US Army Corps
of Engineers
Savannah District

Fort Stewart
Georgia

Solicitation Number
DACA21-02-R-0022
Soldier Service Center
FY-02, Line Item 51968
February 2002

PHASE ONE OF TWO PHASE DESIGN/BUILD SUBMITTAL PROCEDURE

THIS SOLICITATION IS UNRESTRICTED PURSUANT TO THE "BUSINESS OPPORTUNITY DEVELOPMENT REFORM ACT OF 1988" (PUBLIC LAW 100-656)

U.S. ARMY ENGINEER DISTRICT, SAVANNAH
CORPS OF ENGINEERS
100 WEST OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640

NOTICE TO BIDDERS

1. WITH RESPECT TO FAR PART 9.5, SUBPART 9.505-2(b)(1) and (2), THE A/E FIRM OF STEVENS & WILKINSON OF GEORGIA, INC., ATLANTA, GA, PREPARERS OF THIS RFP, HAVE BEEN DETERMINED TO BE INELIGIBLE TO COMPETE FOR THE DESIGN/BUILD CONTRACT TO BE AWARDED VIA THIS SOLICITATION.

2. SEE SECTION 00100 FOR PRE-PROPOSAL CONFERENCE INFORMATION.

3. CLAUSE 52.214-4001(c) "FACSIMILE MODIFICATION OF BIDS" NOW CONTAINS THE FOLLOWING LANGUAGE:

ALL FACSIMILE BID MODIFICATIONS SHALL CONTAIN A COMPLETED BID SCHEDULE. THE SPACES SHALL BE FILLED IN FOR UNIT PRICES, EXTENDED PRICES AND TOTAL BID PRICE.

5. For those contracts over $1,000,000 a SUBCONTRACTING PLAN is required of the successful LARGE BUSINESS bidder/offeror. LARGE BUSINESS bidders/offerors should submit this plan with the bid/offer. This requirement shall be one of the elements addressed by the Contracting Officer in determination of Contractor responsibility prior to award of a contract.

6. SMALL BUSINESSES are exempt from the requirement to submit a subcontracting plan. They are NOT exempt from the requirement in FAR 52.219-8 to make maximum practicable opportunity available to other small businesses for subcontracting.

7. SUBCONTRACTING PLAN REQUIREMENTS:

a. FAR CLAUSE 52.219-9: Paragraphs (d) and (e) address the items that shall be included in the subcontracting plan.

b. DFARS 219.704(a)(1) addresses the use of Historically Black Colleges and Universities and Minority Institutions (HBCU/MI) subcontractors which is a composite of the small disadvantaged business (SDB) goal.

8. DFARS 219.705-4(d) addresses review of the subcontracting plan for positive goals and the extent to which an offeror plans to use competition restricted to small disadvantaged business concerns (SDB), historically black colleges and universities, or minority institutions (HBCU/MI).

9. For additional information concerning subcontracting plan requirements, please call Ms. Gwennette Parker, Small Business Specialist, telephone (912) 652-5340.

Solicitation No.
DACA21-02-R-0022

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Attachment 1 to Section 00800

Specifications

SOLICITATION, OFFER, AND AWARD *(Construction, Alteration, or Repair)*	1. SOLICITATION NO. DACA21-02-R-0022-0005	2. TYPE OF SOLICITATION [ ] SEALED BID (IFB) [X] NEGOTIATED *(RFP)*	3. DATE ISSUED 13-Feb-2002	PAGE OF PAGES 1 OF 214

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

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.	6. PROJECT NO.

7. ISSUED BY CODE DACA21	8. ADDRESS OFFER TO *(If Other Than Item 7)* CODE
U.S. ARMY ENGINEER DISTRICT, SAVANNAH 100 WEST OGLETHORPE AVENUE P. O. BOX 889 SAVANNAH GA 31402-0889 TEL: FAX:	**See Item 7** TEL: FAX:

9. FOR INFORMATION CALL:	A. NAME	B. TELEPHONE NO. *(Include area code)* *(NO COLLECT CALLS)*
	DONNA S KNIGHT	(912)652-5504

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):*

Contract Specialist: Donna Knight, Phone: (912) 652-5504
E-Mail: donna.s.knight@sas02.usace.army.mil

Contracting Officer: Kathleen Achord, Phone: (912) 652-5169
E-Mail: kathleen.a.achord@sas02.usace.army.mil

SOLDIER SERVICE CENTER
FORT STEWART, GEORGIA
PHASE II

FY 02, LINE ITEM 50907

Performance documents are hereby incorporated and attached

11. The Contractor shall begin performance within 5 calendar days and complete it within 600 calendar days after receiving [ ] award, [X] notice to proceed. This performance period is [X] mandatory, [ ] negotiable. *(See* 52.211-10 *.)*

12 A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE AND PAYMENT BONDS? *(If "YES," indicate within how many calendar days after award in Item 12B.)* [X] YES [ ] NO	12B. CALENDAR DAYS 5

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and 3 copies to perform the work required are due at the place specified in Item 8 by 04:00 PM *(hour)* local time 22 Jul 2002 *(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 [X] is, [ ] is not required.

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

D. Offers providing less than 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 consummates 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)* TEL: EMAIL:
30B. SIGNATURE	30C. DATE	31B. UNITED STATES OF AMERICA BY / 31C. AWARD DATE

Section 00010 - Solicitation Contract Form

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0001		1.00	Lump Sum		
	FFP - DESIGN EFFORT, AND ENGINEERING SERVICES DURING CONSTRUCTION, COMPLETE				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0002		1.00	Lump Sum		
	FFP - CONSTRUCTION OF SOLDIER SERVICE CENTER COMPLETE TO 5 FOOT BUILDING LINE				

ITEM NO	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
0003		1.00	Lump Sum		
	FFP - SITE PREPARATION AND DEVELOPMENT - INCLUDING UTILITIES (EVERYTHING OUTSIDE THE 5 FOOT BUILDING LINE, COMPLETE; AND DEMOLITION OF FIVE BUILDINGS; BLDG NO.S 251 (TWO STRUCTURES), 470, 920, 1191, AND 1192, AND CAPPING UTILITIES; ROADS AND PARKING AREAS; MISCELLANEOUS SITE FEATURES. COMPLETE TO 5 FOOT BUILDING LINE				

CLAUSES INCORPORATED BY FULL TEXT

52.232-4001 COST LIMITATION – JUNE 1999

The contract award for design and construction shall not exceed $ 8,930,431.00 for this project. Offerors are under no obligation to approach this amount.

The above cost limitations are based on Conventional Design/Review/Approval/Construction and/or Fast Track Design/Construction Schedule.

(End of Clause)

Section 00100 - Bidding Schedule/Instructions to Bidders

CLAUSES INCORPORATED BY FULL TEXT

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

(a) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" followed by the DUNS number that identifies the offeror's name and address exactly as stated in the offer.

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

(1) Company name.

(2) Company address.

(3) Company telephone number.

(4) Line of business.

(5) Chief executive officer/key manager.

(6) Date the company was started.

(7) Number of people employed by the company.

(8) Company affiliation.

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

(End of provision)

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

Copies of specifications, standards, and data item descriptions cited in this solicitation may be obtained--

(a) From the ASSIST database via the Internet at http://assist.daps.mil; or

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

(End of provision)

52.211-14 NOTICE OF PRIORITY RATING FOR NATIONAL DEFENSE USE (SEP 1990)

Any contract awarded as a result of this solicitation will be DX rated order; X DO rated order certified for national defense 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)

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

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

(End of provision)

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

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

(End of provision)

52.214-4002 HAND-CARRIED OR MAILED BIDS/PROPOSALS:

All bids/proposals must be clearly identified with the contractor name and address and Notice to Bidder OF-17 label affixed to the lower left corner of the outermost wrapper indicating the Invitation No., Date of Bid/Proposal Opening, Time of Opening, and Bid/Proposals For information. Bids/Proposals not properly identified on the outermost wrapper may not be acceptable if received late by the Contracting Officer, as there may be not way to determine the exact time of receipt by the agency.

The Government will not be responsible for bids delivered to any location or to anyone other than those designated to receive bids/proposals on its behalf as indicated below.

Bids/Proposals delivered by commercial carrier and those sent by U.S. Mail must be addressed as indicated below. Bids/proposals shall not be addressed to any specific person.

U.S. Army Engineer District, Savannah
ATTN: CESAS-CT-C
100 West Oglethorpe Avenue
Savannah, Georgia 31401-3640

Bids/Proposals sent by U.S. Mail must be mailed within sufficient time so that they will be received in the mailroom on the first floor not later than the exact time set for opening of bids/proposals.

Commercial carrier hand-carried bids/proposals must be delivered to mailroom personnel on the first floor not later than the exact time set opening of bids/proposals.

Contractor hand-carried bids/proposals delivered more than a half-hour before bid opening must also be delivered to mailroom personnel on the first floor.

Contractor hand-carried bids/proposals delivered within a half-hour of bid opening must be delivered to the bid opening room on the second floor.

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

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

(1) Obviously misplaced decimal points will be corrected;
(2) Discrepancy between unit price and extended price, the unit price will govern;
(3) Apparent errors in extension of unit prices will be corrected;
(4) Apparent errors in addition of lump-sum and extended prices will be corrected.

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

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

(End of statement)

52.215-1 INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITION (MAY 2001)

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

“Discussions” are negotiations that occur after establishment of the competitive range that may, at the Contracting Officer's discretion, result in the offeror being allowed to revise its proposal.

In writing, writing, or written means any worded or numbered expression that can be read, reproduced, and later communicated, and includes electronically transmitted and stored information.

“Proposal modification” is a change made to a proposal before the solicitation's closing date and time, or made in response to an amendment, or made to correct a mistake at any time before award.

“Proposal revision” is a change to a proposal made after the solicitation closing date, at the request of or as allowed by a Contracting Officer as the result of negotiations.

“Time”, if stated as a number of days, is calculated using calendar days, unless otherwise specified, and will include Saturdays, Sundays, and legal holidays. However, if the last day falls on a Saturday, Sunday, or legal holiday, then the period shall include the next working day.

(b) Amendments to solicitations. If this solicitation is amended, all terms and conditions that are not amended remain unchanged. Offerors shall acknowledge receipt of any amendment to this solicitation by the date and time specified in the amendment(s).

(c) Submission, modification, revision, and withdrawal of proposals. (1) Unless other methods (e.g., electronic commerce or facsimile) are permitted in the solicitation, proposals and modifications to proposals shall be submitted

in paper media in sealed envelopes or packages (i) addressed to the office specified in the solicitation, and (ii) showing the time and date specified for receipt, the solicitation number, and the name and address of the offeror. Offerors using commercial carriers should ensure that the proposal is marked on the outermost wrapper with the information in paragraphs (c)(1)(i) and (c)(1)(ii) of this provision.

(2) The first page of the proposal must show--

(i) The solicitation number;

(ii) The name, address, and telephone and facsimile numbers of the offeror (and electronic address if available);

(iii) A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item;

(iv) Names, titles, and telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the offeror's behalf with the Government in connection with this solicitation; and

(v) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority, unless that evidence has been previously furnished to the issuing office.

(3) Submission, modification, or revision, of proposals.

(i) Offerors are responsible for submitting proposals, and any modifications, or revisions, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that proposal or revision is due.

(ii)(A) Any proposal, modification, or revision received at the Government office designated in the solicitation after the exact time specified for receipt of offers is “late” and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and--

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

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

(3) It is the only proposal received.

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

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

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

(v) Proposals may be withdrawn by written notice received at any time before award. Oral proposals in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision at 52.215-5, Facsimile Proposals. Proposals may be withdrawn in person by an offeror or an authorized representative, if the identity of the person requesting withdrawal is established and the person signs a receipt for the proposal before award.

(4) Unless otherwise specified in the solicitation, the offeror may propose to provide any item or combination of items.

(5) Offerors shall submit proposals in response to this solicitation in English, unless otherwise permitted by the solicitation, and in U.S. dollars, unless the provision at FAR 52.225-17, Evaluation of Foreign Currency Offers, is included in the solicitation.

(6) Offerors may submit modifications to their proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

(7) Offerors may submit revised proposals only if requested or allowed by the Contracting Officer.

(8) Proposals may be withdrawn at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

(d) Offer expiration date. Proposals in response to this solicitation will be valid for the number of days specified on the solicitation cover sheet (unless a different period is proposed by the offeror).

(e) Restriction on disclosure and use of data. Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall--

(1) Mark the title page with the following legend: This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed--in whole or in part--for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of--or in connection with-- the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]; and

(2) Mark each sheet of data it wishes to restrict with the following legend: Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

(f) Contract award. (1) The Government intends to award a contract or contracts resulting from this solicitation to the responsible offeror(s) whose proposal(s) represents the best value after evaluation in accordance with the factors and subfactors in the solicitation.

(2) The Government may reject any or all proposals if such action is in the Government's interest.

(3) The Government may waive informalities and minor irregularities in proposals received.

(4) The Government intends to evaluate proposals and award a contract without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If the Contracting Officer determines that the number of proposals that would otherwise be in the competitive range exceeds the number at which an efficient competition can be conducted, the Contracting Officer may limit the number of proposals in the competitive range to the greatest number that will permit an efficient competition among the most highly rated proposals.

(5) The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the proposal.

(6) The Government reserves the right to make multiple awards if, after considering the additional administrative costs, it is in the Government's best interest to do so.

(7) Exchanges with offerors after receipt of a proposal do not constitute a rejection or counteroffer by the Government.

(8) The Government may determine that a proposal is unacceptable if the prices proposed are materially unbalanced between line items or subline items. Unbalanced pricing exists when, despite an acceptable total evaluated price, the price of one or more contract line items is significantly overstated or understated as indicated by the application of cost or price analysis techniques. A proposal may be rejected if the Contracting Officer determines that the lack of balance poses an unacceptable risk to the Government.

(9) If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.

(10) A written award or acceptance of proposal mailed or otherwise furnished to the successful offeror within the time specified in the proposal shall result in a binding contract without further action by either party.

(11) The Government may disclose the following information in postaward debriefings to other offerors:

(i) The overall evaluated cost or price and technical rating of the successful offeror;

(ii) The overall ranking of all offerors, when any ranking was developed by the agency during source selection;

(iii) A summary of the rationale for award; and

(iv) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

(End of provision)

52.215-4001 FACSIMILE MODIFICATION OF OFFERS (Ref. FAR 52.215-1(c)) (JUL 1999)

(a) Definition. "Facsimile proposal modification," as used in this solicitation means a modification to a proposal that has been submitted in accordance with the solicitation.
(b) Offerors may submit facsimile proposal modifications to this solicitation. These facsimile proposal modifications must arrive at the place, and by the time specified in the solicitation.
(c) ALL FACSIMILE BID MODIFICATIONS SHALL CONTAIN A COMPLETED BID SCHEDULE. THE SPACES SHALL BE FILLED IN FOR UNIT PRICES, EXTENDED PRICES AND TOTAL BID PRICE.
(d) Facsimile proposal modifications must contain the signature of an official of the company.
(e) Facsimile receiving data and compatibility characteristics are as follows:
(1) Telephone number of receiving facsimile equipment: 912-652-6001
(2) Compatibility characteristics - CCTTT Group 3, 2, 1
(f) If the offeror chooses to transmit a facsimile proposal

modification, the Government will not be responsible for any failure attributable to the transmission or receipt of the facsimile modification, including, but not limited to, the following:

(1) Receipt of garbled or incomplete modification.
(2) Availability or condition of the receiving facsimile equipment.
(3) Incompatibility between the sending and receiving equipment.
(4) Delay in transmission or receipt of modification.
(5) Failure of the offeror to properly identify the modification.
(6) Illegibility of modification.
(7) Security of modification data.

(End of provision)

52.216-1 TYPE OF CONTRACT (APR 1984)

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

(End of clause)

52.219-4001 SUBCONTRACTING PLAN FOR SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS CONCERNS (MAY 1997 CESAS-CT-C)

(a) In accordance with FAR Clause 52.219-9, large businesses must submit a subcontracting plan. A sample subcontracting plan is located in Section 00800.

(b) The goals of the Savannah District for subcontracting to small businesses, small disadvantaged businesses, and women-owned small businesses are:

	Basic Year	Option Year
(1) Total Amount of Prime Contract	$10,000,000	_____
(2) Total Dollars Planned for Subcontract Award (10% of Line (1))	$ 1,000,000	_____
(3) Dollars Planned for Subcontracting to Large Business (38% of Line (2))	$ 380,000	_____
(4) Total Dollars Planned for Subcontracting to Small Business (62% of Line (2))	$ 620,000	_____
(A) Dollars Planned for Subcontracting to Small Disadvantaged Business (10% of Line (2))	$ 100,000	_____
(B) Dollars Planned for Subcontracting to Women-Owned Business (5%) of Line (2))	$ 50,000	_____
(C) Dollars Planned for Subcontracting to Other Small Business (41.5%) of Line (2))	$ 415,000	_____

(D) Dollars Planned for
Subcontracting to HUBZone
Small Business
(2.5%) of Line (2)) $ 25,000 _____

(E) Dollars Planned for
Subcontracting to Service-Disabled
Veteran-Owned Small Business
(3%) of Line (2)) $ 30,000 _____

If you cannot reach the above-stated goals, you must provide written justification with your subcontracting plan detailing the reasons you cannot meet the requirements.

(End of provision)

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

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

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

Goals for minority participation for each trade	Goals for female participation for each trade
29.8%	6.9%

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

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

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

(1) Name, address, and telephone number of the subcontractor;

(2) Employer's identification number of the subcontractor;

(3) Estimated dollar amount of the subcontract;

(4) Estimated starting and completion dates of the subcontract; and

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

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is Fort Stewart, Liberty County, Georgia.

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

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

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

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

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

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

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

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

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

(ii) May be accepted if revised during negotiations.

(End of provision)

52.232-4006 I SUBJECT TO AVAILABILITY OF FUNDS STATEMENT (JUL 1990 SASCT) (Ref. AFARS 5101.602-2)

This is a high priority requirement as defined in Army Federal Acquisition Regulation (AFAR) Supplement 5101.602-2. Subject to the availability of funds, the accounting classification will be stated on the contract documents. This statement is not a commitment of funds. Funds are not presently available for this acquisition. No contract award will be made until appropriated funds are made available from which payment for contract purposes can be made.

(End of provision)

52.232-4007 ACCOUNTING AND APPROPRIATION DATA (APR 1989 CESAS-RM)

212 2050 208 8021 P1000 3230 S09133

(End of clause)

52.233-2 SERVICE OF PROTEST (AUG 1996)

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

U.S. Army Corps of Engineers, Savannah District
Contracting Officer, CESAS-CT-C
100 West Oglethorpe Avenue
Savannah, Georgia 31401

(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) – ALTERNATE I (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) An organized site visit has been scheduled for--
1 July 2002 at 1300 hours

(c) Participants will meet at—

Services Branch Conference Room
Building 1139
1117 Frank Cochran Drive
Fort Stewart, Georgia 31314

At the Fort Stewart gates, attendees will be required to show a proof of insurance and registration for the vehicle, a picture I.D. for each person in the vehicle, and should be prepared for a vehicle search. Allow sufficient time to be processed through the gate. Point of contact for the meeting is Mr. Anthony White (912) 767-5115.

52.236-28 PREPARATION OF PROPOSALS--CONSTRUCTION (OCT 1997)

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

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

(1) Lump sum price;

(2) Alternate prices;

(3) Units of construction; or

(4) Any combination of paragraphs (b)(1) through (b)(3) of this provision.

(c) If the solicitation requires submission of a proposal on all items, failure to do so may result in the proposal being rejected without further consideration. If a proposal on all items is not required, offerors should insert the words “no proposal” in the space provided for any item on which no price is submitted.

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

(End of provision)

52.236-4011 Disclosure of Magnitude of Construction (FAR 36.204 and DFARS 236.204)

The estimated price range for this project is between $5,000,000 and $10,000,000. .

SUBMITTAL PROCEDURES

Section 00110

PROPOSAL SUBMISSION REQUIREMENTS AND INSTRUCTIONS

1. PROPOSAL OVERVIEW.

1.1 General. Inasmuch as the proposal will describe the capability of the offeror to perform any resultant contract, as well as describe its understanding of the requirements of the Statement of Work, it should be specific and complete in every detail. The proposal should be prepared simply and economically, providing straight-forward, concise delineation of capabilities to satisfactorily perform the contract being sought. The proposal should therefore be practical, legible, clear and coherent.

1.2 Proposal Submissions and the Two (2) Phase Design-Build Process. This process requires potential contractors to submit their performance and capability information initially for review and consideration by the Government. Following the review, evaluation, and rating of these proposals, the Government will select up to five of the highest rated contractors to receive the technical requirements package and provide a technical and cost proposal for consideration by the Government. The technical and cost proposals of the selected contractors will be reviewed by the Government. The technical information contained in this Phase 2 proposal will be reviewed and evaluated by the Government in accordance with the evaluation criteria set out in Section 00120 : PHASE 1 EVALUATION MANUAL. The final evaluation rating used for comparison, selection, and award will reflect both the rating received in Phase 1 and the evaluation rating received in Phase 2. Cost information will not be rated in either phase but will be evaluated in response to the funding limitations set out in Section 00010 – PRICE PROPOSAL SCHEDULE and other offeror's price proposals. The proposal process for this two (2) phase procurement consists of the following individual pieces:

PHASE 2 PROPOSAL

- Pro Forma Information
- Completed Price Proposal Information
- Technical Proposal Information
- Project Management Plans and Schedules
- Other Information (Any additional information – background provided by the proposer)

NOTE: FOR ALL THOSE CONTRACTORS WHO COMPETE IN BOTH PHASE 1 AND PHASE 2, THE CONTRACTOR'S PROPOSAL SHALL BE DEFINED AS ALL INFORMATION WHICH WAS SUBMITTED IN RESPONSE TO THE REQUIREMENTS OF BOTH PHASES OF THE SOLICITATION.

PROPOSAL DATA SHEET – PHASE 1

SOLDIER SERVICE CENTER
FORT STEWART, GA

NOTE TO OFFERORS
This OFFEROR PERFORMANCE CAPABILITY PROPOSAL DATA SHEET must be completed and attached as the first page of the body of your proposal. The information required by this data sheet may be completed directly on this form or attached to the form as supplemental data sheets.

1. NAME OF OFFEROR.

Name of Offeror(s):

If a joint venture or contractor-subcontractor association of firms, list the individual firms and briefly describe the nature of the association.

Firm 1:

Firm 2:

Firm 3:

Firm 4:

Nature of Association:

2. AUTHORIZED NEGOTIATORS. FAR 52.215-11

The offeror represents that the following persons are authorized to negotiate on its behalf with the Government in connection with this Request for Proposals (RFP).

[List names, titles, and telephone number of the authorized negotiator.]

Name of Person Authorized to Negotiate:

Negotiator's Address:

Negotiator's Telephone:

2. DELETED.

3. PHASE 2 PROPOSAL SUBMISSION INSTRUCTIONS

3.1 Who May Submit. Proposals may be submitted by the offerors who receive written notification from the Savannah District Contracting Officer that their firm has been selected to participate in Phase 2 of this solicitation. No more than five offerors will compete in Phase 2. The Government intends to announce the names of offerors selected for Phase 2 in the Government Point of Entry (GPE) unless an offeror provides written notification and explanation for not wanting this information released.

3.2 Where to Submit. Offerors shall submit their proposals to the U.S. Army Corps of Engineers, Savannah District, 100 West Ogelthorpe Street, Savannah, Georgia 31402 or U.S. Army Corps of Engineers, Savannah District, P.O. Box 889, Savannah, Georgia 31402.

3.3 Submission Deadline. Proposals shall be received by the Savannah District no later than the time and date specified.

3.4 General Requirements.

3.4.1 In order to effectively and equitably evaluate all proposals, the Contracting Officer must receive information sufficiently detailed to clearly indicate the materials, equipment, methods, functions, and schedules proposed.

3.4.2 In addition to the design documents addressed below, proposals must contain financial terms, management information, schedules for design and construction, and the representations and certifications. Specific requirements are described below.

3.4.3 Title Page, including the title of the solicitation, solicitation number, offeror name, and date of the submittal.

3.4.4 The proposals shall contain a detailed table of contents. If more than one binder is used, the complete table of contents shall be included in each. Any materials submitted but not required by this solicitation, (such as company brochures), shall be relegated to appendices.

3.4.5 Size of Printed Matter Submissions.

3.4.5.1 Written materials: 8-1/2" x 11" format.

3.4.5.2 Drawing sheets will be either: (1) Size A1 approximately 24" x 36" for full size drawings which are not intended for reduction to half-size sets. Half size sheets size A2

approximately 16" x 23" are also acceptable; or (2) Size F approximately 30” x 42” for full size drawings (Half size sheets size C approximately 15” x 21” are also acceptable).

3.4.6 Compliance Statement: The offeror is required to certify that all items submitted in its technical proposal comply with the RFP requirements and any differences, deviations or exceptions have been identified and explained. Offerors are required to complete the statement and submit it with their technical proposal. Even if there are no differences, deviations or exceptions, the offeror must submit the Compliance Statement and state that none exist.

Statement of Compliance

Insert name of the offeror hereby certifies that all items submitted in this proposal and final design documents (after contract award) comply with the solicitation requirements. The criteria specified in Request for Proposal No. DACA21-02-R-0022 are binding contract criteria and in case of any conflict after award, between DACA21-02-R-0022 and the contractor's proposal, the Request for Proposal criteria shall govern unless there is a written and signed agreement between the contractor and the Government waiving a specific requirement. Should this proposal result in the award of a contract. this statement will be included on each sheet of drawings and on the cover of the specifications.

3.5 Exceptions. Exceptions to the contractual terms and conditions of the solicitation (e.g., standard company terms and conditions) must not be included in the proposal.

3.6 Price Information. The technical proposal shall not include any cost information. The technical and price proposals shall be submitted as two separate documents.

3.7 Proposal Requirements and Submission Format. The proposals sought by this solicitation shall contain the categories of submittal information as follows:

3.7.1 Pro Forma requirements. This information should be submitted in an envelope labeled "Pro Forma Requirements." This category consists of representations and certifications, subcontracting plan, proposal bonds, and completed Standard Form 1442. Provide original and one (1) copy.

3.7.2 Price Proposal Information. Offerors shall complete all portions of the Price Proposal Schedule and furnish it in a separate envelope in original and one copy.

3.7.3 Proposal Submission for Technical Data Requirements. This information shall be submitted in separate three-ring binders labeled "Design-Technical Information." This category consists of design documents, drawings, sketches, outline specifications, design analysis, catalog cuts, and other information. Provide:

(1) either:

(a) an original and five copies of the drawings (size A1); an original and five copies of half size drawings (size A2) with a minimum of one full size set.

or:

(b) an original and five copies of the drawings (size F); or an original and five copies of half size drawings (size C) with a minimum of one full size set.

(2) 1 set of color boards.

(3) an original and five copies of catalog cuts and other technical data.

The drawings shall be bound.

3.7.3.1 The following factors will be evaluated based on the material provided to meet the technical data requirements:

FACTOR 2-1: BUILDING FUNCTION AND AESTHETICS

FACTOR 2-2: BUILDING SYSTEMS

FACTOR 2-3: SITE DESIGN

FACTOR 2-4: SUSTAINABLE DESIGN CONSIDERATIONS

3.7.3.2 The following technical data shall be submitted as part of the formal proposal. Proposals shall include graphic description of the design included in the basic proposal clearly indicated as such. All alternate designs shall be graphically described on separate drawings from the basic proposal. Offerors are advised that the required data listed below will be utilized for technical review and evaluation and used for determination of a "Quality Rating" by a Technical Evaluation Team. Materials indicated in the design/construction criteria, but not indicated in the offeror's specifications, will be assumed to be included and a part of the proposal.

TECHNICAL REQUIREMENTS

1. SITE DEVELOPMENT DESIGN SUBMITTAL REQUIREMENTS. The site development portion of the proposal must outline the proposed site demolition, layout, grading, storm drainage, and erosion control practices of design and construction. Improvements to the RFP site plan are encouraged. A topographic survey will be provided at Phase II to the proposers in English units. The design shall include the following:

1.1 General Site Development Description of the Project. State the purpose, functional layout of all major structures in relation to parking and access drives, the extent of grading and drainage system, as well as erosion control measures in sufficient detail to delineate and characterize functional features and the desired image or visual appearance of this project. The narrative shall reflect setbacks requirements as indicated in Section 01020, paragraph 12.3.2 as well as the visual characteristics of the surrounding topography. Include a statement addressing Force Protection Compliance, as well as a statement addressing Storm Water Management such that post development runoff does not exceed pre development runoff flows. Also include a statement of any requirements for traffic control signals and signage plans. Provide a brief statement of the exterior construction materials to be used in the project.

1.2 Design Calculations. Submit calculations for the following:

1.2.1 Storm drainage pipe design calculations shall not be required for the proposal submittal. Storm drainage pipe design calculations for the final design submittal shall show that the pipes are adequately sized using the Rational Method in accordance with technical instructions.

1.2.2 Storm water detention pond calculation shall show that the pond is adequately sized such that post development runoff does not exceed pre-development runoff in accordance with Fort Stewart IDG requirements. Storm water detention can be designed as an underground system.

1.1.1.3 Outline Specifications. Provide a list of titles of specifications proposed for use in the design, if the section is not provided in this RFP.

1.2 Site Development Drawings. Drawings shall be shown at 1 in = 30ft scale (or 1:400 in metric units). All drawings shall have a Legend, North Arrow, and a graphic bar scales. Drawings shall be provided in sufficient detail and annotated so that Government may visualize how the designer has interpreted the user's functional and operational requirements in his proposal for final design. Drawings shall include, the following:

1.2.1 Demolition Plan and Tree Removal Plan. The demolition plan shall also show the limits of tree removal.

1.2.2 Layout Plan. This plan should show the building layout in relation to parking areas, access drives, and pedestrian walkways. This plan should show overall dimensions of parking lots, minimum building setbacks (in compliance with Force Protection), minimum setback from Streets or Roads, utility pad locations (this includes dumpster, electrical and mechanical equipment pads). The Layout Plan will also show location of sidewalks, access drives, retaining walls, fencing, site steps, service vehicle drives, pedestrian bridges, sports fields, handicap parking spaces, and curb and gutter. The use of patterning shall be required to distinguish between concrete pavement and bituminous asphalt pavement. The submitted layout plan shall also show dimensions of major items such as building, parking lot rather than coordinates of corner points.

1.2.3 Grading and Drainage Plan. This Plan should show contour elevations at 1-foot (250mm) minimum interval and critical spot elevations, as well as finish floor elevations. This plan should also show the locations of storm inlets, curb inlets, manholes, storm drainage pipes, culverts, headwalls, storm water control structure, detention pond area, and drainage ditches. Drainage ditches shall be kept to a minimum due to the highly erodable soil. Curb cuts for drainage of parking lots and access drives are prohibited.

1.2.4 Erosion Control Plan. Provide a narrative on what erosion control measures will be used in this project.

1.3 Landscape Design Narrative. The landscape design narrative shall include an analysis of existing site conditions, including an indication of existing trees and plant materials that are to be saved and remain on the project site. The narrative shall indicate specific site problems related to proposed development and the rationale for proposed plant selection and locations. The narrative shall also include a list of suggested types and sizes of plant materials to be used (use native plants as much as possible). It shall also discuss type of irrigation to be provided, type, quantity and location of site furniture, per Ft. Stewart Installation Design Guide's (IDG). The narrative shall discuss what materials are being included in the project that comes from recycled materials and renewable resources.

1.3.1 Outline Specifications. Provide a list of titles of specifications proposed to be used in this design, if the section is not provided in this RFP.

1.4 Landscape Design Plan. This plan shall include existing trees and under story to be saved, new trees to be planted, screens, buffers, lawns, and mulched area for the project. Both large shade trees and small under story and ornamental trees shall be shown. Plant labels shall be provided for the plans. Also to be provided is a drawing at a larger scale of the building entrance of the project site to indicate the Landscape Architect's ideas or intent for a more detailed planting plan as used in foundation plantings including plant labels.

1.5 Environmental Engineering Design.

1.5.1 Design Narrative shall include general utility layout with connection points, valve fittings and requirements for pneumatic ejector, sewage pumps and sump pumps.

1.5.1.1 Outline Specifications: Provide a list of titles of specifications proposes for use in the design, if the section is not provided in this RFP.

1.5.2 Exterior Utility Layout: The proposal shall include a utility layout, which depicts the relative placement of water and sanitary sewer systems. The layout plans should take into account the ease of maintenance and utility corridors.

2. STRUCTURAL DESIGN SUBMITTAL REQUIREMENTS. The structural portion of the proposal must outline the proposed methods and materials of design and construction. The design shall include the following:

2.1 Structural Narrative.

2.1.1 General. Provide a general description of the scope of the project and all of the major structures. Give overall building dimensions and a description of the principal features such as wall and roof construction proposed. If the building is irregularly shaped, explain where seismic joints will be placed to create regular shapes or provide a statement that a dynamic analysis of the building will be performed.

2.1.2 Framing System.

2.1.2.1 Provide a description of the framing system chosen.

2.1.2.2 Provide a description of the lateral load resisting system and how these loads will be transmitted to the foundations.

2.1.2.3 Foundation. Give a description of the anticipated foundations based on information provided in the RFP.

2.1.2.4 List special design features.

2.1.2.5 Fire Resistance Statement. State the required fire resistance criteria for all portions of the structural system and the proposed method of meeting these requirements.

2.2 Design Analysis. The following specific items shall be included.

2.2.1 Load Assumptions. State the live loads for which the facility is to be designed. Include roof and floor loads. Provide the wind loads, lateral earth pressure loads, seismic loads, etc. as applicable. Complete analysis is not necessary, only tabulation of loads is required.

2.3 Outline Specifications. The proposer shall provide a list of titles of specifications he proposes to use in the design, if sections are not provided in this RFP.

3. ARCHITECTURAL DESIGN SUBMITTAL REQUIREMENTS.

3.1 Architectural Narrative. State the proposed image or design theme of this proposal. Describe interior design theme. Describe any special features or finishes that contribute to the proposed design theme. Describe construction of typical interior partitions. List all architectural betterments and deviations included in the proposal.

3.1.1 Certifications. Provide signed and dated certification that the final design shall meet "U" values required in the RFP for each exterior wall assembly and roof assemblies. Provide signed and dated certification that the mechanical room is of sufficient size to accommodate and serve all mechanical equipment shown and specified by the mechanical design. Include with architectural narrative.

3.1.2 List of Specifications. Provide a list of titles of specifications proposed to use in the design. It is not necessary to include sections required in this RFP.

3.2 Architectural Drawings. Drawings shall be provided in sufficient detail for reviewers to visualize how the designer has interpreted the RFP functional and operational requirements in his proposal. Drawings shall include, but not be limited to, the following:

3.2.1 Floor Plan(s). Floor plans for each floor shall drawn accurately to scale and shall be shown at 1/8 “ = 1’-0” scale. Show gross floor area tabulations on lower portion of plate. Label all spaces. Indicate net area of all spaces. Show all doors, windows, plumbing fixtures, toilet partitions and built-in casework. Show required workstations as dashed-line blocks to demonstrate that the spaces accommodate the required workstations. Show overall building dimensions. If the floor plan(s) must be drawn in segments in order to comply with the requirements on the proper scale, provide a separate 1/16”=1’-0” scale composite floor plan showing exterior walls, interior partitions, circulation elements and cross referencing for enlarged floor plans.

3.2.2 Building Elevations. Exterior elevations shall be drawn to 1/8”=1’-0” scale for all four major building elevations. Elevations shall show all windows, doors, canopies, and platforms. All building exterior materials and roof pitches shall be noted clearly.

3.2.3 Typical Wall Section. Provide one exterior wall section indicating the predominant exterior wall and wall/roof intersection condition. Show overall wall thickness and eave height. Note all materials. Wall section shall be unbroken where practical and drawn at ¾”= 1’-0” scale.

3.2.4 Room Finish Schedule. Provide a room finish schedule indicating the following for all spaces: floor, wall base, wainscot, wall and ceiling finishes; wainscot height, wall base height and ceiling height.

4. MECHANICAL DESIGN SUBMITTAL REQUIREMENTS.

4.1 Heating, Ventilating, and Air Conditioning. Narrative of design analysis will contain the following:

4.1.1 Criteria listings - manuals, pamphlets, technical books, etc.

4.1.2 Design conditions used in calculations - inside and outside temperatures, personnel load, outside air or ventilation requirements, U-factors, and other special conditions.

4.1.3 Block loads for heating and cooling shall be calculated using ASHRAE-based methods. Where passive solar applications prove feasible and cost effective, the proposer shall employ a load calculation method that can incorporate all applicable passive solar factors. All load calculation software must be traditionally used by the industry.

4.1.4 Brief description of various items of equipment, including catalog cuts. Indicate operating temperatures and capacities.

4.1.5 Description of piping systems including type of pipe, insulation requirements, and whether concealed or exposed, including catalog cuts.

4.2 Plumbing. Narrative of design analysis will contain the following:

4.2.1 Criteria listing - manuals, codes, etc.

4.2.2 Plumbing analysis to determine number of fixture units, cold and hot water capacity requirements, and equipment or capacities of miscellaneous and special systems.

4.2.3 Fixture determination listing quantity and type of fixtures for both men's and women's toilets, and other fixtures such as drinking water fountains, service sinks, etc.

4.2.4 Description of domestic water heating and storage equipment, including capacity, type (gas, electric, boiler, water), materials, and insulation.

4.2.5 Piping types and location (concealed or exposed), together with material proposed and insulation requirements.

4.2.6 Brief description of miscellaneous systems such as compressed air (capacity, pressure, piping, location of air outlets, etc.), roof drainage, natural gas (pressure, quantity, and equipment to be served), and other special systems.

4.3 Outside Utilities. Narrative of design analysis will contain the following:

4.3.1 Criteria listings - manuals, pamphlets, codes, etc.

4.3.2 Preliminary pipe size calculations in tabular form.

4.3.3 Description of the utility systems chosen.

4.4 Mechanical Drawings. Provide plan view showing the following:

4.4.1 Heating, Ventilating, and Air Conditioning. Heating, ventilating, and air conditioning equipment layout - chillers or refrigeration compressors, boilers, pumps, condensers or cooling tower, air handling units, fans, hoods, and other items of major equipment required for the facility.

4.4.2 Plumbing. Plumbing fixture layout, floor and area drains, and plumbing equipment layout (hot water generator, storage tank, air compressors, etc.).

4.4.3 Outside Utilities. Indicate locations of outside utilities where required to support the project. Show same scale as other site work drawings.

4.4.4 Mechanical Room(s). Provide a 1/4 inch = 1 foot scale (1:50) plan showing equipment layout of major components in mechanical rooms. The Engineer/ Architect of record will be required to certify that adequate space has been provided for safe operation of equipment and maintenance capability. Mechanical equipment layouts shall comply with Section 01020.

4.5 Outline Specifications. The proposer shall provide a list of titles of specifications he proposes to use in the design, if section not provided in this RFP.

5. ELECTRICAL POWER, LIGHTING, GROUNDING, AND COMMUNICATIONS DESIGN SUBMITTAL REQUIREMENTS.

5.1 Interior Electrical System Design Narrative. The interior electrical design shall be a narrative presentation and shall include the following data:

5.1.1 Provide a brief description of the lighting system(s) to be used for major areas. Include a concept lighting schedule showing room name and/or number, lighting intensity, type of fixture by manufacturer's name, voltage, and basis of design such as I.E.S. criteria, definitive, etc. Only a single catalog cut sheet is required for each fixture type. This cut sheet will establish the physical, functional and visual characteristics of the fixture and establish a level of quality.

5.1.2 State the type of wiring system, such as, rigid conduit, non metallic tubing, intermediate conduit, electrical metallic tubing, nonmetallic sheathed cable, etc. proposed and where it is intended to be used.

5.1.3 Provide a paragraph describing any special items of design, such as, specialized equipment, special receptacles, handicapped and seismic requirements, etc.

5.1.4 Describe how the 5-ohm grounding system will be achieved.

5.1.5 Describe the basic characteristics of the panel boards, protective devices, switchboard, motor control centers or other major equipment to be provided. Provide the name of the manufacturer(s) and catalog cuts that will be used.

5.1.6 Specifications: Provide a list of titles of specifications proposed for use in the design, if the section is not provided in the RFP.

5.1.7 Describe the telephone system requirements proposed for the building.

5.2 Exterior Electrical Distribution System Design Narrative. The exterior electrical design shall be a narrative presentation and shall include the following data:

5.2.1 Indicate the electrical characteristics (phase, voltage and number of wires) of the electrical system proposed for each building.

5.2.2 Provide conclusions in the design analysis as related to the total connected load and resulting kVA demand load. Indicate type, number, kVA capacity of transformer installation proposed. State the primary and secondary connections of transformers (i.e., 24,940 to 480Y/277 volts, Delta-wye) in accordance with ANSI C57.12.00. Primary voltage at Fort Stewart is 24,940/14,400 volts.

5.2.3 State the basis for the selection of the secondary distribution voltage, i.e., 480Y/277 vs. 208Y/120. Include any analysis or reasoning used in making this selection.

5.2.4 Provide a statement describing street lighting, security, parking lot lighting, or sidewalk lighting requirements. Types of fixtures, pole heights, and proposed intensities are to be included. Only a single catalog cut sheet is required for each fixture type. This cut sheet will establish the physical, functional and visual characteristics of the fixture and establish a level of quality.

5.2.5 Provide a statement describing the extent of any exterior work such as modifications to the existing telephone vault, the telephone duct banks, television (TV) distribution system, etc.

5.3 Energy Conservation Design Narrative. Energy conservation measures shall be indicated. The narrative shall describe measures and techniques that are proposed in the electrical design that will conserve energy.

5.4 Drawings. Provide drawings of the exterior electrical system.

5.4.1 Provide a separate electrical site plan indicating all existing and proposed support utility lines and equipment required to serve the project including electrical power lines, telephone and other communication lines. The plan shall also show all roads and driveways, parking areas, and any other items necessary for functional and operating adequacy.

5.4.2 Provide electrical characteristics (voltage, phase, number, and size of conductors) for the primary and secondary lines at the point of delivery and/or any extensions. Indicate characteristics and standards of design for overhead or underground line.

5.4.3 Indicate the number, location, kVA capacity, type, primary and secondary voltages of the transformer (i.e., three-phase, pad-mounted, 150kVA, delta-wye, 12,470-480Y/277 volts) installation proposed.

5.4.4 Identify any existing and new communications service connections, both overhead and underground. Indicate characteristics and standards of design for overhead or underground communication line.

6. FIRE PROTECTION DESIGN SUBMITTAL REQUIREMENTS.

6.1. A narrative will be provided addressing the following items for each building type in this project:

6.1.2 Provide certification by the fire protection engineer that the building design shall comply with the life safety/fire protection provisions of the applicable criteria indicated in Section 01020.

6.1.3 Automatic fire extinguishing systems and hose standpipe systems: Identification of all areas provided with sprinkler protection and the type of sprinkler system provided, sprinkler hazard classification for these areas, areas protected by other automatic suppression systems and the type system provided, and buildings provided with hose standpipe systems and the type of standpipe system provided.

6.1.4 Fire alarm and detection systems: Type of alarm and detection system, location of the fire alarm and detection equipment including fire alarm control panel, and catalog data sheets of major components

6.2 Credentials of Fire Protection Engineer. The design of the fire protection features shall be by a Registered Professional Engineer or Registered Architect who is a full member in good standing of the Society of Fire Protection Engineers (SFPE) whose principle duties are fire prevention engineering or by a Registered Fire Protection Engineer whose principle duties are fire prevention engineering. A copy of the Fire Protection Engineer's credentials shall be included in each submittal.

7. ENERGY ANALYSES, ECONOMIC ANALYSES, CONTROL SYSTEMS, SUBMITTAL REQUIREMENTS.

7.1 The following items shall be submitted with the proposal:

7.1.1 A description of all HVAC systems to be considered in a life cycle cost analysis (LCCA). The LCCA, using the program LCCID, is to be submitted by the successful contractor, verifying the system is within the energy budget. For additional requirements, see Section 01020, paragraph 6.1.2.

7.1.2 List of specifications to be used.

7.1.3 A description of the proposed Direct Digital Controls System to be used.

7.2 Provide certification that the design will comply with Energy Budget requirements of specification Section 01020.

8. SUSTAINABLE DESIGN SUBMITTAL REQUIREMENTS.

8.1 The following items shall be submitted with the proposal:

8.1.1 SPIRIT Summary Table. Submit Appendix D of Section 01020 DESIGN REQUIREMENTS, “SPIRIT Requirements and Summary Table” with the “Proposal Points” column filled in to reflect the points contained in your proposal, including the total. NOTE: the points indicated on this summary will be considered contract requirements upon award. Do not modify any of the spaces in this column that were filled in on the solicitation.

8.1.2 Sustainable Design Narrative. Organize the narrative in the same order as SPIRIT summary table with one paragraph devoted to each proposed item on the chart. Briefly describe the activities and/or features proposed to earn each point indicated on your proposal. For mandatory points and requirements the narrative may be limited to repeating the statement found in the “Remarks” column of the SPIRIT summary table.

9. DRAWINGS FILES

9.1 Drawings for the proposal can be done with any CAD software available to the Proposer but the drawings for 60% and final submittal will be done and submitted in Microstation format only. Conversions form AutoCAD are discouraged because of file incompatibility and all the added work necessary for the conversion. Start the work in Microstation and submit Microstation drawings.

9.2 No drawing FILES are required to be submitted at the proposal stage.

END OF TECHNICAL REQUIREMENTS

3.7.4 FACTOR 2-5 Management Plans and Schedules. The offeror shall provide a Management Plan. This is an overall plan showing how the offeror will control the job. The term "management plan" is defined as a plan that includes the following subplans:

3.7.4.1 Project Key Personnel. Provide the names, resumes, and levels of responsibility of the principal managers and technical personnel who will be directly responsible for the day-to-day design and construction activities. Include, as a minimum, the project manager; the project architect; the engineers responsible for civil, electrical, mechanical and structural design; the quality control manager; and the construction manager. Indicate whether each individual has had a significant part in any of the project examples cited. If reassignment of personnel is considered possible, provide the names and resumes of the alternative professionals in each assignment. Project key personnel shall include the key construction subcontractors and the extent of their role with respect to the design phases of this project. Key subcontractors shall include, but are not limited to: Structural Ironworkers, Masonry Works, Electrical, Mechanical, and Site Development subcontractors.

3.7.4.2 Schedule.

3.7.4.2.1 Integrated Design and Construction Schedule with all “Fast Tracking” areas clearly identified. The schedule for design and construction shall be task oriented, indicating dates by which milestones are to be achieved. The offeror may use a critical path or other method of his/her choice; however, the schedules shall be graphically represented.

3.7.4.2.2 The offeror shall also submit a rationale explaining how the schedules will be achieved.

3.7.4.3 Quality Control Plan: The Quality Control Plan is part of the Management Plan. The alliance of the project designer and builder on a project such as this naturally removes one commonly used method of quality control; that is, the usual reliance on the owner or the design consultant for monitoring construction quality. Although the Government will provide an on-site representative during construction, offerors are expected to develop a formal program of monitoring to ensure a high level of construction quality. Offerors shall submit Quality Control Plans that respond to the minimum requirements of Technical Specifications Section 01451 (furnished with this RFP package) entitled "Contractor Quality Control Design/Build." The offeror's program shall include the following characteristics:

3.7.4.3.1 A clear identification of the personnel responsible for quality control and a clear policy establishing their authority. The quality control group shall be separate and apart from (not the same) the people that are doing the construction. This quality

control group shall report to the Contractor's management at a level no lower than a vice president of the company.

3.7.4.3.2 A specific description of the tasks and functions of the quality control personnel.

3.7.4.3.3 A specific policy establishing schedules for the performance of quality control tasks.

3.7.4.3.4 A policy for reporting quality control findings to the Contracting Officer.

3.7.4.3.5 A procedure whereby the Contracting Officer may resolve disputes that have not received satisfactory responses from the first levels of quality control personnel.

3.7.4.3.6 The names of testing laboratories to be used and the procedures for test data reporting.

3.7.4.3.7 A plan for material storage and protection.

3.7.4.3.8 The plan for review, evaluation, and Offeror Quality Control of the Design Submittals prior to Government receipt.

3.7.4.3.9 The plan for review of submittals and extensions of design. Of particular interest is the role of the Designer of Record in all design and construction progress.

3.7.4.3.10 Procedures for involving Key Subcontractors in the design development.

3.7.4.3.11 Procedures for successful integration of the Offeror's Quality Control Program with the Government's Quality Assurance Program.

3.7.4.4 Subcontracting Plan: All large businesses are required to submit a subcontracting plan with their Phase 2 proposal. For guidance in preparing an acceptable plan refer to the Army's Subcontracting Plan Evaluation Guide (Army Federal Acquisition Regulation Supplement Appendix CC) at http://acqnet.sarda.army.mil/afar/apcc.htm.

4.0 RESTRICTIONS. Incomplete proposals. Failure to submit all the data indicated in this section may be cause for determining a proposal incomplete and, therefore, not considered for technical evaluation in Phase 2, or for subsequent award.

PHASE TWO REQUIREMENTS

Section 00120 – PART 2
PHASE 2 EVALUATION MANUAL

1. GENERAL

The purpose of this document is to establish a uniform evaluation procedure for Phase 2 of the solicitation based on contractually defined criteria. This process will be an extension of the Phase 1 evaluation process. The Evaluation Team will evaluate each proposal individually using the qualitative/quantitative procedures that follow. Each proposal will be reviewed and rated by each of the evaluators. During this process, discrepancies between evaluations will be discussed and resolved within the team. Following the completion of the individual evaluations, a consensus evaluation will be derived. The results of this consensus evaluation will be used to set the competitive range for the purposes of discussions and as the basis for the best value decision by the Contracting Officer/ Source Selection Authority.

2. PROPOSAL REQUIREMENTS. Section 00110, Proposal Submission Requirements and Instructions identifies all the necessary submittal information to be included in the proposals. Proposals that reach the evaluation stage have passed an initial Contracting Division review to assure that they are complete and responsive. All proposals that are provided to the evaluation team will be evaluated and rated.

3. INDIVIDUAL PROPOSAL RATING WORKSHEETS

3.1 Worksheets are provided on the following pages that the evaluators will use to review and rate the individual proposals.

3.2 During the consensus evaluation, a single “consensus rating” worksheet shall be completed for each proposal and signed by all the evaluators. It is imperative that all comments and supporting rational for the rating assigned be included on this consensus sheet.

3.3 Comments are required to support all ratings.

4. RATING METHODOLOGY

4.1 General. The proposals from the Offerors who reach Phase 2 will be evaluated by a team to determine compliance with this solicitation (as a minimum), and to evaluate the quality of the proposed materials, methods, and procedures. Each of the evaluation Factors for Phase 2 will be evaluated by the Government and a final overall rating for the proposals will be determined

by consensus of the Government evaluation team. The rating scheme for Phase 2 of the process is as shown below:

Outstanding: The offeror greatly exceeds the scope of the solicitation requirements in all aspects of the particular factor or sub-factor. The offeror also provides significant advantage(s) and exceeds the solicitation requirements in performance or capability in an advantageous way and has no apparent or significant weaknesses or omissions.

Above Average: The offeror exceeds the scope of the solicitation in most aspects of the particular factor or sub-factor. The offeror provides an advantage in key areas or exceeds performance or capability requirements, but has some areas of improvement remaining.

Satisfactory: The offeror matches the scope of the solicitation in most aspects of the particular factor or sub-factor. The offeror meets the performance or capability requirements of the element but not in a way advantageous to the Government. There is room for improvement in this element.

Marginal: The offeror meets some but not the entire minimum scope of this factor or sub-factor. The offeror does not include any advantages in any areas and does meet the minimum performance or capability requirement for the particular factor or sub-factor. The offer has many apparent weaknesses and improvements are necessary.

Unsatisfactory: The offeror fails to meet the scope of the solicitation in all aspects of the factor or sub-factor or has not submitted any information to address this evaluated item. The offeror does not include any advantages in any areas of the element and does not meet the minimum performance or capability requirements of this factor or sub-factor. The proposal includes large apparent weaknesses and the proposal will require extensive modifications to come into compliance with the minimum requirements of the solicitation.

4.2 **YES – NO Ratings.** Where the specific evaluation sheets indicate a YES – NO Rating these items shall be treated as information items. They are included in the evaluation worksheets to assure a similar focus among the evaluators and to ensure that individual evaluators do not overlook proposal information provided.

5. EVALUATION FACTORS and WEIGHTS

5.1 Relative Importance Definitions: **For the purpose of this evaluation, the following terms will be used to establish the relative importance of the factors and subfactors:**

- **Significantly More Important*:*** The criterion is at least two times greater in value than another criterion.

- **More Important:** The criterion is greater in value than another criterion but less than two times greater.

- **Equal:** The criterion is of the same value or nearly the same as another criterion.

5.2 The following factors will be evaluated and rated for each proposal:

5.2.1 Price is equal in importance to all Technical Factors combined.

5.2.2 Weight among technical factors.

FACTOR 1-1: OFFEROR PAST PERFORMANCE: This factor is significantly more important than Factors 1-2 and 1-3 in the evaluation of Phase 1 proposals.

FACTOR 1-2: TECHNICAL APPROACH NARRATIVE: This factor is equal in importance to Factor 1-3.

FACTOR 1-3: OFFEROR RELEVANT EXPERIENCE: This factor is equal in importance to Factor 1-2.

Factors 1-1, 1-2, and 1-3 combined are equal in weight to Factors 2-2 and 2-3.

FACTOR 2-1: BUILDING FUNCTION AND AESTHETICS: This factor is significantly more important than Factors 2-2 and 2-3.

FACTOR 2-2: BUILDING SYSTEMS: This factor is equal in importance to Factors 2-3 and more important than Factor 2-4 and 2-5.

FACTOR 2-3: SITE DESIGN: This factor is equal in importance to Factor 2-2 and more important than Factor 2-4 and 2-5 .

FACTOR 2-4: SUSTAINABLE DESIGN: This Factor is equal in importance to Factor 2-5.

FACTOR 2-5: MANAGEMENT PLANS AND SCHEDULES: This Factor is equal in importance to Factor 2-4.

6. OVERALL PROPOSAL RATING

6.1 The intent of the evaluation worksheets that follow is to focus the evaluators on the key issues and concerns with respect to construction, operation, and function of the facilities. These

worksheets are meant to stimulate thought and analysis and provide a framework in which to document concerns, strengths, weaknesses, and omissions. Evaluators are encouraged to document all observations and analyses when analyzing the individual proposals, and to share that analysis with the team during the consensus discussions.

6.2 It is the responsibility of the evaluation team to provide and document strengths, weaknesses, and omissions to support the assigned rating in each Factor as well as the overall Phase 1 rating. Documentation/comments are required for all ratings.

6.3 The Chairperson shall provide a copy of the Phase 1 ratings for each Offeror. The evaluation team, will then weigh the assigned ratings from Phase 1 and Phase 2, take into account the assembled strengths and weaknesses, and provide an overall proposal rating for each Offeror. This final combined rating shall be used for comparison and in the trade off process as applicable. For the purposes of this final proposal adjectival rating, the Phase 2 rating shall be more important than the Phase 1 rating.

6.4 Following the completion of the consensus discussions and rating assignments, the individual rating worksheets from each of the evaluators will be collected by the Chairperson and provided to the Contracting Officer. Each evaluator shall sign the final consensus rating assignment sheet.

7. BASIS OF AWARD

7.1 In order to determine which proposal represents the best overall value, the Government will compare proposals to one another. The Government will award a firm fixed-price contract to that responsible Offeror whose submittal and price proposal contain the combination of those criteria described in this document offering the best overall value to the Government. Best value will be determined by a comparative assessment of proposals against all source selection criteria in this RFP.

7.2 The Government is concerned with striking the most advantageous balance between technical features and cost to the Government.

7.3 As technical ratings and relative advantages and disadvantages become less distinct, differences in price between proposals are of increased importance in determining the most advantageous proposal. Conversely, as differences in price become less distinct, differences in rating and relative advantages and disadvantages between proposals are of increased importance to the determination.

7.4 The Government reserves the right to accept other than the lowest priced offer. The right is also reserved to reject any and all offers. The basis of award will be a conforming offer, the price or cost of which may or may not be the lowest. If other than the lowest offer, it must be sufficiently more advantageous than the lowest offer to justify the payment of additional amounts.

7.5 Offerors are reminded to include their best technical and price terms in their initial offer and not to automatically assume that they will have an opportunity to participate in discussions or be asked to submit a revised offer. The Government may make award of a conforming proposal without discussions, if deemed to be within the best interests of the Government.

EVALUATION CRITERIA
FACTOR 2-1: BUILDING FUNCTION AND ASTHETICS

This factor considers the overall functional layout and interaction of the spaces in the facilities as well as the "appeal" of the facility considering interior as well as exterior considerations. The subfactors to be considered deal with the planning and design of the spaces with respect to soldier living and working conditions and the operations of a Soldier Service Center Facility. Closely associated with the functional layout of the spaces and facilities, this factor considers the asthetics of the interior areas as well as the exterior finishes and design of the facilities, up to and including pedestrian ways and the overall environment created by the design proposed. The subfactors described below will be evaluated in the following order of importance:

Subfactors a and b are "GO/NO GO" factors and will be rated as pass/fail without an adjectival component.

Subfactor c is significantly more important than subfactor d.

SUBFACTOR 2-1 a. APPROPRIATE FACILITIES

From an overall perspective, does the proposal include all the required facilities as described in the Statement of Work?

SUBFACTOR 2-1 b. MINIMUM SPACE AND FACILITY SIZE

Does the proposal include all the mandatory spaces in response to the requirements set forth in the Statement of Work? For each of the spaces with a minimum or maximum size limitation, does the proposal comply with these requirements? Insufficient information contained in the proposal to evaluate this item will be considered a "NO GO" and will represent a "FAIL" rating.

EVALUATION CRITERIA
FACTOR 2-1: BUILDING FUNCTION AND ASTHETICS
(Continued)

SUBFACTOR 2-1 c. FUNCTIONAL ARRANGEMENT The following items will be considered in the evaluation of the functional arrangement of the various facilities:

(1A) Soldier Service Center

(a) Does the building floor plan provide space arrangement well suited to the mission of the facility?

(b) Does the building floor plan provide acceptable life safety and fire safety measures? Is the Life Safety Analysis for the facility acceptable and in conformance with the Statement of Work requirements?

(c) Evaluate the Offeror's floor plan with respect to the functional and spatial relationship requirements established in the Statement of Work.

(d) Does the Offeror's floor plan demonstrate compliance with the mandatory requirements for furnishings while allowing suitable space for circulation and other requirements?

(e) Does the Offeror's floor plan allow for suitable work flow and access necessary to successfully operate this facility in accordance with it's mission.

SUBFACTOR 2-1 d. Building Asthetics. The following items will be considered:

(1) Exterior Considerations:

(a) Facades, roof lines, and delineation of entrances.

(b) Proportions of fenestration in relation to elevations.

(c) Shadow effects, materials, and textures.

(d) Proportion and scale within the structure.

(e) Compliance with Installation Design Guide Recommendations

(f) Conformance to adjacent structures architectural styles

EVALUATION CRITERIA
FACTOR 2-1: BUILDING FUNCTION AND ASTHETICS
(Continued)

(g) Exterior color schemes proposed.

(h) Other aesthetic considerations.

(2) Interior Considerations:

(a) Are the proposed colors and details conducive to the mission of the facility?

(b) Do the proposed materials and finishes represent a positive working environment?

(c) Do the ceiling heights, hallway widths, and other space sizes and configurations provided develop a workable solution to the facility mission?

(d) Does the interior design package provide for an interesting, attractive environment?

(e) Is the interior system and finishes proposed suitable for use in a facility where the primary occupants are soldiers? Are these systems suitable for a heavy usage environment?

EVALUATION CRITERIA
FACTOR 2-2: BUILDING SYSTEMS

This factor considers the materials, layout, maintainability, quality, durability, maintenance considerations, and any aspects of the proposed building systems and materials. Additional consideration will be given to all proposed systems or materials which include betterments or which exceed the minimum requirements of the Statement of Work. Offerors are encouraged to present energy, maintenance, and life cycle cost improvements which will lead to the overall improvement in the final facilities constructed. The following subfactors shall be considered in evaluating this factor. The levels of importance are as follows:

Subfactor b is significantly more important than subfactor c.

Subfactor c is more important than subfactor a.

SUBFACTOR 2-2 a. Building Structural Systems. This subfactor evaluates the structural systems and sub-systems proposed for installation in the facilities. While no detail drawings or calculations are required or desired, this subfactor will evaluate the narrative descriptions of the structural systems proposed. Consideration will be given to overall life cycle maintenance of the systems and also to considerations of materials selected with respect to the expected use by soldiers. Additional considerations will be given to proposed systems with a long expected life (greater than 25 years) vs. a system requiring greater cyclical replacement.

SUBFACTOR 2-2 b. Building Heating, Ventilating, and Air Conditioning Systems. This subfactor evaluates the heating, air conditioning, and ventilating systems proposed for installation. Evaluation will concentrate on the proposed schematic drawing information presented, the design approach narratives, and the equipment and material catalog information included in the proposals. The systems proposed must meet the minimum requirements set out in the Statement of Work and shall represent systems which are fully integrated into the building structure and are fully capable of environmental control of the spaces. Within this subfactor, the automatic temperature controls will also be considered. Where addressed in the Statement of Work, the proposed automatic temperature controls systems proposed shall be 100% compatible and integratable into the existing Installation Wide UMCS without translators or third party interface devices. Additional considerations will be given to proposals which incorporate energy recovery systems, high efficiency systems, energy conservation considerations, thermal storage systems, and other systems and features designed to enhance the overall performance of the facility while reducing the operating and maintenance costs expected.

EVALUATION CRITERIA
FACTOR 2-2: BUILDING SYSTEMS
(Continued)

SUBFACTOR 2-2 c. Building Interior Electrical Systems. This subfactor evaluates the electrical power and lighting systems proposed for installation. Evaluation will concentrate on the proposed schematic drawing information presented, the design approach narratives, and the equipment and material catalog information included in the proposals. The systems proposed must meet the minimum requirements set forth in the Statement of Work and shall represent systems which are fully integrated into the building structure. Additional consideration will be given to proposals which incorporate energy saving materials or materials which represent a lower life cycle cost to the Base.

EVALUATION CRITERIA
FACTOR 2-3: SITE DESIGN CONSIDERATIONS

This factor considers the layout and planning of the site which comprise a good site development plan. All elements of site design will be considered in this factor, with the exception of the design and materials utilized for utility systems which will be evaluated under a different factor. The following subfactors shall be considered in evaluation of this factor. The levels of importance are as follows:

Subfactor a is more important than subfactors b, c, and d.

Subfators a, b, c and d are equal in importance.

SUBFACTOR 2-3 a. Area Development Plan. This subfactor evaluates the overall development concept proposed in the Offeror's plan with respect to the placement and orientation of the facilities, parking areas, pedestrian ways, circulation paths, site lighting, and other aspects which comprise the overall site development. Proposals which reflect the design intent and direction as outlined in the Statement of Work will receive the most consideration during the evaluation process.

SUBFACTOR 2-3 b. Site Utilities. This factor evaluates the technical performance of the proposed utility and exterior distribution systems. The quality of the proposed design as well as the materials selected will be considered in this item. Emphasis will be placed on durability, corrosion resistance, ease of maintenance, and life cycle cost of materials selected. Consideration will be given to the suitability of the chosen materials for the soil conditions present. Site engineering will consider all aspects of the proposal beyond the 5-ft (1500-mm) line from all new facilities.

SUBFACTOR 2-3 c. Force Protection Considerations. This subfactor evaluates the inclusion of the site restraints imposed by the Force Protection requirements in the Statement of Work into the Offeror's proposal. The proposal must address this subfactor specifically. If a proposal is rated "unsatisfactory" in this subfactor the proposal may be eliminated from further consideration.

SUBFACTOR 2-3 d. Site Amenities. This subfactor evaluates the provision of site amenities to enhance the outdoor livability of the Soldier Service Center. The requirements shown in the Statement of Work are considered minimums. Offerors are encouraged to include additional items or considerations to enhance the nature of the Soldier Service Center and foster the development of the areas as "campus like" environments.

EVALUATION CRITERIA

FACTOR 2-4: SUSTAINABLE DESIGN CONSIDERATIONS

Offerors shall include a preliminary ranking of the sustainable design considerations included in the proposal. This ranking shall be either a LEED (Leadership in Energy and Environmental Design, by the U.S. Green Building Council) or a SPiRiT (Sustainable Project Rating Tool, by the U.S. Army Corps of Engineers) ranking. The successful proposal shall be required to complete a detailed analysis on the final design which meets or exceeds the preliminary ranking established at proposal level. Proposals must score at least a Bronze SPiRiT Level or a Certified LEED Level. The evaluation of this factor shall be as follows:

FACTOR RATING	SpiRiT Level	LEED Level
Satisfactory	Bronze	Certified Bronze
Above Average	Silver	Certified Silver
Outstanding	Gold	Certified Gold
Outstanding	Platinum	Certified Platinum

EVALUATION CRITERIA
FACTOR 2-5: MANAGEMENT PLANS AND SCHEDULES

This factor evaluates the Offeror's Project Management as well as the proposed schedule for completion of the entire design-build project. Each of the subfactors below is equal in importance.

SUBFACTOR 2-5 a. Project Key Personnel. The Government will evaluate and rate the Key Personnel identified in the proposal package. The resumes and levels of responsibility of the principal managers and technical personnel who will be directly responsible for the day-to-day design and construction activities will be evaluated. Data should indicate whether each individual has had a significant part in any of the project examples cited. If reassignment of personnel is considered possible, the names and resumes of the alternative professionals for each assignment will be evaluated. Additional consideration will be given to individuals who have past experience with Corps of Engineers construction project operations and who have completed the Corps sponsored Quality Control Class.

SUBFACTOR 2-5 b. Schedule Information. The schedule will be evaluated to assess the inclusion of "fast tracking" and the rationale of how the Offeror intends to comply with the submitted schedule. The schedule must reflect a single task oriented structure for both design and construction. The schedule will be reviewed for completeness and the inclusion of required milestones. A schedule which improves on the Government supplied maximum duration will be considered more favorably during the evaluation.

SUBFACTOR 2-5 c. Quality Control Plan. The Offeror's sample quality control plan will be reviewed and evaluated for inclusion of specific quality control practices and requirements necessary for the successful completion of all phases of this project. These phases include design stages as well as construction specialties. The Offeror's plan must show the inclusion of the Corps Three Phase Inspection process, and address the implications and operations of the Quality Control Plan and its integration with the Quality Assurance Operations performed by the Government.

SUBFACTOR 2-5 d. Sub-Contracting Plan. The Offeror's proposed subcontracting plan will be evaluated in terms of achieving the required special emphasis group participations and the completeness and rationale for the plan proposed. Offerors who are not required to submit a subcontracting plan (i.e., Small Business concerns) will be assigned a rating equal to the highest evaluation of any subcontracting plan submitted in response to this solicitation.

Offeror: _____

Evaluator:_____

MINIMUM REQUIREMENTS CHECKLIST

PRO FORMA

- ❑ Certification of Compliance with the RFP
- ❑ Representaions and Certifications
- ❑ Proposal Bonds
- ❑ Completed SF 1442 (including DUNS Number)
- ❑ Price Proposal – Original and One Copy
- ❑ 6 sets of drawings (original and 5 copies)
- ❑ 6 copies of bound Technical Proposal
- ❑ 6 copies of bound Management Plan

Offeror: _____

Evaluator:_____

MINIMUM REQUIREMENTS CHECKLIST
(Continued)

DRAWINGS

- ❑ Area Site Development Plan
- ❑ Demolition and Phasing Plan
- ❑ Site Plan
- ❑ Utility Plan
- ❑ Floor Plans
- ❑ Typical Exterior Elevations
- ❑ Typical Interior Elevations
- ❑ Transverse and Longitudinal Sections
- ❑ Typical Wall Sections
- ❑ Details
- ❑ Finish Schedules
- ❑ Mechanical Floor Plan
- ❑ Electrical Floor Plan

Offeror: _____

Evaluator:_____

MINIMUM REQUIREMENTS CHECKLIST
(Continued)

SPECIFICATIONS

- ❑ Outline Specifications

EQUIPMENT SCHEDULE

- ❑ Equipment Schedule
- ❑ Manufacturers Data / Catalog Cuts

COLOR BOARDS

- ❑ Interior Color Board
- ❑ Exterior Color Board

LIFE SAFETY ANALYSIS

- ❑ Life Safety Analysis

MANAGEMENT PLANS

- ❑ Integrated Design and Construction Schedule
- ❑ Subcontracting Plan

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET

FACTOR 2-1

BUILDING FUNCTION AND AESTHETICS

1. General: In this most basic area the subfactors are concerned with the "appeal" of the facility as well as its functionality in space arrangement and work/living space circulation patterns. This subfactor will also consider the aesthetics of the interior and exterior of the proposed facilities. The first two subfactors are GO/NO GO items. If either of these items is a "NO GO" rating, the entire factor (2-1) shall be rated as "UNACCEPTABLE".

2. Each individual subfactor will be rated separately with a combined rating made for all of Factor 2-1 at the completion of the rating for each subfactor.

3. Subfactor Evaluations.

a. Subfactor 2-1 a Appropriate Facilities. Has the offeror provided the facilities as required by the Statement of Work? This subfactor is to be evaluated on the "gross scale" of buildings and types of building provided. The actual evaluation of the technical quality of those facilities will be done in other factors and subfactors.

/__ / GO /__ / NO GO

b. Subfactor 2-1 b Minimum Space and Facility Size. Does the proposal include all the spaces required by the statement of work and do those spaces comply with the minimum size or dimension requirements of the statement of work? Insufficient or incomplete information in the proposal will be scored as a "NO GO".

/__ / GO /__ / NO GO

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-1
(Continued)

c. Subfactor 2-1 c Functional Arrangement. Consider the proposed layout of the facilities with respect to circulation space, adjacencies, life safety concerns, and privacy considerations. Do the floor plans and arrangements offered comply with the minimum stated requirements from the statement of work? Has the offeror demonstrated knowledge of the expected facility operations in the offered plans? If multiple facility types are included in a single project, the evaluator shall make an overall assessment with respect to all facility types.

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the area of Functional Arrangement. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses in the area of Functional Arrangement. Comments are required for all ratings.

Other Comments. Include any other comments with respect to Functional Arrangement here.

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-1
(Continued)

d. Subfactor 2-1 d Building Aesthetics. Evaluators shall review and assess the appeal of the proposed facility. This assessment shall include interior and exterior considerations which enhance the interior spaces and increase the exterior presence of the facility. Attention shall be paid to compliance with the Installation Design Guide and in particular with the overall architectural themes desired for the new facilities. If multiple facility types are included in a single project, the evaluator shall make an overall assessment with respect to all facility types.

For exteriors consider: facades, roof lines, colors, entrance delineation, fenestration in relation to elevations, textures, proportion and scale.

For interiors consider: interior finishes, durability of interior finishes and materials, ceiling heights and hallway widths, color schemes, durability, cleaning requirements.

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the area of Building Aesthetics. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses in the area of Building Aesthetics. Comments are required for all ratings.

Other Comments. Include any other comments with respect to Building Aesthetics here.

Offeror: _____

Evaluator:_____

FACTOR 2-1 Summary Rating

FACTOR 2-1 SUMMARY RATING CHART			
Item No.	**Description**	**Rating***	**Comments**
1.	Subfactor 2-1 a Appropriate Facilities		GO/NO GO
2.	Subfactor 2-1 b Minimum Space and Facility Size		GO/NO GO
3.	Subfactor 2-1 c Functional Arrangement		Subfactor c is significantly more important than subfactor d.
4.	Subfactor 2-1 d Building Aesthetics		
FACTOR 2-1 RATING**			

* Ratings may be either:

Outstanding – Above Average – Satisfactory – Marginal – Unsatisfactory

** Evaluators shall consider the ratings in the various items shown to determine a suitable overall rating. The overall rating cannot be an average, mode, or median of the ratings of the subfactors. A final rating must be reached based on discussions and a consensus among the evaluators

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET

FACTOR 2-2

BUILDING SYSTEMS

1. General: In analyzing the various subfactors the evaluators must rate these items with respect to material quality, durability, life cycle cost considerations, and on-going maintenance required. Proposals which exceed the minimum requirements of the solicitation in these areas should be rated above "SATISFACTORY". Particular attention should be paid to energy conservation, maintenance considerations, and durability.

2. Subfactor Evaluations.

a. **Subfactor 2-2 a Building Structural Systems.** Evaluators must key on the expected life cycle of the proposed structural system in the environment where the facility is located and its use by soldiers. Narrative information must include considerations and explanations of these implications to receive higher than a "Satisfactory" rating.

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the area of Building Structural Systems. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses in the area of Building Structural Systems. Comments are required for all ratings.

Other Comments. Include any other comments with respect to Building Structural Systems here.

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-2 BUILDING SYSTEMS
(Continued)

b. **Subfactor 2-2 b Building Heating, Ventilating, and Air Conditioning Systems.** Building HVAC systems are prime consumers of energy and represent a key opportunity to reduce the overall energy usage of the facilities. Through a careful review of the proposal information the evaluators must keep energy conservation considerations foremost in their analysis. Proposed systems which meet the minimum requirements of the statement of work should not be rated above "Satisfactory". Proposed materials and systems should be evaluated to determine their compliance with the solicitation requirements. Proposal narrative and information provided concerning the HVAC systems should address energy conservation as well as control of the various components.

Other Considerations: Access to equipment for maintenance, noise considerations from central equipment, provision of individual space control, durability of materials proposed, suitability of materials exposed to troop areas, integration into the facility wide control system where applicable, outside air (ventilation) considerations, outside equipment locations quality of equipment proposed.

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the area of HVAC Systems. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses in the area of HVAC Systems. Comments are required for all ratings.

Other Comments. Include any other comments with respect to HVAC Systems here.

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-2 BUILDING SYSTEMS
(Continued)

c. **Subfactor 2-2 c Building Interior Electrical Systems.** This subfactor evaluates the electrical power and lighting systems within the facility. As with HVAC systems, there are a significant number of methods to reduce the electrical usage of the facilities. Proposals which comply with the minimum requirements of the statement of work shall be rated as "SATISFACTORY". Proposals which include energy saving materials and methods should receive a higher evaluation. In addressing the potential energy savings from energy conservation systems the evaluators must also consider the possible impacts to maintenance and replacement costs for highly specialized or unusual systems proposed. Consideration of future maintenance and replacement costs must be included in evaluating this subfactor.

Other Considerations: Placement of panels, fixtures, receptacles, etc; capacity for future loads, logic and simplicity of power feeds and systems, quality of materials proposed,

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the area of Electrical Power and Lighting Systems. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses in the area of Electrical Power and Lighting Systems. Comments are required for all ratings.

Other Comments. Include any other comments with respect to Electrical Power and Lighting Systems here.

Offeror: _____

Evaluator:_____

FACTOR 2-2 Summary Rating

FACTOR 2-2 SUMMARY RATING CHART			
Item No.	**Description**	**Rating***	**Comments**
1.	Subfactor 2-2 a Building Structural Systems		
2.	Subfactor 2-2 b Building HVAC Systems		Subfactor b is significantly more important than subfactor c.
3.	Subfactor 2-2 c Building Interior Electrical Systems		Subfactor c is more important than subfactor a.
FACTOR 2-2 RATING**			

* Ratings may be either:

Outstanding – Above Average – Satisfactory – Marginal – Unsatisfactory

** Evaluators shall consider the ratings in the various items shown to determine a suitable overall rating. The overall rating cannot be an average, mode, or median of the ratings of the subfactors. A final rating must be reached based on discussions and a consensus among the evaluators

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET

FACTOR 2-3

SITE DESIGN CONSIDERATIONS

1. General: In analyzing the various subfactors the evaluators must rate these items with respect to material quality, durability, life cycle cost considerations, and on-going maintenance required. Proposals which exceed the minimum requirements of the solicitation in these areas should be rated above "Satisfactory". Particular attention should be paid to the development of livable communities for the soldiers and to the inclusion of Force Protection considerations.

2. Subfactor Evaluations.

a. **Subfactor 2-3 a Area Development Plan.** The overall site development must compliment the requirements of the Installation Design Guide as well as provide for a safe, organized, well thought out solution to the siting of the facilities and amenities. Original innovative site designs which capitalize on the existing site possibilities shall be evaluated highly.

Other Considerations: Placement of parking areas, placement of pedestrian parkways, orientation of the facilities, site lighting,

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the area of Area Development. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses in the area of Area Development. Comments are required for all ratings.

Other Comments. Include any other comments with respect to Area Development Plans.

Offeror: _____

Evaluator: _____

PROPOSAL RATING WORKSHEET
FACTOR 2-3 SITE DESIGN CONSIDERATIONS
(Continued)

b. **Subfactor 2-3 b Site Utilities.** This subfactor evaluates the technical performance of the proposed site utility and exterior utility distribution systems. The quality of the proposed design as well as the materials selected will be considered in this item. Emphasis will be placed on durability, corrosion resistance, ease of maintenance, and life cycle cost of materials selected. Consideration will be given to the suitability of the chosen materials for the site soil conditions present. Site engineering will consider all aspects of the proposal beyond the 5-ft (1500 mm) line from all new facilities.

Other Considerations: Integration and/or tie-in with existing utilities systems.

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the area of Site Utilities. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses in the area of Site Utilities. Comments are required for all ratings.

Other Comments. Include any other comments with respect to Site Utilities here.

Offeror: _____

Evaluator: _____

PROPOSAL RATING WORKSHEET
FACTOR 2-3 SITE DESIGN CONSIDERATIONS
(Continued)

b. **Subfactor 2-3 c Force Protection.** This subfactor evaluates the inclusion of the site restraints imposed by the Force Protection requirements in the Statement of Work into the Offeror's proposal. The proposal must address this subfactor specifically. If a proposal is rated "unsatisfactory" in this subfactor the proposal may be eliminated from further consideration.

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the area of Force Protection. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses in the area of Force Protection. Comments are required for all ratings.

Other Comments. Include any other comments with respect to Force Protection here.

Offeror: _____

Evaluator: _____

PROPOSAL RATING WORKSHEET
FACTOR 2-3 SITE DESIGN CONSIDERATIONS
(Continued)

b. **Subfactor 2-3 d Site Amenities.** This subfactor evaluates the provision of site amenities to enhance the outdoor livability of the Soldier Service Center. The requirements shown in the Statement of Work are considered minimums. Offerors are encouraged to include additional items or considerations to enhance the nature of the Soldier Service Center and foster the development of the areas as "campus like" environments.

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the area of Site Amenities. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses in the area of Site Amenities. Comments are required for all ratings.

Other Comments. Include any other comments with respect to Site Amenities here.

Offeror: _____

Evaluator:_____

FACTOR 2-3 Summary Rating

FACTOR 2-3 SUMMARY RATING CHART			
Item No.	**Description**	**Rating***	**Comments**
1.	Subfactor 2-3 a **Area Development Plan**		Subfactor a is more important than subfactor b, c, and d.
2.	Subfactor 2-3 b **Site Utilities**		Subfactor b is equal to subfactor c and d.
3.	Subfactor 2-3 c **Force Protection**		Subfactor c is equal to subfactor b and d.
4.	Subfactor 2-3 d **Site Amenities**		Subfactor d is equal to subfactor b and c.
FACTOR 2-3 RATING**			

* Ratings may be either:

Outstanding – Above Average – Satisfactory – Marginal – U nsatisfactory

** Evaluators shall consider the ratings in the various items shown to determine a suitable overall rating. The overall rating cannot be an average, mode, or median of the ratings of the subfactors. A final rating must be reached based on discussions and a consensus among the evaluators

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET

FACTOR 2-4
SUSTAINABLE DESIGN CONSIDERATIONS

1. General: Evaluators shall utilize the Offeror provided analysis to enter the chart below to determine the rating for this factor.

SUSTAINABILITY RATINGS			
Offeror Prepared Sustainability Level		***Associated Factor Rating***	***Comments***
SPIRIT POINTS			
50 to 100 (Platinum or Gold)		Outstanding	
35 to 49 (Silver)		Above Average	
25 to 34 (Bronze)		Satisfactory	
20 to 24		Marginal	
0 to 19		Unsatisfactory	

Factor Rating: _____

Proposal Strengths. Include narrative comments with respect to proposal strengths in the Offeror's Sustainable Design. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses of the Offeror's Sustainable Design. Comments are required for all ratings.

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET

FACTOR 2-5

MANAGEMENT PLANS AND SCHEDULES

1. General: The information provided in response to this factor completes the Offeror Performance Information which was received, reviewed, and evaluated in Phase 1 of this solicitation. Through this factor the evaluators will review and evaluate the Offeror's demonstrated understanding of the design/build process as required in this solicitation.

Subfactor 2-5 a. Key Personnel:

Does the Proposal Include Identifications of the Key Personnel? ____ YES ___ NO

Review and evaluate the proposed Offeror personnel to be included on this project team. Have these individuals worked Design/Build projects together previously? Do the key construction staff (CQC, Project Manager) have experience with "fast-track" design/build projects? Are the designers of record registered professional engineers? Are the designers suitably experienced in their field to provide them a suitable level of design expertise? Based on that review, provide a rating for the Offeror proposed project team below. Include a listing of any apparent weaknesses or strengths of the offeror and the proposed project team.

/__/ Outstanding

/__/ Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

/__ / Unknown

Strengths: Include a listing of any identified or obvious strengths of the offeror with respect to Offeror Key Personnel.

Weaknesses: Include a listing of any identified or obvious weaknesses of the offeror with respect to Offeror Key Personnel.

Other: Include any other comments/rational to support the overall rating provided for this offeror.

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-5 MANAGEMENT PLANS AND SCHEDULES
(Continued)

SUBFACTOR 2-5 b. Schedule Information. Evaluators shall review and evaluate the Offeror's proposed schedule information to determine the extent of "fast tracking" included. The schedule must reflect a single task oriented structure for both design and construction operations. Evaluators shall review and assess completeness, inclusion of required milestones, and realism. Proposed schedules which indicate project completion prior to the Government indicated maximum duration should receive favorable consideration.

Other Considerations:

Integrated Design and Construction Schedule with all "Fast Tracking" areas clearly identified. The schedule for design and construction shall be task oriented, indicating dates by which milestones are to be achieved. The offeror may use a critical path or other method of his/her choice; however, the schedules shall be graphically represented.

The offeror shall also submit a rationale explaining how the schedules will be achieved.

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the Offeror's proposed Project Schedule. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses of the Offeror's proposed Project Schedule. Comments are required for all ratings.

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-5 MANAGEMENT PLANS AND SCHEDULES
(Continued)

SUBFACTOR 2-5 c. Quality Control Plan. Evaluators shall review and evaluate the Offeror's quality control procedures planned for application to this project. The quality control plan and procedures must address design as well as construction phases of the project. The proposed quality control program must include and address the Corps three phase quality control system and acknowledge experience and familiarity with the Corps Quality Assurance program. If personnel identified by the Offeror have changed, the alternate personnel shall be reviewed to assure a similar level of quality.

Other Considerations:

Offerors shall submit Quality Control Plans that respond to the minimum requirements of Technical Specifications Section 01451 entitled "Contractor Quality Control Design/Build." The Offeror's program shall include the following characteristics:

A clear identification of the personnel responsible for quality control and a clear policy establishing their authority. The quality control group shall be separate and apart from (not the same) the people that are doing the construction. This quality control group shall report to the Contractor's management at a level no lower than a Vice President of the company.

A specific description of the tasks and functions of the quality control personnel.

A specific policy establishing schedules for the performance of quality control tasks.

A policy for reporting quality control findings to the Contracting Officer.

A procedure whereby the Contracting Officer may resolve disputes that have not received satisfactory responses from the first levels of quality control personnel.

The names of testing laboratories to be used and the procedures for test data reporting.

A plan for material storage and protection.

The plan for review, evaluation, and Offeror Quality Control of the Design Submittals prior to Government receipt.

The plan for review of submittals and extensions of design. Of particular interest is the role of the Designer of Record in all design and construction progress.

Procedures for involving Key Subcontractors in the design development.

Procedures for successful integration of the Offeror's Quality Control Program with the Government's Quality Assurance Program.

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-5 MANAGEMENT PLANS AND SCHEDULES
(Continued)

SUBFACTOR 2-5 c. Quality Control Plan. Overall rating.

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the Offeror's proposed Quality Control Plan. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses of the Offeror's proposed Quality Control Plan. Comments are required for all ratings.

Other comments.

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-5 MANAGEMENT PLANS AND SCHEDULES
(Continued)

SUBFACTOR 2-5 d. Sub-Contracting Plan. Evaluators shall review and evaluate the Offeror's proposed subcontracting plan in terms of achieving the required special emphasis group participations and the completeness and rationale for the plan proposed. All large businesses are required to submit a subcontracting plan with their Phase 2 proposal. For guidance in preparing an acceptable plan refer to the Army's Subcontracting Plan Evaluation Guide (Army Federal Acquisition Regulation Supplement Appendix CC) at http://acqnet.sarda.army.mil/afar/apcc.htm.

Small Business is inclusive of small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and woman-owned small business concerns.

Offerors who are not required to submit a subcontracting plan (ie Small Business concerns) will be assigned a neutral rating.

Considerations:

1. Does the subcontracting plan give the prime contract amount? (Bid amount for sealed bid, proposed amount for RFP, basic value of contract for IDIQ)

2. Does the subcontracting plan address a separate goal for all small business concerns? And options, if applicable? See sample format. FAR Clause 52.219-9(d)(1)&(2)

3. Are the goals addressed in paragraph #2 expressed in terms of percentages and dollars of the total planned subcontracted dollars? See sample format. FAR Clause 52.219-9(d)(1)&(2)

4. Does the subcontracting plan state a goal, or address subcontracting, for Historically Black Colleges & Universities/Minority Institutions (HBCU)? DFAR 219.704(a)(1)

5. Does the subcontracting plan state how much of the total planned subcontracted dollars will be subcontracted to large business?

6. Does the subcontracting plan demonstrate efforts to broaden the small business vendor base by the following (FAR Clause 52.219-9(d)(3)&(e)):

   - Describe the supplies and services to be subcontracted, or give the key project elements to be subcontracted?
   - Identify specific small business concerns for each subcontracted item?
   - Target specific small business concerns to determine their competence, ability, experience?

7. Does the subcontracting plan give a description of the method used to develop the subcontracting plan goals? FAR Clause 52.219-9(d)(4)

8. Does the subcontracting plan describe the method used to identify potential sources? FAR Clause 52.219-9(d)(5)

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-5 MANAGEMENT PLANS AND SCHEDULES
(Continued)

SUBFACTOR 2-5 d. Sub-Contracting Plan (Continued).

9. Does the subcontracting plan give a statement as to whether or not the plan includes indirect costs in establishing subcontracting goals, and for administering the subcontracting plan? If the subcontracting plan includes indirect costs, a description must be given to show the method used to determine the proportionate share of indirect costs. FAR Clause 52.219-9(d)(6)

Only those companies such as General Electric, Westinghouse, and BBC typically include these costs.

10. Does the subcontracting plan name the company employee responsible for administration of the subcontracting program and the employee's duties in regards to the subcontracting program? FAR Clause 52.219-9(d)(7),

11. Does the subcontracting plan give a description of the efforts to ensure that small businesses have an equitable opportunity to participate in the acquisition? FAR Clause 52.219-9(d)(8)

12. Does the subcontracting plan give a statement affirming intent to comply with subcontracting "flowdown" provisions? FAR Clause 52.219-9(d)(9)

13. Does the subcontracting plan give a statement affirming willingness to cooperate in studies and to provide reports, and to submit the SF294/295 timely? FAR Clause 52.219-9(d)(10)

14. Does the subcontracting plan give a description of the types of records that will be maintained to demonstrate procedures adopted to comply with the requirements and goals in the plan? FAR Clause 52.219-9(d)(11).

15. Does the subcontracting plan demonstrate an outreach program of on-going and planned actions? FAR Clause 52.219-9(d)&(e)

16. Does the subcontracting plan have a policy statement or evidence of internal guidance recognizing commitment to the pertinent Public Laws which demonstrates definitive corporate and management commitment?

17. PAST PERFORMANCE OF THE PRIME CONTRACTOR. Does the subcontracting plan discuss past performance relating to how the prime contractor has historically been successful in establishing realistic goals, and achieving those goals? FAR 19.705-4

18. Does the prime contractor participate in the DOD Mentor-Protégé program, or the SBA's 8(a)

mentor-protégé program?

Offeror: _____

Evaluator:_____

PROPOSAL RATING WORKSHEET
FACTOR 2-5 MANAGEMENT PLANS AND SCHEDULES
(Continued)

SUBFACTOR 2-5 d. Sub-Contracting Plan (Continued).

/__ / Outstanding

/__ / Above Average

/__ / Satisfactory

/__ / Marginal

/__ / Unsatisfactory

Proposal Strengths. Include narrative comments with respect to proposal strengths in the Offeror's proposed Sub-Contracting Plan. Comments are required for all ratings.

Proposal Weaknesses. Include narrative comments with respect to proposal weaknesses of the Offeror's proposed Sub-Contracting Plan. Comments are required for all ratings.

Offeror: _____

Evaluator:_____

FACTOR 2-5 Summary Rating

FACTOR 2-5 SUMMARY RATING CHART			
Item No.	**Description**	**Rating***	**Comments**
1.	Subfactor 2-5 a **Key Personnel**		All subfactors are equal.
2.	Subfactor 2-5 b **Schedule Information**		All subfactors are equal.
3.	Subfactor 2-5 c **Quality Control Plan**		All subfactors are equal.
4.	Subfactor 2-5 d **Sub-Contracting Plan**		All subfactors are equal.
FACTOR 2-5 RATING**			

* Ratings may be either:

Outstanding – Above Average – Satisfactory – Marginal – Unsatisfactory

** Evaluators shall consider the ratings in the various items shown to determine a suitable overall rating. The overall rating cannot be an average, mode, or median of the ratings of the subfactors. A final rating must be reached based on discussions and a consensus among the evaluators

Offeror:_____

Phase 2 Summary and Overall Rating

PHASE 2 SUMMARY RATING CHART			
Item No.	**Description**	**Rating***	**Comments**
1.	Factor 2-1 Building Function and Aesthetics		This factor is significantly more important than Factors 2-2 and 2-3.
2.	Factor 2-2 Building Systems		This factor is equal in importance to Factors 2-3 and more important than Factor 2-4 and 2-5.
3.	Factor 2-3 Site Design		This factor is equal in importance to Factor 2-2 and more important than Factor 2-4 and 2-5.
4.	Factor 2-4 Sustainable Design		This factor is equal to Factor 2-5.
5.	Factor 2-5 Management Plans and Schedules		This factor is equal to Factor 2-4.
OVERALL PHASE 2 RATING**			

* Ratings may be either:

Outstanding – Above Average – Satisfactory – Marginal – U nsatisfactory

** Evaluators shall consider the ratings in the various items shown to determine a suitable overall rating. The overall rating cannot be an average, mode, or median of the ratings of the four factors. A final rating must be reached based on discussions and a consensus among the evaluators

Attach additional sheets to this rating summary to provide supporting rational for assignment of ratings.

_____ Board Member 1

_____ Board Member 2

_____ Board Member 3

_____ Board Member 4

_____ Board Chairperson

Section 00600 - Representations & Certifications

CLAUSES INCORPORATED BY FULL TEXT

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

(a) The offeror certifies that --

(1) The prices in this offer have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other offeror or competitor relating to –

(i) Those prices,

(ii) The intention to submit an offer, or

(iii) The methods of factors used to calculate the prices offered:

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

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

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

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

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

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

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

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

(End of provision)

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

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence

Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.

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

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

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

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

(End of provision)

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

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

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

(End of provision)

52.204-4003 TAXPAYER IDENTIFICATION

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

(a) Taxpayer Identification Number (TIN).

___ TIN:._____

___ TIN has been applied for.

___ TIN is not required because:

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

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

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

(b) Type of organization.

___ Sole proprietorship;

___ Partnership;

___ Corporate entity (not tax-exempt);

___ Corporate entity (tax-exempt);

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

___ Foreign government;

___ International organization per 26 CFR 1.6049-4;

___ Other _____

(c) Common parent.

___ Offeror is not owned or controlled by a common parent

___ Name and TIN of common parent:

Name _____

TIN _____

(End of provision)

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

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

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

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

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

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

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

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

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

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

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

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

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

(End of provision)

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

(a)(1) The North American Industry Classification System (NAICS) code for this acquisition is 233320 (insert NAICS code).

(2) The small business size standard is 28.5 (insert size standard).

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

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

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

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

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

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

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

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

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

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

( ) Black American.

( ) Hispanic American.

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

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

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

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

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

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

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

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

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

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

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

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

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

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

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

(d) Notice.

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

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

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

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

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

(End of provision)

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

(a) Definition.

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

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

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

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

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

(End of provision)

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

The offeror represents that --

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

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

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

(End of provision)

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

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

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

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

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

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

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

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

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

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

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

(a) "Definitions."

As used in this provision --

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

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

(3) "Significant interest" means --

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

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

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

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

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

(b) "Prohibition on award."

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

(c) "Disclosure."

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

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

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

(End of provision)

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

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

(b) Representation. The Offeror represents that it:

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

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

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

(End of provision)

Section 00700 - Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

52.202-1 DEFINITIONS (DEC 2001) --ALTERNATE I (MAY 2001)

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

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

(c) Any item, other than real property, that is of a type customarily used by the general public or by non-governmental entities for purposes other than governmental purposes, and that--

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

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

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

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

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

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

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

(5) Installation services, maintenance services, repair services, training services, and other services if--

(i) Such services are procured for support of an item referred to in paragraph (c)(1), (2), (3), or (4) of this definition, regardless of whether such services are provided by the same source or at the same time as the item; and

(ii) The source of such services provides similar services contemporaneously to the general public under terms and conditions similar to those offered to the Federal Government;

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

(i) Catalog price means a price included in a catalog, price list, schedule, or other form that is regularly maintained by the manufacturer or vendor, is either published or otherwise available for inspection by customers, and states

prices at which sales are currently, or were last, made to a significant number of buyers constituting the general public; and

(ii) Market prices means current prices that are established in the course of ordinary trade between buyers and sellers free to bargain and that can be substantiated through competition or from sources independent of the offerors.

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

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

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

(e) Contracting Officer means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(f) Nondevelopmental item means--

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

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

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

(End of clause)

52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled--

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

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

(a) Except as provided in (b) of this clause, the Contractor shall not enter into any agreement with an actual or prospective subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such subcontractors directly to the Government of any item or process (including computer software) made or furnished by the subcontractor under this contract or under any follow-on production contract.

(b) The prohibition in (a) of this clause does not preclude the Contractor from asserting rights that are otherwise authorized by law or regulation.

(c) The Contractor agrees to incorporate the substance of this clause, including this paragraph (c), in all subcontracts under this contract which exceed $100,000.

(End of clause)

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

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed $100,000.

(End of clause)

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

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

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

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

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

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

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

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

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

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

(End of clause)

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

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee

under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be--

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts--

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may--

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

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

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

(1) The awarding of any Federal contract.

(2) The making of any Federal grant.

(3) The making of any Federal loan.

(4) The entering into of any cooperative agreement.

(5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

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

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

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

(4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, Title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working

days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

(1) Section 1352 of Title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--

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

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has

agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of $25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding $100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(End of clause)

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

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

“Postconsumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.” For paper and paper products, postconsumer material means “postconsumer fiber” defined by the U.S. Environmental Protection Agency (EPA) as--

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

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

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

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

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

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as--

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

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

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

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

(End of clause)

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUL 1995)

(a) The Government suspends or debars Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the $25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed $25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

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

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(End of clause)

52.211-15 DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS (SEP 1990)

This is a rated order certified for national defense use, and the Contractor shall follow all the requirements of the Defense Priorities and Allocations System regulation (15 CFR 700).

(End of clause)

52.215-2 AUDIT AND RECORDS--NEGOTIATION (JUN 1999)

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

(b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

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

(1) The proposal for the contract, subcontract, or modification;

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

(3) Pricing of the contract, subcontract, or modification; or

(4) Performance of the contract, subcontract or modification.

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

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating (1) the effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports and (2) the data reported.

(f) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition--

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and--

(1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(2) For which cost or pricing data are required; or

(3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(End of clause)

52.215-11 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, except that this clause does not apply to any modification if an exception under FAR 15.403-1 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a

subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--

(1) The actual subcontract; or

(2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d)(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

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

(2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the “as of” date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data were known by the Contractor to be understated before the “as of” date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the “as of” date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

52.215-13 SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) The requirements of paragraphs (b) and (c) of this clause shall--

(1) Become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4; and

(2) Be limited to such modifications.

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

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds the threshold for submission of cost or pricing data at FAR 15.403-4 on the date of agreement on price or the date of award, whichever is later.

52.215-21 REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) Exceptions from cost or pricing data. (1) In lieu of submitting cost or pricing data for modifications under this contract, for price adjustments expected to exceed the threshold set forth at FAR 15.403-4 on the date of the agreement on price or the date of the award, whichever is later, the Contractor 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) Information on modifications of contracts or subcontracts for commercial items. (A) If--

(1) The original contract or subcontract was granted an exception from cost or pricing data requirements because the price agreed upon was based on adequate price competition or prices set by law or regulation, or was a contract or subcontract for the acquisition of a commercial item; and

(2) The modification (to the contract or subcontract) is not exempted based on one of these exceptions, then the Contractor may provide information to establish that the modification would not change the contract or subcontract from a contract or subcontract for the acquisition of a commercial item to a contract or subcontract for the acquisition of an item other than a commercial item.

(B) For a commercial item exception, the Contractor shall provide, at a minimum, information on prices at which the same item or similar items have previously been sold that is adequate for evaluating the reasonableness of the price of the modification. Such information may include--

(1) 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.

(2) 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.

(3) 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 Contractor 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 clause, 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 Contractor's determination of the prices to be offered in the catalog or marketplace.

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

(1) The Contractor shall submit cost or pricing data and supporting attachments in accordance with Table 15-2 of FAR 15.408.

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

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

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

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

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

(ii) Otherwise successful offers from small business concerns;

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

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

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

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

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

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

___ Offeror elects to waive the evaluation preference.

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

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

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

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

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

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

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

(End of clause)

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

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

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

Definitions. As used in this contract--

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

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(End of clause)

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (JAN 2002) ALTERNATE II (OCT 2001)

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

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

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

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

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

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

Subcontract means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) Proposals submitted in response to this solicitation shall include a subcontracting plan that separately addresses subcontracting with small business, veteran-owner small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owner small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate a subcontracting plan shall make the offeror ineligible for award of a contract.

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

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

(2) A statement of--

(i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

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

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

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

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

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

(vi) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to--

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

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

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns; and

(vi) Women-owned small business concerns.

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

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

(6) A statement as to whether or not the offeror in included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—

(i) Small business concerns;

(ii) Veteran-owned small business concerns;

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

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns; and

(vi) Women-owned small business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

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

(10) Assurances that the offeror will--

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

(ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;

(iii) Submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.

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

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated)

(i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, veteran-owner small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than $100,000, indicating--

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

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

(C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;

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

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

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

(G) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact--

(A) Trade associations;

(B) Business development organizations;

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

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through--

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owner small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owner small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owner small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all ``make-or-buy" decisions.

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

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owner small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided--

(1) the master plan has been approved,

(2) the offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and

(3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

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

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

(End of clause)

52.219-16 LIQUIDATED DAMAGES-SUBCONTRACTING PLAN (JAN 1999)

(a) Failure to make a good faith effort to comply with the subcontracting plan, as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled “Small Business Subcontracting Plan,” the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

(End of clause)

52.222-3 CONVICT LABOR (AUG 1996)

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

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

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

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

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

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

(End of clause)

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION. (SEP 2000)

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

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

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

(d) Payrolls and basic records.

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

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

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

(End of clause)

52.222-6 DAVIS-BACON ACT (FEB 1995)

(a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (b) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(b)(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (b)(2) and (b)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(d) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

52.222-7 WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other Federally assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis-Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

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

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

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

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

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

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

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours

on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

52.222-9 APPRENTICES AND TRAINEES (FEB 1988)

(a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer

be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

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

52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

52.222-11 SUBCONTRACTS (LABOR STANDARDS (FEB 1988)

(a) The Contractor or subcontractor shall insert in any subcontracts the clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination-Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.

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

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)

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

52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988)

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

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

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

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

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

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

(End of clause)

52.222-26 EQUAL OPPORTUNITY (FEB 1999)

(a) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of $10,000, the Contractor shall comply with subparagraphs (b)(1) through (11) of this clause. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(b) During performing this contract, the Contractor agrees as follows:

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The Contractor shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Contracting Officer advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or

order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

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

(End of clause)

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

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

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

"Employer's identification number," as used in this clause, means the Federal Social Security number used on the employer's quarterly federal tax return, U.S. Treasury Department Form 941.

"Minority," as used in this clause, means--

(1) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(2) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);

(3) Black (all persons having origins in any of the black African racial groups not of Hispanic origin); and

(4) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).

(b) If the Contractor, or a subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such subcontract in excess of $10,000 shall include this clause and the Notice containing the goals for minority and female participation stated in the solicitation for this contract.

(c) If the Contractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area, either individually or through an association, its affirmative action obligations on all work in the

plan area (including goals) shall comply with the plan for those trades that have unions participating in the plan. Contractors must be able to demonstrate participation in, and compliance with, the provisions of the plan. Each Contractor or subcontractor participating in an approved plan is also required to comply with its obligations under the Equal Opportunity clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good-faith performance by other Contractors or subcontractors toward a goal in an approved plan does not excuse any Contractor's or subcontractor's failure to make good-faith efforts to achieve the plan's goals.

(d) The Contractor shall implement the affirmative action procedures in subparagraphs (g)(1) through (16) of this clause. The goals stated in the solicitation for this contract are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Contractor is expected to make substantially uniform progress toward its goals in each craft.

(e) Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Contractor has a collective bargaining agreement, to refer minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.

(f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

(g) The Contractor shall take affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and implement affirmative action steps at least as extensive as the following:

(1) Ensure a working environment free of harassment, intimidation, and coercion at all sites and in all facilities where the Contractor's employees are assigned to work. The Contractor, if possible, will assign two or more women to each construction project. The Contractor shall ensure that foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.

(2) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, referrals of minorities or females from unions, recruitment sources, or community organizations, and the action taken with respect to each individual. If an individual was sent to the union hiring hall for referral and not referred back to the Contractor by the union or, if referred back, not employed by the Contractor, this shall be documented in the file, along with whatever additional actions the Contractor may have taken.

(4) Immediately notify the Deputy Assistant Secretary when the union or unions with which the Contractor has a collective bargaining agreement has not referred back to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly

include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (g)(2) of this clause.

(6) Disseminate the Contractor's equal employment policy by--

(i) Providing notice of the policy to unions and to training, recruitment, and outreach programs, and requesting their cooperation in assisting the Contractor in meeting its contract obligations;

(ii) Including the policy in any policy manual and in collective bargaining agreements;

(iii) Publicizing the policy in the company newspaper, annual report, etc.;

(iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year; and

(v) Posting the policy on bulletin boards accessible to employees at each location where construction work is performed.

(7) Review, at least annually, the Contractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination, or other employment decisions. Conduct review of this policy with all on-site supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with, other Contractors and subcontractors with which the Contractor does or anticipates doing business.

(9) Direct recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than 1 month before the date for acceptance of applications for apprenticeship or training by any recruitment source, send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit minority persons and women. Where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.

(11) Validate all tests and other selection requirements where required under 41 CFR 60-3.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc., opportunities for promotion.

(13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Contractor's obligations under this contract are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user rest rooms and necessary dressing or sleeping areas shall be provided to assure privacy between the sexes.

(15) Maintain a record of solicitations for subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business

associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment policy and affirmative action obligations.

(h) The Contractor is encouraged to participate in voluntary associations that may assist in fulfilling one or more of the affirmative action obligations contained in subparagraphs (g)(1) through (16) of this clause. The efforts of a contractor association, joint contractor-union, contractor-community, or similar group of which the contractor is a member and participant may be asserted as fulfilling one or more of its obligations under subparagraphs (g)(1) through (16) of this clause, provided the Contractor--

(1) Actively participates in the group;

(2) Makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry;

(3) Ensures that concrete benefits of the program are reflected in the Contractor's minority and female workforce participation;

(4) Makes a good-faith effort to meet its individual goals and timetables; and

(5) Can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

(i) A single goal for minorities and a separate single goal for women shall be established. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.

(j) The Contractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

(k) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts under Executive Order 11246, as amended.

(l) The Contractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity clause, including suspension, termination, and cancellation of existing subcontracts, as may be imposed or ordered under Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any failure to carry out these sanctions and penalties as ordered shall be a violation of this clause and Executive Order 11246, as amended.

(m) The Contractor in fulfilling its obligations under this clause shall implement affirmative action procedures at least as extensive as those prescribed in paragraph (g) of this clause, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Deputy Assistant Secretary shall take action as prescribed in 41 CFR 60-4.8.

(n) The Contractor shall designate a responsible official to--

(1) Monitor all employment-related activity to ensure that the Contractor's equal employment policy is being carried out;

(2) Submit reports as may be required by the Government; and

(3) Keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

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

52.222-35 EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA AND OTHER ELIGIBLE VETERANS (DEC 2001)

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

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

Executive and top management means any employee--

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

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

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

(4) Who customarily and regularly exercises discretionary powers; and

(5) Who does not devote more than 20 percent or, in the case of an employee of a retail or service establishment, who does not devote more than 40 percent of total hours of work in the work week to activities that are not directly and closely related to the performance of the work described in paragraphs (1) through (4) of this definition. This paragraph (5) does not apply in the case of an employee who is in sole charge of an establishment or a physically separated branch establishment, or who owns at least a 20 percent interest in the enterprise in which the individual is employed.

Other eligible veteran means any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized.

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

Qualified special disabled veteran means a special disabled veteran who satisfies the requisite skill, experience, education, and other job-related requirements of the employment position such veteran holds or desires, and who, with or without reasonable accommodation, can perform the essential functions of such position.

Special disabled veteran means--

(1) A veteran who is entitled to compensation (or who but for the receipt of military retired pay would be entitled to compensation) under laws administered by the Department of Veterans Affairs for a disability--

(i) Rated at 30 percent or more; or

(ii) Rated at 10 or 20 percent in the case of a veteran who has been determined under 38 U.S.C. 3106 to have a serious employment handicap (i.e., a significant impairment of the veteran's ability to prepare for, obtain, or retain employment consistent with the veteran's abilities, aptitudes, and interests); or

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

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days and was discharged or released from active duty with other than a dishonorable discharge, if any part of such active duty occurred--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases; or

(2) Was discharged or released from active duty for a service-connected disability if any part of the active duty was performed--

(i) In the Republic of Vietnam between February 28, 1961, and May 7, 1975; or

(ii) Between August 5, 1964, and May 7, 1975, in all other cases.
(b) General. (1) The Contractor shall not discriminate against the individual because the individual is a special disabled veteran, a veteran of the Vietnam era, or other eligible veteran, regarding any position for which the employee or applicant for employment is qualified. The Contractor shall take affirmative action to employ, advance in employment, and otherwise treat qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans without discrimination based upon their disability or veterans' status in all employment practices such as--

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

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

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

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

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

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

(vii) Selection and financial support for training, including apprenticeship, and on-the-job training under 38 U.S.C. 3687, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

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

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

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

(c) Listing openings. (1) The Contractor shall immediately list all employment openings that exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract, and including those occurring at an establishment of the Contractor other than the one where the contract is being performed, but excluding those of independently operated corporate affiliates, at an appropriate local public employment service office of the State wherein the opening occurs. Listing employment openings with the U.S. Department of Labor's America's Job Bank shall satisfy the requirement to list jobs with the local employment service office.

(2) The Contractor shall make the listing of employment openings with the local employment service office at least concurrently with using any other recruitment source or effort and shall involve the normal obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing of employment openings does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(3) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State public employment agency in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these terms and has so advised the State agency, it need not advise the State agency of subsequent contracts. The Contractor may advise the State agency when it is no longer bound by this contract clause.

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, the Virgin Islands of the United States, and Wake Island.

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

(2) The employment notices shall--

(i) State the rights of applicants and employees as well as the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified employees and applicants who are special disabled veterans, veterans of the Vietnam era, and other eligible veterans; and

(ii) Be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary of Labor), and provided by or through the Contracting Officer.

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

(4) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement, or other contract understanding, that the Contractor is bound by the terms of the Act and is committed to take affirmative action to employ, and advance in employment, qualified special disabled veterans, veterans of the Vietnam era, and other eligible veterans.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, the Government may take appropriate actions under the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(g) Subcontracts. The Contractor shall insert the terms of this clause in all subcontracts or purchase orders of $25,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor. The Contractor shall act as specified by the Deputy Assistant Secretary of Labor to enforce the terms, including action for noncompliance.

(End of clause)

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

(a) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

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

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

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

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

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

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

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

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

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

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings. (1) The Contractor agrees to post employment notices stating--

(i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and

(ii) The rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.

(3) The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified individuals with physical or mental disabilities.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of $10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-37 EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS (DEC 2001)

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

(1) The number of special disabled veterans, the number of veterans of the Vietnam era, and other eligible veterans in the workforce of the Contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of the total, the number of special disabled veterans, the number of veterans of the Vietnam era, and the number of other eligible veterans; and

(3) The maximum number and the minimum number of employees of the Contractor during the period covered by the report.

(b) The Contractor shall report the above items by completing the Form VETS-100, entitled “Federal Contractor Veterans” Employment Report (VETS-100 Report)”.

(c) The Contractor shall submit VETS-100 Reports no later than September 30 of each year beginning September 30, 1988.

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date--

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

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

(e) The Contractor shall base the count of veterans reported according to paragraph (a) of this clause on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all special disabled veterans, veterans of the Vietnam era, and other eligible veterans who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that--

(1) The information is voluntarily provided;

(2) The information will be kept confidential;

(3) Disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and

(4) The information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.

(f) The Contractor shall insert the terms of this clause in all subcontracts or purchase orders of $25,000 or more unless exempted by rules, regulations, or orders of the Secretary of Labor.

(End of clause)

52.222-38 COMPLIANCE WITH VETERANS' EMPLOYMENT REPORTING REQUIREMENTS (DEC 2001)

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 Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans), it has submitted the most recent VETS-100 Report required by that clause.

(End of provision)

52.222-41 SERVICE CONTRACT ACT OF 1965, AS AMENDED (MAY 1989)

(a) Definitions. "Act," as used in this clause, means the Service Contract Act of 1965, as amended (41 U.S.C. 351, et seq.).

"Contractor," as used in this clause or in any subcontract, shall be deemed to refer to the subcontractor, except in the term "Government Prime Contractor."

"Service employee," as used in this clause, means any person engaged in the performance of this contract other than any person employed in a bona fide executive, administrative, or professional capacity, as these terms are defined in Part 541 of Title 29, Code of Federal Regulations, as revised. It includes all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

(b) Applicability. This contract is subject to the following provisions and to all other applicable provisions of the Act and regulations of the Secretary of Labor (29 CFR Part 4). This clause does not apply to contracts or subcontracts administratively exempted by the Secretary of Labor or exempted by 41 U.S.C. 356, as interpreted in Subpart C of 29 CFR Part 4.

(c) Compensation. (1) Each service employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wages and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor, or authorized representative, as specified in any wage determination attached to this contract.

(2)(i) If a wage determination is attached to this con- tract, the Contractor shall classify any class of service employee which is not listed therein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination) so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed class of employees shall be paid the monetary wages and furnished the fringe benefits as are determined pursuant to the procedures in this paragraph (c).

(ii) This conforming procedure shall be initiated by the Contractor prior to the performance of contract work by the unlisted class of employee. The Contractor shall submit Standard Form (SF) 1444, Request For Authorization of Additional Classification and Rate, to the Contracting Officer no later than 30 days after the unlisted class of employee performs any contract work. The Contracting Officer shall review the proposed classification and rate and promptly submit the completed SF 1444 (which must include information regarding the agreement or disagreement of the employees' authorized representatives or the employees themselves together with the agency recommendation), and all pertinent informa-tion to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor. The Wage and Hour Division will approve, modify, or disapprove the action or render a final determination in the event of disagreement within 30 days of receipt or will notify the Contracting Officer within 30 days of receipt that additional time is necessary.

(iii) The final determination of the conformance action by the Wage and Hour Division shall be transmitted to the Contracting Officer who shall promptly notify the Contractor of the action taken. Each affected employee shall be furnished by the Contractor with a written copy of such determination or it shall be posted as a part of the wage determination.

(iv)(A) The process of establishing wage and fringe benefit rates that bear a reasonable relationship to those listed in a wage determination cannot be reduced to any single formula. The approach used may vary from wage determination to wage determination depending on the circumstances. Standard wage and salary administration practices which rank various job classifications by pay grade pursuant to point schemes or other job factors may, for example, be relied upon. Guidance may also be obtained from the way different jobs are rated under Federal pay systems (Federal Wage Board Pay System and the General Schedule) or from other wage determina- tions issued in the same locality. Basic to the establishment of any conformable wage rate(s) is the concept that a pay relationship should be maintained between job classifications based on the skill required and the duties performed.

(B) In the case of a contract modification, an exercise of an option, or extension of an existing contract, or in any other case where a Contractor succeeds a contract under which the classification in question was previously conformed pursuant to paragraph (c) of this clause, a new conformed wage rate and fringe benefits may be assigned to the conformed classification by indexing (i.e., adjusting) the previous conformed rate and fringe benefits by an amount equal to the average (mean) percentage increase (or decrease, where appropriate) between the wages and fringe benefits specified for all classifications to be used on the contract which are listed in the current wage determination, and those specified for the corresponding classifications in the previously applicable wage determination. Where conforming actions are accomplished in accordance with this paragraph prior to the performance of contract work by the unlisted class of employees, the Contractor shall advise the Contracting Officer of the action taken but the other procedures in subdivision (c)(2)(ii) of this clause need not be followed.

(C) No employee engaged in performing work on this contract shall in any event be paid less than the currently applicable minimum wage specified under section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended.

(v) The wage rate and fringe benefits finally determined under this subparagraph (c)(2) of this clause shall be paid to all employees performing in the classification from the first day on which contract work is performed by them in

the classification. Failure to pay the unlisted employees the compensation agreed upon by the interested parties and/or finally determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract.

(vi) Upon discovery of failure to comply with subparagraph (c)(2) of this clause, the Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be retroactive to the date such class or classes of employees commenced contract work.

(3) Adjustment of Compensation. If the term of this contract is more than 1 year, the minimum monetary wages and fringe benefits required to be paid or fur- nished thereunder to service employees under this contract shall be subject to adjustment after 1 year and not less often than once every 2 years, under wage determinations issued by the Wage and Hour Division.

(d) Obligation to Furnish Fringe Benefits. The Contractor or subcontractor may discharge the obligation to furnish fringe benefits specified in the attachment or determined under subparagraph (c)(2) of this clause by furnishing equivalent combinations of bona fide fringe benefits, or by making equivalent or differential cash payments, only in accordance with Subpart D of 29 CFR Part 4.

(e) Minimum Wage. In the absence of a minimum wage attachment for this contract, neither the Contractor nor any subcontractor under this contract shall pay any person performing work under this contract (regardless of whether the person is a service employee) less than the minimum wage specified by section 6(a)(1) of the Fair Labor Standards Act of 1938. Nothing in this clause shall relieve the Contractor or any subcontractor of any other obligation under law or contract for payment of a higher wage to any employee.

(f) Successor Contracts. If this contract succeeds a contract subject to the Act under which substantially the same services were furnished in the same locality and service employees were paid wages and fringe benefits provided for in a collective bargaining agreement, in the absence of the minimum wage attachment for this contract setting forth such collectively bargained wage rates and fringe benefits, neither the Contractor nor any subcontractor under this contract shall pay any service employee performing any of the contract work (regardless of whether or not such employee was employed under the predecessor contract), less than the wages and fringe benefits provided for in such collective bargaining agreement, to which such employee would have been entitled if employed under the predecessor contract, including accrued wages and fringe benefits and any prospective increases in wages and fringe benefits provided for under such agreement. No Contractor or subcontractor under this contract may be relieved of the foregoing obligation unless the limitations of 29 CFR 4.1b(b) apply or unless the Secretary of Labor or the Secretary's authorized representative finds, after a hearing as provided in 29 CFR 4.10 that the wages and/or fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality, or determines, as provided in 29 CFR 4.11, that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations. Where it is found in accordance with the review procedures provided in 29 CFR 4.10 and/or 4.11 and Parts 6 and 8 that some or all of the wages and/or fringe benefits contained in a predecessor Contractor's collective bargaining agreement are substantially at variance with those which prevail for services of a character similar in the locality, and/or that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations, the Department will issue a new or revised wage determination setting forth the applicable wage rates and fringe benefits. Such determination shall be made part of the contract or subcontract, in accordance with the decision of the Administrator, the Administrative Law Judge, or the Board of Service Contract Appeals, as the case may be, irrespective of whether such issuance occurs prior to or after the award of a contract or subcontract (53 Comp. Gen. 401 (1973)). In the case of a wage determination issued solely as a result of a finding of substantial variance, such determination shall be effective as of the date of the final administrative decision.

(g) Notification to Employees. The Contractor and any subcontractor under this contract shall notify each service employee commencing work on this contract of the minimum monetary wage and any fringe benefits required to be paid pursuant to this contract, or shall post the wage determination attached to this contract. The poster provided by the Department of Labor (Publication WH 1313) shall be posted in a prominent and accessible place at the worksite.

Failure to comply with this requirement is a violation of section 2(a)(4) of the Act and of this contract.

(h) Safe and Sanitary Working Conditions. The Contractor or subcontractor shall not permit any part of the services called for by this contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor which are unsanitary, hazardous, or dangerous to the health or safety of the service employees. The Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR Part 1925.

(i) Records. (1) The Contractor and each subcontractor performing work subject to the Act shall make and maintain for 3 years from the completion of the work, and make them available for inspection and transcription by authorized representatives of the Wage and Hour Division, Employment Standards Administration, a record of the following:

(i) For each employee subject to the Act--

(A) Name and address and social security number;

(B) Correct work classification or classifications, rate or rates of monetary wages paid and fringe benefits provided, rate or rates of payments in lieu of fringe benefits, and total daily and weekly compensation;

(C) Daily and weekly hours worked by each employee; and

(D) Any deductions, rebates, or refunds from the total daily or weekly compensation of each employee.

(ii) For those classes of service employees not included in any wage determination attached to this contract, wage rates or fringe benefits determined by the interested parties or by the Administrator or authorized representative under the terms of paragraph (c) of this clause. A copy of the report required by subdivision (c)(2)(ii) of this clause will fulfill this requirement.

(iii) Any list of the predecessor Contractor's employees which had been furnished to the Contractor as prescribed by paragraph (n) of this clause.

(2) The Contractor shall also make available a copy of this contract for inspection or transcription by authorized representatives of the Wage and Hour Division.

(3) Failure to make and maintain or to make available these records for inspection and transcription shall be a violation of the regulations and this contract, and in the case of failure to produce these records, the Contracting Officer, upon direction of the Department of Labor and notification to the Contractor, shall take action to cause suspension of any further payment or advance of funds until the violation ceases.

(4) The Contractor shall permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the worksite during normal working hours.

(j) Pay Periods. The Contractor shall unconditionally pay to each employee subject to the Act all wages due free and clear and without subsequent deduction (except as otherwise provided by law or regulations, 29 CFR Part 4), rebate, or kickback on any account. These payments shall be made no later than one pay period following the end of the regular pay period in which the wages were earned or accrued. A pay period under this Act may not be of any duration longer than semi-monthly.

(k) Withholding of Payments and Termination of Contract. The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor under this or any other Government contract with the Prime Contractor such sums as an appropriate official of the Department of Labor requests or such sums as the Contracting Officer decides may be necessary to pay underpaid employees employed by the Contractor or subcontractor. In the event of failure to pay any employees subject to the Act all or part of the wages or fringe benefits due under the Act, the Contracting Officer may, after authorization or by direction of the Department of

Labor and written notification to the Contractor, take action to cause suspension of any further payment or advance of funds until such violations have ceased. Additionally, any failure to comply with the requirements of this clause may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional cost.

(l) Subcontracts. The Contractor agrees to insert this clause in all subcontracts subject to the Act.

(m) Collective Bargaining Agreements Applicable to Service Employees. If wages to be paid or fringe benefits to be furnished any service employees employed by the Government Prime Contractor or any subcontractor under the contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the contract is being performed, the Government Prime Contractor shall report such fact to the Contracting Officer, together with full information as to the application and accrual of such wages and fringe benefits, including any prospective increases, to service employees engaged in work on the contract, and a copy of the collective bargaining agreement. Such report shall be made upon commencing performance of the contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance such agreements shall be reported promptly after negotiation thereof.

(n) Seniority List. Not less than 10 days prior to completion of any contract being performed at a Federal facility where service employees may be retained in the performance of the succeeding contract and subject to a wage determination which contains vacation or other benefit provisions based upon length of service with a Contractor (predecessor) or successor (29 CFR 4.173), the incumbent Prime Contractor shall furnish the Contracting Officer a certified list of the names of all service employees on the Contractor's or subcontractor's payroll during the last month of contract performance. Such list shall also contain anniversary dates of employment on the contract either with the current or predecessor Contractors of each such service employee. The Contracting Officer shall turn over such list to the successor Contractor at the commencement of the succeeding contract.

(o) Rulings and Interpretations. Rulings and interpretations of the Act are contained in Regulations, 29 CFR Part 4.

(p) Contractor's Certification. (1) By entering into this contract, the Contractor (and officials thereof) certifies that neither it (nor he or she) nor any person or firm who has a substantial interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of the sanctions imposed under section 5 of the Act.

(2) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract under section 5 of the Act.

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

(q) Variations, Tolerances, and Exemptions Involving Employment. Notwithstanding any of the provisions in paragraphs (b) through (o) of this clause, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to section 4(b) of the Act prior to its amendment by Pub. L. 92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business:

(1) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical or mental deficiency, or injury may be employed at wages lower than the minimum wages otherwise required by section 2(a)(1) or 2(b)(1) of the Act without diminishing any fringe benefits or cash payments in lieu thereof required under section 2(a)(2) of the Act, in accordance with the conditions and procedures prescribed for the employment of apprentices, student-learners, handicapped persons, and handicapped clients of sheltered workshops under section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator (29 CFR Parts 520, 521, 524, and 525).

(2) The Administrator will issue certificates under the Act for the employment of apprentices, student-learners,

handicapped persons, or handicapped clients of sheltered workshops not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two acts, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor Standards Act of 1938 (29 CFR Parts 520, 521, 524, and 525).

(3) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in 29 CFR Parts 525 and 528.

(r) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide apprenticeship program registered with a State Apprenticeship Agency which is recognized by the U.S. Department of Labor, or if no such recognized agency exists in a State, under a program registered with the Bureau of Apprenticeship and Training, Employment and Training Administration, U.S. Department of Labor. Any employee who is not registered as an apprentice in an approved program shall be paid the wage rate and fringe benefits contained in the applicable wage determination for the journeyman classification of work actually performed. The wage rates paid apprentices shall not be less than the wage rate for their level of progress set forth in the registered program, expressed as the appropriate percentage of the journeyman's rate contained in the applicable wage determination. The allowable ratio of apprentices to journeymen employed on the contract work in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program.

(s) Tips. An employee engaged in an occupation in which the employee customarily and regularly receives more than $30 a month in tips may have the amount of these tips credited by the employer against the minimum wage required by section 2(a)(1) or section 2(b)(1) of the Act, in accordance with section 3(m) of the Fair Labor Standards Act and Regulations, 29 CFR Part 531. However, the amount of credit shall not exceed $1.34 per hour beginning January 1, 1981. To use this provision--

(1) The employer must inform tipped employees about this tip credit allowance before the credit is utilized;

(2) The employees must be allowed to retain all tips (individually or through a pooling arrangement and regardless of whether the employer elects to take a credit for tips received);

(3) The employer must be able to show by records that the employee receives at least the applicable Service Contract Act minimum wage through the combination of direct wages and tip credit; and

(4) The use of such tip credit must have been permitted under any predecessor collective bargaining agreement applicable by virtue of section 4(c) of the Act.

Disputes Concerning Labor Standards. The U.S. Department of Labor has set forth in 29 CFR Parts 4, 6, and 8 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(End of clause)

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

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

THIS STATEMENT IS FOR INFORMATION ONLY: IT IS NOT A WAGE DETERMINATION

Employee Class	Monetary Wage-Fringe Benefits
General Clerk IV	$9.58
Secretary V	$15.97
Civil Engineer Technician	$14.83
Engineering Technician I	$11.86

(End of clause)

52.222-44 FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT ACT--PRICE ADJUSTMENT (MAY 1989)

(a) This clause applies to both contracts subject to area prevailing wage determinations and contracts subject to Contractor collective bargaining agreements.

(b) The Contractor warrants that the prices in this contract do not include any allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

(c) The contract price or contract unit price labor rates will be adjusted to reflect increases or decreases by the Contractor in wages and fringe benefits to the extent that these increases or decreases are made to comply with--

(1) An increased or decreased wage determination applied to this contract by operation of law; or

(2) An amendment to the Fair Labor Standards Act of 1938 that is enacted subsequent to award of this contract, affects the minimum wage, and becomes applicable to this contract under law.

(d) Any such adjustment will be limited to increases or decreases in wages and fringe benefits as described in paragraph (b) of this clause, and to the accompanying increases or decreases in social security and unemployment taxes and workers' compensation insurance; it shall not otherwise include any amount for general and administrative costs, overhead, or profit.

(e) The Contractor shall notify the Contracting Officer of any increase claimed under this clause within 30 days after the effective date of the wage change, unless this period is extended by the Contracting Officer in writing. The Contractor shall promptly notify the Contracting Officer of any decrease under this clause, but nothing in the clause shall preclude the Government from asserting a claim within the period permitted by law. The notice shall contain a statement of the amount claimed and any relevant supporting data that the Contracting Officer may reasonably require. Upon agreement of the parties, the contract price or contract unit price labor rates shall be modified in writing. The Contractor shall continue performance pending agreement on or determination of any such adjustment and its effective date.

(f) The Contracting Officer or an authorized representative shall, until the expiration of 3 years after final payment under the contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor.

(End of clause)

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

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

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

52.223-6 DRUG-FREE WORKPLACE (MAY 2001)

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

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to deter- mine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract where employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

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

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

(b) The Contractor, if other than an individual, shall-- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about--

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

(3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;

(4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will--

(i) Abide by the terms of the statement; and

(ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.

(5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;

(6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:

(i) Taking appropriate personnel action against such employee, up to and including termination; or

(ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and

(7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) though (b)(6) of this clause.

(c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.

(d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.

(End of clause)

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

52.225-11 BUY AMERICAN ACT--BALANCE OF PAYMENTS PROGRAM--CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS (FEB 2002)

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

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

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

Cost of components means--

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

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

Designated country means any of the following countries: Aruba, Austria, Bangladesh, Belgium, Benin, Bhutan, Botswana, Burkina Faso, Burundi, Canada, Cape Verde, Central African Republic, Chad, Comoros, Denmark, Djibouti, Equatorial Guinea, Finland, France, Gambia, Germany, Greece, Guinea, Guinea-Bissau, Haiti, Hong Kong, Iceland, Ireland, Israel, Italy, Japan.

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

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

Designated country construction material means a construction material that--

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

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

Domestic construction material means--

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

(2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

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

North American Free Trade Agreement country means Canada or Mexico.

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

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

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

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

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

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

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

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

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

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

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

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

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

(B) Unit of measure;

(C) Quantity;

(D) Price;

(E) Time of delivery or availability;

(F) Location of the construction project;

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

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

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

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

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

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

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

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

Foreign and Domestic Construction Materials Price Comparison

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

\1\ Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).
List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.
Include other applicable supporting information.

(End of clause)

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

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

the Treasury. Those countries are Cuba, Iran, Iraq, Libya, North Korea, Sudan, the territory of Afghanistan controlled by the Taliban, and Serbia (excluding the territory of Kosovo).

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

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

(End of clause)

52.226-1 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUN 2000)

(a) Definitions. As used in this clause:

"Indian" means any person who is a member of any Indian tribe, band, group, pueblo or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any ``Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C., chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitutea not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1542(c).

"Interested party" means a prime contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(b) The Contractor shall use its best efforts to give Indian organizations and Indian-owned economic enterprises (25 U.S.C. 1544) the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.

(1) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status. In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to the U.S. Department of the Interior, Bureau of Indian Affairs (BIA), Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street, NW., MS 2626-MIB, Washington, DC 20240-4000.

The BIA will determine the eligibility and notify the Contracting Officer. No incentive payment will be made within 50 working days of subcontract award or while a challenge is pending. If a subcontractor is determined to be an ineligible participant, no incentive payment will be made under the Indian Incentive Program.

(2) The Contractor may request an adjustment under the Indian Incentive Program to the following:

(i) The estimated cost of a cost-type contract.

(ii) The target cost of a cost-plus-incentive-fee prime contract.

(iii) The target cost and ceiling price of a fixed-price incentive prime contract.

(iv) The price of a firm-fixed-price prime contract.

(3) The amount of the adjustment to the prime contract is 5 percent of the estimated cost, target cost, or firm-fixed-price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.

(4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(c) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor. The Contracting Officer will seek funding in accordance with agency procedures.

(End of clause)

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.)

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

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or

claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

(c) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at (FAR) 2.101.to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

(End of clause)

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

52.228-1 BID GUARANTEE (SEP 1996)

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

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

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

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

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

52.228-2 ADDITIONAL BOND SECURITY (OCT 1997)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if--

(a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract becomes unacceptable to the Government.

(b) Any surety fails to furnish reports on its financial condition as required by the Government;

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

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

52.228-5 INSURANCE--WORK ON A GOVERNMENT INSTALLATION (JAN 1997)

(a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.

(b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.

(c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

(1) Pledge of assets; and

(2) Standard Form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of--

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

52.228-12 PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS. (OCT 1995)

In accordance with Section 806(a)(3) of Pub. L. 102-190, as amended by Sections 2091 and 8105 of Pub. L. 103-355, upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to the Miller Act, the Contractor shall promptly provide a copy of such payment bond to the requester.

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) “Irrevocable letter of credit” (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which

financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to the Miller Act, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than $25 million in the past year, ILCs over $5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than $25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:

_____

[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date _____

IRREVOCABLE LETTER OF CREDIT NO. _____

Account party's name _____

Account party's address _____

For Solicitation No. _____(for reference only)

TO: [U.S. Government agency]

[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States $_____. This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on _____, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the

confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution, if any, otherwise state of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

_____

[Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

_____
[Confirming Financial Institution's Letterhead or Name and Address]

(Date) _____

Our Letter of Credit Advice Number _____

Beneficiary: _____ [U.S. Government agency]

Issuing Financial Institution: _____

Issuing Financial Institution's LC No.: _____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by _____ [name of issuing financial institution] for drawings of up to United States dollars _____/U.S. $_____ and expiring with our close of business on _____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at

_____.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

_____

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

_____

[City, State]

(Date) _____

[Name and address of financial institution]

Pay to the order of _____ [Beneficiary Agency] _____ the sum of United States $_____.
This draft is drawn under Irrevocable Letter of Credit No. _____.

_____

[Beneficiary Agency]

By: _____

(End of clause)

52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (JUL 2000)-

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

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is $100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection. (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW, 2nd Floor, West Wing, Washington, DC 20227.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 270b(c). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (JAN 1991)

(a) "Contract date," as used in this clause, means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

"All applicable Federal, State, and local taxes and duties," as used in this clause, means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax," as used in this clause, means any new or increased Federal excise tax or duty, or tax

that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.
"After-relieved Federal tax," as used in this clause, means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

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

(c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The contract price shall be decreased by the amount of any after-relieved Federal tax.

(e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds $250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.229-5 TAXES--CONTRACTS PERFORMED IN U.S. POSSESSIONS OR PUERTO RICO (APR 1984)

The term "local taxes," as used in the Federal, State, and local taxes clause of this contract, includes taxes imposed by a possession of the United States or by Puerto Rico.

(End of clause)

52.231-5000 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE
MAR 1995)--EFARS
(a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.
(b) Allowable cost for construction and marine plant and equipment in sound workable condition owned or controlled and furnished by a contractor or subcontractor at any tier shall be based on actual cost data for each piece of equipment or groups of similar serial and series for which the Government can determine both ownership and operating costs from the contractor's accounting records. When both ownership and operating costs cannot be determined for any piece of equipment or groups of similar serial or series equipment from the contractor's accounting records, costs for that equipment shall be based upon

the applicable provisions of EP 1110-1-8, Construction Equipment Ownership and Operating Expense Schedule, Region ____. Working conditions shall be considered to be average for determining equipment rates using the schedule unless specified otherwise by the contracting officer. For equipment not included in the schedule, rates for comparable pieces of equipment may be used or a rate may be developed using the formula provided in the schedule. For forward pricing, the schedule in effect at the time of negotiations shall apply. For retroactive pricing, the schedule in effect at the time the work was performed shall apply.

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(End of clause)

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

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

(b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.

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

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

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

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

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

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

(2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--

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

(ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the

following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

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

_____

(Name)

_____

(Title)

_____

(Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after--

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against
the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

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

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

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

52.232-10 PAYMENTS UNDER FIXED-PRICE ARCHITECT-ENGINEER CONTRACTS (AUG 1987)

(a) Estimates shall be made monthly of the amount and value of the work and services performed by the Contractor under this contract which meet the standards of quality established under this contract. The estimates shall be prepared by the Contractor and accompanied by any supporting data required by the Contracting Officer.

(b) Upon approval of the estimate by the Contracting Officer, payment upon properly executed vouchers shall be

made to the Contractor, as soon as practicable, of 90 percent of the approved amount, less all previous payments; provided, that payment may be made in full during any months in which the Contracting Officer determines that performance has been satisfactory. Also, whenever the Contracting Officer determines that the work is substantially complete and that the amount retained is in excess of the amount adequate for the protection of the Government, the Contracting Officer may release the excess amount to the Contractor.

(c) Upon satisfactory completion by the Contractor and acceptance by the Contracting Officer of the work done by the Contractor under the "Statement of Architect-Engineer Services", the Contractor will be paid the unpaid balance of any money due for work under the statement, including retained percentages relating to this portion of the work. Upon satisfactory completion and final acceptance of the construction work, the Contractor shall be paid any unpaid balance of money due under this contract.

(d) Before final payment under the contract, or before settlement upon termination of the contract, and as a condition precedent thereto, the Contractor shall execute and deliver to the Contracting Officer a release of all claims against the Government arising under or by virtue of this contract, other than any claims that are specifically excepted by the Contractor from the operation of the release in amounts stated in the release.

(e) Notwithstanding any other provision in this contract, and specifically paragraph (b) of this clause, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

52.232-17 INTEREST (JUNE 1996)

(a) Except as otherwise provided in this contract under a Price Reduction for Defective Cost or Pricing Data clause or a Cost Accounting Standards clause, all amounts that become payable by the Contractor to the Government under this contract (net of any applicable tax credit under the Internal Revenue Code (26 U.S.C. 1481)) shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 12 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in paragraph (b) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid. reproduce, prepare derivative works, distribute copies to the public, and (b) Amounts shall be due at the earliest of the following dates:

(1) The date fixed under this contract.

(2) The date of the first written demand for payment consistent with this contract, including any demand resulting from a default termination.

(3) The date the Government transmits to the Contractor a proposed supplemental agreement to confirm completed negotiations establishing the amount of debt.

(4) If this contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or a negotiated pricing agreement not confirmed by contract modification.

(c) The interest charge made under this clause may be reduced under the procedures prescribed in 32.614-2 of the

Federal Acquisition Regulation in effect on the date of this contract.

52.232-18 AVAILABILITY OF FUNDS (APR 1984)

Funds are not presently available for this contract. The Government's obligation under this contract is contingent upon the availability of appropriated funds from which payment for contract purposes can be made. No legal liability on the part of the Government for any payment may arise until funds are made available to the Contracting Officer for this contract and until the Contractor receives notice of such availability, to be confirmed in writing by the Contracting Officer.

52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986) - ALTERNATE I (APR 1984)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence. Unless otherwise stated in this contract, payments to an assignee of any amounts due or to become due under this contract shall not, to the extent specified in the Act, be subject to reduction or setoff.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

52.232-26 PROMPT PAYMENT FOR FIXED-PRICE ARCHITECT-ENGINEER CONTRACTS (FEB 2002)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) of this clause concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments--(1) Due date. The due date for making invoice payments is--

(i) For work or services completed by the Contractor, the later of the following two events:

(A) The 30th day after the designated billing office receives a proper invoice from the Contractor (except as provided in paragraph (a)(1)(iii) of this clause).

(B) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice, when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the settlement.

(ii) The due date for progress payments is the 30th day after Government approval of Contractor estimates of work or services accomplished.

(iii) If the designated billing office fails to annotate the invoice or payment request with the actual date of receipt at the time of receipt, the payment due date is the 30th day after the date of the Contractor's invoice or payment request, provided the designated billing office receives a proper invoice or payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(x) of this clause. If the invoice does not comply with these requirements, the designated billing office will return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and contract line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., discount for prompt payment terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.

(viii) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(ix) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34,Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(x) Any other information or documentation required by the contract.

(3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

(i) The designated billing office received a proper invoice.

(ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor, Government acceptance or approval is deemed to occur constructively as shown in paragraphs (a)(4)(i)(A) and (B) of this clause. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, Contractor compliance with a contract provision, or requested progress payment amounts. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(A) For work or services completed by the Contractor, Government acceptance is deemed to occur constructively on the 7th day after the Contractor completes the work or services in accordance with the terms and conditions of the contract.

(B) For progress payments, Government approval is deemed to occur on the 7th day after the designated billing office receives the Contractor estimates.

(ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with 5 CFR part 1315.

(6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315, in addition to the interest penalty amount only if--

(A) The Government owes an interest penalty of $1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

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

(ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--

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

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

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

(B) If there is no postmark or the postmark is illegible--

(1) The designated payment office that receives the demand will annotate it with the date of receipt, provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.

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

(b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(c) Overpayments. If the Contractor becomes aware of a duplicate payment or that the Government has otherwise overpaid on an invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(End of clause)

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (FEB 2002)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments under the terms and conditions specified in this clause. The Government considers payment as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in sections 2.101, 32.001, and 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see paragraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments--(1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project.

(A) The due date for making such payments is 14 days after the designated billing office receives a proper payment request. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date is the 14th day after the date of the Contractor's payment request, provided the designated billing office receives a proper payment request and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, is as specified in the contract or, if not specified, 30 days after approval by the Contracting Officer for release to the Contractor.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract).

(A) The due date for making such payments is the later of the following two events:

(1) The 30th day after the designated billing office receives a proper invoice from the Contractor.

(2) The 30th day after Government acceptance of the work or services completed by the Contractor. For a final invoice when the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance is deemed to occur on the effective date of the contract settlement.

(B) If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date is the 30th day after the date of the Contractor's invoice, provided the designated billing office receives a proper invoice and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in paragraphs (a)(2)(i) through (a)(2)(xi) of this clause. If the invoice does not comply with these requirements, the designated billing office must return it within 7 days after receipt, with the reasons why it is not a proper invoice. When computing any interest penalty owed the Contractor, the Government will take into account if the Government notifies the Contractor of an improper invoice in an untimely manner.

(i) Name and address of the Contractor.

(ii) Invoice date and invoice number. (The Contractor should date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and contract line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., discount for prompt payment terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice.

(viii) For payments described in paragraph (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision (e.g., 52.232-38, Submission of Electronic Funds Transfer Information with Offer), contract clause (e.g., 52.232-33, Payment by Electronic Funds Transfer--Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer--Other Than Central Contractor Registration), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(xi) Any other information or documentation required by the contract.

(3) Interest penalty. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if payment is not made by the due date and the conditions listed in paragraphs (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday, the designated payment office may make payment on the following working day without incurring a late payment interest penalty.

(i) The designated billing office received a proper invoice.

(ii) The Government processed a receiving report or other Government documentation authorizing payment and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The Government will compute the interest penalty in accordance with the Office of Management and Budget prompt payment regulations at 5 CFR part 1315.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in paragraph (a)(1)(ii) of this clause, Government acceptance or approval is deemed to occur constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. If actual acceptance or approval occurs within the constructive acceptance or approval period, the Government will base the determination of an interest penalty on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The prompt payment regulations at 5 CFR 1315.10(c) do not require the Government to pay interest penalties if payment delays are due to disagreement between the Government and the Contractor over the payment amount or

other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. The Government and the Contractor shall resolve claims involving disputes, and any interest that may be payable in accordance with the clause at FAR 52.233-1, Disputes.

(5) Discounts for prompt payment. The designated payment office will pay an interest penalty automatically, without request from the Contractor, if the Government takes a discount for prompt payment improperly. The Government will calculate the interest penalty in accordance with the prompt payment regulations at 5 CFR part 1315.

(6) Additional interest penalty. (i) The designated payment office will pay a penalty amount, calculated in accordance with the prompt payment regulations at 5 CFR part 1315 in addition to the interest penalty amount only if--

(A) The Government owes an interest penalty of $1 or more;

(B) The designated payment office does not pay the interest penalty within 10 days after the date the invoice amount is paid; and

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

(ii)(A) The Contractor shall support written demands for additional penalty payments with the following data. The Government will not request any additional data. The Contractor shall--

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

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

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

(B) If there is no postmark or the postmark is illegible--

(1) The designated payment office that receives the demand will annotate it with the date of receipt provided the demand is received on or before the 40th day after payment was made; or

(2) If the designated payment office fails to make the required annotation, the Government will determine the demand's validity based on the date the Contractor has placed on the demand, provided such date is no later than the 40th day after payment was made.

(b) Contract financing payments. If this contract provides for contract financing, the Government will make contract financing payments in accordance with the applicable contract financing clause.

(c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

(1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.

(2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--

(i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and

(ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(3) Subcontractor clause flowdown. A clause requiring each subcontractor to use:

(i) Include a payment clause and an interest penalty clause conforming to the standards set forth in paragraphs (c)(1) and (c)(2) of this clause in each of its subcontracts; and

(ii) Require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.

(d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--

(1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;

(2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and

(3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--

(i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and

(ii) The Contractor furnishes to the Contracting Officer a copy of any notice issued by a Contractor pursuant to paragraph (d)(3)(i) of this clause.

(e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--

(1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;

(2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to paragraph (e)(1) of this clause;

(3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (e)(1) of this clause;

(4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--

(i) Make such payment within--

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under paragraph
(e)(5)(i)) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notice to Contracting Officer. Notify the Contracting Officer upon--

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--

(A) The amounts withheld under paragraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under paragraph (e)(5)(i) of this clause.

(f) Third-party deficiency reports--(1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a “second-tier subcontractor”) a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under paragraph (e)(6) of this clause--

(i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

(ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under paragraph (f)(1)(i) of this clause.

(2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--

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

(ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments

under section 12 of the Contracts DisputesAct of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) Written notice of subcontractor withholding. The Contractor shall issue a written notice of any withholding to a subcontractor (with a copy furnished to the Contracting Officer), specifying--

(1) The amount to be withheld;

(2) The specific causes for the withholding under the terms of the subcontract; and

(3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.

(h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.

(i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the Government is a party. The Government may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.

(k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the Government for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

(l) Overpayments. If the Contractor becomes aware of a duplicate payment or that the Government has otherwise overpaid on an invoice payment, the Contractor shall immediately notify the Contracting Officer and request instructions for disposition of the overpayment.

(End of clause)

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

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

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

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

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

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

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

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

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

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

(i) Making a correct payment;

(ii) Paying any prompt payment penalty due; and

(iii) Recovering any erroneously directed funds.

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

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

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

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

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

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

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

(End of Clause)

52.233-1 DISPUTES. (DEC 1998)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding $100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) of this clause. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2)(i) The contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -

(A) Exceeding $100,000; or

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

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

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

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

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data

are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

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

(e) For Contractor claims of $100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over $100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative disput resolution (ADR). If the Contractor refuses an offer for ADR, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the Contracting Officer.

(End of clause)

52.233-3 PROTEST AFTER AWARD (AUG. 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable

to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

(e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.

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

52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

(1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or

(2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to

(1) conditions bearing upon transportation, disposal, handling, and storage of materials;

(2) the availability of labor, water, electric power, and roads;

(3) uncertainties of weather, river stages, tides, or similar physical conditions at the site;

(4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

(b) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)

(a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems

incompetent, careless, or otherwise objectionable.

52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage all existing improvements and utilities

(1) at or near the work site, and

(2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

(a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.

(c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

(a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

52.236-12 CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

52.236-13 ACCIDENT PREVENTION (NOV 1991) – ALTERNATE I (NOV 1991)

(a) The Contractor shall provide and maintain work environments and procedures which will

(1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;

(2) avoid interruptions of Government operations and delays in project completion dates; and

(3) control costs in the performance of this contract.

(b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-

(1) Provide appropriate safety barricades, signs, and signal lights;

(2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and

(3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

(c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

(d) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

(f) Before commencing the work, the Contractor shall-

(1) Submit a written proposed plan for implementing this clause. The plan shall include an analysis of the significant hazards to life, limb, and property inherent in contract work performance and a plan for controlling these

hazards; and

(2) Meet with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to administration of the overall safety program.

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

52.236-17 LAYOUT OF WORK (APR 1984)

The Contractor shall lay out its work from Government established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

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

(a) The Contractor shall keep on the work site a copy of the drawings and specifications and shall at all times give the Contracting Officer access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures, in the drawings, or in the specifications, the matter shall be promptly submitted to the Contracting Officer, who shall promptly make a determination in writing. Any adjustment by the Contractor without such a determination shall be at its own risk and expense. The Contracting Officer shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

(b) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of the Contracting Officer is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by," or "acceptable to", or "satisfactory to" the Contracting Officer, unless otherwise expressly stated.

(c) Where "as shown," as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place," that is "furnished and installed".

(d) Shop drawings means drawings, submitted to the Government by the Contractor, subcontractor, or any lower tier subcontractor pursuant to a construction contract, showing in detail (1) the proposed fabrication and assembly of structural elements, and (2) the installation (i.e., fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the contractor to explain in detail specific portions of the work required by the contract. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(e) If this contract requires shop drawings, the Contractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with contract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the Contracting Officer without evidence of the Contractor's approval may be returned for resubmission. The Contracting Officer will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate the Government's reasons therefor. Any work done before such approval shall be at the Contractor's risk. Approval by the Contracting Officer shall not relieve the Contractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this contract, except with respect to variations described and approved in accordance with (f) below.

(f) If shop drawings show variations from the contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the Contracting Officer approves any such variation, the Contracting Officer shall issue an appropriate contract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

(g) The Contractor shall submit to the Contracting Officer for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. Three sets (unless otherwise indicated) of all shop drawings, will be retained by the Contracting Officer and one set will be returned to the Contractor.

52.236-22 DESIGN WITHIN FUNDING LIMITATIONS (APR 1984)

(a) The Contractor shall accomplish the design services required under this contract so as to permit the award of a contract, using standard Federal Acquisition Regulation procedures for the construction of the facilities designed at a price that does not exceed the estimated construction contract price as set forth in paragraph (c) below. When bids or proposals for the construction contract are received that exceed the estimated price, the contractor shall perform such redesign and other services as are necessary to permit contract award within the funding limitation. These additional services shall be performed at no increase in the price of this contract. However, the Contractor shall not be required to perform such additional services at no cost to the Government if the unfavorable bids or proposals are the result of conditions beyond its reasonable control.

(b) The Contractor will promptly advise the Contracting Officer if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is unable to design a usable facility within these limitations. Upon receipt of such information, the Contracting Officer will review the Contractor's revised estimate of construction cost. The Government may, if it determines that the estimated construction contract price set forth in this contract is so low that award of a construction contract not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction contract price set forth in paragraph (c) below, or the Government may adjust such estimated construction contract price. When bids or proposals are not solicited or are unreasonably delayed, the Government shall prepare an estimate of constructing the design submitted and such estimate shall be used in lieu of bids or proposals to determine compliance with the funding limitation.

(c) The estimated construction contract price for the project described in this contract is $

52.236-24 WORK OVERSIGHT IN ARCHITECT-ENGINEER CONTRACTS (APR 1984)

The extent and character of the work to be done by the Contractor shall be subject to the general oversight, supervision, direction, control, and approval of the Contracting Officer.

52.236-25 REQUIREMENTS FOR REGISTRATION OF DESIGNERS (APR 1984)

The design of architectural, structural, mechanical, electrical, civil, or other engineering features of the work shall be accomplished or reviewed and approved by architects or engineers registered to practice in the particular professional field involved in a State or possession of the United States, in Puerto Rico, or in the District of Columbia.

52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)

If the Contracting Officer decides to conduct a preconstruction conference, the successful offeror will be notified and will be required to attend. The Contracting Officer's notification will include specific details regarding the date, time, and location of the conference, any need for attendance by subcontractors, and information regarding the items

to be discussed.

52.239-4001 Year 2000 Compliance

The contractor shall ensure products provided under this contract, to include hardware, software, firmware, and middleware, whether acting alone or combined as a system, are Year 2000 compliant as defined as follows: Year 2000 compliant means with respect to information technology, that the information technology accurately processes date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations, to the extent that other information, used in combination with the information technology being acquired, properly exchanges date/time data with it.

52.239-4005 Year 2000 Compliance - Construction Contracts

a. In accordance with FAR 39.106, the contractor shall ensure that with respect to any design, construction, goods, or services under this contract as well as any subsequent task/delivery orders issued under this contract (if applicable), all information technology contained therein shall be Year 2000 compliant. Specifically:

The contractor shall:

(1) Perform, maintain, and provide an inventory of all major components to include structures, equipment, items, parts, and furnishings under this contract and each task/delivery order which may be affected by the Y2K compliance requirement.

(2) Indicate whether each component is currently Year 2000 compliant or requires an upgrade for compliance prior to government acceptance.

(End of Clause)

52.242-13 BANKRUPTCY (JUL 1995)

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

(End of clause)

52.242-14 SUSPENSION OF WORK (APR 1984)

(a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

52.243-1 CHANGES--FIXED-PRICE (AUG 1987) - ALTERNATE III (APR 1984)

(a) The Contracting Officer may at any time, by written order, and without notice to the sureties, if any, make changes within the general scope of this contract in the services to be performed.

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance of any part of the work under this contract, whether or not changed by the order, the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.

(d) If the Contractor's proposal includes the cost of property made obsolete or excess by the change, the Contracting Officer shall have the right to prescribe the manner of the disposition of the property.

(e) Failure to agree to any adjustment shall be a dispute under the Disputes clause. However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

(f) No services for which an additional cost or fee will be charged by the Contractor shall be furnished without the prior written authorization of the Contracting Officer.

52.243-4 CHANGES (AUG 1987)

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--

(1) In the specifications (including drawings and designs);

(2) In the method or manner of performance of the work;

(3) In the Government-furnished facilities, equipment, materials, services, or site; or

(4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating

(1) the date, circumstances, and source of the order and

(2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after

(1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

52.244-5 COMPETITION IN SUBCONTRACTING (DEC 1996)

(a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(b) If the Contractor is an approved mentor under the Department of Defense Pilot Mentor-Protege Program (Pub. L. 101–510, section 831 as amended), the Contractor may award subcontracts under this contract on a noncompetitive basis to its proteges.

52.244-6 SUBCONTRACTS FOR COMMERCIAL ITEMS (DEC 2001)

(a) Definitions. As used this clause--

"Commercial item", has the meaning contained in the clause at 52.202-1, Definitions.

"Subcontract", includes a transfer of commercial items between divisions, subsidiaries, or affiliates of the Contractor or subcontractor at any tier.

(b) To the maximum extent practicable, the Contractor shall incorporate, and require its subcontractors at all tiers to incorporate, commercial items or nondevelopmental items as components of items to be supplied under this contract.

(c)(1) The Contractor shall insert the following clauses in subcontracts for commercial items:

(i) 52.219-8, Utilization of Small Business Concerns (OCT 2000) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $500,000 ($1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(ii) 52.222-26, Equal Opportunity (FEB 1999) (E.O. 11246).

(iii) 52.222-35, Equal Opportunity for Special Disabled Veterans, Veterans of the Vietnam Era and Other Eligible Veterans (DEC 2001) (38 U.S.C. 4212(a)).

(iv) 52.222-36, Affirmative Action for Workers with Disabilities (JUN 1998) (29 U.S.C. 793).

(v) 52.247-64, Preference for Privately Owned U.S.-Flagged Commercial Vessels (JUN 2000) (46 U.S.C. Appx 1241) (flowdown not required for subcontracts awarded beginning May 1, 1996).

(2) While not required, the Contractor may flow down to subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(d) The Contractor shall include the terms of this clause, including this paragraph (d), in subcontracts awarded under this contract.

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

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) below.

(b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).

"Value engineering change proposal (VECP)" means a proposal that--

(1) Requires a change to this, the instant contract, to implement; and

(2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change--

(i) In deliverable end item quantities only; or

(ii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) A separate, detailed cost estimate for

(i) the affected portions of the existing contract requirement and

(ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) Government action.

(1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it shall not be liable for any delay in acting upon a VECP.

If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) Sharing.

(1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by

(i) 45 percent for fixed-price contracts or

(ii) 75 percent for cost-reimbursement contracts.

(2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to--

(i) Accept the VECP;

(ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and

(iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

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

(h) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of $50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(i) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering-- Construction clause of contract . . . . . , shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations." If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(End of clause)

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

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work

terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

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

(d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

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

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted--

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is

received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

52.249-7 TERMINATION (FIXED-PRICE ARCHITECT-ENGINEER) (APR 1984)

(a) The Government may terminate this contract in whole or, from time to time, in part, for the Government's convenience or because of the failure of the Contractor to fulfill the contract obligations. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the nature, extent, and effective date of the termination. Upon receipt of the notice, the Contractor shall (1) immediately discontinue all services affected (unless the notice directs otherwise), and (2) deliver to the Contracting Officer all data, drawings, specifications, reports, estimates, summaries, and other information and materials accumulated in performing this contract, whether completed or in process.

(b) If the termination is for the convenience of the Government, the Contracting Officer shall make an equitable adjustment in the contract price but shall allow no anticipated profit on unperformed services.

(c) If the termination is for failure of the Contractor to fulfill the contract obligations, the Government may complete the work by contract or otherwise and the Contractor shall be liable for any additional cost incurred by the Government.

(d) If, after termination for failure to fulfill contract obligations, it is determined that the Contractor had not failed, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the Government.

(e) The rights and remedies of the Government provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased

costs incurred by the Government in completing the work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if--

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include

(i) acts of God or of the public enemy,

(ii) acts of the Government in either its sovereign or contractual capacity,

(iii) acts of another Contractor in the performance of a contract with the Government,

(iv) fires,

(v) floods,

(vi) epidemics,

(vii) quarantine restrictions,

(viii) strikes,

(ix) freight embargoes,

(x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

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

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

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

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

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

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

(End of clause)

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

(a) Definitions. As used in this clause—

(1) “Arising out of a contract with the DoD” means any act in connection with—

(i) Attempting to obtain;

(ii) Obtaining, or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) “Conviction of fraud or any other felony” means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of *nolo contendere*, for which sentence has been imposed.

(3) “Date of conviction” means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--

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

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

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

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

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

(d) 10 U.S.C. 2408 provides that a defense contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than $500,000 if convicted of knowingly—

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as—

(1) Suspension or debarment;

(2) Cancellation of the contract at no cost to the Government; or

(3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify—

(1) The person involved;

(2) The nature of the conviction and resultant sentence or punishment imposed;

(3) The reasons for the requested waiver; and

(4) An explanation of why a waiver is in the interest of national security.

(g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.

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

(End of clause)

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

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

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

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

(End of clause)

252.204-7000 DISCLOSURE OF INFORMATION (DEC 1991)

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

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

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

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

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

(End of clause)

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

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

(End of clause)

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

(a) Definitions.

As used in this clause--

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

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

(3) Data Universal Numbering System +4 (DUNS+4) number means the DUNS number assigned by Dun and Bradstreet plus a 4-digit suffix that may be assigned by a parent (controlling) business concern. This 4-digit suffix

may be assigned at the discretion of the parent business concern for such purposes as identifying subunits or affiliates of the parent business concern.

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

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

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

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

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

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

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

(End of clause)

252.205-7000 PROVISION OF INFORMATION TO COOPERATIVE AGREEMENT HOLDERS (DEC 1991)

(a) Definition.

"Cooperative agreement holder" means a State or local government; a private, nonprofit organization; a tribal organization (as defined in section 4(c) of the Indian Self-Determination and Education Assistance Act (Pub. L. 93-268; 25 U.S.C. 450 (c))); or an economic enterprise (as defined in section 3(e) of the Indian Financing Act of 1974 (Pub. L. 93-362; 25 U.S.C. 1452(e))) whether such economic enterprise is organized for profit or nonprofit purposes; which has an agreement with the Defense Logistics Agency to furnish procurement technical assistance to business entities.

(b) The Contractor shall provide cooperative agreement holders, upon their request, with a list of those appropriate employees or offices responsible for entering into subcontracts under defense contracts. The list shall include the business address, telephone number, and area of responsibility of each employee or office.

(c) The Contractor need not provide the listing to a particular cooperative agreement holder more frequently than once a year.

(End of clause)

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

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

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

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

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

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

252.215-7000 PRICING ADJUSTMENTS (DEC 1991)

The term "pricing adjustment," as used in paragraph (a) of the clauses entitled "Price Reduction for Defective Cost or Pricing Data - Modifications," "Subcontractor Cost or Pricing Data," and "Subcontractor Cost or Pricing Data - Modifications," means the aggregate increases and/or decreases in cost plus applicable profits.

252.219-7003 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS

SUBCONTRACTING PLAN (DOD CONTRACTS) (APR. 1996)

This clause supplements the Federal Acquisition Regulation 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, clause of this contract.

(a) *Definitions. Historically black colleges and universities,* as used in this clause, means institutions determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. The term also means any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority institutions, as used in this clause, means institutions meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)). The term also includes Hispanic-serving institutions as defined in section 316(b)(1) of such Act (20 U.S.C. 1059c(b)(1)).

(b) Except for company or division-wide commercial items subcontracting plans, the term *small disadvantaged business,* when used in the FAR 52.219-9 clause, includes historically black colleges and universities and minority institutions, in addition to small disadvantaged business concerns.

(c) Work under the contract or its subcontracts shall be credited toward meeting the small disadvantaged business concern goal required by paragraph (d) of the FAR 52.219-9 clause when:

(1) It is performed on Indian lands or in joint venture with an Indian tribe or a tribally-owned corporation, and

(2) It meets the requirements of 10 U.S.C. 2323a.

(d) Subcontracts awarded to workshops approved by the Committee for Purchase from People Who are Blind or Severely Disabled (41 U.S.C. 46-48), may be counted toward the Contractor's small business subcontracting goal.

(e) A mentor firm, under the Pilot Mentor-Protege Program established under Section 831 of Pub. L. 101-510, as amended, may count toward its small disadvantaged business goal, subcontracts awarded--

(f) The master plan approval referred to in paragraph (f) of the FAR 52.219-9 clause is approval by the Contractor's cognizant contract administration activity.

(g) In those subcontracting plans which specifically identify small, small disadvantaged, and women-owned small businesses, the Contractor shall notify the Administrative Contracting Officer of any substitutions of firms that are not small, small disadvantaged, or women-owned small businesses for the firms listed in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable.

(End of clause)

252.223-7001 HAZARD WARNING LABELS (DEC 1991)

(a) "Hazardous material," as used in this clause, is defined in the Hazardous Material Identification and Material Safety Data clause of this contract.

(b) The Contractor shall label the item package (unit container) of any hazardous material to be delivered under this contract in accordance with the Hazard Communication Standard (29 CFR 1910.1200 et seq). The Standard requires that the hazard warning label conform to the requirements of the standard unless the material is otherwise subject to the labeling requirements of one of the following statutes:

(1) Federal Insecticide, Fungicide and Rodenticide Act;

(2) Federal Food, Drug and Cosmetics Act;

(3) Consumer Product Safety Act;

(4) Federal Hazardous Substances Act; or

(5) Federal Alcohol Administration Act.

(c) The Offeror shall list which hazardous material listed in the Hazardous Material Identification and Material Safety Data clause of this contract will be labeled in accordance with one of the Acts in paragraphs (b)(1) through (5) of this clause instead of the Hazard Communication Standard. Any hazardous material not listed will be interpreted to mean that a label is required in accordance with the Hazard Communication Standard.

MATERIAL (If None, Insert "None.")	ACT
_____	_____
_____	_____

(d) The apparently successful Offeror agrees to submit, before award, a copy of the hazard warning label for all hazardous materials not listed in paragraph (c) of this clause. The Offeror shall submit the label with the Material Safety Data Sheet being furnished under the Hazardous Material Identification and Material Safety Data clause of this contract.

(e) The Contractor shall also comply with MIL-STD-129, Marking for Shipment and Storage (including revisions adopted during the term of this contract).

(End of clause)

252.223-7004 DRUG-FREE WORK FORCE (SEP 1988)

(a) Definitions.

(1) "Employee in a sensitive position," as used in this clause, means an employee who has been granted access to classified information; or employees in other positions that the Contractor determines involve national security; health or safety, or functions other than the foregoing requiring a high degree of trust and confidence.

(2) "Illegal drugs," as used in this clause, means controlled substances included in Schedules I and II, as defined by section 802(6) of title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that Title. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.

(b) The Contractor agrees to institute and maintain a program for achieving the objective of a drug-free work force. While this clause defines criteria for such a program, contractors are encouraged to implement alternative approaches comparable to the criteria in paragraph (c) that are designed to achieve the objectives of this clause.

(c) Contractor programs shall include the following, or appropriate alternatives:

(1) Employee assistance programs emphasizing high level direction, education, counseling, rehabilitation, and coordination with available community resources;

(2) Supervisory training to assist in identifying and addressing illegal drug use by Contractor employees;

(3) Provision for self-referrals as well as supervisory referrals to treatment with maximum respect for individual confidentiality consistent with safety and security issues;

(4) Provision for identifying illegal drug users, including testing on a controlled and carefully monitored basis. Employee drug testing programs shall be established taking account of the following:

(i) The Contractor shall establish a program that provides for testing for the use of illegal drugs by employees in sensitive positions. The extent of and criteria for such testing shall be determined by the Contractor based on considerations that include the nature of the work being performed under the contract, the employee's duties, and efficient use of Contractor resources, and the risks to health, safety, or national security that could result from the failure of an employee adequately to discharge his or her position.

(ii) In addition, the Contractor may establish a program for employee drug testing--

(A) When there is a reasonable suspicion that an employee uses illegal drugs; or

(B) When an employees has been involved in an accident or unsafe practice;

(C) As part of or as a follow-up to counseling or rehabilitation for illegal drug use;

(D) As part of a voluntary employee drug testing program.

(iii) The Contractor may establish a program to test applicants for employment for illegal drug use.

(iv) For the purpose of administering this clause, testing for illegal drugs may be limited to those substances for which testing is prescribed by section 2..1 of subpart B of the "Mandatory Guidelines for Federal Workplace Drug Testing Programs" (53 FR 11980 (April 11, 1988), issued by the Department of Health and Human Services.

(d) Contractors shall adopt appropriate personnel procedures to deal with employees who are found to be using drugs illegally. Contractors shall not allow any employee to remain on duty or perform in a sensitive position who is found to use illegal drugs until such times as the Contractor, in accordance with procedures established by the Contractor, determines that the employee may perform in such a position.

(e) The provisions of this clause pertaining to drug testing program shall not apply to the extent that are inconsistent with state or local law, or with an existing collective bargaining agreement; provided that with respect to the latter, the Contractor agrees those issues that are in conflict will be a subject of negotiation at the next collective bargaining session.

(End of clause)

252.223-7006 PROHIBITION ON STORAGE AND DISPOSAL OF TOXIC AND HAZARDOUS MATERIALS (APR 1993)

(a) "Definitions".

As used in this clause --

(1) "Storage" means a non-transitory, semi-permanent or permanent holding, placement, or leaving of material. It does not include a temporary accumulation of a limited quantity of a material used in or a waste generated or resulting from authorized activities, such as servicing, maintenance, or repair of Department of Defense (DoD) items, equipment, or facilities.

(2) "Toxic or hazardous materials" means:

(i) Materials referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (42 U.S.C. 9601(14)) and materials designated under section 102 of CERCLA (42 U.S.C. 9602) (40 CFR part 302);

(ii) Materials that are of an explosive, flammable, or pyrotechnic nature; or

(iii) Materials otherwise identified by the Secretary of Defense as specified in DoD regulations.

(b) In accordance with 10 U.S.C. 2692, the Contractor is prohibited from storing or disposing of non-DoD-owned toxic or hazardous materials on a DoD installation, except to the extent authorized by a statutory exception to 10 U.S.C. 2692 or as authorized by the Secretary of Defense or his designee.

(End of clause)

252.225-7012 PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (AUG 2000)

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

(1) Food;

(2) Clothing;

(3) Tents, tarpaulins, or covers;

(4) Cotton and other natural fiber products;

(5) Woven silk or woven silk blends;

(6) Spun silk yarn for cartridge cloth;

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

(8) Canvas products;

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

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

(b) This clause does not apply --

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

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

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

(4) To fibers and yarns that are for use in synthetic fabric or coated synthetic fabric (but does apply to the synthetic or coated synthetic fabric itself), if--

(i) The fabric is to be used as a component of an end item that is not a textile product. Examples of textile products, made in whole or in part of fabric, include--

(a) Draperies, floor coverings, furnishings, and bedding (Federal Supply Group 72, Household and Commercial Furnishings and Appliances);

(B) Items made in whole or in part of fabric in Federal Supply Group 83, Textile/leather/furs/apparel/ findings/tents/flags, or Federal Supply Group 84, Clothing, Individual Equipment and Insignia;

(C) Upholstered seats (whether for household, office, or other use); and

(D) Parachutes (Federal Supply Class 1670); or

(ii) The fibers and yarns are para-aramid fibers and yarns manufactured in the Netherlands.

(End of clause)

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

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

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

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

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

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

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

(End of clause)

252.226-7001 Utilization of Indian Organizations and Indian-Owned Economic Enterprises-DoD Contracts (Sep 2001)

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

“Indian” means any person who is a member of any Indian tribe, band, group, pueblo, or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any “Native” as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C. Chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitutes not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1452 (c).

"Interested party" means a contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(b) The Contract shall use its best efforts to give Indian organizations and Indian-owned economic enterprises the maximum practicable opportunity to participate in the subcontracts it awards, to the fullest extent consistent with efficient performance of the contract.

(c) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless and interested party challenges its status or the Contracting Officer has independent reason to question that status.

(d) In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to the U.S. Department of the Interior, Bureau of Indian Affairs, Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street NW, MS-2626-MIB, Washington, DC 20240-4000. The BIA will determine the eligibility and will notify the Contracting Officer. No incentive payment will be made--

(1) Within 59 working days of subcontract award;

(2) While a challenge is pending; or

(3) If a subcontractor is determined to be an ineligible participant.

(e)(1) The Contractor, on its own behalf or on behalf of a subcontractor at any tier, may request an adjustment under the Indian Incentive Program to the following:

(i) The estimated cost of cost-type contract.

(ii) The target cost of a cost-plus-incentive-fee contract.

(iii) The target cost and ceiling price of a fixed-price incentive contract.

(iv) The price of a firm-fixed-price contract.

(2) The amount of the adjustment that may be made to the contract is 5 percent of the estimated cost, target cost, or firm-fixed price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.

(3) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.

(4) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor.

(5) If the Contractor requests and receives an adjustment on behalf of a subcontractor, the Contractor is obligated to pay the subcontractor the adjustment.

(f) The Contractor shall insert the substance of this clause, including this paragraph (f), in all subcontracts that--

(1) Are for other than commercial items; and

(2) Are expected to exceed the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation.

(End of clause)

252.227-7022 GOVERNMENT RIGHTS (UNLIMITED) (MAR 1979)

The Government shall have unlimited rights, in all drawings, designs, specifications, notes and other works developed in the performance of this contract, including the right to use same on any other Government design or construction without additional compensation to the Contractor. The Contractor hereby grants to the Government a paid-up license throughout the world to all such works to which he may assert or establish any claim under design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish the original or copies of all such works on the request of the Contracting Officer.

252.227-7033 RIGHTS IN SHOP DRAWINGS (APR 1966)

(a) Shop drawings for construction means drawings, submitted to the Government by the Construction Contractor, subcontractor or any lower-tier subcontractor pursuant to a construction contract, showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit, and attachment details) of materials or equipment. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(b) This clause, including this paragraph (b), shall be included in all subcontracts hereunder at any tier.

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown --

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for --

(i) Material;

(ii) Labor;

(iii) Equipment;

(iv) Subcontracts; and

(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

252.236-7001 CONTRACT DRAWINGS, MAPS, AND SPECIFICATIONS (AUG 2000)

(a) The Government will provide to the Contractor, without charge, one set of contract drawings and specifications, except publications incorporated into the technical provisions by reference, in electronic or paper media as chosen by the Contracting Officer.

(b) The Contractor shall--

(1) Check all drawings furnished immediately upon receipt;

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

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

(4) Be responsible for any errors that might have been avoided by complying with this paragraph (b); and

(5) Reproduce and print contract drawings and specifications as needed.

(c) In general--

(1) Large-scale drawings shall govern small-scale drawings; and

(2) The Contractor shall follow figures marked on drawings in preference to scale measurements.

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

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

Title	File	Drawing No.
SEE INDEX OF DRAWINGS		

(End of clause)

252.236-7005 AIRFIELD SAFETY PRECAUTIONS. (DEC 1991)

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

(1) "Landing areas means" --

(i) The primary surfaces, comprising the surface of the runway, runway shoulders, and lateral safety zones. The length of each primary surface is the same as the runway length. The width of each primary surface is 2,000 feet (1,000 feet on each side of the runway centerline);

(ii) The "clear zone" beyond the ends of each runway, i.e., the extension of the primary surface for a distance of 1,000 feet beyond each end of each runway;

(iii) All taxiways, plus the lateral clearance zones along each side for the length of the taxiways (the outer edge of each lateral clearance zone is laterally 250 feet from the far or opposite edge of the taxiway, e.g., a 75-foot-wide taxiway would have a combined width of taxiway and lateral clearance zones of 425 feet); and

(iv) All aircraft parking aprons, plus the area 125 feet in width extending beyond each edge all around the aprons.

(2) "Safety precaution" areas means those portions of approach-departure clearance zones and transitional zones where placement of objects incident to contract performance might result in vertical projections at or above the approach-departure clearance, or the transitional surface.

(i) "The approach-departure clearance surface" is an extension of the primary surface and the clear zone at each end of each runway, for a distance of 50,000 feet, first along an inclined (glide angle) and then along a horizontal plane, both flaring symmetrically about the runway centerline extended.

(A) The inclined plane (glide angle) begins in the clear zone 200 feet past the end of the runway (and primary surface) at the same elevation as the end of the runway. It continues upward at a slope of 50:1 (1 foot vertically for each 50 feet horizontally) to an elevation of 500 feet above the established airfield elevation. At that point the plane becomes horizontal, continuing at that same uniform elevation to a point 50,000 feet longitudinally from the beginning of the inclined plane (glide angle) and ending there.

(B) The width of the surface at the beginning of the inclined plane (glide angle) is the same as the width of the clear zone. It then flares uniformly, reaching the maximum width of 16,000 feet at the end.

(ii) The "approach-departure clearance zone" is the ground area under the approach-departure clearance surface.

(iii) The "transitional surface" is a sideways extension of all primary surfaces, clear zones, and approach-departure clearance surfaces along inclined planes.

(A) The inclined plane in each case begins at the edge of the surface.

(B) The slope of the incline plane is 7:1 (1 foot vertically for each 7 feet horizontally). It continues to the point of intersection with the --

(1) Inner horizontal surface (which is the horizontal plane 150 feet above the established airfield elevation); or

(2) Outer horizontal surface (which is the horizontal plane 500 feet above the established airfield elevation), whichever is applicable.

(iv) The "transitional zone" is the ground area under the transitional surface. (It adjoins the primary surface, clear zone, and approach-departure clearance zone.)

(b) General. (1) The Contractor shall comply with the requirements of this clause while --

(i) Operating all ground equipment (mobile or stationary);

(ii) Placing all materials; and

(iii) Performing all work, upon and around all airfields.

(2) The requirements of this clause are in addition to any other safety requirements of this contract.

(c) The Contractor shall -

(1) Report to the Contracting Officer before initiating any work;

(2) Notify the Contracting Officer of proposed changes to locations and operations;

(3) Not permit either its equipment or personnel to use any runway for purposes other than aircraft operation without permission of the Contracting Officer, unless the runway is -

(i) Closed by order of the Contracting Officer; and

(ii) Marked as provided in paragraph (d)(2) of this clause;

(4) Keep all paved surfaces, such as runways, taxiways, and hardstands, clean at all times and, specifically, free from small stones which might damage aircraft propellers or jet aircraft;

(5) Operate mobile equipment according to the safety provisions of this clause, while actually performing work on the airfield. At all other times, the Contractor shall remove all mobile equipment to locations -

(i) Approved by the Contracting Officer;

(ii) At a distance of at least 750 feet from the runway centerline, plus any additional distance; and

(iii) Necessary to ensure compliance with the other provisions of this clause; and

(6) Not open a trench unless material is on hand and ready for placing in the trench. As soon as practicable after material has been placed and work approved, the Contractor shall backfill and compact trenches as required by the contract. Meanwhile, all hazardous conditions shall be marked and lighted in accordance with the other provisions of this clause.

(d) Landing areas. The Contractor shall -

(1) Place nothing upon the landing areas without the authorization of the Contracting Officer;

(2) Outline those landing areas hazardous to aircraft, using (unless otherwise authorized by the Contracting Officer) red flags by day, and electric, battery-operated low-intensity red flasher lights by night;

(3) Obtain, at an airfield where flying is controlled, additional permission from the control tower operator every time before entering any landing area, unless the landing area is marked as hazardous in accordance with paragraph (d)(2) of this clause;

(4) Identify all vehicles it operates in landing areas by means of a flag on a staff attached to, and flying above, the vehicle. The flag shall be three feet square, and consist of a checkered pattern of international orange and white squares of 1 foot on each side (except that the flag may vary up to ten percent from each of these dimensions);

(5) Mark all other equipment and materials in the landing areas, using the same marking devices as in paragraph (d)(2) of this clause; and

(6) Perform work so as to leave that portion of the landing area which is available to aircraft free from hazards, holes, piles of material, and projecting shoulders that might damage an airplane tire.

(e) Safety precaution areas. The Contractor shall -

(1) Place nothing upon the safety precaution areas without authorization of the Contracting Officer;

(2) Mark all equipment and materials in safety precaution areas, using (unless otherwise authorized by the Contracting Officer) red flags by day, and electric, battery-operated, low-intensity red flasher lights by night; and

(3) Provide all objects placed in safety precaution areas with a red light or red lantern at night, if the objects project above the approach-departure clearance surface or above the transitional surface.

252.242-7000 POSTAWARD CONFERENCE (DEC 1991)

The Contractor agrees to attend any postaward conference convened by the contracting activity or contract administration office in accordance with Federal Acquisition Regulation subpart 42.5.

(End of clause)

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

252.243-7002 REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)

(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including--

(1) Cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Information other than cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to----

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustment under an incentive provision of the contract.

252.244-7000 SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS (DOD) (MAR 2000)

In addition to the clauses listed in paragraph (c) of the Subcontracts for Commercial Items and Commercial Components clause of this contract (Federal Acquisition Regulation 52.244-6), the Contractor shall include the terms of the following clauses, if applicable, in subcontracts for commercial items or commercial components, awarded at any tier under this contract:

252.225-7014 Preference for Domestic Specialty Metals, Alternate I (10 U.S.C. 2241 note).

252.247-7023 Transportation of Supplies by Sea (10 U.S.C. 2631).

252.247-7024 Notification of Transportation of Supplies by Sea (10 U.S.C. 2631).

(End of clause)

252.247-7023 TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

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

(1) "Components" means articles, materials, and supplies incorporated directly into end products at any level of manufacture, fabrication, or assembly by the Contractor or any subcontractor.

(2) "Department of Defense" (DoD) means the Army, Navy, Air Force, Marine Corps, and defense agencies.

(3) "Foreign flag vessel" means any vessel that is not a U.S.-flag vessel.

(4) "Ocean transportation" means any transportation aboard a ship, vessel, boat, barge, or ferry through international waters.

(5) "Subcontractor" means a supplier, materialman, distributor, or vendor at any level below the prime contractor whose contractual obligation to perform results from, or is conditioned upon, award of the prime contract and who is performing any part of the work or other requirement of the prime contract.

(6) "Supplies" means all property, except land and interests in land, that is clearly identifiable for eventual use by or owned by the DoD at the time of transportation by sea.

(i) An item is clearly identifiable for eventual use by the DoD if, for example, the contract documentation contains a reference to a DoD contract number or a military destination.

(ii) "Supplies" includes (but is not limited to) public works; buildings and facilities; ships; floating equipment and vessels of every character, type, and description, with parts, subassemblies, accessories, and equipment; machine tools; material; equipment; stores of all kinds; end items; construction materials; and components of the foregoing.

(7) "U.S.-flag vessel" means a vessel of the United States or belonging to the United States, including any vessel registered or having national status under the laws of the United States.

(b)(1) The Contractor shall use U.S.-flag vessels when transporting any supplies by sea under this contract.

(2) A subcontractor transporting supplies by sea under this contract shall use U.S.-flag vessels if--

(i) This contract is a construction contract; or

(ii) The supplies being transported are--

(A) Noncommercial items; or

(B) Commercial items that--

(1) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it contracts for f.o.b. destination shipment);

(2) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(3) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(c) The Contractor and its subcontractors may request that the Contracting Officer authorize shipment in foreign-flag vessels, or designate available U.S.-flag vessels, if the Contractor or a subcontractor believes that --

(1) U.S.-flag vessels are not available for timely shipment;

(2) The freight charges are inordinately excessive or unreasonable; or

(3) Freight charges are higher than charges to private persons for transportation of like goods.

(d) The Contractor must submit any request for use of other than U.S.-flag vessels in writing to the Contracting Officer at least 45 days prior to the sailing date necessary to meet its delivery schedules. The Contracting Officer will process requests submitted after such date(s) as expeditiously as possible, but the Contracting Officer's failure to grant approvals to meet the shipper's sailing date will not of itself constitute a compensable delay under this or any other clause of this contract. Requests shall contain at a minimum --

(1) Type, weight, and cube of cargo;

(2) Required shipping date;

(3) Special handling and discharge requirements;

(4) Loading and discharge points;

(5) Name of shipper and consignee;

(6) Prime contract number; and

(7) A documented description of efforts made to secure U.S.-flag vessels, including points of contact (with names and telephone numbers) with at least two U.S.-flag carriers contacted. Copies of telephone notes, telegraphic and facsimile message or letters will be sufficient for this purpose.

(e) The Contractor shall, within 30 days after each shipment covered by this clause, provide the Contracting Officer and the Division of National Cargo, Office of Market Development, Maritime Administration, U.S. Department of Transportation, Washington, DC 20590, one copy of the rated on board vessel operating carrier's ocean bill of lading, which shall contain the following information --

(1) Prime contract number;

(2) Name of vessel;

(3) Vessel flag of registry;

(4) Date of loading;

(5) Port of loading;

(6) Port of final discharge;

(7) Description of commodity;

(8) Gross weight in pounds and cubic feet if available;

(9) Total ocean freight in U.S. dollars; and

(10) Name of the steamship company.

(f) The Contractor agrees to provide with its final invoice under this contract a representation that to the best of its knowledge and belief --

(1) No ocean transportation was used in the performance of this contract;

(2) Ocean transportation was used and only U.S.-flag vessels were used for all ocean shipments under the contract;

(3) Ocean transportation was used, and the Contractor had the written consent of the Contracting Officer for all non-U.S.-flag ocean transportation; or

(4) Ocean transportation was used and some or all of the shipments were made on non-U.S.-flag vessels without the written consent of the Contracting Officer. The Contractor shall describe these shipments in the following format:

ITEM	CONTRACT	QUANTITY

DESCRIPTION LINE ITEMS

_____
_____
_____
_____
TOTAL_____

(g) If the final invoice does not include the required representation, the Government will reject and return it to the Contractor as an improper invoice for the purposes of the Prompt Payment clause of this contract. In the event there has been unauthorized use of non-U.S.-flag vessels in the performance of this contract, the Contracting Officer is entitled to equitably adjust the contract, based on the unauthorized use.

(h) The Contractor shall include this clause, including this paragraph (h), in all subcontractors under this contract that--

(1) Exceed the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation; and

(2) Are for a type of supplies described in paragraph (b)(3) of this clause.

(End of clause)

252.247-7024 NOTIFICATION OF TRANSPORTATION OF SUPPLIES BY SEA (MAR 2000)

(a) The Contractor has indicated by the response to the solicitation provision, Representation of Extent of Transportation by Sea, that it did not anticipate transporting by sea any supplies. If, however, after the award of this contract, the Contractor learns that supplies, as defined in the Transportation of Supplies by Sea clause of this contract, will be transported by sea, the Contractor --

(1) Shall notify the Contracting Officer of that fact; and

(2) Hereby agrees to comply with all the terms and conditions of the Transportation of Supplies by Sea clause of this contract.

(b) The Contractor shall include this clause; including this paragraph (b), revised as necessary to reflect the relationship of the contracting parties--

(1) In all subcontracts under this contract, if this contract is a construction contract; or

(2) If this contract is not a construction contract, in all subcontracts under this contract that are for--

(i) Noncommercial items; or

(ii) Commercial items that--

(A) The Contractor is reselling or distributing to the Government without adding value (generally, the Contractor does not add value to items that it subcontracts for f.o.b. destination shipment);

(B) Are shipped in direct support of U.S. military contingency operations, exercises, or forces deployed in humanitarian or peacekeeping operations; or

(C) Are commissary or exchange cargoes transported outside of the Defense Transportation System in accordance with 10 U.S.C. 2643.

(End of clause)

Section 00800 - Special Contract Requirements

CLAUSES INCORPORATED BY FULL TEXT

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

The Contractor shall be required to (a) commence work under this contract within 5 calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than 600 days after Notice to Proceed. The time stated for completion shall include final cleanup of the premises.

*The Contracting Officer shall specify either a number of days after the date the contractor receives the notice to proceed, or a calendar date.

(End of clause)

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) If the Contractor fails to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to the Government in the amount of $510.00 for each calendar day of delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of clause)

52.211-13 TIME EXTENSIONS (SEP 2000)

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

(End of clause)

52.219-4002 REPORTING REQUIREMENTS--SUBCONTRACTING PLAN (CESAD-CT JUL 1993)

(a) Retainage will be withheld from progress payments in an amount sufficient to protect the Government's ability to assess Liquidated Damages in accordance with FAR clause 52.219-0016 for failure to submit timely SF 294 and SF 295 Reports. The amount of retainage will be determined in accordance with the following formula:

(b) Total dollar amount proposed for subcontracting to small business multiplied by percentage of actual progress on the contract, up to a maximum of 10% of the given progress payment, shall be withheld from the next progress payment due after a contractor fails to submit a required report. If one or more reports have been submitted before such failure, formula for determining the amount of retainage will be adjusted by deducting any amounts reported as subcontracted to small business from the total dollar amount proposed to be subcontracted and the difference multiplied by the percent of actual progress, up to a maximum of 10% of the given progress payment.

(End of clause)

52.223-4002 U.S. ARMY CORPS OF ENGINEERS SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1

This paragraph applies to contracts and purchase orders that require the contractor to comply with EM 385-1-1 (e.g., contracts that include the Accident Prevention clause at FAR 52.236-13 and/or other safety provisions). EM 385-1-1 and its changes are available at http://www.hq.usace.army.mil. (At the HQ homepage, select Safety and Occupational Health.) The Contractor shall be responsible for complying with the current edition and all changes posted on the web through the date that is 10 calendar days prior to the date offers are due. If the solicitation is amended to extend the time set for receipt of offers, the 10 calendar days rule stated above shall be applied against the amended date. (For example, if offers are due on 10 April, all changes posted on or before 31 March shall apply to the contract. If the time for receipt of offers is extended from 10 April to 20 April, all changes posted on or before 10 April shall apply to the contract.)

52.228-4001 RECOMMENDED INSURANCE COVERAGE – MAY 2000

The Design-Build Contractor's attention is invited to the contract requirements concerning "RESPONSIBILITY OF THE CONTRACTOR FOR DESIGN' and 'WARRANTY OF CONSTURCTION WORK". These requirements vest in the Contractor complete responsibility for the professional quality, technical accuracy, and coordination of all design, drawings, specifications and other work or materials furnished by his in-house or consultant forces. The Design-Build Contractor must correct and revise any errors or deficiencies in his work, notwithstanding any review, approval, acceptance or payment by the Government. The Contractor must correct and change any work resulting from his defective design at no additional cost to the Government. The requirements further stipulate that the Design-Build Contractor shall be liable to the Government for the damages to the Government caused by negligent performance. Though it is not am mandatory requirement, this is to recommend that the Design-Build Contractor investigate and obtain appropriate insurance coverage for such liability protection.

(End of Clause)

52.228-4002 REQUIRED INSURANCE (FEB 1987 SAS) (Ref. FAR 28.307)

(a) The Contractor shall procure and maintain during the entire period of his performance under this contract the following minimum insurance:

Comprehensive and Employer's Liability Insurance in the amount required by the State law in which the work is to be performed under this contract.

Comprehensive General Liability Insurance in an amount not less than $500,000 per accident.

Automobile Liability Insurance: $200,000 per person and $500,000 per accident for bodily injury liability and $20,000 property damage liability.

(b) Prior to the commencement of work hereunder, the Contractor shall furnish to the Contracting Officer a certificate or written statement of the

above-required insurance. The policies evidencing required insurance shall contain an endorsement to the effect that cancellation, or any material change in the policies adversely affecting the interests of the Government in such insurance, shall not be effective for such period as may be prescribed by the laws of the State in which this contract is to be performed and in no event less than 30 days after written notice thereof to the Contracting Officer.

(c) The Contractor agrees to insert the substance of this clause, including this subparagraph (c), in all subcontracts hereunder.

(End of clause)

52.231-5000 EQUIPMENT OWNERSHIP AND OPERATING EXPENSE SCHEDULE
MAR 1995)--EFARS

(a) This clause does not apply to terminations. See 52.249-5000, Basis for Settlement of Proposals and FAR Part 49.

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

(c) Equipment rental costs are allowable, subject to the provisions of FAR 31.105(d)(ii) and FAR 31.205-36. Rates for equipment rented from an organization under common control, lease-purchase arrangements, and sale-leaseback arrangements, will be determined using the schedule, except that actual rates will be used for equipment leased from an organization under common control that has an established practice of leasing the same or similar equipment to unaffiliated lessees.

(d) When actual equipment costs are proposed and the total amount of the pricing action exceeds the small purchase threshold, the contracting officer shall request the contractor to submit either certified cost or pricing data, or partial/limited data, as appropriate. The data shall be submitted on Standard Form 1411, Contract Pricing Proposal Cover Sheet.

(End of clause)

52.232-4008 DESIGNATED BILLING OFFICE (APR 1989 CESAS-RM)

Invoices will be mailed to: Fort Stewart Area Office
ATTN: CESAS-CD-ST
Building 936, Wilson Avenue
Fort Stewart, GA 31314

(End of Clause)

52.232-4009 DESIGNATED PAYMENT OFFICE (AUG 1998 CESAS-RM-F)

Payment will be made by:
U.S. Army Corps of Engineers Finance Center
ATTN: CEFC-AO-P
5720 Integrity Drive
Millington, TN 38054-5005
(End of clause)

52.236-1 PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least twenty (20) percent of the total amount of work to be performed under the contract. This percentage may be reduced by a supplemental agreement to this contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

52.236-4 PHYSICAL DATA (APR 1984)

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

(a) The indications of physical conditions on the drawings and in the specifications are the result of site investigations by . . . . . [insert a description of investigational methods used, such as surveys, auger borings, core borings, test pits, probings, test tunnels].

(b) Weather conditions - See Clause "Time Extensions for Unusually Severe Weather," Section 00800.

(c) Transportation facilities – The site of the work is available by public highway.

52.236-14 AVAILABILITY AND USE OF UTILITY SERVICES (APR 1984)

(a) The Government shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

(b) The Contractor, at its expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

52.236-4001 DESIGN-BUILD CONTRACT-ORDER OF PRECEDENCE – AUG 1997

(e) The contract includes the standard contract clauses and schedules current at the time of award. It also entails: (1) the solicitation in its entirety, including all drawings, cuts and illustrations, and any amendments during proposal evaluation and selection, and (2) the successful Offeror's accepted proposal. The contract constitutes and defines the entire agreement between the Contractor and the Government. No documentation shall be omitted which in any ways bears upon the terms of that agreement.

(f) In the event of conflict or inconsistency between any of the provisions of the various portions of this contract, precedence shall be given in the following order:

(1.) Betterments: Any portions of the Offeror's proposal which both meet and exceed the provisions of the solicitation

(2.) The provisions of the solicitation. (see also Contract Clause: SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION.)

(3.) All other provisions of the accepted proposal.

(4.) Any design products, including but not limited to plans, specifications, engineering studies and analyses, shop drawings, equipment installation drawings, etc. These are "deliverables" under the contract and are not part of the contract itself. Design products must conform to all provisions of the contract, in the order of precedence herein.

(End of Clause)

52.236-4001 RESPONSIBILITY OF THE CONTRACTOR FOR DESIGN – FEB 2000

(a) The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, and other non-construction services furnished by the Contractor under this contract. The Contractor shall, without additional compensation, correct or revise any errors or deficiency in its designs, drawings, specifications, and other non-construction services and perform any necessary rework or modifications, including any damage to real or personal property, resulting from the design error or omission.

(b) Neither the Government's review, approval or acceptance of, nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract. The Contractor shall be and remain liable to the Government in accordance wit applicable law for all damages to the Government caused by the Contractor's negligent performance of any of these services furnished under this contract.

(c) The rights and remedies of the Government provided for under this contract are in addition to any other rights and remedies provided by law

(d) If the Contractor is comprised of more than one legal entity shall be jointly and severally liable thereunder.

(End of Clause)

NOTE: If your proposal **does not** include Fast Track Design/Build, then this provision shall apply.

52.236-4004 SEQUENCE OF DESIGN-CONSTRUCTION – AUG 1997

(a) After receipt of the Contract Notice to Proceed (NTP) the Contractor shall initiate design, comply with all design submission requirements as covered under Division 01 General Requirements, and obtain Government review of each submission. No construction may be started, <with the exception of….clearing, etc…> until the Government reviews the Final Design submission and determines it satisfactory for purposes of beginning construction. The Contracting Officer will notify the Contractor when the design is cleared for construction. The Government will not grant any time extension for any design resubmittal required when, in the opinion of the Contracting Officer, the initial submission failed to meet the minimum quality requirements as set forth in the Contract.

(b) If the Government allows the Contractor to proceed with limited construction based on pending minor revisions to the reviewed Final Design submission, no payment will be made for any in-place construction related to the pending revisions until they are completed, resubmitted and are satisfactory to the Government.

(c) No payment will be made for any in-place construction until all required submittals have been made, reviewed and are satisfactory to the Government.

(End of Clause)

NOTE: If your proposal contains Fast Track Design/Build, then this provision shall apply.

52.236-4005 SEQUENCE OF DESIGN- CONSTRUCTION (FAST TRACK) – AUG 1997

(a) After receipt of the Contract Notice to Proceed (NTP) the Contractor shall initiate design, comply with all design submissions requirements as covered under Division 01 General Requirements, and obtain Government review of each submission. The contractor may begin construction on portions of the work for which the Government has reviewed the final design submission and has determined satisfactory for purposes of beginning construction. The Contracting Officer will notify the Contractor when the design is cleared for construction. The Government will not grant any time extension for any design resubmittal required when, in the opinion of the Contracting Officer, the initial submission failed to meet the minimum quality requirements as set forth in the Contract.

(b) If the Government allows the Contractor to proceed with the construction based on pending minor revisions to the reviewed Final Design submission, no payment will be made for any in-place construction related to the pending revisions until they are completed, resubmitted and are satisfactory to the Government.

(c) No payment will be made for any in-place construction until all required submittals have been made, reviewed and are satisfactory to the Government.

(End of Clause)

52.236-4006 CONSTRUCTOR'S ROLE DURING DESIGN – JUN 1998

The Contractor's construction management key personnel shall be actively involved during the design process to effectively integrate the design and construction requirements of this contract. In addition to the typical required construction activities, the constructor's involvement includes, but is not limited to actions such as: integrating the design schedule into the Master Schedule to maximize the effectiveness of fast-tracking design and construction (within the limits allowed in the contract), ensuring constructability and economy of the design, integrating the shop drawing and installation drawing process into the design, executing the material and equipment acquisition programs to meet critical schedules, effectively interfacing the construction QC program with the design QC program, and maintaining and providing the design team with accurate, up-to-date redline and as-built documentation. The Contractor shall require and manage the active involvement of key trade subcontractors in the above activities.

(End of Clause)

52.236-4007 TRAINING – FEB 2000

The Contractor shall provide operational and maintenance training for all systems furnished under this contract for the operating and maintenance personnel. The system manufacturer shall conduct the training, where feasible. All operation and maintenance manuals shall be submitted and approved prior to conducting the training, where feasible. All operation and maintenance manuals shall be submitted and approved prior to conducting the training and shall be used during training. The Contractor shall video tape the training session on VHS tapes and provide the tapes to the Government.

(End of Clause)

52.236-4008 DESIGN CONFERENCES – AUG 1997

(a) Pre-Work: As part of the Pre-Work Conference conducted after contract award, key representatives of the Government and the Contractor will review the design submission and procedures specified herein, discuss the preliminary design schedule and provisions for phase completion of the D-B documents with construction activities (fast tracking), as appropriate, meet with Corps of Engineers Design Review personnel and key Using Agency points of contract and any other appropriate pre-design discussion items.

(b) Design Charette: After award of the contract, the Contractor shall visit the site and conduct extensive interviews, and problem solving discussions with the individual users, base personnel, Corps of Engineers personnel to acquire all necessary site information, review user options, and discuss user needs. The Contractor shall document all discussions. The design shall be finalized as direct result of these meetings.

(c) Design Review Conferences: Review conferences will be held on base for each design submittal. The Contractor will bring the personnel that developed the design submittal to the review conference. The conferences will take place the week after the review is complete.

(End of Clause)

52.236-4009 PARTNERING – FEB 2000

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 <NAME THE USING ORGANIZATIONS AND OTHER CRITICAL PARTIES HERE>, the Contractor, primary

subcontractors and designers and the Corps of Engineers. This partnership would strive to develop a cooperative management team drawing on the strengths of each team member in an effort to achieve quality project within budget and on schedule. This partnership would be bilateral in membership and participation will be totally voluntary. Any cost associated with effectuating this partnership, excluding travel and lodging cost of Government personnel, will be borne by <<SELECT AN OPTION TO SPECIFY: The Contractor/each party/the Government>>, The partnering meetings shall be held in ……

(End of Clause)

52.236-4013 CONTRACTOR-PREPARED NETWORK ANALYSIS SYSTEM (January 2002 SAS) (Ref. DFARS 236.273)

The progress chart to be prepared by the contractor pursuant to FAR 52.236-15, Schedules for Construction Contracts, shall utilize the Critical Path Method (CPM) of network calculation. (See Attachment 1 to Section 00800).

52.236-4015 PRECONSTRUCTION CONFERENCE (OCT 1988 SAS) (Ref. FAR 36.305)

(a) A preconstruction conference will be arranged by the Area/Resident Engineer after award of contract and before commencement of work. The Area/Resident Engineer will notify the Contractor of the time and date set for the meeting. At this conference, the Contractor shall be oriented with respect to Government procedures and line of authority, contractual, administrative, and construction matters.

(b) The Contractor shall bring to this conference, in completed form, a Certificate of Insurance, plus the following items in either completed or draft form:

Accident Prevention Plan (5 copies)
(use format shown in Attachment 1 to SECTION 00800)
Quality Control Plan (5 copies)
Letter Appointing Superintendent
Transmittal Register
Power of Attorney and Certified Copy of Resolution
Network Analysis System, when applicable
List of Subcontractors

(c) A letter of record will be written documenting all items discussed at the conference, and a copy will be furnished by the Area/Resident Engineer to all in attendance.

(End of clause)

52.236-4016 VIDEO TAPING OPERATING AND MAINTENANCE INSTRUCTIONS (MAR 1987 SASCD-SQ)

For all of the operating and maintenance instructions which are required in the contract specifications, the Contractor shall video tape these instructions as they are presented to the Government representatives. These tapes shall provide clear and understandable detailed instructions for all items required by the contract specifications. The tapes shall be

prepared by an experienced video director/cameraman using good quality half-inch VHS color tape with correct sound equipment, lighting, and backdrop. The sound and picture quality shall be high and subject to approval by the Contracting Officer. The tapes are intended as followup training for other Government representatives at a later date. They must be suitable for this purpose. The Contractor shall be responsible for the contents of the instructions and shall verify that they are correct prior to taping. The Contractor may submit individual equipment manufacturer's instructional tape(s), provided they meet the above qualifications and cover the actual equipment that is installed. The tape(s) shall be for specific equipment identified by contents and contract name and number. The Contractor shall submit one copy of the tape(s) to the Contracting Officer for review and approval. Unacceptable tapes are to be corrected by the Contractor as indicated by the Contracting Officer at no additional cost to the Government.

(End of clause)

52.236-4017 SUBMITTAL OF MODIFICATION COST ESTIMATE PROPOSALS (MAR 1992 SAS) (Ref. DFARS 52.236-7000)

When submittals of Cost Estimate Proposals are required for additions or deletions to work under this contract by modification, the Contractor shall use DA Form 5418-R titled "Cost Estimate Analysis" (see Attachment 1 to SECTION 00800). A separate assemblage will be prepared for submittal by each trade affected by the proposed work.

(End of clause)

52.239-4005 Year 2000 Compliance - Construction Contracts

a. In accordance with FAR 39.106, the contractor shall ensure that with respect to any design, construction, goods, or services under this contract as well as any subsequent task/delivery orders issued under this contract (if applicable), all information technology contained therein shall be Year 2000 compliant. Specifically:

The contractor shall:

(1) Perform, maintain, and provide an inventory of all major components to include structures, equipment, items, parts, and furnishings under this contract and each task/delivery order which may be affected by the Y2K compliance requirement.

(2) Indicate whether each component is currently Year 2000 compliant or requires an upgrade for compliance prior to government acceptance.

(End of Clause)

52.244-4001 KEY PERSONNEL, SUBCONTRACTORS AND OUTSIDE ASSOCIATES OR CONSULTANTS – AUG 1997

In connection with the services covered by this contract, any in-house personnel, subcontractors, and outside associates or consultants will be limited to the individuals or firms that were specifically identified and agreed to during negotiations. The contractor shall obtain the Contracting Officer's written consent before making any substitution for these designated in-house personnel, subcontractors, associates, or consultants.

(End of Clause)

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

(a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.

(c) Government inspections and tests are for the sole benefit of the Government and do not--

(1) Relieve the Contractor of responsibility for providing adequate quality control measures;

(2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;

(3) Constitute or imply acceptance; or

(4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this section.

(d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

(e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.

(h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

(i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

52.246-4001 WARRANTY OF CONSTRUCTION WORK – AUG 1997

(a) In addition to any other warranties in this contract, the Contractor warrants, except as provided in paragraph (1) of this clause, that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, or workmanship performed by the Contractor or any subcontractor or supplier at any tier.

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

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

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

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

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

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

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the Government shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall –

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

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

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

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

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

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

(End of Clause)

52.248-4003 VALUE ENGINEERING AFTER AWARD

(g) In reference to Contract Clause 52.248-3, "Value Engineering – Construction", the Government may refuse to entertain a "Value Engineering Change Proposal" (VECP) for those "performance oriented" aspects of the Solicitation documents which were addressed in the Contractor's accepted contract proposal and which were evaluated in competition with other offerors for award of this contract.

(h) The Government may consider a VECP for those "prescriptive" aspects of the Solicitation documents, not addressed in the Contractor's accepted contract proposal or addressed but evaluated only for minimum conformance with the Solicitation requirements.

(i) For purposes of this clause, the term "performance oriented" refers to those aspects of the design criteria or other contract requirements which allow the Offeror or Contractor certain latitude, choice of and flexibility to propose in its accepted contract offer a choice of design, technical approach, design solution, construction approach or other approach to fulfil the contract requirements. Such requirements generally tend to be expressed in terms of functions to be performed, performance required or essential physical characteristics, without dictating a specific process or specific design solution for achieving the desired result.

(j) In contrast, for purposes of this clause, the term "prescriptive" refers to those aspects of the design criteria or other Solicitation requirements wherein the Government expressed the design solution or other requirements in terms of specific materials, approaches, systems and/or processes to be used. Prescriptive aspects typically allow the Offerors little or no freedom in the choice of design approach, materials, fabrication techniques, methods of installation or other approach to fulfill the contract requirements.

(End of Clause)

52.249-4001 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (APR 1991 OCE)
(Ref. FAR 52.249-10)

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

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

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

(b) The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The Contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY
WORKDAYS BASED ON 5-DAY WORK WEEK

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
6	6	5	4	5	7	9	8	5	2	3	6

(c) Upon acknowledgment of the Notice to Proceed and continuing through-out the contract, the Contractor will record on the daily Contractor Quality Control report the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delay days must prevent work on critical activities for 50 percent or more of the Contractor's scheduled workday. The number of actual adverse weather 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 in 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 workdays, and issue a modification in accordance with the contract clause entitled DEFAULT (FIXED PRICE CONSTRUCTION).

(End of clause)

52.249-5000 BASIS FOR SETTLEMENT OF PROPOSALS - EFARS

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:

(k) 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.

(l) 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)

ATTACHMENT 1 TO SECTION 00800

LIST OF ATTACHMENTS

1. Contract Drawings:

   File No. 610-50-02, Sheets 1 through 15

2. Rates of Wages:

3. Formats:

   Sign

   Project Sign Legend Defined

   Erection Detail

   Corps of Engineers Logo

   Accident Prevention Plan (Ref. FAR 52.236-13 and EM 385-1-1)

   Construction Quality Control Report

   Small and Disadvantaged Business Subcontracting Plan

   Weekly Temporary Electrical Inspection

4. Minimum Standard for Temporary Electrical Service (Ref. FAR 52.236-14)

5. Forms:

   SAS Form 9 - Activity Hazard Analysis

   SAD Form 1666a-R - Safety Checklist for Crawler, Truck & Wheel Mounted Cranes

   SAD Form 1666b-R - Safety Checklist for Portal, Tower, and Pillar Cranes

   SAD Form 1666c-R - Safety Checklist for Rigging

   SAD Form 1666d-R - Safety Checklist for Motor Vehicles, Trailers and Trucks

   SAD Form 1666e-R - Safety Checklist for Crawler Tractors and Dozers

   SAD Form 1666f-R - Safety Checklist for Scrapers, Motor Graders, and Other Mobile Equipment

   SAD Form 1666g-R - Safety Checklist for Material Hoists

   SAD Form 1666h-R - Safety Checklist for Earth Drilling Equipment

   ENG Form 4025 - Transmittal of Shop Drawings, Equipment Data, Material Samples, or Manufacturer's Certificates of Compliance

   DA Form 5418-R - Cost Estimate Analysis

   DD Form 1354 - Transfer and Acceptance of Military Real Property

   Standard Form LLL-A - Disclosure of Lobbying Activities

Real Property Inventory

6. Contractor Prepared Network Analysis System

General Decision Number GA020036

General Decision Number **GA020036**
Superseded General Decision No. GA010036
State: Georgia
Construction Type:
BUILDING
County(ies):

APPLING	EMANUEL	MONTGOMERY
ATKINSON	EVANS	PIERCE
BACON	JEFF DAVIS	SCREVEN
BRANTLEY	JEFFERSON	TATTNALL
BULLOCH	JENKINS	TELFAIR
BURKE	JOHNSON	TOOMBS
CANDLER	LAURENS	TREUTLEN
CHARLTON	LIBERTY	WARE
CLINCH	LONG	WAYNE
ECHOLS	MCINTOSH	WHEELER

BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories)

Modification Number	Publication Date
0	03/01/2002

COUNTY(ies):

APPLING	EMANUEL	MONTGOMERY
ATKINSON	EVANS	PIERCE
BACON	JEFF DAVIS	SCREVEN
BRANTLEY	JEFFERSON	TATTNALL
BULLOCH	JENKINS	TELFAIR
BURKE	JOHNSON	TOOMBS
CANDLER	LAURENS	TREUTLEN
CHARLTON	LIBERTY	WARE
CLINCH	LONG	WAYNE
ECHOLS	MCINTOSH	WHEELER

CARP0144B 12/01/2000

	Rates	Fringes
JOHNSON, LAURENS, MONTGOMERY, TELFAIR, TREUTLEN AND WHEELER COUNTIES:		
MILLWRIGHT	17.50	5.06

CARP0256B 07/01/2001

	Rates	Fringes
BULLOCH, CANDLER, EVANS, LIBERTY, LONG, SCREVEN, TATTNALL AND TOOMBS COUNTIES:		
MILLWRIGHT	16.60	5.00

FOOTNOTE:
Work with creosote materials, acid or other strong chemicals; work with cofferdams and tunnels; swinging scaffolds and boatswain chair, 25 ft. or higher; chimneys, silos or towers which are independent of the building and which are 25 ft. or higher; clip forms; erecting and dismantling scaffolds 35 ft. or higher; operation of radial arm saws: $.50 per hour additional. If handrails and/or safety belts are provided by the contractor, the premium pay will not be applicable.

CARP0283A 10/01/1999

	Rates	Fringes
BURKE, EMANUEL, JEFFERSON AND JENKINS COUNTIES:		
MILLWRIGHT	16.40	4.13

CARP0865D 09/16/2001

	Rates	Fringes
APPLING, ATKINSON, BACON AND BRANTLEY COUNTIES; CHARLTON COUNTY (does not include the city of Folkston); CLINCH, ECHOLS, JEFF DAVIS, MCINTOSH, PIERCE, WARE AND WAYNE COUNTIES:		
MILLWRIGHTS:		
General contracts under $3,000,000	17.40	4.49
General contracts $3,000,000 and		

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 over                                18.40           4.52
-----------------------------------------------------------------
 CARP2411C  06/19/2000
                                      Rates           Fringes
CHARLTON COUNTY (City of Folkston):
MILLWRIGHT                             16.65           4.19
-----------------------------------------------------------------
 SUGA1011C  05/10/2000
                                      Rates           Fringes
BRICKLAYER                             15.00
CARPENTER (does not include batt
  insulation or drywall hanging)       13.31
CABINET INSTALLER                       8.83
CEMENT MASON/CONCRETE FINISHER         12.04
DRYWALL HANGER                         13.64
ELECTRICIAN                            12.29
HVAC MECHANIC (does not include
  HVAC duct work)                      11.94
INSULATION, BATT                        7.00
IRONWORKER, STRUCTURAL                 10.13
LABORER                                 7.95
MASON TENDER                            8.00
PAINTER, BRUSH (does not include
  drywall finishing)                   12.44
PIPEFITTER (does not include HVAC
  piping)                              15.27           3.20
PLUMBER (does not include HVAC
  piping)                              13.69
POWER EQUIPMENT OPERATORS:
  Backhoe                              11.97
  Roller                                8.54
ROOFER                                 10.00
SHEET METAL WORKER (includes HVAC
  duct work)                           10.45
TRUCK DRIVER                            8.70
-----------------------------------------------------------------
WELDERS - Receive rate prescribed for craft performing operation
to which welding is incidental.
=================================================================
Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses
(29 CFR 5.5(a)(1)(v)).
-----------------------------------------------------------------
In the listing above, the "SU" designation means that rates
listed under that identifier do not reflect collectively
bargained wage and fringe benefit rates.  Other designations
indicate unions whose rates have been determined to be
prevailing.
      WAGE DETERMINATION APPEALS PROCESS
1.) Has there been an initial decision in the matter?  This can
 be:
* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a
  position on a wage determination matter
* a conformance (additional classification and rate)
  ruling
On survey related matters, initial contact, including requests
for summaries of surveys, should be with the Wage and Hour
Regional Office for the area in which the survey was conducted
because those Regional Offices have responsibility for the
Davis-Bacon survey program.  If the response from this initial
contact is not satisfactory, then the process described in 2.)
and 3.) should be followed.
With regard to any other matter not yet ripe for the formal
process described here, initial contact should be with the Branch
of Construction Wage Determinations.  Write to:
     Branch of Construction Wage Determinations
     Wage and Hour Division
     U. S. Department of Labor
     200 Constitution Avenue, N. W.
     Washington, D. C.  20210
```

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

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

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

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

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

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

END OF GENERAL DECISION

WAGE DETERMINATION NO: 94-2141 REV (26) AREA: GA,SAVANNAH

WAGE DETERMINATION NO: 94-2141 REV (26) AREA: GA,SAVANNAH
REGISTER OF WAGE DETERMINATIONS UNDER | U.S. DEPARTMENT OF LABOR
FOR OFFICIAL USE ONLY BY FEDERAL AGENCIES PARTICIPATING IN MOU WITH DOL
| WASHINGTON D.C. 20210
|
|
|
| Wage Determination No.: 1994-2141
William W.Gross Division of | Revision No.: 26
Director Wage Determinations| Date Of Last Revision: 05/29/2002
_____|_____

States: **Georgia,** South Carolina

Area: **Georgia** Counties of Appling, Bacon, Bryan, Bulloch, Candler, Chatham, Effingham, Evans, Jeff Davis, **Liberty,** Long, McIntosh, Screven, Tattnall, Toombs, Wayne
South Carolina Counties of Hampton, Jasper

Fringe Benefits Required Follow the Occupational Listing

OCCUPATION TITLE	MINIMUM WAGE RATE
Administrative Support and Clerical Occupations	
Accounting **Clerk** I	7.79
Accounting **Clerk** II	9.46
Accounting **Clerk** III	10.81
Accounting **Clerk** IV	13.97
Court Reporter	10.35
Dispatcher, Motor Vehicle	10.35
Document Preparation **Clerk**	10.16
Duplicating Machine Operator	10.16
Film/Tape Librarian	10.65
General Clerk I	8.49
General Clerk II	9.55
General Clerk III	10.94
General Clerk IV	11.71
Housing Referral Assistant	12.82
Key Entry Operator I	8.70
Key Entry Operator II	11.18
Messenger (Courier)	7.75
Order **Clerk** I	8.66
Order **Clerk** II	11.78
Personnel Assistant (Employment) I	14.25
Personnel Assistant (Employment) II	17.24
Personnel Assistant (Employment) III	20.67
Personnel Assistant (Employment) IV	24.58
Production Control **Clerk**	13.29
Rental **Clerk**	9.26
Scheduler, Maintenance	9.61
Secretary I	9.61

Secretary II	10.74
Secretary III	12.82
Secretary IV	12.92
Secretary V	15.56
Service Order Dispatcher	9.26
Stenographer I	8.25
Stenographer II	9.26
Supply Technician	12.92
Survey Worker (Interviewer)	10.66
Switchboard Operator-Receptionist	7.88
Test Examiner	10.74
Test Proctor	10.74
Travel **Clerk** I	9.44
Travel **Clerk** II	10.07
Travel **Clerk** III	10.87
Word Processor I	9.42
Word Processor II	10.58
Word Processor III	11.83
Automatic Data Processing Occupations	
Computer Data Librarian	10.94
Computer Operator I	10.49
Computer Operator II	11.68
Computer Operator III	14.38
Computer Operator IV	15.99
Computer Operator V	17.70
Computer Programmer I (1)	13.90
Computer Programmer II (1)	18.96
Computer Programmer III (1)	20.71
Computer Programmer IV (1)	27.62
Computer Systems Analyst I (1)	20.11
Computer Systems Analyst II (1)	22.96
Computer Systems Analyst III (1)	26.66
Peripheral Equipment Operator	10.94
Automotive Service Occupations	
Automotive Body Repairer, Fiberglass	14.73
Automotive Glass Installer	11.50
Automotive Worker	11.73
Electrician, Automotive	12.14
Mobile Equipment Servicer	10.22
Motor Equipment Metal Mechanic	12.81
Motor Equipment Metal Worker	11.50
Motor Vehicle Mechanic	12.81
Motor Vehicle Mechanic Helper	9.59
Motor Vehicle Upholstery Worker	10.87
Motor Vehicle Wrecker	11.50
Painter, Automotive	12.14
Radiator Repair Specialist	11.50
Tire Repairer	9.87
Transmission Repair Specialist	12.81
Food Preparation and Service Occupations	
Baker	9.64
Cook I	8.57
Cook II	9.64
Dishwasher	6.61
Food Service Worker	6.61
Meat Cutter	9.87

Waiter/Waitress	6.28
Furniture Maintenance and Repair Occupations	
Electrostatic Spray Painter	15.29
Furniture Handler	10.49
Furniture Refinisher	15.29
Furniture Refinisher Helper	12.07
Furniture Repairer, Minor	13.68
Upholsterer	15.29
General Services and Support Occupations	
Cleaner, Vehicles	6.66
Elevator Operator	6.66
Gardener	8.84
House Keeping Aid I	6.13
House Keeping Aid II	6.66
Janitor	6.66
Laborer, Grounds Maintenance	7.22
Maid or Houseman	6.13
Pest Controller	9.42
Refuse Collector	6.66
Tractor Operator	8.30
Window Cleaner	7.22
Health Occupations	
Dental Assistant	10.93
Emergency Medical Technician (EMT)/Paramedic/Ambulance Driver	11.24
Licensed Practical Nurse I	9.62
Licensed Practical Nurse II	10.79
Licensed Practical Nurse III	12.07
Medical Assistant	10.05
Medical Laboratory Technician	10.05
Medical Record **Clerk**	10.05
Medical Record Technician	13.54
Nursing Assistant I	7.10
Nursing Assistant II	7.98
Nursing Assistant III	8.71
Nursing Assistant IV	9.77
Pharmacy Technician	12.53
Phlebotomist	11.10
Registered Nurse I	16.02
Registered Nurse II	19.58
Registered Nurse II, Specialist	19.58
Registered Nurse III	23.69
Registered Nurse III, Anesthetist	23.69
Registered Nurse IV	27.62
Information and Arts Occupations	
Audiovisual Librarian	12.45
Exhibits Specialist I	15.56
Exhibits Specialist II	19.13
Exhibits Specialist III	23.39
Illustrator I	15.56
Illustrator II	19.13
Illustrator III	23.39
Librarian	17.24
Library Technician	11.90
Photographer I	13.85
Photographer II	15.56
Photographer III	19.13

Photographer IV 23.39
Photographer V 28.30
Laundry, Dry Cleaning, Pressing and Related Occupations
Assembler 6.85
Counter Attendant 6.85
Dry Cleaner 7.20
Finisher, Flatwork, Machine 6.85
Presser, Hand 6.85
Presser, Machine, Drycleaning 6.85
Presser, Machine, Shirts 6.85
Presser, Machine, Wearing Apparel, Laundry 6.85
Sewing Machine Operator 8.09
Tailor 9.20
Washer, Machine 6.58
Machine Tool Operation and Repair Occupations
Machine-Tool Operator (Toolroom) 15.29
Tool and Die Maker 18.46
Material Handling and Packing Occupations
Forklift Operator 11.00
Fuel Distribution System Operator 12.85
Material Coordinator 13.42
Material Expediter 13.42
Material Handling Laborer 8.49
Order Filler 10.45
Production Line Worker (Food Processing) 11.00
Shipping Packer 10.64
Shipping/Receiving **Clerk** 10.64
Stock **Clerk** (Shelf Stocker; Store Worker II) 11.86
Store Worker I 9.02
Tools and Parts Attendant 11.00
Warehouse Specialist 11.00
Mechanics and Maintenance and Repair Occupations
Aircraft Mechanic 16.13
Aircraft Mechanic Helper 12.07
Aircraft Quality Control Inspector 16.91
Aircraft Servicer 13.68
Aircraft Worker 14.46
Appliance Mechanic 15.29
Bicycle Repairer 12.42
Cable Splicer 16.13
Carpenter, Maintenance 15.29
Carpet Layer 14.46
Electrician, Maintenance 16.13
Electronics Technician, Maintenance I 17.82
Electronics Technician, Maintenance II 18.85
Electronics Technician, Maintenance III 19.88
Fabric Worker 13.68
Fire Alarm System Mechanic 16.13
Fire Extinguisher Repairer 12.85
Fuel Distribution System Mechanic 16.13
General Maintenance Worker 9.21
Heating, Refrigeration and Air Conditioning Mechanic 16.13
Heavy Equipment Mechanic 18.55
Heavy Equipment Operator 18.55
Instrument Mechanic 18.55
Laborer 6.66

Locksmith	15.29
Machinery Maintenance Mechanic	18.55
Machinist, Maintenance	16.13
Maintenance Trades Helper	12.07
Millwright	18.55
Office Appliance Repairer	15.29
Painter, Aircraft	15.29
Painter, Maintenance	17.27
Pipefitter, Maintenance	16.51
Plumber, Maintenance	15.65
Pneudraulic Systems Mechanic	16.13
Rigger	16.13
Scale Mechanic	14.46
Sheet-Metal Worker, Maintenance	16.13
Small Engine Mechanic	14.46
Telecommunication Mechanic I	16.13
Telecommunication Mechanic II	16.91
Telephone Lineman	16.13
Welder, Combination, Maintenance	16.13
Well Driller	16.13
Woodcraft Worker	16.13
Woodworker	12.85
Miscellaneous Occupations	
Animal Caretaker	6.93
Carnival Equipment Operator	7.58
Carnival Equipment Repairer	8.08
Carnival Worker	6.08
Cashier	6.60
Desk **Clerk**	8.29
Embalmer	16.57
Lifeguard	7.88
Mortician	16.57
Park Attendant (Aide)	9.89
Photofinishing Worker (Photo Lab Tech., Darkroom Tech)	6.85
Recreation Specialist	10.66
Recycling Worker	8.30
Sales **Clerk**	7.88
School Crossing Guard (Crosswalk Attendant)	6.34
Sport Official	6.85
Survey Party Chief (Chief of Party)	18.50
Surveying Aide	11.56
Surveying Technician (Instr. Person/Surveyor Asst./Instr.)	15.85
Swimming Pool Operator	8.65
Vending Machine Attendant	7.22
Vending Machine Repairer	8.65
Vending Machine Repairer Helper	7.22
Personal Needs Occupations	
Child Care Attendant	7.69
Child Care Center **Clerk**	9.58
Chore Aid	5.33
Homemaker	10.66
Plant and System Operation Occupations	
Boiler Tender	16.13
Sewage Plant Operator	15.29
Stationary Engineer	16.13
Ventilation Equipment Tender	12.07

Water Treatment Plant Operator	15.29
Protective Service Occupations	
Alarm Monitor	7.70
Corrections Officer	15.20
Court Security Officer	15.20
Detention Officer	15.20
Firefighter	15.17
Guard I	5.96
Guard II	8.61
Police Officer	15.22
Stevedoring/Longshoremen Occupations	
Blocker and Bracer	13.21
Hatch Tender	13.21
Line Handler	13.21
Stevedore I	12.43
Stevedore II	13.97
Technical Occupations	
Air Traffic Control Specialist, Center (2)	27.00
Air Traffic Control Specialist, Station (2)	18.62
Air Traffic Control Specialist, Terminal (2)	20.50
Archeological Technician I	13.78
Archeological Technician II	15.49
Archeological Technician III	19.13
Cartographic Technician	21.10
Civil Engineering Technician	19.13
Computer Based Training (CBT) Specialist/ Instructor	20.58
Drafter I	12.30
Drafter II	13.85
Drafter III	15.56
Drafter IV	19.13
Engineering Technician I	13.75
Engineering Technician II	15.48
Engineering Technician III	17.39
Engineering Technician IV	21.38
Engineering Technician V	26.13
Engineering Technician VI	31.63
Environmental Technician	14.50
Flight Simulator/Instructor (Pilot)	21.30
Graphic Artist	18.66
Instructor	18.66
Laboratory Technician	13.04
Mathematical Technician	19.13
Paralegal/Legal Assistant I	11.90
Paralegal/Legal Assistant II	14.32
Paralegal/Legal Assistant III	17.50
Paralegal/Legal Assistant IV	21.18
Photooptics Technician	19.13
Technical Writer	17.24
Unexploded (UXO) Safety Escort	17.16
Unexploded (UXO) Sweep Personnel	17.16
Unexploded Ordnance (UXO) Technician I	17.16
Unexploded Ordnance (UXO) Technician II	20.76
Unexploded Ordnance (UXO) Technician III	24.88
Weather Observer, Combined Upper Air and Surface Programs (3)	13.04
Weather Observer, Senior (3)	14.50
Weather Observer, Upper Air (3)	13.04

Transportation/ Mobile Equipment Operation Occupations

Bus Driver	11.19
Parking and Lot Attendant	7.91
Shuttle Bus Driver	10.52
Taxi Driver	9.87
Truckdriver, Heavy Truck	11.83
Truckdriver, Light Truck	10.52
Truckdriver, Medium Truck	11.19
Truckdriver, Tractor-Trailer	11.83

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: $2.15 an hour or $86.00 a week or $372.67 a month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 8 years, and 4 weeks after 20 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

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

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

1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)

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

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

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordinance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and

incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordance, explosives, and incendiary material differential pay.

** UNIFORM ALLOWANCE **

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

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

** NOTES APPLYING TO THIS WAGE DETERMINATION **

Source of Occupational Title and Descriptions:

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

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE
{Standard Form 1444
(SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be

classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).

2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.

3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).

4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.

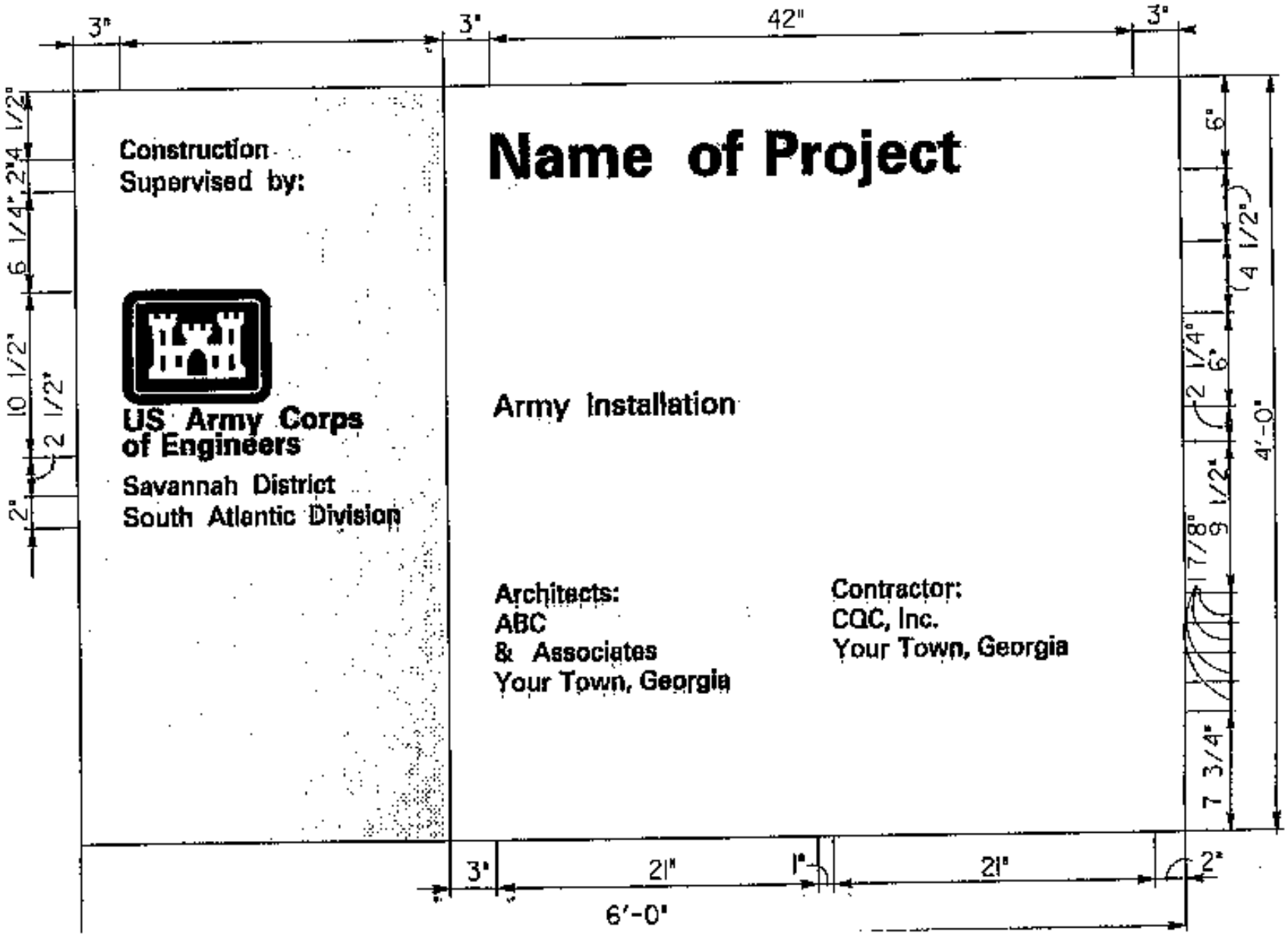
5) The contracting officer transmits the Wage and Hour decision to the contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

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

&&&&&&&&&&


3"
3"
42"
3"
Construction
Supervised by:
US Army Corps
of Engineers
Savannah District
South Atlantic Division
Name of Project
Army Installation
Architects:
ABC
& Associates
Your Town, Georgia
Contractor:
CQC, Inc.
Your Town, Georgia
6"
4 1/2"
2 1/4"
6"
9 1/2"
7 3/4"
4'-0"
2 1/2"
10 1/2"
6 1/4"
4 1/2"
2"
3"
21"
1"
21"
2"
6'-0"

PROJECT SIGN LEGEND DEFINED

Legend Group 1: The words:

"Construction Supervised by:" or "Design and Construction Supervised by:"

shall be placed on two lines using black, 1.25" Helvetica regular typeface. Maximum line length is 19".

10.5" Reverse Signature: The Corps symbol shall be a 10.5" white reverse signature using a 6" castle on a red background. The castle and surrounding border lines shall be white. The castle windows, door, and logo background are to be red. The words "U.S. Army Corps of Engineers" shall be black.

Legend Group 2: The words:

"Savannah District
South Atlantic Division"

shall be placed on two lines below the 10.5" reverse signature, using black, 1.25" Helvetica regular typeface.

Legend Group 3: The "Name of Project" shall be placed on one to three lines using white 3" Helvetica bold typeface. Maximum line length is 42".

Legend Group 4: The "Army Installation" shall be a one or two line identification of the facility or name of the sponsoring department. Lettering is to be white, 1.5" Helvetica regular typeface. Maximum line length is 42".

NOTE: Cross-align the first line of legend group 4 with the first line of the Corps signature (U.S. Army Corps) as shown.

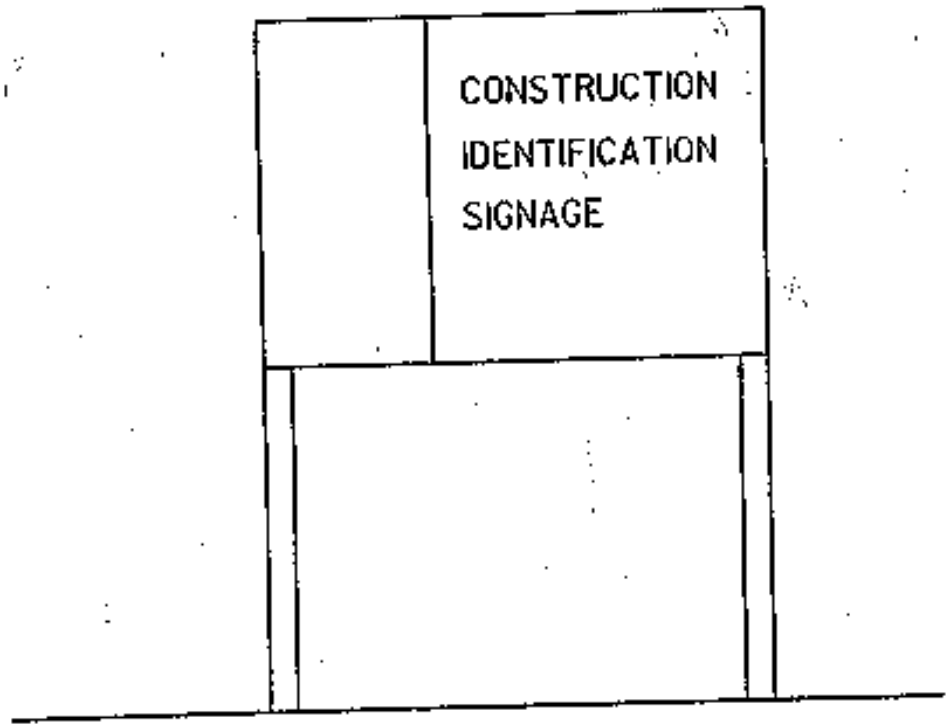
Legend Group 5a: The words:

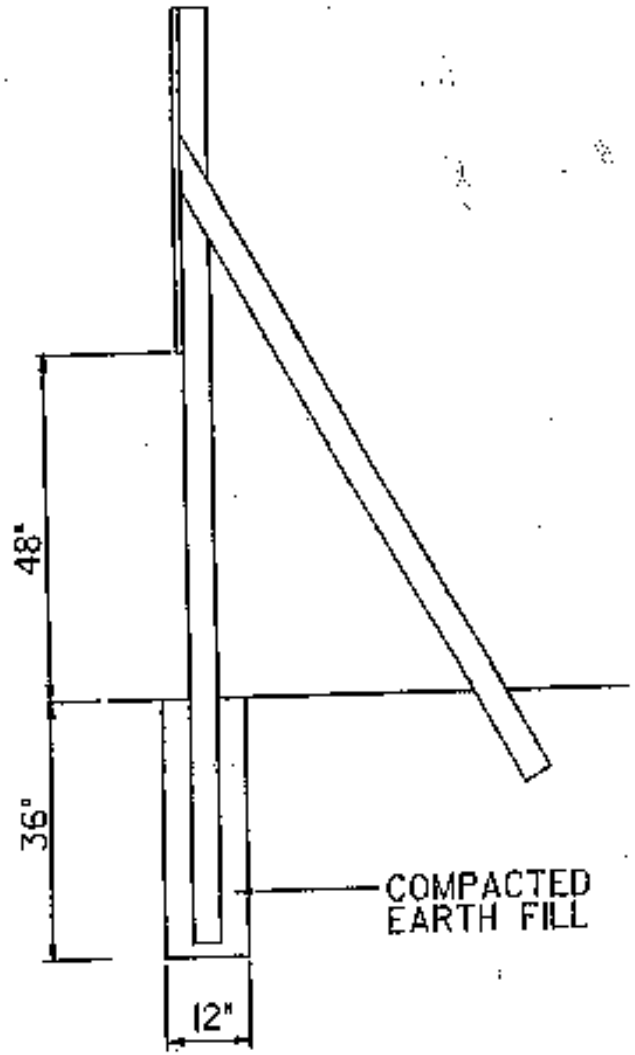
"Architects:" or "Engineers:" or "Architect-Engineers:"

shall be a one to five line identification of the prime architect or engineering corporate or firm name, city, and State. Lettering shall be white, 1.25" Helvetica regular typeface. Maximum line length is 21".

Legend Group 5b: The "Contractor:" shall be a one to five line identification of the prime Contractor corporate or firm name, city, and State. Include type of Contractor, i.e. General Contractor, etc. Lettering shall be white, 1.25" Helvetica regular typeface. Maximum line length is 21".

NOTE: All typography shall be flush left and rag right, upper and lower case with initial capitals only as shown.


CONSTRUCTION
IDENTIFICATION
SIGNAGE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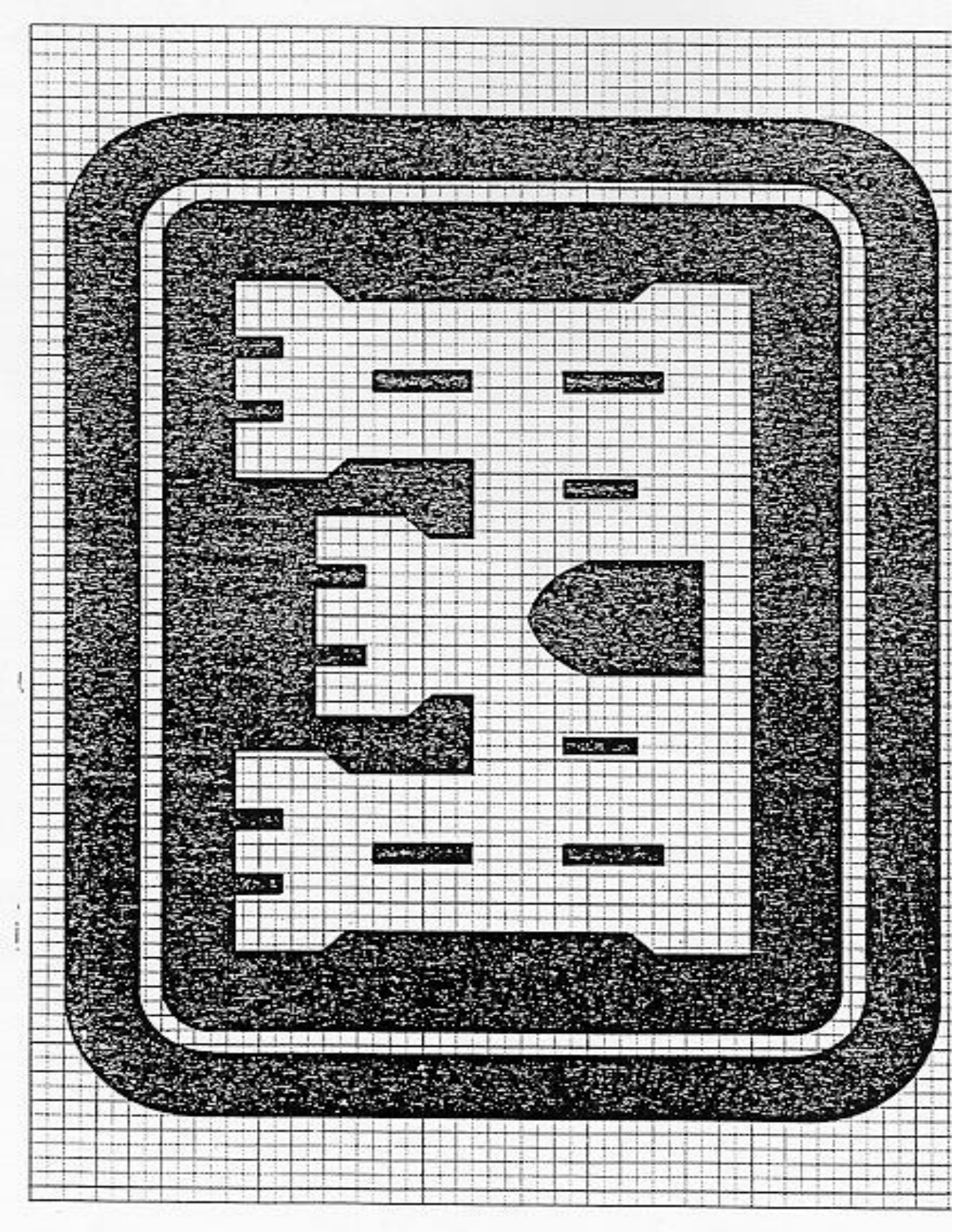
12"
COMPACTED
EARTH FILL



CORPS OF ENGINEERS LOGO
HALF SIZE

Last revised 9 May 97

FORMAT
(Ref. FAR 52.236-13 and EM 385-1-1 dated 3 Sep 96)
ACCIDENT PREVENTION PLAN

MINIMUM BASIC OUTLINE FOR ACCIDENT PREVENTION PLAN

An accident prevention plan is, in essence, a safety and health policy and program document. The following areas are typically addressed in an accident prevention plan, but a plan shall be job specific and shall also address any unusual or unique aspects of the project or activity for which it is written.

The accident prevention plan shall interface with the employer's overall safety and health program. Any portions of the overall safety and health program that are referenced in the accident prevention plan shall be included as appropriate.

1. SIGNATURE SHEET. Title, signature, and phone number of the following:

a. Plan preparer (corporate safety staff person, QC);

b. Plan approval, e.g., owner, company president, regional vice president (HTRW activities require approval of a Certified Industrial Hygienist (or qualified Industrial Hygiene personnel for in-house USACE activities; a Certified Safety Professional (or qualified USACE safety personnel for in-house work) may approve the plan for operations involving UST removal where contaminants are known to be petroleum, oils, or lubricants);

c. Plan concurrence (provide concurrence of other applicable corporate and project personnel (contractor)), e.g., Corporate Chief of Operations, Corporate Chief of Safety, Corporate Industrial Hygienist, project manager or superintendent, project safety professional, project QC.

The plan will be developed by qualified personnel (plan preparer) and will be signed by a competent person (plan concurrence) and a representative of the prime contractor=s project management team (plan approval).

2. BACKGROUND INFORMATION. List the following:

a. Contractor;

b. Contract number;

c. Project name;

d. Brief project description, description of work to be performed, and location (map);

e. Contractor accident experience (provide information such as EMR, OSHA 200 Forms, corporate safety trend analyses);

f. Listing of phases of work and hazardous activities requiring activity hazards analyses.

3. STATEMENT OF SAFETY AND HEALTH POLICY. (In addition to the corporate policy statement, a copy of the corporate safety program may provide a significant portion of the information required by the accident prevention plan.)

4. RESPONSIBILITIES AND LINES OF AUTHORITIES.

a. Identification and accountability of personnel responsible for safety - at both corporate and project level (contracts specifically requiring safety or industrial hygiene personnel should include a copy of their resume - the District Safety and Occupational Health Office will review the qualifications for acceptance). For items in EM 385-1-1 which require the use of a Acompetent person@ or a Aqualified person@, the contractor is to maintain documentation demonstrating the competence or qualification of that individual.

b. Lines of authority

5. SUBCONTRACTORS AND SUPPLIERS. Provide the following:

a. Identification of subcontractors and suppliers (if known);

b. Means for controlling and coordinating subcontractors and suppliers;

c. Safety responsibilities of subcontractors and suppliers.

6. TRAINING.

a. List subjects to be discussed with employees in safety indoctrination.

b. List mandatory training and certifications which are applicable to this project (e. g., explosive actuated tools, confined space entry, crane operator, diver, vehicle operator, HAZWOPER training and certification, personal protective equipment) and any requirements for periodic retraining/recertification.

c. Identify requirements for emergency response training.

d. Outline requirements (who attends, when given, who will conduct etc.) for supervisory and employee safety meetings.

e. Identify location at the project site where the records will be maintained.

7. SAFETY AND HEALTH INSPECTIONS. Provide details on:

a. Who will conduct safety inspections (e.g., project manager, safety professional, QC, supervisors, employees, etc.), when inspections will be conducted, how the inspections will be recorded, deficiency tracking system, follow-up procedures, etc;

b. Any external inspections/certifications which may be required (e.g., Coast Guard).

8. SAFETY AND HEALTH EXPECTATIONS, INCENTIVE PROGRAMS, AND COMPLIANCE.

a. The company's written safety program goals, objectives, and accident experience goals for this contract should be provided.

b. A brief description of the company's safety incentive programs (if any) should be provided.

c. Policies and procedures regarding noncompliance with safety requirements (to include disciplinary actions for violation of safety requirements) should be identified.

d. Provide written company procedures for holding managers and supervisors accountable for safety.

9. ACCIDENT REPORTING. The contractor shall identify who shall complete the following, how, and when:

a. Exposure data (man-hours worked);

b. Accident investigations, reports and logs;

c. Immediate notification of major accidents.

10. MEDICAL SUPPORT. Outline on-site medical support and off-site medical arrangements.

11. PERSONAL PROTECTIVE EQUIPMENT. Outline procedures (who, when, how) for conducting hazard assessments and written certifications for use of personal protective equipment.

12. PLANS (PROGRAMS, PROCEDURES) REQUIRED BY THE SAFETY MANUAL (as applicable).

a. Hazard communication program (01.B.04);

b. Emergency response plans:
- procedures and tests (01.E.01)
- spill plans (01.E.01, 06.A.02)
- fire fighting plan (01.E.01, 19.A.04)
- posting of emergency telephone numbers (01.E.04)
- wildfire prevention plan (09.K.01)
- man overboard/abandon ship (19.A.04)

c. Layout plans (04.A.01);

d. Respiratory protection plan (05.E.01);

e. Health hazard control program (06.A.02);

f. Lead abatement plan (06.B.05 & specifications);

g. Asbestos abatement plan (06.B.05 & specifications);

h. Abrasive blasting (06.H.01);

1. Confined space (06.1);

j. Hazardous energy control plan (12.A.07);

k. Critical lift procedures (16.C.17);

1. Contingency plan for severe weather (19.A.03);

m. Access and haul road plan (22.1.10);

n. Demolition plan (engineering and asbestos surveys) (23.A.01);

o. Emergency rescue (tunneling) (26.A.05);

p. Underground construction fire prevention and protection plan (26.D.01);

q. Compressed air plan (26.1.01);

r. Formwork and shoring erection and removal plans (27.B.02);

s. Lift slab plans (27.D.01);

t. SHP and SSHP (for HTRW work an SSHP must be submitted and shall contain all information required by the accident prevention plan - two documents are not required (28.B.01);

u. Blasting plan (29.A.01);

v. Diving plan (30.A.13);

w. Plan for prevention of alcohol and drug abuse (Defense Federal Acquisition Regulation Supplement Subpart 252.223-7004, Drug-Free Work Force).

13. The Contractor shall provide information on how they will meet the requirements of major sections of EM 385-1-1 in the accident prevention plan. Particular attention shall be paid to excavations, scaffolding, medical and first aid requirements, sanitation, personal protective equipment, fire prevention, machinery and mechanized equipment, electrical safety, public safety requirements, and chemical, physical agent, and biological occupational exposure prevention requirements. Detailed site specific hazards and controls shall be provided in the activity hazard analysis for each phase of the operation. Site specific hazards are those hazards which would be reasonably be anticipated to occur on the construction site of concern and will be identified through analysis of the activities to be performed. The controls are measures which will be implemented by the contractor to eliminate or reduce each hazard to an acceptable level.

F O R M A T

CONTRACTOR'S NAME
(Address)

CONSTRUCTION QUALITY CONTROL REPORT

Date: _____ Report No. _____

Contract No.: _____

Description and Location of Work: _____

WEATHER: (Clear)(P. Cloudy)(Cloudy); Temperature:___Min,___Max;
Rainfall ___Inches

Contractor/Subcontractors and Area of Responsibility
a._____
b._____
c._____
d._____
e._____
f._____
g._____
h._____

1. Work Performed Today:

(Indicate location and description of work performed. Refer to work performed by prime and/or subcontractors by letter in table above.)

_____

2. Results of Control Activities:

(Indicate whether: P-Preparatory, I-Initial, or F-Followup and include satisfactory work completed or deficiencies with action to be taken.)

_____

3. Test Required by Plans and/or Specifications Performed and Results of Tests:

_____

4. Monitoring of Materials and Equipment:

---

5. Offsite Surveillance Activities:

---

6. Job Safety:

(Daily comment required.)

---

7. Remarks:

a. (Cover any conflicts in plans, specifications or instructions.)

b. (Action taken in review of submittal.)

c. (Verbal instructions received.)

_____
Inspector

CONTRACTOR'S VERIFICATION:

The above report is complete and correct and all material and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications except as noted above.

_____
Contractor's Approved
Authorized Representative

SAMPLE

SMALL AND DISADVANTAGED BUSINESS SUBCONTRACTING PLAN

BETTER BUILDERS, INC.

DATE: April 29, 2002

SOLICITATION NO. DACA21-0X-X-XXXX

TITLE: Barracks Complex, Fort Swampy, Georgia

Type of Work: Design and Construction

In accordance with applicable contract clauses of the solicitation noted above, Better Builders, Inc. submits the following Small Business Subcontracting Plan (includes small, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns).

It is company policy to follow all public laws including P.L. 99-661, Section 1207, P.L. 100-180, Section 806, P.L. 105-135 and P.L. 106-50. We have informed all purchasers to follow these laws in hiring subcontractors and buying materials.

1. The following floors (expressed in terms of percentages of the total dollars available for subcontract/purchase order award) would be applicable to a contract awarded under the cited solicitation. You must also provide the dollar amounts for each of the goals listed below.

    a. Total Proposed Contract Amount: $26,961,000

    b. Total amount available for Subcontract award: $18,300,000

    c. Large Business: $6,740,250 - 25%

    d. Total amount to be subcontracted to all small business: $11,236,200 - 61.4%

    e. Small Disadvantaged Business: $1,665,300 - 9.1%

    f. Women-Owned Small Business: $915,000 - 5%

    g. Service-Disabled Veteran-Owned Small Business: $549,000 - 3%

    h. All other small business concerns: $3,934,500.00 - 21.5%

i. There are no options in this solicitation. ***(NOTE: If there are options in the solicitation you must provide the same information as listed in paragraph 1 a-h for each option year/period.)***

j. Indirect and overhead costs have not been included in the goals specified in this section for amounts available for subcontract/purchase order award.

k. Consideration was given to HCBU/MI's but no opportunities were found to be included in the small disadvantaged business goals.

NOTE: There are no floors established for HUBZone and Veteran small business concerns; however, you must address these in this plan.

2. The following principal products and/or services will be subcontracted under this contract, and the distribution among all small business concerns are as follows:

Large Business - Earthwork
Small Business - Windows and Storm Doors, Recreation, Site Utilities Plumbing
Veteran Owned Small Business – Materials, Equipment
Service Disabled Veteran Owned Small Business – Asphalt, Electrical, Doors
HUBZone Small Business - Window Treatment, HVAC, Concrete
Small Disadvantaged Business - Vinyl Siding, Insulation, Gutters
Women Owned Small Business – Carpentry, Ceramic Tile, Fencing

NOTE: Company names should be provided for each product and/or service listed.

The following method was used in developing our subcontracting floors: (1) all areas of potential subcontract work were determined to be available for subcontract award to all types of small business concerns, and (2) will be actively recruited for participation through the many sources described hereinafter.

3. The following individual will administer this Subcontract Plan on behalf of Better Builders, Inc.:

Name: Freddie Better Title: Executive Vice President

Address and Telephone Number: 4845 Tonka Drive
Fair Haven, CT 27413
800-621-4845

The individual's specific duties with regard to the conduct of our firm's Subcontracting Plan will include, but will not be limited to the following:

a. Developing and maintaining bidders lists of all types of small business concerns using sources such as the Pronet System developed by the Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce, Local Minority Business Development Centers and Minority Contractor Associations, and the General Business Services Center in the project's Standard Metropolitan Statistical Area.

b. Assuring the inclusion of all types of small business concerns in all solicitations for products or services which they are capable of providing; and ensuring that all solicitations are structured to permit the maximum possible participation by all types of small business concerns.

c. Establishing and maintaining records of all solicitations and subcontract awards to all types of small business concerns to ensure that the members of the firm who review bidders proposals document their reasons for selecting or not selecting a bid.

d. Preparing and submitting the Subcontracting Report for Individual Contracts (SF 294) and the Summary Subcontract Report (SF 295) in accordance with the instructions provided on the forms, and coordinating and preparing for all compliance reviews by Federal agencies.

e. Conducting or arranging for all other activities necessary to further the intent and attainment of goals of the Plan to include motivational training of the firm's purchasing personnel attendance at workshop, seminars and trade fairs conducted by or on behalf of all types of small business concerns, and general cooperation with members of these concerns or their representatives.

4. The following steps will be taken to ensure that all types of small business concerns receive notice and have an equitable opportunity to compete for intended awards of subcontracts and/or purchase orders for the products and/or services described in paragraph 2 above:

a. Sources will be requested through the SBA's ProNet system, business development organizations, small business trade associations and at small business procurement conferences; sources will be contacted and bidding materials will be provided to all responding parties with interest.

b. Internally, motivational training will be conducted to guide and encourage purchasing personnel; source lists and guides to all types of small business concerns will be maintained and utilized by purchasing personnel while soliciting subcontracts and purchase orders; activities will be monitored to ensure sufficient time is allowed for interested bidders to prepare their bids and to evaluate continuing compliance with this Subcontracting Plan.

5. Better Builders, Inc. agrees that the clause entitled "Utilization of Small Business Concerns" will be included in all subcontracts which offer further subcontracting opportunities. All subcontractors, except small business concerns, who

receive subcontracts in excess of $500,000 ($1,000,000 in the case of construction) will be required to adopt and comply with a subcontracting plan similar to this one. Such plans will be reviewed to assure that all minimum requirements of an acceptable subcontracting plan have been satisfied.

The acceptability of floors shall be determined on a case-by-case basis depending on the supplies/services involved, the availability of all potential small business and prior experience. Once approved and implemented, plans will be monitored through the submission of periodic reports or, as time and availability of funds permit, periodic visits to subcontractor's facilities to review applicable records and subcontracting program progress.

6. Better Builders, Inc. agrees to submit such periodic reports and cooperate in any studies or surveys as may be required by the Contracting agency or the Small Business Administration in order to determine the extent of compliance by the offeror with the subcontracting plan and with the clause entitled "Utilization of Small Business Concerns" contained in the solicitation.

7. Better Builders, Inc. agrees to maintain at least the following types of records to document compliance with this Subcontracting Plan:

a. The names of all organizations, agencies, and associations contacted for all small business sources, along with records of attendance at conferences, seminars and trade fairs where additional sources were developed.

b. Source lists, guides, and other data identifying all types of small business concerns

c. Records on all subcontract solicitations, on a contract-by-contract basis, indicating (1) whether all types of small business concerns were solicited, and if not, why not; and (2) the reasons for the failure of all solicited small businesses to receive a subcontract award.

d. Records of all subcontract award data, to include subcontractor's name and address, to be kept on a contract-by-contract basis.

e. Minutes of internal motivational and training meetings held for the guidance and encouragement of purchasing personnel, and records of all monitoring activities performed for compliance evaluation.

f. Copies of SF 294 and SF 295 showing date and place of filing and copies of all other reports or results of reviews conducted by the contracting agency or other interested agencies of the Federal government to monitor our compliance with this Subcontracting Plan.

In closing Better Builders, Inc. states that it will be the policy of Better Builders, Inc. to afford every practicable opportunity to all types of small business concerns to

participate in construction contracts awarded to Better Builders, Inc. by the Federal Government to ensure that equitable opportunity is provided to all types of small business concerns to compete for award of subcontracts and purchase orders, and to diligently pursue the achievement of our floors by participation of all types of small business concerns in the dollars available for subcontract/purchase order award under the solicitation.

BY_____ DATE _____

_____
Signature

_____
Title, and Company Name

_____ DATE _____
Contract Specialist

Approval Recommended

_____ DATE _____
SADBU

Approve/Disapprove

_____ DATE _____
Contracting Officer

Approve/Disapprove

_____ DATE _____
Procurement Center Representative
Small Business Administration

WEEKLY TEMPORARY ELECTRICAL INSPECTION

Week ending _____

Contract No. _____

Contract Description _____

The following items were inspected in accordance with requirements in National Electrical Code and Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1.

1. Wire (size, type, condition).

2. Systems and devices (polarity, continuity of ground, resistance to ground).

3. Resistance of ground rods (25 OHMS) measured and recorded.

4. Check GFI for 15/20 amp 120 volt circuits.

5. Plugs and receptacles (type, NEMA rating).

6. Circuit breakers and disconnect (size, type, weatherproof).

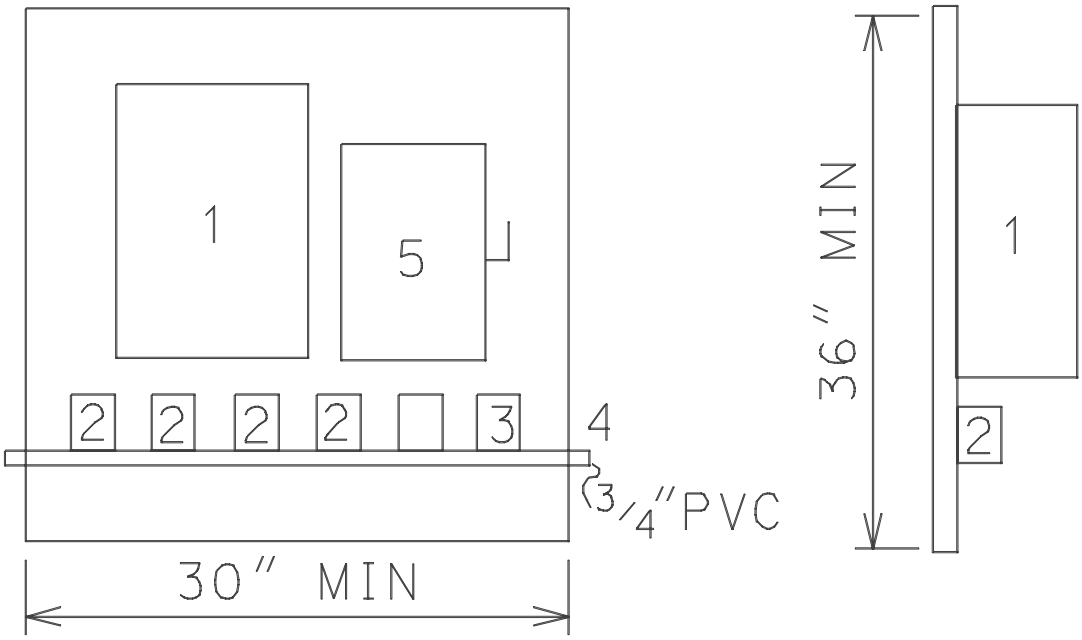
7. Extension cords (type, UL listed, insulation condition, splices, location).

8. Open wiring on insulators, nonmetallic sheathed cable, outside clearance (600 volts or less), Festoon lighting (as applicable).

_____

Signature Electrician/Electrical Engineer

MINIMUM STANDARD FOR TEMPORARY ELECTRICAL SERVICE



(DIMENSIONS ARE APPROXIMATE)

A. The backboard for temporary service shall consist of not less than 1/2 inch plywood of exterior grade.

B. Numbers above correspond to the item below:

Item 1 - NEMA 3R circuit breaker type panelboard. This panelboard shall consist of 1 two-pole 60 amp main circuit breaker, 4* one pole 20 AMP branch circuit breakers, and 1* two pole 20 AMP branch circuit breaker. Breakers shall meet Federal Specifications Standards for Class 1A breakers and shall be plug-in type. (*Number of breakers to be adjusted to suit the job requirements.)

Item 2 - Duplex grounding type convenience outlets in standard utility type outlet boxes with covers, meeting the NEC and NEMA requirements for wet locations. Connections to the branch circuit breakers shall be grounded by two conductors #12 NMC cable.

Item 3 – (Optional) A single three-conductor grounding type outlet rated for 250 volt service meeting the NEC and NEMA requirements for wet locations. Connections from this outlet to the two pole breaker shall be by two conductor grounded type NMC cable.

Item 4 - 3/4 inch PVC. This shall be used to support extension cords.

Item 5 – NEMA 3R service disconnect safety switch – 60 amp minimum.

C. The panelboard shall be grounded by #6 copper wire connected to a 3/4 inch by 10-foot long ground rod.

D. Service to the panel shall consist of three copper conductor #6 minimum service entrance cable. This cable may enter the top or side of the panelboard.

E. Periodic inspections of systems and devices will be made by the Contractor at intervals not to exceed 1 week, and a report will be submitted indicating the results.

F. All receptacle outlets that provide temporary electrical power during construction, remodeling, maintenance, repair, or demolition shall have ground-fault circuit-interrupter (CFCI) protection for personnel. GFCI protection shall be provided on all circuits serving portable electric hand tools or semi-portable electric power tools (such as block/brick saws, table saws, air compressors, welding machines, and drill presses). See EM 385-1-1 for exceptions.

G. Per EM 385-1-1 all temporary power distribution systems shall be submitted to the field office before installation.

ACTIVITY HAZARD ANALYSIS

1. Phase of Construction		
2. Location	3. Contract No.	4. Project
5. Prime Contractor	6. Date of Preparatory	7. Estimated Start Date
Potential Safety Hazard	Procedure to Control Hazard	
8. Contractor's Representative (signature)	9.	

SAS Form 9
1 Jan 82

SAFETY CHECKLIST FOR CRAWLER, TRUCK & WHEEL MOUNTED CRANES

Contract # and title:	
Equipment name & number: owned or leased?	
Contractor:	Subcontractor:
Contract Inspector:	Date inspected:

	Yes	No	N/A
1. Unless the manufacture has specified an on-rubber rating, outriggers will be fully extended and down? (16.D.10)			
2. Are lattice boom cranes equipped with a boom angle indicator, load indicating device, or a load moment indicator? (16.D.01)			
3. Are lattice boom and hydraulic cranes equipped with a means for the operator to visually determine levelness? (16.D.02)			
4. Are lattice boom and hydraulic cranes, except articulating booms cranes, equipped with drum rotation indicators located for use for the operator? (16.D.03)			
5. Are lattice boom and hydraulic mobile cranes equipped with a boom angle or radius indicator within the operator’s view? (16.D.04)			
6. Are lattice boom cranes, with exception of duty cycle cranes, equipped with an anti-two blocking device? (16.D.05)			
7. When duty cycle machines are required to make a non-duty lift, is the crane equipped with an international orange warning device and is a signal person present? (16.D 05)			
8. Are the following with the crane at all times: (16.C.02) a. the manufacturer’s operating manual? b. the load rating chart? c. the crane’s log book documenting use, maintenance, inspections and tests? d. operating manual for crane operator aids used on the crane.			

	Yes	No	N/A
9. Are the following on the project site: a. completed periodic inspection report prior to initial work? (16.C.12) b. pre-operational checklist used for daily inspection? (16.C.12) c. written reports of the operational performance test? (16.C.13) d. written reports of the load performance test? (16.C.13)			
10. Are all operators physically qualified to perform work? (16.C.05)			
11. Are all operators qualified by written and practical exam or by appropriate licensing agency for the type crane they are to operate? (16.C.05)			
12. Is the crane designed and constructed IAW the standards listed in Table 16-1? (16.C.06)			
13. Is a hazard analysis for set-up and set-down available? (16.C.08)			
14. Are accessible areas within the swing radius of the rear of the crane barricaded? (16.C.09)			
15. Are there at least 3 wraps of cable on the drum? (16.C.10)			
16. Are the hoisting ropes installed IAW the manufacturer’s recommendations? (16.C.10)			
17. Are critical lift plans available? (16.C.18)			
18. Are minimum clearance distance for high voltage lines posted at the operator’s position? (11.E.04)			
19. Do older lattice boom cranes with anti-two block warning devices in lieu of anti-two block prevention devices have a written exemption? (16.D.05)			
20. Is the slow moving emblem used on all vehicles which by design move at 25 MPH or less on public roads? (08.A.04)			
21. Are all vehicles which will be parked or moving slower than normal traffic on haul roads equipped with a yellow flashing light or flasher visible from all directions? (16.A.13)			

	Yes	No	N/A
22. Is all equipment to be operated on public roads provided with: (16A.07) a. headlights? b. brake lights? c. taillights? d. back-up lights? e. front and rear turn signals?			
23. Are seat and seat belts provided for the operator and each rider on equipment? (16.A.07 and 16.B.08)			
24. Is all equipment with windshields equipped with powered wipers and defogging or defrosting devices? (16.A.07)			
25. Is the glass in the windshield or other windows clear and unbroken to provide adequate protection and visiblity for the operator? (16.A.07, 16.B.10)			
26. Is all equipment equipped with adequate service brake system and emergency brake system? (16.A.18)			
27. Are areas on equipment where employees walk or climb equipped with platforms, footwalks, steps, handholds, guardrails, toeboards and non-slip surfaces? (16.B.03)			
28. Is all self propelled equipment equipped with automatic, audible, reverse signal alarms? (16.B.01)			
29. Is there a record of manufacturer’s approval of any modification of equipment which affects its capacity or safe operation? (16.A.18)			
30. Are truck and crawler cranes attached to a barge or pontoon by a slack tiedown system? (16.F.06)			
31. Have the following conditions been met for land cranes mounted on barges or pontoons: (16.F.04) a. Have load ratings been modified to reflect the increased loading from list, trim, wave, and wind action? b. Are all deck surfaces above the water? c. Is the entire bottom area of the barge or pontoon submerged? d. Are tie downs available? e. Are cranes blocked and secured?			
32. Are all belts, gears, shafts, spindles, drums, flywheels, or other rotating parts of equipment guarded where is a potential for exposure to workers? (16.B.03)			

	Yes	No	N/A
33. Is the area where the crane is to work level, firm and secured? (16.A.10)			
34. Is a dry chemical or carbon dioxide fire extinguisher rated at least 5-B:C on the crane? (16.A.26)			
35. Are trucks, for truck mounted cranes, equipped with a working reverse signal alarm? (16.B.01)			
36. Is a signal person provided where there is danger from swinging loads, buckets, booms, etc.? (16.B.13)			
37. Is there adequate clearance from overhead structures and electrical sources for the crane to be operated safely? (16.C.09)			
38. Is there adequate lighting for night operations? (16.C.19)			
39. Has the the boom stop test on cable-supported booms been performed? (16.D.06)			
40. Is the boom disenaging device functioning as required? (16.D.06)			
41. Has all rigging and wire rope been inspected? (Section 15)			
Remarks:(Enter actions taken for all “no” answers.)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAFETY CHECKLIST FOR PORTAL, TOWER, AND PILLAR CRANES

Contract # and Title:			
Equipment name & number: owned or leased?			
Contractor:	Subcontractor:		
Contract Inspector:	Date Inspected:		
	Yes	No	N/A
1. Are the following available: (16.E.02) a. written erection instructions? b. listing of the weight of each component? c. an activity hazard analysis for the erection? d. does the activity hazard analysis contain (1.) location of crane and adjacent structures? (2.) foundation design and construction requirements? (3.) clearance and bracing requirements?			
2. Is there a boom angle indicator within the operator's view? (16.E.04)			
3. Are luffing jib cranes equipped with: (16.E.05) a. shock absorbing jib stops? b. jib hoist limit switch? c. jib angle indicator visible to operator?			
4. If used, do rail clamps have slack between the point of attachment to the rail and the end fastened to the crane? (16E.06)			
5. Are the following with the crane at all times: (16.C.02) a. the manufacturer's operating manual? b. the load rating chart? c. the crane's log book documenting use, maintenance, inspections and tests? d. the operating manual for crane operational aids used on the crane?			

	Yes	No	N/A
6. Are the following on the project site: a. completed periodic inspection report prior to initial work? (16.C.12) b. pre-operational checklist used for daily inspections? (16.C.12) c. written reports of the operational performance tests? (16.C.13) d. written reports of the load performance tests? (16.C.13)			
7. Is every crane operator certified by a physician to be physically qualified to perform work? (16.C.05)			
8. Are all operators qualified by written and practical exam or by appropriate licensing agency for the type crane they are to operate? (16.C.05)			
9. Is the crane designed and constructed IAW the standards listed in Table 16-1? (16.C.05)			
10. Is a hazard analysis for set-up and set-down available? (16.C.08)			
11. Are there at least 3 wraps of cable on the drum? (16.C.10)			
12. Are the hoisting ropes installed IAW the manufacturer’s recommendations? (16.C.10)			
13. Is the a record of manufacturer’s approval of any modification of equipment which affects its capacity or safe operation? (16.A.07)			
5. Remarks: (Enter actions taken)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAFETY CHECKLIST FOR RIGGING

Contract # and title:			
Equipment name & number: owned or leased?			
Contractor	Subcontractor:		
Contractor inspector:	Date inspected:		
	Yes	No	N/A
1. Has all defective rigging been removed? (15.A.01)			
2. Is rigging stored properly? (15.A.01)			
3. Are running lines within 6.5’ of the ground or working level guarded? (15.A.03)			
4. Are all eye splices made in an approved manner with rope thimbles? (sling eyes excepted) (15.A.04)			
5. Are positive latching devices used to secure loads? (15.A.05)			
6. Are all custom lifting accessories marked to indicate their safe working loads? (15A.07)			
7. Are all custom designed lifting accessories proof-tested to 125% of their rated load? (15.A.07)			
8. Are the following conditions met for wire rope: (15.B.01-09) a. Are they free of rust or broken wires? b. Are defective ropes cut up or marked as unusable? c. Do rope clips attached with U-bolts have the U-bolts on the dead end or short end of the rope? d. Are protruding ends of strands in splices on slings and bridles covered or blunted? e. Except for eye splices in the end of wires and for all endless wire rope slings, are all wire ropes used in hoisting, lowering, or pulling loads one continuous piece, free of knots or splices?			

	Yes	No	N/A
f. Do all eye splices have at least 5 full tucks? g. If used, are wedge sockets fastening attached without attached the dead end of the wire rope to the live rope? h. Are they free of eyes or splices formed by wire rope clips or knots?			
9. Are the following conditions met for chain? (15.C.01-04) a. Are all chains alloyed? b. Do all coupling links or other attachments have rated capacities at least equal to that of the chain. c. Are makeshift fasteners restricted from use?			
10. Are the following conditions met for fiber rope:(15.D.01-07) a. Are all ropes protected from freezing, excessive heat or corrosive materials? b. Are all ropes protected from abrasion? c. Are splices made IAW manufacture's recommendations? d. Do all eye splices in manila rope contain at least 3 full tucks and do all short splices contain at least 6 full tucks(3 on each side of the centerline of the splice)? e. Do all splices in layed synthetic fiber rope contain at least 4 full tucks and do short splices contain at least 8 full tucks (4 on each side of the centerline of the splice)? f. Do the tails of fiber rope splices extend at least 6 rope diameters (for rope 1" diameter or greater) past the last full tuck? g. Are all eye splices large enough to provide an included angle of not greater than 60* at the splice when the eye is placed over the load or support?			
11. Are the following conditions met for all slings:(15.E.01-06) a. Is protection provided between the sling and sharp surfaces? b. Do all rope slings have minimum clear length of 40 times the diameter of component ropes between each end fitting or eye splice? c. Do all braided slings have a minimum clear length of 40 times the diameter of component ropes between each end fitting or eye splice?			

	Yes	No	N/A
d. Do all welded alloy steel chain slings have affixed permanent identification stating size, grade, rated capacity and manufacturer? e. Is each synthetic web sling marked or coded to identify its manufacturer, rated capacities for each type hitch and the type material?			
12. Are drums, sheaves, and pulley smooth and free of surface defects? (15.F.01)			
13. Is the ratio of the diameter of the rigging and the drum, block sheave or pulley thread diameter such that the rigging will adjust without excessive wear, deformation, or damage? (15F.02)			
14. Have all damaged drums, sheaves and pulleys been removed from service? (15.F.04)			
15. Are all connections, fittings, fastenings, and attachments of good quality, proper size and strength, and installed IAW manufacturer's recommendations? (15.F.05)			
16. Are all shackles and hooks sized properly? (15.F.06 & .07)			
17. Are hoisting hooks rated at 10 tons or greater provided with safe handling means? (15.F.07)			
18. Do all drums have sufficient rope capacity? (15.F.08)			
19. Is the drum end of the rope anchored by a clamp securely attached to the drum in a manner approved by the manufacturer? (15.F.08)			
20. Do grooved drums have the correct groove pitch for the diameter of the rope and is the groove depth correct? (15.F.08)			
21. Do the flanges on grooved drums project beyond the last layer of rope at a distance of either 2″ or twice the diameter of the rope, whichever is greater? (15.F.08)			
22. Do the flanges on ungrooved drums project beyond the last layer of rope a distance of either 2.5″ or twice the diameter of the rope, which ever is greater.			

	Yes	No	N/A
23. Are the sheaves compatible with the size of rope used and as specified by the manufacture? (15F.09)			
24. Are sheaves properly aligned, lubricated, and in good condition? (15.F.09)			
25. When rope is subject to riding or jumping off a sheave, are sheaves equipped with cablekeepers? 915.F.09)			
26. Are eye bolts loaded in the plane of the eye and at angles less than 45* to the horizontal? (15.F.10)			
27. Remarks: (Enter actions taken for “no” answers.)			
Contractor inspector signature			
Contractor QC/safety/project manager signature			

SAFETY CHECKLIST FOR MOTOR VEHICLES , TRAILERS AND TRUCKS

Contract # and title: owned or leased?	
Equipment name & number:	
Contractor:	Subcontractor:
Contractor inspector:	Date inspected:

	Yes	No	N/A
1. Are records of safety inspections of all vehicles available? (18.A.02)			
2. Are all vehicles to be operated between sunset and sunrise equipped with: (18.A.04) a. 2 headlights? b. taillights and brake lights? c. front and back turn signals? d. 3 emergency flares, reflective markers, or equivalent portable warning devices?			
3. Are vehicles, except trailers or semi-trailers having a gross weight of 5000 lbs or less, equipped with service brakes and manually operated parking brakes? (18.A.05)			
4. Are service brakes on trailers and semitrailers controlled from the driver’s seat of the prime mover? (18A.06)			
5. Does the vehicle have: (18.A.06) a. a speedometer? b. a fuel gage? c. an audible warning device (horn)? d. a windshield & adequate windshield wiper? e. an operable defroster and defogging device? f. an adequate rearview mirror? g. a cab, cab shield, and other protection to protect the driver from the elements and falling or shifting materials? h. non-slip surfaces on steps? I. a power-operated starting device?			

	Yes	No	N/A
6. Is all the glass safety glass and is all broken or cracked glass replace? (18.A.07)			
7. Do trailers meet the following: (18A.08) a. Are all towing devices adequate for the weight drawn? b. Are all towing devices properly mounted? c. Are locking devices or a double safety system provided on every 5th wheel mechanism and tow bar arrangement to prevent accidental separation? d. Are trailers coupled with safety chains or cables to the towing vehicle? e. Are trailers equipped with the power brakes equipped with a break-away device which will lock-up the brakes in the event the trailer separates from the towing vehicle?			
8. Are all dump trucks:(18.A.10) a. equipped with a holding device to prevent accidental lowering of the body? b. equipped with a hoist lever secured to prevent accidental starting or tipping? c. equipped with means to determine (from the operator’s position) if the dump box is lowered? d. equipped with trip handles for tailgates that allow the operator to be clear?			
9. Are all buses, trucks and combination of vehicles with a carrying capacity of 1.5 tons or more, to be operated on public roads equipped with: (18.A.11) a. 3 reflective markers? b. 2 wheel chocks for each vehicle? c. at least one 2A:10B:C fire extinguisher? d. at least two properly rated fire extinguishers (for vehicles carrying flammable cargo)? e. a red flag not less than 1 foot square.			
10. Is vehicle exhaust controlled so as not to present a hazard to personnel? (18.A.13)			
11. Are all rubber tired motor vehicles equipped with fenders or with mud flaps if the vehicle is not designed for fenders? (18.A.14)			

	Yes	No	N/A
12. Are all vehicles, except buses, equipped with seat belts? (18.B.02)			
13. Does all self-propelled construction and industrial equipment have a working reverse signal alarm? (16.B.01)			
14. Are all hot surfaces of equipment, including exhaust pipes or other lines, guarded or insulated to prevent injury or fire? (16.B.03)			
15. If an off the road vehicle, is it equipped with rollover protective structures? (16.B.12)			
16. Remarks: (Enter actions taken for “no” answers)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAFETY CHECKLIST FOR CRAWLER TRACTORS AND DOZERS

Contract # and title:	
Equipment name & number: owned or leased?	
Contractor:	Subcontractor:
Contractor inspector:	Date inspected:

	Yes	No	N/A
1. Are initial and daily/shift inspection records available? (16.A.01& .02)			
2. Are only qualified operators assigned to operate mechanized equipment? (16.A.04)			
3. Are sufficient lights provided for night operations? (16.A.11)			
4. Is the unit shut down before refueling? (16.A.14)			
5. Does the unit have as a minimum a 5-B:C fire extinguisher? (16.A.26)			
6. Is there an effective, working reverse alarm? (16.B.01)			
7. Are moving parts, shafts, sprockets, belts, etc., guarded? (16.B.03 ,07, and 13)			
8. Is protections against hot surfaces, exhausts, etc., provided? (16.B.03 and .13)			
9. Are fuel tanks located in a manner to prevent spills or overflows from running onto engine exhaust or electrical equipment?			

	Yes	No	N/A
10. Are exhaust discharges directed so they do not endanger person of obstruct operator vision?(16.B.05)			
11. Are seat belts provided? (16B.08)			
12. Is protection (grills, canopies, screens) provided to shield operator from falling or flying objects? (16.B.10 and .11)			
13. Is roll over protection provided? (16.B.12)			
14. Remarks: (Enter actions taken for “no” answers)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAFETY CHECKLIST FOR SCRAPERS, MOTOR GRADERS , AND OTHER MOBILE EQUIPMENT

Contract # and title:	
Equipment name and number: owned or leased?	
Contractor:	Subcontractor:
Contractor inspector:	Date inspected:

	Yes	No	N/A
1. Are initial and daily/shift inspection records available? (16.A.01 & .02)			
2. Are only qualified operators assigned to operate equipment? (16.A.04)			
3. Are sufficient lights provided for night operations? (16.A.11)			
4. Does the unit have as a minimum a 5-B:C fire extinguisher? (16.A.26)			
5. Is there an effective working reverse alarm? (16.B.01)			
6. Is the unit shut down for refueling? (16.A.14)			
7. Are moving parts, shafts, sprockets, belts, etc., guarded? (16.B.03, .07 and .13)			
8. Is protection against hot surfaces, exhausts, etc., provided? (16.B.03 and .13)			
9. Are fuel tanks located in a manner to prevent spills or overflow from running onto engine exhaust or electrical equipment? (16.B.04)			
10. Are exhaust discharges directed so they do not endanger persons or obstruct operator vision? (16.B.05)			

	Yes	No	N/A
11. Are seat belts provided for each person required to ride on the equipment? (16.B.08)			
12. Is protection (grills, canopies, screens) provided to shield operators from falling or flying objects? (16.B.10 and .11)			
13. Is roll over protection provided? (16.B.12)			
14. Is a safe means of access to the cab provided (steps, grab bars, non-slip surfaces)? (16.B.03)_			
15. Are adequate head and tail lights provided? (16.A.07)			
16. Have brakes been tested and found satisfactory? (16.A.07)			
17. Does the unit have an emergency brake which will automatically stop the equipment upon brake failure? Is this system manually operable from the drivers position? (16.A.07)			
18. Is all equipment with windshields equipped with powered wipers and defogging or defrosting system? (16.A.07)			
19. Are all vehicles which will be parked or moving slower than normal traffic on haul roads equipped with a yellow flashing light or flasher visible from all directions? (16.A.13)			
20. Is the slow moving emblem used on all vehicles which by design move at 25 MPH or less on public roads? (08A.04)			

	Yes	No	N/A
21. Have air tanks been tested and certified? (20.A.01)			
22. Is an air pressure gage in working condition installed on the unit? (20.A.12)			
23. Does the air tank have an accessible drain valve? (20.B.17)			
24. Remarks: (Enter action taken for all “no” answers)			
Contractor inspector signature			
Contractor QC/safety officer/project manager			

SAFETY CHECKLIST FOR MATERIAL HOISTS

Contract # and title:	
Equipment name & number:	
Contractor:	Subcontractor:
Contract Inspector:	Date inspected:

	Yes	No	N/A
1. Are all hoist towers, masts, guys or braces, counterweights, drive machinery supports, sheave supports, platforms, supporting structures, and accessories designed by a licensed engineer? (16.K.02)			
2. Is a copy of the hoist operating manual available? (16.K.04)			
3. Do all floors and platforms have slip-resistant surfaces? (16.K.08)			
4. Are landings and runways adequately barricaded and is overhead protection provided where needed? (16.K.08)			
5. Are hoisting ropes installed IAW manufacturer's instructions? (16.K.10)			
6. Are operating rules posted at the hoist operator's station? (16.K.14)			
7. Are air powered hoists connected to an air supply of sufficient capacity and pressure to safely operate the hoist? (16.K.15)			
8. Are pneumatic hoses secured by some positive means to prevent accidental disconnection? (16.K.15)			
9. Remarks: (Enter actions taken for all "no" answers.)			
Contractor inspector signature			
Contractor QC/safety officer/project manager signature			

SAD Form 1666g-R Mar 97 Previous editions may be used for contracts referencing the 1992 edition of EM 385-1-1.

SAFETY CHECKLIST FOR EARTH DRILLING EQUIPMENT

Contract # and title:	
Equipment name & number:	
Contractor:	Subcontractor:
Contractor inspector:	Date inspected:

	Yes	No	N/A
1. Is a copy of the manual for all drilling equipment available? (16.M.01)			
2. Have all overhead electrical hazards and potential ground hazards been identified in a site layout plan and addressed in an activity hazard analysis? (16.M.02)			
3. Are MSDSs for all drilling fluids available? (16.M.05)			
4. Does the drilling equipment have 2 easily accessible emergency shut down devices (one for the operator and one for the helper)? (16.M.06)			
5. Is the equipment posted with a warning of electrical hazards? (16.M.06)			
6. Is there a spotter or an electrical proximity warning device available to ensure safe distances from power lines are maintained? (16.M.06)			
7. Remarks: (Enter actions taken for “no” answers)			
Contractor inspector signature			
Contractor QC/safety officer/project manager			

SAD Form 1666h-R Mar 97 Previous editions may be used for contracts referencing the 1992 edition of EM 385-1-1.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on the reverse side prior to initiating this form)*	DATE	TRANSMITTAL NO.

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS *(This section will be initiated by the contractor)*

TO:	FROM:	CONTRACT NO.	CHECK ONE: ☐ THIS IS A NEW TRANSMITTAL ☐ THIS IS A RESUBMITTAL OF TRANSMITTAL _____
SPECIFICATION SEC. NO. *(Cover only one section with each transmittal)*	PROJECT TITLE AND LOCATION		CHECK ONE: THIS TRANSMITTAL IS FOR ☐ FIO ☐ GOV'T. APPROVAL

ITEM NO. *a.*	DESCRIPTION OF ITEM SUBMITTED *(Type size, model number/etc.)* *b.*	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. *(See instruction no. 8)* *c.*	NO. OF COPIES *d.*	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE *g.*	VARIATION *(See instruction No. 6)* *h.*	FOR CE USE CODE *i.*
				SPEC. PARA. NO. *e.*	DRAWING SHEET NO. *f.*			

REMARKS	I certify that the above submitted items have been reviewed in detail and are correct and in strict conformance with the contract drawings and specifications except as other wise stated. NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED *(List by Item No.)*	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE

INSTRUCTIONS

1. Section I will be initiated by the Contractor in the required number of copies.

2. Each transmittal shall be numbered consecutively in the space provided for "Transmittal No.". This number, in addition to the contract number, will form a serial number for identifying each submittal. For new submittals or resubmittals mark the appropriate box; on resubmittals, insert transmittal number of last submission as well as the new submittal number.

3. The "Item No." will be the same "Item No." as indicated on ENG FORM 4288-R for each entry on this form.

4. Submittals requiring expeditious handling will be submitted on a separate form.

5. Separate transmittal form will be used for submittals under separate sections of the specifications.

6. A check shall be placed in the "Variation" column when a submittal is not in accordance with the plans and specifications--also, a written statement to that effect shall be included in the space provided for "Remarks".

7. Form is self-transmittal, letter of transmittal is not required.

8. When a sample of material or Manufacturer's Certificate of Compliance is transmitted, indicate "Sample" or "Certificate" in column c, Section I.

9. U.S. Army Corps of Engineers approving authority will assign action codes as indicated below in space provided in Section I, column i to each item submitted. In addition they will ensure enclosures are indicated and attached to the form prior to return to the contractor. The Contractor will assign action codes as indicated below in Section I, column g, to each item submitted.

THE FOLLOWING ACTION CODES ARE GIVEN TO ITEMS SUBMITTED

A -- Approved as submitted.

B -- Approved, except as noted on drawings.

C -- Approved, except as noted on drawings.
Refer to attached sheet resubmission required.

D -- Will be returned by separate correspondence.

E -- Disapproved (See attached).

F -- Receipt acknowledged.

FX -- Receipt acknowledged, does not comply as noted with contract requirements.

G -- Other *(Specify)*

10. Approval of items does not relieve the contractor from complying with all the requirements of the contract plans and specifications.

(Reverse of ENG Form 4025-R)

SUBMITTAL REGISTER
(ER 415 1-10)

CONTRACT NO.

TITLE AND LOCATION

CONTRACTOR

SPECIFICATION SECTION

ACTIVITY NO a.	TRANS-MITTAL NO. b.	ITEM NO c.	SPECIFICATION PARAGRAPH NUMBER d.	DESCRIPTION OF ITEM SUBMITTED e.	TYPE OF SUBMITTAL: DATA f.	DRAWINGS g.	INSTRUCTIONS h.	SCHEDULES i.	STATEMENTS j.	REPORTS k.	CERTIFICATES l.	SAMPLES m.	RECORDS n.	O&M MANUALS o.	CLASSIFICATION: INFORMATION ONLY p.	GOVERNMENT APPROVED q.	REVIEWER r.	CONTRACTOR SCHEDULE DATES: SUBMIT s.	APPROVAL NEEDED BY t.	MATERIAL NEEDED BY u.	CONTRACTOR ACTION: CODE v.	DATE w.	SUBMIT TO GOVERN-MENT x.	GOVERNMENT ACTION: CODE y.	DATE z.	REMARKS aa.

ENG FORM 4288-R, JAN EDITION OF MAR 95 IS OBSOLETE. PAGE _____ O _____ PAGES (Proponent:

COST ESTIMATE ANALYSIS

For use of this form, see TM 5-800-2; the proponent agency is USACE.

PROJECT	INVITATION/CONTRACTOR	EFFECTIVE PRICING DATE	DATE PREPARED
LOCATION	CODE (Check one) ☐ A ☐ B ☐ C ☐ OTHER	DRAWING NO.	SHEET OF SHEETS
		ESTIMATOR	CHECKED BY

TASK DESCRIPTION	QUANTITY		LABOR				EQUIPMENT		MATERIAL		TOTAL	SHIPPING	
	NO. OF UNITS	UNIT MEAS	MH UNIT	TOTAL HRS	UNIT PRICE	COST	UNIT PRICE	COST	UNIT PRICE	COST		UNIT WT	TOTAL WT
TOTAL THIS SHEET													

DA FORM 5418-R, Apr 85

TRANSFER AND ACCEPTANCE OF MILITARY REAL PROPERTY

Form Approved
OMB No. 0704-0188

PAGE OF PAGES

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, Va 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. **FROM** *(Installation/Activity/Service and Zip code)*	2. OPERATING UNIT	3. DISTRICT CODE	4. OPERATING AGENCY	5. DATE	6. JOB NUMBER	7. SERIAL NUMBER	8. CONTRACT NUMBER

9. **TO** *(Installation/Activity/Service and Zip code)*	10. OPERATING UNIT	11. DISTRICT CODE	12. OPERATING AGENCY	13. ACCOUNTING NUMBER	14. ACCOUNTABLE OFFICE NUMBER	15. TYPE OF TRANSACTION		16. PROJECT NUMBER
						A. ☐ NEW CONSTR. ☐ EXISTING FAC. ☐ CAPITAL IMP. ☐ OTHER *(Specify)*	B. ☐ BENF/O ☐ PHYSICAL COM. ☐ FINAN. COM. ☐ OTHER *(Specify)*	

ITEM NO. 17	CATEGORY CODE 18	FACILITY *(Category description)* 19	NO. OF UNITS 20	TYPE 21	UNIT OF MEAS. 22	TOTAL QUANTITY 23	COST 24	DRAWING NUMBERS 25	REMARKS 26

27.		28. ACCEPTED BY *(Signature)*	DATE
TRANSFERRED BY *(Signature)*	DATE	TITLE *(Post Engr./Base Civ. Engr./Navy Rep.)*	29. PROPERTY VOUCHER NUMBER
TITLE *(Area Engr./Base Engr./DPWO)*			

30. CONSTRUCTION DEFICIENCIES

31. REMARKS

INSTRUCTIONS

This form has been designed and issued for use in connection with the transfer of military real property between the military departments and to or from other government agencies. It supersedes ENG Forms 290 and 290B (formerly used by the Army and Air Force) and NAVDOCKS Form 2317 (formerly used by the Navy).

Existing instructions issued by the military departments relative to the preparation of the three superseded forms are applicable to this form to the extent that the various items and columns on the superseded forms have been retained. Additional instructions, as appropriate, will be promulgated by the military departments in connection with any new items appearing hereon.

With the issuance of this DD form, it is not intended that the departments shall revise and reprint manuals and directives simply to show the number of this DD form. Such action can be accomplished through the normal course of revision for other reasons.

Approved by OM 0348-0046

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure.)

1. Type of Federal Action:

☐ a. contract
b. grant
c. cooperative agreement
d. loan
e. loan guarantee
f. loan insurance

2. Status of Federal Action:

☐ a. bid/offer/application
b. initial award
c. post-award

3. Report Type:

☐ a. initial filing
b. material change

For Material Change Only:
year _____ quarter _____
date of last report _____

4. Name and Address of Reporting Entity:

☐ Prime ☐ Subawardee
Tier _____, *if known*:

Congressional District, *if known:*

5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:

Congressional District, *if known*:

6. Federal Department/Agency:

7. Federal Program Name/Description:

CFDA Number, *if applicable*: _____

8. Federal Action Number, *if known*:

9. Award Amount, *if known*:

$

10. a. Name and Address of Lobbying Entity
(*if individual, last name, first name, MI):*

b. Individuals Performing Services *(including address if different from No. 10a)*
(last name, first name, MI):

(attach Continuation Sheet(s) SF-LLL-A, *if necessary*)

11. Amount of Payment *(check all that apply)*:

$ _____ ☐ actual ☐ planned

12. Form of Payment *(check all that apply)*:

☐ a. cash
☐ b. in-kind; specify: nature _____
value _____

13. Type of Payment *(check all that apply)*:

☐ a. retainer
☐ b. one-time fee
☐ c. commission
☐ d. contingent fee
☐ e. deferred
☐ f. other; specify: _____

14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employee(s), or Member(s) contacted, for Payment indicated in Item 11:

(attach Continuation Sheet(s) SF-LLL-A, *if necessary*)

15. Continuation Sheet(s) SF-LLL-A attached: ☐ Yes ☐ No

16. Information requested through this form is authorized by title 31 U.S.C section 1352. This disclosure of lobbyig activities is a materia representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352 . This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to

Signature: _____

Print Name: _____

Title: _____

Telephone No.: _____ **Date:** _____

Federal Use Only:

Authorized for Local Reproduction

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.

2. Identify the status of the covered Federal action.

3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.

4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.

5. If the organization filing the report in item 4 checks “Subawardee”, then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.

6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.

7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.

8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., “RFP-DE-90-001.”

9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.

10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.

    (b) Enter the full names of the individuals(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).

11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.

12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.

13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.

    Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

DISCLOSURE OF LOBBYING ACTIVITIES
CONTINUATION SHEET

Approved by
OM
0348-0046

Reporting Entity: _____ Page ____ of ____ ____

*U.S. G.P.O. 1990-260-708:00012

REAL PROPERTY INVENTORY

ITEM	TALLY	TOTAL
COMMODES		
LAVATORIES		
URINALS		
EXHAUST FAN (9")		
EXHAUST FAN (OTHER)		
WATER COOLER		
HOTWATER HEATER		
MOP SINK		
AC PLANT	LS 5 TN. 5-25 TN. 25-100 TN. OVER 100 TN.	
AS (WINDOW TYPE)		
FIRE ALARM SYSTEM	MANUAL HALON SPRINKLER	
EMERGENCY LIGHTS		
UNIT HEATER		
STRIP HEATER		
COOLING TOWER		
WALK-IN COOLER		
AIR CURTAIN		
EYE WASH		
SHOWERS		
BOILER	GAS FIRED OIL FIRED STEAM	
FUEL TANK	UNDERGROUND OUTSIDE	

REAL PROPERTY INVENTORY

ITEM	TALLY	TOTAL
WASH BASIN		
AIR COMPRESSOR		
HOISTS		
INVENTORY BY:		DATA:
RECONCILED BY:		DATA:

REAL PROPERTY INVENTORY

ITEM	TALLY	TOTAL
INVENTORIED BY:		DATE:
RECONCILED BY:		DATE:

CONTRACTOR PREPARED NETWORK ANALYSIS SYSTEM (NAS) FOR DESIGN –BUILD CONTRACTS—PROJECT SCHEDULE (SAS Sept 01)

A. REFERENCES

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

ER 1-1-11 Progress, Schedules, and Network Analysis Systems (June 1995)

B. CONTRACTOR SCHEDULING REPRESENTATIVE

The Contractor shall designate, a scheduling representative, who shall be responsible for the preparation and submittal of the entire NAS project schedule including all items specified below and revisions to the schedule or supplemental completion schedules, as applicable or directed by the Contracting Officer. The scheduling representative shall be approved by the Contracting Officer based on a resume indicating as a minimum, formal training from software vendor or 5 years experience in working with NAS schedules.

C. GENERAL REQUIREMENTS

Pursuant to the Contract Clause, SCHEDULES FOR CONSTRUCTION CONTRACTS, FAR 52.236-15 the contractor shall prepare the NAS Project Schedule as described below.

The NAS Project Schedule shall be a composite schedule including the design and construction activities.

The scheduling of construction shall be the responsibility of the Contractor. Contractor management and superintendent personnel shall actively participate in its development. Subcontractors and suppliers working on the project should actively participate in developing and maintaining an accurate NAS Project Schedule and the prime contractor shall verify their support for the submitted schedule in writing. The contractor shall include this written verification with the initial submittal and all revisions (to logic and durations) of the NAS schedule. The approved NAS Project Schedule shall be used by the Contractor to plan and control the progress of the work, perform evaluations of actual progress, perform time analysis for requests of time extensions on changes, and to provide the basis for the request of all progress payments.

The Government will use the NAS Project Schedule to evaluate the contractor’s progress for timely completion, plan for Quality Assurance verification of the work and evaluate the effects of a proposed modification on the contract duration (critical path activities).

D. BASIS FOR PAYMENT

The approved schedule shall be the basis for progress payments. Lack of an approved schedule or scheduling personnel will result in an inability of the Contracting Officer to evaluate Contractor's progress, may delay progress payments and may result in an interim unsatisfactory performance rating for the area of effectiveness of management. The Contractor shall provide all information/data, as specified below, for the Contracting Officer to evaluate Contractor progress for payment purposes. The Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, for failure to provide information and data required in this specification.

E. PROJECT SCHEDULE

E.1 Project schedule software

The contractor shall prepare the NAS schedule using a computer software system. The system utilized by the Contractor shall be capable of satisfying all requirements of this specification and ER 1-1-11. Manual methods used to produce any required information shall require prior approval by the Contracting Officer. The Contracting Officer intends to use PRIMAVERA P3. The Contractor shall provide to the Government a complete input listing for he initial schedule. The selected software must be able to function so as to provide all information and functions required by this specification in an accessible manner acceptable to the Contracting Officer. The Government’s acceptance of the software does not waive any requirements under this specification and shall not require the Government to go to any significant effort to retrieve the required information.

Should the contractor utilize software that is different than that utilized by the Contracting Officer, based on the software utilized by the contractor for the preparation of the NAS schedule, the contractor shall provide a copy of the software and a license to the Administrative Contracting Officer at the Government field office until final payment. The software and license shall be returned to the contractor. The Contractor shall submit a copy of the user's manual outlining the selected CPM computer program's mathematical analysis capabilities, details, functions and operation.

The NAS schedule shall be prepared in the Standard Data Exchange Format as required in ER 1-1-11 and approved by the Contracting Officer.

E.2 Use of the Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The Contractor shall provide the Project schedule in the Precedence Diagram Method (PDM).

E.2.1 Level of Detail Required

The contractor shall develop or update the Project Schedule and provide data to the Contracting officer at the appropriate level of detail necessary to properly evaluate progress as approved by the Contracting Officer.

E.2.2 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable durations are those that allow the progress of activities to be accurately determined between payment

periods (usually less than 2 percent of all non-procurement activities' original durations should be greater than 20 work days).

E.2.3 Key Procurement Activities

Tasks related to the procurement of long lead materials or equipment shall be included as separate activities in the project schedule. Long lead materials and equipment are those materials that have a procurement cycle of over 90 days. Examples of key procurement activities include, but are not limited to: shop drawing submittals/approvals or review/and fabrication/delivery.

E.2.4 Government Activities

Government and other agency activities that could impact progress shall be included in the schedule. These activities include, but are not limited to: Government approvals, Government review and verification that design submittals are in accordance with the RFP , inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements. Government approval of shop drawings activities should be shown with the duration at least the minimum allowed by the contract. The contractor's failure to provide reasonable durations in its schedule for Government activities does not establish or change the Government's review or approval periods and the durations established for Government's activities are subject to approval by the Contracting Officer.

E.2.5 Contracts with multiple buildings/facilities

The contractor shall prepare a separate detailed NAS schedule for each building/facility indicating its critical path for specified interim completion dates or critical milestone date. The master NAS schedule shall indicate the interface/lag/link between buildings/facilities to maximize/level the labor and other resources. The master schedule critical path must be indicated through the various buildings/facilities and total duration equal to the contract duration.

E.3 PROJECT NAS SCHEDULE SUBMISSIONS

The Contractor shall provide the submissions as described below. The data for each submission is as follows:

E.3.1 Preliminary NAS Project Schedule Submission

The Preliminary NAS Project Schedule, defining the Contractor's planned operations for the first 90 calendar days shall be submitted for approval at the PRECONSTRUCTION CONFERENCE. The approved preliminary schedule shall be used for payment purposes not to exceed 90 calendar days after NTP. The preliminary schedule shall be detailed for the first 90 days and depict the remainder of the project in summary format. The preliminary schedule shall be submitted on data disk or CD (2 copies).

E.3.2 Initial NAS Project Schedule Submission

The Initial NAS Project Schedule shall be submitted for approval within 90 calendar days after NTP is acknowledged. The schedule shall include detailed activities for the entire project with a reasonable sequence of activities, and shall be at a reasonable level of detail as approved by the Contracting

Officer. The initial schedule shall be submitted on data disk or CD (2 copies).

E.3.3 Monthly Updates (entire NAS project schedule)

The Contractor shall submit monthly schedule updates to the Contracting Officer for approval. Monthly updates shall continue until the Contracting Officer accepts the contract. See paragraph F-2 for further requirements for monthly updates. These submissions shall enable the Contracting Officer to assess Contractor's monthly progress. The monthly updates shall be submitted on data disk or CD (2 copies).

The contractor’s invoice may be deemed as an improper invoice, if it fails to provide monthly updates acceptable to Contracting Officer, this may delay progress payment and may result in an interim unsatisfactory performance rating. The contractor shall include its requests to revise/adjust the NAS schedule for approval, prior to implementing the revisions into the official schedule.

E.3.4 Standard Activity Coding Dictionary

The Contractor shall use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11, Appendix A. This exact structure is mandatory, even if some fields are not used.

E.3.5 SUBMISSION REQUIREMENTS

E.3.5.1 DATA DISKS

Two data disks containing the project schedule shall be provided. Data on the disks shall adhere to the SDEF format specified in ER 1-1-11, Appendix A.

E.3.5.2 File Medium

Required data shall be submitted on CD including the baseline and all updates (cumulative). Monthly data disks must be 3.5 in. disks, formatted to hold 1.44 MB of data, under the MS-DOS Version S. or 6.x, unless otherwise approved by the Contracting Officer.

E.3.5.3 Disk Label

A permanent exterior label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Preliminary, Initial, Update, or Change), full contract number, project name, project location, data date, name and telephone number or person responsible for the schedule, and the MS-DOS version used to format the disk

E.3.5.4 File Name

Each file submitted shall have a name related to either the schedule data date, project name, or contract number. The Contractor shall develop a naming convention that will ensure that the names of the files submitted are unique. The Contractor shall submit the file naming convention to the

Contracting Officer for approval. Provide the naming convention (limited to 4 characters: i.e. Filename (contract 99-47) = 47BL for Baseline and 4701 for 1st monthly.

E.4 Network Logic Diagram

E.4.1 Two (2) hard copies of the network diagram shall be required on the preliminary schedule, initial schedule submission, and updated on each monthly schedule submissions. Monthly updates must indicate actual progress as of the data date. The network diagram shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished.

E.4.2 Network diagrams shall show the order and interdependence of project activities and the sequence in which the work is to be accomplished, as planned by the Contractor. The network diagramming procedure, which will be used, will show how the start of a given activity is dependent on the completion of preceding activities, and how its completion restricts the start of following activities.

E.4.3 Activity Duration:
The activity duration shall be indicated in "work" days, and revise the assigned calendar. The contractor may request to change the work days from 5 days/week to 6 or 7 days/week should this action become necessary to regain the schedule due to problems unrelated to the Government actions.

E.4.3.1 Contractor submissions shall include reasonable activity durations as determined by the contractor and subcontractors. The durations are to be determined by the contractor using the planned crew size/composition.

All activities shall be resource loaded with the crew size and composition

E.4.4 The logic diagrams may be manually or machine drafted. The quality and readability of the diagrams shall be acceptable to the Contracting Officer.

E.4.5 Omitted

E.4.6 Responsibility

All activities shall be identified in the project schedule by the party responsible to perform the work. Responsibility includes, but is not limited to, the subcontracting firm, contractor work force, or government agency performing a given task. Activities shall not belong to more than one responsible party. The responsible party for each activity shall be identified by the Responsibility Code. The Government must accept responsibility for activities in writing by the Contracting Officer.

E.4.7 Work Areas

All activities shall be identified in the project schedule by the work area in which the activity occurs. Activities shall not be allowed to cover more than one work area. The work area of each activity shall he identified by the Work Area Code.

E.4.8 Modification

Any activity that is added by a contract modification subnet shall be identified by the modification number. Activities shall not belong to more than one modification.

E.4.9 Bid Item

All activities shall be identified in the project schedule by the Bid Item to which the activity belongs. An activity shall not contain work in more than one bid item. The bid item for each appropriate activity shall be identified by the Bid Item Code.

E.4.10 Phase of Work

All activities shall be identified in the project schedule by the phases of work in which the activity occurs. Activities shall not contain work in more than one phase of work. The project phase of each activity shall be by the unique Phase of Work Code.

E.4.11 Category of Work

All Activities shall be identified in the project schedule according to the category of work, which best describes the activity. Category of work refers, but is not limited, to the procurement chain of activities including such items as submittals, approvals, procurement, fabrication, delivery, installation, start-up, and testing. The category of work for each activity shall be identified by the Category of Work Code.

E.4.12 Feature of Work

All activities shall be identified in the project schedule according to the feature of work to which the activity belongs. Feature of work refers, but is not limited to, a work breakdown structure for the project. The feature of work for each activity shall be identified by the Feature of Work Code.

E.4.13 Scheduled Project Completion

The schedule duration shall extend from NTP to the official contract completion date as awarded (unless approved by Contracting Officer-for early completion).

E.4.14 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. The Contractor shall include as the first activity in the project schedule an activity called "Start Project". The "Start Project" activity shall have an “ES” constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

E.4.15 Constraint of Last Activity

Completion of the last activity in the schedule shall be constrained by the contract completion date. Calculation on project updates shall be such that if the early finish of the last activity falls after the contract completion date, then the float calculation shall reflect a negative float on the critical path. The Contractor shall include as the last activity in the project schedule an activity called "End Project". The "End Project" activity

shall have a “LF” constraint date equal to the completion date for the project, and a zero day duration.

E.4.16 Early Project Completion

In the event the project schedule shows completion of the project prior to the contract completion date, the Contractor shall identify those activities that have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. Contractor shall specifically address each of the activities noted in the narrative report at every project schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the contract period.

The Contractor shall include an activity named “contingency” with no cost and a duration equal to the number of calendar days from the date all the contract work is planned to be completed, to the official contract completion date as awarded.

E.4.17 Interim Completion Dates

Contractually specified interim completion dates shall also be constrained to show negative float if the early finish date of the last activity in that phase falls after the interim completion date.

E.4.18 Design phase

The contractor shall include the following design phase activities in the composite design and construction NAS Project schedule:

Design Charette (Preliminary Design) within 7 days after NTP

Submittal of preliminary design (60%)

Design review conference of Preliminary design

Submittal of Final design (95%)

Design review conference of Final design

Submittal of Corrected Final design (100%)

Design review conference of Corrected Final design

Design Complete

The duration of each of these activities must be the duration as included in the contract award.

E.4.18.A Start Phase for construction activities

The Contractor shall include as the first activity for a project phase an activity called "Start Phase _____" where _____ refers to the phase of work. The "Start Phase _____” activity shall have an “ES” constraint date equal to the date on which the NTP was acknowledged, and a zero day duration.
The start phase for construction activities must be as applicable for design-build contracts

E.4.19 End Phase

The Contractor shall include as the last activity in a project phase an activity called "End Phase _____" where _____ refers to the phase of work. The "End Phase _____" activity shall have a "LF" constraint date equal to the completion date for the project, and a zero day duration.

E.4.20 Inspection/Acceptance phase

The contractor shall include the following work activities with duration and cost:

CQC (all) mechanical systems test (indicate the specific system)

CQC (all) electrical system tests (indicate the specific system)

Government QA (all) mechanical system acceptance/operational test (indicate specific system)

Government QA (all) electrical system acceptance /operational test (indicate specific system)

CQC completion inspection of the entire project

Contractor works off CQC punchlist

Prefinal inspection performed when the facility is completed such that it can be used for it intended function (as determined by the Contracting Officer)

Contractor works off prefinal punchlist

Final/acceptance inspection of the entire project

Contractor works off final punchlist.

Contractor shall allow 50 calendar days total duration prior to current contract completion date for the above stated activities. (See specification section 01445 Contractor Quality Control).

E.4.21 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in CPM scheduling software systems. Actual Start and Finish dates on the CPM schedule shall match those dates provided from Contractor Quality Control Reports. The Contractor must document the Actual Start and Finish dates on the Daily Contractor Quality Control report by activity. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Program features which calculate one of these parameters from the other shall be disabled.

E.4.22 Out-of-Sequence Progress

Activities that have posted progress without all preceding logic being satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case approval of the Contracting Officer. The Contractor shall propose logic

corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule.

E.4.23 Negative Lags

Lag duration contained in the project schedule shall not have a negative value.

E.4.24 Project Monthly and Specific Milestone Dates

Milestone dates shall be shown on the diagram for start of project, each monthly milestone for the critical path activity in progress as of the data date, specific milestones such as: foundation complete, structure complete, roof complete, facility dried in, interim completion dates, and other specific contract milestones as required by the Contracting Officer.

E.4.25 Critical Path

The critical path shall be clearly shown on all diagrams (as approved).

E.4.26 Banding

Activities shall be grouped to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility

E.4.27 S-Curves---cash flow curves

Earnings (cash flow) curves (as required for submissions) shall show scheduled ES/EF and LS/LF curves and actual progress plotted as of the data date. The cash flow curves are affected by the assigned cost and duration of the activities.

The LS/LF cash flow curve is expected approximate 40% earning (without stored material) @ 50% of the contract duration and 70% earning @ 70% of contract duration.

(FOR FAST TRACK DESIGN-BUILD) The LS/LF cash flow curve is expected approximate 38% earning (without stored material) @ 50% of contract duration and 70% earning @ 70% of contract duration.

E.5 SCHEDULE REPORTS/SORTS (as required by Contracting Officer for submissions)

The format for each activity for the schedule reports listed below shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float. Actual Start and Actual Finish Dates shall he printed for those activities in progress or completed.

E.5.1 Activity Report/sort

A list of all activities sorted according to activity number.

E.5.2 Logic Report/sort

A list of Preceding and succeeding activities for every activity in ascending order by activity number. Preceding and succeeding activities shall include all information listed above in paragraph Schedule Reports. A blank line shall be left between each activity grouping.

E.5.3 Total Float Report/sort

A list of all incomplete activities sorted in ascending order of total float. Activities, which have the same amount of total float, shall be listed in ascending order of Early Start Dates. Completed activities shall not be shown on this report.

E.5.4 Earnings Report/sort

A calculation of the Contractor's Total Earnings on the project from the NTP until the most recent Monthly Progress Meeting. This report shall reflect the Earnings of specific activities based on the agreements made in the field and approved between the Contractor and Contracting Officer at the most recent Monthly Progress Meeting. Provided that the Contractor has provided a complete schedule update, this report shall serve as the basis of determining Contractor Payment. Activities shall be grouped by bid item and sorted by activity numbers. This report shall: sum all activities in a bid item and provide a bid item percent; and complete and sum all bid items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

E.5.5 Milestone Report/Sort

The established monthly and special milestones shall be included in this report. The milestones must be established for each significant project features such as: Clearing-grading-demolition, foundation, slab-on-grade, structure-frame, exterior walls-windows, roof-building dry-in, interior walls-mech/elect R/I, above ceiling mech/elect R/I, ceiling, interior wall finish--doors, painting-coverings, floor finish, installation of mech/elect and other equipment-fixtures-casework, plumbing, HVAC system, finish interior mech/elect, testing-commissioning mech/elect systems, onsite utilities, paving-landscaping, prefinal-final inspections—final cleanup and/or other features (as applicable for the project). For design-build contracts add milestones for each design submittal and design complete.

E.5.6 Late Start Sort

E.5.7 Bid Item Sort

E.6 NARRATIVE REPORT

A Narrative Report shall be provided with the preliminary, initial, and each monthly update of the project schedule. This report shall include: a description of activities along the most critical paths, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to relay to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis. If the contractor believes that any Government action or inaction

has, or potentially, will impact its progress, it will include the specific notice of the fact in this report. This information should include the activity number of the impacted work, nature and duration of the impact.

The narrative report shall address all modifications and weather activities that were input for the progress and their impact on the contract completion and total float.

E.6.1 APPROVED CHANGES VERIFICATION

Only project schedule changes that have been previously approved by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes. The contractor shall not change the NAS schedule without specific written approval from the Contracting Officer. Unauthorized changes are not acceptable.

F. MONTHLY PROGRESS MEETINGS

There will be two progress meetings.

F.1 First- a progress update meeting will be held at the onsite between USACE and the authorized contractor representatives, on the agreed cut-off date established at the preconstruction conference. During this meeting the Contractor shall indicate it’s requested percentage completed on each activity on which there was a revised percentage of completion. The Contracting Officer must approve actual progress percentages for each activity. The updated progress data will be evaluated at the second progress meeting.

F.2 Second- a progress evaluation meeting shall be held with the contractor, after the updating of the current progress period work activities percentage is complete including modifications and adverse weather activities, to evaluate progress and the NAS schedule.

The monthly updated NAS schedule is submitted to the Contracting Officer, for approval, with the contractor’s request for progress payment. The evaluation will include a review of actual durations compared to scheduled durations for critical and non-critical activities, progress on critical activities and near critical activities, trends, and current/potential problem areas, cash flow progress, and projected workflow of activities.

The contractor’s narrative report shall be available for review at least three days prior to the second progress meeting.

The Contracting Officer shall approve all proposed revisions and adjustments to the NAS schedule. Update information must include the Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost-to-Date. The Contractor must address all the activities on an activity-by-activity basis during the second progress meeting.

The monthly NAS schedule update must include an adverse weather activity for work activities impacted greated than 50% of the work shift or were impacted by previous adverse weather (carry-over). The adverse weather activities must be added and applied to the NAS schedule, (all work activities –within 10 days float or less when compared to the current critical path and current

critical activities)--AFTER all of the modifications finalized within the month have been applied to the NAS schedule in the sequential order of finalization during the progress month.

The time extension for usually severe weather (in calendar days) must result from the agreement reached or (as directed) by the Contracting Officer) following the joint Contractor and Contracting Officer monthly weather evaluation held to review the CQC and QA daily reports, not later than 7 calendar days after the end of the progress month. The Contracting Officer will confirm the results of this evaluation to the contractor in writing monthly.

The official contract completion date must be revised on the NAS schedule, monthly (if applicable) based on the Contracting Officer’s letter confirming the results of the monthly evaluation, to include the time extension in calendars of unusually severe weather (actual adverse weather impact less the specified anticipated adverse weather impact, for the specific month).

A contract modification (SF 30) for a time extension to the official contract completion date, due to unusually severe weather (if any), will be completed quarterly by the Contracting Officer based on the monthly evaluations.

F.2.1 REMAINING DURATIONS

The estimated Remaining Duration for each activity in-progress. Time-based progress calculations shall be based on Remaining Duration for each activity.

F.2.2 LOGIC CHANGES

All logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, lag duration, and other changes that have been made pursuant to contract provisions shall be specifically identified and discussed.

F.2.3 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 (material delivery), Government Activities, deliveries or work stoppages, which make re-planning the work necessary. 3) Changes required to correct a schedule, which does not represent the actual or planned prosecution and progress of the work.

F.3 PROGRESS MEETING ATTENDANCE

The Contractor's Project Manager/Superintendent, Chief Quality Control, and Contractor’s Scheduler, (as approved in paragraph B), shall attend the second monthly progress meeting. The onsite Government representatives shall be advised of the meetings location, time and date.

F.4 UPDATE SUBMISSION FOLLOWING PROGRESS MEETING

A complete update of the entire NAS project progress schedule containing all approved revisions, and adjustments, based on the second monthly progress

meeting, shall be submitted not later than 6 working days after the second monthly progress meeting, (if applicable).

G. REQUESTS FOR TIME EXTENSIONS

In the event the Contractor requests a time extension of the contract completion date, or any interim milestone date, the Contractor shall furnish the following for a determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract: justification, project schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of delay shall be based on a subnet/fragnet of work activities, revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is required for any time extension approvals. 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. Actual delays that are found to be caused by the Contractor's own actions, which result in the extension of the schedule, shall not be a cause for a time extension to the contract completion date.

G.1 SUBMISSION REQUIREMENTS FOR JUSTIFICATION OF REQUEST FOR TIME EXTENSION

The Contractor shall submit a comprehensive time analysis and justification for each “Request for Proposal” for a change in the contract, based upon the most recent approved schedule update at the time of the RFP issued. Such a time analysis and justification shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

a. A subnet/fragnet of activities indicating all new change activities and the affect on existing schedule activities.

b. A brief explanation of the causes of the change.

c. An analysis of the overall impact the subnet/fragnet has when applied to the current-updated approved NAS schedule.

Activities impacted in each justification for change shall be identified by a unique activity code contained in the required data file.

H. MODIFICATIONS TO THE CONTRACT

H.1 Unpriced, unilateral and bilateral (without agreement on time) modifications

Upon receipt of the signed SF 30, for un-priced and unilateral modifications (or bilateral modifications with agreement on costs without an agreement on time, the Contractor shall submit proposed schedule revisions (in the form of a proposed subnet/fragnet) to the Contracting Officer for approval, within 14 days of the SF 30 being issued. The proposed (subnet/fragnet) revisions to the schedule will be approved by the Contracting Officer prior to application of those changes within the project schedule.

Should the contractor fail or refuse to submit the provisions, the Contracting Officer may furnish the Contractor suggested (subnet/fragnet) revisions to the project schedule.

Upon receipt, the Contractor shall include these subnet/fragnet revisions in the project schedule.

If the Contractor has any objections to the revisions furnished by the Contracting Officer, the Contractor shall advise the Contracting Officer within 14 days 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 on 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 deem to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will be the basis for an “equitable adjustment" for performance of the work.

H.2 Bilateral modifications shall be entered into the NAS schedule, utilizing the subnet/fragnet as agreed during negotiations, immediately after receipt of signed SF 30. Entries to the schedule must be approved by Contracting Officer.

H.3 All modifications subnets/fragnets shall be applied to the NAS schedule immediately in the sequence in which they were finalized (received signed SF 30). Weather time extensions must be included upon receipt of the results of the monthly weather evaluation.

I. CONTRACTOR FALLS BEHIND THE APPROVED NAS PROJECT SCHEDULE

If the Contractor falls behind its approved schedule, (behind the LS/LF cash flow curve or more than 15 work days of negative float) or performs the work in such a manner that the network diagram and mathematical analysis no longer indicate reasonable logic and duration for completion of the work by the current contract completion date, as determined by the Contracting Officer, the Contractor shall promptly provide a supplemental NAS recovery or completion schedule for completion by the current completion date, by reducing the remaining durations, revising logic, or adjusting resources onsite (in addition to the original approved NAS schedule) as approved by the Contracting Officer. The supplemental schedule shall be (resource loaded with crew size and productivity for each remaining activity, and indicating overtime, weekend work, double shifts needed to regain the schedule), in accordance with FAR 52.236-15, without additional cost to the Government. The supplement schedule shall not replace the original approved schedule as the official contract schedule. The original approved schedule shall be updated monthly (in addition to the supplemental schedule) and monitored by the contractor and the Contracting Officer to determine the effect of the supplemental schedule progress has on the contract progress to regain its rate of progress for timely completion as specified.

The Contractor shall not artificially improve its progress by revising the schedule logic restraints or shortening future work activity durations. The contractor may improve its progress by performing sequential work activities concurrently or by performing activities more quickly than planned, but such improvements shall be indicated on a supplement schedule and shall not be recorded on the official until the contractor has actually achieved them.

The additional resources required to improve the progress must be evident on the work site.

Failure of the contractor to perform work and maintain progress in accordance with the supplemental recovery or completion schedule, may result in an interim and final unsatisfactory performance rating and/or may result in corrective action by the contraction officer in accordance with far 52.236-15.

J. OWNERSHIP OF FLOAT

All float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

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APPENDIX H – SUSTAINABLE PROJECT RATING TOOL (SPiRiT)
APPENDIX I – BORROW PIT PROCEDURES
APPENDIX J – FIRE FLOW TEST
01030 DESIGN AFTER AWARD
01330 SUBMITTAL PROCEDURES
01415 METRIC MEASUREMENTS
01420 SOURCES FOR REFERENCE PUBLICATIONS
01451 CONTRACTOR QUALITY CONTROL
01500 TEMPORARY CONSTRUCTION FACILITIES
01780 AS-BUILT DRAWINGS SUBMITTALS
01781N OPERATION AND MAINTENANCE DATA

SECTION 01010

GENERAL PROJECT REQUIREMENTS

1. GENERAL

1.1 This section provides general scope information and design/construction requirements for this project. More explicit requirements are provided in subsequent sections. The design and construction requirements within this RFP represent the minimum quantity and quality acceptable for the proposal and project.

1.2 The site plan and floor plan provide a conceptual design that has been coordinated with and is acceptable to the User and Base Master Planning for functional relationships and working arrangements but does not imply that this is the only solution that will be considered or that would be acceptable.

2. GENERAL PROJECT DESCRIPTION

The scope of work for the Soldier Service Center, Fort Stewart, Georgia, includes the design, site preparation and construction of one new building and the demolition of five existing structures and other miscellaneous features on the site. Supporting facilities will include parking, vehicular pavement, sidewalks, water, sewer, electrical service, fire alarm systems, storm drainage, erosion control measures, information systems, force protection features, and landscaping. Interior design for furniture (including re-use of existing furniture) and finishes is included in the scope of work.

The scope of work includes, but is not limited to:

a. Demolition of existing site features, paving, site utilities, etc. as required for new construction.
b. Demolition of 5 buildings and associated site features and removal of asbestos containing materials.
c. A new parking lot, curbs, islands, site signage, site furniture, and sidewalks.
d. Enclosures at a cooling tower and dumpsters.
e. Landscaping and landscape irrigation.
f. The Soldier Service Center building.
g. Provisions for future 30,000 s.f. expansion of the building.
h. Phasing of work to maintain continuous operation of the existing Soldier Service Center.

Included in the scope of work is the phasing and scheduling of demolition and construction activities to maintain continuous operation of existing Soldier Service Center.

All work shall be in conformance with the Fort Stewart Installation Design Guide, a copy of which may be obtained from the USACE on a CD.

2.1 Sustainable Design. This project has been chosen as a showcase for sustainable design with the goal of achieving Bronze, Silver, Gold, or Platinum level of sustainable design features as measured through the use of Sustainable Project Rating Tool (SPiRiT), Appendix H to Section 01020. SPiRiT is a modified version of the U.S. Green Building Council LEED Green

Building Rating System. As stated in the contract clauses each offeror will complete and submit the SPiRiT Facility Points Summary with the proposal; the total points score will determine the SPiRiT Sustainable Project Certificate Level: SPiRiT Bronze, Silver, Gold or Platinum. The proposed level will be used as a proposal evaluation factor as defined in the contract clauses. A minimum of **Bronze** level rating is required.

2.2 Site Development and Utilities. Site development will include all clearing, grading, roads, parking lots, landscaping, sidewalks, curbs and gutters and utilities for the complex.

2.3 Demolition. Demolition will include asbestos abatement and removal of buildings, foundations, pavement and site improvements. Underground utilities will be capped as specified.

2.4 Facilities. The project facilities will consist of a Soldier Service Center housing soldier in-processing and out-processing as well as related functions. All areas and features necessary for the proper functioning of the facilities will be included.

*4
All required anti-terrorism/force protection measures will be incorporated into the facilities and site in accordance with the ~~"Department of Defense Antiterrorism Construction Standards" draft version dated 2 October 2001~~"Interim Department of Defense Antiterrorism/Force Protection (AT/FP) Construction Standards" dated 16 Dec 99.

> **Note: The site plans, plans and other design documents provided with this RFP ~~were developed prior to the document referenced above being issued, and do~~ may or may~~-~~ not incorporate all required antiterrorism features included in this referenced document. Included in the scope of work is design or redesign required to achieve compliance with the referenced document. Site elements shall be designed or redesigned to avoid violations of force protection setbacks of adjacent existing structures.**

2.5 There are no Army Standard Designs for this project.

2.6 Project design plans and specifications may be in English inch-pound units or the Metric SI System of measurements but the units for the site or building(s) must be consistent. The site survey drawings provided are in English units, as are the Site Layout Plan and Floor Plan. The Offerors may present their plans in either English or Metric units of measure.

2.7 The Facility (including site, building, restrooms, furniture, equipment) shall be handicap accessible meeting the requirements of Americans with Disabilities Act.

3. FUNDING CONSTRUCTION:

3.1 The funding limit for this project is stated in the notes to the bid schedule. Offerors are encouraged to provide proposals that stay within the budget.

4. DESIGN REQUIREMENTS

The proposal documents shall include adequate information in the form of narratives, drawings, calculations, catalog cuts, etc., to enable the Government to adequately review the proposal. Proposal documents shall include all requirements listed in the Contract Clauses and compliance with the format requirements is encouraged to facilitate review and award.

4.1 The design, following award, will include a 60% and final design submittal and corrected final design submittals. See Section 01030, DESIGN SUBMITTAL REQUIREMENTS.

4.2 The proposal drawings may be done with any CADD software. Once the contract is awarded all drawings will be initiated and done in MicroStation version SE or J software (or later version) in accordance with A/E/C CADD Standards Manual which is available at: (http://tsc.wes.army.mil/).

4.3 Codes, reference documents and criteria referenced within this RFP, although not attached, are an integral part of this RFP. Each proposer shall be responsible for securing any necessary reference at his own expense and resources. Requirements of this RFP may delete, revise, add to, or substitute for criteria contained in the referenced documents and this RFP shall be deemed the controlling authority of any changes to the other referenced documents and criteria.

4.4 Fire Protection narrative shall provide the following:

a. Provide certification by the fire protection engineer that the building designs shall comply with the life safety and fire protection provisions of the applicable criteria indicated in Section 01020.

b. Automatic fire extinguishing systems and hose standpipe systems: identification of all areas provided with sprinkler protection and the type of sprinkler system provided, sprinkler hazard classification for these areas, areas protected by other automatic suppression systems and the type system provided, buildings provided with hose standpipe systems and the type of standpipe system provided.

c. Fire alarm and detection systems: type of alarm and detection system, location of the fire alarm and detector equipment, and catalog data sheets of major components.

d. Specifications: Provide a list of UFGS guide specifications to be used and catalog cuts of major pieces of equipment showing conformance to the specifications.

e. Credentials of Fire Protection Engineer (Proposer). The design of the fire protection features shall be by a qualified fire protection engineer meeting one of the following conditions: 1) An engineer with a Bachelor of Science or Masters of Science Degree in fire protection engineering from an accredited university engineering program, plus a minimum of 5 years work experience in fire protection engineering. 2) A registered professional engineer who has passed the National Council of Examiners for Engineering and Surveys (NCEE) fire protection engineering written examination. 3) A registered P.E. in a related engineering discipline with a minimum of 5 years experience dedicated to fire protection engineering.

4.5 Life Safety Plans. Provide Fire Prevention/Life Safety Plans in accordance with Design Manual, 6.1.4.2.

5. EXPLANATION OF BID ITEMS:

5.1 General: This section comprises an explanation of the bid items identified in the bid schedule. This section is a general scope of work for the bid items described in the bid schedule and is not intended to be all-encompassing in the descriptions. All work specified herein shall be accomplished in accordance with the procedures prescribed in the technical provisions of the RFP. The Contractor shall bid each type of work under the applicable bid item. Measurement for payment will not be made. Payment described for the various bid items will be full compensation for all labor, materials, and equipment required to complete the work. Compensation for any item of work described in the contract but not listed in the bid schedule shall be included in the payment for the item of work to which it is made subsidiary.

5.2 Payment under Bid Item No. 0001, "Design Effort, Complete" will constitute full compensation for furnishing all materials, labor and other associated incidentals necessary to complete the design for the facilities including demolition, sitework and utility design in accordance with RFP. This also includes engineering services during construction to assure quality construction and commissioning of equipment. This item will also include the structural interior design work and renderings, and the comprehensive interior design work for the furniture.

5.3 Payment under Bid Item No. 0002, "Construction of Soldier Service Center Complete to 5 foot Building Line (FY-02, LI 51968)" will constitute full compensation for furnishing all materials, equipment, plant, tools, and all labor costs and other associated incidentals necessary to complete the construction of the building as proposed by the Contractor.

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5.4 Payment under Bid Item No. 0003, "Site Preparation and Development Including Utilities (Everything Outside the 5 foot Building Line, Complete): and Demolition of five buildings: Bldg. Nos. 251 (two structures), 470, 920, 1191, 1192, and capping utilities; roads and parking areas; miscellaneous site features" This will constitute full compensation for furnishing all materials, equipment, plants, tools, and all labor costs and other associated incidentals necessary to complete the construction of the work beyond the 5' building line including clearing, grubbing, grading, new curbs, gutters and pavement, landscaping, irrigation and all utilities~~.~~; and full compensation for asbestos abatement, disposition of debris and furnishing all materials, equipment, tools, and all labor and hauling costs and other associated incidentals necessary to complete.

~~5.6 Payment under Bid Item No. 0004, "Demolition of five buildings: Bldg. Nos. 251 (two structures), 470, 920, 1191 and 1192, and capping utilities; roads and parking areas; miscellaneous site features. Complete to 5 Foot Building Line" (Bid Item 0004). This will constitute full compensation for asbestos abatement, disposition of debris and furnishing all materials, equipment, tools, and all labor and hauling costs and other associated incidentals necessary to complete.~~

--End of Section--

SECTION 01020

DESIGN REQUIREMENTS

1. DESIGN REQUIREMENTS.

1.1 GENERAL. The Contractor shall design and construct the Soldier Service Center at Fort Stewart, Georgia resulting in complete and useable facilities.

2. DESIGN CRITERIA.

2.1 Information provided in the Appendices is intended to provide additional design requirements and information. Appendix "A" is Functional Room Requirements, a room-by-room summary of specific user requirements for functions within the new facility. Appendix "B" is the Life Safety/Fire Protection Analysis. Appendix "C" is the Room Finish Requirements Schedule. Appendix "D" is the SPIRIT Requirements and Point Summary. Appendix "E" contains Geotechnical Information. Appendix "F" contains environmental and abatement information. Appendix "G" contains the Interior Design Presentation Format Appendix "H" is the Sustainable Project Rating Tool (SpiRiT). Appendix "I" contains operating procedures for borrow pits.

2.2 Drawings included in this RFP include a conceptual site plans, floor plans, roof plans and elevations. The drawings represent an acceptable solution to the functional and aesthetic requirements for this facility. They have been coordinated with and approved by the using agency. Use of this design is optional.

3. SPECIFICATION INTENT. The intent of these specification sections is to describe the requirements for quality, function, and materials, and types of construction in sufficient detail to enable engineering and design to be completed by the Contractor. In this specification section, each engineering and design discipline describes design intent and outlines the parameters to which the Contractor shall design.

3.1 Section 01020 DESIGN REQUIREMENTS defines the design and performance criteria. The applicable building codes and standards shall be used as the minimum criteria to develop the construction documents unless more stringent criteria is defined for a specific area.

3.2 Section 01030 DESIGN AFTER AWARD defines the format and submittal requirements in which the design and the construction documents shall be prepared by the Contractor.

4. COORDINATION BETWEEN THE VARIOUS DISCIPLINES. The Contractor shall be responsible for the coordination between design, engineering and construction disciplines in order to fulfill the requirements of this contract and to provide for a complete, integrated and functional design.

5. QUALITY OF WORK. Construction documents shall be sufficient to afford a clear understanding of the construction work required. The work shall be organized in a manner that will assure thorough coordination between the various details on the drawings, and between the drawings and the specifications. The Contractor shall crosscheck all work until all conflicts have been reconciled. The US Army Corps of Engineers, Savannah District Design Manual, current edition, and Savannah District Guide Specifications are available on the Internet at:

http://www.hnd.usace.army.mil/TECHINFO/

SPECSINTACT software which is used to edit the guide specifications is available free of charge at the same site.

Unified Facilities Guide Specifications (UFGS) are available on the internet at:

http://www.hnd.usace.army.mil/

They shall be used as the basis for format and preparation of construction documents.

6. DESIGN REQUIREMENTS.

6.1 GENERAL.

6.1.1 The project shall be designed and constructed in accordance with the criteria contained herein using industry standard materials and efficient practices. The Contractor shall use materials and equipment accepted within the construction industry. The building design and the materials selected shall be high quality, durable and easily maintained.

6.1.2 The Contractor shall prepare complete construction documents for all work designed as required by the RFP. The construction documents to be prepared include, but are not limited to, construction drawings, specifications, submittals, and design analyses as required in Section 01030, DESIGN AFTER AWARD. The Contractor's Designers of Record shall develop construction document technical specifications for all areas of work.

6.1.3 The Contractor shall be responsible for the professional quality, code compliance, technical accuracy and coordination of all designs, drawings, specifications and other documents or publications upon which the design and construction are based.

*3

6.1.4 The project specifications shall be prepared using UFGS guide specifications. If a UFGS guide specification cannot be found, contact the Savannah District to see if a guide specification exists. If a guide specification does not exist the Design/Build Contractor will prepare a job-specific specification. The UFGS shall be edited and adapted by the designer for this project, incorporating UFGS instructions and recommendations in the notes to specifier contained in the guide specs. The designer is to delete inapplicable portions of the guide specification and revise and/or supplement, as required, the applicable portions to provide a complete project specification. Editing of specifications shall be for bracketed options and project requirements as stated in the RFP only. Deviations will not be allowed without prior approval from the Contracting Officer. Specifications shall be submitted at final design submittal in hard copy form that shows the text added and deleted with additions highlighted and deletions lined through but still readable. This feature is available in SPECSINTACT or Microsoft Word. In Microsoft Word this feature is located under “Tools”, “Track Changes” and “Highlight Changes”. Following is a partial list of UFGS specifications required for this project. Other UFGS sections shall be added and submitted by the Design/Build Contractor as needed to address all other portions of the work in the accepted proposal. Use the Division 01 GENERAL REQUIREMENTS specifications as provided in the RFP. No changes to ~~these~~ 01 General Requirements sections are allowed.

Division 01 General Requirements

UF-01320A Project Schedule
UF-01330 Submittal Procedures
UF-01355 ENVIRONMENTAL PROTECTION
UF-01356A STORM WATER POLLUTION PREVENTION MEASURES
UF-01415 METRIC MEASUREMENTS
UF-01420 REFERENCES
UF-01451A CONTRACTOR QUALITY CONTROL
UF-01572A CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT
UF-01670A RECYCLED/RECOVERED MATERIALS
UF-01780A CLOSEOUT SUBMITTALS
UF-01781N OPERATION AND MAINTENANCE DATA

Division 02 Sitework

UF-02081 DEMOLITION (Obtain from Savannah District COE)
UF-02115A UNDERGROUND STORAGE TANK REMOVAL
UF-02120A TRANSPORTATION AND DISPOSAL OF HAZARDOUS MATERIALS
UF-02210A SUBSURFACE DRILLING, SAMPLING, AND TESTING
UF-02217A FOUNDATION PREPARATION
UF-02220A DEMOLITION
UF-02230A CLEARING AND GRUBBING
UF-02233A CLEARING (TIMBER AND STRUCTURE)
UF-02300A EARTHWORK
UF-02315A EXCAVATION, FILLING AND BACKFILLING FOR BUILDINGS
UF-02316A EXCAVATION, TRENCHING AND BACKFILLING FOR UTILITIES SYSTEMS
UF-02364A TERMITICIDE TREATMENT MEASURES FOR SUBTERRANEAN TERMITE CONTROL
UF-02370A SOIL SURFACE EROSION CONTROL
UF-02510A WATER DISTRIBUTION SYSTEM
UF-02531A SANITARY SEWERS
UF-02555A PREFABRICATED UNDERGROUND HEATING/COOLING DISTRIBUTION SYSTEM
UF-02556A GAS DISTRIBUTION SYSTEM
UF-02621A FOUNDATION DRAINAGE SYSTEM
UF-02630 STORM DRAINAGE SYSTEM
UF-02721A SUBBASE COURSES
UF-02722A AGGREGATE AND/OR GRADED-CRUSHED AGGREGATE BASE COURSE
UF-02741A HOT-MIX ASPHALT (HMA) FOR ROADS
UF-02742A BITUMINOUS BINDER AND WEARING COURSES (CENTRAL-PLANT COLD-MIX)
UF-02744A BITUMINOUS ROAD-MIX SURFACE COURSE
UF-02745A BITUMINOUS SURFACE TREATMENT
UF-02754A CONCRETE PAVEMENTS FOR SMALL PROJECTS
UF-02763A PAVEMENT MARKINGS
UF-02770A CONCRETE SIDEWALKS AND CURBS AND GUTTERS
UF-02785A BITUMINOUS SEAL COAT, SPRAY APPLICATION
UF-02811A UNDERGROUND SPRINKLER SYSTEMS
UF-02840A VEHICLE BARRIERS
UF-02870A SITE FURNISHINGS
UF-02915A TRANSPLANTING EXTERIOR PLANT MATERIAL
UF-02921A SEEDING
UF-02922A SODDING
UF-02930A EXTERIOR PLANTING
UF-02935A EXTERIOR PLANT MATERIAL MAINTENANCE

Division 03 Concrete

UF-03150A EXPANSION JOINTS, CONTRACTION JOINTS, AND WATERSTOPS
UF-03307A CONCRETE FOR MINOR STRUCTURES
UF-03413A PRECAST ARCHITECTURAL CONCRETE

Division 04 Masonry

UF-04220A NON-BEARING MASONRY VENEER/STEEL WALLS

Division 05 Metals

UF-05055A METALWORK FABRICATION, MACHINE WORK, MISCELLANEOUS PROVISIONS
UF-05090A WELDING, STRUCTURAL
UF-05120A STRUCTURAL STEEL
UF-05210A STEEL JOISTS
UF-05300A STEEL DECKING
UF-05400A COLD-FORMED STEEL FRAMING
UF-05500A MISCELLANEOUS METAL

Division 06 Woods and Plastics

UF-06100A ROUGH CARPENTRY
UF-06200A FINISH CARPENTRY

Division 07 Thermal and Moisture Protection

UF-07110A BITUMINOUS DAMPPROOFING
UF-07131A ELASTOMERIC MEMBRANE WATERPROOFING
UF-07220A ROOF INSULATION
UF-07240A EXTERIOR INSULATION AND FINISH SYSTEM
UF-07416A STRUCTURAL STANDING SEAM METAL ROOF (SSSMR) SYSTEM
UF-07600A SHEET METALWORK, GENERAL
UF-07720A ROOF VENTILATORS, GRAVITY-TYPE
UF-07840A FIRESTOPPING
UF-07900A JOINT SEALING

Division 08 Doors and Windows

Uf-08110 STEEL DOORS AND FRAMES
UF-08210 WOOD DOORS
UF-08331A METAL ROLLING COUNTER DOORS
UF-08520A ALUMINUM AND ENVIRONMENTAL CONTROL ALUMINUM WINDOWS
UF-08710 DOOR HARDWARE
UF-08810A GLASS AND GLAZING
UF-08850 FRAGMENT RETENTION FILM FOR GLASS
UF-08900 GLAZED CURTAIN WALL

Division 09 Finishes

UF-09000 BUILDING COLOR AND FINISH SCHEDULE
UF-09250A GYPSUM WALLBOARD
UF-09310A CERAMIC TILE
UF-09510A ACOUSTICAL CEILINGS
UF-09650A RESILIENT FLOORING
UF-09680A CARPET
UF-09900A PAINTING, GENERAL
UF-09915 COLOR SCHEDULE

Division 10 Specialties

UF-10160A TOILET PARTITIONS
UF-10260A WALL AND CORNER PROTECTION
UF-10430A EXTERIOR SIGNAGE
UF-10440 INTERIOR SIGNAGE
UF-10650A OPERABLE PARTITIONS
UF-10800A TOILET ACCESSORIES

Division 11 Equipment

UF-11400A FOOD SERVICE EQUIPMENT
UF-11710A WARMING CABINETS, STERILIZERS, AND ASSOCIATED EQUIPMENT

Division 12 Furnishings

UF-12320A CABINETS AND COUNTERTOPS
UF-12490A WINDOW TREATMENT
UF-12705 FURNITURE SYSTEMS

Division 13 Special Construction

UF-13080 SEISMIC PROTECTION FOR MISCELLANEOUS EQUIPMENT
UF-13090A X-RAY SHIELDING
UF-13100A LIGHTNING PROTECTION SYSTEM
UF-13280A ASBESTOS ABATEMENT
UF-13851A FIRE DETECTION AND ALARM SYSTEM, ADDRESSABLE
UF-13930A WET PIPE SPRINKLER SYSTEM, FIRE PROTECTION

Division 14 Conveying Systems

UF-14240A ELEVATORS, HYDRAULIC

Division 15 Mechanical

UF-15070A SEISMIC PROTECTION FOR MECHANICAL EQUIPMENT
UF-15080A THERMAL INSULATION FOR MECHANICAL SYSTEMS
UF-15181A CHILLED AND CONDENSED WATER PIPING AND ACCESSORIES
UF-15190A GAS PIPING SYSTEMS
UF-15217N MEDICAL GAS AND VACUUM PIPING
UF-15400A PLUMBING, GENERAL PURPOSE
UF-15405A PLUMBING, HOSPITAL
UF-15566A WARM AIR HEATING SYSTEMS
UF-15569A WATER AND STEAM HEATING; OIL, GAS OR BOTH; UP TO 20 MBTUH
UF-15620A 08/01 LIQUID CHILLERS
UF-15700A UNITARY HEATING AND COOLING EQUIPMENT
UF-15895A AIR SUPPLY, DISTRIBUTION, VENTILATION, AND EXHAUST SYSTEM
UF-15951A DIRECT DIGITAL CONTROL FOR HVAC
UF-15990A TESTING, ADJUSTING, AND BALANCING OF HVAC SYSTEMS
UF-15995A COMMISSIONING OF HVAC SYSTEMS

Division 16 Electrical

UF-16070A SEISMIC PROTECTION FOR ELECTRICAL EQUIPMENT
UF-16370A ELECTRICAL DISTRIBUTION SYSTEM, AERIAL
UF-16375A ELECTRICAL DISTRIBUTION SYSTEM, UNDERGROUND
UF-16415A ELECTRICAL WORK, INTERIOR
UF-16528A EXTERIOR LIGHTING
UF-16710A PREMISES DISTRIBUTION SYSTEM
UF-16711A TELEPHONE SYSTEM, OUTSIDE PLANT
UF-16768A FIBER OPTIC DATA TRANSMISSION SYSTEM
UF-16770A RADIO AND PUBLIC ADDRESS SYSTEMS
UF-16782N COMMUNITY ANTENNA TELEVISION SYSTEM

7. RFP DESIGN AND TECHNICAL CRITERIA. All design and construction document drawings and specifications shall be prepared to comply with the RFP. The RFP describes the design work that shall not be changed, and shall be included in the construction documents. All remaining design work shall be performed by the Contractor based on the design criteria as required by the RFP. No deviations from the criteria will be allowed unless prior approval is obtained from the Contracting Officer's Representative. All questions or problems

encountered by the Contractor in following criteria shall be promptly submitted with recommendations to the Contracting Officer's Representative for approval.

7.1 CONFLICTS IN RFP CRITERIA. Where the various elements of the RFP are in conflict, the following priority shall be used to establish precedence, unless specifically noted otherwise:

1. Specifications
2. Drawings

8. APPLICABLE BUILDING CODES AND STANDARDS. The following codes of the most current edition shall be used as standards for building construction and life safety design. Where there is a conflict between the RFP and building codes, the most stringent shall apply. When codes are in conflict, the most stringent shall apply. This list is not intended to be a complete list. All work shall be designed and constructed to meet all state and federal codes, standards and laws. Refer to the technical specifications for other standards and references not listed below.

Regulatory, Reference Requirements and Standards

ASSOCIATED AIR BALANCE COUNCIL (AABC) PUBLICATIONS

AMERICAN CONCRETE INSTITUTE

ACI 318-99 Building Code Requirements for Structural Concrete

ACI 301 Specifications for Structural Concrete for Buildings

ACI 302 Guide for Concrete Floors and Slab Construction

ACI-530-95/ASCE 5-95 Building Code Requirements for Masonry Structures

AMERICANS WITH DISABILITIES ACT (ADA)

Accessibility Guidelines for Buildings and Facilities. Available from US Architectural and Transportation Barriers Compliance Board, 1111 18th Street, N.W., Suite 501, Washington, DC 20036-3894, (202) 653-7834 v/TDD or (202) 653-7863 FAX

AASHTO American Association of State Highway and Transportation Officials

A policy on Geometric Design of Highways and Streets, AASHTO

ADAAG Americans with Disabilities Act Accessibility Guidelines

ARMY/AIR FORCE TECHNICAL MANUAL ™

TM 5-337 Paving & Surfacing Operations

TM 5-785 Engineer Weather Data

TM 5-805-4 Noise and Vibration Control for Mechanical Equipment

TM 5-809-12 Concrete Floor Slabs on Grade Subjected to Heavy Loads

TM 5-810-5 Plumbing

TM 5-811-1 Electrical Power Supply and Distribution

TM 5-811-2 Electrical Design Interior Electrical Systems

TM 5-811-3 Electrical Design Lightning and Static Electricity

TM 5-811-9 Voice/Data Systems

TM 5-811-13 Standards for High-Efficiency Motors and Controllers

TM 5-811-14 Coordinated Power System Protection

TM 5-812-2 Energy Monitoring & Control Systems

TM 5-813-5 Water Supply, Water Distribution

TM 5-814-1 Sanitary and Industrial Wastewater Collection - Gravity Sewers and Appurtenances

TM 5-822-2/ AFM 88-7, Chap. 5, General Provisions and Geometric Design for Roads, Streets, Walks, and Open Storage Area

TM 5-822-5 Pavement Design for Roads, Streets, Walks, and Open Storage Areas

TM 5-822-7 Standard Practice for Concrete Pavements

TM 5-822-8 Bituminous Pavements Standard Practice

TM 5-822-13 Pavement Design for Roads, Streets, and Open Storage Areas, Elastic Layered Method

TM 5-811-7 Electrical Design, Cathodic Protection

TM 5-853-1/ AFMAN 32-1071, Vol. 1 Security Engineering Project Development

TM 5-853-3/ AFMAN 32-1071, Vol. 3 Security Engineering Final Design Interim Department of Defense Antiterrorism/Force Protection Construction Standards

Manual for Erosion and Sediment Control in Georgia (latest-edition)

ARMY/COE MILITARY HANDBOOKS

MIL-HDBK-1190 Sept. 1987, Facility Planning and Design Guide

MIL-HDBK-1008C Fire Protection for Facilities Engineering, Design, and Construction, 1997

ARMY REG 190-11 Physical Security of Arms, Ammunition and Explosives

ENGINEER TECHNICAL LETTER (ETL), MANUAL (EM) AND REGULATIONS (ER)

EM 1110-2-1906 Laboratory Soils Testing

EM 1110-2-1909 Calibration of Laboratory Soils Testing Equipment

EM 1110-2-3102 General Principals of Pumping Station Design and Layout

ETL 91-6 Cathodic Protection

ETL 94-4 Energy Usage Criteria for Facilities in the Military Construction Program

ETL 1110-3-403 Electrical Power Systems for Nonlinear Loads

ETL 1110-3-412 Transformer Application Guide

ETL 1110-3-466 Selection and Design of Oil/Water Separators at Army Facilities

ETL 1110-3-474 Cathodic Protection

ETL 1110-9-10 Cathodic Protection System Using Ceramic Anodes

ER 1110-3-110 Information Systems Design in Support of Military Construction

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

AISC Load and Resistance Factor Design Specifications for Structural Steel Buildings

AISC Code of Standard Practice for Steel Buildings and Bridges

AISC LRFD Specification for Structural Joints Using ASTM A325 or A490 Bolts

AMERICAN IRON AND STEEL INSTITUTE (AISI)

American Iron and Steel Institute (AISI), Specification for the Design of Cold-Formed Steel Structural Members

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/ASME 17.1 - 2000 Safety Code for Elevators and Escalators

ANSI 302.9 Standard Test Methods for Impact Resistance of Flat Rigid Plastic Specimens by Means of a TUP (Falling Object)

*5
ANSI 358.1 (1998) Emergency Eyewash and Shower Equipment.

ANSI 402.9 Retaining Rings

ANSI A117.1 (1986) Buildings and Facilities - Providing Accessibility and Usability for Physically Handicapped People

ANSI A156.1 (1988) Butts and Hinges (BHMA 101)

ANSI A156.2 (1989) Bored and Preassembled Locks and Latches (BHMA 601)

ANSI A156.4 (1992) Door Controls - Closers

A156.5 (1992) Auxiliary Locks and Associated Products

ANSI A156.9 (1988) Cabinet Hardware (BHMA 201)

ANSI A156.12(1992) Interconnected Locks and Latches

ANSI A161.1 (1990) Recommended Construction and Performance Standards for Kitchen and Vanity Cabinets

ANSI B16.3-85Malleable Iron Threaded Fittings, Classes 150 and 300

ANSI C2 (1996) National Electrical Safety Code

ANSI C57.12.28 (1988) Liquid-Filled Distribution Transformers Used In Pad-Mounted Installations, Including Unit Substations

ANSI Z21.45 (1985; Z21.ag; Z21.45b) Flexible Connectors of Other Than All Metal Construction for Gas Appliances (Fourth Edition)

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)

Air Conditioning and Refrigeration Institute (ARI), publication Directory of Certified Unitary Air Conditioners, latest edition.

AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE)

ASCE 7 (1995) Minimum Design Loads for Buildings and Other Structures

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR CONDITIONING ENGINEERS(ASHRAE)

ASHRAE Handbooks (Latest Edition)

Standard 62 (1999) Ventilation for Acceptable Indoor Air Quality

Standard 90.1(1999) Energy Standards for Buildings except Low-Rise Residential Buildings

Standard 15 (1994) Safety Code for Mechanical Refrigeration

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 48 (1983; R 1990) Gray Iron Castings

ASTM C 136 (2001) Sieve Analysis of Fine and Coarse Aggregates

ASTM C 478 (1990b) Precast Reinforced Concrete Manhole Sections

ASTM D 420 (1998) Site Characterization for Engineering, Design, and Construction Purposes

ASTM D 422 (1963; R 1998) Particle-Size Analysis of Soils

ASTM D 1140 (2000) Amount of Material in Soils Finer than the No. 200 (75-Micrometer) Sieve

ASTM D 1556 (2000) Density of Soil in Place by the Sand-Cone Method

ASTM D 1557 (2000) Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3))

ASTM D 1586 (1999) Penetration Test and Split-Barrel Sampling of Soils

ASTM D 1587 (2000) Thin-Walled Tube Sampling of Soils for Geotechnical Purposes

ASTM D 2216 (1998), Laboratory Determination of Water (Moisture) Content of Soil, and Rock

ASTM D 2487 (2000) Classification of Soils for Engineering Purposes

ASTM D 2488 (2000) Description and Identification of Soils (Visual-Manual Procedure)

ASTM D 2661 (2001) Acrylonitrile-Butadiene-Styrene (ABS) Plastic Drain, Waste, and Vent Pipe and Fittings

ASTM D 2665 (2001) Poly(Vinyl Chloride) (PVC) Plastic Drains, Waste, and Vent Pipe and Fittings

ASTM D 2666 (1996a) Polybutylene (PB) Plastic Tubing

ASTM D 3441 (1998) Standard Test Method for Deep, Quasi-Static, Cone And Friction-Cone Penetration Tests of Soil

ASTM D 4318 (2000) Liquid Limit, Plastic Limit, and Plasticity Index of Soils

ASTM D5778 (2000) Standard Test Method for Performing Electric Friction-Cone and Piezocone Penetration Testing of Soils

ASTM E 119 (2000a) Standard Test Methods and Fire Tests of Building Construction and Materials

ASTM E 779 (1999) Standard Test Method for Determining Air Leakage Rate by Fan Pressurization

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)

Directory of Certified Unitary Air Conditioners (Latest Edition)

U.S. Army Corps of Engineers, Architectural and Engineering Instructions, Design Control

TECHNICAL INSTRUCTIONS (TI)

TI 800-01 Design Criteria

TI 809-04 Seismic Design For Buildings

TI 809-07 Design of Cold-Formed Load Bearing Steel Systems

TI 810-10 Mechanical Design Heating, Ventilating, and Air Conditioning

TI 810-11 Heating, Ventilating and Air Conditioning (HVAC) Control System

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA Standards

AWWA C500 (Latest Edition) Gate Valves for Water and Sewerage Systems (DOD adopted)

AWWA C502 (Latest Edition) Dry-Barrel Fire Hydrants

AMERICAN WELDING SOCIETY (AWS)

DEPARTMENT OF THE ARMY

Pamphlet 385-64 (1999) Ammunition and Explosives Safety Standards

DEPARTMENT OF DEFENSE

Department of Defense Antiterrorism Construction Standards, DRAFT, 2 Oct 2001

ENVIRONMENTAL PROTECTION AGENCY (EPA)

EPA 340/1-90-018 (1990) Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance

EPA 340/1-90-019 (1990) Asbestos/NESHAP Adequately Wet Guidance

EPA 402-R-94-009 (1994) Model Standards and Techniques for Control of Radon in New Residential Buildings

EPA 560/5-85-024 (1985) Guidance for Controlling Asbestos Containing Materials in Buildings

FACTORY MUTUAL SYSTEM (FM) STANDARDS

FEDERAL COMMUNICATIONS COMMISSION (FCC)

FCC Part 15 (Jul 1986) Rules and Regulations: Radio Frequency Devices

FEDERAL HIGHWAY ADMINISTRATION

Federal Standard 595, Uniform Federal Accessibility Standards

FEDERAL REGULATIONS

The Federal Clean Water Act
40 CFR 122 National Pollutant Discharge Elimination System
40 CFR 141 National Primary Drinking Water Regulations
Safe Drinking Water Act, Public Law 95-190 as amended
40 CFR 122 National Pollutant Discharge Elimination System
Federal Standard 595, Uniform Federal Accessibility Standards.
Public Law 89-665, National Historic Preservation Act of 1966, October 15, 1966, as amended by Public Law 95-515, December 12, 1980.
Archaeological Resources Protection Act of 1979, Public Law 96-95, 93 STAT-721.
AR 420-40, Historic Preservation, 15 May 1984
TM 5-801-1, Historic Preservation, Administrative Procedures, November, 1995.
TM 5-801-2, Historic Preservation Maintenance Procedures, February 1977.
Secretary of the Interior's Standards and Guidelines. For construction on military installation, plans must be coordinated with the local Environmental Coordinator or Environmental Manager.

FEDERAL STANDARD SPECIFICATIONS (FS)

FED-STD 595 (Rev B) Colors
FS795 Federal Standard 795 (Accessibility)

FS WW-P-541 Plumbing Fixtures

FS WW-P-541/5 Plumbing Fixtures (Sinks, Kitchens, Service, Laundry Trays - Detail Specification)

FORT STEWART DESIGN GUIDELINES

Installation Guide / Fort Stewart, GA

INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS

International Plumbing Code

ILLUMINATING ENGINEERING SOCIETY (IES)

(2000) LIGHTING HANDBOOK REFERENCE AND APPLICATION, 9TH EDITION

INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)

IEEE STD 144	IEEE Recommended Practice for Grounding of Industrial and Commercial Power Systems
IEEE Std. 519	Practices and Requirements for Harmonic Control in Electrical Power Systems
IEEE Std. 1100	Powering and Grounding Sensitive Electronic Equipment

INTERNATIONAL PLUMBING CODE

MILHDBK 1008C	EC 1110-1-94 Engineering and Design Classification of Construction

NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS (NAAMM)

NAAMM-01	(1988) Metal Finishes Manual for Architectural and Metal Products

NATIONAL ASSOCIATION OF CORROSION ENGINEERS (NACE)

NACE RP0169	Control of External Corrosion and Underground or Submerged Metallic

NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB), NEBB PUBLICATIONS

NEBB-01	(1991) Procedural Standards for Testing, Adjusting, and Balancing of Environmental Systems

NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA)

Specifications for the Design and Construction of Load Bearing Concrete Masonry

NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION (NEMA)

NEMA PB 1	(1990; PB 1.1-1986) Panelboards
NEMA PB 2	(1989; PB 2.1-1986) Deadfront Distribution Switchboards

NATIONAL FIRE PROTECTION ASSOCIATION CODES AND STANDARDS (NFPA)

NFPA 70	(1999) National Electrical Code
NFPA 72	(1999) National Fire Alarm Code
NFPA 101	(2000) Life Safety Code
NFPA 780	(1997) Installation of Lightning Protection Systems

National Fire Codes (NFC) Current as of 2001

NATIONAL FOREST PRODUCTS ASSOCIATION (NFPA)

OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)

29 CFR Occupational Safety and Health Standards Part 1910

10 CFR 435B Energy Conservation Performance Standards

29 CFR 1926 Safety and Health Regulations for Construction

40 CFR 61 National Emission Standards for Hazardous Air Pollutants

40 CFR 260 Hazardous Waste Management System General

40 CFR 261 Identification and Listing of Hazardous Waste

40 CFR 763 Asbestos

SAVANNAH DISTRICT DESIGN MANUAL
Design Manual for Military Construction, June 2000

SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION (SMACNA)

STATE OF GEORGIA REGULATIONS

Georgia Department of Natural Resources – Georgia Rule 391-3-6-.16
Georgia Department of Natural Resources - Georgia Rule 391-3-5-.04
Georgia Department of Natural Resources - Georgia Rule 391-3-6-.08
Department of Transportation State of Georgia
Standard Specifications Construction of Roads and Bridges, 1993
Supplemental Specifications Modifying the 1993 Standard Specifications for Construction of Roads and Bridges, 1997

10 STATE STANDARDS

Recommended Standards for Water Works
Recommended Standards for Wastewater Facilities

STEEL DECK INSTITUTE (SDI)

STEEL DECK INSTITUTE DIAPHRAGM DESIGN MANUAL (Second Edition)

STEEL JOIST INSTITUTE

STANDARD PLUMBING CODE (SBCC)

Standard Specification for Load Table for Open Web Joists (latest edition)

TELECOMMUNICATIONS INDUSTRY ASSOCIATION/ELECTRONIC INDUSTRIES ALLIANCE (TIA/EIA)

TIA/EIA 568-B (2001) Commercial Building Telecommunications Cabling Standard

TIA/EIA 569A (1998) Commercial Building Standard for Telecommunications Pathways and Spaces

TIA/EIA 606 (1993) Administration Standard for the

Telecommunications Infrastructure of Commercial Buildings

TIA/EIA 607 (1994) Commercial Building Grounding and Bonding Requirements for Telecommunications

TIA/EIA 758 (1999) Customer Owned Outside Plant Telecommunications Cabling Standard

UNIFORM BUILDING CODE (UBC) OF THE INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS, 1997 Edition

UNDERWRITERS LABORATORIES STANDARDS (UL)

UNIFORM FEDERAL ACCESSIBILITY STANDARD (UFAS)

UNIFORM MECHANICAL CODE (UMC)

UNITED STATES ARMY INFORMATION SYSTEMS ENGINEERING COMMAND

CE99008 (2000) Outside Plant Performance Requirements

I3A (2001) Installation Information Infrastructure Architecture (I3A) Implementation Guide

WATER ENVIRONMENTAL FEDERATION

Water Environment Federation Manual of Practice No. FD-5, Gravity Sanitary Sewer Design and Construction, except asbestos and asbestos cement products shall not be allowed.

9. METRIC DESIGN. If the Contractor chooses to develop the design using metric measurements, the following shall apply: Use the hard metric system. The site survey and concept plans are done in English units. The Contractor shall coordinate. Specifications requiring metric measurements may contain requirements for equipment (e.g. printers, HVAC systems) described in inch-pound (I-P) units in which case no metric substitution will be allowed. Specifications requiring metric measurements shall include references to related non-metric industry and/or Government standards. Discrepancies, such as mismatches or product unavailability, arising from use of metric measurements and discrepancies between the measurements in the specifications and the measurements in the drawings shall be resolved by the Contractor. Submittals for Government approval or for information only shall cover the SI or I-P products actually being furnished for the project. The Contractor shall submit the required drawings and calculations in the same units used in the contract documents describing the product or requirement unless otherwise instructed or approved. The Contractor shall use ASTM E 380 and ASTM E 621 as the basis for establishing metric measurements required to be used in submittals.

10. GENERAL CONSTRUCTION REQUIREMENTS.

10.1 Government-Furnished Government-Installed Equipment (GFGI). All existing loose furniture, equipment, computers and related hardware, video projectors, VCR's, TV's, drink machines, vending machines, microwaves, and refrigerators are Government furnished and installed. The Contractor shall provide utility connections and space for these items.

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10.2 Government-Furnished Contractor-Installed Equipment (GFCI). The items to be specified in the Comprehensive Interior Design Package (modular office furniture and new loose furnishings) are **NOT** GFCI equipment. ~~See Appendix 'C' to the specifications. The installation of these items is an Option No. 1 as indicated in the Bid Schedule.~~

11. SITE CONDITIONS AND REQUIREMENTS.

11.1 Project Limits. The Contractor shall confine all work within the area shown on the site plan and in paragraph 12.1 below.

11.2 Hazardous Materials And Contamination. The Government does not anticipate that the Contractor will be required to remove or dispose of any hazardous materials or waste during the site preparation phase of this project.

11.3 Omitted.

11.4 DISPOSAL OF WASTE MATERIALS.

11.4.1 The Contractor shall identify, as a part of his submittals required by this contract, the specific disposal site or sites for any waste materials generated by the contractors operations at Fort Stewart.

11.4.1.1 The Contractor's haul route to the disposal site or sites shall be coordinated with and approved by the Installation Planning Branch.

11.4.2 The Contractor shall edit and submit the following UFGS as defined in Section 01030, DESIGN AFTER AWARD:

> 01410 Environmental Protection. In addition to other requirements within Specification 01410, the following SD-18 Records shall be listed requiring Government Approval: specific disposal sites, documentation (i.e., weight tickets, etc.), and compliance of disposal by resale.

*4
11.5 STAKING, DEMOLITION AND REMOVALS. The Contractor shall field survey and stake-out the project boundaries before starting work on demolition activities. The survey drawing provided in the RFP indicates existing conditions and locations of existing utilities. The Contractor may utilize the utilities during construction operations and may incorporate the utilities as part of the final project. If these existing utilities are determined to be inadequate for construction operations or incorporation into the final facility, they will be upgraded as part of the construction project. However, if the Contractor elects not to use the existing utilities, they will be demolished and removed as part of the construction project. All utilities to be demolished shall be demolished so that no abandoned systems remain at the end of construction. Existing utilities that interfere with this project will be relocated. The information shown on the survey drawing is the most recent data. The Contractor shall prepare and provide an as-built survey of the construction. All demolition debris shall be removed from Ft. Stewart. The Ft. Stewart landfill will not accept demolition debris from this project. ~~to the Ft. Stewart Landfill.~~ The haul route for vehicles leaving Ft. Stewart with demolition debris shall be coordinated with the Installation Planning Branch.

11.5.1 Trees. Removal of tree trunks is not included in the Contract. Removal of branches left after tree trunk removal, stumps, roots, and other debris is in the Contract. Tree trunks will be harvested at start of the

Contractor's design phase. Removal of items in Contract shall occur during the Design Phase so that site is prepared for building construction by the end of design.

11.6 Site Access. Access gate to Base and access route to demolition and construction sites shall be determined at the start of construction by the Installation Planning Branch.

12. NEW SITE DESIGN AND CONSTRUCTION. The concept site plan presents the general geometric layout for the site work. The Contractor shall design the paving, sidewalks and utilities including fire hydrants, irrigation and street lights. The Contractor shall prepare, submit and obtain approval of an erosion control plan prior to start of land disturbing activities.

12.1 Project Limits. The Contractor shall confine all work within the area of the project limits shown on the concept site plan.

12.2 A Stormwater Pollution Prevention Plan (Best Management Plan) shall be designed and included in the design submittals shown in Section 01030. The approved plan shall be onsite at all times for inspection by EPA, GA DENR, and Fort Stewart environmental personnel. All activities in the approved plan shall be implemented. The Contractor shall control erosion and sedimentation during construction. Sedimentation of adjacent sites or downstream ditches will not be permitted. The plan shall be approved and permitted by Georgia Department of Environmental and Natural Resources (GA DENR).

12.3 CONSTRAINTS.

12.3.1 The new project grading and storm water system shall not impact the surrounding buildings. Construction shall not impact the existing drainage system adjacent to the site.

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12.3.2 Building Setback Requirements. The building shall be located on the site in accordance with the "Interim Department of Defense Antiterrorism/Force Protection (AT/FP) Construction Standards" dated 16 Dec 99.~~DOD Antiterrorism/Force Protection Construction Standards.~~

~~Building Setbacks~~	~~Minimum acceptable~~
~~Building front to edge of pavement for vehicles~~	~~90 feet at controlled perimeter situations~~

The Contractor shall harden the structure if minimum setback requirements are not met.

12.3.3 The trees on the site shall be incorporated in the design, retained and protected during construction to the extent possible.

12.4 Access Drives, Parking And Sidewalks. Connections to existing asphalt or concrete pavements shall be accomplished by saw cutting the adjacent existing pavement.

12.4.1 Width Criteria. All pavement and radii dimensions in this section are from back of curb to back of curb or as shown. Parking lot islands do not have curb and gutter. Minimum access drive width shall be 7.62 meters (25 feet). Minimum turning radius for all intersections shall be 9 meters (30 feet) except where fire truck access and semi-truck and trailer access is required a 15.3 meter (50 feet) radius is required. Designer shall consider the types of vehicles traversing and parking on these facilities. Vehicles

shall include but not be limited to: passenger cars, emergency vehicles, garbage, fire trucks, military vehicles, delivery service, and utility vehicles. Contractor shall provide traffic control signs and pavement markings. Parking stripes shall be white and handicap parking stripes shall be blue.

12.4.2 Curb and Gutters. All gradients shall provide positive drainage (no ponding). Curb cuts shall be provided as necessary for pavement drainage.

12.4.3 Pavement Thickness. Pavement structure shall be designed for actual vehicle loadings and frequencies. Access drives shall be asphalt pavement with graded crushed aggregate base course, or portland cement concrete. See the conceptual site plan for locations of each pavement type. Pavement structure thickness shall be in accordance with PCASE Program, latest version. Pavement structure shall be designed for a twenty year pavement life.

12.4.3.1 Concrete Pavement. A concrete joint layout plan shall be required for all concrete pavements. Joint spacing, joint types, and joint grading shall be shown. Concrete pavement thickness shall be designed for an equivalent 8,165 kilogram (18,000 pound) single axle load for the design vehicle loading and number of passes. Pavement life shall be twenty years. Concrete pavement shall be designed in accordance with TM 5-822-5, Chapter 1. Concrete pavement shall be non-reinforced except for odd shaped slabs. The number of joints shall be kept to a minimum by using the greatest joint spacing which will effectively control cracking. The maximum length to width ratio of the slabs shall be 125 percent. Joint sealant type shall be preformed compression seal.

12.4.4 SIDEWALKS. Sidewalks, minimum 1.83 meters (6 feet) wide, shall be provided as indicated on the concept site plan. Sidewalks shall be widened as necessary to meet building entrance and exit way widths. Sidewalks shall connect the parking areas to the building exits. Sidewalks shall be concrete with a minimum nominal thickness of 100 mm (4 inch) with 2,109,300 kilograms per square meter (3000 psi) compressive strength. Contraction joints shall be spaced at 1.83 meters (6 feet) on center and expansion joints shall be placed at 15.24 meters (50 feet) on center and at the intersection of walks and curbs. Minimum cross slope on sidewalks shall be 2 percent. Sidewalks allowing vehicular crossings or in odd shapes shall be reinforced with wire mesh.

12.4.5 Handicapped Access. Ramps shall be provided for handicapped access. Number of parking slots and site access for the physically disabled shall be as required by ADAAG, UFAS and FS 795.

12.4.6 PARKING.

12.4.6.1 Parking shall be provided as generally indicated in the layout presented in the concept site plan. All parking shall be 90 degrees off-street parking. Handicap parking stalls shall be provided. Area lighting and landscaping shall reinforce the parking area in accordance with the Fort Stewart Installation Design Guide while meeting functional and safety requirements.

12.4.6.2 Parking areas shall be paint striped and adequately drained. Parking stalls shall be a minimum of 2740 mm by 5486 mm (9 feet by 18 feet). Paint markings shall be 100 mm (4 inch) in width. Traffic isles shall be 3,660 mm (12 feet) in width.

12.4.6.3 Parking area drainage shall sheet flow to grassed swales then into the storm collection system. Parking area slopes shall be adequate to provide proper drainage. Minimum slopes across pavement shall be 1 percent.

12.4.6.4 Parking areas design shall conform to TM 5-822-3. Parking stalls and access drives shall be asphalt pavement with graded crushed aggregate base course. Pavement structure thickness shall be in accordance with TM 5-822-5, Chapter 3. The pavement structure shall be designed for a twenty year pavement life. Pavement under and for 12 feet in front of dumpsters shall be heavy duty concrete.

12.4.6.5 Area Lighting. The Contractor shall design parking lot area lighting and shall install poles and fixtures. See Electrical for type.

12.5 Building Connection to the Site.

12.5.1 The finish floor shall be a minimum of 150 mm (6-inch) above finished grade.

12.5.2 Finished grade shall slope a minimum of 5 percent away from the new building for a distance of 3 meters (10 feet).

13. FOUNDATION AND GEOTECHNICAL DESIGN

13.1 Government Investigation

The Government has performed geotechnical explorations at the project site. The locations of and drilling logs of soil test borings are shown on the drawings included with this RFP. A report of the explorations and analysis is included in an appendix. The “preliminary” report provides an overview of the soils and geologic conditions, and is furnished for informational and proposal purposes and not for final design; however, the recommendations provided in the report shall be considered to be minimum requirements that shall be incorporated into the final design and construction of the project.

13.2 Contractor Investigation

The offeror, to whom this contract is awarded, shall employ the services of a consulting professional geotechnical engineer experienced in geotechnical engineering, who shall be responsible for determining site-specific geotechnical conditions. The site-specific geotechnical conditions, together with recommendations specific to the geotechnical design and construction requirements for the proposed project, shall be addressed in a “final” geotechnical report prepared by the consulting geotechnical engineer. The geotechnical report shall include, but not be limited to, the following:

a. Description of the site as to topography, existing surface conditions, and any other features that might influence the design.

b. Description of the investigation program and the methods used. Information obtained from the explorations performed by the Government can be used, supplemented by additional investigations as deemed necessary by the consulting geotechnical engineer. Subsurface exploration may include soil borings, cone penetrometer test (CPT) soundings, and test pits. The investigation, sampling, and identification of subsurface materials shall be in accordance with methods and procedures described in ASTM D 420. Soil investigation and sampling by hollow-stem auger borings shall be in accordance with AASHTO T 251. Drilling and sampling with the "Standard Penetration Test" (SPT) split-barrel sampler shall be in accordance with ASTM D 1586. The procedure shall be modified to provide for continuous standard penetration and sampling tests for the initial 12 feet of the boring. Beginning at a depth of 15 feet below grade, penetration and sampling tests can be performed every 5 feet and at each change in soil stratification or soil consistency. The location of the groundwater table, if encountered, shall be measured and recorded after 24 hours. If drilling techniques that prevent determination of the groundwater table are used, install at least one piezometer for every four explorations to measure the depth to the groundwater table. Classification of soils shall be in accordance with ASTM D 2487 or D 2488, as appropriate. Cone penetrometer test (CPT) soundings shall be in accordance with ASTM D 3441 or ASTM D 5778, as appropriate. Undisturbed soil sampling shall be in accordance with ASTM D 1587.

The depths of explorations shall be of sufficient depth to evaluate bearing capacity and settlement potential. However, beneath structures, explorations

shall extend to a minimum depth of 25 feet, and beneath roads, hardstands, and/or parking areas to a minimum depth of 5 feet.

The Contractor shall be responsible for all applicable clearances and permits and for the protection of all underground utilities from damage during field investigations. Utility clearances and digging permits are required prior to drilling on the installation. Procurement of the clearances and permits shall be coordinated through the Contracting Officer.

c. Discussion of the subsurface soil conditions and stratigraphy and groundwater conditions.

d. Location plan of explorations.

e. Logs of explorations. Indicate on logs complete information on who, when, and how made. Show soil description, standard penetration resistance, N, or other type resistance, topsoil, water level observations, surface elevation and datum, and any other information gathered during the exploration.

Exploration locations shall be surveyed. Surveyed elevations and coordinates shall be provided on each exploration log. Elevations shall be in accordance with NGVD 29 and horizontal coordinates shall be in accordance with NAD 83 (Georgia State Plane Coordinates); accuracy to be plus or minus 3 feet horizontal and plus or minus 0.5 foot vertical.

Soil test boring logs shall show graphical representation of soil strata, location of each change by depth or elevation, location of each sample by depth or elevation, and number of blows for each 6 inches and amount of soil recovered for each sample location. Logs shall also indicate type and size of casing, type of drilling fluid, and type and size of drill bit. If no casing is used, indicate size of borehole. Indicate when boring is terminated due to refusal.

Soil classifications for final logs shall be based on the field classifications, the results of tests, and further inspection of samples in the laboratory by geotechnical engineers.

Include a chart illustrating the soil classification criteria and the terminology and symbols used on the boring logs.

Locations of all explorations shall be shown on the grading and drainage plates of the submittal drawings. Logs of all explorations shall be included on plate(s) of the submittal drawings.

f. Laboratory test data shall be included in detail. Laboratory testing shall be in accordance with the requirements set forth in EM 1110-2-1906, Laboratory Soils Testing, EM 1110-2-1909, Calibration of Laboratory Soils Testing Equipment, and/or applicable ASTM standards.

g. Notation of the location of strata containing organic materials, weak materials or other inconsistencies that might affect engineering conclusions.

h. Pavement design, or if not responsible for pavement design, pavement structural design data, including design California Bearing Ratio (CBR) and modulus of subgrade reaction.

i. Discussion of the facilities under design and recommendations regarding foundation support of the structures and slabs on grade, including soil

bearing pressures, bearing elevations, foundation design recommendations and anticipated settlements, including total and differential.

j. Anticipation of, and management of, groundwater.

k. Discussion of site preparation and the effect of weather and construction equipment on soils during construction.

l. Areas requiring undercutting and removal of unsatisfactory soils.

m. Types of materials to be excavated and possible uses and/or disposition of the materials.

n. Fill and backfill placement procedures, and types of compaction equipment.

o. Results of pH tests and salinity tests and resistivity measurements, as appropriate, necessary to design corrosion control and grounding systems. The raw field data shall be included in the report.

p. Lateral earth pressures and pressure coefficients (active, passive, and at rest) and internal friction angles for design of walls below grade, including backfill, compaction and subdrainage, and their requirements.

q. Provide calculations that support the recommendations for the foundation design. The calculations may be included in an appendix to the report. Calculations shall include loadings, capacities, safety factors, settlement analysis, bearing analysis, and references from which calculations are based. Any graphs and formulas shall be clearly indicated along with derivation of curve slopes and data derived from laboratory testing. Computer outputs shall also be included.

Three copies of the geotechnical report shall be submitted with the 60 percent submittal. If revisions are made to the 60 percent design submittal that require revisions to the geotechnical report, a revised report (three copies) shall be provided with the final design submittal.

13.3 Certification

The successful proposer shall be fully responsible for acceptable foundations, pavements and other geotechnical aspects for the proposed project. The proposer and his professional geotechnical engineering consultant shall certify in writing that the design of the project has been developed consistent with the site specific geotechnical conditions. The certification shall be stamped by the consulting professional geotechnical engineer and shall be submitted with the 60 percent design submittal. If revisions are made to the 60 percent design submittal, a new certification shall be provided with the final design submittal.

13.4 Foundation Design

13.4.1 General

Given the proposed site and the proposed structures, it is anticipated that shallow spread footings can be used for support of the proposed buildings.

13.4.2 Allowable Bearing Pressure

Allowable soil bearing pressure shall be determined by the consulting geotechnical engineer.

13.4.3 Footing Dimensions

Column footings and load-bearing wall footings shall have minimum dimensions of 30 inches and 24 inches, respectively, and shall be located at a minimum depth of 24 inches below finish floor or finish grade, as appropriate. Non load-bearing wall footings shall have a minimum width of 18 inches and shall be located at a minimum depth of 18 inches below finish floor or finish grade, as appropriate.

13.5 Site Classification for Seismic Design

The project site shall be classified as Site Class D for the purpose of determining maximum considered earthquake spectral response accelerations S_{ms} and S_{m1} in accordance with Corps of Engineers Technical Instruction "TI809-04, Seismic Design for Buildings."

13.6 Slabs on Grade

All interior slabs on grade, including storage rooms, shall be underlain by a moisture vapor barrier consisting of lapped polyethylene sheeting having a minimum thickness of 6 mils and a minimum 4-inch thick capillary water barrier of open graded, washed pea gravel, or crushed stone. Concrete slabs shall be jointed around columns and along supported walls to minimize cracking due to possible differential movement.

13.7 Soil Compaction

13.7.1 Soil compaction shall be achieved by equipment approved by the consulting geotechnical engineer. Soil materials shall be moistened or aerated as necessary to provide the moisture content that will readily facilitate obtaining the compaction specified with the compaction equipment used.

Each layer of structural fill and subgrades shall be compacted to the following minimum percent of the modified Proctor maximum density, determined in accordance with ASTM D 1557:

Beneath structures and building slabs, to 5 feet beyond structure limits, around footings and in trenches	90 percent
Beneath streets and paved areas, except top 12 inches in fill and top 6 inches in native soil	90 percent
Beneath streets and paved areas, top 12 inches in fill and top 6 inches in native soil	95 percent
Beneath shoulders	90 percent
Beneath sidewalks and grassed areas	85 percent
Base course under paved areas	100 percent

The requirements shall be verified or modifications recommended by the consulting professional geotechnical engineer in the report wherever engineering, soils, or climatic factors indicate the necessity. Any modification to the specified compaction requirements shall require the approval of the Contracting Officer.

13.7.2 The Contractor, with recommendations and input from his consulting geotechnical engineer, shall edit and submit the following UFGS Specifications:

02300A Earthwork
02315A Excavation, Filling and Backfilling for Buildings
02316A Excavation, Filling and Backfilling for Utilities

13.8 Construction Quality Control Testing

13.8.1 Prior to initiating any structural fill placement and/or compaction operations, representative samples of the soils which will be used as structural fill or subgrade, both suitable on-site soils and off-site soils (borrow), shall be obtained and tested to determine their classification and compaction characteristics. The samples shall be carefully selected to represent the full range of soil types to be used. The moisture content, maximum dry density, optimum moisture content, grain-size and plasticity characteristics shall be determined. These tests are required to determine if the fill and subgrade soils are acceptable and for compaction quality control of the subgrades and structural fill. A minimum of 7 compaction tests shall be performed on materials classified as satisfactory for use.

Tests for the above soil properties shall be in accordance with the following:

Moisture Content	ASTM D 2216
Maximum Dry Density and Optimum Moisture	ASTM D 1557
Grain-Size (Wash No. 200, w/o Hydrometer)	ASTM D 422 and ASTM D 1140
Plasticity	ASTM D 4318

13.8.2 A representative number of in-place field density tests shall be performed in the subgrade of compacted on-site soils and in the structural fill and backfill to confirm that the required degree of compaction has been obtained. In-place density tests shall be performed in accordance with the sand cone method prescribed in ASTM D 1556; the use of nuclear gauges for density testing will not be permitted. At least one density test shall be performed for each 5,000 square feet, or portion thereof, of compacted existing onsite soils, subgrades, and in **each** lift of compacted structural fill. At least one density test shall be performed in the bearing level soils for each column footing and for each 75 linear feet in continuous footings. Density tests shall be performed at 75-foot intervals along roadway subgrade soils. In addition, a density test shall be performed for each 150 linear feet of backfill placed per foot of depth in trenches for utilities. Where other areas are compacted separately by manually operated compactors, a minimum of one density test shall be performed for every 250 square feet, or portion thereof, of fill placed per foot of depth.

13.8.3 Any area that does not meet the required compaction criteria shall be reworked, and retested. If the moisture content of the soil is within the recommended range, additional compaction may be all that is necessary to increase the density. If the moisture content is not within the recommended range, then, the moisture content shall be adjusted to within the range, and the area recompacted.

13.8.4 All laboratory and field density testing shall be performed by a commercial testing laboratory which has been found adequate and qualified by a Corps of Engineers Division Laboratory Inspection Team.

13.9 Soil Treatment

13.9.1 The pesticide applicator's principal business shall be pest control and the pesticide applicator shall be State certified in the U.S. Environmental Protection Agency (EPA) pesticide applicator category which includes structural pest control, and certified in the State of the project's location.

13.9.2 Pesticides shall be delivered to the project site in sealed and labeled containers in good condition as supplied by the manufacturer or formulator. Pesticides shall be stored, handled, and used in accordance with manufacturer's labels. Labels shall bear evidence of registration under the Federal Insecticide, Fungicide, and Rodenticide Act (MX), as amended.

13.9.3 The Contractor shall formulate, treat, and dispose of termiticides and their containers in accordance with label directions. Pesticides and related materials shall be kept under lock and key when unattended. Proper protective clothing and equipment shall be worn and used during all phases of termiticide application.

13.9.4 The Contractor shall provide a 5-year written warranty against infestations or reinfestations by subterranean termites of the buildings constructed under this contract. Warranty shall include annual inspections of the buildings. If live subterranean termite infestation or subterranean termite damage is discovered during the warranty period, and the soil and building conditions have not been altered in the interim, the Contractor shall:

a. Retreat the soil and perform other treatment as may be necessary for elimination of subterranean termite infestation;

b. Repair damage caused by termite infestation; and

c. Reinspect the building approximately 180 days after the retreatment.

13.9.5 Termiticides shall be currently registered by the EPA.

13.9.6 At the time of application, the soil moisture content shall be sufficiently low to allow uniform distribution of the treatment solution throughout the soil. Applications shall not be made during or immediately following heavy rains or when conditions may cause runoff and create an environmental hazard.

13.9.7 The Contractor shall establish complete and unbroken vertical and/or horizontal (as necessary) soil poison barriers between the soil and all portions of the intended structure that may allow termite access to wood and wood related products. Application shall not be made to areas intended for use as a plenum air space. Surface treatments shall not be made for areas to serve as crawl spaces. Termiticide shall be applied as a coarse spray and provide uniform distribution unto the soil surface. Treatment shall be applied prior to placement of the vapor barrier and at least 12 hours prior to concrete placement. Where treated soil or fill material is not to be covered with a vapor barrier or waterproof membrane; adequate precautions shall be taken to prevent its disturbance. Soil or fill material disturbed after treatment shall be retreated as specified above before placement of slabs or other covering structures. Treatment of the soil on the exterior sides of foundation walls, grade beams, and similar structures shall be coordinated with final grading and planting operations so as to avoid disturbance of the treated barriers. Manufacturer's warnings and precautions shall be observed in the handling and use of such materials. Care shall be taken to prevent

these chemicals from entering water supply systems, potable water supplies, or aquifers; and that they do not endanger plants or animals. The Contracting Officer shall be notified at least 48 hours prior to beginning of treatment and formulating, mixing, and application shall be performed in the presence of the Contracting Officer's representative.

13.9.8 Rates and methods of application shall be in accordance with the manufacturer's instructions on the pesticide label. Maximum application or dosage rates shall be used. If the pesticide contains less than the amount of active ingredient specified on the label, work shall be repeated with pesticides conforming to this specification.

13.9.9 The Contractor shall dispose of residual pesticides and containers off Government property in accordance with label instructions and EPA criteria.

13.9.10 The Contractor shall edit and submit the following UFGS Specification:

02364A TERMITICIDE TREATMENT MEASURES FOR SUBTERRANEAN TERMITE CONTROL

13.10 Decay Treatment

The Contractor shall be responsible for determining and implementing the appropriate treatment for prevention of subsurface induced decay.

13.11 Radon Mitigation

The design and construction of foundation walls, slabs, and crawl spaces shall include provisions for the reduction of radon entry and facilitate its removal. Radon mitigation shall comply with the requirements of EPA 402-R-94-009.

13.12 Soil Resistivity Testing

The proposer to whom this contract is awarded shall be responsible for all soil resistivity testing required for cathodic protection design of underground utilities.

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13.13 Borrow

Borrow material shall be selected to meet the requirements and conditions of the particular fill or embankment for which it is to be used. Borrow material shall be obtained from the borrow areas ~~shown~~ identified by the Base at the start of construction. Necessary clearing, grubbing, and satisfactory drainage of borrow pits and the disposal of debris thereon shall be considered related operations to the borrow excavation. Borrow pits shall be neatly trimmed and drained after the excavation is completed.

14. LANDSCAPE DESIGN. The landscape shall be designed using the Fort Stewart Installation Design Guide including force protection criteria as modified here. Graded and scarred areas shall be seeded or solid sodded (refer to Site Plan). Existing grass not affected during construction shall be protected. Landscaping shall be absolutely minimum maintenance. Planting shall consist predominantly of tree species matching adjacent growth. Trees shall be planted in a formal pattern to provide shade for the East and West facades, and to highlight the building entrance. Trees shall also be planted in

islands designed in the Contractor's parking layout with the intent of breaking up the linear image of the parking lots.

14.1 TURF. Solid sod in accordance with the Installation Design Guide shall be provided for all graded and scarred areas. All existing grassed areas not graded or disturbed shall remain sodded. Contractor shall be responsible for proper care and watering of grass from the beginning of the turfing operation and continuing for 3 months after completion of sod placement. New trees and shrubs shall be maintained for a 12-month period after installation. Proper care means watering, fertilizing, cutting and weeding. Trees and shrubs shall require a 1 year warranty and sod shall require a ninety day warranty. Turf preparation shall include eradication of unwanted vegetation with Roundup and the use of a pre-emergent granular herbicide. Provide for a soil test that includes pH, potassium, phosphorus, calcium, magnesium, nematode count, and soil amendment recommendations (N-P-K). Post planting fertilizer for the turf after the sod is rooted shall be applied based on the soil analysis. Grass shall be mowed initially after achieving a 75 mm (3 inch) growth and then twice monthly thereafter.

14.2 Landscape Plantings. Landscaping shall emphasize low maintenance. Mulch shall be shredded cyprus or pine bark. Mulch should have a minimum thickness of 4”. Also, there shall be a weed barrier under the mulch. Solid rubber guys with 610 mm stakes shall be used to stabilize newly planted trees. Landscaping shall be in accordance with the Fort Stewart Installation Design Guide. Quality plant material shall be as specified by the American Standard for Nursery Stock, ANSI 260.1.

14.3 Approved Plant List. Large trees, 3 inches maximum caliper, and small shrubs at entrances, as defined in the Fort Stewart Installation Design Guide consistent with adjacent existing trees and plants.

15. IRRIGATION SYSTEM. The project shall include a complete operating lawn and landscape irrigation system. The system shall connect to the existing potable water system for areas within 82’ of the building. Cut-off valves shall be installed at the water supply source. The piping design and layout shall be coordinated with the landscaping plan to provide adequate irrigation requirements/coverage to protect and maintain the health of all landscape materials within the design boundaries. A system shall be selected for minimum maintenance and operational skill requirements, without waste of water, including the piping, valves, sprinkler heads, controller and wiring, and all of the other system appurtenances that help to make a complete and operable landscape irrigation system. The system selected shall be divided into zones and shall be automatically controlled. The system shall be designed and installed by a experienced firms licensed for irrigation design and installation in the State and County.

16. UTILITY LAYOUT. Coordination of all site work on the project, including utility work, is the responsibility of the Contractor. It is the Contractor's responsibility to confirm the specific locations of the existing utilities and to design and construct new utility services for the new buildings. All utilities, including electrical service, telephone, fiber optic, cable TV, gas, and chilled water, shall be installed underground. New underground utility lines, including appurtenant structures such as valve boxes, manholes, vaults, etc., shall not be located under pavement, road shoulders or drainage ditches to the maximum extent practicable. Unless otherwise approved, placing utilities and culverts under existing roads shall be by jack and bore.

16.1 Backflow prevention valves, post indicator valves, transformers, electric switches, telephone/cable boxes, manholes, irrigation pump and controllers, etc., shall be located in locations not immediately apparent to

the facility users or personnel passing by the site. New utility lines shall not be located within 5 meters (15 feet) of the footprint of any future building as shown on the site.

16.2 Marking Of Utility Lines. Utility lines shall be marked with plastic marking tape. Plastic marking tape shall be acid and alkali-resistant polyethylene film, 150 mm (6 inch) wide with minimum thickness of 0.01 mm. Tape shall have a minimum strength of 12.5 MPa lengthwise and 10.5 MPa crosswise. The tape shall be manufactured with integral wires, foil backing or other means to enable detection by a metal detector when the tape is buried up to 1 meter deep. The tape shall be of a type specifically manufactured for marking and locating underground utilities. The metallic core of the tape shall be encased in a protective jacket or provided with other means to protect it from corrosion. Warning tapes shall be installed directly above all buried pipes or wires, at a depth of 450 mm (18 inch) below finished grade. Tape color shall be as specified below and shall bear a continuous printed inscription describing the specific utility.

Tape Color:

Red:	Electric
Orange:	Telephone, Telegraph, Television, Police, Fiber Optics, and Fire Communications
Blue:	Water Systems
Green:	Sewer Systems
Yellow:	Gas, Dangerous Materials

16.2.1 Tracer Wire. In addition to the plastic marking tape, tracer wire shall also be provided for all new underground utilities. Tracer wire shall be provided for all pipelines, including force mains but excluding storm drain and sanitary sewer lines. Tracer wire shall be provided for all electrical and communication conduits, direct buried cables, gas, and chilled water piping systems. Tracer wire shall be installed on the bottom of the trench just to one side of where the pipe, conduit, or cable contacts the trench bottom. The wire shall run continuously between and terminate at valve boxes on water and gas lines, regulator stub-ups on gas lines, sprinkler heads and valve boxes on sprinkler system lines, panel boxes on electrical lines, and other such aboveground appurtenances. Each end of the wire shall have an additional length of at least 0.6m (2 feet) coiled up in the appurtenance. Tracer wire shall be insulated No. 12 AWG solid copper and of a type specifically manufactured for locating underground utilities. Insulation shall be solid in color, matching tape color. Tracer wire shall be subject to approval by the Contracting Officer.

16.3 Metering. Area master meters shall be provided where water, gas and electricity are connected to base distribution lines. Water, electrical, and natural gas meters shall transmit usage data to the existing Fort Stewart digital control system. Meters, interface devices and programming of the existing host shall be furnished as required to accomplish complete utility metering and remote usage monitoring as required by Ft. Stewart utility managing agency.

17. PERMITS.

17.1 General. The Contractor shall determine permit requirements as part of the design process and shall submit permit draft applications as part of the submittal process. Water, sewer, storm water, excavation and air are some of the permits required for this project.

18. STORM DRAINAGE.

18.1 Post construction storm water discharge shall not exceed pre-construction discharge. A combination of infiltration, retention, and detention will be used. Drainage from roofs shall be handled with downspouts filtering the water into the ground in dry well sumps and/or other types of infiltration systems. Do not use splash blocks.

18.2 The storm drain collection system shall consist of grassed swales and pavement sheet flow. The proposed system shall tie to the existing grassed ditches or pipe systems. Minimum pipe velocities shall be 2.5 fps (0.762 m/s) when drains are one-third or more full, and the maximum shall be 10 fps (3.048 m/s) for fully coated, fully paved, corrugated pipe and 15 fps (4.6 m/s) for concrete pipe, with outlet erosion protection. The minimum pipe size for an open pipe system shall be 0.46 meter (18 inch) and 0.38 meter (15 inch) for a closed system. The design frequency for the collection systems and surface drainage shall be 10 years.

18.3 The allowable pipe types shall include concrete pipe, type III or IV as required. Pipe joints shall be water tight with gaskets.

19. WATER AND WASTE WATER.

19.1 The Contractor shall design and construct the new water supply and wastewater utility services for the new building. The Contractor shall provide water service lines, new water distribution lines (as required) and connection to the existing water mains. The Contractor shall also provide new wastewater building laterals, new sewage mains (as required) and connection to the existing sanitary sewerage system. The water and sewage facilities shall be designed and constructed in accordance with the criteria contained herein. Placement of a buried utility main under a new building shall not be allowed. Minimum earth cover for the new utility lines will not be less than 760 mm (30 inch), except for sewer lines where the minimum cover shall be 1000 mm (36 inch). Contractor shall refer to the Savannah District Design Manual, Chapter A-8, and TM-5-814-1.

19.2 The Government anticipates that the Contractor will connect the new water laterals to the existing water distribution system and that sufficient pressure and quantity will be available for domestic and industrial uses. The design of the water distribution mains and service lines shall provide adequate quantity at sufficient pressure for domestic use and industrial use (vehicle washing, etc.). The Contractor shall determine minimum pressures in accordance with applicable plumbing and fire protection criteria. Flow test shall be conducted by the Contractor prior to obtaining permits.

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19.3 The mains shall be designed and installed in accordance and compatible with the Savannah District Design Manual, Chapter A-8, and with TM5-813-5 (Water) and TM5-814-1 (Sanitary Sewer) Standards. Water mains shall follow existing streets or utility corridors. The design shall limit installation beneath pavement. Contractor will provide a separate 10” fire and 4” domestic water supply line from the existing 12” main to the new building.

19.4 Design of the service lines shall be in accordance with the National Plumbing Code and applicable AWWA standards. A curb stop or valve shall be installed near the point of connection to the main. Water service lines shall be equipped with suitable meters. Metering of fire service lines is not required.

19.5 The water distribution system in the fire truck parking or servicing area shall provide a fire hydrant dedicated to the fire truck water refilling operations.

19.6 Water Supply for Fire Protection.

19.6.1 Interior and outside fire protection shall be designed in accordance with MILITARY HANDBOOK 1008C (MIL-HDBK 1008C). Fire flow test data is provided in Appendix J of this document.

From the data obtained from the flow test, and the specific fire protection requirements, the Contractor shall determine the need for additional water supply components such as fire pumps, water storage, or new connection to off-site water mains (perhaps several blocks from the building site) or the creation of loops.

19.6.2 The Contractor shall provide the required water flow and pressure for the interior and outside (hose stream) demand. Fire pumps and storage shall be provided as required to meet the required water demand. Connection to off-site water mains shall be considered the most desirable solution to water supply needs. Fire pumps (if required) shall be designed and installed in accordance with NFPA 20. Fire pumps shall be electric motor driven. Water storage (if required) shall be designed and installed in accordance with AWWA D100.

19.6.3 The fire sprinkler supply line shall include a post indicator valve with a tamper switch wired to the building fire alarm panel and a double check valve assembly backflow prevention device equipped with a flow detection meter. The backflow prevention device is located in the building. Indicate tamper switch on Fire Alarm Riser Diagram on Electrical Drawings.

19.6.4 Protect all fire hydrants subject to corrosion with cathodic protection complying with the National Association of Corrosion Engineers (NACE) criteria.

19.7 Wastewater.

19.7.1 The wastewater collection and conveyance system shall be designed in accordance with TM 5-814-1. In addition, the designer shall comply with specific state and local regulations that apply.

19.7.2 If a sewage pump station is necessary, the Contractor shall provide (as a minimum requirement) a duplex submersible sewage pump station with a 1,524 mm minimum diameter reinforced concrete wet well, with aluminum cover. All electrical components and controls shall be included.

19.7.3 The wastewater conveyance system shall comply with all the above requirements and shall be compatible with the wastewater to be conveyed. The materials specified shall withstand the effects of the wastewater and not deteriorate as a result of pollutants in the wastewater.

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20. GAS DISTRIBUTION SYSTEM. Natural gas is available adjacent to the project site. An existing natural gas line has adequate capacity to serve this project. Contractor shall confirm system pressure. Connection to the line is to be made with the line under full pressure—no outage of service to existing facilities. Provide a gas distribution system complete with master meter, connected to the existing system and designed in accordance with local codes, utility company requirements, and installation requirements. Gas

distribution system shall comply with the requirements of NFPA 54, National Fuel Gas Code. Unless otherwise indicated by the Contracting Officer, a hot-tap connection to existing gas distribution system shall be made at the location shown on the Gas Distribution Plan drawings provided within the RFP. Where new structures are located above existing gas mains, existing gas mains shall be relocated. The Contractor shall bear the cost of installation and relocation of all utilities. When connecting to existing steel piping system, provision shall be made to ensure that the integrity of the cathodic protection is not compromised. Plastic gas shutoff valves and valve boxes shall not be used. Gas valves shall be provided in a valve box at the tie-in point to the existing gas distribution system~~ and also as shown on the on the Gas Distribution drawings provided in the RFP~~. A gas regulator and meter assembly shall be provided, located at least 15 feet from the air intakes. The building service entrance shall be installed at a height sufficient to allow for installation of the gas meter. Installation of gas piping shall be in accordance with manufacturer's recommendations and applicable sections of ASME B31.8, and the AGA Manual. UFGS Specification Section 02556 GAS DISTRIBUTION SYSTEM, shall be the basis for the gas distribution system specifications. Metallic underground gas piping shall not be used. Aboveground gas piping shall be steel. Gas mains and service lines shall be graded. Mains and service lines shall have 24-inch minimum cover; and both mains and service lines shall be placed on firmly compacted select material for the full length. Where required, and at street crossings, gas piping shall be encased or designed to withstand any anticipated external loads as specified in ASME B31.8. Jack-and-bore method shall be used for routing gas piping under all existing streets. Saw-cutting of streets is not allowed, unless otherwise approved by the Contracting Officer.

20.1 Drips. Drips shall be installed at the low points, immediately following reduction from high pressure to medium pressure (at supply points) and at occasional low points throughout the system to provide for blowing out the lines.

20.2 Valves. Plug valves shall be installed so that interruptions to service can be confined to the building.

20.3 Service Lines. Lines shall not be placed under any buildings. Lines shall be placed with a minimum of 2 feet of earth cover. Vented protective casings shall be provided to protect lines from superimposed street or heavy traffic loads. Tracer wire shall be installed with polyethylene piping. Tracer wire shall be terminated in valve box and at riser. The Contractor shall relocate any portion of the existing gas main required to construct the new facility to comply with the directives found in this paragraph.

21. ARCHITECTURAL DESIGN REQUIREMENTS.

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21.1 GENERAL. The Soldier Service Center facility shall meet the functional requirements with a simple layout that allows for future changes in use. The facilities' aesthetics shall reflect a welcoming, "Southern Coastal Style" building complying with the Installation Design Guide and incorporating red brick exteriors, white framed windows, white architectural trim, Tuscan or Doric style classical columns, broad eaves, and standing seam metal sloped roofs in a soft green color. The type of brick shall be coordinated with the existing Liberty County Annex Building (at Memorial Drive and N. Main Street) ~~Hinesville City Hall and proposed Tri-County Library to be built near the Base Main Gate~~.

21.2 Applicable Codes And Standards. Applicable codes and standards are listed in paragraph 8.

21.3 Functional Layout. The floor plan included in this solicitation represents an acceptable solution to the functional requirements for this facility. Coordinate mechanical room size to ensure proposed room size will accommodate proposed equipment. Use of this floor plan is optional. Functional requirements are described in the Functional Room Requirements document at Appendix A. Arrange spaces in an efficient, functional manner with simple circulation. Provide flexibility that allows future modifications. NOTE: It is recommended that the main Electrical Room and main HVAC Room indicated on the plans be redesigned to be adjacent to each other.

21.4 Accessibility. This facility shall be handicapped-accessible.

21.5 SUSTAINABLE DESIGN. This facility has been designated a showcase for sustainable design, with a goal of achieving more than 25 points using the SPIRIT Project Rating Tool for Sustainable Design. Architectural contributions include building envelope characteristics, solar control and daylighting, views, indoor air quality, environmentally preferable materials selections, salvage/reuse opportunities, waste reduction, and close collaboration with all team members and User to synthesize successful sustainable design solutions.

21.6 Construction Type, Fire Protection And Life Safety. This facility shall comply with MILHDBK 1008C, including EC1110-1-94 dated 31 July 2001. MIL HDBK 1008c requires compliance with UBC for construction type, occupancy separation and features related to location on property and compliance with NFPA 101 for egress and life safety. It also contains specific requirements contained in the document itself. The facility shall be fully sprinklered. See Appendix B for additional code analysis information.

21.7 Gross Area. The gross area of the Soldier Service Center building shall not exceed 60,000 square feet gross area, measured in accordance with TI 800-1. Information shown below is an overview of gross area calculation requirements. Refer to TI 800-1, Chapter 5, paragraph 1.c for specific instructions.

21.7.1 Enclosed Space. The gross area includes the total area including all enclosed spaces as determined by the outside dimensions of the building.

21.7.2 Half Space. One-half of the area will be included in the gross area for covered raised loading platforms and covered exterior usable areas such as covered porches and covered walkways.

21.7.3 Excluded Space. Open paved areas; roof overhangs and soffits for weather protection; uncovered ramps; uncovered stoops; covered unpaved areas; and utility tunnels and raceways will be excluded from the gross area.

21.8 Exterior Construction. This facility shall be designed and constructed to provide a watertight durable facility consistent with industry standards and compliant with model building and energy codes. Appearance, materials and colors shall comply with the IDG. The following paragraphs are an overview of the exterior construction requirements.

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21.8.1 Exterior Walls. Primary exterior wall finish shall be common face brick (red color to match the Liberty County Annex Building (at Memorial Drive and N. Main street)~~Hinesville City Hall~~) and EIFS on cement board. White trim shall be precast concrete or cast stone masonry units. Classical style columns shall be fiberglass. Single wythe masonry walls are not permitted.

Composite wall construction (grout-filled cavity between wythes) is not permitted. A 2” air space is required between masonry veneer and backup walls. Brick shall not be sealed. Wood trim is not permitted. A sample masonry panel per UFGS is required. Louvers shall be storm-resistant profile and shall have enclosed drainable sill pan and bird screen. Joint sealants used at building exterior shall have a service life for the exposure condition of at least ten years, retaining elasticity and seal.

21.8.2 Roof. Roof shall be pitched minimum 3:12 slope. Roof covering shall be structural standing seam metal roof (SSMR) system. Architectural (nonstructural) standing seam metal roof is permitted at option of Contractor. Standing seam metal roof shall have concealed clip fastening system and be warranted per UFGS 07416, except manufacturer’s 20 year weathertightness warranty is not required. Exposed fasteners are not permitted at roofing system. Exposed wood is not permitted for eaves, fasciae or soffits. Gutters and downspouts are required. Concealed gutters are not permitted. Roof detailing shall be in accordance with NRCA Roofing and Waterproofing Manual recommendations and standard details. Joint sealants used at building exterior shall have a service life for the exposure condition of at least ten years, retaining elasticity and seal.

21.8.3 Insulation. Provide a complete thermal envelope. All water and sprinkler pipes must be inside the thermal envelope. Insulation shall not be placed directly on acoustic tile ceiling panels.

21.8.4 Fireman Lock-Box. Provide 1 fireman lock box at Main Entry – Knox-Box Model #3270 with recessed mounting kit 3240 (www.knoxbox.com) and a fire alarm key – LSDA 300 flat key and cam lock, available at IDN – Armstrong, Inc., part #CL58 KA300 (800-726-3332; www.idaarmstrongs.com).

21.8.5 Screen Walls. Composite wall construction (grout-filled cavity between wythes) is not permitted.

21.8.6 Exterior Signage. Provide signage as required by the Installation Design Guide. Signage will include, but not be limited to:

a. Military Facility Identification sign
b. Site Directory sign
c. Primary Entrance sign
d. Pedestrian Directional signs
e. Parking signs
f. Traffic Control signs

21.8.7 Doors and Windows. All exterior glass must be treated for fragment retention. For insulated glass units the inner pane should be a minimum of ¼-inch annealed laminated glass. Single glazed doors should be a minimum of ¼-inch annealed laminated glass. Windows and storefront shall have prefinished commercial grade aluminum frames with high-performance organic coating finish and thermal breaks. Windows shall be Performance Class HC. Entry lobby doors shall be medium or wide stile storefront. All other exterior doors and frames shall be painted insulated hollow metal. All exterior doors shall have non-removable pin hinges and deadlocks. All exterior hollow metal frames shall be welded type construction. All windows and exterior glass (except in doors) shall have operable window treatments for solar control. Reflective (mirror) glass finish is not permitted. All windows shall be inoperable.

21.8.8 Exterior Soffits. Exterior soffits shall be EIFS or stucco. No metal or gypsum board soffits shall be allowed.

21.9 Interior Construction. The following paragraphs are an overview of the interior construction.

21.9.1 Room Sizes. Room sizes shown on the concept floor plan and in Appendix A are approximate clear space. Adjustments to room sizes may be acceptable if furnishing and functioning of the rooms are unaffected.

21.9.2 Sound Control. Spaces requiring sound control shall have STC-50 ratings. This includes all door and ceiling treatments as needed to achieve this performance for the entire space.

21.9.3 "Secured" Classification: These spaces shall be enclosed on all sides so that physical intrusion into the space cannot be accomplished without obvious physical evidence remaining. Partitions shall have continuous drywall finish or be constructed of masonry. Ceilings in these spaces must be drywall. Acoustic tile ceilings are not permitted. These requirements also apply to partitions surrounding concealed spaces such as raised floors. All penetrations shall have approved baffles installed to prevent inadvertent disclosure of conversations. Door must resist forceful entry. Acceptable doors are standard solid hardwood doors at least 1-3/4 inch thick. The door frame must be securely attached to the facility and fitted with a heavy-duty/high security strike plate and hinges installed with screws long enough to resist removal by prying. The door must be installed to resist removal of hinge pins by locating the hinge pins inside the room or by set screwing/welding the pins in place. Door must be equipped with a GSA-approved electro-mechanical lock meeting Federal Specification FF-L-2740.

21.9.4 Doors and Frames. Interior doors may be metal or solid core wood. Door frames shall be metal.

21.9.5 Finishes. Finishes shall be durable and convey the appropriate aesthetics such as would be expected for a typical facility/space of this type in the commercial sector. Sustainable design considerations shall be incorporated into finish selections and building aesthetics. See Appendix C Room Finish Requirements Schedule for additional information.

21.9.5.1 Ceramic Tile. Maximum water absorption shall be 0.50 percent. Floor tile minimum coefficient of friction wet or dry shall be 0.60. Floor tile shall be Class IV Heavy Traffic durability classification. Expansion joints shall be per TCA Handbook. Ceramic floor tile shall be thickset, including tile on the second floor.

21.9.5.2 Acoustic Tile Ceiling. Acoustic units shall be no larger than 24" by 24".

21.9.5.3 Carpet. Carpet shall be tufted; multilevel or level loop; commercial 100% branded nylon continuous filament type 6 or 6/6 100% recyclable pile fiber; solution or yarn dyed; minimum 0.114 inch pile height; minimum two yarn ply; minimum 1/10 inch gauge; minimum 26 oz. per square yard pile yarn weight, not including weight of backing. Carpet shall be multicolored with at least three colors, random and/or tweed pattern. Avoid extremely bright colors, extremely light colors and high contrast patterns.

21.9.6 Casework and Trim. Cabinets and countertops shall comply with AWI Quality Standards, Section 400, Custom Grade. Finish shall be plastic laminate. Wood standing and running trim shall comply with AWI Section 300 Custom Grade.

21.10 Door Hardware. Exit devices shall be rim type or surface vertical rod with touch bar. Use removable mullions where possible at pairs of doors.

Cylinders and cores shall have seven pin tumblers. Cylinders shall be fully compatible with products of the Best Lock Corporation and shall have interchangeable cores.

21.11 Fire Extinguisher Cabinets. Fire extinguishers are furnished and installed by Government. Designer shall determine required type and size of fire extinguishers and indicate this on Life Safety Plan. Provide recessed or semi-recessed fire extinguisher cabinets at occupied spaces and fire extinguisher brackets at unoccupied spaces to meet location, size and type requirements per NFPA (and ADAAG as applicable). All fire extinguisher cabinets shall be sized for 15 pound extinguisher minimum, and shall be lockable and shall have full-glass hinged door.

21.12 Wall and Corner Protection. Provide corner guards at all exterior corners in all corridors, waiting rooms and break rooms.

22. INTERIOR DESIGN.

22.1 Structural Interior Design.

22.1.1 Definition. The Structural Interior Design (SID) shall involve the selection and sampling of all applied building related finishes necessary to complete the buildings interior and exterior architecture. The SID submittal shall be submitted concurrent with the architectural design submittals. The SID requirements and format shall be in accordance with the Savannah District Interior Design Presentation Format.

22.1.1.1 Predefinition Conference. The Contractor shall lead a predefinition conference at Fort Stewart, Ga. This meeting shall be attended by Government personnel responsible for this project to include facility user representatives, Fort Stewart Directorate of Public Works, and Savannah District personnel. The purpose of the predefinition conference is to present and discuss the SID color Scheme for the project. Actual exterior and interior materials, finishes and colors are to be provided for review and comment. The format for this presentation may be on 2’ x 3’ matte board. The Contractor may provide colored exterior elevations/perspectives of both the SID exterior and interior color schemes to assist in the discussion and presentation. At the end of the predefinition conference the Government will decide the final SID finishes that will be accepted for incorporation into the construction. The facility user representatives must provide concurrence with the SID prior to Contractor purchase and installation of finishes. Final interior and exterior finishes will be submitted in 8½” x 11” notebook format.

22.1.2 In general, the SID should reflect a transitional, professional image reflecting the “Southern Coastal” style. Wall colors throughout the facility shall be a neutral color that will enhance accent colors in the existing furniture related items. Accent walls will not be approved for private offices. Accent walls will not be approved except for the lobby. The cove base and door trim shall be a neutral color and shall be consistent throughout the facility. Interior stain colors and finishes shall be consistent throughout the facility. All finishes are to be Class A. This section covers only the general color and minimum characteristics of the exterior and interior materials and products that are exposed to view in the finished construction. The word "color" as used herein includes surface color and pattern. Requirements for quality and method of installation are covered in appropriate sections of the specifications herein and which the General Contractor will submit after award. Specific locations where the various materials are required will be indicated during the Predefinition Conference, 50% and 90% design after award submittals. The Contractor shall propose all colors not listed in Section 09000, BUILDING COLOR AND FINISH SCHEDULE.

22.1.3 Signage Requirements. Interior signage is an important item that is to be fully integrated with the architecture and building related finishes. All signage shall be in accordance with the Department of the Army technical manual, Signage, TM 5-807-10 and/or Ft. Stewart sign standards. All signs are to be from one manufacturer and shall match in color and style. All room sign copy is to be Helvetica medium with a ratio of height and width to meet Americans with Disabilities Act (ADA) requirements. Signs are to be provided for all interior doors. Installation shall be wall mounted, on the latch side of the door with the center of the sign installed 1500mm above the finish floor and 150 from the outside edge of the metal doorframe. Where conditions do not allow signs to be mounted directly adjacent to the door, install signs on the wall at the nearest point to the latch side. Signage for General Office areas shall be a modular plaque format with a minimum of three insert slides. All signs are to have a changeable room number sign. All signs are to be a minimum overall dimension of 200mm wide and 150mm high. Copy for the first slide is to have a changeable integral, tactile, raised room number with corresponding, Grade 2 Braille indicating the room number. The second two slides are to be window insert slides to accommodate personnel changes or room name changes. Mechanical rooms and other building system room and service support rooms including restrooms are to have permanent room signs with copy that has raised room numbers and permanent room names. Copy is to be raised, tactile, letters and Grade 2 Braille indicating the room number and room name. All signs are to be permanently and mechanically attached to the building. Double-sided tape will not be accepted. Signage message shall be coordinated with the Government/user before ordering or installation. Provide Emergency Egress sign plaques that indicate "YOU ARE HERE" and the path of egress. These signs are to be fully coordinated with the Fort Stewart Fire Marshall at the 100% review Submittal design phase and before fabrication and installation. The Fire Marshall is to review the correct placement and quantity of these signs within the building and also review the proposed path of egress that will be graphically illustrated on the sign. Suggested placements for these signs are to be determined before installation.

22.1.4 Reference To Manufacturer's Color and Product. Where color and product is shown as being specific to one manufacturer, an equivalent color by another manufacturer may be submitted for approval. Manufacturers and materials specified are not intended to limit the selection of equal colors, patterns and textures from other manufacturers. However the intent of the design is to remain consistent with this section of the contract.

22.1.4.1 Color Schedule. The Contractor shall prepare Section 09000, BUILDING COLOR AND FINISH SCHEDULE, which lists the colors, patterns and textures and products required for exterior and interior finishes, including both factory applied and field applied colors.

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~~23. COMPREHENSIVE INTERIOR DESIGN.~~

~~23.1 The preparation of the Comprehensive Interior Design is part of the Base Bid. The procurement of the items specified in the Comprehensive Interior Design will be accomplished separate from this contract. The installation of these items will be an Option to the Base Bid as indicated in the Bidding Schedule. If awarded, the Contractor shall install the modular office furniture and other items listed in the Contractor-prepared CID. The CID Submittals shall be in accordance with the Savannah District Interior Design Presentation Format. The furniture shall be coordinated with the prepared and approved Furniture Placement drawings developed in the SID package. Installation shall include scheduling shipments from vendors,~~

~~accepting delivery at the site, unloading, inventorying, securing and installing the items.~~

~~23.2 Definition. The CID shall involve all the furniture-related components necessary to complete the interior environment. The necessary components shall include all loose furniture/furnishings/artwork.~~

~~23.3 CID Philosophy. The CID for this facility shall be coordinated in color, texture, pattern, size, form and function with building footprint and the SID. Furnishings submitted for approval shall reflect the image and style presented in the architecture to further support the corporate image. The Contractor shall select those CID items from UNICOR for which they can meet specifications. The UNICOR web site is: www.unicor.gov and the regional sales representative for UNICOR is Joe McCormick @ 770-982-3156. If they are unable to meet the specifications, the contractor shall coordinate approval of the waiver with UNICOR and prepare the basis of the waiver request for submission by the Government. All items of furniture/furnishings not available from UNICOR shall be selected from General Services Schedules (GSA). The GSA web site is: www.gsa.gov.~~

~~23.4 Format. The CID format shall be in accordance with the Savannah District Interior Design Presentation Format.~~

~~23.5 CID Coordination and Installation. The Contractor shall develop and fully coordinate the CID package with the SID package. The CID submittals shall run concurrent with the SID submittals. The Contractor is required to purchase the CID package items and is required to schedule with all the CID vendors the delivery and installation of the CID. Phasing the delivery and installation of the CID package items shall be determined by the Contractor. The Contractor will procure the CID items.~~
~~23.6 Requirement Analysis. The Contractor shall interview the Government and determined the CID requirements. CID items and quantities shall be determined by but are not limited to: (1) the number of personnel to occupy the building, (2) job functions and related furniture/office equipment to support the job function (3) room functions (4) rank and grade.~~

~~23.7 CID Furnishing List. Typical CID items to specify for these buildings are:~~

- ~~Executive Wood Furniture~~
- ~~Support desks~~
- ~~Artwork~~
- ~~Bookcases~~
- ~~Bulletin Board, Porcelain Marker Boards~~
- ~~Chairs-all kinds, including stools~~
- ~~Desks-freestanding Technical support and Executive Level Quality~~
- ~~Desk-based systems furniture workstations-~~
- ~~Files-all kinds~~
- ~~Laboratory furniture~~
- ~~Lamps-all kinds~~
- ~~Podium/lecture stands~~
- ~~Storage-all kinds~~
- ~~Silk Plants~~
- ~~Tables-all kinds~~
- ~~Waste cans-various sizes~~

~~All specific/special items as required by the government/user~~

~~23.8 The Government will direct the Contractor as to the sources that will be used to ensure coordination with existing items. To the fullest extent possible, General Services Administration Sources will be specified.~~

23. COMPREHENSIVE INTERIOR DESIGN.

23.1 The preparation of the Comprehensive Interior Design is part of the Base Bid. The procurement of the items specified in the Comprehensive Interior Design will be accomplished separate from this contract. The CID Submittals shall be in accordance with the Savannah District Interior Design Presentation Format. The furniture shall be coordinated with the prepared and approved Furniture Placement drawings developed in the SID package

23.2 Definition. The CID shall involve all the furniture-related components necessary to complete the interior environment. The necessary components shall include all loose furniture/furnishings/artwork.

23.3 CID Philosophy. The CID for this facility shall be coordinated in color, texture, pattern, size, form and function with building footprint and the SID. Furnishings submitted for approval shall reflect the image and style presented in the architecture to further support the corporate image. All furniture/furnishings shall be selected under the guidance of the National Defense Authorization Act - FY 2002, S1438, Title VIII, Subtitle B, Sec 811, Para 2410 which states UNICOR is no longer a mandatory source for furniture and a waiver is **not required from UNICOR** on items before selecting from the GSA Schedules. However, UNICOR shall be considered as a vendor to determine if UNICOR offers the "best value" product in terms of quality, price, and timeliness. If an UNICOR product is not the "best value", then GSA Schedules shall be used for selection of furniture/furnishings. A Best Value Determination Guideline Sheet shall be filled out for each vendor whose furniture has been specified and the sheet provided in the CID binder. All furniture/furnishings shall be selected from GSA Schedules. The GSA web site is: www.gsa.gov. The UNICOR web site is: www.unicor.gov. The UNICOR regional sales representative for the Savannah District is: Joe McCormick @ 803-802-0189.

23.4 Format. The CID format shall be in accordance with the Savannah District Interior Design Presentation Format.

23.5 CID Coordination and Installation. The Contractor shall develop and fully coordinate the CID package with the SID package. The CID submittals shall run concurrent with the SID submittals.
23.6 Requirement Analysis. The Contractor shall interview the Government and determined the CID requirements. CID items and quantities shall be determined by but are not limited to: (1) the number of personnel to occupy the building, (2) job functions and related furniture/office equipment to support the job function (3) room functions (4) rank and grade.

23.7 CID Furnishing List. Typical CID items to specify for these buildings are:

Executive Wood Furniture
Support desks
Artwork
Bookcases
Bulletin Board, Porcelain Marker Boards
Chairs-all kinds, including stools
Desks-freestanding Technical support and Executive Level Quality
Desk-based systems furniture workstations-
Files-all kinds
Laboratory furniture
Lamps-all kinds
Podium/lecture stands

Storage-all kinds
Silk Plants
Tables-all kinds
Waste cans-various sizes
All specific/special items as required by the government/user

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24. FURNITURE ORDER FORMS.

24.1 Furniture order forms for artwork, framing, draperies, or any other item for which construction is not standardized by the manufacturer, is to include as an attachment, construction specifications. If installation is required for an item, indicate this in the Remarks Section of the Furniture Order Form, and include a recommended source.

~~24. FURNITURE ORDER FORMS.~~

~~24.1 Furniture order forms for artwork, framing, draperies, or any other item for which construction is not standardized by the manufacturer, is to include as an attachment, construction specifications. If installation is required for an item, indicate this in the Remarks Section of the Furniture Order Form, and include a recommended source. The Justification Section of the Furniture Order Form is to contain the justification for a UNICOR waiver for this item if applicable.~~

25. STRUCTURAL DESIGN REQUIREMENTS.

25.1 General Design Requirements. The Structural Engineer shall be responsible for selection and design of the complete structural building system. A complete structural system for the building shall include foundations, walls, roof framing, roof diaphragms, lateral load stability, framing and connection of any architectural features, and support of mechanical and electrical equipment. Locations of columns shall be coordinated so as to fall in partition locations. The structural design shall be in accordance with the criteria, requirements, and guidance provided in the U.S. Army Corps of Engineers, Savannah District Design Manual unless modified by the following requirements.

25.2 Design Loads.

25.2.1 Design loads and load combinations shall be in accordance with the requirements of ASCE 7, "Minimum Design Loads for Buildings and Other Structures", unless otherwise specified herein.

Dead Loads	Actual
Floor Live Loads	
Offices	50 psf
Corridors	
Second Floor	80 psf
Ground Floor	100 psf
Mechanical	125 psf (Or equipment weight, whichever is greater)
Storage	125 psf
Partition Loading	20 psf

Roof Live Loads

Typical Areas (No Reduction) 20 psf

25.2.2 Wind loads shall be based on a 120 mph basic wind speed, building classification category II, exposure category C, and an importance factor of 1.0. Wind loads shall be computed and applied in accordance with ASCE 7-1995.

The design wind pressures shall be shown on an isometric or 2D view of the building on one of the Structural Plates. Views shall be similar to these shown in figures 3 and 4 of ASCE 7 and be accompanied by a table that identifies the component and cladding pressures for each zone. Pressures for arch and gabled roofs on open sheds shall be similarly shown.

25.2.3 Seismic loads shall be in accordance with the guidance given in TI 809-04, "Seismic Design For Buildings and Other Structures", dated November, 1999 and FEMA 302 NEHRP "Recommended Provisions for Seismic Regulations for New Buildings and Other Structures", dated 1997, using the following:

Spectral Response
Ss = .31
S1 = .13
Seismic Use Group II

25.3 Foundations.

25.3.1 Design of foundations shall be based on the site-specific geotechnical report prepared by the Contractor's consulting geotechnical engineer and the requirements specified in this Section.

25.4 Concrete.

25.4.1 Codes and References.

American Concrete Institute
Portland Cement Association

25.4.2 Additional Requirements.

25.4.2.1 Minimum concrete strength shall have at least a compressive strength of 3000 psi at 28 days. All foundation walls and footings shall be constructed of reinforced cast-in-place concrete.

25.4.2.2 Reinforcing Materials. Reinforcing Bars: ASTM A 615, Grade 60, deformed.

25.4.2.3 Concrete Materials.

a. Cement: ASTM C 150, Type I-II Portland cement.
b. Fine Aggregate: ASTM C 33.
c. Coarse Aggregate: ASTM C 33.
d. Air-Entraining Admixture: ASTM C 260.
e. Flowing Concrete Admixture: ASTM C 1017, Type 1 or 2.
f. Calcium Chloride will not be permitted.
g. Fly Ash: ASTM C 618, Class "F".

25.4.2.4 Ready-Mix Concrete. ASTM C94.

25.4.2.5 Reinforcement of concrete walls, continuous footings, and tie and bond beams shall be continuous, and typical details of reinforcing at corners and intersections of these members shall be shown on the drawings.

25.4.2.6 Slabs.

25.4.2.6.1 Slabs supported on ground shall be a minimum thickness of 4 inches and reinforced with either welded wire fabric or fiber reinforcing.

25.4.2.6.2 Slabs supported on ground will conform to the minimum requirements for slab-on-grade: Horizontal runs of conduits and pipes shall not be embedded in slabs supported by ground. Vertical penetrations will conform to ACI 318-99. Aluminum conduit and pipes will not be embedded in any concrete.

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25.4.2.6.3 Building slabs on grade shall be protected from moisture intrusion with 4 inch capillary water barrier covered with a vapor barrier of 6 mil thick polyethylene. ~~sheeting that is protected with 2 inches of sand.~~

25.5 Steel.

25.5.1 Codes and References.

American Iron and Steel Institute
American Institute of Steel Construction
Steel Joist Institute
AWS D1.1 Structural Welding Code
ER 1110-345-53 Structural Steel Connections

25.5.2 Material Properties

W-Shapes	ASTM A992, F_y = 50 ksi
Shapes and Plates	ASTM A36, F_y = 36 ksi
HSS Square and Rectangular Shapes:	ASTM A500 Grade B, F_y = 46 ksi
Welding Electrodes:	AWS A5.1 or A5.5 Series E60 or E70
High Strength Bolts:	ASTM A325
Anchor Bolts:	ASTM A307
Welded Studs:	ASTM A108
Deformed Bar Anchors:	ASTM A496
Paint and Protection:	SSPC Paint 25

25.5.3 Additional Requirements.

25.5.3.1 Shop connections for structural steel shall be welded, and generally field connections shall be made with high strength bolts (ASTM A325) in bearing type connections. All connections other than standard AISC shear connections shall be designed by the engineer of record and detailed on the final plans.

25.5.3.2 Joists shall be anchored to steel supports by bolting or field welding. Provide steel insert plates in concrete work. Where top chords are extended, provide required section modulus of extensions on the drawings.

25.5.3.3 If braced frames are used as all or part of the main lateral force resisting system, the stability of the structural system shall not depend on any single member or connection. Redundancy shall be provided either by using multiple bays of tension only X-bracing members or by using bracing members that are capable of both tension and compression if bracing is placed in a single bay.

25.6 Metal Deck.

25.6.1 Codes and References.

Steel Deck Institute

25.6.2 Additional Requirements.

25.6.2.1 Composite steel floor deck shall be galvanized and have a minimum thickness of 20 GA.

25.6.2.2 Steel roof deck material shall be galvanized and have a minimum thickness of 22 GA. A structural steel roof deck shall be provided under all nonstructural metal roofs in accordance with EI 01S908, Structural Considerations for Metal Roofing.

25.6.2.3 Galvanized steel roof deck in areas without ceilings which are exposed to view and are scheduled to be finish painted should be specified to receive a factory primer coat on the underneath side of the deck.

25.7 Masonry.

25.7.1 Codes and References.

American Concrete Institute
Brick Institute of America
National Concrete Masonry Association

25.7.2 Additional Requirements.

25.7.2.1 Mortar used on this project shall be type “S” mortar.

25.7.2.2 Brick veneer ties shall be corrugated galvanized steel spaced 16 inches on centers both vertically and horizontally.

25.7.2.3 Installation of brickwork shall comply with the latest edition of the Brick Institute of America Technical Notes No. 28; Brick Veneer, New Construction.

25.7.2.4 Concrete masonry units shall have a minimum compressive strength of 2000 psi at 28 days.

25.7.2.5 Structural masonry walls (load bearing walls, shear walls, or exterior walls) shall be designed as reinforced masonry, in accordance with ACI 530.

25.7.2.6 Horizontal reinforcement shall be provided continuously at floor and roof levels and at the tops of walls. Horizontal reinforcement shall also be provided above and below all wall openings as shown in FEMA 302.

25.7.2.7 Nonstructural masonry walls shall be reinforced in accordance with TI 809-04 and FEMA 302.

25.7.2.8 Masonry walls shall have vertical control joints as follows:

a. Exterior and Interior Walls: 24 feet maximum,
b. At changes in wall height or thickness,
c. Near wall intersections,
d. At points of stress concentration,
e. At control joints in foundation walls and in floors that support

masonry walls.

25.7.2.9 Brick walls shall be provided with 3/8 inch expansion joints at 22 feet maximum. Brick expansion joints shall be provided near the corner of exterior walls within a distance of 10 feet.

25.7.2.10 Brick walls shall be of cavity-type construction. Damp proofing shall be used on the exterior face of CMU backup walls. Brick veneer/steel stud walls shall be designed and constructed in accordance with TI 809-07 "Design of Cold-Formed Load bearing Steel Systems and Masonry Veneer/Steel".

25.7.2.11 Prefinished metal cap flashing shall be provided on top of all masonry parapet end walls and masonry screen walls.

25.7.2.12 Aerated Autoclaved Concrete block (AAC) may be used as an alternate backup for brick veneer if proven to be more economical.

25.8 Roof.

25.8.1 Roof Requirements.

25.8.1.1 Roofing shall be structural standing-seam metal or architectural standing seam.

25.8.1.2 Roof clips for structural standing seam roofs shall be attached to roof framing members and not just to plywood roof sheathing or metal decking, unless it is 16 GA minimum thickness.

25.9 Cold Formed Steel Framing.

25.9.1 Codes and References.

American Iron and Steel Institute
TI 809-07 Design of Cold-Formed Load Bearing Steel Systems

25.9.2 Additional Requirements.

25.9.2.1 Cold-formed steel members, their components, and connection material shall have G60 galvanized coating.

25.9.2.2 Cold-formed metal framing systems used for fascias, soffits, exterior brick back-up (if used), and architectural framing that is subject to the design loads specified in this section shall be designed by the engineer.

25.9.2.3 Top chords of cold-formed roof members shall be 16 GA, minimum, where standing seam roof clips are connected with screws.

25.9.2.4 Where metal stud construction is used as a backup for brick veneer, the maximum allowable deflection shall be l/800.

26. PLUMBING REQUIREMENTS.

26.1 Plumbing Design References, Codes, and Standards.

26.1.1 The design and construction of the plumbing systems for the Soldier Service Center shall be in compliance with design criteria listed below, latest editions; as required herein; and the referenced Unified Facility Guide Specifications (UFGS). Guide specifications are referenced in this RFP for their use in preparation of the design and shall be edited consistent with the criteria furnished. The most current edition of the codes, standards, and

references shall be used for project design. Where there is a conflict between the RFP and the codes and standards the most stringent shall apply. When codes and standards are in conflict, the most stringent shall apply.

Design Criteria List:

- Savannah District Design Manual for Military Construction, dated May 2000.
- Savannah District Drafting Standards.
- Uniform Building Code
- Uniform Plumbing Code
- Army Technical Manuals

  TM 5-810-4 Compressed Air
  TM 5-810-5 Plumbing
  TM 5-810-6 Nonindustrial Gas Piping System

- MIL-HDBK-1191 – DOD Medical and Dental Treatment Facilities Design and Construction Criteria

- National Fire Protection Association (NFPA) Standards.

  NFPA 54 Natural Fuel Gas Code

  NFPA 101 Life Safety Code

- Provide services or systems for items listed in Appendix A - Functional Room Requirement Sheets.

- All other codes and standards listed in Section 01020.

26.1.2 Toilet areas and plumbing fixtures shall be handicapped accessible as required by Accessibility Guidelines for Buildings and Facilities.

26.2 Provide plumbing systems for the project as follows:

26.2.1 Domestic Water Systems.

Water Supply. Provide domestic water service to the mechanical room from 5'-0" outside the building. Service entrance inside the mechanical room shall include main shut-off, RPZ backflow preventer, and water meter with remote readout capability from UMCS.

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Water Distribution. Water shall be supplied to restrooms, mechanical equipment, and any other items requiring water. All piping shall be labeled, color coded, titled, and indicate direction of flow. Shutoff/isolation valves, water hammer arrestors, ~~shower control valves,~~ trap primer valves, and all other control components and equipment requiring adjustment and/or maintenance shall be readily accessible through the use of lay-in ceilings and/or appropriately sized access doors. A pressure-reducing valve assembly (with valved bypass) shall be provided in the cold water main where system pressures exceed 60 psig. Routing of water piping below floor slabs shall be minimized, and limited to the building entrance penetration. Water hammer arrestors shall be provided for all plumbing fixtures with flush valves for shock suppression. The placement of water hammer arrestors shall be as referenced in International Plumbing Code. Appropriate means shall be provided within the plumbing system design to insure that all fixture trap water seals susceptible to loss of water seal by evaporation are replenished. Trap primers

shall be provided for all floor drain traps to prevent loss of water seal by evaporation.

26.2.2 Domestic Hot Water.

The domestic hot water service shall extend from the water heater to plumbing fixtures and equipment requiring hot water. The heater shall be sized to meet the domestic hot water heating requirements for the buildings. Domestic hot water shall be generated and stored at 140 degrees F. minimum and delivered to plumbing fixtures at 110 degrees F. Mixing valves shall be provided to allow delivery of water at temperature required.

Fixtures requiring hot water shall be supplied from a central system with circulated loop system as required. Domestic hot water shall be provided using the most cost effective system based on energy analysis of natural gas and electric. The water heater and circulation pumps to be connected to the building DDC system.

26.2.3 Drainage System.

Sanitary, waste, and vent system shall be provided for restrooms, floor drains located in mechanical equipment rooms, elevator pits, and equipment as required.

Sanitary drain waste and vent systems shall extend from 5 feet outside the building to all fixtures and equipment requiring service. The exit location of the building waste and sanitary sewer main shall be coordinated with existing site conditions shown on utility drawings. The system shall be provided with traps, vents, cleanouts, and all other components as required by code.

Floor drains shall be provided in all toilet locations and mechanical equipment rooms.

26.2.4 Acid Waste System. Dark Room and X-Ray equipment and drains shall be connected to acid waste traps. Acid waste and vent piping will be provided for sinks and equipment drains in the Dark Room.

26.2.5 Special Systems. Dental equipment (chairs) to be supplied with compressed air and vacuum. The compressed air system shall have air compressor, tank and air dryer. The vacuum pump shall have pump and tank. Piping to be extended to dental chairs.

Sterilization Room to be provided with distilled water supply.

Dark Room to have emergency eye wash at sink.

26.2.6 Storm Drainage System. Refer to Architectural design.

26.2.7 Natural Gas System. If natural gas is required for the project, the system shall be provided with meter, regulators and a complete piping system. Gas meter to be provided with remote readout capability from UMCS.

26.2.8 Plumbing Materials, Equipment and Fixture Requirements.

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26.2.8.1 Routing and Design. All piping shall be concealed, properly supported with allowances for expansion and contraction. Interior water distribution piping shall not be buried under concrete floors. All piping systems shall be drainable. Interior hot and cold water piping systems shall

be insulated. Water piping systems (including sprinkler piping) shall not be routed or located where subjected to freezing, and shall be located within the insulated building envelope. Heat tracing (to prevent freezing) of interior piping systems will not be allowed. Individual shutoff or stop valves shall be provided on water supply lines to all plumbing fixtures. Individual stops shall also be furnished at all equipment connections such as vending machines, icemakers, etc. ~~Shower control valves shall be provided with integral stops (shut-offs).~~ Isolation shutoff valves shall be provided for each toilet room group to allow isolation shutoff for maintenance purposes while continuing service to the remainder of the building. Consolidate fixture vents through one common vent whenever possible. All vent penetrations through the roof shall be made through a roof jack designed for use with the roofing system furnished and color-matched to the roof. Above ground piping shall run parallel with the lines of the building and in accordance with **UFGS** 15400A, Plumbing General Purpose, unless otherwise indicated. Floor drains shall be provided in all toilet rooms, mechanical rooms and for equipment requiring drainage. All floor drain traps shall be automatically primed by single trap primers or where appropriate distribution unit type trap primers. All vents shall be routed so that roof penetrations occur on the parking lot side (northeast of the building).

26.2.8.2 Each fixture and piece of equipment requiring connections to the drainage system shall be equipped with a trap, and all fixtures shall be vented. Surface or wall cleanouts shall be provided for each drainage main. Cleanouts shall be provided at each change in direction of sanitary sewer lines, at the intervals specified in the Plumbing Code, and at the building service entrance. All cleanouts shall be permanently accessible. Ground cleanouts shall be installed in a 12 inch by 12 inch , 4 inch thick concrete pad, flush with grade. Pipes passing through elevated slab shall pass through a pipe sleeve and be installed in accordance with UFGS 15400, Plumbing General Purpose.

26.2.8.3 Piping Distribution System (Below Grade).

Domestic water service is copper with no lead solder joints.

Sanitary sewer, waste, and vent systems are cast iron.

26.2.8.4 Piping Distribution System (Above Grade).

Domestic water piping is copper, Type “K”, with “no lead” solder joints. All domestic water piping is insulated with fiberglass insulation meeting the flame and smoke rating of NFPA.

Sanitary, waste, and vent piping is no-hub cast iron pipe and fittings.

Natural gas piping is black steel with welded fittings (where used).

26.2.9 Special Piping Distribution Systems.

Acid waste and vent systems shall be corrosion resistant pipe and fittings. Piping installed above grade shall be flame retardant material.

Compressed air and vacuum piping shall comply with MIL HDBK 1191.

26.2.10 Plumbing Fixtures. Fixtures shall be provided complete with fittings, and trim. All shutoff valves shall be metal construction. Plastic valves are not acceptable. All fixtures, fittings, and trim in a project shall be from the same manufacturer and shall have the same finish.

26.2.10.1 Plumbing shall meet the following criteria:

a. In general, all faucets shall have solid brass bodies, ceramic valving, and chrome plated or trim. Water flow shall be no more than 2.5 gpm from any faucet.

b. Fixtures shall be water conservation type, in accordance with the International Plumbing Code.

c. All vitreous china plumbing fixtures shall conform to ANSI A112.19.2M, Vitreous China Plumbing Fixtures. Stainless steel fixtures shall be in accordance with ANSI A112.19.3M, Stainless Steel Plumbing Fixtures (residential design).

d. Floor drains shall be provided in toilet rooms, mechanical rooms and for equipment requiring drainage. Floor drains shall be cast iron body and grate. All floor drain traps shall be automatically primed by single trap primers or where appropriate distribution unit type trap primers.

e. Fixture descriptions shall be a described by the American Society of Mechanical Engineers, ASME A112.19.

26.2.10.2 Water Closets. Siphon-jet, elongated bowl, top supply spud, ASME A112.19.2M, floor mounted. Gasket shall be wax type. Seat - ANSI Z124.5, Type A, white plastic, elongated, open front. Flushometer Valve - ASSE ANSI/ASSE 1037, large diaphragm type with non-hold-open feature, backcheck angle control stop, and vacuum breaker. Minimum upper chamber inside diameter of not less than 2½ inch at the point where the diaphragm is sealed between the upper and lower chambers. The maximum water use shall be 1.6 gallon per flush. Water closet trim shall conform to ANSI A112.19.5, Trim for Water-Closet Bowls, Tanks, and Urinals (Dimensional Standards). Any water closets designed as handicapped water closets shall meet the top rim of the bowl height requirements of CABO A117.1.

26.2.10.3 Urinals. Wall hanging, with integral trap and extended shields, ASME A112.19.2M, siphon jet. Top supply connection, back outlet. Flushometer Valve - ASSE ANSI/ASSE 1037, large diaphragm type with non-hold-open feature, backcheck angle control stop, and vacuum breaker. Minimum upper chamber inside diameter of not less than 2½ inch at the point where the diaphragm is sealed between the upper and lower chambers. The maximum water use shall be 4L per flush. Urinal trim shall conform to ANSI A112.19.5, Trim for Water-Closet Bowls, Tanks, and Urinals (Dimensional Standards).

26.2.10.4 Lavatories. Manufacturer's standard sink depth, vitreous china ASME A112.19.2M, wall hung and under counter mount as shown on the Conceptual Floor Plans.

a. Faucet - Faucets shall be single lever, centerset, washerless type. Faucets shall have all brass and copper waterways and ceramic valving. The flow shall be limited to 2.5 gpm per second at a flowing pressure of 80 psi.

b. Drain - Strainer shall be copper alloy or stainless steel.

c. Handicap lavatories shall conform to ADA and Uniform Federal Accessibility Standards (Fed. Std. 795) for fixture height and safety insulation. Handicap lavatory faucets shall be ADA compliant.

26.2.10.5 Break Room Sinks. Sinks shall be of size and configuration shown on the conceptual floor plan or as found in the architectural specifications

and shall be constructed of stainless steel. Faucets shall be same as the bath faucets in material, but designed for kitchen sink application.

26.2.10.6 Water cooler drinking fountains. Water cooler drinking fountains shall be located in close proximity to each restroom and break room. Corridors which are distant from these rooms shall contain at least one water cooler drinking fountain as well. Water cooler drinking fountains shall: be self contained, conform to ARI 1010, use one of the fluorocarbon gases conforming to ARI 700 and ASHRAE 34 which has an Ozone Depletion Potential of less than or equal to 0.05, have a capacity to deliver 7.6 gph of water at 50° F with an inlet water temperature of 80° F while residing in a room environment of 90° F and have self-closing valves. Self-closing valves shall have automatic stream regulators, have a flow control capability, have a push button actuation or have a cross-shaped index metal turn handle without a hood. Exposed surfaces of stainless steel shall have No. 4 general polish finish. Spouts shall provide a flow of water at least 4 inch high so as to allow the insertion of a cup or glass under the flow of water.

26.2.10.7 Wall Hydrants (Exterior). Wall Hydrants shall be provided at a maximum spacing interval of 200 feet around the exterior wall of the building. Each hydrant shall be box type, freeze proof, with a integral vacuum breaker/backflow preventer. Hydrants shall have 3/4 inch hose connections.

26.2.10.8 Major Appliance Plumbing Connections. The Contractor shall provide appropriate connections for all appliances, vending machines, and any other items requiring water and/or drain connections.

26.2.11 Testing. Entire plumbing system shall be tested in accordance with project specifications, and International Plumbing Code.

27. FIRE PROTECTION.

27.1 Qualifications of Fire Protection Engineer. The design of the fire protection features shall be by a qualified fire protection engineer meeting one of the following conditions: a.) An engineer with a Bachelor of Science or Masters of Science Degree in fire protection engineering from an accredited university engineering program, plus a minimum of 5 years work experience in fire protection engineering; b.) A registered professional engineer who has passed the National Council of Examiners for Engineering and Surveys (NCEE) fire protection engineering written examination; c.) A registered P.E. in a related engineering discipline with a minimum of 5 years experience dedicated to fire protection engineering. The name and credentials (education, registration, experience) of the fire protection engineer shall be submitted with the initial contract documents and approved by the District fire protection engineer prior to proceeding with fire protection design.

27.2 Fire Suppression System. Automatic wet pipe sprinkler protection shall be provided for the building. A performance specification design is acceptable. The requirements indicated below shall be incorporated into the design.

27.3 Sprinkler System. The facilities shall be fully protected with an automatic wet pipe sprinkler systems. All floors and all areas of the facilities shall be protected. The sprinkler system designs shall be in accordance with MIL-HDBK-1008C, NFPA 13, 24, 72 and 241, and UFGS Specification Section 13930, Wet Pipe Sprinkler System. The sprinkler hazard classifications shall be in accordance with MIL-HDBK-1008C, NFPA 13. Design densities, design areas and exterior hose streams shall be in accordance with MIL-HDBK-1008C. The sprinkler systems shall be designed and all piping sized with computer

generated hydraulic calculations. The exterior hose stream demand shall be included in the hydraulic calculations. A complete sprinkler system design, including sprinklers, branch lines, floor mains and risers, shall be shown on the drawings.

Provide floor control valve assemblies for each floor of multi-story buildings. The assemblies shall be as shown in NFPA 13, Figure A-5-15.4.2(b).

If dry pipe sprinkler protection is required, it shall be in accordance with NFPA 13 and UFGS 13935, Dry Pipe Sprinkler System. Contractor shall use and edit Section 13935.

Elevator installation shall be protected in accordance with NFPA 13 and 72, ASME A17.1, and the requirements of UFGS 14240, Hydraulic Elevators (Notes to the Specification Writer). Contractor shall use and edit section 14240.

Provide installation and protection of common area kitchen range and hood in accordance with NFPA 96. Contractor shall use and edit Section 13965, Wet Chemical Systems.

The sprinkler service main shall be provided with an exterior post indicator valve with tamper switch reporting to the fire alarm control panel (FACP). The sprinkler entry riser shall include a double check backflow preventer, a fire department connection, and a wall hydrant for testing of backflow preventer. The sprinkler system shall include an indicating control valve, an alarm check valve, a water motor alarm and a flow switch reporting to the FACP. All control valves shall be OS&Y type and shall be provided with tamper switches connected to the FACP.

The Contractor shall edit UFGS Specification Section 13930, Wet Pipe Sprinkler System, for this project. This shall be submitted for review with the preliminary and final design submittals. These specifications shall be followed for the design and installation of the sprinkler systems.

Pipe 2 inches and smaller shall be minimum Schedule 40 and 2.5 inches and larger shall be minimum Schedule 10.

The Contractor shall submit material data, hydraulic calculations, and shop drawings as required by Specification Section 13930 to the Contracting Officer for review and approval.

27.4 Exterior Hose Stream. Exterior hose stream demand shall be in accordance with MIL-HDBK-1008C. This shall be 946 l pm for light hazard and 1892 lpm for ordinary hazard. Exterior hose stream demand shall be included in the sprinkler system hydraulic calculations.

27.5 Backflow Preventer. A double check backflow preventer shall be provided on the fire water main serving each building. This shall be located within the building. An exterior wall hydrant with OS&Y valve shall be provided to allow testing of backflow preventer at design flow as required by NFPA 13 1999, 5-15.4.6.1.

27.6 Fire Department Connection. A fire department connection shall be provided for each building with sprinkler protection. These shall be located to be directly accessible to the fire department, either on the front side or on the main street side of the building.

27.7 System Components and Hardware. Materials for the sprinkler system, fire pump system, and hose standpipe system shall be in accordance with Specification Sections 13930 and 13935 and with NFPA 13 and NFPA 230.

Sprinkler system piping shall be black steel and shall be minimum Schedule 40 for sizes 50mm and less and minimum Schedule 10 for sizes greater than 50mm.

27.8 Seismic protection (based on the seismic zone and geographical location of project) shall be provided for this project. Sprinkler and fire pump piping systems shall be protected against damage from earthquakes. Seismic protection shall include flexible and rigid couplings, sway bracing, seismic separation assemblies where piping crosses building seismic separation joints, and other features as required by NFPA 13 for protection of piping against damage from earthquakes.

27.9 Fire Water Supply.

The proposer shall perform a fire hydrant water flow test at the site and shall determine if the resulting available fire flow is adequate to support the fire protection requirements of this project. During fire flow demands, the exterior water distribution system shall not be drawn down below 1.38 bar. If necessary to meet the fire flow requirements for this project, the proposer shall include in their proposal means to increase the available fire flow, such as increased water main line sizes or a complete fire pump installation.

If a fire pump installation is required, it shall be designed in accordance with NFPA 20 and UFGS 13920, Fire Pumps. Contractor shall use and edit Section 13920. The installation shall include the fire pump and all appurtenances necessary to provide a complete system. This shall include a pump bypass line. The Contractor shall submit fire pump sizing and selection calculations, fire pump installation shop drawings, and catalog data for all piping and components of the fire pump installation to the Contracting Officer for review and approval.

Refer to Civil Design for additional requirements.

27.10 Fire Detection and Alarm. Refer to Electrical Design for design requirements.

27.11 Fire Extinguishers. Refer to Architectural Design for design requirements.

27.12 Fire Hydrants. Refer to Civil Design for design requirements.

28. HEATING, VENTILATING, AND AIR CONDITIONING REQUIREMENTS.

28.1 Mechanical Design References, Codes, and Standards.

28.1.1 The design and construction of the mechanical systems shall be in compliance with design criteria (latest edition) listed below, as required herein, and the referenced Unified Facility Guide Specifications (UFGS). Guide specifications are referenced in this RFP for their use in preparation of the design and shall be edited consistent with the criteria furnished. The most current edition of the codes, standards, and references shall be used for project design. Where there is a conflict between the RFP and the codes and standards the most stringent shall apply. When codes and standards are in conflict, the most stringent shall apply.

Design Criteria List:

- Savannah District Design Manual for Military Construction, dated May 2000.
- Savannah District Drafting Standards.
- Uniform Building Code

- Uniform Mechanical Code
- Army Technical Manuals

TM 5-785	Engineer Weather Data
TM 5-805-4	Noise & Vibration Control for Mechanical Equipment
TI 800-01	Technical Instructions, Design Criteria
TI 809-04	Seismic Design for Buildings
TM 810-10	Mechanical Design Heating, Ventilating & Air Conditioning
TM 5-815-2	Energy Monitoring & Control Systems
TI 810-11	Heating, Ventilating & Air Conditioning (HVAC) Control Systems
ETL 94-4	Energy Usage Criteria for Facilities in the Military Construction Program
MIL-HDBK-1190	Military Handbook Facility Planning & Design Guide

- American Society of Mechanical Engineers (ASME).

B31.1	Power Piping

- Air Conditioning & Refrigeration Institute (ARI).

Std. 410	Forced-Circulation Air-Cooling & Air-Heating Coils
Std. 550	Centrifugal or Rotary Screw Water-Chilling Packages

- American Society of Heating, Refrigeration & Air Conditioning Engineers (ASHRAE), Inc. Standards (Latest Edition).

  HVAC Applications
  HVAC Systems & Equipment
  Fundamentals
  Refrigeration

  ASHRAE Standard 62-1999 Ventilation for Acceptable Indoor Air Quality

- Sheet Metal and Air Conditioning Contractors' National Association (SMACNA), Inc. (Latest Edition).

06	HVAC Duct Construction Standards - Metal & Flexible

- National Fire Protection Association (NFPA) Standards.

NFPA 90A	Installation of Air Conditioning & Ventilating Systems
NFPA 90B	Installation of Warm Air Heating & Air Conditioning Systems
NFPA 101	Life Safety Code

- Provide services or systems for items listed on Functional Room Requirement Sheets.

- All other codes and standards listed in Section 01020.

28.2 General. The mechanical systems design for this project shall be in accordance with ASHRAE Handbooks, TI 800-01 Design Criteria Technical Instructions, ASHRAE Standard 62 - Ventilation for Acceptable Indoor Air Quality, Savannah District Design Manual for Military Construction, Volume II of II, applicable NFPA Standards, other applicable references listed within

the RFP, and governing industry standards as applicable. The contractor's proposal will list all pertinent standards and specifications and their applicability to the project. Catalog cuts for major equipment will include manufacturer's published data stating that such equipment meets the applicable standard. Catalog cuts for major equipment shall be for the actual equipment proposed to be installed. Deviations and installation of equipment other than proposed are only allowed subject to Contracting Officer approval. Mechanical equipment room(s) shall be ventilated for heat dissipation and shall be designed to minimize interior temperatures from exceeding 10 degrees F above outside design ambient temperature. As a minimum, the mechanical equipment room shall reflect the minimum clearance as specified by the equipment manufacturer in all five directions (all four sides and top). Equipment tube bundle and coil pull spaces shall be shown on mechanical room layouts. Mechanical room shall be adequate to allow the layout of equipment such that the removal or replacement of one major piece of equipment shall not require removal of adjacent equipment. Toilet rooms shall be directly heated, cooled, and exhausted. All exposed exterior water piping systems (i.e. chilled water) shall be provided with protective aluminum jacketing. Freeze protection design measures shall be provided to protect all interior and exterior piping systems, and equipment. Refrigeration equipment provided shall be equipped with low-ambient controls to allow equipment operation down to 20 degrees F. Roof penetrations required by HVAC design shall be located on the parking lot side (northeast) of the building.

28.3 HVAC Design Conditions.

28.3.1 Outside Design Conditions.

Location: Ft. Stewart, GA
31°, 52' North Latitude
81°, 37' West Latitude
88 Ft. Above Sea Level

Heating Degree-Days (basis 65 °F):	1,713
Cooling Degree-Days (basis 65 °F):	2,414
Heating Design Conditions:	23 degree F DB
Cooling Design Conditions:	93 degree F DB / 79 degree F WB
Air Cooled Condensing Design Conditions:	95 degree F DB

28.3.2 General Inside Design Conditions (unless otherwise indicated).

Heating (Comfort Applications)	70 degree F DB, no humidity control
Heating (Freeze Protection, Mech Rms)	45 degree F DB
Cooling (Comfort Application)	78 degrees F DB/50% Relative Humidity

28.3.3 Room HVAC Functional Requirements. All interior spaces shall be heated, ventilated and air conditioned, except as noted herein. Interior conditions as indicated above, unless otherwise stated.

28.4 Cooling Systems Design.

28.4.1 District generated chilled water is not available at this site.

28.4.2 An air cooled chiller is recommended at this point in the design process. The system proposed consists of an air cooled water chiller with multiple stage/multiple compressor and with two chilled water circulation

pumps, one used for stand-by. The water will be distributed to the cooling coils through the constant volume pumps.

28.4.3 A summer design cooling water temperature of 44 degrees F. will be circulated to cooling coils. The system chilled water temperature will be automatically reset upwards, based on the greatest AHU coil demand.

28.4.4 Piping will extend to the AHU's. Sectional shutoff and balancing valves will be provided in the main piping systems. The piping will be installed above ceilings and in partition spaces within the building. The above ground piping is proposed to be black steel with malleable steel fittings. Seamless copper, hard drawn tubing with wrought copper joints is proposed for pipe sizes 2 inches and smaller. Air conditioning condensate piping will be constructed of seamless copper, hard drawn tubing with wrought copper joints and insulation.

28.4.5 Below ground chilled water piping will be a double wall factory fabricated system consisting of Schedule 40 PVC carrier piping, cellular insulation and high density polyethylene (HDPE) exterior jacket. Reinforced concrete thrust blocks will be provided at changes in direction.

28.4.6 Two freeze protection alternatives are recommended for evaluation. The first is an electric heat trace cable system on all exterior chilled water piping exposed to freezing temperatures. The second is a propylene glycol solution in the chilled water system. The volume of glycol in the chilled water system required for the winter design ambient conditions is approximately 20 percent.

28.5 Heating System Design.

28.5.1 District hot water is not available at this site. The heating system will serve the central station AHU's and terminal (re-heat) needs. Gas-fired hot water boilers and pumps to circulate hydronic heating water to heat transfer coils in air handling units and system ductwork are recommended at this point in the design progression.

Hot water will be generated through two cast-iron sectional boilers or two copper fin boilers with forced draft burners. Each boiler will be equipped with an in-line circulating pump. The water will be distributed to heat transfer elements within the building by two constant volume pumps. A winter design heating water temperature of 180 degrees F. will be circulated to heating coils within the variable volume air terminal valves, and other heating devices.

A factory fabricated double wall flue system with barometric damper will be provided for each boiler and hot water heater.

Hot water piping will extend to the AHU's and to terminal heating devices. Sectional shutoff and balancing valves will be provided in the piping mains. The piping will be installed above ceilings and in partition spaces within the building. The piping is proposed to be black steel with malleable steel fittings. Seamless copper, hard drawn tubing with wrought copper joints is proposed for pipe sizes 2 inches and smaller.

An emergency boiler shut-off switch will be installed near the exit door(s) in accordance with ANSI/ASME CSD-1a, Control and Safety Devices for Automatically Fired Boilers.

28.6 Air System Design and Zoning.

28.6.1 Air handling systems shall be zoned by functional requirements, operation schedules, environmental control conditions, and load characteristics. Each Conference, Training, Briefing, Computer Room, etc. shall have its own zone. Each Communications Room shall be conditioned by a separate split system DX unit.

28.7 Ventilation Systems Design.

28.7.1 Ventilation for building occupants shall be provided in accordance with ASHRAE Standard 62-99. Ventilation air shall be injected into the building at each air handling unit upstream of the coils. Each unit shall maintain a constant minimum outside air flow by electronic airflow measurement station as required. The outside air intake shall be located away from fumes including vehicle exhaust, toilet exhaust, etc. Exhaust systems shall be provided for all toilet rooms, bathrooms, janitor's closets, and other spaces as required. Rooms requiring exhaust systems shall be at a negative pressure relative to adjacent spaces.

28.8 Utility Metering: Gas, Potable Water.

28.8.1 Potable water and gas shall be metered. Meters shall all have pulse outputs, data collection/communication capability and shall be compatible with Ft. Stewart existing base wide utility management and control system. All meters shall be monitored by the DDC system. Meters shall determine consumption, and not rate-of-consumption. Electric meters shall monitor consumption and demand.

28.9 Electrical Rooms And Mechanical Rooms.

28.9.1 Mechanical rooms and electrical rooms shall be heated and ventilated. Ventilation rate of 10 and 20 air changes per hour minimum shall be used. A two-speed, thermostatically-controlled fan shall be provided to accomplish the 10 ac/hr and 20 ac/hr rates. The space shall be maintained at 45°F in winter and maximum of 10°F above outside design ambient in summer. Ventilation shall be positively introduced within the mechanical room.

28.10 Telecommunications Rooms.

28.10.1 Each Telecommunications Room shall be air conditioned by an independent air cooled DX split system. The unit shall provide cooling 24 hours per day, 7 days per week. The unit shall maintain a space temperature of 72 degrees F. plus or minus 2 degrees F. The unit shall be sized to dissipate the heat generated by internal equipment and the building structure loads. Provide a space temperature high temperature alarm to report to the building temperature controls system.

28.11 System Maintainability.

28.11.1 Ensure that filters, controls, control valves, and coils are easily accessible for servicing and cleaning. Isolation valves shall be provided for each terminal unit, zone, branch, long runs, etc. as necessary for proper isolation and maintenance. Coils shall be fully removable without requiring demolition of any building components. Piping configuration at all coils shall include unions to facilitate easy coil removal.

28.12 Commissioning.

28.12.1 The Mechanical system commissioning shall be in accordance with UFGS Specification Section 15995A COMMISSIONING OF HVAC SYSTEMS. Commissioning requirements shall be clearly detailed on the design drawings and shall be

clearly stated in the construction specifications to ensure the HVAC systems are properly installed, balanced and calibrated prior to building occupancy. Commissioning procedures shall be in accordance with ASHRAE Standards.

28.13 Direct Digital Controls.

28.13.1 It is proposed to use electronic direct digital control (DDC) controls for all equipment. Individual microprocessor based digital equipment controllers will be interconnected to a central local area network for building global communications from a central location. However, all controllers will have stand alone capability, with the respective equipment in each system served form a dedicated control panel. Controllers will be specified with battery backup and surge protection.

The Post has advised that a single control manufacturer is desired. The post wide energy management and control system (EMCS) is manufactured by Williams. The system for this facility will be specified as a proprietary system as alternative manufacturers will not facilitate a seamless interface to the Williams system.

The DDC system for this facility will consist of a central building controller connected to lower level application specific equipment controllers through a local area network cable system. A central host computer currently installed in Building 1135 at Fort Stewart will be utilized for global system monitoring and remote system setpoint adjustment. The central building controller in this facility will interface to the existing operator's workstation through fiber optics. However, the DDC controllers will have stand alone operational capability, with the respective equipment related to each system served from a dedicated control panel. The central building controller will be equipped to connect to a laptop computer for local setpoint adjustment.

Based on the light torque duty requirements of the control damper and valve operators, it is recommended to provide electric operators. Control valves on all new heat transfer equipment will be three-way.

Individual room temperature control is proposed to be provided through air terminal valves and reheat coils within the supply ductwork system. An application specific controller and room sensor, with local timed override, will be indicated/specified for each air terminal valve. Certain spaces will be indicated to receive unit heaters. Local thermostatic control will be provided for each.

Individual DDC controllers are indicated for each central station AHU. Monitoring and adjustment of all DDC points will be available from the workstation computer.

Mechanical energy using devices will be provided with metering to monitor energy consumption. Totalizing flow measuring meters will be provided on utility services.

DDC design shall be in accordance with CESAS Standards.

28.13.2 Stand alone equipment, such as chillers supplied with packaged controls, shall be installed with all necessary additional communications support equipment for interface with the post-wide DDC system.

28.14 Acoustical Criteria.

28.14.1 Systems shall be designed to meet the following noise criteria:

Area	NC Level
General open offices	40
Lobbies and common areas	40
Conference rooms	30

Acoustical treatments such as duct lining and sound attenuators shall be used to achieve these levels. Any spaces not specifically listed above shall be coordinated with the user. Vibration transmission from equipment shall be minimized with the use of vibration isolation equipment as required.

28.15 Controls System Specifications.

28.15.1 Automatic temperature controls shall be designed in accordance with specification Section 15951 Direct Digital Control for HVAC. All control devices shall be labeled with laminated plastic tags using unique identifiers, which are cross referenced to the control drawings.

28.16 Energy Conservation.

28.16.1 Public Law 100-615 and Federal Regulations 10 CFR 435 Subpart B, require Federal buildings to be designed and constructed to reduce energy consumption in a life-cycle, cost-effective manner using renewable energy sources when economical. Submittals from the successful bidder shall be in compliance with above and address energy conservation features such as variable frequency drives, etc. System configuration and major equipment selection shall optimize life cycle costs.

28.17 HVAC Calculations.

28.17.1 Design Criteria. Design calculations for determining capacities of all equipment, mechanical systems and components shall be performed by the Contractor, and shall be supported with a complete design analysis. Capacity of all mechanical system components shall be coordinated with the electrical designer. The Design Analysis shall contain all explanatory material giving the design rationale for any decisions that would not be obvious to an engineer reviewing final drawings and specifications. Except as indicated herein, calculations for sizing HVAC systems shall be in accordance with ASHRAE Handbooks, TI 800-01 Design Criteria Technical Instructions, ASHRAE Standard 62 - Ventilation for Acceptable Indoor Air Quality, and Savannah District Design Manual for Military Construction, Volume II of II, NFPA Standards. ASHRAE-based computer generated loads shall be provided and must be submitted with complete input and output data summaries. The design shall reflect heating and cooling capacities based on the design conditions indicated herein. The space (airflow) pressure relationships shall be maintained. The overall building pressurization shall be positive to minimize effects of infiltration.

28.17.2 Internal Loads and Heat Gains.

28.17.2.1 The successful proposer is required and responsible for determining all miscellaneous internal loads (i.e. electronic equipment, equipment layout and locations, etc.) for all areas. Coordination and consultation with the User is required in assessing miscellaneous internal load requirements. Computers, instruments, communication equipment, and A/V equipment are located throughout the facility. Each individual office and each workstation shown on Architectural drawings shall be assumed to include one (1) personal computer for internal load calculations. Break room equipment includes soda vending machine, full size refrigerator, and coffee maker. Documentation and

miscellaneous internal load requirements shall be provided within Design Analysis.

28.18 Energy Budget Calculations.

28.18.1 An Energy Analysis to determine a design energy usage (DEU) budget is required in accordance with Savannah District Design Manual for Military Construction, Volume II of II, Technical Cost Estimating and Value Engineering Requirements, Ninth Edition, Dated March 1999 and TI 800-01 Dated 20 Jul 98. The DEU shall be calculated and compared to the required energy use budget value (EUB) per chapter 11, T1 800-01 (weighted areas of facilities) DEU calculations shall be submitted by the successful bidder after contract award.

28.18.2 The DEU shall include air conditioning, heating, ventilating, lighting, and domestic hot water usage for the facility. The DEU budget shall not include process loads. Process energy load is the energy consumed in support of all functions other than comfort and amenities for building occupants (refrigerators, stoves, computers, instruments etc.).

28.18.3 The operational hours for the calculation shall be 10 hours/day, 5 days/week for the facility type. Use 0700-1700 as the 10-hour period for energy budget calculations. The DEU budget shall be based on availability of energy systems during 10 hours. For the remaining 14-hour period lights, people, heating, air conditioning, and ventilating will be scheduled as OFF.

28.18.4 The area used in the DEU budget estimation is the gross floor area which is defined as the sum of all floor areas, measured from the outside of the exterior walls.

28.18.5 Calculation of the DEU shall be preformed by computerized methods. Computerized calculations shall be performed using the Trane TRACE 600 or the Carrier Hourly Analysis programs. Detailed, room by room, calculations shall be performed with the energy simulation calculated for 8,760 hour per year.

28.18.6 Conversation Factors. Energy use or savings shall be calculated using the following factors. These conversion factors are given by 10 CFR Part 436. Equipment efficiencies and system losses must be accounted for in calculations. For energy media not listed here, use current standard Engineering data or other approved reference data.

ENERGY MEDIUM	CONVERSION FACTORS
Natural Gas	38.4 million joules/liter
Electricity	3.6 million joules/kWh

28.18.7 The DEU budget calculations (including all input and output information) are to be submitted by the successful proposer at the concept design stage. All proposers must submit in their proposals a statement that they will provide a facility that does not exceed the energy budget.

The DET values are taken from MIL-HDBK-1190. The DET represents the maximum unit energy per square foot, based on building category, applicable program area, and Design Region.

The energy study for the Soldier Service Center is based on the following criteria:

Building Category:	Office A1
Region:	6
DET:	45 Btu/hr/sq.ft.

28.19 Energy Conscious Design Features Summary - Mechanical/Electrical

28.19.1 Daylighting design with photocell operation for fixtures in areas with natural daylight.

28.19.2 Fluorescent fixtures provided with electronic ballasts and 32W T-8 lamps. Electronic ballasts will have 0.9 power factor and 5% total harmonic distortion.

28.19.3 The use of incandescent fixtures will be limited to areas requiring dimming.

28.19.4 Occupancy sensors will be provided in low occupancy type rooms (i.e. storage rooms, toilets, janitor's closets, etc.).

28.19.5 Exterior lighting will be controlled by a lighting contactor with photocell on, time clock off operation.

28.19.6 High efficiency motors and motor controllers.

28.19.7 Direct digital controls (DDC) will be utilized. This type of system will enable precise control and energy monitoring of mechanical environmental systems.

28.20 Energy Sources.

28.20.1 Electricity is provided to the site from Georgia Power, Natural gas is also available on Post and will be evaluated for heating in comparison with electricity. Fuel oil is available through vehicular delivery, but will not be considered. Central district heating and cooling utilities are not available from a Central Energy Plant for this site.

28.20.2 Rate structures for all available utilities will need to be confirmed with the DPW energy personnel at the time of study.

28.21 U-Values.

28.21.1 Utilize the U-values presented below as a starting point. These values may be modified if a life cycle cost analysis indicates that a more cost effective value should be used. The life cycle cost analysis shall be based on the Department of Energy (DOE) Federal Energy Management Program (FEMP) criteria according to the provision of the latest version of Code of Federal Regulations, 10 CFR 436A. For guidance on the methodology, refer to National Bureau of Standards Handbook 135, Life Cycle Costing Manual for the Federal Energy Management Program.

Nominal U-Values Btu/square foot - °F for Exposed Floors, Ceilings, and Walls

Heating Degree Days	Opaque Walls	Gross Walls	Ceiling/Roof	Floor
3,283 (Ref 65°F)	0.092	0.210	0.052	0.049

The U-Values above are taken from T1 800-1, table 11-4A in weather region 6. Coordinate actual U-values with the architectural design of the facility.

28.22 Mechanical Equipment.

28.22.1 Mechanical equipment shall be designed in accordance **UFGS** guide specifications listed in this section of mechanical design and included in the appendix volumes. The equipment described below is a minimum. All materials and equipment provided shall be standard catalogued products of manufacturers regularly engaged in the production of such materials and equipment shall be of the manufacturers' latest standard design. Equipment shall comply with the requirements of Underwriter's Laboratories, Inc. (UL), Air Conditioning Refrigeration Institute (ARI), American Society for Testing and Materials (ASTM), National Electric Manufacturer's Association (NEMA), American National Standards Institute (ANSI), National Fire Protection Association (NFPA), or other national trade associations as applicable.

29.22.2 All pieces of floor mounted mechanical equipment shall be installed on a 6 inch thick concrete equipment pad. Provide pad 6 inch larger than equipment footprint on all sides. Install do well pins into floor slab prior to pouring equipment pad. All suspended equipment shall be properly supported according to the manufacturer's instructions. Provide trapeze hangers for larger pieces of equipment. Provide adequate clearance around all pieces of equipment for periodic maintenance, inspection and cleaning. Service of one piece shall not require disturbance of adjacent equipment.

28.22.3 Each pieces of motorized equipment shall be provided with vibration isolators. Nominal deflection and natural frequency of isolation equipment shall be selected based upon equipment size and structural attachment details.

28.22.4 All strainers and air separators are to be equipped with blowdown valves and piped to a floor drain.

28.22.5 The mechanical room shall be separate from the electrical utility room and be accessible from an exterior door. The mechanical room shall house any central equipment for facility comfort conditioning.

28.22.6 Roof mounted equipment is not acceptable. Exhaust fans will be provided for areas that require 100 percent exhaust directly to the outside. These areas include toilet rooms, janitor closets, dark rooms, and other areas as required by the design criteria. Ducted exhaust air systems are proposed; from room inlets to the exhaust fan locations. Vent sets are proposed; located on enclosed accessible mechanical mezzanine structures within the ceiling/roof space, ducted to exterior louvers in architectural elements. All of the exhaust ductwork shall be specified to be sealed.

28.23 Air Handling Units.

28.23.1 Central station air handling units are proposed to supply a mixture of return and outside air for climate control and ventilation of the spaces in the building. Each air handling unit will be furnished with chilled water coils to cool and dehumidify the circulated air. The units will contain supply air fans, and return air fans where necessary. Each fan will be controlled by a variable speed motor controller.

28.23.2 The AHU casings will be double wall steel construction with internal insulation. The casing and components will be installed on a structural steel frame. The AHU's are indicated to be equipped with demount seams in the casing sections to facilitate installation and removal of the equipment; dimensions will not exceed the space available for removal from the building.

28.23.3 The drain pans and coil casings will be constructed of galvanized steel. Cooling coils will be specified to be constructed of aluminum fins and copper tubing.

28.23.4 Maximum coil face velocities shall be limited to 500 feet per minute. Mixing boxes shall be factory or field fabricated and configured with dampers to promote mixing of return air and outdoor air streams. Control dampers shall be constructed to provide no more than 10 CFM/ft^2 air leakage at 4" water column. Angled filter section may be included as part of the mixing box.

28.23.5 AHU's will be provided with access to all internal components: fans, coils, filters, and controls. Where required for rigging, the AHU coils will be vertically split for removal from both sides of the units.

28.23.6 Outdoor air will be obtained through exterior louver elements. Electronic airflow measuring stations will be indicated in the outdoor air ducts, and at the supply and return fan inlets for airflow control. Outdoor air requirements will be based on occupancy in accordance with ASHRAE Standard 62-1999.

28.23.7 Supply fan section shall be equipped with non-overloading centrifugal fan mounted on a steel base frame. Fan base shall be isolated from air handling unit base rails by the use of housed spring isolators. Fans shall be V-belt driven by belt drives sized for 150% of design power requirement. Provide adjustable sheaves for fans up to 20 Hp.

28.24 Air Distribution.

28.24.1 Ductwork shall be constructed of sheet metal to SMACNA HVAC Duct Construction Standards, latest edition. Medium pressure high velocity supply ductwork is proposed for the main supply duct runs. The supply ductwork connects to a series of air terminal valves equipped with inlet control dampers, velocity sensors, controllers, and hydronic hot water heating coils. The units serve low velocity ductwork to the ceiling supply air outlets. The air terminal valves will be factory fabricated, single wall steel construction with internal lining. The hot water heating coils will be aluminum fin and copper tube construction. The variable volume air terminal valves will be equipped with minimum ventilation airflow set points. The ceiling diffuser layout and performance will be assessed at the turndown air quantity to assure adequate distribution at low airflows. Louvered face ceiling supply air diffusers will be provided with a minimum of four concentric elements located within the face. Flexible ductwork runouts to terminal devices shall be limited to 5 feet in length, and shall be pre-insulated. Fiberglass duct shall not be used. Each duct branch shall be fitted with a manual balancing damper. All ductwork shall be located above ceiling, supported from roof structures. Ducted return air systems will be utilized from room return grilles to the AHU return inlets. The high velocity ductwork is specified to be sealed and leak tested, except that duct downstream of air terminal valves will not require leak testing. Ductwork leak tests will not be required for 2 inch w.g. and below pressure classes.

28.24.2 Low pressure distribution ductwork shall be installed to SMACNA pressure class 2" wg, seal class C, and leakage class 24 as a minimum. Test ductwork in accordance with SMACNA 10. Access must be provided to all devices or areas that may require periodic inspection, including but not limited to balancing devices, motor operated dampers, flow measuring stations, smoke/fire dampers, etc.

28.24.3 Provide systems with filters, plenums, and all safety controls. Filtration will be provided at the air handling unit in accordance with the requirements of MIL-HDBK 1190 and ASHRAE Test Standard 52-76. The pre-filters will consist of a 4" thick pleated filter to provide 30% efficient filtration; located on the inlet side of the air handling unit. Intermediate stage

filters of 80% efficiency will also be provided in the AHU downstream of the pre-filter. In the event of smoke, duct mounted smoke detectors shall shut down the fan per NFPA 90A requirements.

28.25 Duct Insulation.

28.25.1 All supply, return, and outside air ductwork shall be insulated, and shall include vapor barrier. Exposed heating only or exposed return air ductwork shall not be insulated.

28.26 Miscellaneous Fans.

28.26.1 Exhaust fans shall be cabinet type, inline, or wall mounted. Roof mounted fans are not acceptable. Fans shall be V-belt driven by belt drives sized for 150% of design power requirement. Provide adjustable sheaves for fans up to 20 Hp. Small fans not available with V-belt drive may be directly driven. Motor selection shall permit non-overloading operation at all conditions. All fans shall be provided with vibration isolators to decouple the motor assembly from the fan housing. Suspend fans with vibration isolators from building structure.

28.27 Heating Equipment.

28.27.1 The hot water heating systems shall include gas-fired hot water boilers and circulation pumps for each building. Manufacturer's standard packaged operation controls shall be provided to handle all aspects capacity modulation and safeguarding. Pumps shall be base mounted or in-line type and selected for non-overloading operation at all conditions. Provide a standby/redundant pump. Provide hot water bypass feeder, expansion tanks and air separator tank.

28.28 Piping and Accessories.

28.28.1 Heating water piping shall be Type L copper or ASTM A53 SCH 40 black steel. Ball valves shall be utilized for sizes up to 3", larger piping shall be equipped with gate valves. Butterfly valves are not acceptable. Piping supports shall be in accordance with MSS SP-59 and MSS SP-69. System shall include an air separator, expansion tank, chemical bypass feeder and makeup water connections. Equip circulation pumps with strainers, check valve, balance valve, flexible couplings and isolation valves to permit pump maintenance. Pipe pump body drain and air vents from expansion tank to nearest floor drain. Provide pressure gages arranged such that pump differential pressure may be witnessed. Entire pump assembly shall be mounted on a structural steel frame equipped with housed spring vibration isolators. Provide manual or automatic waterflow control valves at each coil and balancing valve in each loop of piping branch.

28.28.2 Heating hot water piping shall be insulated with 1-1/2" glass fiber insulation. Piping passing through hangers shall be supported on insulation shields.

28.29 Chiller Equipment.

28.29.1 The chilled water system shall include exterior and interior mounted equipment for each building. Chiller components exterior to the building shall be protected from freezing through the use of a glycol solution or heat tape. Manufacturer's standard packaged controls shall be provided to handle all aspects of compressor staging and safeguarding. Pumps shall be base

mounted and selected for non-overloading operation at all conditions. Close coupled pumps are not acceptable.

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28.29.2 The chiller will be located to the Northwest and immediately adjacent to the dumpsters as depicted on RFP Plate C-2.

28.30 Chilled Water Piping.

28.30.1 Chilled water piping system shall include an air separator, expansion tank, chemical bypass feeder, makeup water connections, chemical treatment systems, surge tank if system volume is not adequate, temperature and pressure ports, temperature and pressure gages, flow switch, and all other required appurtenances. Equip circulation pumps shall be equipped with strainers, check valve, balance valve, flexible couplings and isolation valves to permit pump maintenance. Pipe pump body drain and air vents from expansion tank to nearest floor drain. Provide pressure gages arranged such that pump differential pressure may be witnessed.

28.30.2 All chilled water piping and exterior chilled water piping shall be insulated. Piping passing through hangers shall be supported on insulation shields.

28.31 Thermostats.

28.31.1 A Thermostat shall be provided for each VAV terminal unit or split system air unit. Small rooms with similar load profiles, may be grouped together on a single thermostat. Thermostat shall not be located in location subject to unrepresentative temperatures.

28.32 Unified Facility Guide Specifications (UFGS).

28.32.1 The project specifications shall be prepared using Unified Facility Guide Specifications (UFGS). The guide specifications shall be edited and adapted by the designer to fit each individual project in accordance with the project requirements. The designer is to delete the inapplicable portions of the guide specifications and revise and/or supplement, as required, the applicable portions to provide a complete project specification. Deviations will not be allowed without prior approval from the Savannah District. If additional specification sections are required, contact the Savannah District to see if a guide specification exists. If a guide specification does not exist, the Design/Build Contractor will prepare job specific specifications. Specifications sections shall be edited and submitted at the Final Review stage or earlier. Sections shall be submitted in hard copy form that indicates the changes being added and those to be deleted. For example if Microsoft Word is used, this feature is located under “Tools” “Track Changes” “Highlight Changes”.

28.33 Seismic Protection.

28.33.1 Seismic protection (based on the seismic zone and geographical location of project) shall be provided for this project. Design requirements shall be in accordance with Army Technical Instructions TI 809-04, Seismic Design for Buildings, 31 Dec 1998. Detailed narrative and documentation shall be provided in Design Analysis to support the seismic protection design.

28.34 Cathodic Protection.

28.34.1 Cathodic protection and protective coatings shall be provided for the following buried or submerged ferrous metallic structures regardless of soil or water resistivity in compliance with the National Association of Corrosions Engineers (NACE) criteria and standards.

(1) Natural gas and propane piping
(2) Fire protection piping
(3) Ductile or cast iron pressurized piping under floor (slab on grade) in soil
(4) Underground heat distribution and chilled water piping in ferrous metallic conduit in soils with resistivity of 30,000 ohm-cm or less.
(5) Steel casing for underground hydraulic elevator jack
(6) All fire hydrants and materials subject to corrosion.

28.35 Quality and Workmanship of Mechanical Equipment, Piping systems, Materials and System Components.

28.35.1 The project specifications form the basis for the required level of workmanship and quality of all equipment, piping systems, materials, and system components provided for this project. All materials and equipment provided shall be standard catalogued products of manufacturers regularly engaged in the production of such materials and equipment shall be of the manufacturers' latest standard design. All products shall be supported by a service organization. All mechanical system components shall be environmentally suitable for the intended application. Roof mounted equipment

is not acceptable to be used on this project. All floor-mounted equipment shall be installed on concrete equipment pads. Equipment pads shall extend a minimum of 6 inches beyond the footprint of the equipment on all sides. All suspended equipment shall be properly supported according to the manufacturer's instructions. Vibration isolation devices shall be provided for all equipment which house rotating components, and shall be in accordance with equipment manufacturer’s recommendation.

28.36 Mechanical Systems Maintainability and Accessibility.

28.36.1 Accessibility features (i.e. access panels, etc.) shall be designed and included in this project as required to allow complete access to all mechanical systems and system components which are concealed, or require adjustment, inspection, maintenance, and replacement. Provide adequate clearance around all pieces of equipment for periodic maintenance, inspection and cleaning. Service of one piece of equipment shall not require disturbance of adjacent equipment.

28.37 Work Coordination

28.37.1 The contractor is responsible for insuring that the installation of all mechanical features required is coordinated with the work of all other trades.

28.38 Testing, Adjusting, and Balancing (TAB) of HVAC Systems.

28.38.1 All HVAC systems shall be tested, adjusted, and balanced in accordance with the requirements of AABC or NEBB Procedural Standards. UFGS Specification Section **15990A TESTING, ADJUSTING, AND BALANCING OF HVAC SYSTEMS** forms the basis for HVAC system TAB. The TAB Firm shall be either a member of AABC or certified by NEBB, and certified in all mechanical system categories applicable to this project. The TAB Standard shall be used for all aspects of TAB.

28.38.2 A comprehensive test and balance (TABS) effort of the entire facility will be required.

28.38.3 All new airside systems require TABS in order to validate space pressure relationships, pressure relationships between departments, and the pressure relationships between interior and exterior spaces.

28.38.4 Air quantities will be indicated for each distribution device. Operating conditions of all air moving equipment will be scheduled. Outdoor air dampers will be adjusted to correspond to the building exhaust air quantities.

28.38.5 All new waterside equipment requires TABS in order to verify energy distribution and consumption. Water quantities will be indicated for each heat transfer element and pump.

28.38.6 Commissioning of all new mechanical equipment will be conducted. The commissioning effort will verify that system components are adequately installed, are operating within the tolerances of the design, control components are calibrated, and that the TABS work was conducted effectively.

29. ELECTRICAL DESIGN.

29.1 Codes and Standards.

29.1.1 The design and construction of the electrical systems shall be in compliance with: (1) Applicable building codes and standards listed in paragraph 8, (2) as required herein, and (3) the referenced Unified Facility Guide Specifications (UFGS). Guide specifications are referenced in this RFP for their use in preparation of the design and shall be edited consistent with the criteria furnished. The most current edition of the codes and standards shall be used for building construction and life safety design. Where there is a conflict between the RFP and the codes and standards the most stringent shall apply. When codes and standards are in conflict, the most stringent shall apply.

29.2 Site Electrical.

29.2.1 Primary cable shall be rated 25 KV EPR, 133%, MV-90, 3#1 copper conductors. Provide cable terminators, fused cutouts, lightning arrestors and all necessary hardware. Pad mounted transformers shall have liquid level gauge, liquid temperature gauge, drain valve, bayonet fusing, loop feed, pressure relief valve, tap changer, KWH digital demand metering package (compatible with the Base’s UMCS system), rated 25 kilo-volt delta, (secondary voltage as determined by design), dead front, bolted tank cover, corrugated cooling fins, steel divider, RTE bushing wells, ground pads, 4-position sectionalizing load break switch, 65 degree rise, R-temp filled (non-PCB), 95 KV BIL, green color, six hole spade secondary lugs, parking stands, filling plug, pressure-vacuum gauge, C.T.’s grounding lug, and lifting lugs.

29.2.2 A minimum two-way 4-inch concrete duct-bank (one conduit for the phase conductors, the other for a spare) shall be provided from the riser pole to the pad mounted transformer. A three-phase power line that runs down East Bultman Avenue shall be tapped and ran underground. Jack and bore under all existing roads crossed. The duct bank shall be a minimum 30 inches below grade. Provide manholes as required.

29.2.3 Manholes shall have the following dimensions: 8 ft X 8 ft X 7 ft high. Minimum cover opening shall be 32 inches. All manholes shall have sumps. Primary manholes shall have four 5-inch cast in terminators with end bells on each side of the manhole. Precast-concrete manholes shall have the required strength established by ASTM C 478. Frames and covers shall be made of gray cast iron and a machine-finished seat shall be provided to ensure a matching joint between frame and cover. All frames and covers shall be rated for H20 wheel loading. Cast iron shall comply with ASTM A 48, Class 30B, minimum.

29.2.4 Any outages on the existing systems shall be scheduled for an off peak time (night, weekend, holiday) to be determined by the Ft. Stewart’s DPW. Full preparation shall be done before the outage to keep the downtime duration to a minimum. Design/Build Contractor shall schedule all work items requiring an outage on the same feeder to be accomplished concurrently during the single outage. All coordination with the Ft. Stewart’s DPW shall be done through the Contracting Officer's Representative.

29.2.5 The landscape architect shall be consulted to provide appropriate screening of the pad-mounted transformer. Pad-mounted transformer protection and location shall be in accordance with MIL-HDBK-1008C.

29.3 Site Communications.

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29.3.1 All exterior cable shall be provided by the DOIM. Two 4-inch concrete encased duct banks with innerduct will be provided from a designated

telecommunications room or space, extended five feet outside the building and terminated in ~~a handhole~~ six foot by twelve foot by seven foot manhole. The DOIM will extend copper and fiber optic cable plants to the ~~hand~~manhole. The ~~Contractor~~ DOIM will then extend copper and fiber optic plants into the building and make connections. ~~All cable installed by the Design /Build Contractor MUST be done by a certified telephone technician; not an electrician.~~ The successful Design/Build Contractor shall coordinate work with COMCAST, the local CATV supplier, to ensure that CATV cable plants are extended to the building. One 4-inch concrete encased duct bank for CATV will be provided from a designated telecommunications room, extended five feet outside the building and terminated in a handhole. Duct banks shall be a minimum 24 inches below grade. The communications ductlines shall be concrete encased under roads and all areas subject to vehicle traffic. A pull wire shall be provided in all empty ducts.

29.3.2 The Design/Build Contractor shall exercise care when working with cable plants pulled by the DOIM into the handholes. Any cables damaged by the Design/Build Contractor shall be repaired or replaced by the Design/Build Contractor immediately and at no additional cost to the Government.

29.3.3 Coordinate the exact elevation, placement and orientation of communications handholes with Fort Stewart’s DOIM through the Contracting Officer's Representative. Coordinate the tie-in of new ducts with Fort Stewart’s DOIM through the Contracting Officer's Representative.

29.3.4 Handhole and duct bank systems must be completed (to include pumped out and clean), inspected and accepted by the DOIM at least 6 months prior to the BOD (Beneficiary Occupancy Date) for the project.

29.3.5 Telephone Installer. Outside plant installers shall have a minimum of two (2) years' experience in telecommunications installation and repair to include installing and/or repair and maintains manual, dial, and touchtone telephone equipment. Read and interprets circuit diagrams and follows standard procedures. Runs wire between components and to the outside cable system. Install molding, insulators, connectors, terminal boxes, and other protective and support items. Installing telephone sets, transmitters, receivers, condensers, relays, induction coils, multiple switch keys, ringers and buzzers. Checks the system for proper operation and for such characteristics as volume, clarity and continuity. Use such test equipment as hand test sets, volt-ohmmeters, ammeters, and tone testers. All CAT5E or CAT6 cable must be installed and terminated by a Certified installer.

29.3.6 Cable Splice. Cable splicing personnel shall have a minimum of two (2) years' experience in the installation, maintenance, repair, and testing of multiple conductor aerial, underground, and buried multi-purpose communications cable to include coaxial and fiber optic cable. Copper/twisted pair cable will be spliced using the appropriate cable splicing technique and equipment, to include multiple pair/machine splicing. Fiber optic technician must have manufacturer's training in current methods/techniques of installation and splicing; installation of telecommunication and networking cabling; and termination of cabling for both vertical and horizontal installations.

29.3.7 For additional criteria, See Installation Information Infrastructure Architecture (I3A) Design and Implementation Guide and Outside Plant Performance Requirements.

29.4 Utility Routing.

29.4.1 All power and telecommunications duct lines shall be concrete encased under all roads, paved areas and any other areas subject to vehicular traffic. Jack and bore under all existing roads crossed.

29.4.2 Coordinate the installation of the underground electric and communication lines with all other new utilities which shall include but not be limited to: power, telecommunications, storm drains, sanitary sewers, water lines, steam lines, high temp water lines, chilled water lines, gas lines, and any other utilities. The minimum separation between electric or communication lines and other utility lines shall be 36 inches vertically and 36 inches horizontally when running adjacent. If utilities are crossing minimum separation shall be 12 inches vertically. In the case of concrete encasement, the clearances shall be measured from the outermost dimension of the utility line and shall have suitable supports on each side of the upper line to prevent transferring any direct load onto the lower line.

29.4.3 Prior to commencing work on any new underground power or telecommunications line, the Design/Build Contractor shall stake the route of each line and indicate the exact location of all new ducts, primary sectionalizing cabinets and switches, manholes and transformers for approval by the Base’s DPW and the DOIM, and by the Contracting Officer's Representative.

29.4.4 The routing of the secondary and communications service ductlines into the buildings shall be coordinated with the structural footings to avoid any conflicts.

29.4.5 New underground utilities including manholes shall be located outside the tree drip lines of existing trees scheduled to remain. Ducts that cannot be routed around tree drip lines shall be tunneled through the drip line area as approved by the Contracting Officer's Representative.

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29.4.6 Provide underground electrical service to a future designated smoking area. Provide a dedicated single pole (20 Amp) and a double pole (30 Amp) circuit to a location approximately 100 feet from the new building. Stub up and make safe the conductors at the location to be designated by the DPW at the pre-design conference.

29.5 Grounding.

29.5.1 The secondary electrical distribution system shall be the solidly grounded neutral type with no intentionally introduced grounding impedance. Grounding shall be in accordance with Article 250, National Electrical Code. A green insulated grounding conductor shall be provided with all branch and feeder wiring.

29.5.2 The Premises Distribution System shall be grounded in accordance with TIA/EIA-607 and I3A.

29.5.3 A grounding counterpoise shall be provided around each transformer pad and chillers. Counterpoises and ground ring shall be bonded together underground. The transformers and chillers counterpoise, the main electrical panel, the main telecommunications ground, building steel, and lightning protection down conductors shall be connected to the ground ring.

29.5.4 Grounding conductors shall be copper. Driven grounding electrodes shall be 3/4 inch diameter solid rods of the following materials: copper or copper-clad steel.

29.5.5 Even though ground rods are indicated above, the grounding system shall be designed for a maximum of 5 ohms. Chemical or other similar designs, which calls for the USER to maintain the system, will not be used. Impedance measurements should be made using a direct reading ground resistance meter. Documentation will be provided to the Contracting Officer’s Representative.

29.5.6 Grounding and bonding shall conform to UL 467.

29.6 Exterior Lighting

29.6.1 The design of exterior lighting and associated lighting levels not indicated shall be in accordance with the Illuminating Engineering Society, IES, Lighting Handbook Reference and Application, 9th Edition. Exterior lighting shall include parking lots, canopies, and facility entrances/exits. All exterior lighting shall utilize color corrected metal halide lamps and be controlled by photocell. All site lighting shall be zoned and shall be controlled by a photocell on, time clock signal off operation via lighting contactors. Each contactor/zone shall be equipped with Hand-Off-Auto switches, location of controls shall be coordinated with the User after Contract award. Parking areas shall be illuminated to 1 footcandle utilizing 400W metal halide lamped, high cut-off type fixtures mounted on 30 feet square aluminum poles. Facility entrances/exits shall be illuminated with wall mounted fixtures or recessed fixtures mounted in the soffit, if applicable. All exterior fixtures shall be dark bronze anodized aluminum.

29.6.2 Where poles are located in areas capable of being struck by a vehicle, poles shall be mounted on concrete pedestals (height to be determined during the design of the project). Aluminum poles mounted in turf or landscaping areas shall be mounted on concrete pedestals 3 inches in height above the ground.

29.6.3 Metal poles shall be the pole manufacturer's standard design for supporting the number of fixtures indicated. Poles shall be designed for a wind velocity of 100 mi/hr at the base of the pole, for a wind gust factor of 1.3, and for the height and drag factors recommended by AASHTO LTS-3. The effective projected area of luminaries and other pole-mounted devices shall be taken into account in pole design. Poles shall have grounding provisions. The type of pole shaft material provided shall not be mixed for the same type of fixture types. Grounding connection shall be provided near the bottom of each metal pole and at each concrete pole anchor base. Scratched, stained, chipped, or dented poles shall not be installed.

29.7 Lighting.

29.7.1 Lighting shall be provided in all rooms in the building. Average maintained horizontal illumination levels at 30 inches above the finished floor shall be provided as listed in TI 800-01 Design Criteria and MIL-HDBK-1191. Vertical illumination levels for all rooms and horizontal and vertical illumination levels for rooms or areas that are not listed on the Schedules in TI-800-01 shall be in accordance with the Illuminating Engineering Society, IES, Lighting Handbook Reference and Application, 9th Edition. The IES handbook shall also be consulted for additional lighting requirements (uniformity, etc). Design should be based on the middle of the ranges; not the high values. Energy conservation methods shall be in accordance with ASHRAE 90.1. Interior lighting calculations for rectangular rooms shall be based on Zonal Cavity method using lighting levels listed in MIL-HDBK-1191, STD DETL 40-06-04. Irregularly shaped rooms will utilize the point-by-point method for lighting calculations. All lighting calculations shall be submitted to the Energy Office for review.

29.7.2 General ambient illumination shall provide a generally glare-free, high quality lighting environment. Linear-type fluorescent lighting installations in offices, conference rooms, workrooms, file rooms and similar spaces shall achieve Visual Comfort Probabilities (VCP) of 70 or higher. Fluorescent lamps for general purpose lighting will be cool white, 4100 degrees kelvin with a minimum CRI of 80.

29.7.3 Compact fluorescent down lighting fixtures shall be used in areas where special attention must be given to aesthetics.

29.7.4 Occupancy sensors shall be used in storage rooms and restrooms. Occupancy sensors may also be used in other areas for energy savings.

29.7.5 Fluorescent lamps shall be T8 or compact. The usage of U-lamps is not recommended due to higher initial cost. Fluorescent ballast shall be the electronic type. All fluorescent lamps shall be low mercury content certified to pass the U.S. Environmental Protection Agency (EPA) Toxic Characteristics Leaching Procedures (TCLP) test for non-hazardous waste.

29.7.6 Wall switches shall be located on the strike side of a door, 6 inches from the door opening, unless otherwise functionally required. Multiple switching will be provided for rooms as directed by the user, where indicated on standard room guide plates, and in large rooms and areas. Multiple switching through the same light fixtures will be achieved by providing these fixtures with two ballasts. One switch/ballast combination will control the inner lamps, while the second switch/ballast combination will control the outer lamps.

29.7.7 Emergency Egress Lighting

29.7.7.1 Illuminated exit signs and emergency lights shall be provided for all emergency exits and passageways as required by the NFPA Life Safety Code No. 101. All electrical, telecommunications and mechanical rooms shall also be provided with emergency lighting. Emergency battery ballasts in fluorescent fixtures will provide emergency lighting. Exit fixtures shall be LED (red) with built-in battery backup capability.

29.7.7.2 Upon loss of power the emergency lamp shall light regardless of the light switch position.

29.7.8 Incandescent lighting fixtures may be utilized only in small, infrequently used areas, such as janitor closets.

29.7.9 Parabolic lowered, linear type fluorescent lighting fixtures and dimming shall be provided for Training Rooms and Conference Rooms.

29.7.10 Security lighting shall be provided at service entrances and at utility rooms (i.e. mechanical, electrical, communications, etc.). Exterior wall mounted security light fixtures shall be of a design consistent with a Southern Coastal Georgia motif and shrouded to minimize glare. Fixture shall use compact fluorescent lamps whenever possible; where compact fluorescent lamps are inadequate, fixtures shall be equipped with metal halide lamps.

29.7.11 Wall mounted light fixtures at main entrances and other high visibility areas shall be selected for aesthetics and compatibility with the building architecture.

29.7.12 Lighting shall be provided for specialty items such as display cases, accent lighting and other items as necessary.

29.7.13 See Appendix A - Functional Room Requirements for additional information.

29.8 Receptacles

29.8.1 Provide a minimum of one general-purpose 120 volt, 15 or 20 ampere duplex receptacle outlet on each wall in every room. In rooms where walls exceed 10 feet horizontally, provide an additional duplex outlet for each additional 10 feet of wall or fraction thereof. Receptacles spacing shall not exceed 10 feet. The general-purpose receptacles are in addition to the special purpose and dedicated outlets for special equipment. Unless otherwise indicated or required for handicap, all receptacles will be 18 inches above finish floor (AFF). Receptacles mounted above counter tops or in any control desk areas shall be appropriately mounted.

29.8.2 Receptacles in corridors shall be provided for floor cleaning equipment. The receptacles shall be spaced in such a manner as to permit full coverage by the equipment with a 25 feet extension cord. Floor receptacles shall not be used.

29.8.3 An overhead projector system will be used in the Conference Rooms and Training Rooms. Confirm locations at pre-design conference. Provide the necessary conduits, wiring, outlets, etc. for the User to connect a laptop computer to operate with this projector. Location of these outlets will be coordinated with the User after contract award.

29.8.4 Each computer workstation shall be provided with a quadraplex receptacle outlet adjacent to the combination voice/data outlet. All receptacles serving computer equipment shall be labeled and served from dedicated branch circuits with no more than four receptacles per circuit.

29.8.5 Special Function Receptacles

29.8.5.1 Appropriate outlet types shall be provided for items identified in other portions of the RFP (i.e coffee pots, vending machines, overhead motorized projectors and screens, etc.) Provide appropriate outlet types for any Government furnished equipment identified.

29.8.5.2 Dedicated outlets shall be provided for copying machines, FAX machines, laser printers, and items identified in other portions of the RFP. The user may adjust locations after the Final Review stage.

29.8.6 Receptacles in weatherproof enclosures shall be provided on the outside areas at entrances to all buildings.

29.8.8 Ground Fault Circuit Interrupter (GFCI) Outlets

GFCI outlets are to be used for 20-amp convenience type outlets in the following areas: Outdoor, wet locations, toilets, and other locations as required by the National Electric Code or OSHA. GFCI receptacles are to be wired such that the loss of power on one receptacle does not affect downstream receptacles.

29.8.9 Two dedicated quadraplex receptacles each will be provided in the Telecommunication spaces to serve the voice/data equipment racks and cabinets.

29.9 Premises Distribution System (PDS)

29.9.1 A completely operational cabling system including, but not limited to, all necessary raceway, cabling, backboards, cable trays, equipment racks, terminations, jacks, patch panels, and faceplates shall be provided in accordance with TIA/EIA 568-B. The PDS will be designed as a star topology in accordance with TIA/EIA 568-B. All combination outlets (voice/data) and cable TV (CATV) outlets will be 18 inches above finish floor (AFF) except wall voice outlets will be 54 inches AFF. One voice, two data, and one blank insert will be in the same outlet. The cable for the outlet will be 4 pair, 24 AWG solid unshielded twisted pair (category 5e) copper for voice and a 4 pair, 24 AWG solid unshielded twisted pair (category 5e) for data. Termination of copper at instrument end will be in a eight position connector (Category 5e) for voice and eight position connector (category 5E) for data, both 568A configured per Base Communications.

29.9.1.1 Coordinate with the DOIM the installation of the Main Distribution Frame, Building Distribution Frames, patch cords, fiber optics patch panels and the protected terminals for the building. Design Build Contractor to provide space for the DOIM's equipment.

29.9.1.2 All combination voice and data jacks shall be installed in a 4-1/2" x 2-1/8" deep square box with a single gang plaster ring with 1" conduit stubbed out into the corridor cable tray system. The single gang plaster ring will allow a four-position single gang faceplate to be installed and the box will be sized to accommodate the slack cable.

29.9.1.3 The CATV system will consist of RG6 coaxial cable, "F" type connectors, splitters and outlets located in waiting rooms, lounges, selected offices, training rooms, briefing rooms, classrooms, and conference rooms. In conference rooms, training rooms, classrooms, and briefing rooms there will be a coaxial switch to allow direct input from portable VCRs. Confirm locations at pre-design conference. Taps and splitters will be provided to distribute the television signals throughout the facility. Amplifiers will be provided to produce a +6 to +12 dBmv signal level at each outlet. The program distribution source will be by Comcast, the local CATV company supplying service to the Base.

29.9.2 All voice pairs from the copper building entrance cable shall be terminated on a protected entrance terminal. These pairs shall be connected pair for pair to a 110 type block for cross connect. Only pairs to be used for voice and data shall be terminated on the back of the voice/data patch panel. Patch cords shall be used to connect voice pairs or lines and from the voice patch panel to the voice/data patch panel. Patch cords shall also be used to connect data lines from the hub to the voice/data patch panel. Voice/data patch panel shall be a surge protected patch panel.

29.9.3 Backbone distribution will consist of multi-pair copper cable for voice and 24-strand multi-mode fiber optic cable for data. The fiber optic data cable will be terminated on fiber optic patch panels mounted in the telecommunications equipment rack. The fiber optic cable will be terminated using ST connectors.

29.9.4 Conduit from voice/data or CATV outlets shall be a minimum of 1-inch electrical metallic tubing (EMT) conduit. One inch EMT conduits shall be installed as a "home run" between the telecommunications room backboard/rack and each outlet or between each outlet and the cable tray. "Home run" means one continuous conduit run with NO pull boxes and NO more than two 90-degree bends in the entire conduit run. Solid bottom cable trays shall be used to provide a centralized cable distribution system in the buildings if space permits and is readily accessible. Cable trays shall be no higher than 6 inches above finished ceilings. The cable tray shall be a minimum of 6 inches

deep and provided with one square-inch of cross-sectional area per outlet location to be served. An optimal fill ratio of 40% should be the design plan. The EMT conduit shall be physically strapped to the cable tray and an anti-chaffing grommet attached. All empty conduits routed to outlet boxes shall be provided with a pull cord. All conduits to administrative outlet boxes shall be provided with a pull cord for future installation of fiber optic cable (FOC).

29.9.5 For additional criteria, See Installation Information Infrastructure Architecture (I3A) Design and Implementation Guide and TIA/EIA standards.

29.10 Fire Alarm System.

29.10.1 The building will have an automatic fire sprinkler system. The fire alarm system will consist of a control panel, manual pull stations, horns and strobe lights, sprinkler water flow switches, valve tamper switches, air pressure supervisory switches, control and monitor modules for non-addressable devices and smoke and heat detectors. Fire Alarm system for this building shall comply with the Americans with Disabilities Act (ADA).

29.10.2 In addition to the manual pull stations at all exits, provide pull stations at all other exterior entrances and the mechanical room. In addition to the horns/strobes throughout the facility, provide them also in the mechanical room.

29.10.3 Provide horns/strobes throughout the facility so that alarm sound levels at any location are at least 15 dB above normal ambient sound levels and can be heard in all rooms. Provide strobe lights to comply with NFPA 72-1999. Strobe lights shall meet Underwriter’s Laboratories (UL) Standard 1971 and shall be synchronized.

29.10.4 The fire alarm system shall be a completely supervised system employing analog addressable initiating devices and multiplex communication techniques. Each detection, monitor and control device shall be individually addressable. Devices which are not inherently addressable (i.e. tamper, flow switches etc.) shall be equipped with addressable monitor and control modules.

29.10.5 Coordinate with the other disciplines to provide tamper switches on all fire alarm system control valves and the Post Indicator Valve (PIV).

29.10.6 Conduit and wiring shall be installed in accordance with Specifications Section 13851A. System shall be a four wire, two conduit loop system. Vertical and horizontal separation of conduits shall be in accordance with NFPA 72. Conduits are to be marked with a red stripe every 10 feet. All junction or pullboxes shall be painted red.

29.10.7 Provide cabinet mounted MOV based surge protection device in addition to surge protection integral to the FACP. Device shall be UL 1449 listed and shall satisfy the requirements of IEEE C62.41.

29.10.8 Provide a Monoco Fire Alarm Transmitter. Locate the Fire Alarm Control Panel (FACP) and the transmitter in the Electrical Rooms.

29.10.9 Provide a smoke detector at the location of the FACP as required by NFPA 72, 1-5.6.

29.11 Service Equipment.

29.11.1 Provide only one main service disconnect device for the normal power supply to the facility and located in the Main Distribution Panel (MDP) inside the building.

29.11.2 The main service equipment and all other electrical equipment shall fit into the space required and provided with all the access and clearance required by code.

29.11.3 A short-circuit and overcurrent protective devices coordination study shall be provided for the complete electrical distribution system.

29.11.4 All interior cables will be copper. No aluminum conductors will be used in the construction of this facility. The use of 75 or 90 degrees C terminals and insulated conductors are required.

29.12 Electrical Disconnects. Electrical disconnects shall be installed adjacent to equipment and accessible to equipment operators for the following equipment: Motors and equipment as required by the NEC and OSHA requirements.

29.13 Lightning Protection. Lightning protection shall be provided for the building. A complete protection via air terminals shall be provided. The system shall have the appropriate U.L. master label installed on the building. Down and roof conductors shall be concealed within the buildings. Lightning Protection System shall be in accordance with NFPA 780.

29.14 Transient Voltage Surge Suppression (TVSS). Surge suppressors shall parallel the operating devices in providing a path to ground for an electrical surge and limiting the magnitude of transient voltage surges on the system. Units shall be mounted adjacent to the Main Distribution Panel in accordance with the manufacturer recommendations. Unit shall be hard-wired into the electrical distribution system utilizing a circuit breaker connection. Units shall be tested in accordance with IEEE C62.45 using an IEEE C62.41 Category B waveform. Units shall be UL 1449 listed and labeled. Modes of protection shall be normal mode (L-N, L-L) and common mode (L-G, N-G). The unit shall include self-diagnostic and self-testing capabilities, a resettable transient event counter, and a local audible alarm with mute capability.

29.15 Seismic Protection. Seismic design shall be in accordance with Army Technical Manual, TI 809-04, Seismic Design for Buildings, dated December 1998 and Specification Section 16070A Seismic Protection For Electrical Equipment.

29.16 Intrusion Detection System (IDS)

29.16.1 An empty conduit system with pull strings and outlet boxes will be provided as determined by the using service.

29.17 Public Address (PA) System

29.17.1 A prewired public address system, including cabling and raceways, will be provided for the entire facility. Provide slack cable in outlet boxes located at 18 foot intervals in corridors and at 14 foot intervals in waiting rooms for connection to speakers. System headend equipment, components, speakers, back-boxes, final connections, etc. will be provided by the Government.

29.18 INTERCOM SYSTEM

29.18.1 All intercom functions will be provided through the telephone system.

29.19 The electrical system shall comply with the Americans with Disabilities Act (ADA) for buildings identified in the RFP with this requirement.

29.20 The design and construction of the electrical system shall be in accordance with the most current codes and standards. Provide adequate electrical power and safe and efficient distribution from panelboards, switchboards to lighting, wiring devices, motors, miscellaneous equipment, kitchen equipment, appliances and the locations where it is needed, based on the project requirements as contained within this RFP (architectural, mechanical, etc).

29.20.1 The design of the electrical distribution system shall include twenty-five percent future load growth in all cable and equipment. Twenty-five percent spares and capacity shall be provided in all lighting and receptacle panelboards.

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29.20.2 ~~Panelboards serving the loads for the rest of the building shall not be located in corridors or any other open places that the public can access.~~Omitted.

29.20.3 Series rated breakers/panelboards shall not be used.

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29.20.4 ~~The User will relocate following equipment: **(The following will be needed from the User's: voltage, phase, and amps of all equipment coming from existing Buildings and will also need the rooms that it will be used in.)**~~ Appendix A, Functional Room Requirements, lists general utility requirements for anticipated equipment and activities in each planned space as identified during preliminary planning. Contractor shall coordinate with DPW and User during the project design to identify actual utility requirements for each space and provide adequate electrical service for all equipment identified at that time.

29.21 Nonlinear Loads. The increasing presence of solid-state switching mode power supply components in electrical equipment requires the designer to consider the equipment to be supplied by the distribution system and to make provisions for nonlinear loads in the building. These loads generate harmonics, which can overload conventionally-sized conductors or equipment causing safety hazards and premature failures. ETL 1110-3-403, IEE Std. 1100 and IEEE Std. 519 shall be used as design guides.

29.21.1 ETL-1110-3-412 shall be used in the selection and application of transformers and dielectrics. K-rated transformers shall be supplied to serve nonlinear loads. "K" factor ratings shall be scheduled. Panelboards serving nonlinear loads shall have double-rated neutral buses. Motors connected to the same power source as nonlinear loads shall also be upgraded in size similarly. True RMS sensing meters, relays, and circuit breaker trip elements shall be used with nonlinear loads.

29.22 For additional electrical criteria, See TI-800-01 Design Criteria), Appendix A - Functional Room Requirements for additional information.

29.23 Location of Documents referenced in Section 29.

29.23.1 TI-800-01 & TI-800-04 - http://www.hnd.usace.army.mil/techinfo/ti.htm

29.23.2 Specifications Sections - http://www.ccb.org/ufgs/ufgs.htm

29.23.3 Installation Information Infrastructure Architecture (I3A) Design and Implementation Guide - http://arch-odisc4.army.mil/I3A/i3a.htm

30. SUSTAINABLE DESIGN

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30.1 Sustainable Design Goal. The goal for this project is to achieve ~~more than 50~~ at least 26 points using SPIRIT, the Army's project rating tool for sustainable design. SPIRIT is a modified version of the US Green Building Council's LEED project rating tool.

30.2 Mandatory Requirements. The SPIRIT Points Summary, Appendix D, indicates what SPIRIT items are contract requirements for this project in the "Mandatory Points in RFP" column. A description of these SPIRIT items is contained in the SPIRIT document itself, Appendix H. This column also indicates the status of SPIRIT points that fall outside the scope of design and construction, such as features of the selected site.

- End of Section -

APPENDIX A

FUNCTIONAL ROOM REQUIREMENTS

SOLDIER SERVICE CENTER – FIRST FLOOR

Note: Square footages shown are as drawn followed by the programmed square footages in parentheses.

SPACE: 1001 – VESTIBULE
DEPARTMENT: Building Requirement
DESCRIPTION: Entry
AREA: 96 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior, 1002 – Lobby.
FEATURES: Glazed entry doors, walk off mat, Knox Box on exterior of building at Entry.

SPACE: 1002 – LOBBY
DEPARTMENT: Building Requirement
DESCRIPTION: Main Lobby
AREA: 992 SF
NUMBER OF OCCUPANTS: 10 by Code
ADJACENCY REQUIREMENTS: 1001 – Vestibule, Corridors, Elevator.
FEATURES: Reception desk (ADA accessible) with data drop, phone drop, quad electrical outlet; electrical outlets per Code; bulletin board (8'w x 4'h); electronic building directory with electrical power and data drop.

SPACE: 1003 – COMMERCIAL TRAVEL
DEPARTMENT: Transportation
DESCRIPTION: "Travel Agency" office
AREA: 196 (240) SF
NUMBER OF OCCUPANTS: 2 Staff / 4 Visitors
ADJACENCY REQUIREMENTS: 1002 – Lobby, 1004 – Office.
FEATURES: Waiting space with brochure racks; counter (ADA accessible) with 2 data outlets, 2 phone outlets, 2 quad electrical outlets; additional phone outlet for fax.

SPACE: 1004 – OFFICE
DEPARTMENT: Transportation
DESCRIPTION: Private office
AREA: 133 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: 1003 – Commercial Travel.
FEATURES: 2 data outlets; 2 phone outlets; electrical outlets per Code plus 2 additional quad electrical outlets.

SPACE: 1005 – JOB INFO
DEPARTMENT: Human Resources Civilian
DESCRIPTION: Office for employment assistance for civilian relatives
AREA: 188 (190) SF
NUMBER OF OCCUPANTS: 2 Staff / 4 Visitors
ADJACENCY REQUIREMENTS: 1002 – Lobby.

FEATURES: Waiting space with brochure racks; counter (ADA accessible) with 2 data outlets, 2 phone outlets, 2 quad electrical outlets; additional phone outlet for fax.

SPACE: 1006 – VEHICULAR REGISTRATION
DEPARTMENT: Vehicular Registration
DESCRIPTION: Office for registration of privately owned vehicles
AREA: 181 (180) SF
NUMBER OF OCCUPANTS: 2 Staff / 4 Visitors
ADJACENCY REQUIREMENTS: 1002 – Lobby.
FEATURES: Waiting space; counter (ADA accessible) with 2 data outlets, 2 phone outlets, 2 quad electrical outlets; additional phone outlet for fax.

SPACE: 1007 – CORRIDOR
DEPARTMENT: Building Requirement
DESCRIPTION: Main corridor
AREA: 1,098 SF
NUMBER OF OCCUPANTS: 11 by Code
ADJACENCY REQUIREMENTS: 1002 – Lobby, 1016 – Vestibule, Finance, In Processing, Dental, Tri-Care, Hearing, Personnel Processing, Restrooms.
FEATURES: Electrical outlets per Code; drinking fountains (Hi/Lo).

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SPACE: 1008 – CORRIDOR/WORKSTATIONS/WAITING
DEPARTMENT: Finance
DESCRIPTION: Open office
AREA: 3,140 SF
NUMBER OF OCCUPANTS: 24 Staff / 15 Waiting / 24 Visitors
ADJACENCY REQUIREMENTS: Corridor, Soldier Entry (1016 - Vestibule), 1011 – Waiting.
FEATURES: 24 workstations (80 s.f. each) with 1 data outlet, 1 phone outlet, 1 quad electrical outlet; Waiting Area with 15 seats and phone drop; other electrical outlets per Code; one additional phone outlet at Waiting; two additional phone outlets for faxes.

SPACE: 1009 – OFFICE
DEPARTMENT: Finance
DESCRIPTION: Private office
AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: 1008 – Workstations.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1010 – OFFICE
DEPARTMENT: Finance
DESCRIPTION: Private office
AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: 1008 – Workstations.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

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SPACE: 1011 – WAITING
DEPARTMENT: Shared: Finance, In Processing, In Dental, Tri-Care, In Medical
DESCRIPTION: Waiting / Briefing Room
AREA: 1,102 (1,100) SF
NUMBER OF OCCUPANTS: 100
ADJACENCY REQUIREMENTS: Soldier Entry (1016 – Vestibule), Finance, In Processing, Dental, Tri-Care, Hearing.
FEATURES: Open room with movable seating; 1 data drop and 1 phone drop; two ceiling mounted TVs; electrical outlets per Code; two 8'w x 4'h bulletin boards.

SPACE: 1012 – CORRIDOR/WORKSTATIONS
DEPARTMENT: In Processing
DESCRIPTION: Open office
AREA: 696 SF
NUMBER OF OCCUPANTS: 7 Staff / 6 Visitors
ADJACENCY REQUIREMENTS: 1011 – Waiting, Soldier Entry (1016 Vestibule).
FEATURES: 6 workstations (80 s.f. each) each with one data drop, 1 phone drop, and quad electrical outlet; casework for ADA accessible reception desk with one data drop, 1 phone drop, 1 quad electrical outlet; other electrical outlets per Code; 1 additional phone outlet for fax.

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SPACE: 1013 – DOG TAG
DEPARTMENT: In Processing
DESCRIPTION: Room for dog tag machine
AREA: 59 (60) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: 1012 – Workstations.
FEATURES: Dog tag machine with required electrical power; other electrical outlets per Code; data drop; sound insulation in walls, ceiling.

SPACE: 1014 – STORAGE
DEPARTMENT: Building Requirement
DESCRIPTION: Storage closet
AREA: 40 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 1015 – STORAGE
DEPARTMENT: Building Requirement
DESCRIPTION: Storage closet
AREA: 85 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 1016 – VESTIBULE

DEPARTMENT: Building Requirement
DESCRIPTION: Entry vestibule, primary entrance for soldier in-processing
AREA: 92 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior, 1007 – Corridor, 1017 – Stair.
FEATURES: Electrical outlets per Code; glazed entry doors, walk off mat.

SPACE: 1017 – STAIR NO. 3
DEPARTMENT: Building Requirement
DESCRIPTION: Egress stair
AREA: 192 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior, 2002 – Corridor, 1016 – Vestibule.
FEATURES:

SPACE: 1018 – HVAC
DEPARTMENT: Building Requirement
DESCRIPTION: HVAC room
AREA: 556 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior.
FEATURES: Electrical outlets per Code.

SPACE: 1019 – MAIN ELECTRICAL
DEPARTMENT: Building Requirement
DESCRIPTION: Main electrical room
AREA: 243 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior.
FEATURES: Electrical outlets per Code.

SPACE: 1020 – STORAGE
DEPARTMENT: Building Requirement
DESCRIPTION: Storage closet
AREA: 50 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: 1026 – Sterilization.
FEATURES: Air compressor and vacuum pump for dental equipment, electrical outlets per Code; sound insulation in walls and ceiling.

SPACE: 1021 – CORRIDOR
DEPARTMENT: Shared: In Medical, Tri-Care, Dental
DESCRIPTION: Corridor
AREA: 728 SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: 1007 – Corridor, Dental, Tri-Care, Hearing, 1031 – Waiting.
FEATURES: Casework (ADA accessible) for reception with 2 data drops, 2 phone drops, 2 quad outlets; casework for coffee in alcove with quad electrical outlets and water supply; other electrical outlets per Code; intercom system at reception desk connected to 1022, 1024, 1025, 1028, 1030.

SPACE: 1022 – EXAM
DEPARTMENT: In Dental

DESCRIPTION: Dental exam room
AREA: 75 (80) SF
NUMBER OF OCCUPANTS: 1 Staff / 1 Visitor
ADJACENCY REQUIREMENTS: Soldier Entry, Dental Department.
FEATURES: Dental exam chair with required utilities routed through floor trench; casework with sink and emergency eye wash, storage cabinets and work surface; three duplex electrical outlets above casework; other electrical outlets per Code; 2 data outlets above casework; 1 phone drop above casework.

SPACE: 1023 – OFFICE
DEPARTMENT: In Dental
DESCRIPTION: Private office
AREA: 80 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Dental Department.
FEATURES: 2 data drops; 3 phone drops; electrical outlets per Code plus one quad electrical outlet.

SPACE: 1024 – EXAM
DEPARTMENT: In Dental
DESCRIPTION: Dental exam room
AREA: 75 (80) SF
NUMBER OF OCCUPANTS: 1 Staff / 1 Visitor
ADJACENCY REQUIREMENTS: Dental Department.
FEATURES: Dental exam chair with required utilities routed through floor trench; casework with sink and emergency eye wash, storage cabinets and work surface; three duplex electrical outlets above casework; other electrical outlets per Code; 2 data outlets above casework; 1 phone drop above casework.

SPACE: 1025 – EXAM
DEPARTMENT: In Dental
DESCRIPTION: Dental exam room
AREA: 76 (80) SF
NUMBER OF OCCUPANTS: 1 Staff / 1 Visitor
ADJACENCY REQUIREMENTS: Dental Department.
FEATURES: Dental exam chair with required utilities routed through floor trench; casework with sink and emergency eye wash, storage cabinets and work surface; three duplex electrical outlets above casework; other electrical outlets per Code; 2 data outlets above casework; 1 phone drop above casework.

SPACE: 1026 – STERILIZATION
DEPARTMENT: In Dental
DESCRIPTION: Dental sterilization room
AREA: 93 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Dental Department.
FEATURES: Casework on two sides of room with sink, 2 autoclaves (each with dedicated electrical circuit), undercounter refrigerator; 3 quad electrical outlets above counter; 1 phone drop above counter; 1 data drop above counter; wall storage cabinets above counter; other electrical outlets per Code; distilled water supply.

SPACE: 1027 – X-RAY
DEPARTMENT: In Dental

DESCRIPTION: X-Ray Room Bitewing
AREA: 43 (44) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Dental Department, 1028 – X-Ray Control.
FEATURES: X-Ray equipment with required utilities; chair for X-Rays performed in seated position; lead glass window to X-Ray Control; lead shielding in walls and door; other electrical outlets per Code.

SPACE: 1028 – X-RAY CONTROL
DEPARTMENT: In Dental
DESCRIPTION: Room for X-Ray controls and technician
AREA: 32 (32) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: 1027 – X-Ray, 1029 – X-Ray, Dental Department.
FEATURES: Controls for X-Ray equipment; lead glass windows to 1027 and 1029; electrical outlets per Code.

SPACE: 1029 – X-RAY
DEPARTMENT: In Dental
DESCRIPTION: X-Ray Room Panoramic
AREA: 29 (28) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: 1028 – X-Ray Control, Dental Department.
FEATURES: X-Ray equipment with required utilities; X-rays performed in standing position; lead glass window to X-Ray Control; lead shielding in walls, door; electrical outlets per Code.

SPACE: 1030 – DARK ROOM
DEPARTMENT: In Dental
DESCRIPTION: X-Ray developing dark room
AREA: 53 (48) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: X-Ray Area.
FEATURES: Casework with developing equipment and double sink; ventilation to exterior; red light; warning light outside door; light seals on door; 2 data drops above casework; 1 phone drop above casework; 2 quad electrical outlets above casework; other electrical outlets per Code; wall cabinets above casework; emergency eye wash at sink.

SPACE: 1031 – WAITING
DEPARTMENT: Shared: In Dental, Tri-Care, Hearing
DESCRIPTION: Waiting room
AREA: 350 (350) SF
NUMBER OF OCCUPANTS: 30
ADJACENCY REQUIREMENTS: Soldier Entry, In Dental, Tri-Care, Hearing.
FEATURES: Ceiling mounted TV, electrical outlets per Code.

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SPACE: 1032 – RECEPTION
DEPARTMENT: Tri-Care
DESCRIPTION: Reception workstation
AREA: 79 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Tri-Care, 1031 – Waiting.
FEATURES: ADA accessible casework with 2 data drops, 2 phone drops, 2 quad electrical outlets; other electrical outlets per Code; 1 phone drop.

SPACE: 1033 – DATA
DEPARTMENT: Tri-Care
DESCRIPTION: Record screening room
AREA: 139 (140) SF
NUMBER OF OCCUPANTS: 5

ADJACENCY REQUIREMENTS: Tri-Care.
FEATURES: Casework work surface with 5 data drops, 5 phone drops, 5 quad outlets; other electrical outlets per Code.

SPACE: 1034 – HIV
DEPARTMENT: Tri-Care
DESCRIPTION: Room for HIV Testing
AREA: 120 (120) SF
NUMBER OF OCCUPANTS: 2 Staff / 4 Visitors
ADJACENCY REQUIREMENTS: Tri-Care
FEATURES: 4 stations with chairs, dividing screens; casework with sink, 1 data outlet, 1 phone outlet, 1 quad electrical outlet; other electrical outlets per code; lockable cabinets.

SPACE: 1035 – OFFICE
DEPARTMENT: Tri-Care
DESCRIPTION: Private office, HIV
AREA: 85 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: HIV
FEATURES: 1 data drop; 1 phone drop; electrical outlets per Code plus additional quad electrical outlet.

SPACE: 1036 – OFFICE
DEPARTMENT: Tri-Care
DESCRIPTION: Private office, shots
AREA: 85 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: 1037, 1038
FEATURES: 1 data drop; 1 phone drop; electrical outlets per Code plus additional quad electrical outlet.

SPACE: 1037 – SHOT
DEPARTMENT: Tri-Care
DESCRIPTION: Room for giving shots
AREA: 80 (80) SF
NUMBER OF OCCUPANTS: 1 Staff / 1 Visitor
ADJACENCY REQUIREMENTS: Tri-Care.
FEATURES: Casework with sink, under counter refrigerator; lockable cabinets; 1 data drop; 1 phone drop; electrical outlets per Code plus one quad outlet; room for exam table.

SPACE: 1038 – SHOT
DEPARTMENT: Tri-Care
DESCRIPTION: Room for giving shots
AREA: 80 (80) SF
NUMBER OF OCCUPANTS: 1 Staff / 1 Visitor
ADJACENCY REQUIREMENTS: Tri-Care.
FEATURES: Casework with sink, under counter refrigerator; lockable cabinets; 1 data drop; 1 phone drop; electrical outlets per Code plus one quad outlet; room for exam table.

SPACE: 1039 – HEARING
DEPARTMENT: In Medical
DESCRIPTION: Hearing testing room
AREA: 319 (270) SF
NUMBER OF OCCUPANTS: 2 Staff / 16 Visitors

ADJACENCY REQUIREMENTS: 1031 - Waiting.
FEATURES: Two manufactured 8-person hearing testing booths with required utilities and HVAC equipment, confirm size with manufacturer; casework work surface with 2 data drops, 3 phone drops, 3 quad electrical outlets; other electrical outlets per Code; design based on booths by "Industrial Acoustical Corp." 718-430-4532, Dominic Nardi; (booth 8'-2" x 10'-6").

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SPACE: 1040 - WOMEN
DEPARTMENT: Building Requirement
DESCRIPTION: Restroom
AREA: 144 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 4 water closets; 2 lavatories; baby changing station; toilet accessories and stalls.

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SPACE: 1041 - MEN
DEPARTMENT: Building Requirement
DESCRIPTION: Restroom
AREA: 150 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 2 water closets; 2 lavatories; baby changing station; 2 urinals; toilet accessories and stalls.

SPACE: 1042 - JANITOR
DEPARTMENT: Building Requirement
DESCRIPTION: Janitor closet
AREA: 30 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Janitor sink; mop rack.

SPACE: 1043 - CORRIDOR/WORKSTATIONS
DEPARTMENT: Personnel Processing
DESCRIPTION: Corridor, open office
AREA: 346 SF
NUMBER OF OCCUPANTS: 2
ADJACENCY REQUIREMENTS: Soldier Entry.
FEATURES: 2 workstations (80 s.f. each), each with 1 data outlet, 1 phone outlet, and 1 quad electrical outlet; other electrical outlets per Code; space for file cabinets; additional phone drop for fax.

SPACE: 1044 - OFFICE
DEPARTMENT: Personnel Processing
DESCRIPTION: Private office
AREA: 106 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Personnel Processing Department.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1045 – OFFICE
DEPARTMENT: Personnel Processing
DESCRIPTION: Private office
AREA: 140 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Personnel Processing Department.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1046 – ELECTRIC
DEPARTMENT: Building Requirement
DESCRIPTION: Electrical closet
AREA: 80 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor, centrally located in one-half of building.
FEATURES: Electrical outlets per Code.

SPACE: 1047 – TELECOMMUNICATIONS
DEPARTMENT: Building Requirement
DESCRIPTION: Telecommunications closet
AREA: 120 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor, centrally located in one-half of building.
FEATURES: Electrical outlets per Code.

SPACE: 1048 – STAIR NO. 2
DEPARTMENT: Building Requirement
DESCRIPTION: Main Stair
AREA: 210 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: 1002 – Lobby, 2001 – Lobby.
FEATURES: Open to Lobbies.

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SPACE: 1049 – BRIEFING
DEPARTMENT: Out Processing
DESCRIPTION: Waiting / Briefing Room
AREA: 515 (500) SF
NUMBER OF OCCUPANTS: 50
ADJACENCY REQUIREMENTS: Out Processing Department, Lobby.
FEATURES: Ceiling mounted TV; electrical outlets per Code; 1 data drop; 1 phone drop; open room with movable seating; 8’w x 4’h bulletin board.

SPACE: 1050 – CORRIDOR/WORKSTATIONS
DEPARTMENT: Out Processing
DESCRIPTION: Corridor and work stations
AREA: 699 SF
NUMBER OF OCCUPANTS: 5 Staff / 4 Visitors
ADJACENCY REQUIREMENTS: Lobby.
FEATURES: 4 workstations (80 sf each) each with 1 data outlet, 1 phone outlets, 1 quad electrical outlet; reception with ADA accessible casework with 1 data outlet, 1 phone outlet, 1 quad electrical outlet; other electrical outlets per Code.

SPACE: 1051 – STORAGE
DEPARTMENT: Out Processing
DESCRIPTION: Storage closet
AREA: 27 (0) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Out Processing Department.
FEATURES: Electrical outlets per Code.

SPACE: 1052 – OFFICE
DEPARTMENT: Out Processing
DESCRIPTION: Private office
AREA: 110 SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Out Processing Department.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1053 – STORAGE
DEPARTMENT: Out Processing
DESCRIPTION: Storage closet
AREA: 27 (0) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Out Processing Department.
FEATURES: Electrical outlets per Code.

SPACE: 1054 – CORRIDOR
DEPARTMENT: Building Requirement
DESCRIPTION: Main corridor
AREA: 983 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: 1002 – Lobby, 1086 – Vestibule, Reassignment Processing, Transition Processing, Restrooms, Veteran Affairs, Retirement Services, Reserve Recruiters.
FEATURES: Electrical outlets per code; drinking fountains (Hi/Lo).

SPACE: 1055 – ELEVATOR MACHINE ROOM
DEPARTMENT: Building Requirement
DESCRIPTION: Room for elevator equipment
AREA: 60 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Elevator.
FEATURES: Electrical outlets per Code.

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SPACE: 1056 – WAITING
DEPARTMENT: Shared: Veteran Affairs, Retirement Services, Reserve Recruiters
DESCRIPTION: Waiting area
AREA: 234 (230) SF
NUMBER OF OCCUPANTS: 23
ADJACENCY REQUIREMENTS: Veteran Affairs, Retirement Services, Reserve Recruiters, 1054 – Corridor, Elevator.
FEATURES: Sliding window to a workstation; electrical outlets per Code; 1 Phone drop; ceiling mounted TV; rack for forms on wall; 23 chairs.

SPACE: 1057 – EQUIPMENT

DEPARTMENT: Building Requirement
DESCRIPTION: Computer wiring and equipment
AREA: 138 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Electrical outlets per Code.

SPACE: 1058 – TELECOMMUNICATIONS
DEPARTMENT: Building Requirement
DESCRIPTION: Telecommunications closet
AREA: 130 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor, centrally located in one-half of building.
FEATURES: Electrical outlets per Code.

SPACE: 1059 – ELECTRIC
DEPARTMENT: Building Requirement
DESCRIPTION: Electrical closet
AREA: 80 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor, centrally located in one-half of building.
FEATURES: Electrical outlets per Code.

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SPACE: 1060 – MEN
DEPARTMENT: Building Requirement
DESCRIPTION: Restroom
AREA: 149 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 2 water closets; 2 lavatories; 2 urinals; baby changing station; toilet accessories and stalls.

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SPACE: 1061 – WOMEN
DEPARTMENT: Building Requirement
DESCRIPTION: Restroom
AREA: 144 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 4 water closets; 2 lavatories; baby changing station; toilet accessories and stalls.

SPACE: 1062 – JANITOR
DEPARTMENT: Building Requirement
DESCRIPTION: Janitor closet
AREA: 30 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Janitor sink; mop rack.

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SPACE: 1063 – CORRIDOR/WORKSTATIONS/WAITING
DEPARTMENT: Shared: Veteran Affairs, Retirement Services, Reserve Recruiters
DESCRIPTION: Corridor/Workstations/Waiting
AREA: 1,437 SF
NUMBER OF OCCUPANTS: 7 Staff / 10 Waiting / 6 Visitors
ADJACENCY REQUIREMENTS: Corridor, Veteran Affairs, Retirement Services, Reserve Recruiting
FEATURES: 3 workstations for Veteran Affairs and 3 workstations for Retirement Services (all 80 s.f. each) each with 1 data drop, 1 phone drop, 1 quad electrical outlet; Reception (at Reserve Recruiters) with ADA accessible casework with 1 data drop, 1 phone drop, 1 quad electrical outlet; space and 220V outlet and data drop for copier; Waiting Area with 10 chairs and 1 phone drop; other electrical outlets per Code; 3 additional phone lines for faxes.

SPACE: 1064 – STORAGE
DEPARTMENT: Veteran Affairs
DESCRIPTION: Storage room
AREA: 54 (28) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Veteran Affairs
FEATURES: Electrical outlets per Code.

SPACE: 1065 – OFFICE
DEPARTMENT: Veteran Affairs
DESCRIPTION: Private office
AREA: 108 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Veteran Affairs.
FEATURES: 1 data outlet; 1 phone outlet; one T1 drop; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1066 – OFFICE
DEPARTMENT: Veteran Affairs
DESCRIPTION: Private office
AREA: 108 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Veteran Affairs.
FEATURES: 1 data outlet; 1 phone outlet; one T1 drop; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1067 – STORAGE
DEPARTMENT: Building Requirement
DESCRIPTION: Storage closet
AREA: 40 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 1068 – STORAGE
DEPARTMENT: Veteran Affairs
DESCRIPTION: Storage room
AREA: 60 (60) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Veteran Affairs

FEATURES: Electrical outlets per Code.

SPACE: 1069 - OFFICE
DEPARTMENT: Veteran Affairs
DESCRIPTION: Private Office
AREA: 123 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Veteran Affairs.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1070 – OFFICE
DEPARTMENT: Reserve Recruiters
DESCRIPTION: Private office
AREA: 77 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reserve Recruiters.
FEATURES: 3 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 1071 – OFFICE
DEPARTMENT: Retirement Services
DESCRIPTION: Private office
AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Retirement Services
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1072 – OFFICE
DEPARTMENT: Retirement Services
DESCRIPTION: Private office
AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Retirement Services
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1073 – OFFICE
DEPARTMENT: Reserve Recruiters
DESCRIPTION: Private office
AREA: 77 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reserve Recruiters.
FEATURES: 3 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 1074 – OFFICE
DEPARTMENT: Reserve Recruiters
DESCRIPTION: Private office
AREA: 77 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reserve Recruiters.
FEATURES: 3 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 1075 – STORAGE

DEPARTMENT: Retirement Services
DESCRIPTION: Storage closet
AREA: 60 (60) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Retirement Services
FEATURES: Electrical outlets per Code.

SPACE: 1076 – STORAGE
DEPARTMENT: Reserve Recruiters
DESCRIPTION: Storage closet
AREA: 55 (60) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Reserve Recruiters
FEATURES: Electrical outlets per Code.

SPACE: 1077 – OFFICE
DEPARTMENT: Reserve Recruiters
DESCRIPTION: Private office
AREA: 77 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reserve Recruiters.
FEATURES: 3 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 1078 – OFFICE
DEPARTMENT: Reserve Recruiters
DESCRIPTION: Private office
AREA: 77 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reserve Recruiters.
FEATURES: 3 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 1079 – OFFICE
DEPARTMENT: Reserve Recruiters
DESCRIPTION: Private office
AREA: 77 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reserve Recruiters.
FEATURES: 3 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 1080 – OFFICE
DEPARTMENT: Reserve Recruiters
DESCRIPTION: Private office
AREA: 126 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reserve Recruiters.
FEATURES: 3 phone drops; 1 data drop; 1 video outlet; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 1081 – OFFICE
DEPARTMENT: Reserve Recruiters
DESCRIPTION: Private office
AREA: 83 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reserve Recruiters.

FEATURES: 3 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 1082 – STORAGE
DEPARTMENT: Building Requirement
DESCRIPTION: Storage closet
AREA: 179 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Double door; electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 1083 – HVAC
DEPARTMENT: Building Requirement
DESCRIPTION: HVAC room
AREA: 850 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior.
FEATURES: Electrical outlets per Code.

SPACE: 1084 – NOT USED

SPACE: 1085 – STAIR NO. 1
DEPARTMENT: Building Requirement
DESCRIPTION: Egress stair
AREA: 192 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior, 2033 – Corridor, 1086 – Vestibule.
FEATURES:

SPACE: 1086 – VESTIBULE
DEPARTMENT: Building Requirement
DESCRIPTION: Entry vestibule
AREA: 92 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior, 1054 – Corridor.
FEATURES: Glazed entry doors; electrical outlets per Code.

SPACE: 1087 – ACS STORAGE
DEPARTMENT: Army Community Services
DESCRIPTION: Storage closet for large items
AREA: 166 (160) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: 1086 – Vestibule.
FEATURES: 48” wide door; electrical outlets per Code.

SPACE: 1088 – CORRIDOR/WORKSTATIONS
DEPARTMENT: Transition Processing
DESCRIPTION: Corridor, workstations, reception
AREA: 1,023 SF
NUMBER OF OCCUPANTS: 7 Staff / 6 Visitors
ADJACENCY REQUIREMENTS: Transition Processing Department.
FEATURES: 6 workstations (80 s.f. each) each with 1 data drop, 1 phone drop, 1 quad electrical outlet; Reception with ADA accessible casework with 1 data drop, 1 phone drop, 1 quad electrical outlet; other electrical outlets per Code; 1 additional phone drop for fax.

SPACE: 1089 – OFFICE
DEPARTMENT: Transition Processing
DESCRIPTION: Private office
AREA: 80 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Transition Processing
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1090 – OFFICE
DEPARTMENT: Transition Processing
DESCRIPTION: Private office
AREA: 111 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Transition Processing
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1091 – OFFICE
DEPARTMENT: Transition Processing
DESCRIPTION: Private office
AREA: 85 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Transition Processing
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1092 – OFFICE
DEPARTMENT: Transition Processing
DESCRIPTION: Private office
AREA: 80 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Transition Processing
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1093 – STORAGE
DEPARTMENT: Transition Processing
DESCRIPTION: Storage closet
AREA: 66 (60) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Transition Processing
FEATURES: Electrical outlets per Code.

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SPACE: 1094 – BRIEFING/SHARED WAITING
DEPARTMENT: Shared: Transition Processing, Reserve Recruiters, Retirement Services
DESCRIPTION: Waiting / Briefing Room
AREA: 686 (680) SF
NUMBER OF OCCUPANTS: 50
ADJACENCY REQUIREMENTS: Corridor, Transition Processing, Reserve Recruiters, Retirement Services

FEATURES: Ceiling mounted TV; bulletin board (8'w x 4'h); open space with movable chairs; 1 data drop; 1 phone drop; electrical outlets per Code.

SPACE: 1095 – BREAK
DEPARTMENT: Building Requirement
DESCRIPTION: Shared Break Room
AREA: 261 SF
NUMBER OF OCCUPANTS: 8
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Space and utilities for two vending machines, 1 ice machine, and 1 full size refrigerator; casework base and wall cabinets with double sink, space for two microwaves, coffee machine; 3 duplex electrical outlets above base cabinets; other electrical outlets per Code; room for table, 4 chairs.

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SPACE: 1096 – WAITING
DEPARTMENT: Shared: Reassignment Processing, Transition Processing
DESCRIPTION: Waiting / Briefing Room
AREA: 232 (230) SF
NUMBER OF OCCUPANTS: 10
ADJACENCY REQUIREMENTS: Corridor, Reassignment Processing, Transition Processing.
FEATURES: Open space with chairs; electrical outlets per Code; 1 phone drop.

SPACE: 1097 – CORRIDOR/WORKSTATIONS
DEPARTMENT: Reassignment Processing
DESCRIPTION: Corridor, workstations, reception
AREA: 1,148 SF
NUMBER OF OCCUPANTS: 9 Staff / 8 Visitors
ADJACENCY REQUIREMENTS: Reassignment Processing.
FEATURES: 7 workstations (80 s.f. each) each with 1 data drop, 1 phone drop, 1 quad electrical outlet; Reception (80 s.f.) with ADA accessible casework with 1 data drop, 1 phone drop, 1 quad electrical outlet; 1 passport workstation (120 s.f.) with passport photo machine (with required electrical), 1 data drop, 1 phone drop, 1 quad electrical outlet; other electrical outlets per Code; two additional phone drops for faxes.

SPACE: 1098 – OFFICE
DEPARTMENT: Reassignment Processing
DESCRIPTION: Private office
AREA: 78 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reassignment Processing.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1099 – OFFICE
DEPARTMENT: Reassignment Processing
DESCRIPTION: Private office
AREA: 80 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reassignment Processing.

FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

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SPACE: 1100 – BRIEFING/SHARED WAITING
DEPARTMENT: Shared: Reassignment Processing, Veteran Affairs
DESCRIPTION: Waiting / Briefing Room
AREA: 686 (680) SF
NUMBER OF OCCUPANTS: 50
ADJACENCY REQUIREMENTS: Corridor, Reassignment Processing, Veteran Affairs.
FEATURES: Ceiling mounted TV; bulletin board (8'w x 4'h); open space with movable chairs; 1 data drop; 1 phone drop; electrical outlets per Code.

SPACE: 1101 – OFFICE
DEPARTMENT: Reassignment Processing
DESCRIPTION: Private office
AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Reassignment Processing
FEATURES: 1 data outlet; 1 phone outlet; 1 secure telephone drop; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 1102 – STORAGE
DEPARTMENT: Reassignment Processing
DESCRIPTION: Storage Closet
AREA: 121 (120) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Reassignment Processing
FEATURES: Electrical outlets per Code.

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SPACE: 1103 – CORRIDOR/WORKSTATIONS
DEPARTMENT: ID Card
DESCRIPTION: Corridor, workstations, waiting
AREA: 753 SF
NUMBER OF OCCUPANTS: 6 Staff / 20 Visitors
ADJACENCY REQUIREMENTS: 1002 – Lobby.
FEATURES: 5 workstations (80 s.f. each) each with 1 data drop, 1 phone drop, 1 quad electrical outlet; Reception with ADA accessible casework with 1 data drop, 1 phone drop, 1 quad electrical outlet; Waiting Area with 13-15 chairs and 1 phone drop; other electrical outlets per Code.

SPACE: 1104 – OFFICE
DEPARTMENT: ID Card
DESCRIPTION: Private office
AREA: 102 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: ID Card Department.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

End Soldier Service Center – First Floor

SOLDIER SERVICE CENTER – SECOND FLOOR

SPACE: 2001 – LOBBY
DEPARTMENT: Building Requirement
DESCRIPTION: Second Floor Lobby
AREA: 553 SF
NUMBER OF OCCUPANTS: 6 per Code
ADJACENCY REQUIREMENTS: Elevator, 1048 – Stair, 2002 – Corridor, 2035 – Corridor, AG Director Department.
FEATURES: 8 ft. bulletin board; electrical outlets per Code.

SPACE: 2002 – CORRIDOR
DEPARTMENT: Building Requirement
DESCRIPTION: Corridor
AREA: 1,063 SF
NUMBER OF OCCUPANTS: 11 per Code
ADJACENCY REQUIREMENTS: 2001 – Lobby, 1017 – Stair, Transportation, Human Resources, Restrooms, Break Room
FEATURES: Electrical outlets per Code; drinking fountains (Hi/Lo).

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SPACE: 2003 – CORRIDOR/WORKSTATIONS/WAITING
DEPARTMENT: Transportation
DESCRIPTION: Corridors, workstations, waiting
AREA: 3,062 SF
NUMBER OF OCCUPANTS: 21 Staff / 21 Visitors / 36 Waiting
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 21 workstations (80 s.f. each) each with 1 data drop, 1 phone drop, 1 quad electrical outlet; waiting area with 28 chairs and 1 phone drop; 2 additional phone drops for fax; other electrical outlets per Code; bulletin board (8'w x 4'h) at Waiting.

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SPACE: 2004 – BRIEFING
DEPARTMENT: Transportation
DESCRIPTION: Briefing room
AREA: 481 (500) SF
NUMBER OF OCCUPANTS: 50
ADJACENCY REQUIREMENTS: Transportation Department.
FEATURES: Ceiling mounted TV; 16'w x 4'h marker board; open space with chairs; 1 data drop near marker board; 1 phone drop; electrical outlets per Code.

SPACE: 2005 – STORAGE
DEPARTMENT: Transportation
DESCRIPTION: Storage closet
AREA: 41 (30) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Transportation Department.
FEATURES: Electrical outlets per Code.

SPACE: 2006 – OFFICE
DEPARTMENT: Transportation
DESCRIPTION: Private office

AREA: 150 (150) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Transportation Department.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2007 – OFFICE
DEPARTMENT: Transportation
DESCRIPTION: Private office
AREA: 150 (150) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Transportation Department.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2008 – HVAC
DEPARTMENT: Building Requirement
DESCRIPTION: HVAC room
AREA: 667 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior.
FEATURES: Electrical outlets per Code.

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SPACE: 2009 – CORRIDOR/WORKSTATIONS
DEPARTMENT: Human Resources - Civilian
DESCRIPTION: Corridor, workstations, waiting
AREA: 1,591 SF
NUMBER OF OCCUPANTS: 10 Staff / 10 Visitors / 12 Waiting
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 10 workstations (80 s.f. each) each with 1 data drop, 1 phone drop, 1 quad electrical outlet; Waiting area with 12 chairs and 1 phone drop; other electrical outlets per Code; 4 additional phone drops for fax.

SPACE: 2010 – STORAGE/RECORDS
DEPARTMENT: Human Resources - Civilian
DESCRIPTION: Storage room for files
AREA: 227 (240) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Human Resources – Civilian.
FEATURES: Electrical outlets per Code.

SPACE: 2011 – COMPUTER LAB
DEPARTMENT: Human Resources - Civilian
DESCRIPTION: Computer lab
AREA: 316 (240) SF
NUMBER OF OCCUPANTS: 10
ADJACENCY REQUIREMENTS:
FEATURES: 10 workstations (48” long) each with 1 data drop and 1 quad electrical outlet; 1 server space with 2 data drops, required power; other electrical outlets per Code.

SPACE: 2012 – OFFICE
DEPARTMENT: Human Resources - Civilian
DESCRIPTION: Private office

AREA: 155 (150) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Human Resources - Civilian
FEATURES: 2 phone drops; 1 data drop; secure telephone drop; 1 hot line telephone drop; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2013 – OFFICE
DEPARTMENT: Human Resources - Civilian
DESCRIPTION: Private office
AREA: 78 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Human Resources - Civilian
FEATURES: 1 data drop; 2 phone drops; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 2014 – OFFICE
DEPARTMENT: Human Resources - Civilian
DESCRIPTION: Private office
AREA: 108 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Human Resources - Civilian
FEATURES: 1 data drop; 2 phone drops; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 2015 – OFFICE
DEPARTMENT: Human Resources - Civilian
DESCRIPTION: Private office
AREA: 108 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Human Resources - Civilian
FEATURES: 1 data drop; 2 phone drops; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 2016 – STORAGE/RECORDS
DEPARTMENT: Human Resources - Civilian
DESCRIPTION: Storage room for files
AREA: 241 (240) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Human Resources – Civilian.
FEATURES: Electrical outlets per Code.

SPACE: 2017 – OFFICE
DEPARTMENT: Human Resources - Civilian
DESCRIPTION: Private office
AREA: 108 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Human Resources - Civilian
FEATURES: 2 phone drops; 1 data drop; secure telephone drop; 1 hot line telephone drop; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2018 – WOMEN
DEPARTMENT: Building Requirement
DESCRIPTION: Restroom
AREA: 149 SF

NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 4 water closets; 2 lavatories; baby changing station; toilet accessories and stalls; electrical outlets per Code.

SPACE: 2019 – MEN
DEPARTMENT: Building Requirement
DESCRIPTION: Restroom
AREA: 157 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 2 water closets; 2 urinals; 2 lavatories; baby changing station; toilet accessories and stalls; electrical outlets per Code.

SPACE: 2020 – JANITOR
DEPARTMENT: Building Requirement
DESCRIPTION: Janitor closet
AREA: 26 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Janitor sink; mop rack.

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SPACE: 2021 – BREAK
DEPARTMENT: Building Requirement
DESCRIPTION: Break room
AREA: 380 SF
NUMBER OF OCCUPANTS: 12
ADJACENCY REQUIREMENTS: Corridor, ACS
FEATURES: Space and utilities for 3 vending machines, 1 ice machine, 2 full size refrigerators; base and wall cabinets with double sink, disposal, dishwasher, residential range (with oven) and hood (per NFPA 96), space for two microwave ovens; two duplex electrical outlets above base cabinets; other electrical outlets per Code; space for 2 tables and 8 chairs.

SPACE: 2022 – ELECTRIC
DEPARTMENT: Building Requirement
DESCRIPTION: Electrical closet
AREA: 120 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor, centrally located in one-half of building.
FEATURES: Electrical outlets per Code.

SPACE: 2023 – TELECOMMUNICATIONS
DEPARTMENT: Building Requirement
DESCRIPTION: Telecommunications closet
AREA: 120 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor, centrally located in one-half of building.
FEATURES: Electrical outlets per Code.

SPACE: 2024 – WORK
DEPARTMENT: AG (Director of Human Resources)

DESCRIPTION: Open office
AREA: 252 SF
NUMBER OF OCCUPANTS: 2
ADJACENCY REQUIREMENTS: 2001 – Lobby.
FEATURES: 2 data drops, 3 phone drops, electrical outlets per Code plus 2 additional quad electrical outlets.

SPACE: 2025 – OFFICE
DEPARTMENT: AG DHR
DESCRIPTION: Private office
AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: AG DHR.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2026 – OFFICE
DEPARTMENT: AG DHR
DESCRIPTION: Private office
AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: AG DHR.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2027 – OFFICE
DEPARTMENT: AG DHR
DESCRIPTION: Director’s office
AREA: 172 (150) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: AG DHR, MPD Admin.
FEATURES: 2 data drops; 2 phone drops; electrical outlets per Code plus 2 additional quad electrical outlets; 1 secure telephone drop; 1 secure data drop.

SPACE: 2028 – OFFICE
DEPARTMENT: AG DHR
DESCRIPTION: Private office
AREA: 130 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: AG DHR.
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2029 – CORRIDOR/WORKSTATIONS
DEPARTMENT: MPD Admin
DESCRIPTION: Corridor, workstations
AREA: 738 SF
NUMBER OF OCCUPANTS: 5
ADJACENCY REQUIREMENTS: Corridor, AG DHR.
FEATURES: 5 workstations (80 s.f. each) each with 1 data drop, 1 phone drop, 1 quad electrical outlet; other electrical outlets per Code; 2 additional phone drops for faxes.

SPACE: 2030 – OFFICE
DEPARTMENT: MPD Admin
DESCRIPTION: Private office

AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: MPD Admin
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2031 – RECORDS
DEPARTMENT: MPD Admin
DESCRIPTION: Storage closet
AREA: 29 (60) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: MPD Admin.
FEATURES: Electrical outlets per Code.

SPACE: 2032 – OFFICE
DEPARTMENT: MPD Admin
DESCRIPTION: Private office
AREA: 118 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: MPD Admin
FEATURES: Cable TV connection; 1 data outlet; 1 phone outlet; 1 additional phone drop for fax; 1 secure data drop; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2033 – OFFICE
DEPARTMENT: MPD Admin
DESCRIPTION: Private office
AREA: 96 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: MPD Admin
FEATURES: 1 data outlet; 1 phone outlet; 1 secure data drop; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2034 – OFFICE
DEPARTMENT: MPD Admin
DESCRIPTION: Private office
AREA: 85 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: MPD Admin
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2035 – SUPPLY
DEPARTMENT: MPD Admin
DESCRIPTION: Supply room
AREA: 774 (770) SF
NUMBER OF OCCUPANTS: 1 Staff / 4 Visitors
ADJACENCY REQUIREMENTS: Corridor, MPD Admin.
FEATURES: ADA accessible casework with 1 data drop, 1 phone drop, 1 quad electrical outlet; other electrical outlets per Code; metal shelving.

SPACE: 2036 – CORRIDOR
DEPARTMENT: Building Requirement
DESCRIPTION: Corridor
AREA: 1,144 SF
NUMBER OF OCCUPANTS: 0

ADJACENCY REQUIREMENTS: 2001 - Lobby, 1085 - Stair, MPD Admin, CAC, CSAPC, Restrooms, Shared Conference, Housing, Media Center, ACS.
FEATURES: Electrical outlets per Code; drinking fountains (Hi/Lo).

*5

SPACE: 2037 - CORRIDOR/WORKSTATION
DEPARTMENT: CAC
DESCRIPTION: Corridor, workstations
AREA: 995 SF
NUMBER OF OCCUPANTS: 5 Staff / 5 Visitors / 14 Waiting
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 5 workstations (80 s.f. each) each with one data drop, 1 phone drop, 1 quad electrical outlet; Waiting area with 7 chairs and 1 phone drop; other electrical outlets per Code; 1 additional phone drop for fax.

SPACE: 2038 - STORAGE
DEPARTMENT: CAC
DESCRIPTION: Storage closet
AREA: 60 (60) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: CAC
FEATURES: Electrical outlets per Code.

SPACE: 2039 - OFFICE
DEPARTMENT: CAC
DESCRIPTION: Private office
AREA: 85 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: CAC
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2040 - OFFICE
DEPARTMENT: CAC
DESCRIPTION: Private office
AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: CAC
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2041 - TELECOMMUNICATIONS
DEPARTMENT: Building Requirement
DESCRIPTION: Telecommunications closet
AREA: 120 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor, centrally located in one-half of building.
FEATURES: Electrical outlets per Code.

SPACE: 2042 - ELECTRIC
DEPARTMENT: Building Requirement
DESCRIPTION: Electrical closet
AREA: 90 SF
NUMBER OF OCCUPANTS: 0

ADJACENCY REQUIREMENTS: Corridor, centrally located in one-half of building.
FEATURES: Electrical outlets per Code.

SPACE: 2043 – MEN
DEPARTMENT: Building Requirement
DESCRIPTION: Restroom
AREA: 157 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 2 water closets; 2 urinals; 2 lavatories; baby changing station; toilet accessories and stalls; electrical outlets per Code.

SPACE: 2044 – WOMEN
DEPARTMENT: Building Requirement
DESCRIPTION: Restroom
AREA: 149 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 4 water closets; 2 lavatories; baby changing station; toilet accessories and stalls; electrical outlets per Code.

SPACE: 2045 – JANITOR
DEPARTMENT: Building Requirement
DESCRIPTION: Janitor closet
AREA: 26 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Janitor sink; mop rack.

SPACE: 2046 – CORRIDOR/WORKSTATIONS
DEPARTMENT: CSAPC
DESCRIPTION: Corridor, workstations
AREA: 456 SF
NUMBER OF OCCUPANTS: 3
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 3 workstations (80 s.f. each) each with 1 data drop, 1 phone drop, 1 quad electrical outlet; other electrical outlets per Code.

SPACE: 2047 – LAB
DEPARTMENT: CSAPC
DESCRIPTION: Lab room – drug and alcohol testing
AREA: 126 (120) SF
NUMBER OF OCCUPANTS: 2
ADJACENCY REQUIREMENTS: CSAPC.
FEATURES: Casework (base and wall cabinets) with sink, under counter refrigerator, lockable cabinets; 4 quad electrical outlets above base cabinet; other electrical outlets per Code; 2 data drops, 1 phone drop.

SPACE: 2048 – STORAGE
DEPARTMENT: CSAPC
DESCRIPTION: Storage room
AREA: 126 (130) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: CSAPC.
FEATURES: Electrical outlets per Code; lockable door; metal shelving.

SPACE: 2049 – STORAGE
DEPARTMENT: Building Requirement
DESCRIPTION: Storage room
AREA: 230 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 2050 – SHARED CONFERENCE
DEPARTMENT: Shared by all departments
DESCRIPTION: Conference room
AREA: 383 (385) SF
NUMBER OF OCCUPANTS: 25
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Roll down projection screen (8’w x 4’h); ceiling mounted video projector; ceiling mounted TV; 1 data drop near screen; quad electrical outlet near screen; flush floor duplex electrical outlet in center of room; other electrical outlets per Code; 1 phone drop; marker board (8’w x 4’h).

SPACE: 2051 – STORAGE
DEPARTMENT: Shared
DESCRIPTION: Storage closet
AREA: 27 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: 2050 – Shared Conference.
FEATURES: Electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 2052 – HVAC
DEPARTMENT: Building Requirement
DESCRIPTION: HVAC room
AREA: 686 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Exterior.
FEATURES: Electrical outlets per Code.

SPACE: 2053 – STORAGE
DEPARTMENT: Building Requirement
DESCRIPTION: Storage closet
AREA: 44 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: Electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 2054 – REAR PROJECTION
DEPARTMENT: Public Affairs
DESCRIPTION: Booth for rear projection equipment
AREA: 131 (150) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: Media Center
FEATURES: 6’ x 8’ rear projection glass screen to Media; shelving and electrical power for projection equipment; 1 phone drop; 1 data drop; other electrical outlets per Code.

SPACE: 2055 – MEDIA CENTER
DEPARTMENT: Public Affairs
DESCRIPTION: Center for media briefings
AREA: 813 (850) SF
NUMBER OF OCCUPANTS: 50
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 16 data drops, 16 phone drops, ceiling mounted TV; duplex electrical outlets at 5' on center around perimeter of room; flush floor data and duplex electrical outlet in center of room.

SPACE: 2056 – CORRIDOR/WORKSTATIONS
DEPARTMENT: Housing
DESCRIPTION: Corridor, workstations
AREA: 895 SF
NUMBER OF OCCUPANTS: 5 Staff / 4 Visitors
ADJACENCY REQUIREMENTS: Corridor.
FEATURES: 5 workstations (80 s.f. each) each with 1 data drop, 1 phone drop, 1 quad electrical outlet; other electrical outlets per Code; 3 additional phone drops for faxes.

SPACE: 2057 – OFFICE
DEPARTMENT: Housing
DESCRIPTION: Private office
AREA: 110 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Housing
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2058 – OFFICE
DEPARTMENT: Housing
DESCRIPTION: Private office
AREA: 87 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Housing
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2059 – STORAGE
DEPARTMENT: Housing
DESCRIPTION: Storage closet
AREA: 104 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS:
FEATURES: Electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 2060 – OFFICE
DEPARTMENT: Housing
DESCRIPTION: Private office
AREA: 109 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Housing
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2061 – OFFICE

DEPARTMENT: Housing
DESCRIPTION: Private office
AREA: 109 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Housing
FEATURES: 1 data outlet; 1 phone outlet; electrical outlets per Code plus 1 additional quad electrical outlet.

SPACE: 2062 – OFFICE
DEPARTMENT: Housing
DESCRIPTION: Private office
AREA: 168 (150) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: Housing.
FEATURES: 2 data drops, 2 phone drops, 2 quad outlets; other electrical outlets per Code; cable TV connection.

*5

SPACE: 2063 – WAITING
DEPARTMENT: Housing
DESCRIPTION: Waiting room
AREA: 161 (150) SF
NUMBER OF OCCUPANTS: 9
ADJACENCY REQUIREMENTS: Corridor, Housing.
FEATURES: Electrical outlets per Code; 1 phone drop; ceiling mounted TV.

*5

SPACE: 2064 – CORRIDOR/WORKSTATIONS
DEPARTMENT: ACS
DESCRIPTION: Corridor, workstations, waiting
AREA: 3,003 SF
NUMBER OF OCCUPANTS: 20 Staff / 18 Visitors / 8 Waiting
ADJACENCY REQUIREMENTS:
FEATURES: 18 workstations (80 s.f. each) each with 1 data drop, 2 phone drops, 1 quad electrical outlet; 1 secretary workstation (80 s.f.) with 1 phone drop, 1 data drop, 1 quad electrical outlet; Reception (80 s.f.) with ADA accessible casework, 1 data drop, 1 phone drop, 1 quad electrical outlet; Waiting area with 8 chairs and 1 phone drop; other electrical outlets per Code; additional phone line for fax; 2 phone drops in Waiting.

SPACE: 2065 – LENDING CLOSET
DEPARTMENT: ACS
DESCRIPTION: Storage room for small items to be lent
AREA: 369 (300) SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS: 2001 – Lobby.
FEATURES: Electrical outlets per Code; metal shelving.

SPACE: 2066 – STORAGE
DEPARTMENT: ACS
DESCRIPTION: Storage room
AREA: 220 (240) SF
NUMBER OF OCCUPANTS: 0

ADJACENCY REQUIREMENTS: ACS.
FEATURES: Electrical outlets per Code.

SPACE: 2067 – OFFICE
DEPARTMENT: ACS
DESCRIPTION: Private office
AREA: 76 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: ACS.
FEATURES: 2 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 2068 – OFFICE
DEPARTMENT: ACS
DESCRIPTION: Private office
AREA: 83 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: ACS.
FEATURES: 2 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 2069 – OFFICE
DEPARTMENT: ACS
DESCRIPTION: Private office
AREA: 83 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: ACS.
FEATURES: 2 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 2070 – STORAGE
DEPARTMENT: Building Requirement
DESCRIPTION: Storage
AREA: 37 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS:
FEATURES: Electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 2071 – OFFICE
DEPARTMENT: ACS
DESCRIPTION: Private office
AREA: 83 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: ACS.
FEATURES: 2 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet; TV cable outlet.

SPACE: 2072 – OFFICE
DEPARTMENT: ACS
DESCRIPTION: Private office
AREA: 125 (110) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: ACS.
FEATURES: 2 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 2073 – TRAINING
DEPARTMENT: ACS
DESCRIPTION: Training room
AREA: 282 (240) SF
NUMBER OF OCCUPANTS: 16
ADJACENCY REQUIREMENTS: ACS
FEATURES: Roll down screen (8'w x 4'h); ceiling mounted video projector; marker board (8'w x 4'h); 1 data drop; 1 phone drop; electrical outlets per Code plus 1 quad electrical outlet; ceiling mounted TV.

SPACE: 2074 – TRAINING
DEPARTMENT: ACS
DESCRIPTION: Training room
AREA: 241 (240) SF
NUMBER OF OCCUPANTS: 16
ADJACENCY REQUIREMENTS: ACS
FEATURES: Roll down screen (8'w x 4'h); ceiling mounted video projector; marker board (8'w x 4'h); 1 data drop; 1 phone drop; electrical outlets per Code plus 1 quad electrical outlet; ceiling mounted TV.

SPACE: 2075 – COMPUTER ROOM*
DEPARTMENT: ACS
DESCRIPTION: Computer room
AREA: 319 (288) SF
NUMBER OF OCCUPANTS: 12
ADJACENCY REQUIREMENTS: ACS
FEATURES: 12 workstations (48" long) each with 1 data drop and 1 quad electrical outlet; 1 server station (48") with 2 data drops, 2 quad electrical outlets, 1 phone outlet; two 220V outlets for copiers.

SPACE: 2076 – OFFICE
DEPARTMENT: ACS
DESCRIPTION: Private office
AREA: 83 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: ACS.
FEATURES: 2 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 2077 – OFFICE
DEPARTMENT: ACS
DESCRIPTION: Private office
AREA: 83 (80) SF
NUMBER OF OCCUPANTS: 1
ADJACENCY REQUIREMENTS: ACS.
FEATURES: 2 phone drops; 1 data drop; electrical outlets per Code plus 1 quad electrical outlet.

SPACE: 2078 – BABY CHANGING
DEPARTMENT: ACS
DESCRIPTION: Baby changing room
AREA: 56 (48) SF
NUMBER OF OCCUPANTS: 2
ADJACENCY REQUIREMENTS: 2082 – Briefing.
FEATURES: Casework with baby changing area and sink, ventilation fan.

SPACE: 2079 – STORAGE
DEPARTMENT: Building Requirement
DESCRIPTION: Storage closet
AREA: 37 SF
NUMBER OF OCCUPANTS: 0
ADJACENCY REQUIREMENTS:
FEATURES: Electrical outlets per Code.
Note: Unprogrammed space.

SPACE: 2080 – VIDEO CONFERENCE
DEPARTMENT: ACS
DESCRIPTION: Room for family video conference with soldiers
AREA: 100 (100) SF
NUMBER OF OCCUPANTS: 2
ADJACENCY REQUIREMENTS: ACS
FEATURES: Video teleconferencing equipment and required utilities; sound insulation in walls, ceiling, door; special lighting; fiber connection to room; 2 data drops; 2 dedicated circuit duplex outlets (20 amp); 4 phone drops; other electrical outlets per Code.

SPACE: 2081 – VIDEO CONFERENCE
DEPARTMENT: ACS
DESCRIPTION: Room for family video conference with soldiers
AREA: 96 (100) SF
NUMBER OF OCCUPANTS: 2
ADJACENCY REQUIREMENTS: ACS
FEATURES: Video teleconferencing equipment and required utilities; sound insulation in walls, ceiling, door; special lighting; fiber connection to room; 2 data drops; 2 dedicated circuit duplex outlets (20 amp); 4 phone drops; other electrical outlets per Code.

SPACE: 2082 – BRIEFING
DEPARTMENT: ACS
DESCRIPTION: Open room for briefing, activities
AREA: 628 (630) SF
NUMBER OF OCCUPANTS: 40
ADJACENCY REQUIREMENTS: 2001 – Lobby.
FEATURES: Marker board (8’w x 4’h); bulletin board (8’w x 4’h); 2 phone drops; 2 data drops; electrical outlets per Code; ceiling mounted TV.

End Soldier Service Center – Second Floor

APPENDIX B
FIRE PROTECTION / LIFE SAFETY CODE ANALYSIS

APPENDIX B
FIRE PROTECTION/LIFE SAFETY CODE ANALYSIS

NOTE TO DESIGNER: This document is a preliminary analysis used for concept development. It does not contain all requirements and does not relieve the designer of complete code and criteria review, compliance and documentation responsibilities during proposal preparation and final design development.

REFERENCES:
Military Handbook MIL HDBK 1008c, Fire Protection for Facilities Engineering, Design and Construction, 10 June 1997
Engineering Circular EC 1110-1-94, Classification of Type of Construction, 31 July 2001
Uniform Building Code, 1997
NFPA 101, Life Safety Code, 2000
NFPA 10, Standard for Portable Fire Extinguishers, 1998

BUILDING DESCRIPTION:
Two-Story Building, Approximately 60,008 Square Feet

AUTOMATIC SPRINKLER SYSTEM: Fully Sprinklered

UBC OCCUPANCY: B Business

NFPA 101 OCCUPANCY: Business (Chapter 26)

CONSTRUCTION TYPE (UBC Table 5-B): Any type permitted by referenced Codes and Standards.
Construction may be of any materials allowed by UBC, nonrated, noncombustible.
References: 505.2 Unlimited area increase – 60’ yards all sides
504.3 exc 2 A Occupancy less than 10% of building area

EXTERIOR WALL AND OPENING PROTECTION (UBC Table 5-A):
No requirements based on UBC Sec. 709.

FIRE RATED SEPARATIONS:
Shaft enclosures: One Hour (UBC Table 6-A)
Vertical openings: One Hour (NFPA 101 8.2.5.2).
Mechanical, Generator rooms: One Hour (NFPA 101 8.4.1.1).
Records, Storage: One Hour (MIL HDBK 1008c 4.10.5).

ATTIC DRAFT STOPS (MIL HDBK 1008c 2.2.1):
Unsprinklered attic spaces at combustible roof construction: Draft stops of gypsum board on wood or metal framing required to divide space into areas not exceeding 3,000 square feet.

OCCUPANT LOAD (NFPA 101):

Occupancy	Area	Occupant Load
First Floor Assembly	2,926	418
First Floor Business	26,630 (Enclosed)	267
Second Floor Assembly	2,306	329

Second Floor Business 27,372 274

EGRESS REQUIREMENTS (NFPA 101)

CAPACITY (Table 5.3.3.1):

418(0.2) = 84 inches
267(0.2) = 53 inches
329(0.3) = 99 inches
274(0.3) = 82 inches

MINIMUM CORRIDOR WIDTH (26.2.3.2): 44 inches

NUMBER OF EXITS (7.4.1):

Two required at Business

MAXIMUM DEAD END (26.2.5.2):

50 feet at Business

MAXIMUM COMMON PATH OF TRAVEL (26.2.5.3): 100 feet

MAXIMUM TRAVEL DISTANCE (26.2.6):

300 feet at Business

INTERIOR FINISHES:

WALL AND CEILING FINISHES (MIL HDBK 1008c 2.7.1):

Class A in Exits and Exit Passageways.
Class A, B or C all other areas.
Class A materials shall not exceed FS 25 and SD 50.
Class B materials shall not exceed FS 75 and SD 100.
Class C materials shall not exceed FS 200 and SD 200.
Cellular Plastics not permitted.

FLOOR FINISHES (NFPA 101 26.3.3.3, 10.2.8.2):

Class I or Class II in Corridors and exits.

PORTABLE FIRE EXTINGUISHERS (NFPA 10):

Maximum travel to fire extinguisher: 75 feet

APPENDIX C
FINISH SCHEDULE

SPACE	FLOOR	FLOOR	BASE	WALLS	CEILING	MIN CLG HT	REMARKS
1001	VESTIBULE	VCT	VB	PGWB	PGWB	9'	
1002	LOBBY	VCT	VB	PGWB	ATC	9'	
1003	COMMERCIAL TRAVEL	VCT	VB	PGWB	ATC	9'	
1004	OFFICE	VCT	VB	PGWB	ATC	10'-8"	
1005	JOB INFO	VCT	VB	PGWB	ATC	9'	
1006	VEHICLE REGISTRATION	VCT	VB	PGWB	ATC	9'	
1007	CORRIDOR	VCT	VB	PGWB	ATC	9'	
1008	FINANCE - OPEN OFFICE	VCT	VB	PGWB	ATC	9'	
1009	OFFICE	CPT	VB	PGWB	ATC	9'	
1010	OFFICE	CPT	VB	PGWB	ATC	9'	
1011	WAITING	VCT	VB	PGWB	ATC	9'	
1012	INPROCESSING - OPEN OFFICE	VCT	VB	PGWB	ATC	10'-8"	
1013	DOG TAG	VCT	VB	PGWB	ATC	9'	
1014	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1015	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1016	VESTIBULE	VCT	VB	PGWB	PGWB	9'	
1017	STAIR No.3	VCT/RUB	VB	PGWB	ATC	8'	SEE NOTE 1
1018	HVAC (MECHANICAL)	CONC	VB	PGWB	EXP STR		
1019	MAIN ELECTRICAL ROOM	CONC	VB	PGWB	EXP STR		
1020	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1021	CORRIDOR	VCT	VB	PGWB	ATC	9'	
1022	EXAM	VCT	VB	PGWB	ATC	9'	
1023	OFFICE	VCT	VB	PGWB	ATC	9'	
1024	EXAM	VCT	VB	PGWB	ATC	9'	
1025	EXAM	VCT	VB	PGWB	ATC	9'	
1026	STERILIZATION	SV	SV	EP	ATC	9'	
1027	X-RAY	VCT	VB	PGWB	ATC	9'	
1028	X-RAY CONTROL	VCT	VB	PGWB	ATC	9'	
1029	X-RAY	VCT	VB	PGWB	ATC	9'	
1030	DARKROOM	SV	SV	EP	ATC	9'	
1031	WAITING	VCT	VB	PGWB	ATC	9'	
1032	RECEPTION	VCT	VB	PGWB	ATC	9'	
1033	DATA	VCT	VB	PGWB	ATC	9'	

SPACE	FLOOR	FLOOR	BASE	WALLS	CEILING	MIN CLG HT	REMARKS
1034	HIV	VCT	VB	PGWB	ATC	9'	
1035	OFFICE	VCT	VB	PGWB	ATC	9'	
1036	OFFICE	VCT	VB	PGWB	ATC	9'	
1037	SHOT	VCT	VB	PGWB	ATC	9'	
1038	SHOT	VCT	VB	PGWB	ATC	9'	
1039	HEARING	VCT	VB	PGWB	ATC	9'	
1040	WOMEN'S TOILET	CT	CT	PGWB/ CT	ATC	9'	SEE NOTE 2
1041	MEN'S TOILET	CT	CT	PGWB/ CT	ATC	9'	SEE NOTE 2
1042	JANITOR'S CLOSET	CT	CT	PGWB/ CT	ATC	9'	SEE NOTE 2
1043	WORK STATIONS/CORRIDOR	VCT	VB	PGWB	ATC	9'	
1044	OFFICE	CPT	VB	PGWB	ATC	9'	
1045	OFFICE	CPT	VB	PGWB	ATC	9'	
1046	ELECTRICAL ROOM	CONC	VB	PGWB	EXP STR		
1047	TELECOMM ROOM	CONC	VB	PGWB	EXP STR		
1048	STAIR No.2	VCT/RUB	VB	PGWB	ATC	8'	SEE NOTE 1
1049	BRIEFING	VCT	VB	PGWB	ATC	9'	
1050	WORK STATIONS/CORRIDOR	VCT	VB	PGWB	ATC	10'-8"	
1051	STORAGE ROOM	VCT	VB	PGWB	ATC	9'	
1052	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
1053	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1054	CORRIDOR	VCT	VB	PGWB	ATC	9'	
1055	EMR	VCT	VB	PGWB	ATC	9'	
1056	WAITING	VCT	VB	PGWB	ATC	9'	
1057	EQUIPMENT	CONC	VB	PGWB	ATC	9'	
1058	TELECOMM ROOM	CONC	VB	PGWB	EXP STR		
1059	ELECTRICAL ROOM	CONC	VB	PGWB	EXP STR		
1060	MEN'S TOILET	CT	CT	PGWB/ CT	ATC	9'	SEE NOTE 2
1061	WOMEN'S TOILET	CT	CT	PGWB/ CT	ATC	9'	SEE NOTE 2
1062	JANITOR'S CLOSET	CT	CT	PGWB/ CT	ATC	9'	SEE NOTE 2
1063	WORK STATIONS/CORRIDOR	VCT	VB	PGWB	ATC	9'	
1064	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1065	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
1066	OFFICE	CPT	VB	PGWB	ATC	9'	

SPACE	FLOOR	FLOOR	BASE	WALLS	CEILING	MIN CLG HT	REMARKS
1067	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1068	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1069	OFFICE	CPT	VB	PGWB	ATC	9'	
1070	OFFICE	CPT	VB	PGWB	ATC	9'	
1071	OFFICE	CPT	VB	PGWB	ATC	9'	
1072	OFFICE	CPT	VB	PGWB	ATC	9'	
1073	OFFICE	CPT	VB	PGWB	ATC	9'	
1074	OFFICE	CPT	VB	PGWB	ATC	9'	
1075	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1076	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1077	OFFICE	CPT	VB	PGWB	ATC	9'	
1078	OFFICE	CPT	VB	PGWB	ATC	9'	
1079	OFFICE	CPT	VB	PGWB	ATC	9'	
1080	OFFICE	CPT	VB	PGWB	ATC	9'	
1081	OFFICE	CPT	VB	PGWB	ATC	9'	
	WAITING	VCT	VB	PGWB	ATC	9'	
1082	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1083	MAIN HVAC ROOM	CONC	VB	PGWB	EXP STR		
1084	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1085	STAIR No.1	VCT/RUB	VB	PGWB	ATC	8'	SEE NOTE 1
1086	VESTIBULE	VCT	VB	PGWB	PGWB	9'	
1087	ACS STO	CONC	VB	PGWB	ATC	9'	
1088	WORK STATIONS/CORRIDOR	VCT	VB	PGWB	ATC	9'	
1089	OFFICE	CPT	VB	PGWB	ATC	9'	
1090	OFFICE	CPT	VB	PGWB	ATC	9'	
1091	OFFICE	CPT	VB	PGWB	ATC	9'	
1092	OFFICE	CPT	VB	PGWB	ATC	9'	
1093	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1094	BRIEFING/SHARED WAITING	VCT	VB	PGWB	ATC	9'	
1095	BREAK ROOM	VCT	VB	PGWB	ATC	9'	
1096	WAITING	VCT	VB	PGWB	ATC	9'	
1097	WORK STATIONS/CORRIDOR	VCT	VB	PGWB	ATC	9'	
1098	OFFICE	CPT	VB	PGWB	ATC	9'	

SPACE	FLOOR	FLOOR	BASE	WALLS	CEILING	MIN CLG HT	REMARKS
1099	OFFICE	CPT	VB	PGWB	ATC	9'	
1100	BRIEFING/SHARED WAITING	VCT	VB	PGWB	ATC	9'	
1101	OFFICE	CPT	VB	PGWB	ATC	9'	
1102	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
1103	WORK STATIONS/CORRIDOR	VCT	VB	PGWB	ATC	9'	
1104	OFFICE	CPT	VB	PGWB	ATC	9'	

SPACE	FLOOR	FLOOR	BASE	WALLS	CEILING	MIN CLG HT	REMARKS
1017	STAIR No.3	VCT/RUB	VB	PGWB	ATC	8'	SEE NOTE 1
1048	STAIR No.2	VCT/RUB	VB	PGWB	ATC	8'	SEE NOTE 1
1085	STAIR No.1	VCT/RUB	VB	PGWB	ATC	8'	SEE NOTE 1
2001	LOBBY	VCT	VB	PGWB	ATC	9'	
2002	CORRIDOR	VCT	VB	PGWB	ATC	9'	
2003	WORK STATIONS/CORRIDOR	CPT	VB	PGWB	ATC	9'	
2004	BRIEFING	CPT	VB	PGWB	ATC	9'	
2005	STORAGE ROOM	VCT	VB	PGWB	ATC	9'	
2006	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2007	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2008	HVAC	CONC	VB	PGWB	EXP STR		
2009	WORK STATIONS/CORRIDOR	CPT	VB	PGWB	ATC	9'	
2010	STORAGE/RECORDS	CONC	VB	PGWB	ATC	9'	
2011	COMPUTER LAB	CPT	VB	PGWB	ATC	9'	
2012	OFFICE	CPT	VB	PGWB	ATC	9'	
2013	OFFICE	CPT	VB	PGWB	ATC	9'	
2014	OFFICE	CPT	VB	PGWB	ATC	9'	
2015	OFFICE	CPT	VB	PGWB	ATC	9'	
2016	STORAGE/RECORDS	VCT	VB	PGWB	ATC	9'	
2017	OFFICE	CPT	VB	PGWB	ATC	9'	
	WAITING	CPT	VB	PGWB	ATC	9'	
2018	WOMEN'S TOILET	CT	CT	PGWB/ CT	ATC	8'	SEE NOTE 2
2019	MEN'S TOILET	CT	CT	PGWB/ CT	ATC	8'	SEE NOTE 2
2020	JANITOR'S CLOSET	CT	CT	PGWB/ CT	ATC	8'	SEE NOTE 2
2021	BREAK ROOM	VCT	VB	PGWB	ATC	9'	
2022	ELECTRICAL CLOSET	CONC	VB	PGWB	ATC	9'	
2023	TELEPHONE AND COMMUNICATION CLOSET	CONC	VB	PGWB	ATC	9'	
2024	WORK AREA	CPT	VB	PGWB	ATC	9'	
2025	OFFICE	CPT	VB	PGWB	ATC	9'	
2026	OFFICE	CPT	VB	PGWB	ATC	9'	

SPACE	FLOOR	FLOOR	BASE	WALLS	CEILING	MIN CLG HT	REMARKS
2027	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2028	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2029	WORK STATIONS/CORRIDOR	CPT	VB	PGWB	ATC	9'	
2030	OFFICE	CPT	VB	PGWB	ATC	9'	
2031	RECORDS	VCT	VB	PGWB	ATC	9'	
2032	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2033	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2034	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2035	SUPPLY ROOM	CONC	VB	PGWB	ATC	9'	
2036	WAITING	CPT	VB	PGWB	ATC	9'	
2037	WORK STATIONS/CORRIDOR	CPT	VB	PGWB	ATC	9'	
2038	STORAGE ROOM	VCT	VB	PGWB	ATC	9'	
2039	OFFICE	CPT	VB	PGWB	ATC	9'	
2040	OFFICE	CPT	VB	PGWB	ATC	9'	
2041	TELEPHONE AND COMMUNICATION CLOSET	CONC	VB	PGWB	ATC	9'	
2042	ELECTRICAL ROOM	CONC	VB	PGWB	ATC	9'	
2043	MEN'S TOILET	CT	CT	PGWB/ CT	ATC	8'	SEE NOTE 2
2044	WOMEN'S TOILET	CT	CT	PGWB/ CT	ATC	8'	SEE NOTE 2
2045	JANITOR'S CLOSET	CT	CT	PGWB/ CT	ATC	8'	SEE NOTE 2
2046	WORK STATIONS/CORRIDOR	VCT	VB	PGWB	ATC	9'	
2047	LAB	VCT	VB	PGWB	ATC	9'	
2048	STORAGE ROOM	CONC	VB	PGWB	PGWB	9'	SEE NOTE 3
2049	STORAGE ROOM	VCT	VB	PGWB	ATC	9'	
2050	SHARED CONFERENCE ROOM	CPT	VB	PGWB	ATC	9'	
2051	STORAGE CLOSET	CPT	VB	PGWB	ATC	9'	
2052	HVAC ROOM	CONC	VB	PGWB	EXP STR		
2053	STORAGE ROOM	VCT	VB	PGWB	ATC	9'	
2054	REAR PROJECTION ROOM	CONC	VB	PGWB	ATC	9'	
2055	MEDIA CENTER	CPT	VB	PGWB	ATC	9'	

SPACE	FLOOR	FLOOR	BASE	WALLS	CEILING	MIN CLG HT	REMARKS
2056	WORK STATIONS/CORRIDOR	CPT	VB	PGWB	ATC	9'	
2057	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2058	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2059	STORAGE ROOM	VCT	VB	PGWB	ATC	9'	
2060	OFFICE	CPT	VB	PGWB	ATC	9'	
2061	OFFICE	CPT	VB	PGWB	ATC	9'	
2062	OFFICE	CPT	VB	PGWB	ATC	9'	
2063	WAITING	CPT	VB	PGWB	ATC	9'	
2064	WORK STATIONS/CORRIDOR	CPT	VB	PGWB	ATC	9'	
2065	LENDING CLOSET	CONC	VB	PGWB	ATC	9'	
2066	STORAGE ROOM	CONC	VB	PGWB	ATC	9'	
2067	OFFICE	CPT	VB	PGWB	ATC	9'	
2068	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2069	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2070	STORAGE CLOSET	VCT	VB	PGWB	ATC	9'	
2071	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2072	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2073	RECEPTION	CPT	VB	PGWB	ATC	9'	
2074	TRAINING	VCT	VB	PGWB	ATC	9'	
2075	TRAINING	VCT	VB	PGWB	ATC	9'	
2076	WAITING	CPT	VB	PGWB	ATC	9'	
2077	COMPUTER ROOM	CPT	VB	PGWB	ATC	9'	
2078	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2079	OFFICE	CPT	VB	PGWB	ATC	10'-8"	
2080	SECRETARY	CPT	VB	PGWB	ATC	9'	
2081	BABY	VCT	VB	PGWB	ATC	9'	
2082	STORAGE ROOM	VCT	VB	PGWB	ATC	9'	
2083	VIDEO CONFERENCE	CPT	VB	PGWB	ATC	9'	
2084	VIDEO CONFERENCE	CPT	VB	PGWB	ATC	9'	
2085	BRIEFING ROOM	CPT	VB	PGWB	ATC	9'	

LEGEND:	
	Flooring:
CT	Ceramic Floor Tile
CONC	Sealed Concrete
CPT	Carpet
RUB	Rubber Tile
SV	Sheet Vinyl
VCT	Vinyl Composition Tile
	Base:
CT	Coved Ceramic Tile Base
SV	Sheet Vinyl - Integral Coved
VB	Vinyl Base
	Walls:
CT	Ceramic Wall Tile - where wainscot is indicated include bullnose trim cap
EP	Epoxy Painted Gypsum Wallboard
FWC	Fabric Wall Covering
PCMU	Painted Concrete Masonry Unit
PGWB	Painted Gypsum Wallboard
	Ceiling:
ATC	Acoustical Tile Ceiling
EXP STR	Exposed to Structure
PGWB	Painted Gypsum Wallboard

GENERAL NOTES	
A	Where PGWB wall is indicated other finishes such as wallcovering or paneling that convey design image and provide a similar quali finish are acceptable.
B	Where ATC ceiling is indicated soffits are acceptable for design enhancemen
C	Vinyl wallcovering is not desired
D	1" mini blinds shall be provided at all exterior windows, typica
E	Exterior entrance pads shall have a broom finish. Exposed concrete slabs in interior rooms and slabs to receive resilient tile, carpet ar ceramic tile shall have a trowel finish. Exposed concrete slabs shall be sealed.
F	Provide compatible reducers at all changes in floor material. Install reducers under door where door exists. Where no door occurs, install reducer in line with partition until perpendicular partition. At Logistics, extend from low partition to partition defining Office 5.
KEYED NOTES	
1	VCT hall be on 1st floor landing only. Stairs shall have rubber nosings and treads. Intermediate and second floor landings shall hav rubber tile.
2	Install ceramic tile for full height behind water closet for full width of wall. Install ceramic tile wainscot and cap (to 3'-6" aff) for all oth walls within toilet area.
3	Finishes within this room should offer resistance to, and evidence of, unauthorized ent

APPENDIX D
SPIRIT REQUIREMENTS AND SUMMARY TABLE

SPIRIT Requirements and Summary Table	Maximum points possible	Mandatory points in RFP	Proposal points	
FEATURE				**REMARKS**
: SEE SPIRIT TEXT FOR FULL DESCRIPTION OF REQUIREMENTS FOR EACH ITEM.				
LIANCE IS REQUIRED IF "R" OR A NUMBER GREATER THAN ZERO APPEARS IN THE				
ATORY POINTS COLUMN				
Sediment/Erosion Control Plan	R	R		RFP requirement
Avoid undesirable sites	1	1		Site meets criteria
Site adjacencies/compatibility	1	1		Site meets criteria
Increase density	1	1		Site meets criteria
Minimize new infrastructure	1	1		Site meets criteria
Brownfield	1	0		N/A
Proximity to transit system	1	0		N/A
Bike racks & showers	1	0		
Proximity to alternative fuel station	1	1		Site meets criteria
Parking capacity, carpool parking	1	0		
Limited site disturbance , restoration	1	0		
Reduced footprint	1	0		
Stormwater runoff rate	1	0		
Stormwater treatment	1	0		
Reduce site heat islands	1	1		RFP requirement
Reduce roof heat islands	1	1		RFP requirement
Reduce light pollution	1	1		RFP requirement
optimize site features	1	1		RFP requirement
Cluster facilities	1	0		N/A
Mitigate offsite impacts	1	1		RFP requirement
Site Ecology	1	1		RFP requirement
High efficiecy irrigation/recycle site water	1	0		
no irrigation	1	0		
Innovative wastewater technologies	1	0		
20% Water use reduction	1	0		
30% Water use reduction	1	0		
Building commissioning	R	R		RFP requirement
Minimum energy performance	R	R		RFP requirement
CFC Reduction	R	R		RFP requirement
Optimize energy performance	20	0		
5% Onsite renewable energy	1	0		
10% onsite renewable energy	2	0		
15% onsite renewable energy	3	0		
20% onsite renewable energy	4	0		
Additional commissioning	1	0		
Measurement and verification	1	0		
Green power	1	0		
Distributed generation	1	0		
Storage & collection of recyclables	R	R		RFP requirement
Building reuse	3	0		N/A
Reduce construction waste	1	0		
Reduce construction waste addl	1	0		

Salvage/reused materials	1	0			
Salvage/reused materials addl	1	0			
Materials recycled content	1	0			
Addl materials recycled content	1	0			
Regionally manufactured materials	1	0			
Regionally extracted materials	1	0			
Rapidly renewable materials	1	0			
Certified wood	1	0			
Minimum IAQ performance	R	R		RFP requirement	
Environmental tobacco smoke	R	R		RFP requirement	
IAQ monitoring	1	0			
Increase ventilation effectiveness	1	0			
SMACNA/absorptive mtls/filtration	1	0			
Flushout/baseline IAQ test	1	0			
Adhesive/sealant VOC	1	1		RFP requirement	
Green Seal paints & coatings	1	1		RFP requirement	
CRI Green Label carpet	1	1		RFP requirement	
No urea/formaldehyde resins	1	1		RFP requirement	
Indoor pollutant source control	1	0			
Operable windows, perimeter light controls	1	0			
Non-perimeter controls	1	0			
ASHRAE thermal comfort stds	1	1		RFP requirement	
Temperature/humidity monitoring	1	0			
75% daylighting	1	1		RFP requirement	
90% outdoor view	1	0			
Noise control	1	1		RFP requirement	
IAQ management plan	1	0			
Team leader experience	1	1		RFP requirement	
Train team	1	1			
Identify project goals	1	1			
Charettes	1	?			
Resolve tradeoffs	1				
Document results	1				
Develop O&M plan	2	2		RFP requirement	
Durable materials	1	1		RFP requirement	
Quality indoor environment	1	1		RFP requirement	
Functional work environment	1	1		RFP requirement	
Healthy work environment	1	1		RFP requirement	
Determine functional life	1	1			
Determine building life	1	1			
Design for future uses	1	1		RFP Requirement	
Minimize building size	1	0			
TOTAL	100	24		26 minimum required	

APPENDIX E
GEOTECHNICAL INFORMATION

SUBSURFACE EXPLORATION
AND
GEOTECHNICAL ENGINEERING REPORT
(PRELIMINARY)

SOLDIER SERVICE CENTER
L.I. 51968, FY-02
Fort Stewart, Georgia

By
Soils Section
Geotechnical & HTRW Branch
U.S. Army Engineer District, Savannah

21 February 2002

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APPENDIX

One-Point and Two-Point Compaction Methods

SUBSURFACE EXPLORATION AND
GEOTECHNICAL ENGINEERING REPORT
(PRELIMINARY)
Soldier Service Center
L.I. 51968, FY-02
Fort Stewart, Georgia

21 February 2002

1. PURPOSE. The Government has conducted a preliminary geotechnical investigation for the proposed project. This report provides an overview of the site conditions, including subsurface soil and groundwater conditions, and preliminary recommendations pertaining to the geotechnical design and construction of the project.

2. QUALIFICATIONS OF REPORT. The field explorations performed for this report were made to determine the subsurface soil and groundwater conditions and were not intended to serve as an assessment of site environmental conditions. No effort was made to define, delineate, or designate any areas of environmental concern or of contamination. Any recommendations regarding drainage and earthwork construction are made on the basis that such work can be performed in accordance with applicable laws pertaining to environmental contamination.

3. PROJECT DESCRIPTION. The project consists of the design, site preparation, and construction of a Soldier Service Center. The Soldier Service Center's primary mission is in and out processing of soldiers at Fort Stewart at a single location; secondary missions are Retirement and Transition Processing, Army Community Services, Transportation, Directorate of Human Resources, Public Affairs, Housing, and Veteran Affairs. These operations are currently housed in multiple WWII era facilities which are antiquated and beyond economical repair. The proposed building is a two-story building having a maximum area of 60,000 square feet.

Since the project will be constructed under a design/build contract, detailed structural information for the proposed building is unavailable. However, some of the pertinent design features are as follows: The exterior wall will be non-loadbearing reinforced concrete masonry with brick veneer. The proposed floor system is a composite steel beam and slab construction. The slab system is 6-½ inches thick, being comprised of 4-1/2 inches of regular weight concrete over a 2 inch deep steel composite deck.

4. EXPLORATION PROCEDURES.

a. Site Reconnaissance. Prior to the field exploration, the site and surrounding areas were visually inspected by a geotechnical engineer. The observations were used in planning the exploration, in determining areas of special interest, and in relating site conditions to known geologic conditions in the area.

b. Field Exploration.

(1) Subsurface conditions at the project site were explored by eight soil test borings (designated B-1 through B-8) drilled at the approximate locations shown on the Soil Test Boring Location Plan included in the drawings with this RFP. Depths of the borings for the proposed building ranged from 5 to 25 feet below existing ground surface.

(2) Boring locations were established in the field by an engineer by measuring distances and estimating right angles from existing buildings, roads, sidewalks, and other features. The ground surface elevation at each boring location was determined by interpolation from the site topography survey. Since the measurements were not precise, the locations shown on the boring location plan and the elevations on the boring logs should be considered approximate.

(3) The test borings were drilled using a SIMCO 2400 drill rig by Environmental Field Technology, Inc., under contract to the Savannah District. Where the borehole wall would remain stable, a 4-inch solid flight auger was used to advance the borehole. Where the borehole wall would not remain stable, the borehole was advanced using the rotary wash boring method, in which a bentonite drilling fluid is circulated in the borehole to stabilize the borehole wall and to remove the drill cuttings. The drill bit used was a 5-inch "fishtail" bit. Split-barrel sampling with Standard Penetration Testing (SPT) was performed in the soil test borings at intervals shown on the boring logs. All soil sampling and Standard Penetration Testing were in substantial accordance with ASTM D 1586. In the Standard Penetration Test, a soil sample is obtained with a standard 1½ inch I.D. by 2 inch O.D. split-barrel sampler. The sampler is first seated 6 inches and then driven an additional 12 inches with blows from a 140-pound hammer falling a distance of 30 inches. The number of blows required to drive the sampler the final 12 inches is recorded and is termed the "standard penetration resistance", or the "N-value". Penetration resistance, when properly evaluated, is an index of the soil's strength, density, and foundation support capability. Groundwater levels were measured in the boreholes at about 24 hours after drilling.

(4) Representative portions of the soil samples taken in the field were sealed in airtight containers and delivered to the Savannah District office where they were examined by an engineer to confirm the driller's field classifications. Classification of the soil samples was performed in general accordance with ASTM D 2488 (Visual-Manual Procedure for Description of Soils). The soil classifications include the use of the Unified Soil Classification System described in ASTM D 2487 (Classification of Soils for Engineering Purposes). Since the soil descriptions and classifications are based on visual examination, they should be considered approximate.

(5) Soil boring logs graphically depicting soil descriptions, standard penetration resistances, and observed groundwater levels are shown on the drawings with this RFP.

5. SITE AND SUBSURFACE CONDITIONS.

a. Site Description

(1) The proposed site for the Soldier Service Center is located on the tract of land surrounded by Hase Road, Worcester Road, Pony Soldier Avenue, East Bultman Avenue, and Bunker Road Drive. Pony Soldier Avenue and East Bultman Avenue will provide access to the site.

(2) The northwestern corner of the site is presently occupied by Building 251 which actually consists of two structures. The building is surrounded by asphalt paved parking areas. Near the southeast corner of Building 251 is located Building 252, which is a trailer, and several small out buildings. The remainder of the site is grassed with scattered pine trees. A row of palmetto trees extends along the west side of the site along Hase Road. The site is generally level ranging in elevation from about 86 to 89 feet.

b. Area and Site Geology. Fort Stewart is located near the eastern edge of the South Atlantic Coastal Plain. In South Carolina and Georgia, this broad, gently sloping region extends southeastward from the Fall Line (Columbia-Augusta-Macon-Columbus) to the Atlantic Ocean. The soils encountered are predominantly sedimentary in origin and consist of layered marine deposits of sands, silts and clays. The deposits have since been subjected to successive erosion and re-deposition by fluctuations of sea levels, storm tides and winds. Many of the surface sands are the result of depositional forces along ancient beaches which formed during the changing shoreline and river conditions. Intermittent deposits of shells occur within the strata at irregular intervals.

c. Subsurface Conditions.

(1) Natural soils were encountered in all of the borings.

(2) Below the topsoil, which is generally only a few inches thick, the soil profile at the project site is rather homogeneous, consisting of gray colored silty sand to depths of 2 to 8 feet. Below the lightly colored sand to the termination depths of the borings is a light brown to dark brown silty sand. Standard penetration resistances within generally the upper 6 feet of the profile ranged from 6 to 19, indicating loose to medium relative density. Below 6 feet, the standard penetration resistances ranged predominantly from 26 to 49, indicating medium to very dense relative density.

(3) The above subsurface description is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The boring logs shown on the drawings should be reviewed for specific information at individual boring locations. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between the subsurface materials; the actual transition may be gradual.

d. Groundwater Conditions. Water levels were measured generally 24 hours after completion of the boring. Groundwater was encountered from about 5 to 8 feet below existing grade. Groundwater depths or elevations shown on the boring logs represent groundwater encountered on the dates shown. Absence of groundwater data for certain borings implies that no data is available, but does not necessarily mean that groundwater will not be encountered at the locations of those borings. Groundwater levels will fluctuate with seasonal and climatic variations, variations in subsurface soil conditions, and construction operations. Therefore, groundwater conditions in the future, and at other locations on the site, may differ from the conditions encountered at the boring locations, on the dates the borings were performed.

6. ENGINEERING EVALUATIONS AND RECOMMENDATIONS.

a. General. The following conclusions and recommendations are based on the information available on the proposed structure, observations made at the project site, interpretation of the data obtained from the soil test borings, and our experience with soils and subsurface conditions similar to those encountered at the site. Since the test borings represent a very small statistical sampling of the subsurface conditions, it is possible that subsurface conditions substantially different from those indicated by the test borings could be encountered during the construction. In such instances, adjustments to the design and construction of the proposed structure might be necessary, depending on the actual conditions.

b. General Site Preparation. The demolition of structures, concrete and asphalt pavements, and site utilities will be required to prepare the site for construction. Following demolition, clearing and removal, the construction area should be grubbed and stripped of all vegetation, topsoil, organics, remnants of foundations and other deleterious materials. Clean topsoil can be stockpiled and reused in landscaped areas. It is recommended that the zone of stripping extend a minimum of 10 feet beyond the outer edges of the structure and pavement. Any existing utilities in construction areas should be located and rerouted, as necessary.

c. Foundation Design and Construction.

(1) Given the proposed site and the proposed type of structure, it is our opinion that shallow spread foundations can be used for support of the proposed building.

(2) Footings should be supported on the natural in situ soils or on properly compacted structural fill. Column footings and load-bearing wall footings should have minimum dimensions of 30 and 24 inches, respectively, and should be located at a minimum depth of 24 inches below finish floor or finish grade, as appropriate. Non load-bearing wall footings should have a minimum width of 18 inches and should be located at a depth of 18 inches below finish floor or finish grade, as appropriate.

(3) Foundation excavations should be concreted as soon as practical following excavation. Exposure to the environment could weaken the soils at the footing bearing level should the foundation excavations remain open for an extended period of time. Bottoms of foundation excavations should be inspected immediately prior to placement of reinforcing steel and concrete to

verify that adequate bearing soils are present and that all debris, mud, and loose, frozen or water softened soils are removed. If the bearing surface soils have been softened by surface water intrusion or by exposure, the softened soils must be removed to firm bearing, and replaced with additional concrete during the concreting, or replaced to design subgrade with No. 57 or No. 67 stone,and compacted to a non-yielding condition. To minimize exposure, the final excavation (4 to 6 inches) to design subgrade could be delayed until just prior to placement of reinforcing steel and concreting. Foundation excavations must be maintained in a drained/dewatered condition throughout the foundation construction process.

d. Site Classification for Seismic Design. The project site should be classified as Site Class D for the purpose of determining maximum considered earth spectral response accelerations S_{MS} and S_{MI} in accordance with "NEHRP" Recommended Provisions for Seismic Regulations for New Buildings and Other Structures," 1997 Edition.

e. Concrete Slabs-On-Grade.

(1) Based upon our past experience and the subsurface conditions encountered at the site, concrete floor slabs can be supported on densified in situ soils or on fill soils placed and compacted in accordance with the recommendations presented in this report regarding structural fill. We recommend that all concrete slabs-on-grade in inhabitable areas, including storage areas, be underlain by a minimum of 4 inches of open graded, washed pea gravel, or stone, often termed "capillary water barrier," to prevent the capillary rise of groundwater. Nos. 57, 67, 78, or 89 stone could be used. We also recommend that a moisture vapor barrier consisting of lapped polyethylene sheeting having a minimum thickness of 6 mils be provided beneath the building floor slabs to reduce the potential for slab dampness from soil moisture. Concrete slabs should be jointed around columns and along supported walls to minimize cracking due to possible differential movement.

(2) Construction activities and exposure to the environment often cause deterioration of the prepared slab-on-grade subgrade. Therefore, we recommend that the slab subgrade soil be inspected and evaluated immediately prior to floor slab construction. The evaluation might include a combination of visual observations, hand rod probing and field density tests to verify that the subgrade has been properly prepared. If unstable soil is revealed, the affected soil should be removed to firm bearing, and replaced to design subgrade with suitable structural fill soil placed and compacted as recommended, or replaced with additional capillary water barrier material.

f. Groundwater Considerations. Water should not be allowed to collect near the foundation or on floor slab areas of the building either during or after construction. Undercut or excavated areas should be sloped toward one corner to facilitate removal of any collected rainwater, groundwater, or surface runoff. Positive site drainage should be provided to reduce infiltration of surface water around the perimeter of the building and beneath the floor slabs.

g. Structural Fill. In order to achieve high density structural fill, the following evaluations and recommendations are offered:

(1) Based on the soil test borings, excavated on-site soils (excluding any organics and

debris) can be used as structural fill. Some moisture content adjustment will probably be necessary to achieve proper compaction. If water must be added, it should be uniformly applied and thoroughly mixed into the soil by discing.

(2) We recommend that the contractor have appropriate disc harrows on site during earthwork for both drying and wetting the soils.

(3) Materials selected for use as structural fill should be free from roots and other organic matter, trash, debris, and frozen soil, and stones larger than 3 inches in any dimension. The following soils represented by their Unified Soil Classification System (ASTM D 2487) group symbols will be suitable for use as structural fill: GC, GM, SP, SW, SC, SM, and CL. The following soil types are considered unsuitable: Pt, OH, OL, GP, GW, ML, MH, and CH.

(4) Suitable fill soils should be placed in lifts of maximum 8 inches loose measurement. The soil should be compacted by mechanical means such as steel drum, sheepsfoot, tamping, or rubber-tired rollers. Compaction of clays is best accomplished with a sheepsfoot or tamping roller. Periodically rolling with heavily loaded, rubber-tired equipment may be desirable to seal the surface of the compacted fill, thus reducing the potential for absorption of surface water following a rain. This sealing operation is particularly important at the end of the workday and at the end of the week. Within confined areas or foundation excavations, we recommend the use of manually operated, internal combustion activated compactors ("wacker packers" or sled tamps). The compactors should have sufficient weight and striking power to produce the same degree of compaction that is obtained on the other portions of the fill by the rolling equipment as specified. Where hand operated equipment is used, the soils should be placed in lifts of maximum 4 inches loose measurement.

(5) We recommend the structural fill and subgrades be compacted to the following minimum percents of the modified Proctor maximum dry density (ASTM D 1557):

Beneath structures and building slabs, to 5 feet beyond building and structure line, around footings and in trenches	90 percent
Beneath paved areas, except top 12 inches	90 percent
Beneath paved areas, top 12 inches	95 percent
Beneath sidewalks and grassed areas	85 percent

h. Construction Quality Control Testing.

(1) Prior to initiating any structural fill placement and/or compaction operations, we recommend that representative samples of the soils which will be used as structural fill or subgrade, both suitable on-site soils and off-site soils (borrow), be obtained and tested to determine their classification and compaction characteristics. The samples should be carefully selected to represent

the full range of soil types to be used. The moisture content, maximum dry density, optimum moisture content, grain-size and plasticity characteristics should be determined. These tests are required to determine if the fill and subgrade soils are acceptable and for compaction quality control of the subgrades and structural fill. Tests for the above soil properties should be in accordance with the following:

Moisture Content	ASTM D 2216
Maximum Dry Density and Optimum Moisture	ASTM D 1557
Grain-Size (Wash No. 200, less hydrometer)	ASTM D 422 and D 1140
Plasticity	ASTM D 4318

(2) A representative number of in-place field density tests should be performed in the subgrade of compacted on-site soils and in the structural fill and backfill to confirm that the required degree of compaction has been obtained. In-place density tests should be performed in accordance with the sand cone method prescribed in ASTM D 1556. We recommend at least one density test be performed for each 5000 square feet, or portion thereof, of compacted existing on-site soils, subgrades, and in <u>each</u> lift of compacted structural fill. We also recommend that at least one density test be performed for each 75 linear feet in the bearing level soils of continuous footings. Density tests should be performed at 75-foot intervals along roadway subgrade soils. In addition, a density test should be performed for each 150 linear feet of backfill placed per foot of depth in trenches for utilities systems. Where other areas are compacted separately by manually operated compactors, a minimum of one density test should be performed for every 250 square feet, or portion thereof, of fill placed per foot of depth.

(3) Compaction control of soils requires the comparison of fill water content and dry density values obtained in the field density tests with optimum water content and maximum dry density. The performance of a laboratory compaction test on material from each field density test would provide the most accurate relation of the in-place material to optimum water content and maximum density, but it is not feasible to do this as the testing could not keep pace with fill construction. We recommend that compaction control of the earthwork construction be performed using a "family" of compaction curves and the one-point or two-point compaction methods. Excerpts from construction specifications, which describe the approach and its use, are included in the Appendix.

(4) Any area that does not meet the required compaction criteria should be reworked, and retested. If the moisture content of the soil is within the recommended range, additional compaction may be all that is necessary to increase the density. If the moisture content is not within the recommended range, then, the moisture content should be adjusted to within the range, and the area recompacted.

(5) All laboratory and field density testing should be performed by an approved commercial testing laboratory qualified in this type of work.

APPENDIX

One-Point and Two-Point Compaction Methods

Compaction Control

For fine grained (clayey and silty) soils and for sands with appreciable fines such that normal shaped compaction curves are obtained, results of all compaction tests shall be plotted on a common plot as a family of curves. For each field density test performed, a one-point compaction test, with additional points as needed, shall be performed on the same material on which the field density test was conducted. The one-point compaction test shall be performed on the dry side of the optimum moisture content. For comparison of field density data to the proper laboratory compaction test results, the procedures for the one-point and/or two-point compaction control methods as described in paragraph Compaction Procedure, shall be used. Compaction curves plotted on the family of curves shall be of such a scale that the optimum moisture content can be interpreted to the nearest 0.1 percent and the maximum dry density can be interpreted to the nearest 0.1 pcf(or 2 kg/m^3). When a one-point test plots outside the range of the family of curves, an additional five-point compaction test shall be performed.

Compaction Procedure

General

The following paragraphs describe methods of relating field density data to desired or specified values. Compaction control of soils requires comparison of fill water content and/or dry density values obtained in field density tests with optimum water content and/or maximum dry density. At a minimum, control shall be in accordance with the One-Point Compaction Method. Where conditions require, the Two-Point Compaction Method shall be used.

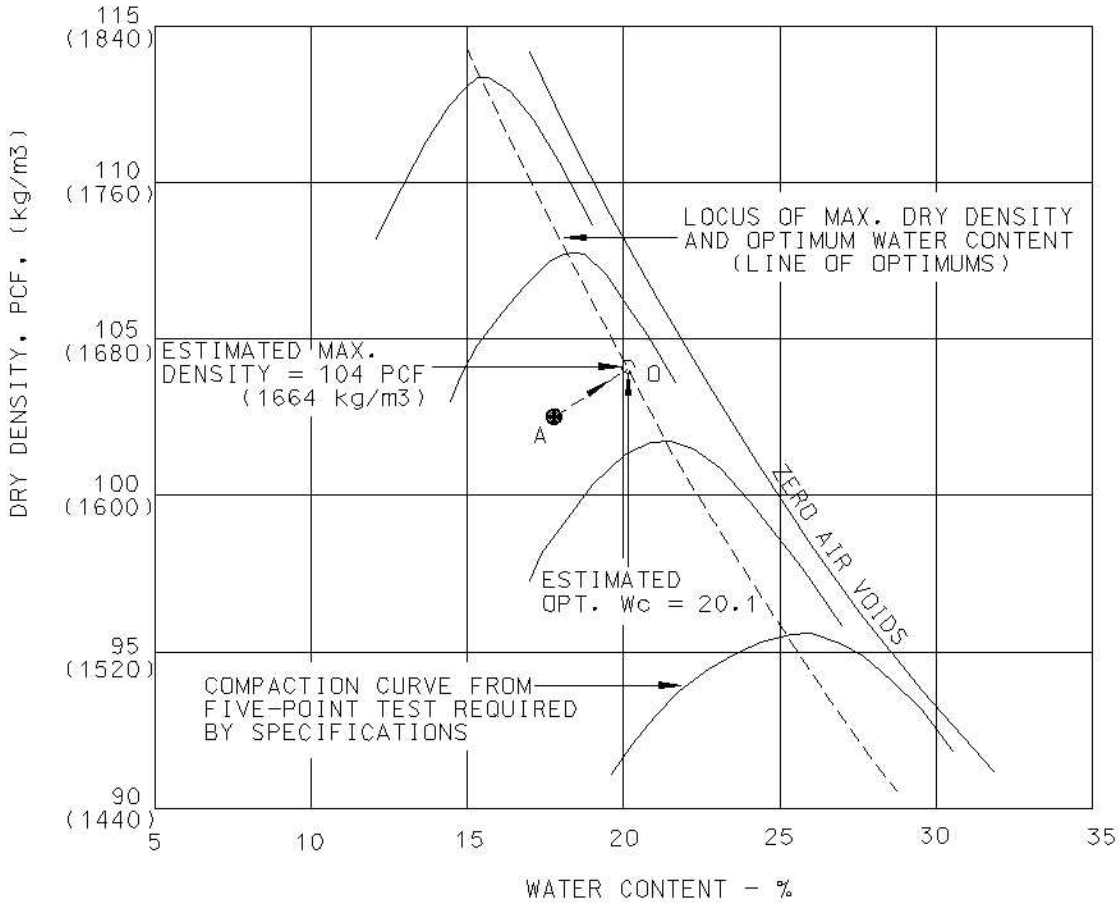
One-Point Compaction Method

The material from the field density test is allowed to dry to a water content on the dry side of estimated optimum, and then compacted using the same equipment and procedures used in the five-point compaction test. Thorough mixing is required to obtain uniform drying; otherwise, results obtained may be erroneous. The water content and dry density of the compacted sample are determined and then used to estimate its optimum water content and maximum dry density as illustrated in Figure 1 at the end of this section. In Figure 1, the line of optimums is well defined and the compaction curves are approximately parallel to each other, consequently, the one-point compaction method could be used with a relatively high degree of confidence. However, in Figure 2 at the end of this section, the curves are not parallel to each other and in several instances will cross if extended on the dry side. Consequently, the correct curve cannot be determined from the one-point method; therefore, the two-point compaction method should be used. The one-point method should be used only when the data define a relatively good line of optimums.

Two-Point Compaction Method

In the two-point test, one sample of material from the location of the field density test is compacted at the fill water content if thought to be at or on the dry side of optimum water content (otherwise, reduced by drying to this condition) using the same equipment and procedures used in the five-point compaction test. A second sample of material is allowed to dry back about 2 to 3 percentage points dry of the water content of the first sample and then

compacted in the same manner. At least one point shall fall within 3 percent of the line of optimums. After compaction, the water contents and dry densities for the two samples are determined. The results are used to identify the appropriate compaction curve for the material being tested as shown in Figure 2 at the end of this section. The data shown in Figure 2 warrant the use of the two-point compaction test because the five-point compaction curves are not parallel. Using point A only, as in the one-point test method, would result in appreciable error as the shape of the curve would not be defined. The estimated compaction curve can be more accurately defined by two compaction points.



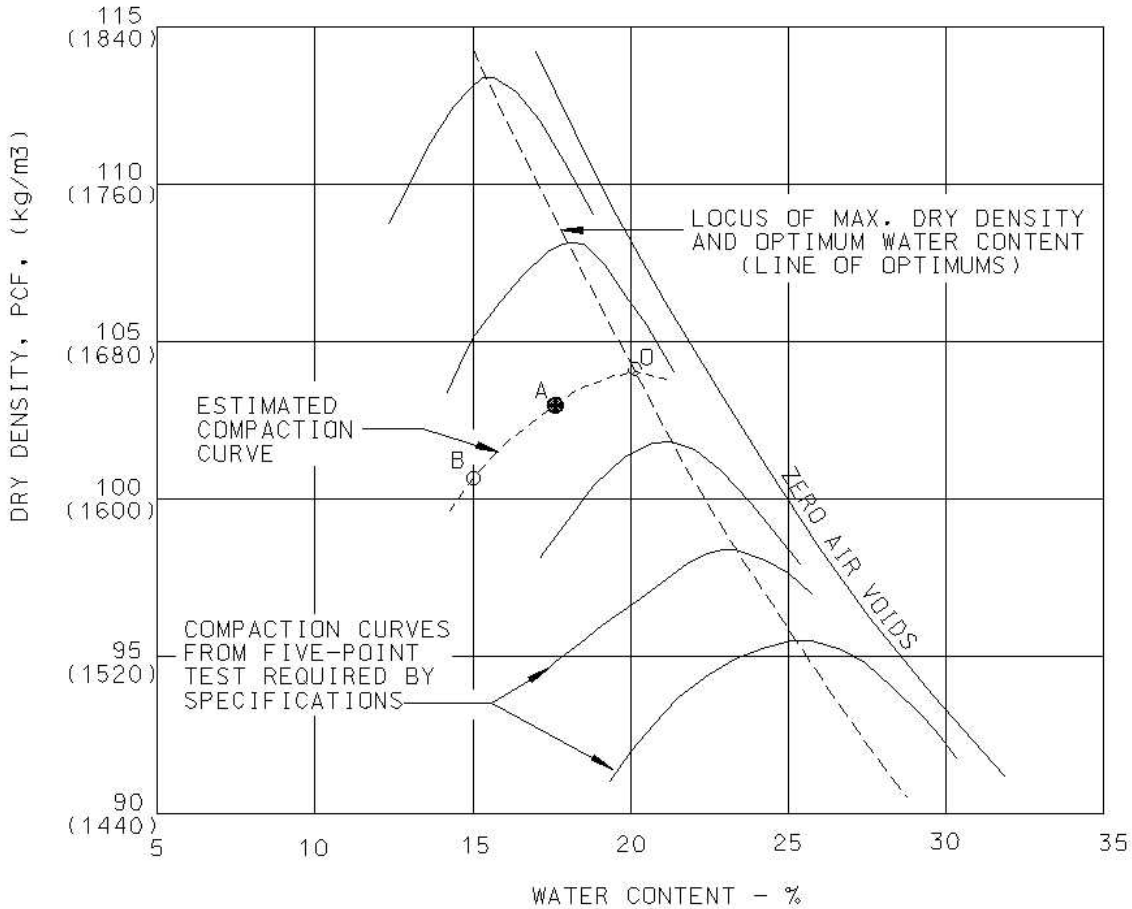
PROCEDURE:

1. Point A is the result of a one-point compaction test on material from field density test. This point must be on the dry side of optimum water content.

2. Point O is the estimated optimum water content and maximum density of the fill material based on a projection of point A approximately parallel to the adjacent compaction curves.

3. Point A must plot within 3 percent of the line of optimums.

Figure 1. Illustration of one-point compaction method.



PROCEDURE:

1. Points A and B are results of a two-point compaction test on material from field density test. Points A and B must be on the dry side of optimum water content.

2. The estimated compaction curve based on Points A and B establishes Point O on the locus, which is the estimated maximum dry density and optimum water content of the fill material.

3. One point must plot within 3 percent of the line of optimums.

Figure 2. Illustration of two-point compaction method.

APPENDIX F
ENVIRONMENTAL AND ASBESTOS INFORMATION

SPECIFIC INSTRUCTIONS
FOR

SOLDIER SERVICE CENTER, FTORT STEWART, GEORGIA
FY: 02 LI: 51968

SECTION 12 - ASBESTOS, LEAD-BASED PAINT, HAZARDOUS AND/OR REGULATED BUILDING MATERIALS, SURFACE AND/OR SUBSURFACE HAZARDOUS MATERIALS AND/OR WASTES
PREPARED BY: CAMPBELL-MILES DATE: 8 November 2001

12.1. GENERAL. The instructions given herein supplement and modify the requirements given in Chapter A-12, Asbestos and Other Hazardous Materials (Identification, Handling and Removal) of the Savannah District Design Manual for Military Construction. Except where modified, all pertinent instructions found in Chapter A-12 of the Design Manual shall be complied with for this project. These instructions are written and numbered so as to "parallel" the text of Chapter A-12.

In addition the instructions covered herein will address requirements for the identification, removal and recycling/recovery of miscellaneous hazardous building materials such as High Intensity Direct lighting (HID), fluorescent light tubes (lamps) containing mercury, mercury containing thermostats, manometers and related sensing equipment, PCB containing ballasts and transformers, and lead items such as roofing anchors, flashing, window weights, tub and sink noise dampers, etc. At this time lead based paint (LBP) may be left on the building structures if the debris from the structures goes directly to a construction and debris (C&D) landfill. Toxicity Characteristic Leaching Process (TCLP) testing has indicated that the leachate for these buildings contains less than the regulatory limit of 5mg/L of lead. Individual surface testing of LBP need not be performed under these circumstances. LBP need not be tested under these circumstances. Should it be determined that hazardous waste materials, USTs, OEW or UXO potentially impact the sites of the new facility the A/E shall also prepare guidance for the control or removal of such hazards as falls under the definition of this project.

12.2 APPLICABLE PUBLICATIONS. Include Georgia's asbestos, lead-based paint (LBP) and other applicable Georgia regulations in all specifications, which shall be used in the development of all design specifications.

The AE/Contractor shall comply with the issue or version (including all changes and amendments) of Federal, State and local environmental statutes and regulations in effect on the day of issuance of this contract, including the applicable portions of the documents cited in the basic contract. References include but are not limited to the following.

Environmental Protection Agency, Resource Conservation and Recovery Act (RCRA) (40 CFR 266).

Environmental Protection Agency 40 CFR Parts 260, 261, 264, 265, 268, 270 and 273

Environmental Protection Agency, Disposal of Polychlorinated Biphenyls (PCBs) Federal Register vol. 63 29 June 1998, p. 25283 together with 40 CFR 761.

Hazardous Waste Management System: Modification of the Hazardous Waste Program; Hazardous Waste Lamps, Final Rule Federal Register Vol. 64 No. 128, July 6 1999 Rules and Regulations

Hazardous Waste and Emergency Responder 29 CFR 1926.65

Georgia Department of Natural Resources, Environmental Protection Division's web site for regulations is: www.dnr.state.ga.us/dnr/environ

Georgia Department of Natural Resources, Environmental Protection Division, Chapter 391-3-1, Rules for Air Quality Control

Georgia Department of Natural Resources, Environmental Protection Division, Chapter 391-3-14, Rules for Asbestos Encapsulation

Georgia Department of Natural Resources, Environmental Protection Division, Chapter 391-3-4, Rules of Solid Waste Management

Georgia Department of Natural Resources, Environmental Protection Division, Chapter 391-3-24, Lead-based Paint Abatement, Certification, and Accreditation

12.3 PRECONCEPT SUBMITTAL REQUIREMENTS. No changes.

12.4 CONCEPT/EARLY PRELIMINARY (35%) DESIGN SUBMITTAL REQUIREMENTS. In addition to the A-12 section 12.4 requirements, the following requirements will also be met. The report of findings shall be stand-alone chapters in one volume. "Negative findings' reports shall be included. The AE shall address all USACE comments in writing and make all changes necessary to bring the report into compliance with federal, state, local, USACE, and Army requirements. The reports shall be included as a permanent part of the project files.

Lead-based Paint. Many of the buildings to be demolished are WW II era wood sided structures with 1970's era aluminum siding upgrade. Lead-based Paint must be addressed on two aspects, environmental disposal and worker safety and health. A composite debris test, using the Toxicity Characteristic Leaching Process (TCLP) has been performed by the government and the results included in the Hazardous (Building) Materials Survey Report for each building. Structures that pass this test for lead may be placed in a C&D landfill. Failure will required that the paint be abated prior to demolition, or the debris placed in a hazardous waste landfill. Worker protection, such as required under the OSHA Lead in Construction Standard and the Hazard Communication Standard, is to be addressed in the specifications regardless of TCLP results.

Lead Items. All lead items such as pipe and venting systems, flashing, noise deadening pastes, and medical/dental x-ray protection panels must be removed prior to demolition. If at all possible these items should be recovered or recycled. Leda items as described herein cannot be disposed of in a C&D landfill. See the Hazardous (Building) Materials Survey Report for type, quantity and location.

Asbestos. A preliminary Asbestos Survey has been conducted by the installation. This survey (included as an appendix) was minimally intrusive and should not be considered a definitive report of type and quantity of asbestos that is in the targeted buildings. An estimate of the type and quantity of asbestos that may be in the buildings was generated by a walk through by a trained and certified Asbestos Building Manager/Inspector. Table 1 was generated to give the Contractor a picture of what should be the maximum amount of asbestos containing material (ACM) for this project. Table 1 also includes an estimate of the maximum number of asbestos bulk samples needed for this project. **Although the table**

provides is a quantity estimated for each building, the Contractor shall use the total estimates as a project wide estimate. The Contractor is encouraged to inspect the buildings for types and quantities of ACM and present any changes in his bid. At minimum, the Contractor must give a unit quantity cost for each type of asbestos listed in Table 1. All vinyl asbestos floor tile (VAFT) quantities are assumed to be multiple layers with positive mastic. Much of the VAFT is covered by carpet.

Should suspected ACM be encountered, the material must be sampled by the Contractor and reported in accordance with Chapter 12 and this instruction. After viewing the buildings the Contractor shall determine the number of bulk samples that may be needed. Table 1 of this instruction provides an estimated quantity of bulk samples. It is recommended that the Contractor justify any increase over this estimate when preparing his bid/proposal. The findings from any additional bulk sampling shall be collated into a brief report (Asbestos Sampling and Survey Supplemental Report) that shall be included as a permanent part of the project file. The sampling report shall be prepared in such a way as to include: location and specific area, quantity, condition and whether it can be demolished in place without becoming friable. All completed sampling forms, custody forms, and drawings shall be included. Sampling locations shall be marked on the drawings. (simple line drawings are acceptable). The Asbestos Sampling and Survey Supplemental Report shall include copies of all licenses and certifications and shall be signed by the licensed asbestos inspector. Suspected asbestos containing materials (ACM) shall not be called negative (or <1%) based upon one sample. A minimum of three asbestos samples shall be analyzed unless the homogeneous material is less than 10 linear ft.

The Contractor must produce an asbestos abatement specifications and associated drawings. The Specification must include the submission of an Asbestos Hazard Control Plan (Means & methods, Safety & health, Certifications & documentation). USACE requires that all Asbestos Hazard Control Plans be submitted and accepted by the District's (Savannah) Safety and Occupational Health Office.

Mercury. Mercury containing materials and hazardous waste lamps (HWL): A survey of all mercury containing building materials was done and a brief report submitted describing the number and type of materials present. All fluorescent tubes and metal halide 'bulbs' that are not marked 'mercury free' shall be considered 'mercury-containing' and disposed of as Universal Waste. The quantities of fluorescent light tubes and fixtures and mercury containing items are listed in each Hazardous (Building) Materials Survey Report. Materials such as electrical switches, thermostats, and thermometers containing liquid mercury must be accounted for. These items may be recycled, recovered, or disposed of as a hazardous waste product as deemed necessary by the AE/Contractor. The AE/Contractor shall contact the Ft Stewart environmental coordinators as to their preference in disposal methods.

PCBs. The AE/Contractor shall use the inventory of fluorescent light fixtures that is found in the Hazardous (Building) Materials Survey Report on each building to determine the number of PCB containing ballasts. The AE/Contractor shall contact the Ft. Stewart environmental coordinators as to their preference in disposal methods.

Miscellaneous Hazardous Building Materials. All fluorocarbon refrigerants and coolants must be removed and recovered or recycled prior to building demolition. All residual fuels in abandoned pipelines and (USTs) must be removed and disposed of in accordance with Georgia underground storage regulations (GUST). See the Hazardous (Building) Materials Survey Report for more details on these materials. All USTs, regardless of use must be removed in accordance with GUST. Coordination with Ft. Stewart environmental and real property departments is required.

The Contractor shall prepare a specification for the removal and disposal of all Universal Wastes.

12.5 SIXTY PERCENT (60%) SUBMITTAL REQUIREMENTS. No changes.

The AE/Contractor shall utilize the information presented in the Contractor's (and the supplied installation) asbestos reports, the mercury-containing materials and HWL report, the PCB report and the knowledge that the buildings contain lead-based paint to create a minimum of two specifications, an Asbestos Abatement and Control Specification and a separate Hazardous Building Materials Removal Specification. The Hazardous Building Materials Removal specification shall not be combined with a general demolition specification, although it should be referenced. The specifications shall address all applicable environmental, worker safety and health regulations, and the methods for removing, recycling/recovering and/or disposal of the hazardous materials that have been identified. Sample guide specifications can be viewed from TECHINFO on the USACE Huntsville District website or a sample version of a Hazardous Building Materials Specification 02081 can be obtained from Savannah District. As these materials are either hazardous or universal wastes, record keeping and disposition documentation must be included as submittal items.

12.6 PRELIMINARY (60%) DESIGN SUBMITTAL REQUIREMENTS.

12.6.1 The format shall match the rest of the project's drawings and style.

12.6.2 Generally, guide specifications must be edited and tailored by the A/E to satisfy the requirements of the particular project being designed. The drawings and specifications must complement each other. All extraneous and irrelevant information contained in the guide specifications must be eliminated. Likewise, information not originally contained in the guide specifications must be added to ensure a complete specification. Furthermore, functional or descriptive specifications must be developed as necessary to fully specify the requirements of the project being designed.

12.6.3 All *Set-up* and *Detail Sheets* referenced in the final specification shall be included as an addendum or attachment to 13280.

12.6.4 The Asbestos Sampling and Survey Supplemental Report shall be included as an addendum.

12.6.5 Contractor Submittal Requirements. The specifications shall require the Contractor to submit shop drawings, samples, manufacturer's data, personnel and equipment certificates, test reports, an abatement plan, etc. as appropriate. The AE shall be required to furnish a listing of the Contractor's submittal requirements. The AE shall add submittal items as needed to supply all relevant information.

12.6.6 Provide a minimum 1-inch margin at all four edges of each page.

12.6.7 All abatement and removal drawings/plates shall be labeled. Drawings shall be specific as to the type and location of the asbestos or hazardous materials. General descriptions and hatch markings shall be avoided. Textual descriptions must be accompanied by hatching or other markings on the drawing. Drawings shall contain material descriptions and approximate quantities, based upon the inspection report. Drawings shall contain sufficient exterior landscaping and details so as to assist the Contractor in locating suitable areas for decontamination units and material load-out centers.

12.7 CORRECTED FINAL (100%) DESIGN SUBMITTAL REQUIREMENTS. No changes.

12.8 ESTIMATE. No changes.

12.9 FEE PROPOSAL. No changes.

12.10 PROJECT REVIEW COMMENTS. The AE shall submit specific annotated responses to all review comments. Responses shall state the specification section or the drawing /plate number where the change was made. Changes include deletions as well as additions. Revised submittals shall be legibly typed and not marked by hand.

Table 1
Soldier Service Center
Fy: 02 LI# 51968
Hazardous Building Components and Estimated Asbestos Quantities

Bldg	*Non HWL Mercury Items	Non-LBP Lead Items/ Systems	VFT/ mastic sf	Roof Flashing sf	Friable Roofing sf	Window Caulking/ Glazing lf	TSI lf	Elbows each	Transite panels sf	Toweled/ Sprayed materials sf	Misc. Friable sf	Asbestos Board & Non-friables* sf
251 (Abestos includes trailer Bldg, aka 252)	11 ---------- 1	3 areas ---------- 0	21,000	200	200	600	200	5	200	200	200	50
1192	1	2	3,000	100	100	900	100	5	100	200	100	50
920	8	2	10,000	100	100	3,000	200	5	330	100	100	225
470	4- misc 8- batteries	2	3,500 (mastic only)	100	100	600	650	5	100	100	100	50
1191	4	2	4,500	100	100	900	200	5	400	100	100	**300 Sheetrock/ mud
Asbestos Totals	**NA**	**NA**	**42,000**	**600**	**600**	**6,000**	**1350**	**25**	**10.400**	**700**	**600**	**675**
Bulk Sample Totals **[53]**	**NA**	**NA**	**9**	**3**	**3**	**6**	**6**	**5**	**3**	**6**	**6**	**6**

*See the Hazardous Building Materials report for the location, number and type of hazardous waste lamps.
**Includes sheetrock mud. (OSHA class II.)

SOLDIER SERVICE CENTER

Bldg. T251	25,914 SF	ALL OCCUPIED
Bldg. T251*	1,340 SF	

LOCATION: Off Hase Rd

CURRENT USE: Soldier Processing Center

EXTERIOR DESCRIPTION. Former NCO club. WWII era building [1940's] with energy conservation upgrade including aluminum siding over green painted wood siding [likely LBP]. Original structure appears to be a 2-story structure with an attic area. Additions have been made to both 1st and 2nd floors. The Building roof appears to have been recently shingled; however, there are at least 3 flat-roofed additions. A crawl space with aluminum siding skirting surrounds the entire building. There is no evidence of vent pipes on the exterior; however, since there were many additions all with raised floors, an old buried heating oil tank (HOT) is connected to this building and is located in the grass in front of Building T 251* (referred to as Bldg 252 in the Hazardous Building Materials Survey Report). Building 251 has passed the lead TCLP test.

EXTERIOR DESCRIPTION. * Trailer/double-wide construction. A detached trailer is also considered part of this building number. Its disposition is unknown at this time. No asbestos samples have been taken in the trailer.

INTERIOR DESCRIPTION. Many additions have been made to the original structure. The changes suggest that there is a potential for a variety of flooring, ceiling and noise insulation - possibly fire retardant materials. There are many rooms subdivided as small office areas. These have many fluorescent light fixtures. The second floor has a sprayed - on acoustical coating that is stained from former water leaks. New floor tile is visible; however, it is unknown whether pre-existing tile and mastic was covered or removed. The building also contains multiple lead and mercury containing items that must be removed, including lead x-ray shielding in some walls.

PREVIOUS ASBESTOS SAMPLING RESULTS:

Confirmed ACM
9x9 white floor tile & mastic in a closet, 120 sf
12x12 tan floor tile in hallway, 60 sf
12x12 black floor tile & mastic VAT in stairwell, 31 LF

Suspected ACM
No roofing samples have been taken. The quantity of ACM is not expected to exceed totals in Table 1. All quantities of suspected ACM are estimated. Contractor is encouraged to inspect this building (and trailer) for ACM type and quantity as the attached asbestos survey report may be incomplete.

SOLDIER SERVICE CENTER

Bldg. T470 15,060 SF OCCUPIED

LOCATION: Off Lindquist Rd

CURRENT USE: Soldier Service Building and Recreation Center. Formerly used as a WWII refugee-processing center. This is one of the oldest buildings at Ft Stewart.

EXTERIOR DESCRIPTION. Building T470 is a large, 2-story building with an attic. WWII era (1940's) painted wood structure with aluminum siding and pillared raised flooring. The old brick chimney formerly used in connection with a coal fired furnace (and possibly later as an oil furnace chimney) is still present and in good condition. There are concrete cradle remnants between the building exterior wall and the new air conditioner units that may have supported heating oil tanks (HOTs) at one time. Shingles on the roof appear new. Aircell insulation was noted on overhead pipes on the interior. Two exterior end stairs support fire/life safety code evacuation needs. There is an irregular shaped, large (15-18'diameter) raised area of asphalt in the rear that may be attributed to pine tree root pressure. A UST is present and may still be in use. This building passed the composite TCLP test for lead.

INTERIOR DESCRIPTION. Soldier Service Building contains offices, a daycare area, the center of the building contains an open assembly room with an open mezzanine on 3 interior sides. The ceiling is sprayed with an acoustical material. Well maintained, it is entered from the rear of the main building. There are 2- mercury thermostats and 2- mercury switches in this building. Lead items are present in the plumbing drain and venting systems.
POC is Ms Lucia.

PREVIOUS ASBESTOS SAMPLING RESULTS: See attached Air-Safe Inc. Report

Confirmed ACM
TSI 20 lf HVAC expansion joint
Black mastic under 12x12 Tan Floor tile, hallway 1st fl, 630 sq ft.
Black mastic under 12x12 Brown Floor tile, training room 2nd floor, 2,808 sq ft.
Ceiling pipeline 5" OD 90 mud, 88 lf, throughout building
Ceiling pipeline 4" OD TSI, 109 lf, throughout building
Ceiling pipeline 4" OD 90 mud, TSI, 26 lf, throughout building
Ceiling pipeline 4" OD TSI, 234 lf, throughout building
Ceiling pipeline 3.5" OD 90 mud TSI, 10 lf, throughout building
Ceiling pipeline 3.5" OD TSI, 65 lf, throughout building
Ceiling pipeline 7" OD 90 mud TSI, 2 lf, throughout building
Ceiling pipeline 7" OD 90 TSI, 82 lf, throughout building

Ft. Stewart POC is Melissa Chaney at 912-767-8880. General Directorate of Public Works telephone is 912-767-2010.

Suspected ACM
No roofing samples have been taken. The quantity of ACM is not expected to exceed totals in Table 1. All quantities of suspected ACM are estimated. Contractor is encouraged to inspect this building for ACM type and quantity.

SOLDIER SERVICE CENTER

Bldg. T920 13,337 SF OCCIUPIED

LOCATION: Sigma St. & McFarland Ave.

CURRENT USE: Currently used as a Training and Miscellaneous office building. Also contains a Travel Agency. This is one of the oldest buildings at Ft Stewart.

EXTERIOR DESCRIPTION. Front section of building is two story (minimal attic) wooden building with aluminum siding and an attached one-story building of the same construction. Two single story additions are attached at the rear of the building. It appears to have a new roof. The foundation is concrete pillars with small crawl space. Severe termite damage on interior where wooden pillars once existed (outer edge pillars are concrete/CMU.) There is no crawl space skirt. A large exterior UST is present at rear of building. This building passed the composite TCLP test for lead.

INTERIOR DESCRIPTION. Termite damaged interior walls are common. Floor is unstable/soft in some areas. Old style 'mainframe' computer room may contain asbestos ceiling tile. There are 8 mercury-containing thermostats and the plumbing drain and vent piping systems contain lead items. POC is Mr. Wagner.

PREVIOUS ASBESTOS SAMPLING RESULTS:

Confirmed ACM
-12x12 inch gray floor tile throughout the building (in-bound room, reception, computer room, mail room, 2nd fl) estimated to be 6,345 SF
-9x9 inch blue floor tile [multi-layered] throughout the building (computer room, admin, ITO room, 2nd fl) approximately 3,463 SF
-Multi-layered brown floor tile [3rd layer] in the mailroom, 396 SF
-ACM board in HVAC Room, 225 SF
-Transite panel in HVAC Room, 228 linear ft

Suspected ACM
No roofing samples have been taken. The quantity of ACM is not expected to exceed totals in Table 1. All quantities of suspected ACM are estimated. Contractor is encouraged to inspect this building for ACM type and quantity as the attached asbestos survey report may be incomplete.

SOLDIER SERVICE CENTER

Bldg. T1191 9,386 SF OCCUPPIED

LOCATION: Located at the corner of W. Bultman Ave. and Memorial Dr (near Post Main Entrance) Entrance Street is Unnamed.

CURRENT USE: Public Affairs office with Newspaper editing and reprographics offices. No printing is done on site.

EXTERIOR DESCRIPTION. This is a one story, painted wooden framed building with aluminum siding. The original coal chimney is still present. This building contains 2 brick former 'arms houses' which are now painted white. Crawl space contains damaged aircell insulated piping. Shingled roof is estimated to be 2 – 5 years old. This building passed the composite TCLP test for lead. A fuel-fired furnace is present but no UST was located.

INTERIOR DESCRIPTION. Basic construction is open reception area with offices off the main halls. This building was apparently renovated approximately 2 years ago. There are 2 mercury-containing thermostats, 2 (possibly) mercury containing pressure switches and the plumbing drain and vent piping systems contain lead items. The building POC is Mr. Olson.

PREVIOUS SAMPLING RESULTS:

Confirmed ACM
Transite paneling is located in the boiler room as is asbestos rope gasket. Vinyl asbestos floor tile is located throughout the building, much of it under carpeting. Asbestos was detected in the sheetrock mud of one sample in the waiting area.

Suspected ACM
No roofing samples have been taken. The Quantity of ACM is not expected to exceed totals in Table 1. All quantities of suspected ACM are estimated. Contractor is encouraged to inspect this building for ACM type and quantity as the attached asbestos survey report may be incomplete.

SOLDIER SERVICE CENTER

Bldg. T1192 3,992 SF OCCUPIED

LOCATION: Located at the corner of W. Bultman Ave and Memorial Dr (near Post Main Entrance)

CURRENT USE: Housing Office

EXTERIOR DESCRIPTION. This is a one-story structure estimated to be approximately 20 yrs old. It has a rolled metal roof [5-6 yrs old], aluminum siding on a wood frame. Building appears to be slab on grade. This building is open between 0900 and 1550 hrs. Building passed the composite TCLP test for lead.

INTERIOR DESCRIPTION. Offices. There 1 -mercury containing thermostat, and the plumbing drain and vent piping systems contain lead items. POC Nathaniel "Country" Adams .

PREVIOUS SAMPLING RESULTS:

Confirmed ACM
-12x12 inch tan floor tile (1st layer) in Reception (under carpet) & HVAC, (negative mastics), approximately 437 SF
-9x9 inch brown floor tile with black mastic (under carpet) in Computer Room, Assignments and Termination Rooms, approximately 754 SF
-9x9 inch tan w/green specks floor tile (2nd layer under tan floor tile and carpeting -mastic is negative), approximately 2,722 SF

Suspected ACM
No roofing samples have been taken. The Quantity of ACM is not expected to exceed totals in Table 1. All other quantities of suspected ACM are estimated. Contractor is encouraged to inspect this building for ACM types and quantity as the attached asbestos survey report may be incomplete.

Figure 1. Bldg. T251. Front - Photographed off Hase Road.

Figure 2. Bldg. T251. Front - Photographed off Hase Road.

Figure 3. Bldg. T470. Front - Photographed off Lindquist Road

Figure 4. Bldg. T470. Rear view.

Inset -Former AT Foundation(?)

Interior View

Ft. Stewart, Georgia

Figure 5. Bldg. T920. Front - Photographed at Sigma St. & McFarland Ave.

Figure 6. Bldg. T920 Side/rear photographed of McFarland Ave.

Figure 7. Bldg. T1191. View form unnamed entrance street.

Figure 8. Bldg. T1192. View form parking lot.

U.S. Army Corps
of Engineers
Savannah District

U.S. ARMY CORPS OF ENGINEERS
ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

HAZARDOUS MATERIAL REPORT

BUILDING NO. T 251
FORT STEWART, GEORGIA

HAZARDOUS MATERIAL REPORT
Ft. STEWART, GEORGIA
BUILDING T 251

INTRODUCTION

1. This report documents the hazardous material survey of Building No. T 251 at Ft. Stewart, Georgia conducted on 2 October 2001 by USACE Savannah District employees Tim Jones and Blaisdell Willis. This survey was conducted in general accordance with the Statement of Services developed by Ray Willingham, USACE Savannah District, which includes the USAEHA guidance for demolition debris characterization by TCLP sampling.

2. The survey consists of a count of florescent and metal halide lights, a search for mercury containing equipment, a search for lead building components, a search for evidence of past or present underground storage tanks and a search for any other hazardous building materials excluding asbestos. The report also documents results of composite sampling of building materials for demolition debris characterization by analysis of TCLP lead.

3. Building No T 251 is estimated to have been built in the 1940s time frame and is of wood frame construction. The roof system is wooden framing with wood decking covered by an asphalt shingle roof system. Due to the construction of the building, the TCLP sampling was performed in accordance with composite sample estimated percentages for Wood structures in the USAEHA guidance. No physical sampling of other hazardous components was performed, only a visual counting was performed.

4. The sampled components for identification of TCLP lead, in their proper percentages, were analyzed by Hygeia Laboratories using EPA methods 1311 for extraction followed by 6010B analysis. Hygeia's analytical report is included in Appendix 1.

SUMMARY

5. The florescent and metal halide light count results are presented in Table 1.

6. Sampling of building components was performed as required and components were processed and mixed in the proper percentages and given a sample identification of FSBT 251C. TCLP analysis by Hygeia Laboratories indicates that lead is not present above the reporting limit of 0.5mg/L. Field sampling data including component type, color, TCLP mix percentage and approximate sampling location is presented in Table 2.

7. Inspection of the building turned up lead in the plumbing drain and vent piping system. Lead is also suspected in the walls, floor, door and ceiling of the X-Ray room in the dental office. Results are presented in Table 3.

8. Eleven mercury-containing thermostat was located in Building T 251. See floor plans for locations.

9. An underground storage tank for heating fuel was located outside of the mechanical room across the asphalt driveway in the grass in front of Building T 252. It is unknown if the tank is still in use.

10. Refrigerant from air conditioning systems and possibly from an old walk in cooler on the first floor should be recovered prior to building demolition.

Prepared by: _____
TIMOTHY A. JONES

Tables

TABLE 1
Ft. STEWART BLDG. T 251
FLORESCENT LIGHT FIXTURES

AREA IDENTIFICATION	NUMBER OF FIXTURES	DESCRIPTION OF FIXTURES
Interior	83	8-foot long total length florescent fixtures, containing 2ea. 4 foot bulbs
Interior	26	8-foot long total length florescent fixtures, containing 4ea. 4 foot bulbs
Interior	73	4 bulb, 4 foot long florescent fixtures
Interior	21	2 bulb, 4 foot long florescent fixtures
Interior	3	1 bulb, 4 foot long florescent fixtures
Interior	2	1 bulb, 2 foot long florescent fixtures
Interior	14	Battery back-up emergency exit lights
Interior	10	Screw in retrofit florescent lamps
Interior	1	1 foot round florescent fixture

TABLE 2
Ft. STEWART BLDG. T 251
COMPOSITE SAMPLE COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	PERCENTAGE OF SAMPLE
Unpainted Wood	Wall Framing	Equipment Room	42%
Interior wall covering	Tan wall covering	Office	23%
Roofing Components	Roof shingle	Roof	7%
Interior Floor Coverings	Maroon carpet	Office	8%
Block, Brick, Concrete	Brown concrete	Support pier	7%
Ceiling Material	Tan ceiling tile	Store Room	7%
Painted Wood-Interior	Light pink molding	Hallway	1%
Painted Wood-Exterior	White support column	Exterior	5%

TABLE 3
Ft. STEWART BLDG. T 251
LEAD BUILDING COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	ESTIMATED NUMBER
Hot poured lead pipe joint	In plumbing drainage, waste and vent piping	Restrooms and under slab	200-300
Lead Sheet	Radiation protection	Suspected in walls, floor, door & ceiling of X-Ray room in dental office	520 Square Feet

Appendix 1

Floor Plan

U.S. Army Corps
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Savannah District

U.S. ARMY CORPS OF ENGINEERS
ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

HAZARDOUS MATERIAL REPORT

BUILDING NO. T 470
FORT STEWART, GEORGIA

HAZARDOUS MATERIAL REPORT
Ft. STEWART, GEORGIA
BUILDING T 470

INTRODUCTION

1. This report documents the hazardous material survey of Building No. T 470 at Ft. Stewart, Georgia conducted on 2 October 2001 by USACE Savannah District employees Tim Jones and Blaisdell Willis. This survey was conducted in general accordance with the Statement of Services developed by Ray Willingham, USACE Savannah District, which includes the USAEHA guidance for demolition debris characterization by TCLP sampling.

2. The survey consists of a count of florescent and metal halide lights, a search for mercury containing equipment, a search for lead building components, a search for evidence of past or present underground storage tanks and a search for any other hazardous building materials excluding asbestos. The report also documents results of composite sampling of building materials for demolition debris characterization by analysis of TCLP lead.

3. Building No T 470 is estimated to have been built in the 1940s time frame and is of wood frame construction. The roof system is wooden framing with wood decking covered by asphalt shingles. Due to the construction of the building, the TCLP sampling was performed in accordance with composite sample estimated percentages for Wood structures in the USAEHA guidance. No physical sampling of other hazardous components was performed, only a visual counting was performed.

4. The sampled components for identification of TCLP lead, in their proper percentages, were analyzed by Hygeia Laboratories using EPA methods 1311 for extraction followed by 6010B analysis. Hygeia's analytical report is included in Appendix 1.

SUMMARY

5. The florescent and metal halide light count results are presented in Table 1.

6. Sampling of building components was performed as required and components were processed and mixed in the proper percentages and given a sample identification of FSBT 470C. TCLP analysis by Hygeia Laboratories indicates that lead is not present above the reporting limit of 0.5mg/L. Field sampling data including component type, color, TCLP mix percentage and approximate sampling location is presented in Table 2.

7. Inspection of the building turned up lead in the plumbing drain and vent piping system. Details are included in Table 3.

8. Two mercury-containing thermostats were located on the first floor of Building T 470. See floor plan for locations. Two mercury-containing pressure switches were located on the boiler in the Mechanical room.

9. An underground storage tank for heating fuel was located outside of the mechanical approximately 30 feet from the Mechanical Room door. It is suspected that the tank is still in use.

10. Refrigerant from air conditioning systems should be recovered prior to building demolition.

11. Eight battery back-up emergency lights were located in Building 470 that will need attention prior to building demolition. See floor plans for locations.

Prepared by: _____
TIMOTHY A. JONES

Tables

TABLE 1
Ft. STEWART BLDG. T 470
FLORESCENT LIGHT FIXTURES

AREA IDENTIFICATION	NUMBER OF FIXTURES	DESCRIPTION OF FIXTURES
Interior	35	4 bulb, 4 foot long florescent fixtures
Interior	136	2 bulb, 4 foot long florescent fixtures
Interior	8	Battery back-up emergency exit lights
Interior	12	Exit lamps
Exterior	5	Mercury vapor wall mount lamps

TABLE 2
Ft. STEWART BLDG. T 470
COMPOSITE SAMPLE COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	PERCENTAGE OF SAMPLE
Unpainted Wood	Wall framing	Store Room	42%
Interior wall covering	White drywall	Closet	23%
Roofing Components	Roof shingle	Roof	7%
Interior Floor Coverings	Grey carpet	Office	8%
Block, Brick, Concrete	Unpainted concrete	Landing	7%
Ceiling Material	White Drywall	Store Room	7%
Painted Wood-Interior	White molding	Hallway	1%
Painted Wood-Exterior	Brown stairs	Exterior	5%

TABLE 3
Ft. STEWART BLDG. T 470
LEAD BUILDING COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	ESTIMATED NUMBER
Hot poured lead pipe joint	In plumbing drainage, waste and vent piping	Restrooms and under slab	200-300

Appendix 1

Floor Plan

U.S. Army Corps
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ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

HAZARDOUS MATERIAL REPORT

BUILDING NO. T 920
FORT STEWART, GEORGIA

HAZARDOUS MATERIAL REPORT
Ft. STEWART, GEORGIA
BUILDING T 920

INTRODUCTION

1. This report documents the hazardous material survey of Building No. T 920 at Ft. Stewart, Georgia conducted on 2 October 2001 by USACE Savannah District employees Tim Jones and Blaisdell Willis. This survey was conducted in general accordance with the Statement of Services developed by Ray Willingham, USACE Savannah District, which includes the USAEHA guidance for demolition debris characterization by TCLP sampling.

2. The survey consists of a count of florescent and metal halide lights, a search for mercury containing equipment, a search for lead building components, a search for evidence of past or present underground storage tanks and a search for any other hazardous building materials excluding asbestos. The report also documents results of composite sampling of building materials for demolition debris characterization by analysis of TCLP lead.

3. Building No T 920 is estimated to have been built in the 1940s time frame and is of wood frame construction. The roof system is wooden framing with wood decking covered by asphalt shingles. Due to the construction of the building, the TCLP sampling was performed in accordance with composite sample estimated percentages for Wood structures in the USAEHA guidance. No physical sampling of other hazardous components was performed, only a visual counting was performed.

4. The sampled components for identification of TCLP lead, in their proper percentages, were analyzed by Hygeia Laboratories using EPA methods 1311 for extraction followed by 6010B analysis. Hygeia's analytical report is included in Appendix 1.

SUMMARY

5. The florescent and metal halide light count results are presented in Table 1.

6. Sampling of building components was performed as required and components were processed and mixed in the proper percentages and given a sample identification of FSBT 920C. TCLP analysis by Hygeia Laboratories indicates that lead is not present above the reporting limit of 0.5mg/L. Field sampling data including component type, color, TCLP mix percentage and approximate sampling location is presented in Table 2.

7. Inspection of the building turned up lead in the plumbing drain and vent piping system. Details are included in Table 3.

8. Six mercury-containing thermostats were located on the first floor and two were located on the second floor of Building T 920. See floor plan for locations.

9. An underground storage tank was located outside of the building approximately 30 feet from the central Mechanical Room door. It is unknown if the tank is still in use. A large above-ground propane tank was located to the rear of the building.

10. Refrigerant from air conditioning systems should be recovered prior to building demolition.

Prepared by: _____
TIMOTHY A. JONES

Tables

TABLE 1
Ft. STEWART BLDG. T 920
FLORESCENT LIGHT FIXTURES

AREA IDENTIFICATION	NUMBER OF FIXTURES	DESCRIPTION OF FIXTURES
Interior	35	4 bulb, 4 foot long florescent fixtures
Interior	106	2 bulb, 4 foot long florescent fixtures
Interior	16	8-foot long total length florescent fixtures, containing 4ea. 4 foot bulbs
Interior	15	8-foot long total length florescent fixtures, containing 2ea. 4 foot bulbs
Exterior	2	Mercury vapor wall mount lamps
Restroom	1 case	4 foot long loose bulbs
Restroom	1 case	2 foot long loose bulbs
Mechanical Room	1 case	4 foot long loose bulbs
Mechanical Room	1 case	8 foot long loose bulbs

TABLE 2
Ft. STEWART BLDG. T 920
COMPOSITE SAMPLE COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	PERCENTAGE OF SAMPLE
Unpainted Wood	Wall framing	Mechanical Room	42%
Interior wall covering	White drywall	Corridor	23%
Roofing Components	Roof shingle	Roof	7%
Interior Floor Coverings	Grey carpet	Office	8%
Block, Brick, Concrete	Unpainted masonry block	Support pier	7%
Ceiling Material	White fiberboard	Store Room	7%
Painted Wood-Interior	White molding	Store Room	1%
Painted Wood-Exterior	Brown door	Exterior	5%

TABLE 3
Ft. STEWART BLDG. T 920
LEAD BUILDING COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	ESTIMATED NUMBER
Hot poured lead pipe joint	In plumbing drainage, waste and vent piping	Restrooms and under floor	150-200

Appendix 1

Floor Plan

U.S. Army Corps
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Savannah District

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BUILDING 400, SUITE 404
MARIETTA, GA 30062

HAZARDOUS MATERIAL REPORT

BUILDING NO. T 1191
FORT STEWART, GEORGIA

HAZARDOUS MATERIAL REPORT
Ft. STEWART, GEORGIA
BUILDING T 1191

INTRODUCTION

1. This report documents the hazardous material survey of Building No. T 1191 at Ft. Stewart, Georgia conducted on 2 October 2001 by USACE Savannah District employees Tim Jones and Blaisdell Willis. This survey was conducted in general accordance with the Statement of Services developed by Ray Willingham, USACE Savannah District, which includes the USAEHA guidance for demolition debris characterization by TCLP sampling.

2. The survey consists of a count of florescent and metal halide lights, a search for mercury containing equipment, a search for lead building components, a search for evidence of past or present underground storage tanks and a search for any other hazardous building materials excluding asbestos. The report also documents results of composite sampling of building materials for demolition debris characterization by analysis of TCLP lead.

3. Building No T 1191 is estimated to have been built in the 1940s time frame and is of wood frame construction. The roof system is wooden framing with wood decking covered by asphalt shingles. Due to the construction of the building, the TCLP sampling was performed in accordance with composite sample estimated percentages for Wood structures in the USAEHA guidance. No physical sampling of other hazardous components was performed, only a visual counting was performed.

4. The sampled components for identification of TCLP lead, in their proper percentages, were analyzed by Hygeia Laboratories using EPA methods 1311 for extraction followed by 6010B analysis. Hygeia's analytical report is included in Appendix 1.

SUMMARY

5. The florescent and metal halide light count results are presented in Table 1.

6. Sampling of building components was performed as required and components were processed and mixed in the proper percentages and given a sample identification of FSBT 1191C. TCLP analysis by Hygeia Laboratories indicates that lead is not present above the reporting limit of 0.5mg/L. Field sampling data including component type, color, TCLP mix percentage and approximate sampling location is presented in Table 2.

7. Inspection of the building turned up lead in the plumbing drain and vent piping system. Details are included in Table 3.

8. Two mercury-containing thermostats were located in Building T 1191. See floor plan for locations. Two possible mercury-containing pressure switches were located on the boiler.

9. Evidence (fuel fired boiler) of the existence of an underground storage tank was found, however, no tank could be located.

10. Refrigerant from air conditioning systems should be recovered prior to building demolition.

Prepared by: _____
TIMOTHY A. JONES

Tables

TABLE 1
Ft. STEWART BLDG. T 1191
FLORESCENT LIGHT FIXTURES

AREA IDENTIFICATION	NUMBER OF FIXTURES	DESCRIPTION OF FIXTURES
Interior	17	1 bulb, 4 foot long florescent fixtures
Interior	2	2 bulb, 8 foot long florescent fixtures
Interior	70	8-foot long total length florescent fixtures, containing 2ea. 4 foot bulbs

TABLE 2
Ft. STEWART BLDG. T 1191
COMPOSITE SAMPLE COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	PERCENTAGE OF SAMPLE
Unpainted Wood	Wall framing	Mechanical closet	42%
Interior wall covering	Unpainted drywall	Mechanical closet	23%
Roofing Components	Roof shingle	Roof	7%
Interior Floor Coverings	Tan floor tile	Office	8%
Block, Brick, Concrete	Unpainted concrete	Landing	7%
Ceiling Material	Unpainted drywall	Mechanical closet	7%
Painted Wood-Interior	White molding	Mechanical closet	1%
Painted Wood-Exterior	Brown trim	Exterior	5%

TABLE 3
Ft. STEWART BLDG. T 1191
LEAD BUILDING COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	ESTIMATED NUMBER
Hot poured lead pipe joint	In plumbing drainage, waste and vent piping	Restrooms and under floor	100-150

Appendix 1

Floor Plan

U.S. Army Corps
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Savannah District

U.S. ARMY CORPS OF ENGINEERS
ENVIRONMENTAL & MATERIALS UNIT
200 NORTH COBB PARKWAY
BUILDING 400, SUITE 404
MARIETTA, GA 30062

HAZARDOUS MATERIAL REPORT

BUILDING NO. T 1192
FORT STEWART, GEORGIA

HAZARDOUS MATERIAL REPORT
Ft. STEWART, GEORGIA
BUILDING T 1192

INTRODUCTION

1. This report documents the hazardous material survey of Building No. T 1192 at Ft. Stewart, Georgia conducted on 2 October 2001 by USACE Savannah District employees Tim Jones and Blaisdell Willis. This survey was conducted in general accordance with the Statement of Services developed by Ray Willingham, USACE Savannah District, which includes the USAEHA guidance for demolition debris characterization by TCLP sampling.

2. The survey consists of a count of florescent and metal halide lights, a search for mercury containing equipment, a search for lead building components, a search for evidence of past or present underground storage tanks and a search for any other hazardous building materials excluding asbestos. The report also documents results of composite sampling of building materials for demolition debris characterization by analysis of TCLP lead.

3. Building No T 1192 is estimated to have been built in the 1940s time frame and is of wood frame construction. The roof system is wooden framing with corrugated metal roofing. Due to the construction of the building, the TCLP sampling was performed in accordance with composite sample estimated percentages for Wood structures in the USAEHA guidance. No physical sampling of other hazardous components was performed, only a visual counting was performed.

4. The sampled components for identification of TCLP lead, in their proper percentages, were analyzed by Hygeia Laboratories using EPA methods 1311 for extraction followed by 6010B analysis. Hygeia's analytical report is included in Appendix 1.

SUMMARY

5. The florescent and metal halide light count results are presented in Table 1.

6. Sampling of building components was performed as required and components were processed and mixed in the proper percentages and given a sample identification of FSBT 1192C. TCLP analysis by Hygeia Laboratories indicates that lead is not present above the reporting limit of 0.5mg/L. Field sampling data including component type, color, TCLP mix percentage and approximate sampling location is presented in Table 2.

7. Inspection of the building turned up the possibility of lead in the plumbing drain and vent piping system. Details are included in Table 3.

8. Three thermostats were located in Building T 1191, however, only one appears to be mercury containing. All three are identified on the floor plan

9. Refrigerant from air conditioning systems should be recovered prior to building demolition.

Prepared by: _____
TIMOTHY A. JONES

Tables

TABLE 1
Ft. STEWART BLDG. T 1192
FLORESCENT LIGHT FIXTURES

AREA IDENTIFICATION	NUMBER OF FIXTURES	DESCRIPTION OF FIXTURES
Interior	29	4 bulb, 4 foot long florescent fixtures
Interior	22	2 bulb, 4 foot long florescent fixtures
Interior	8	1 bulb, 4 foot long florescent fixtures

TABLE 2
Ft. STEWART BLDG. T 1192
COMPOSITE SAMPLE COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	PERCENTAGE OF SAMPLE
Unpainted Wood	Wall framing	Mechanical closet	42%
Interior wall covering	Unpainted drywall	Mechanical closet	23%
Roofing Components	Brown metal roofing	Roof	7%
Interior Floor Coverings	Blue carpet	Office	8%
Block, Brick, Concrete	Unpainted concrete	Landing	7%
Ceiling Material	Unpainted drywall	Mechanical closet	7%
Painted Wood-Interior	Tan molding	Mechanical closet	1%
Painted Wood-Exterior	White trim	Exterior	5%

TABLE 3
Ft. STEWART BLDG. T 1192
LEAD BUILDING COMPONENTS

BUILDING COMPONENT	DESCRIPTION	LOCATION	ESTIMATED NUMBER
Suspected Hot poured lead pipe joint	In plumbing drainage, waste and vent piping	Restrooms and under floor	50-100

Appendix 1

Floor Plan

AIR-SAFE
ENVIRONMENTAL, INC.
Environmental Consultants

P. O. Box 61144 • Savannah, GA 31420 • Telephone (912) 920-7715

AMBER

June 18, 2001

Mr. Daniel Lardinois
Environmental Branch
Directorate of Public Works
3rd In Div (Mech) (Ft. Stewart)
1557 Frank Cochran Drive
Ft. Stewart, GA 31314-4928

Subject: Results of Bulk Sample Analysis for Asbestos
Ft. Stewart – Building 251
Air Safe Project #184-01

Mr. Lardinois;

Air Safe Environmental, Inc. is pleased to provide Ft. Stewart, Environmental Branch, with the analytical results of the bulk samples collected from Building 251 located at the Ft. Stewart, for asbestos analysis on June 12, 2001.

Air Safe Environmental, Inc. appreciates the opportunity to be of service to Ft. Stewart, Environmental Branch and looks forward to our continued association. If you have any questions concerning the results or if we can be of further service, please contact our office at 912-920-7715.

Sincerely,

AIR SAFE ENVIRONMENTAL, INC.

Johnny Ciucevich
AHERA Inspector

C/sn
tachment

Results of Bulk Sample Analysis for Asbestos
Ft. Stewart - Building 251
Air Safe Project #184-01

PROJECT DESCRIPTION

On June 12, 2001, Air Safe Environmental, Inc. conducted a survey for asbestos containing materials at Buildi 251 on Ft. Stewart, located in Hinesville, Georgia. The inspector noted that the building was constructed of a Wood framework , concrete Pier foundation with fiber glass insulation.

The survey and bulk sample collection was conducted by Certified AHERA Building Inspector, Johnr Ciucevich, Certificate #I253069848. The survey consisted of a visual inspection of the subject area by an accredite inspector, bulk sampling of suspect asbestos containing materials and a visualization of the condition of suspect materia in Building 251.

Sample analysis for asbestos is conducted by Polarized Light Microscopy (PLM) **in accordance with the 4 CFR, Chapter 1, Part 763, Subpart F, Appendix A regulations.** Samples containing greater than one percent b visual estimation are considered to be an asbestos containing material.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the asbestos survey and bulk sample results from Building 251 located on Ft. Stewart; **the materials found to contain asbestos are as follows. 9x9 White floor til and black mastic located in closet. 12x12 tan floof tile located in hallway. 12x12 black floor tile and black mastic located in stairwell .** All other materials sampled were reported as non-asbestos containing materials. Please see the following Tables of results as well as drawings (not to scale) for detailed results and specific sample locations.

Roofing materials were not sampled this time, so as not to breach the integrity of the roofing materials. Roofing materials will be sampled when deemed necessary and / or prior to renovation or demolition.

Considering the potential to render these materials friable during demolition or renovation; we advise the removal of this material be performed by a qualified licensed asbestos contractor prior to any renovation or demolition activities.

Asbestos removal should be performed in strict compliance with NESHAP, 40 CFR 61, National Emission Standard for Hazardous Pollutants; Asbestos and all state and federal regulations.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 251 - HINESVILLE, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
06/12/01	1	12x12 White Floor Tile	Entrance Building 251	None Detected	100% Other	None Detected
06/12/01	2	Sheetrock	Break Room Building 251	10% Cellulose	90% other	None Detected
06/12/01	3	Sheetrock Mud	Break Room Building 251	None Detected	100% Other	None Detected
06/12/01	4	Sheetrock Tape	Break Room Building 251	95% Cellulose	5% Other	None Detected
06/12/01	5	2x4 Ceiling Tile	Break Room Building 251	75%Cellulose	25% Other	None Detected
06/12/01	6	9x9 White Floor Tile	Closet Building 251	None Detected	90% Other	**Chrysotile 10%**
06/12/01	7	Black Mastic	Closet Building 251	None detected	90% Other	**Chrysotile 10%**
06/12/01	8	12x12 White Ceiling Tile	Hallway Building 251	92% Cellulose	8% Other	None Detected
06/12/01	9	12x12 Tan Floor Tile	Hallway Building 251	None Detected	95% Other	**Chrysotile 5%**
06/12/01	10	12x12 Blue Floor Tile	Hallway Building 251	None Detected	100% Other	None Detected
06/12/01	11	12x12 Blue Floor Tile	Restroom Building 251	None Detected	100% Other	None Detected
06/12/01	12	Blown in Insulation	Restroom Building 251	40% Min/Glass Wool	60% Other	None Detected
06/12/01	13	Spray on Insulation	Restroom Building 251	2% Mica	98% Other	None Detected
06/12/01	14	Blue Sheetfloor Backing	Restroom Building 251	2% Cellulose	98% Other	None Detected

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 251 - HINESVILLE, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
06/12/01	15	Spray on Insulation	Restroom Building 251	2% Mica	98% Other	None Detected
06/12/01	16	Tan Sheetfloor Backing	Restroom Building 251	2% Cellulose	98% Other	None Detected
06/12/01	17	12x12 White W/ Brown Floor Tile	Closet Building 251	None detected	100% Other	None Detected
06/12/01	18	12x12 White W/ Brown Floor Tile	Office Building 251	None detected	100% Other	None Detected
06/12/01	19	Tan Sheetfloor Backing	Lobby Building 251	2% Cellulose	98% Other	None Detected
06/12/01	20	12x12 Blue Floor Tile	Waiting Room Building 251	None Detected	100% Other	None Detected
06/12/01	21	12x12 Perforated Ceiling Tile	Waiting Room Building 251	95% Cellulose	5% Other	None Detected
06/12/01	22	White / Blue Sheetfloor Backing	Stage Building 251	25% Min/Glass Wool 45% Cellulose	30% Other	None Detected
06/12/01	23	Sheetrock	Stage Building 251	8% Cellulose	92% Other	None Detected
06/12/01	24	Sheetrock Mud	Stage Building 251	None Detected	100% Other	None Detected
06/12/01	25	Sheetrock Tape	Stage Building 251	75% Cellulose	25% Other	None Detected
06/12/01	26	12x12 Black Floor Tile	Stairwell Building 251	None Detected	85% Other	**Chrysotile 15%**
05/30/0	27	Black Mastic	Stairwell Building 251	None Detected	92% Other	**Chrysotile 8%**

OTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 251 - HINESVILLE, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
06/12/01	28	12x12 Gray Floor Tile	Upstairs Restroom Building 251	None detected	100% Other	None Detected
06/12/01	29	Spray on Ceiling	Upstairs Restroom Building 251	None detected	100% Other	None Detected
06/12/01	30	12x12 Grey Floor Tile	Upstairs Restroom Building 251	None detected	100% Other	None Detected
06/12/01	31	Window Caulk	Exterior Building 251	None detected	100% Other	None Detected
06/12/01	32	Window Caulk	Exterior Building 251	None detected	100% Other	None Detected
06/12/01	33	Window Caulk	Exterior Building 251	None detected	100% Other	None Detected
06/12/01	8A	Rope Gasket	HVAC Building 251	98% Min/ Glass Wool	2% Other	None Detected
06/12/01	9A	Gasket	HVAC Building 251	98% Min/ Glass Wool	2% Other	None Detected

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 251 Construction Date: 1900's

Functional Space: Closet Location: Floor

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 9x9 White Floor Tile And Black Mastic

Approximate Amount of Material (Linear or Square Ft.): 130 Square Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear and tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: X High _____ Moderate _____ Low

Description: High traffic area

Influence of Vibration: _____ High _____ Moderate X Low

Description: fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Normal air flow

Overall Rating:

_____ High Potential for Significant Damage & Exposure

_____ Moderate Potential for Significant Damage & Exposure

X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: [signature] Date: June 18, 2001

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

ıilding: Ft. Stewart - Building 251 Construction Date: 1900's

Functional Space: Hallway Location: Floor

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 12x12 Tan Floor Tile

Approximate Amount of Material (Linear or Square Ft.): 60 Square Feet

Condition:

Percent Damage: 25 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear and tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: X High _____ Moderate _____ Low

Description: High Traffic Area

Influence of Vibration: _____ High _____ Moderate X Low

Description: Fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Normal air flow

Overall Rating:

_____	_____	X	
High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure	Low Potential for Significant Damage & Exposure	

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: [signature] Date: June 18, 2001

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

ilding: Ft. Stewart - Building 251 Construction Date: 1900's

Functional Space: Stairwell Location: Floor Tile

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 12x12 Black Floor tile and Black Mastic

Approximate Amount of Material (Linear or Square Ft.): 31 Linear Feet

Condition:

Percent Damage: 25 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear and tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: X High _____ Moderate _____ Low

Description: High Traffic Area

Influence of Vibration: _____ High _____ Moderate X Low

Description: Fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Normal air flow

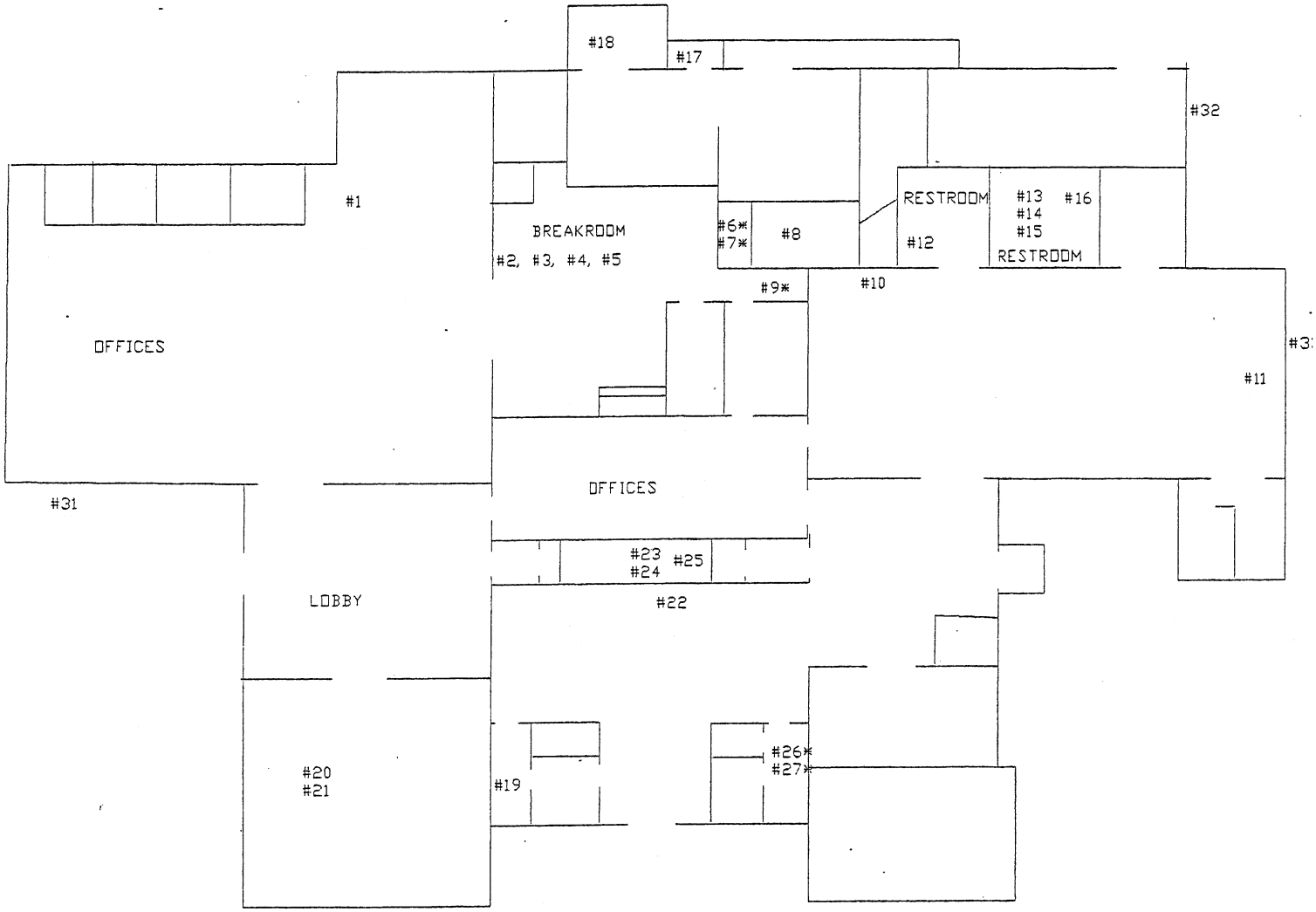
Overall Rating:

_____ High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: June 18, 2001

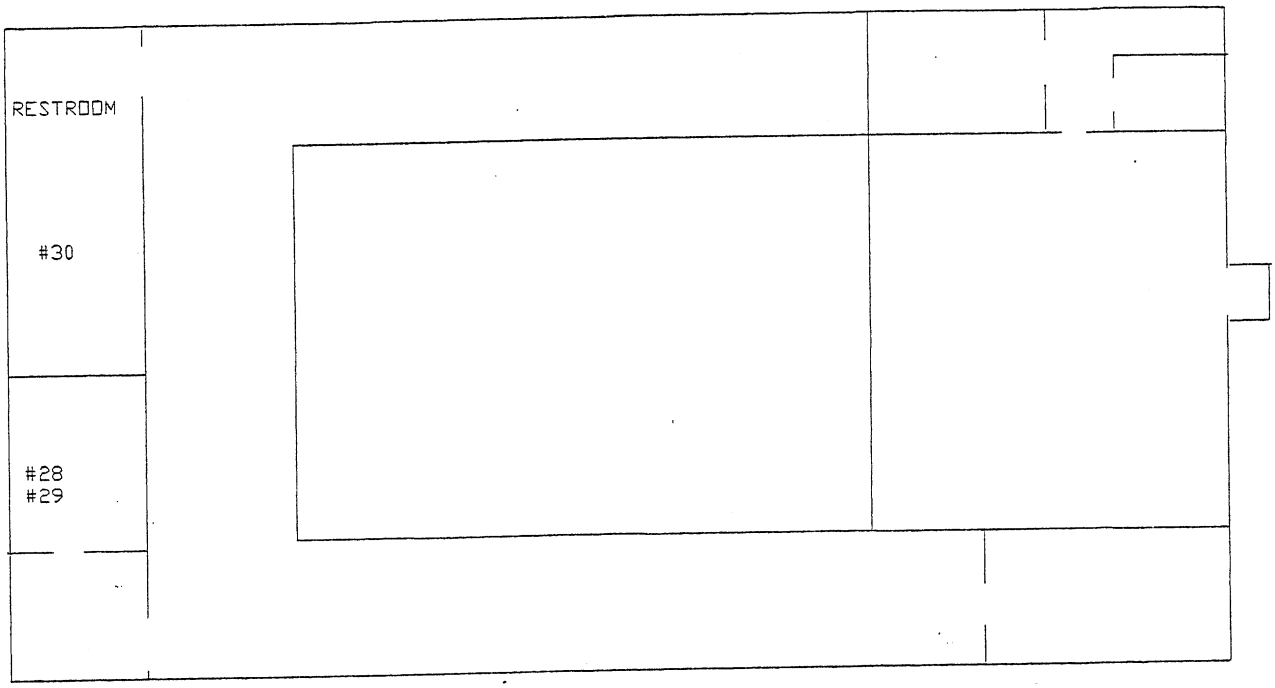
ASBESTOS INSPECTION
FT. STEWART - DIRECTORATE OF PUBLIC WORKS
FT. STEWART - BLDG 251 - HINESVILLE, GA
AIR SAFE PROJECT #184-01



SAMPLES

#1 12x12 WHITE FLOOR TILE
#2 SHEETROCK
#3 SHEETROCK MUD
#4 SHEETROCK TAPE
#5 2x4 CEILING TILE
#6 9x9 WHTIE FLOOR TILE*
#7 BLACK MASTIC*
#8 12x12 WHITE CEILING TILE
#9 12x12 TAN FLOOR TILE*
#10 12x12 BLUE FLOOR TILE
#11 12x12 BLUE FLOOR TILE
#12 BLOWN IN INSULATION
#13 SPRAY ON INSULATION
#14 BLUE SHEETFLOOR BACKING
#15 SPRAY ON INSULATION
#16 TAN SHEETFLOOR BACKING
#17 12x12 WHITE W/BROWN FLOOR TILE
#18 12x12 WHITE W/ BROWN FLOOR TIL
#19 TAN SHEETFLOOR BACKING
#20 12x12 BLUE FLOOR TILE
#21 12x12 PERFORATED CEILING TILE
#22 WHITE/BLUE SHEETFLOOR BACKING
#23 SHEETROCK
#24 SHEETROCK MUD
#25 SHEETROCK TAPE
#26 12x12 BLACK FLOOR TILE*
#27 BLACK MASTIC*
#28 12x12 GRAY FLOOR TILE
#29 SPRAY ON CEILING
#30 12x12 GRAY FLOOR TILE
#31 WINDOW CAULK
#32 WINDOW CAULK
#33 WINDOW CAULK
#8A ROPE GASKET
#9A GASKET

ASBESTOS INSPECTION
FT. STEWART - DIRECTORATE OF PUBLIC WORKS
FT. STEWART - BLDG 251, UPSTAIRS RESTROOM - HINESVILLE, GA
AIR SAFE PROJECT #184-01



SAMPLES

#1 12x12 WHITE FLOOR TILE
#2 SHEETROCK
#3 SHEETROCK MUD
#4 SHEETROCK TAPE
#5 2x4 CEILING TILE
#6 9x9 WHTIE FLOOR TILE*
#7 BLACK MASTIC*
#8 12x12 WHITE CEILING TILE
#9 12x12 TAN FLOOR TILE*
#10 12x12 BLUE FLOOR TILE
#11 12x12 BLUE FLOOR TILE
#12 BLOWN IN INSULATION
#13 SPRAY ON INSULATION
#14 BLUE SHEETFLOOR BACKING
#15 SPRAY ON INSULATION
#16 TAN SHEETFLOOR BACKING
#17 12x12 WHITE W/BROWN FLOOR TILE
#18 12x12 WHITE W/ BROWN FLOOR TILE
#19 TAN SHEETFLOOR BACKING
#20 12x12 BLUE FLOOR TILE
#21 12x12 PERFORATED CEILING TILE
#22 WHITE/BLUE SHEETFLOOR BACKING
#23 SHEETROCK
#24 SHEETROCK MUD
#25 SHEETROCK TAPE
#26 12x12 BLACK FLOOR TILE*
#27 BLACK MASTIC*
#28 12x12 GRAY FLOOR TILE
#29 SPRAY ON CEILING
#30 12x12 GRAY FLOOR TILE
#31 WINDOW CAULK
#32 WINDOW CAULK
#33 WINDOW CAULK
#8A ROPE GASKET
#9A GASKET

AIR-SAFE II, INC.
Environmental Consultants

P. O. Box 61144 • Savannah, GA 31420 • Telephone (912) 920-7715

AMBER

November 9, 2001

Mr. Daniel Lardinois
Environmental Branch
Directorate of Public Works
3rd In Div (Mech) (Ft. Stewart)
1557 Frank Cochran Drive
Ft. Stewart, GA 31314-4928

Subject: Results of Bulk Sample Analysis for Asbestos
Ft. Stewart – Building 470
Air Safe Project #184-01

Mr. Lardinois;

Air Safe II, Inc. is pleased to provide Ft. Stewart, Environmental Branch, with the analytical results of the bulk samples collected from Building 470 located at Ft. Stewart, for asbestos analysis on October 30, 2001.

Air Safe II, Inc. appreciates the opportunity to be of service to Ft. Stewart, Environmental Branch and looks forward to our continued association. If you have any questions concerning the results or if we can be of further service, please contact our office at 912-920-7715.

Sincerely,

AIR SAFE II, INC.

Johnny Ciucevich
AHERA Inspector

JC/sn
Attachment

Results of Bulk Sample Analysis for Asbestos
Ft. Stewart - Building 470
Air Safe Project #184-01

PROJECT DESCRIPTION

On October 30, 2001, Air Safe II, Inc. conducted a survey for asbestos containing materials at Building 470 on Ft. Stewart, located in Hinesville, Georgia. The inspector noted that the building was constructed of a wood frame on a wood foundation.

The survey and bulk sample collection was conducted by Certified AHERA Building Inspector, Johnny Ciucevich, Certificate#I253069848. The survey consisted of a visual inspection of the subject area by an accredited inspector, bulk sampling of suspect asbestos containing materials and a visualization of the condition of suspect materials in Building 470.

Sample analysis for asbestos is conducted by Polarized Light Microscopy (PLM) **in accordance with the 40 CFR, Chapter 1, Part 763, Subpart F, Appendix A regulations.** Samples containing greater than one percent by visual estimation are considered to be an asbestos containing material.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the asbestos survey and bulk sample results from Building 470 located on Ft. Stewart; **the materials found to contain asbestos are as follows. Expansion Joint located in HVAC, Black Mastic associated with 12x12 Tan Floor Tile located in Hallway on 1st Floor, 5" OD 90 Mud located on pipeline, 5" OD TSI located on pipeline, 4" OD 90 Mud located on pipeline, 4" OD 90 TSI located on pipeline, 3.5" OD 90 Mud located on pipeline, 3.5" OD 90 TSI located on pipeline, Black Mastic associated with 12x12 Brown Floor Tile located in Training Room on 2nd Floor, 7" OD 90 Mud located on pipeline, 7" OD 90 TSI located on pipeline. (All pipelines located at ceiling level)** All other materials sampled were reported as non-asbestos containing materials. Please see the following Tables of results as well as drawings (not to scale) for detailed results and specific sample locations.

Roofing materials were not sampled at this time, so as not to breach the integrity of the roofing materials. Roofing materials will be sampled when deemed necessary and / or prior to renovation or demolition.

Considering the potential to render these materials friable during demolition or renovation; we advise the removal of this material be performed by a qualified licensed asbestos contractor prior to any renovation or demolition activities.

Asbestos removal should be performed in strict compliance with NESHAP, 40 CFR 61, National Emission Standard for Hazardous Pollutants; Asbestos and all state and federal regulations.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 470 - HINESVILLE, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
10/30/01	30	Sheetrock	Office Building 470	None Detected	100% Other	None Detected
10/30/01	31	Sheetrock Mud	Office Building 470	None Detected	100% Other	None Detected
10/30/01	32	Sheetrock Tape	Office Building 470	99% Cellulose	1% Other	None Detected
10/30/01	33	Perforated Ceiling Tile	Office Building 470	97% Cellulose	3% Other	None Detected
10/30/01	34	Sheetfloor Backing	Kitchen Building 470	25% Cellulose 10% Min Wool 15% Syn Fiber	50% Other	None Detected
10/30/01	35	Spray on Ceiling	Halway Building 470	2% Cellulose 5% Mica	93% Other	None Detected
10/30/01	36	Expansion Joint	Hallway Building 470	10% Cellulose 15% Syn Fiber	5% Other	**Chrysotile 70%**
10/30/01	37	Expansion Joint	Hallway Building 470	15% Cellulose 15% Syn Fiber	10% Other	**Chrysotile 60%**
10/30/01	38	12x12 Brown Floor Tile	Hallway Building 470	10% Cellulose	90% Other	None Detected
10/30/01	39	12x12 Tan Floor Tile	Hallway Building 470	None Detected	100% Other	None Detected
10/30/01	40	Black Mastic	Hallway Building 470	3% Cellulose	90% Other	**Chrysotile 7%**
10/30/01	41	12x12 Tan Floor Tile	Hallway Building 470	None Detected	100% Other	None Detected
10/30/01	42	Black Mastic	Hallway Building 470	3% Cellulose	90% Other	**Chrysotile 7%**
10/30/01	43	Sheetrock	Hallway Building 470	12% Cellulose	88% Other	None Detected
10/30/01	44	Sheetrock Mud	Hallway Building 470	None Detected	100% Other	None Detected
10/30/01	45	Sheetrock Tape	Hallway Building 470	98% Cellulose	2% Other	None Detected
10/30/01	46	5" OD 90 Jacket	Pipeline Building 470	80% Cellulose	20% Other	None Detected
10/30/01	47	5" OD 90 Mud	Pipeline Building 470	55% Min Wool	43% Other	**Chrysotile 2%**

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 470 - HINESVILLE, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
10/30/01	48	5" OD Jacket	Pipeline Building 470	80% Cellulose	20% Other	None Detected
10/30/01	49	5" OD TSI	Pipeline Building 470	35% Cellulose	20% Other	**Chrysotile 45%**
10/30/01	50	4" OD 90 Jacket	Pipeline Building 470	15% Cellulose	85% Other	None Detected
10/30/01	51	4" OD 90 Mud	Pipeline Building 470	5% Cellulose 70% Min Wool	15% Other	**Chrysotile 10%**
10/30/01	52	4" OD Jacket	Pipeline Building 470	15% Cellulose	85% Other	None Detected
10/30/01	53	4" OD TSI	Pipeline Building 470	40% Cellulose	20% Other	**Chrysotile 40%**
10/30/01	54	3.5" OD 90 Jacket	Pipeline Building 470	20% Cellulose	80% Other	None Detected
10/30/01	55	3.5" OD 90 Mud	Pipeline Building 470	10% Cellulose 65% Min Wool	15% Other	**Chrysotile 10%**
10/30/01	56	3.5" OD Jacket	Pipeline Building 470	15% Cellulose	85% Other	None Detected
10/30/01	57	3.5" OD TSI	Pipeline Building 470	35% Cellulose	20% Other	**Chrysotile 45%**
10/30/01	58	Sheetfloor Backing	Bathroom Building 470	25% Cellulose 10% Min Wool 15% Syn Fiber	50% Other	None Detected
10/30/01	59	Sheetrock	Training Room Building 470	None Detected	100% Other	None Detected
10/30/01	60	Sheetrock Mud	Training Room Building 470	None Detected	100% Other	None Detected
10/30/01	61	Sheetrock Tape	Training Room Building 470	98% Cellulose	2% Other	None Detected
10/30/01	62	Spray on Ceiling	Training Room Building 470	None Detected	100% Other	None Detected
10/30/01	63	12x12 Brown Floor Tile	Training Room Building 470	None Detected	100% Other	None Detected
10/30/01	64	Black Mastic	Training Room Building 470	None Detected	97% Other	**Chrysotile 3%**
10/30/01	65	7" OD 90 Jacket	Pipeline Building 470	15% Cellulose	85% Other	None Detected

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 470 - HINESVILLE, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
10/30/01	66	7" OD 90 Mud	Pipeline Building 470	5% Cellulose 70% Min Wool	10% Other	**Chrysotile 15%**
10/30/01	67	7" OD Jacket	Pipeline Building 470	20% Cellulose	80% Other	None Detected
10/30/01	68	7" OD TSI	Pipeline Building 470	40% Cellulose	20% Other	**Chrysotile 40%**
10/30/01	69	4" OD 90 Jacket	Pipeline Building 470	15% Cellulose	85% Other	None Detected
10/30/01	70	4" OD 90 Mud	Pipeline Building 470	10% Cellulose 55% Min Wool	20% Other	**Chrysotile 15%**
10/30/01	71	4" OD Jacket	Pipeline Building 470	15% Cellulose	85% Other	None Detected
10/30/01	72	4" OD TSI	Pipeline Building 470	45% Cellulose	15% Other	**Chrysotile 40%**
10/30/01	73	5" OD 90 Jacket	Pipeline Building 470	15% Cellulose	85% Other	None Detected
10/30/01	74	5" OD 90 Mud	Pipeline Building 470	15% Cellulose 60% Min Wool	10% Other	**Chrysotile 15%**
10/30/01	75	5" OD Jacket	Pipeline Building 470	20% Cellulose	80% Other	None Detected
10/30/01	76	5" OD TSI	Pipeline Building 470	45% Cellulsoe	20% Other	**Chrysotile 35%**
10/30/01	77	12x12 Brown Floor Tile	Training Room Building 470	None Detected	100% Other	None Detected
10/30/01	78	Black Mastic	Training Room Building 470	None Detected	96% Other	**Chrysotile 4%**

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart – Building 470 Construction Date: 1900's

Functional Space: HVAC Room Location: HVAC Unit

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: Expansion Joint

Approximate Amount of Material (Linear or Square Ft.): 20 Linear Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear and tear

Overall Rating: X Good _____ Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: During regular maintenance or repair

Influence of Vibration: _____ High X Moderate _____ Low

Description: Only when system is in use

Potential for Air Erosion: _____ High X Moderate _____ Low

Description: Material is friable

Overall Rating:

_____ High Potential for Significant Damage & Exposure	X Moderate Potential for Significant Damage & Exposure	_____ Low Potential for Significant Damage & Exposure

Comments: Materials should be addressed prior to any renovation/demolition activities

Inspector Signature: _____ Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Hallway, 1st Floor Location: Floor

Type of Suspect Material: _____ Surfacing: _____ TSI: _____ X _____ Misc.

Description: Black Mastic associated with 12x12 Tan Floor Tile

Approximate Amount of Material (Linear or Square Ft.): 630 Square Feet

Condition:

Percent Damage: 10 % _____ Localized _____ X _____ Distributed

Type of Damage: X Deterioration _____ Water _____ X _____ Physical

Description: Everyday wear & tear

Overall Rating: _____ Good _____ Fair _____ X _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ X _____ Moderate _____ Low

Description: Material located under floor tile

Influence of Vibration: _____ High _____ Moderate _____ X _____ Low

Description: fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate _____ X _____ Low

Description: fibers bound in matrix

Overall Rating:

_____ High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Throughout Building Location: At Ceiling Level

Type of Suspect Material: _____ Surfacing: X TSI: _____ Misc.

Description: 5" OD 90 Mud

Approximate Amount of Material (Linear or Square Ft.): 88Linear Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: At Ceiling Level

Influence of Vibration: _____ High _____ Moderate X Low

Description: When system is in use

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

ilding: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Throughout Building Location: At Ceiling Level

Type of Suspect Material: _____ Surfacing: X TSI: _____ Misc.

Description: 5" OD TSI

Approximate Amount of Material (Linear or Square Ft.): 109 Linear Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: At Ceiling Level

Influence of Vibration: _____ High _____ Moderate X Low

Description: When system is in use

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Throughout Building Location: At Ceiling Level

Type of Suspect Material: _____ Surfacing: X TSI: _____ Misc.

Description: 4" OD 90 Mud

Approximate Amount of Material (Linear or Square Ft.): 26 Linear Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: At Ceiling Level

Influence of Vibration: _____ High _____ Moderate X Low

Description: When system is in use

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Throughout Building Location: At Ceiling Level

Type of Suspect Material: _____ Surfacing: X TSI: _____ Misc.

Description: 4" OD TSI

Approximate Amount of Material (Linear or Square Ft.): 234 Linear Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: At Ceiling Level

Influence of Vibration: _____ High _____ Moderate X Low

Description: When system is in use

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Throughout Building Location: At Ceiling Level

Type of Suspect Material: _____ Surfacing: X TSI: _____ Misc.

Description: 3.5" OD 90 Mud

Approximate Amount of Material (Linear or Square Ft.): 10 Linear Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: At Ceiling Level

Influence of Vibration: _____ High _____ Moderate X Low

Description: When system is in use

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: Johnny Cuevas Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Throughout Building Location: At Ceiling Level

Type of Suspect Material: _____ Surfacing: X TSI: _____ Misc.

Description: 3.5" OD TSI

Approximate Amount of Material (Linear or Square Ft.): 65 Linear Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: At Ceiling Level

Influence of Vibration: _____ High _____ Moderate X Low

Description: When system is in use

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Throughout Building Location: At Ceiling Level

Type of Suspect Material: _____ Surfacing: X TSI: _____ Misc.

Description: 7" OD 90 Mud

Approximate Amount of Material (Linear or Square Ft.): 2 Linear Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: At Ceiling Level

Influence of Vibration: _____ High _____ Moderate X Low

Description: When system is in use

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Throughout Building Location: At Ceiling Level

Type of Suspect Material: _____ Surfacing: X TSI: _____ Misc.

Description: 7" OD TSI

Approximate Amount of Material (Linear or Square Ft.): 82 Linear Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: At Ceiling Level

Influence of Vibration: _____ High _____ Moderate X Low

Description: When system is in use

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure X	Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: November 9, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 470 Construction Date: 1900's

Functional Space: Training Room (2nd Floor) Location: Floor

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: Black Mastic associated with 12x12 Brown Floor Tile

Approximate Amount of Material (Linear or Square Ft.): 2,808 Square Feet

Condition:

Percent Damage: 10 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: _____ High X Moderate _____ Low

Description: Material located under floor tile

Influence of Vibration: _____ High _____ Moderate X Low

Description: fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: fibers bound in matrix

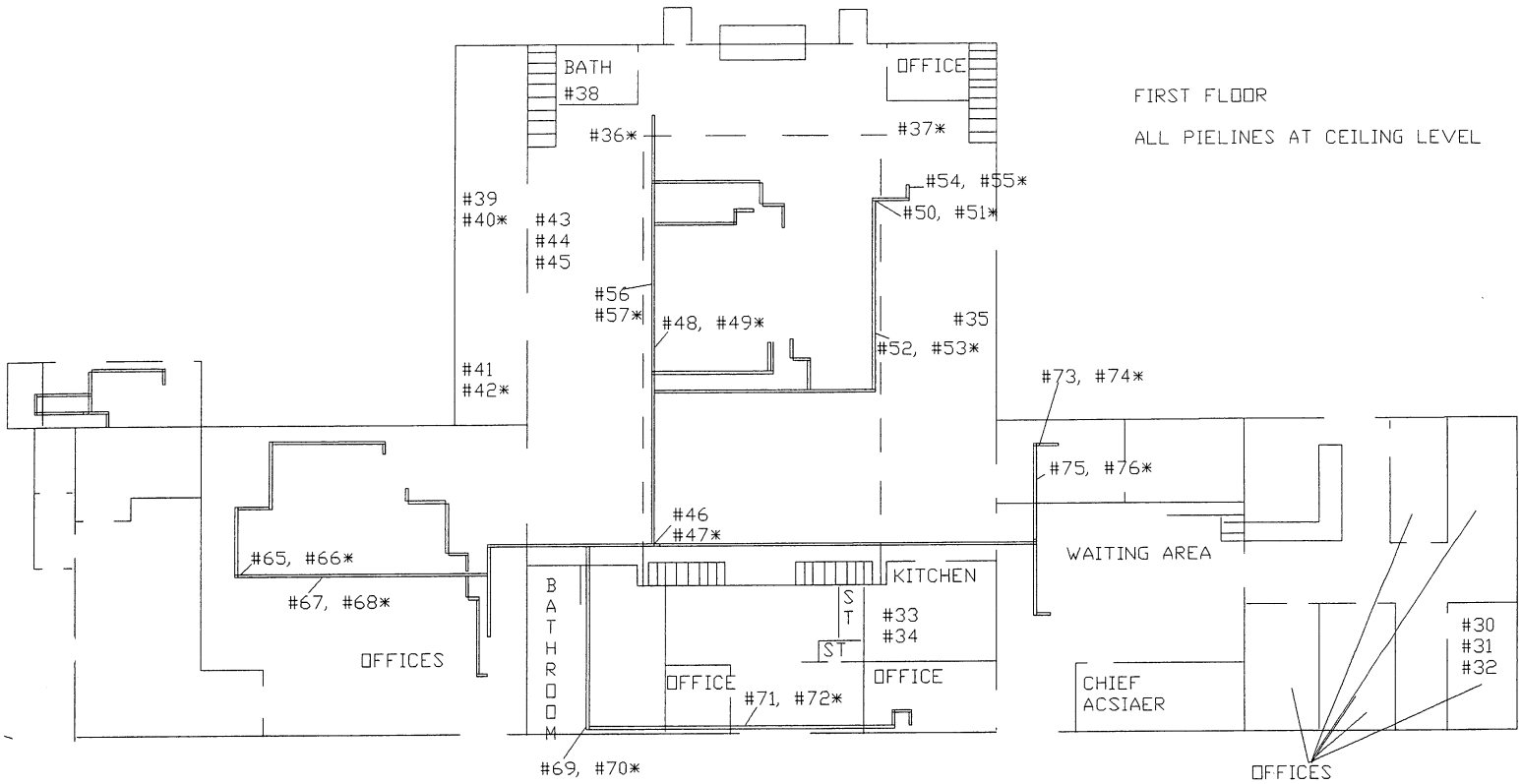
Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: November 9, 2001

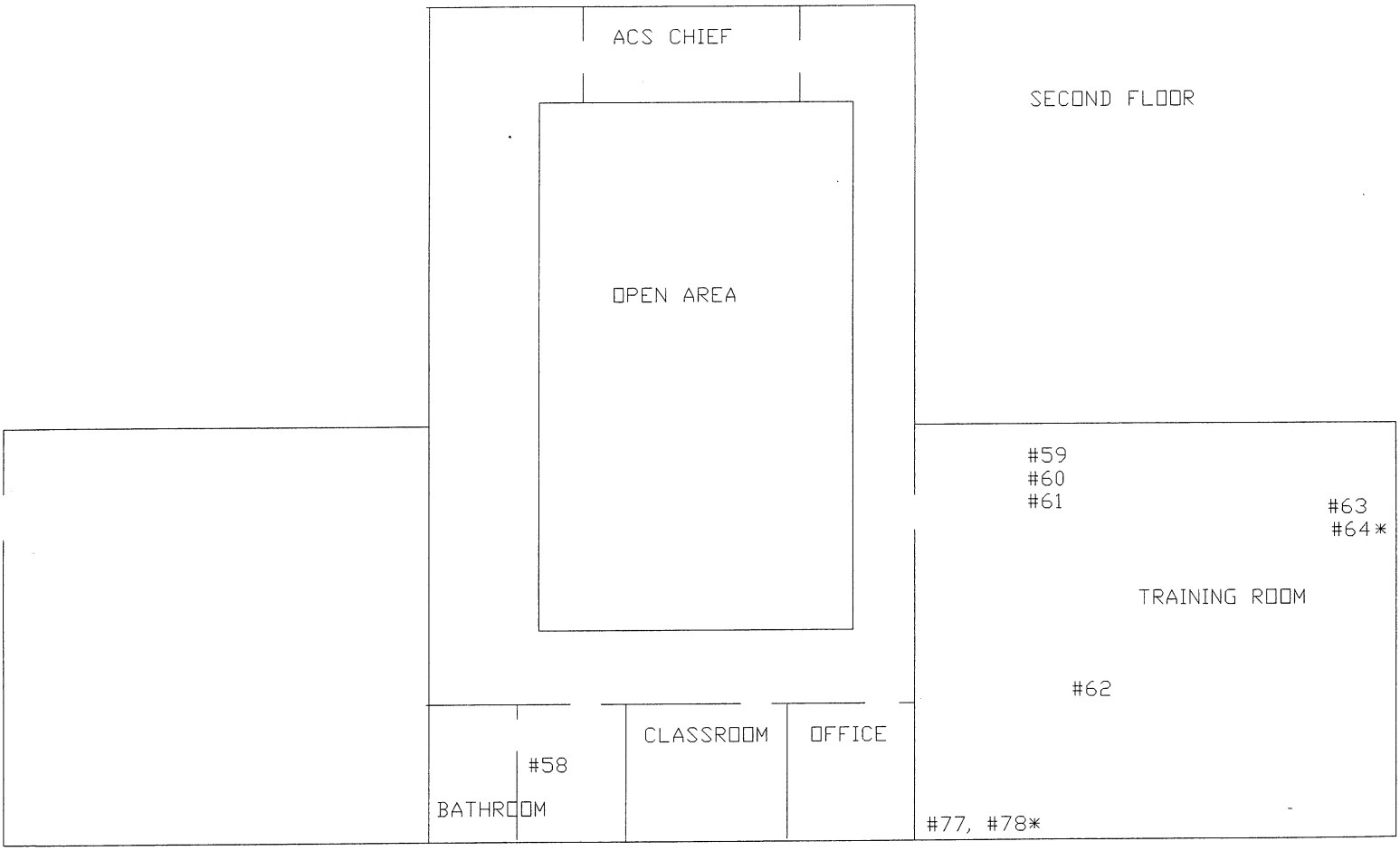
ASBESTOS INSPECTION
FT. STEWART - DIRECTORATE OF PUBLIC WORKS
FT. STEWART - BUILDING 470 - HINESVILLE, GA
AIR SAFE PROJECT #184-01



SAMPLES

#30 SHEETROCK
#31 SHEETROCK MUD
#32 SHEETROCK TAPE
#33 PERFORATED CEILING TILE
#34 SHEETFLOOR BACKING
#35 SPRAY ON CEILING
#36 EXPANSION JOINT*
#37 EXPANSION JOINT*
#38 12x12 BROWN FLOOR TILE
#39 12x12 TAN FLOOR TILE
#40 BLACK MASTIC*
#41 12x12 TAN FLOOR TILE
#42 BLACK MASTIC*
#43 SHEETROCK
#44 SHEETROCK MUD
#45 SHEETROCK TAPE
#46 5" OD 90 JACKET
#47 5" OD 90 MUD*
#48 5" OD JACKET
#49 5" OD TSI*
#50 4" OD 90 JACKET
#51 4" OD 90 MUD*
#52 4" OD JACKET
#53 4" OD TSI*
#54 3.5" OD 90 JACKET
#55 3.5" OD 90 MUD*
#56 3.5" OD JACKET
#57 3.5" OD TSI*
#65 7" OD 90 JACKET
#66 7" OD 90 MUD*
#67 7" OD JACKET
#68 7" OD TSI*
#69 4" OD 90 JACKET
#70 4" OD 90 MUD*
#71 4" OD JACKET
#72 4" OD TSI*
#73 5" OD 90 JACKET
#74 5" OF JACKET*
#75 5" OD JACKET
#76 5" OD TSI*

ASBESTOS INSPECTION
FT. STEWART - DIRECTORATE OF PUBLIC WORKS
FT. STEWART - BUILDING 470 - HINESVILLE, GA
AIR SAFE PROJECT #184-01



SAMPLES
#58 SHEETFLOOR BACKING
#59 SHEETROCK
#60 SHEETROCK MUD
#61 SHEETROCK TAPE
#62 SPRAY ON CEILING
#63 12x12 BROWN FLOOR TILE
#64 BLACK MASTIC*
#77 12x12 BROWN FLOOR TILE
#78 BLACK MASTIC*

AIR-SAFE ENVIRONMENTAL, INC.
Environmental Consultants

P. O. Box 61144 • Savannah, GA 31420 • Telephone (912) 920-7715

AMBER

July 25, 2001

Mr. Daniel Lardinois
Environmental Branch
Directorate of Public Works
3rd In Div (Mech) (Ft. Stewart)
1557 Frank Cochran Drive
Ft. Stewart, GA 31314-4928

Subject: Results of Bulk Sample Analysis for Asbestos
Ft Stewart - Bldg. 920
Air Safe Project #184-01

Lardinois;

Air Safe Environmental, Inc. is pleased to provide Ft. Stewart, Environmental Branch, with the analytical results of the bulk samples collected from Building 920 located at Ft. Stewart, for asbestos analysis on July 16, 2001.

Air Safe Environmental, Inc. appreciates the opportunity to be of service to Ft. Stewart, Environmental Branch and looks forward to our continued association. If you have any questions concerning the results or if we can be of further service, please contact our office at 912-920-7715.

Sincerely,

AIR SAFE ENVIRONMENTAL, INC.

Johnny Ciucevich
AHERA Inspector

JC/sn
'achment

Results of Bulk Sample Analysis for Asbestos
Ft. Stewart - Building 920
Air Safe Project #184-01

PROJECT DESCRIPTION

On July 16, 2001, Air Safe Environmental, Inc. conducted a survey for asbestos containing materials at Building 920 on Ft. Stewart, located in Savannah, Georgia. The inspector noted that the building was constructed of a wood frame, with a wood sub-floor foundation and fiberglass insulation.

The survey and bulk sample collection was conducted by Certified AHERA Building Inspector, Johnny Ciucevich, Certificate #I253069848. The survey consisted of a visual inspection of the subject area by an accredited inspector, bulk sampling of suspect asbestos containing materials and a visualization of the condition of suspect materials in Building 920.

Sample analysis for asbestos is conducted by Polarized Light Microscopy (PLM) **in accordance with the 40 CFR, Chapter 1, Part 763, Subpart F, Appendix A regulations.** Samples containing greater than one percent by visual estimation are considered to be an asbestos containing material.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the asbestos survey and bulk sample results from Building 920 located on Ft. Stewart; **the materials found to contain asbestos are as follows. 12x12 Grey Floor Tile located throughout building. 9x9 Blue Floor Tile located throughout building. Brown Floor Tile located in Mail Room. ACM Board located in HVAC. Transite Panel located in HVAC.** All other materials sampled were reported non-asbestos containing materials. Please see the following Tables of results for detailed results.

Considering the potential to render these materials friable during demolition or renovation; we advise the removal of this material be performed by a qualified licensed asbestos contractor prior to any renovation or demolition activities.

Asbestos removal should be performed in strict compliance with NESHAP, 40 CFR 61, National Emission Standard for Hazardous Pollutants; Asbestos and all state and federal regulations.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 920 - SAVANNAH, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
07/16/01	1	12x12 Grey Floor Tile	Reception Area Building 920	None Detected	98% Other	**Chrysotile 2%**
07/16/01	2	12x12 Grey Floor Tile	Inbound Room Building 920	None Detected	98% Other	**Chrysotile 2%**
07/16/01	3	2x4 Ceiling Tile	Inbound Room Building 920	50% Cellulose	50% Other	None Detected
07/16/01	4	Sheetrock	Inbound Room Building 920	20% Cellulose	80% Other	None Detected
07/16/01	5	Sheetrock Mud	Inbound Room Building 920	None Detected	100% Other	None Detected
07/16/01	6	Sheetrock Tape	Inbound Room Building 920	99% Cellulose	1% Other	None Detected
07/16/01	7	White Sheetfloor Backing	Men's Room Building 920	60% Cellulose 20% Syn Fiber	20% Other	None Detected
16/01	8	White Sheetfloor Backing	Women's Room Building 920	60% Cellulose 20% Syn Fiber	20% Other	None Detected
07/16/01	9	12x12 Grey Floor Tile	Computer Room Building 920	None Detected	98% Other	**Chrysotile 2%**
07/16/01	10	9x9 Blue Floor Tile-3rd Layer	Computer Room Building 920	None Detected	82% Other	**Chrysotile 18%**
07/16/01	11	12x12 Wall Tile	Computer Room Building 920	96% Cellulose	4% Other	None Detected
07/16/01	12	12x12 Grey Floor Tile	Mail Room Building 920	None Detected	98% Other	**Chrysotile 2%**
07/16/01	13	Brown Floor Tile-3rd Layer	Mail Room Building 920	None Detected	95% Other	**Chrysotile 5%**
07/16/01	14	9x9 Blue Floor Tile	Admin Room Building 920	None Detected	82% Other	**Chrysotile 18%**
07/16/01	15	9x9 Blue Floor Tile	IJO Room Building 920	None Detected	82% Other	**Chrysotile 18%**

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

TABLE I (cont'd)
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 920 - SAVANNAH, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
07/16/01	16	2x2 Ceiling Tile	Men's Room Building 920	50% Cellulose	50% Other	None Detected
07/16/01	17	Blue/White Sheetfloor Backing	Women's Room Building 920	85% Cellulose	15% Other	None Detected
07/16/01	18	12x12 Grey Floor Tile	2nd Floor Building 920	None Detected	98% Other	**Chrysotile 2%**
07/16/01	19	Blue/White Sheetfloor Backing	2nd Floor Building 920	85% Min Wool	15% Other	None Detected
07/16/01	20	ACM Board	HVAC Room Building 920	None Detected	17% Other	**Chrysotile 83%**
07/16/01	21	Transite Panel	HVAC Room Building 920	None Detected	75% Other	**Chrysotile 25%**
07/16/01	22	Pipe Wrap	HVAC Room Building 920	10% Cellulose	90% Other	None Detected
7/16/01	23	Duct Mud	HVAC Room Building 920	12% Wollastonite	88% Other	None Detected
07/16/01	24	Sheetrock	HVAC Room Building 920	20% Cellulose	80% Other	None Detected
07/16/01	25	Sheetrock Mud	HVAC Room Building 920	None Detected	100% Other	None Detected
07/16/01	26	Duct Mud	HVAC Room Building 920	12% Wollastonite	88% Other	None Detected
07/16/01	27	Sheetrock	QC Inspectors Building 920	20% Cellulose	80% Other	None Detected
07/16/01	28	Sheetrock Mud	QC Inspectors Building 920	None Detected	100% Other	None Detected
07/16/01	29	Sheetrock Tape	QC Inspectors Building 920	99% Cellulose	1% Other	None Detected
07/16/01	30	9x9 Blue Floor Tile	2nd Floor Building 920	None Detected	82% Other	**Chrysotile 18%**

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 920 Construction Date: 1900's

Functional Space: Throughout Building Location: floor

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 12x12 Grey Floor Tile

Approximate Amount of Material (Linear or Square Ft.): 6.345 Square Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: everyday wear and tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: X High _____ Moderate _____ Low

Description: High traffic area

Influence of Vibration: _____ High _____ Moderate X Low

Description: concrete slab / fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: everyday air flow / material bound in matrix

Overall Rating:

X High Potential for Significant Damage & Exposure

_____ Moderate Potential for Significant Damage & Exposure

_____ Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: July 25, 2001

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

ding: Ft. Stewart - Building 920 Construction Date: 1900's

Functional Space: Throughout Building Location: floor

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 9x9 Blue Floor Tile – 3rd Layer

Approximate Amount of Material (Linear or Square Ft.): 3,463 Square Feet

Condition:

Percent Damage: 5 % Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: everyday wear and tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: Material located under two layers

Influence of Vibration: _____ High _____ Moderate X Low

Description: concrete slab / fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: everyday air flow / material bound in matrix

Overall Rating:

_____ High Potential for Significant Damage & Exposure

_____ Moderate Potential for Significant Damage & Exposure

X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: [signature] Date: July 25, 2001

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 920 Construction Date: 1900's

Functional Space: Throughout Building Location: floor

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: Brown Floor Tile – 3rd Layer

Approximate Amount of Material (Linear or Square Ft.): 396 Square Feet

Condition:

Percent Damage: 5 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: everyday wear and tear

Overall Rating: _____ Good _____ Fair X Poor

'ential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: Material located under two layers

Influence of Vibration: _____ High _____ Moderate X Low

Description: concrete slab / fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: everyday air flow / material bound in matrix

Overall Rating:

_____ High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure X	Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

'pector Signature: [signature] Date: July 25, 2001

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 920 Construction Date: 1900's

Functional Space: HVAC Room Location: Behind HVAC

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: ACM Board

Approximate Amount of Material (Linear or Square Ft.): 225 Square Feet

Condition:

Percent Damage: 25 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: everyday wear and tear

Overall Rating: _____ Good X Fair _____ Poor

'ential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: HVAC Room

Influence of Vibration: _____ High _____ Moderate X Low

Description: concrete slab

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: everyday air flow

Overall Rating:

_____ High Potential for Significant Damage & Exposure

_____ Moderate Potential for Significant Damage & Exposure

X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

'pector Signature: _____ Date: July 25, 2001

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 920 Construction Date: 1900's

Functional Space: HVAC Room Location: Behind HVAC

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: Transite Panel

Approximate Amount of Material (Linear or Square Ft.): 228 Linear Feet

Condition:

Percent Damage: 25 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: everyday wear and tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: HVAC Room

Influence of Vibration: _____ High _____ Moderate X Low

Description: concrete slab

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: everyday air flow

Overall Rating:

_____ High Potential for Significant Damage & Exposure

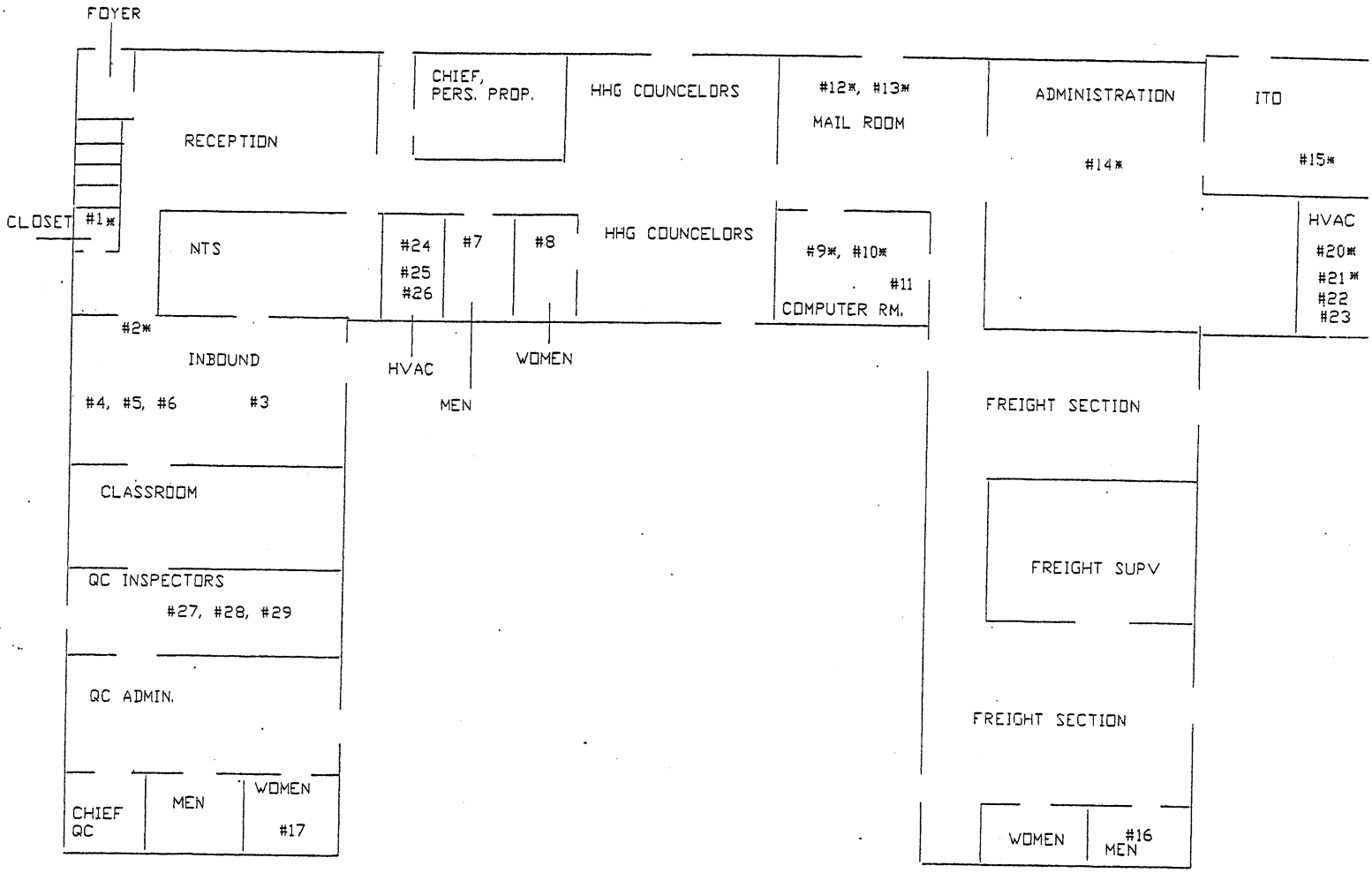
_____ Moderate Potential for Significant Damage & Exposure

X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: [signature] Date: July 25, 2001

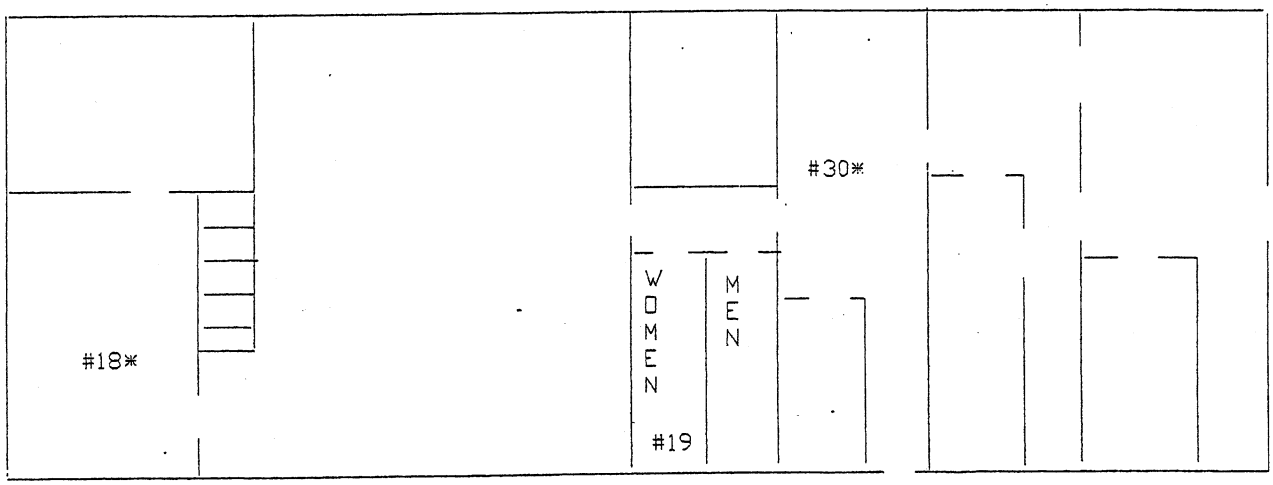
ASBESTOS INSPECTION
FT. STEWART - DIRECTORATE OF PUBLIC WORKS
FT. STEWART - BLDG 920, 1ST FLOOR - HINESVILLE, GA
AIR SAFE PROJECT #184-01



SAMPLES

#1 12x12 GREY FLOOR TILE*
#2 12x12 GREY FLOOR TILE*
#3 2x4 CEILING TILE
#4 SHEETROCK
#5 SHEETROCK MUD
#6 SHEETROCK TAPE
#7 WHITE SHEETFLOOR BACKING
#8 WHITE SHEETFLOOR BACKING
#9 12x12 GREY FLOOR TILE*
#10 9x9 BLUE FLOOR TILE (3RD LAYER)*
#11 12x12 WALL TILE
#12 12x12 GREY FLOOR TILE*
#13 BROWN FLOOR TILE (3RD LAYER)*
#14 9x9 BLUE FLOOR TILE*
#15 9x9 BLUE FLOOR TILE*
#16 2x2 CEILING TILE
#17 BLUE/WHITE SHEETFLOOR BACKING
#20 ACM BOARD*
#21 TRANSITE PANEL*
#22 PIPE WRAP
#23 DUCT MUD
#24 SHEETROCK
#25 SHEETROCK MUD
#26 DUCT MUD
#27 SHEETROCK
#28 SHEETROCK MUD
#29 SHEETROCK TAPE

ASBESTOS INSPECTION
FT. STEWART - DIRECTORATE OF PUBLIC WORKS
FT. STEWART - BLDG 920, 2ND FLOOR - HINESVILLE, GA
AIR SAFE PROJECT #184-01



SAMPLES
#18 12x12 GREY FLOOR TILE*
#19 BLUE/WHITE SHEET FLOOR BACKING
#30 9x9 BLUE FLOOR TILE*

AIR-SAFE
ENVIRONMENTAL II, INC.
Environmental Consultants

P. O. Box 61144 • Savannah, GA 31420 • Telephone (912) 920-7715

AMBER

August 29, 2001

Mr. Daniel Lardinois
Environmental Branch
Directorate of Public Works
3rd In Div (Mech) (Ft. Stewart)
1557 Frank Cochran Drive
Ft. Stewart, GA 31314-4928

Subject: Results of Bulk Sample Analysis for Asbestos
Ft. Stewart – Building 1191
Air Safe Project #184-01

r. Lardinois;

Air Safe II, Inc. is pleased to provide Ft. Stewart, Environmental Branch, with the analytical results of the bulk samples collected from Building 1191 located at the Ft. Stewart, for asbestos analysis on August 16, 2001.

Air Safe II, Inc. appreciates the opportunity to be of service to Ft. Stewart, Environmental Branch and looks forward to our continued association. If you have any questions concerning the results or if we can be of further service, please contact our office at 912-920-7715.

Sincerely,

AIR SAFE II, INC.

Johnny Ciucevich
AHERA Inspector

IC/sn
achment

Results of Bulk Sample Analysis for Asbestos
Ft. Stewart - Building 1191
Air Safe Project #184-01

PROJECT DESCRIPTION

On August 16, 2001, Air Safe II, Inc. conducted a survey for asbestos containing materials at Building 1191 on Ft. Stewart, located in Hinesville, Georgia. The inspector noted that the building was constructed of a wood and block frame, wood, block and concrete slab foundation with fiber glass and cellulose insulation.

The survey and bulk sample collection was conducted by Certified AHERA Building Inspector, Johnny Ciucevich, Certificate #I253069842. The survey consisted of a visual inspection of the subject area by an accredited inspector, bulk sampling of suspect asbestos containing materials and a visualization of the condition of suspect materials in Building 1191.

Sample analysis for asbestos is conducted by Polarized Light Microscopy (PLM) **in accordance with the 40 CFR, Chapter 1, Part 763, Subpart F, Appendix A regulations.** Samples containing greater than one percent by visual estimation are considered to be an asbestos containing material.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the asbestos survey and bulk sample results from Building 1191 located on Ft. Stewart; **the materials found to contain asbestos are as follows. Transite Panelling located in Boiler Room. Rope Gaskets located in Boiler Room. 12x12 Gray Floor Tile under carpet located in Offices, Waiting Areas, Storage Room, Secretary's Office, Computer Room and Lobby. Sheetrock Mud located throughout building. 9x9 Brown Floor Tile (Bottom Layer) and associated black mastic located in Room 1. 9x9 Green Floor Tile (Bottom Layer) and associated black mastic located in Room 2. 4" OD Aircells located throughout crawlspace under building.** All other materials sampled were reported as non-asbestos containing materials. Please see the following Tables of results as well as drawings (not to scale) for detailed results and specific sample locations.

Roofing materials were not sampled this time, so as not to breach the integrity of the roofing materials. Roofing materials will be sampled when deemed necessary and / or prior to renovation or demolition.

Considering the potential to render these materials friable during demolition or renovation; we advise the removal of this material be performed by a qualified licensed asbestos contractor prior to any renovation or demolition activities.

Asbestos removal should be performed in strict compliance with NESHAP, 40 CFR 61, National Emission Standard for Hazardous Pollutants; Asbestos and all state and federal regulations.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 1191 - HINESVILLE, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
08/16/01	1	Transite Panelling	Boiler Room Building 1191	None Detected	75% Other	**Chrysotile 25%**
08/16/01	2	Transite Panelling	Boiler Room Building 1191	None Detected	75% Other	**Chrysotile 25%**
08/16/01	3	Rope Gasket	Boiler Room Building 1191	50% Syn Fiber	5% Other	**Chrysotile 45%**
08/16/01	4	Rope Gasket	Boiler Room Building 1191	50% Syn Fiber	5% Other	**Chrysotile 45%**
08/16/01	5	12x12 Gray Floor Tile	Office Building 1191	None Detected	96% other	**Chrysotile 4%**
08/16/01	6	12x12 Gray Floor Tile	Office Building 1191	None Detected	96% other	**Chrysotile 4%**
08/16/01	7	Sheetrock	Waiting Area Building 1191	2% Cellulose	98% Other	None Detected
08/16/01	8	Sheetrock Mud	Waiting Area Building 1191	None Detected	96% Other	**Chrysotile 4%**
08/16/01	9	Sheetrock Tape	Waiting Area Building 1191	96% Cellulose	4% Other	None Detected
08/16/01	10	Plaster	Storage Building 1191	None Detected	100% Other	None Detected
08/16/01	11	Plaster	Storage Building 1191	None Detected	100% Other	None Detected
08/16/01	12	12x12 Tan Floor Tile-Top Layer	Room 1 Building 1191	2% Cellulose	98% Other	None Detected
08/16/01	13	9x9 Brown Floor Tile-Bottom Layer	Room 1 Building 1191	None Detected	90% Other	**Chrysotile 10%**
08/16/01	14	Black Mastic	Room 1 Building 1191	3% Cellulose	93% other	**Chrysotile 4%**
08/16/01	15	9x9 Green Floor Tile-Bottom Layer	Room 2 Building 1191	None Detected	90% Other	**Chrysotile 10%**
08/16/01	16	Black Mastic	Room 2 Building 1191	2% Cellulose	94% Other	**Chrysotile 4%**

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART - BUILDING 1191 - HINESVILLE, GA
AIR SAFE PROJECT #184-01

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
08/16/01	17	9x9 Green Floor Tile-Bottom Layer	Room 2 Building 1191	None Detected	90% Other	**Chrysotile 10%**
08/16/01	18	Black Mastic	Room 2 Building 1191	2% Cellulose	94% Other	**Chrysotile 4%**
08/16/01	19	9x9 Brown Floor Tile-Bottom Layer	Room 1 Building 1191	None Detected	90% Other	**Chrysotile 10%**
08/16/01	20	Black Mastic	Room 1 Building 1191	3% Cellulose	93% other	**Chrysotile 4%**
08/16/01	21	12x12 Tan Floor Tile-Top Layer	Waiting Area Building 1191	2% Cellulose	98% Other	None Detected
08/16/01	22	Sheetrock	Waiting Area Building 1191	6% Cellulose 4% Min Wool	90% Other	None Detected
08/16/01	23	Sheetrock Mud	Waiting Area Building 1191	None Detected	100% Other	None Detected
08/16/01	24	Sheetrock Tape	Waiting Area Building 1191	95% Cellulose	5% Other	None Detected
08/16/01	25	Sheetrock Mud	Hallway Building 1191	None Detected	100% Other	None Detected
08/16/01	26	4" OD Aircell	Crawlspace Building 1191	None Detected	20% Other	**Chrysotile 80%**
08/16/01	27	4" OD Aircell	Crawlspace Building 1191	None Detected	20% Other	**Chrysotile 80%**
08/16/01	28	White Mastic on HVAC	HVAC Building 1191	10% Cellulose	90% Other	None Detected
08/16/01	29	White Mastic on HVAC	HVAC Building 1191	10% Cellulose	90% Other	None Detected
08/16/01	30	Window Caulk	HVAC Building 1191	None Detected	100% Other	None Detected
08/16/01	31	Window Caulk	HVAC Building 1191	None Detected	100% Other	None Detected

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1191 Construction Date: 1900's

Functional Space: Boiler Room Location: walls

Type of Suspect Material: _____ Surfacing: _____ TSI: _____ X _____ Misc.

Description: Transite Panelling

Approximate Amount of Material (Linear or Square Ft.): 350 Square Feet

Condition:

Percent Damage: 15 % _____ Localized _____ X _____ Distributed

Type of Damage: X Deterioration _____ Water _____ X _____ Physical

Description: Everyday wear and tear

Overall Rating: _____ Good _____ X _____ Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate _____ X _____ Low

Description: Material located in walls

Influence of Vibration: _____ High _____ Moderate _____ X _____ Low

Description: fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate _____ X _____ Low

Description: Normal air flow

Overall Rating:

_____ High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: August 29, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1191 Construction Date: 1900's

Functional Space: Boiler Room Location: _____

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: Rope Gasket

Approximate Amount of Material (Linear or Square Ft.): 10 Linear Feet

Condition:

Percent Damage: 20 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear and tear

Overall Rating: _____ Good X Fair _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: Material located in boiler room

Influence of Vibration: _____ High _____ Moderate X Low

Description: When system is in use

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: August 29, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1191 Construction Date: 1900's

Functional Space: Throughout Building Location: Walls

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: Sheetrock Mud

Approximate Amount of Material (Linear or Square Ft.): To be addressed

Condition:

Percent Damage: 25 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear and tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: Material located in walls

Influence of Vibration: _____ High _____ Moderate X Low

Description: Wood and Block Frame

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: August 29, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1191 Construction Date: 1900's

Functional Space: Offices, Waiting Areas, Storage, Secretary Office, Computer Room and Lobby Location: floor

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 12x12 Gray Floor Tile under carpet

Approximate Amount of Material (Linear or Square Ft.): 4,000 Square Feet

Condition:

Percent Damage: 25 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear and tear

Overall Rating: _____ Good _____ Fair X Poor

tential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: Material located under carpet

Influence of Vibration: _____ High _____ Moderate X Low

Description: fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

spector Signature: _____ Date: August 29, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1191 Construction Date: 1900's

Functional Space: Room 1 Location: Floors

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 9x9 Brown Floor Tile-Bottom Layer and associated black mastic

Approximate Amount of Material (Linear or Square Ft.): 100 Square Feet

Condition:

Percent Damage: 25 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear and tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: Material is bottom layer

Influence of Vibration: _____ High _____ Moderate X Low

Description: fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: August 29, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1191 Construction Date: 1900's

Functional Space: Room 2 Location: Floor

Type of Suspect Material: _____ Surfacing: _____ TSI: _____ X _____ Misc.

Description: 9x9 Green Floor Tile-Bottom Layer and associated black mastic

Approximate Amount of Material (Linear or Square Ft.): 224 Square Feet

Condition:

Percent Damage: 25 % _____ Localized _____ X _____ Distributed

Type of Damage: X Deterioration _____ Water _____ X _____ Physical

Description: Everyday wear and tear

Overall Rating: _____ Good _____ Fair _____ X _____ Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate _____ X _____ Low

Description: Material is bottom layer

Influence of Vibration: _____ High _____ Moderate _____ X _____ Low

Description: fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate _____ X _____ Low

Description: Everyday air flow over deteriorated areas

Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: August 29, 2001

AIR SAFE II, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1191 Construction Date: 1900's

Functional Space: Throughout Crawlspace Location: Underneath Building

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 4" OD Aircell

Approximate Amount of Material (Linear or Square Ft.): 400 Linear Feet

Condition:

Percent Damage: 25 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear and tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: _____ High _____ Moderate X Low

Description: Material located under building

Influence of Vibration: _____ High _____ Moderate X Low

Description: Material located under building

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Everyday air flow over deteriorated areas

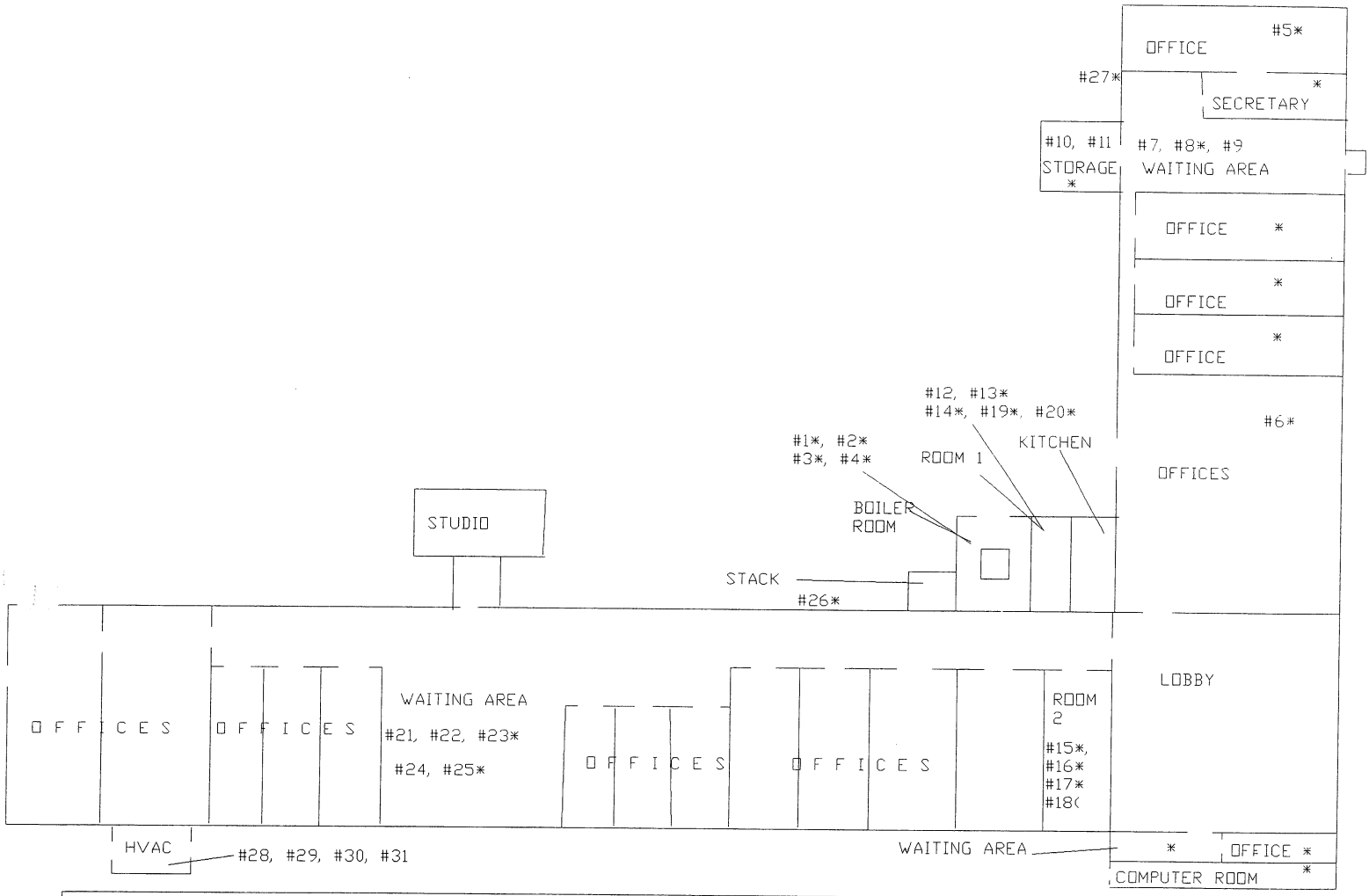
Overall Rating:

_____ High Potential for Significant Damage & Exposure	_____ Moderate Potential for Significant Damage & Exposure	X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: _____ Date: August 29, 2001

ASBESTOS INSPECTION
FT. STEWART - DIRECTORATE OF PUBLIC WORKS
FT. STEWART - BUILDING 1191 - HINESVILLE, GA
AIR SAFE PROJECT #184-01



SAMPLES

#1 TRANSITE PANELLING*
#2 TRANSITE PANELLING*
#3 ROPE GASKET*
#4 ROPE GASKET*
#5 12x12 GRAY FLOOR TILE*
#6 12x12 GRAY FLOOR TILE*
#7 SHEETROCK
#8 SHEETROCK MUD*
#9 SHEETROCK TAPE
#10 PLASTER
#11 PLASTER
#12 12x12 TAN FLOOR TILE-TOP LAYER
#13 9x9 BROWN FLOOR TILE-BOTTOM LAYER*
#14 BLACK MASTIC*
#15 9x9 GREEN FLOOR TILE-BOTTOM LAYER*
#16 BLACK MASTIC*
#17 9x9 GREEN FLOOR TILE-BOTTOM LAYER*
#18 BLACK MASTIC*
#19 9x9 BROWN FLOOR TILE-BOTTOM LAYER*
#20 BLACK MASTIC*
#21 12x12 TAN FLOOR TILE-TOP LAYER
#22 SHEETROCK
#23 SHEETROCK MUD*
#24 SHEETROCK TAPE
#25 SHEETROCK MUD*
#26 4" OD AIRCELL*
#27 4" OD AIRCELL*
#28 WHITE MASTIC ON HVAC
#29 WHITE MASTIC ON HVAC
#30 WINDOW CAULK
#31 WINDOW CAULK

AIR-SAFE
ENVIRONMENTAL, INC.
Environmental Consultants

P. O. Box 61144 • Savannah, GA 31420 • Telephone (912) 920-7715

AMBER

December 7, 2000

Mr. Daniel Lardinois
Environmental Branch
Directorate of Public Works
3rd In Div (Mech) (Ft. Stewart)
1557 Frank Cochran Drive
Ft. Stewart, GA 31314-4928

Subject: Results of Bulk Sample Analysis for Asbestos
Ft. Stewart - Bldg. 1192
Air Safe Project #184-99

Mr. Lardinois;

Air Safe Environmental, Inc. is pleased to provide Ft. Stewart, Environmental Branch, with the analytical results of the bulk samples collected from Building 1192 located at Ft. Stewart, for asbestos analysis on November 9, 2000.

Air Safe Environmental, Inc. appreciates the opportunity to be of service to Ft. Stewart, Environmental Branch and looks forward to our continued association. If you have any questions concerning the results or if we can be of further service, please contact our office at 912-920-7715.

Sincerely,

AIR SAFE ENVIRONMENTAL, INC.

Ross Worley

Ross Worley
AHERA Inspector

//jc
Attachment

.sults of Bulk Sample Analysis for Asbestos
Ft. Stewart - Building 1192
Air Safe Project #184-99

PROJECT DESCRIPTION

On November 9, 2000, Air Safe Environmental, Inc. conducted a survey for asbestos containing materials at Building 1192 on Ft. Stewart, located in Hinesville, Georgia. The inspector noted that the building was constructed of a wood framework on a concrete slab foundation.

The survey and bulk sample collection was conducted by Certified AHERA Building Inspector, Ross Worley, Certificate#I444905719. The survey consisted of a visual inspection of the subject area by an accredited inspector, bulk sampling of suspect asbestos containing materials and a visualization of the condition of suspect materials in Building 1192.

Sample analysis for asbestos is conducted by Polarized Light Microscopy (PLM) **in accordance with the 40 CFR, Chapter 1, Part 763, Subpart F, Appendix A regulations.** Samples containing greater than one percent by visual estimation are considered to be an asbestos containing material.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of the asbestos survey and bulk sample results from Building 1192 located on Ft. Stewart; **the materials found to contain asbestos are as follows. 12x12 Tan Floor Tile located in the HVAC and Reception Area. 9x9 Brown Floor Tile and associated black mastic located in the Computer Room and Assignments and Terminations Room. 9x9 Tan w/ Green Speck Floor Tile located throughout the building.** All other materials ıpled were reported as non-asbestos containing materials. Please see the following Tables of results as well as drawings ɹt to scale) for detailed results and specific sample locations.

Roofing materials were not sampled at this time, so as not to breach the integrity of the roofing materials. Roofing materials will be sampled when deemed necessary and / or prior to renovation or demolition.

Considering the potential to render these materials friable during demolition or renovation; we advise the removal of this material be performed by a qualified licensed asbestos contractor prior to any renovation or demolition activities.

Asbestos removal should be performed in strict compliance with NESHAP, 40 CFR 61, National Emission Standard for Hazardous Pollutants; Asbestos and all state and federal regulations.

TABLE I
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART – BUILDING 1192 - HINESVILLE, GA
AIR SAFE PROJECT #184-99

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
11/09/00	10	**9x9 Tan w/ Green Fl Tile**	HVAC Bldg. 1192	None Detected	93% Other	**Chrysotile 7%**
11/09/00	11	Black Mastic	HVAC Bldg. 1192	None Detected	100% Other	None Detected
11/09/00	12	Spray On Ceiling	Hall Bldg. 1192	None Detected	100% Other	None Detected
11/09/00	13	Sheetrock	HVAC Bldg. 1192	8% Cellulose	92% Other	None Detected
11/09/00	14	Sheetrock Mud	HVAC Bldg. 1192	None Detected	100% Other	None Detected
11/09/00	15	Sheetrock Tape	HVAC Bldg. 1192	92% Cellulose	8% Other	None Detected
11/09/00	16	**9x9 Brown Fl Tile**	Computer Room Bldg. 1192	None Detected	90% Other	**Chrysotile 10%**
11/09/00	17	**Black Mastic**	Computer Room Bldg. 1192	None Detected	92% Other	**Chrysotile 8%**
11/09/00	18	**9x9 Tan w/ Green Fl Tile(2nd Layer)**	HVAC Bldg. 1192	None Detected	92% Other	**Chrysotile 8%**
11/09/00	19	Black Mastic	HVAC Bldg. 1192	None Detected	100% Other	None Detected

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

TABLE II
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART – BUILDING 1192 - HINESVILLE, GA
AIR SAFE PROJECT #184-99

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
11/09/00	20	**12x12 Tan Fl Tile(1st Layer)**	HVAC Bldg. 1192	None Detected	98% Other	**Chrysotile 2%**
11/09/00	21	Black Mastic	HVAC Bldg. 1192	2% Cellulose	98% Other	None Detected
11/09/00	22	Sheetfloor Backing	Men's Restroom Bldg. 1192	25% Cellulose 10% Min Wool	65% Other	None Detected
11/09/00	23	Spray On Ceiling	Office Bldg. 1192	None Detected	100% Other	None Detected
11/09/00	24	Sheetfloor Backing	Kitchen Bldg. 1192	25% Cellulose 15% Min Wool	60% Other	None Detected
11/09/00	25	**9x9 Tan w/ Green Fl Tile**	Office Bldg. 1192	None Detected	92% Other	**Chrysotile 8%**
11/09/00	26	Black Mastic	Office Bldg. 1192	None Detected	100% Other	None Detected
11/09/00	27	Spray On Ceiling	Office Bldg. 1192	None Detected	100% Other	None Detected
11/09/00	28	Sheetrock	Office Bldg. 1192	10% Cellulose	90% Other	None Detected
11/09/00	29	Sheetrock Mud	Office Bldg. 1192	None Detected	100% Other	None Detected

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

TABLE III
SUMMARY OF ACM BULK SAMPLE RESULTS
FT. STEWART - ENVIRONMENTAL BRANCH
FT. STEWART – BUILDING 1192 - HINESVILLE, GA
AIR SAFE PROJECT #184-99

SAMPLE DATE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE LOCATION	NON-ACM FIBROUS	NON-ACM NON-FIBROUS	ASBESTOS TYPE %
11/09/00	30	Sheetrock Tape	Office Bldg. 1192	90% Cellulose	10% Other	None Detected
11/09/00	31	**9x9 Brown Fl Tile**	Assignment and Terminations Bldg. 1192	None Detected	90% Other	**Chrysotile 10%**
11/09/00	32	**Black Mastic**	Assignment and Terminations Bldg. 1192	None Detected	92% Other	**Chrysotile 8%**
11/09/00	33	**12x12 Tan Fl Tile**	Reception Area Bldg. 1192	None Detected	96% Other	**Chrysotile 4%**
11/09/00	34	Black Mastic	Reception Area Bldg. 1192	2% Cellulose	98% Other	None Detected
11/09/00	35	Sheetfloor Backing	Women's Bathroom Bldg. 1192	25% Cellulose 10% Min Wool	65% Other	None Detected

NOTE: Samples found to contain greater than one (1) percent by visual estimation are considered to be an asbestos containing material.

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1192 Construction Date: 1900's

Functional Space: HVAC and Reception Area Location: Predominantly under carpet

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 12x12 Tan Floor Tile

Approximate Amount of Material (Linear or Square Ft.): 437 Square Feet

Condition:

Percent Damage: 10 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: _____ High X Moderate _____ Low

Description: Predominantly under carpet

Influence of Vibration: _____ High _____ Moderate X Low

Description: Fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Fibers bound in matrix

Overall Rating:

_____ High Potential for Significant Damage & Exposure

_____ Moderate Potential for Significant Damage & Exposure

X Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: Ron Worley Date: December 7, 2000

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1192 Construction Date: 1900's

Functional Space: Computer Room. Assignments and Terminations Location: Predominantly under carpet

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 9x9 Tan Floor Tile and associated black mastic

Approximate Amount of Material (Linear or Square Ft.): 754 Square Feet

Condition:

Percent Damage: 10 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: _____ High X Moderate _____ Low

Description: Predominantly under carpet

Influence of Vibration: _____ High _____ Moderate X Low

Description: Fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Fibers bound in matrix

Overall Rating:

_____ High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure X	Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: Ross Worley Date: December 7, 2000

AIR SAFE ENVIRONMENTAL, INC.

Recording Form For Physical Assessment Data

Building: Ft. Stewart - Building 1192 Construction Date: 1900's

Functional Space: Throughout building Location: Partial areas under carpet and floor tile

Type of Suspect Material: _____ Surfacing: _____ TSI: X Misc.

Description: 9x9 Tan w/ Green Floor Tile

Approximate Amount of Material (Linear or Square Ft.): 2722 Square Feet

Condition:

Percent Damage: 10 % _____ Localized X Distributed

Type of Damage: X Deterioration _____ Water X Physical

Description: Everyday wear & tear

Overall Rating: _____ Good _____ Fair X Poor

Potential for Disturbance:

Frequency of potential contact: _____ High X Moderate _____ Low

Description: Areas under carpet and 12x12 Tan Floor Tile

Influence of Vibration: _____ High _____ Moderate X Low

Description: Fibers bound in matrix

Potential for Air Erosion: _____ High _____ Moderate X Low

Description: Fibers bound in matrix

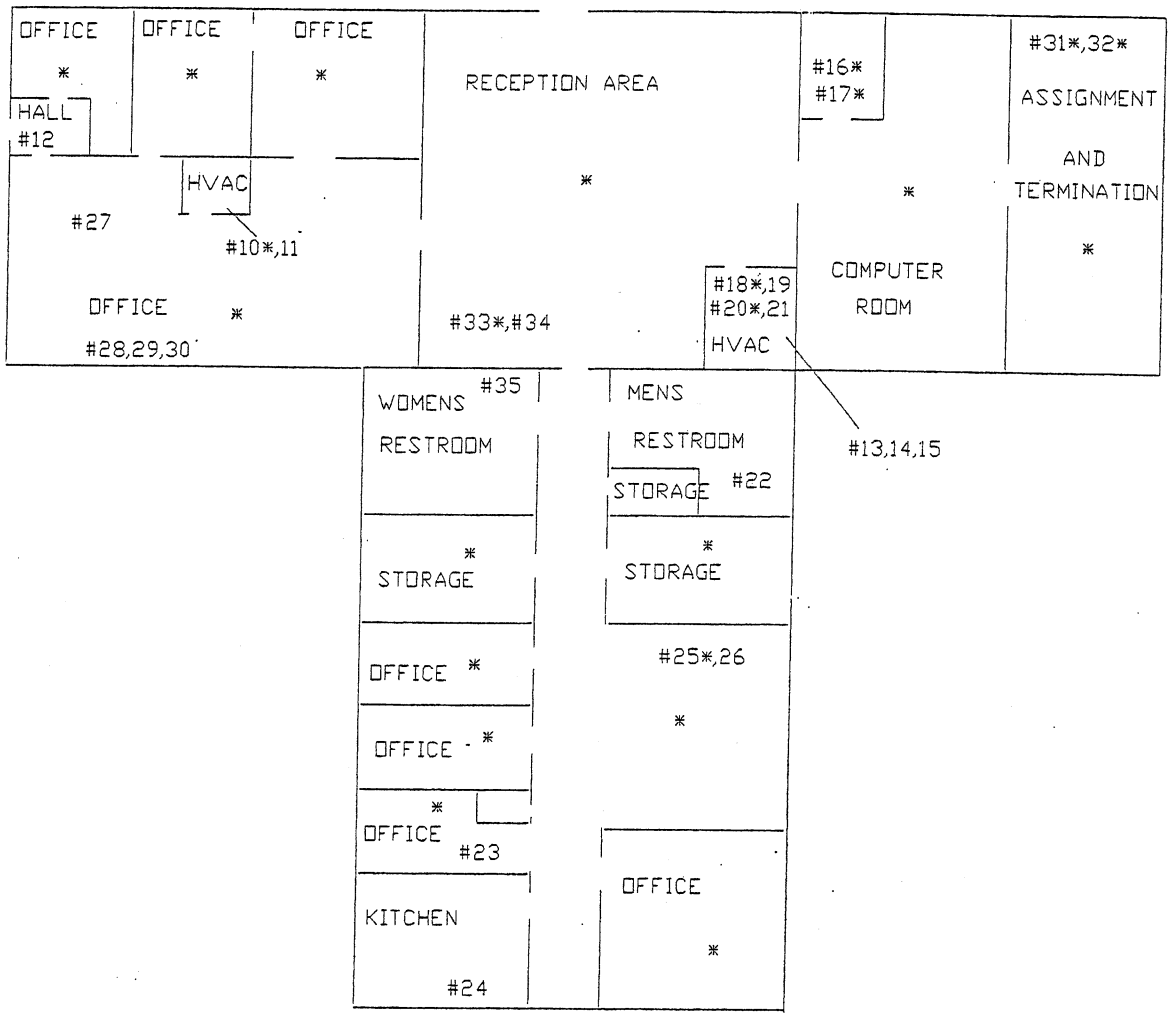
Overall Rating:

_____ High Potential for Significant Damage & Exposure	Moderate Potential for Significant Damage & Exposure X	Low Potential for Significant Damage & Exposure

Comments: Material should be addressed prior to any renovation or demolition activities.

Inspector Signature: Ross Daley Date: December 7, 2000

ASBESTOS INSPECTION
FT. STEWART - DIRECTORATE OF PUBLIC WORKS
FT. STEWART - BUILDING 1192 - HINESVILLE, GA
AIR SAFE PROJECT #184-99



SAMPLES

#10 9X9 TAN FL TILE W/GREEN*
#11 BLACK MASTIC
#12 SPRAY ON CEILING
#13 SHEETROCK
#14 SHEETROCK MUD
#15 SHEETROCK TAPE
#16 9X9 BROWN FL TILE*
#17 BLACK MASTIC*
#18 9X9 TAN FL TILE W/GREEN*
#19 BLACK MASTIC
#20 12X12 TAN FL TILE(TOP LAYER)*
#21 BLACK MASTIC
#22 SHEETFLOOR BACKING
#23 SPRAY ON CEILING
#24 SHEETFLOOR BACKING
#25 9X9 TAN FL TILE W/GREEN*
#26 BLACK MASTIC
#27 SPRAY ON CEILING
#28 SHEETROCK
#29 SHEETROCK MUD
#30 SHEETROCK TAPE
#31 9X9 BROWN FL TILE*
#32 BLACK MASTIC*
#33 12X12 TAN FL TILE*
#34 BLACK MASTIC
#35 SHEETFLOOR BACKING

APPENDIX G

INTERIOR DESIGN PRESENTATION FORMAT

US Army Corps
of Engineers
Savannah District

Interior Design Presentation Format

February 1999

U.S. ARMY ENGINEER DISTRICT, SAVANNAH
CORPS OF ENGINEERS
100 WEST OGLETHORPE AVENUE
SAVANNAH, GEORGIA 31401-3640

THE SAVANNAH DISTRICT'S MANUAL
FOR INTERIOR DESIGN PRESENTATION

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	GOVERNMENT CONTRACTING TERMS	3-7
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3.	SIGNAGE	9-11
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5.	SUBMITTAL MATRIX SUMMARY	14-16
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THE SAVANNAH DISTRICT'S MANUAL
FOR INTERIOR DESIGN PRESENTATION FORMAT

A. This format is required in accordance with THE SAVANNAH DISTRICT DESIGN MANUAL section 10.8.9. and is developed in accordance with Air Force and Army interior design requirements for SID/CID submittals.

B. SID/CID PACKAGES RUN CONCURRENT WITH THE ARCHITECTURAL SUBMITTALS.

C. "Checklists for Reviews" and "Lessons Learned" are to be used to ensure all required information is included in the Contract Documents, the SID/CID presentation binders and to achieve customer satisfaction.

D. The General Contractor will not be receiving the 8 ½" X 11" SID/CID binders. Verify that all graphic illustrations such as carpet borders, ceramic tile patterns, accent color placement, millwork details and prewired furniture finished and details are on the contract drawings.

E. DO NOT REFERENCE THE SID/CID BINDERS IN THE CONTRACT DOCUMENTS.

F. THIS INFORMATION IS NOT OPTIONAL WHEN PRESENTING A SID/CID SUBMITTAL FOR REVIEW and FINAL DESIGN.

G. The Interior Design Point of Contact for the Savannah District is:

U.S. Army Corps of Engineers
ATTN: EN-DA/Peggy Roberson
100 W. Oglethorpe Avenue
Savannah, GA 31402-0889
COMM (912) 652-5544 FAX (912) 652-5891

GOVERNMENT CONTRACTING TERMS

ARMY	AIR FORCE	DEFINITION
MCA	**MILCON**	**MILITARY CONSTRUCTION** funds appropriated by Congress for new construction-fixed price contracts.
OMA	**O & M**	**OPERATION AND MAINTENANCE** funds provided to each installation by the Major Command and used for the day to day operations of the installation. These funds may be used for the renovation of existing buildings or for the purchase of furniture. Funds not spent to award a contract disappear at the end of the FY and cannot be recovered.
FY	**FY**	**FISCAL YEAR:** (A) October 1 through September 30 per the calendar. (B) If the project title begins with "FY-...." This identifies the year Congress will fund the Construction Contract Award.
PD	**PD**	**PROJECT DEFINITION:** A conceptual design of the proposed project (floorplans, elevations, cost estimate).
DD FORM 1391	**DD FORM 1391**	A programming document initiated by the installation; passed through the Major Command on to Congress for funding. The **1391** outlines basic needs for a proposed facility and an estimated cost to reach those needs.
JOC	**SABER**	**JOB ORDER CONTRACT** <u>**OR**</u> **SIMPLIFIED ACQUISITION OF BASE ENGINEERING REQUIREMENTS:** The installation's method to contract for repair work. Unit prices are agreed upon with a Contractor then individual job orders are negotiated for specific scopes of repair work.

GOVERNMENT CONTRACTING TERMS

ARMY	AIR FORCE	DEFINITION
CBD	**CBD**	**COMMERCE AND BUSINESS DAILY:** The federal government's "want ads". Advanced notice of contracting actions & requests for A-E Services.
IFB	**IFB**	**INVITATION FOR BID:** Standard contract procedures with clearly defined requirements, specifications and terms that are not negotiated. Any proposal prepared in response to an IFB must strictly adhered to the terms. Award is based on the lowest bid meeting the requirements and specifications.
RFP **RFQ**	**RFP** **RFQ**	A **REQUEST FOR PROPOSAL** is flexible in contrast to an IFB. It usually defines a problem and allows those who respond to the RFP to suggest a solution. A **REQUEST FOR QUOTES** is an informal request for price for standard item.
DESIGN BUILD	**DESIGN BUILD**	Using the RFP format, performance requirements are outlined; the Construction Contractor and A-E subcontractor are responsibility for the design of specifics to meet performance requirements.
APPENDIX A	**APPENDIX A**	The contractual scope of work for A-E contracts which outlines basic requirements including specific deliverables and the schedule of design submittals.
SF 254 & 255	**SF 254 & 255**	**STANDARD FORMS** to provide resume information to the government regarding the qualifications of A-E's responding to a CBD announcement.

GOVERNMENT SID/CID TERMS

ARMY	AIR FORCE	DEFINITION
SID	**SID**	**STRUCTURAL INTERIOR DESIGN:** Building related finishes; funded with MCA or MILCON dollars; Building Materials and finishes are purchased and installed by the General Contractor; a submittal with samples of proposed building materials being used on a particular project.
CID	**CID**	**COMPREHENSIVE INTERIOR DESIGN:** Furniture related; funded with OMA or O & M dollars: a submittal with furniture illustrations, fabric & finish samples, footprint plans, and furniture ordering information. Purchased by the installation and not by the General Contractor.
PREWIRED WORKSTATIONS	**PREWIRED WORKSTATIONS**	**PREWIRED WORKSTATION** is the term used to identify systems furniture purchased with MCA or MILCON funds. The designers will coordinate the footprint plans with the buildings systems and provide the plans and specifications in the contact documents. The General Contractor will purchase and install this furniture.
SYSTEMS FURNITURE	**SYSTEMS FURNITURE**	**SYSTEMS FURNITURE** is the term used to identify systems furniture purchased with OMA or O & M dollars. The designer will coordinate the footprint plans with the building systems and provide the plans in the contract documents for "information only." Procurement information will appear in the CID and will be purchased by the installation.

GOVERNMENT CID TERMS

ARMY	AIR FORCE	DEFINITION
FAR	**FAR**	**FEDERAL ACQUISITION REGULATIONS:** The laws outlining how the government buys products and services. Title 18 of the U.S.Code allows for direct purchase from UNICOR without competitive bids. (FAR) 8.6 identifies UNICOR as a mandatory procurement source to all federal agencies for products that meet the requirements of the ordering office.
FSS	**FSS**	**FEDERAL SUPPLY SCHEDULES** provides indefinite quantity contracts for commercial items at established prices for direct ordering use by government agencies. Address: Furniture Commodity Center (3FN-CO); Crystal Mall 4, RM 403, Washington DC 20406 (703) 305-5056.
UNICOR	**UNICOR**	**UNICOR** is the trade name for the Federal Prison Industries Inc (FPI) a wholly owned government corporation est. in 1934. UNICOR provides a variety of products and services to the Federal Government.
GSA FSC/FSG	**GSA FSC/FSG**	**GENERAL SERVICES ADMINISTRATION FEDERAL SUPPLY CLASSES FEDERAL SUPPLY GROUPS** are government contracts with private manufacturers that are fixed price, fixed MOL and fixed dates of expirations. GSA CENTRALIZED MAILING LIST SERVICE (7CAFL); PO BOX 6477 FT. WORTH, TX 76115 (817) 334-5215

TYPICAL GOVERNMENT TERMS

ARMY	AIR FORCE	DEFINITION
MOL	**MOL**	**MAXIMUM ORDER of LIMITATION:** GSA FSC/FSC contracts have a ceiling contract dollar amount that can be purchased from a vendor.
OPEN MARKET	**OPEN MARKET**	**OPEN MARKET** is the term indicating products that are not on a GSA contract.
ENVIRONMENTAL PRODUCTS GUIDE	**ENVIRONMENTAL PRODUCTS GUIDE**	GSA CATALOG SUPPLY ITEMS GSA CENTRALIZED MAILING LIST SERVICE (7CAFL); PO BOX 6477 FT. WORTH, TX 76115 (817) 334-5215
FSN 595B	**FSN 595B**	**FEDERAL STANDARD NUMBER 595B** A collection of standard colors used by the various departments or agencies. Colors have been classified in three categories: 1 is full gloss, 2 is semigloss and 3 is flat.
FSN 595B FAN DECK	**FSN 595B FAN DECK**	Standard colors are available in a booklet for under $10.00. Order number NSN 7690-01-162-2210 GSA Specification Unit (3F-BP-W) Seventh and D Sts SW Washington DC 20407

INTERIOR DESIGN PRESENTATION FORMAT

GENERAL NOTES

1. DEFINITIONS:

1.1 STRUCTURAL INTERIOR DESIGN (SID): Structural Interior Design is the term referring to the building related finishes. A SID shall involve the selection and sampling of all applied finishes necessary to complete the buildings' interior and exterior architectural features. If required, the SID shall also include all prewired workstation drawings and specifications. All SID information shall be presented in a 3-ring Binder, 8 1/2" x 11" format. The products sampled in the SID are to be purchased by the General Contractor and are MCA or MILCON funded.

1.2 COMPREHENSIVE INTERIOR DESIGN (CID): Comprehensive Interior Design is the term referring to the furniture related finishes. A CID shall involve the selection and sampling of all the furnishings components necessary to complete the interior environment. The CID shall generally include all free standing furnishings, accessories, Furniture Cost Estimate and generic Order Forms. The products illustrated in the CID are purchased by the installation and are OMA or O&M funded.

1.3 When a "CID Package" is required in the DD Form 1391 and/or the Appendix A, the A/E shall provide to the Government both the SID/ CID illustrated information in the required 8 1/2" x 11" format.

2. TECHNICAL NOTES:

2.1 SPECIAL REQUIREMENTS: The Interior Designer shall identify items in the SID or CID that require attachment to the building either by cutting or fitting. The Designer must prepare specifications and drawings for this service to be performed.

2.2 DISCLAIMER: Guide Specification 09915 Exterior/Interior Finish Schedule indicates all product trade names and colors used for the project. The nonproprietary declaimer indicated within this Guide Specification may also be located on the Finish Schedule of the Contact Drawings.

2.3 FEDERAL STANDARD 595b COLORS (FSN 595b): The use of the Federal Standard Colors is required when indicating exterior colors used on roofs and trim. The use of Federal Standard Colors is not required when indicating interior colors. EXCEPTION: Hurlburt Field, FL requires both exterior and interior paint colors to be indicated with the FSN 595b code.

2.4 CID FURNITURE RESOURCE: Every effort should be made to use UNICOR, GSA Stock or Federal Supply Schedule items. However, when the Interior

Designer determines CID items available on FSS/GSA contract or from UNICOR do not meet the functional requirements, or there is no current FSS/GSA/ UNICOR resource for a furniture requirement, a waiver to use an Open Market source is required. The Designer shall write a waiver/justification letter (Paragraph 15).

This letter shall be included in the CID Binder; attached to the required Order Form. The Government will process the waiver.

3. SIGNAGE:
Signage is critical to "pathway finding" and is to met the requirements indicated in the American With Disabilities Act unless directed by the client to do otherwise.

Indicate on separate signage drawings the typical plaque sizes, types locations, and the message for all signage. Submit a sample of the signage color in the SID.

4. SID/CID SUBMITTAL REQUIREMENTS

4.1 The Interior Designer shall be involved in all phases of the design in order to ensure customer satisfaction.

4.2 REVIEWS: During each phase of the project all SID/CID Binders shall be reviewed by the Government with written and annotated comments being issued back to the A/E. These annotated comments are to be incorporated into the next SID/CID Binder update. Written responses from the Interior Designer are to be included in the front inside pocket of the first volume of the SID Binder.

4.3 FORMAT: Submit all SID/CID information and samples on 8 1/2"x 11" color boards with a maximum spread of 25 1/2" for foldouts.

Each binder shall be labeled on the outside spine and front cover with the Phase %, SID or CID, Project title, Location, Date, and A/E firm. Indicate the volume number (example: Vol 1 of 3).

Each sheet shall be labeled with the Date, Project Tile, Location, A/E firm.

4.3.1 The color boards shall support and anchor all samples. Anchor large or heavy samples with mechanical fasteners or with velcro. Rubber cement or glue will not be acceptable.

4.3.2 Assemble the 8 1/2" x 11" pages and color boards in a 3-ring binder.

4.3.3 Material and finish samples must indicate true pattern, color and texture. Carpet samples must be large enough to indicate a complete pattern or design.

4.3.4 Photographs or colored photocopies of SID materials or CID fabrics will be disapproved.

Color photocopies of artwork are accepted.

4.4 REVISIONS: The Interior Designer shall revise the binders after each review to satisfy review comments. Printed information on existing pages can be updated with "white-out" for cost effective reasons. If the binders are not returned to the A/E for in-house update, the A/E may provide updated inserts to the Government.

4.5 RENDERINGS: Verify that renderings are a contract requirement. All renderings shall be provided by a professional illustrator.

4.6 BLACK AND WHITE SKETCHES: Verify that B&W Sketches are a contract requirement. If they are required, emphasize space relationships, furnishings, patterns and texture. One major area is to be illustrated and possibly used as a basis for the interior color rendering for the final design.

4.7 SEQUENCE: Organize the SID/CID Binder presentation according to the following sequence:

SEQUENCE OF SID SUBMITTAL

1. TITLE PAGE

2. TABLE OF CONTENTS

3. NARRATIVE OF INTERIOR DESIGN OBJECTIVES

4. EXTERIOR ELEVATION

5. EXTERIOR BUILDING MATERIAL LEGEND

6. EXTERIOR BUILDING MATERIAL COLOR BOARD

7. INTERIOR COLOR PLACEMENT PLAN
   (half size drawing or 8 1/2" X 11")

8. INTERIOR COLOR BOARDS (according color placement plan)

9. INTERIOR SIGNAGE COLOR BOARDS

10. PREWIRED WORKSTATION COLOR BOARDS

11. INTERIOR FLOOR PLANS

12. ROOM FINISH SCHEDULES

13. SIGNAGE PLANS

14. PREWIRED WORKSTATION COMPOSITE FLOOR PLANS

15. PREWIRED WORKSTATION PANEL PLANS

16. PREWIRED WORKSTATION ELECTRICAL/VOICE/DATA PLANS

17. PREWIRED WORKSTATION ELEVATION AND INVENTORY DRAWINGS

SEQUENCE OF CID SUBMITTAL

18. TITLE PAGE

19. TABLE OF CONTENTS

20. NARRATIVE OF INTERIOR DESIGN OBJECTIVES

21. PHOTO OF INTERIOR COLOR RENDERING (only if required by contract)

22. BLACK AND WHITE SKETCH PERSPECTIVE(only if required by contract)

23. COMPOSITE FURNITURE PLANS WITH CONVENTIONAL AND SYSTEMS FURNITURE (full size sheet 1/8" scale. Note: provide all systems furniture plans in the contact drawings and indicate "for information only." This is only if the user is buying and installing the systems furniture. Drawing requirements are the same as indicated in items 11-15 of the SID Sequence.

24. MANUFACTURE'S SUMMARY LISTS

25. FURNITURE LOCATION CODE INDEX

26. CONVENTIONAL FURNITURE PLACEMENT PLANS (1/4" scale)

27. CONVENTIONAL FURNITURE ILLUSTRATION SHEETS

28. ARTWORK ILLUSTRATION SHEETS AND PLACEMENT PLAN

29. ITEMIZED FURNITURE COST ESTIMATE

30. INTERIOR FURNISHING ORDER FORMS

31. LETTER OF JUSTIFICATION FOR WAIVER

5. SID/CID SUBMITTAL MATRIX SUMMARY

INTERIOR DESIGN SUBMITTALS RUN CONCURRENT WITH ARCHITECTURAL SUBMITTALS.

		DESIGN PHASE			
ITEM	DESCRIPTION	35%	65%	95%	100% RTA
1.	TITLE PAGE	X	X	X	X
2.	TABLE OF CONTENTS (SID)	X	X	X	X
3.	NARRATIVE (SID)	X	X	X	X
4.	EXTERIOR ELEVATION	X	X	X	X
5.	EXTERIOR MATERIAL LEGEND	X	X	X	X
6.	EXTERIOR COLOR BOARDS	X	X	X	X
7.	INTERIOR COLOR PLACEMENT PLAN	X	X	X	X
8.	INTERIOR COLOR BOARDS	X	X	X	X
9.	SIGNAGE COLOR BOARD	X	X	X	X
10.	WORKSTATION COLOR BOARDS	X	X	X	X
11.	INTERIOR FLOOR PLANS	X	X	X	X
12.	ROOM FINISH SCHEDULE	X	X	X	X
13.	SIGNAGE PLANS			x	X
14.	PREWIRED WORKSTATIONS COMPOSITE FLOOR PLANS	X	X	X	X
15.	PREWIRED WORKSTATION PANEL PLANS	X	X	X	X
16.	PREWIRED WORKSTATION ELECTRICAL/VOICE/DATA PLANS	X	X	X	X
17.	WORKSTATION ELEVATIONS AND INVENTORY DRAWINGS			X	X
18.	TITLE PAGE (CID)	X	X	X	X
19.	TABLE OF CONTENTS	X	X	X	X
20.	NARRATIVE	X	X	X	X
21.	PHOTO OF PROPOSED RENDERING TECHNIQUE (APPROVAL NEEDED)	X			
21a.	FINAL INTERIOR RENDERING			X	X

5. con't CID SUBMITTAL MATRIX SUMMARY

INTERIOR DESIGN SUBMITTALS RUN CONCURRENT WITH ARCHITECTURAL SUBMITTALS.

		DESIGN PHASE			
ITEM	DESCRIPTION	35%	65%	95%	100% RTA
22.	BLACK AND WHITE SKETCHES (ONE SHALL BE APPROVED FOR THE INTERIOR RENDERING).		X	X	X
23.	COMPOSITE AND SYSTEMS FURNITURE PLANS	X	X	X	X
24.	MANUFACTURER'S SUMMARY LIST			X	X
25.	FURNITURE LOCATION CODE (ONE MAJOR AREA)	X			
25A.	FURNITURE LOCATION CODES(ALL AREAS)		X	X	X
26.	FURNITURE PLACEMENT PLANS (ONE MAJOR AREA)	X			
26A.	FURNITURE PLACEMENT PLANS (ALL AREAS)		X	X	X
27.	FURNITURE ILLUSTRATION SHEETS (ONE MAJOR AREA)	X			
27A	FURNITURE ILLUSTRATION SHEETS (ALL AREAS)		X	X	X
28.	ARTWORK ILLUSTRATION SHEETS (PUBLIC AREAS ONLY, ARTWORK NOT REQUIRED IN PRIVATE OFFICES).			X	X
29.	ITEMIZED COST ESTIMATE		X	X	X
30.	FURNITURE ORDER FORMS (ONE MAJOR AREA)	X			
30A.	FURNITURE ORDER FORMS (ALL AREAS)			X	X
31.	LETTERS OF JUSTIFICATION.		X	X	X

6. TYPICAL CID FURNISHINGS AND COST GUIDELINES

6.1 CID FURNISHINGS

ADP tables/printer stands
Acoustical Partial Height Partitions 6' of less in height - freestanding
Artwork
Beds/wall units/ night stands/ chests/ refrigerators
Bedspreads/bedding
Bookcases
Bulletin board/ projection screens(If NOT attached to structure.)
Carts
Chairs - all kinds, including stools
Desks - freestanding
Drafting tables
Draperies
Files - all kinds
Library furniture - book stacks/card files/ study carrels
Modular desk units
Podium/ lecture stands
Systems furniture workstations (If not in SID)
Planters/art/waste & ash receptacles
Storage - all kinds
Tables - all kinds
Upholstered lounge seating (sofas, etc.)
Wardrobes

6.2 FURNISHINGS COST GUIDELINES

The figures are based on an Air Force FY 88 Costs Guide and an inflation factor of 5% per year should be included for subsequent years. These guidelines are for actual items (furniture, window treatments, accessories, etc.) and they do not include other associated cost such as contractor's overhead, profit and shipping.

Overseas Consideration: If local items are used prices may vary from country to country and may vary depending on the current exchange rates.

FACILITY TYPE	$/SQUARE FEET
Administration Space (Conventional Furn)	$ 7.00- $15.00
Administration Space (Systems Furn)	$33.00- *
Airmen Club (Not incl kitchen equip)	$14.00
Alert Facilities	$12.00
Auditorium	$35.00
Base Ops DV Lounge	$18.00

FACILITY TYPE	$/SQUARE FEET
Billeting Office	$15.00
Chief Suite (Billeting)	$17.00
Child Development Center	$13.00
Classroom	$20.00
Clinic/Dental Clinic (not incl equip)	$35.00
Conference Room	$18.00
Dining Facility (incl kitchen equip)	$35.00-$45.00
Dining Facility (not inclu kitchen equip)	$15.00
DV Suite (Billeting)	$24.00
Flight Training Center	$30.00
Family Housing Office	$14.00
Golf Clubhouse	$12.00
Intelligence Training Center	$30.00
Medical Training Center	$30.00
Package Store	$28.00
NC Officer Mess (Not incl Kitchen equip)	$17.00
Officer Open Mess (Not incl Kitchen equip)	$17.00
Recreation Center	$11.00
Transient Living Facility	$15.00
Unenlisted Personnel Housing	$16.00*
Visiting Airman Quarters	$13.00
Visiting Officers Quarters	$16.00*
Yacht Clubhouse	$12.00
Youth Center	$12.00

FACILITY TYPE	$/SQUARE FEET
*UNIT BUDGET GUIDES	
Admin Space (Systems Furn)	1994 price ($4,000/per workstation incl instal(ergo chair $350.00)
1988 Price	
Billeting Office/Lobby	$14,000-$16,000 refinish existing. $35.0000-50,000 for new
Distinguished Visitor Suite	$15,000 per one bedroom suite $20,000 per two bedroom suite $37,000 per 2/3 bedroom apartment
Transient Living Facility One Bedroom, Living/Dining 525 sq feet (new construction)	$15,000 per standard unit
Dorms	
Unaccompanied Enlisted Personnel Housing	$2,500-$3,500 Per person
UOPH	$ 7,000 per single unit
VAQ	$ 6,000 per double occupancy.
VOQ	$ 5,000 per single occupancy $ 8,000 per single Suite. $11,000 per double Suite.

PARAGRAPHS 7-15 EXPLAIN THE FORMAT REQUIRED FOR THE FOLLOWING:

7. PREWIRED AND SYSTEMS FURNITURE WORKSTATIONS
8. MANUFACTURE'S SUMMARY LIST
9. FURNITURE LOCATION CODES
10. FURNITURE ILLUSTRATION SHEETS
11. FURNITURE PLACEMENT PLANS
12. ARTWORK
13. FURNITURE COST SUMMARY
14. ORDER FORMS
15. LETTER OF WAIVER JUSTIFICATION

7. PREWIRED AND SYSTEMS FURNITURE

7.1 General

Prewired and or systems furniture workstations shall be designed with generic components and work surfaces that are typically sold by various manufacturers of systems furniture. Indicate on the contract drawings one manufacture's name and finishes as a bases for design. This will provide a general of range colors for competitive bid purposes.

Indicate in the Guide Specifications 12640 Prewired Workstations, the fabric width, fiber content, and construction method. DO NOT INDICATE A VENDOR IN THE SPECIFICATIONS. INDICATE A VENDOR ONLY ON THE DRAWINGS.

7.2. COMPOSITE FLOOR PLAN

A Composite floor plan shall show the all panels, components and free-standing furniture in relationship to the building and the building systems such as light switches and mechanical devices.

7.3. PANEL PLAN

The panel plan shall indicate a panel symbol legend, all panel placements, critical dimensions of aisles widths and critical dimensions in relation to the building's structure and the building's electrical/mechanical system devices and the panels. Each panel shall be noted as follows:

N (non-power) Width (in feet) Height (in inches)
or
P (power)

Example: a non-powered panel 2 feet wide and 68 inches high will be noted on the plan N 2 68

7.4 ELECTRICAL, VOICE AND DATA PLAN

The Electrical, voice and data plans shall indicate all panel placements, a symbol legend, and all receptacles used in each workstations. This plan shall also indicate the height and location of the building's light switches and building's mechanical control devices like thermostats. Provide a general note that on the "PREWIRED WORKSTATION plans" are to be coordinated with the Communication and Mechanical Engineering Plans.

7.5 ELEVATION AND INVENTORY PLAN

The Elevation and inventory drawings shall illustrate each typical workstation in elevation form with a related inventory list of all panels and components used to build the typical. The inventory list shall be generic in description.

7.6 FINISHES

It is suggested when selecting finishes for prewired workstations that only two (2) fabric colors be used: one color for all panels and one color for tackboards. A third color can be used as a means of "wayfinding" for large open office projects.

7.7 COST

The average cost of a prewired workstation is $4000.00. Do not exceed this average cost figure or the project will be rejected. Verify line item 10 in the 1391 for a line item total cost of the prewired workstations appropriated for the project.

7.8 WORKSTATION LOCATION CODE

Each and every workstation will be identified on each plan with a single alpha identification code to indicate the "Typical". For example all like reception stations are "A" and like offices are "B". Every workstation shall have a "room number" that is separate and apart from the fixed room numbering system. This is to provide consistent workstation identification throughout all drawings. An example would be "A-100" "B-101" "B-102" "B-103".

7.9 PREWIRED WORKSTATION PACKAGE ITEMS

1. Panels

1.1 Acoustical/nonacoustical
1.2 Powered/nonpowered
1.3 Connecting hardware

2. Components

2.1 Work surfaces
2.2 Drawers
2.3 Shelves(with doors/ without doors)
2.4 Files (lateral, panel hung/ bins)
2.5 Task Lights/special purpose
2.6 Counter tops
2.7 Drafting surface

3. Accessories

3.1 Tackboards
3.2 Locks
3.3 Shelf dividers
3.4 Reader Stand
3.5 Paper flow devices
3.6 Marker boards

3.7 Computer turntable
3.8 Printer stand
3.9 Coat rack
3.10 Wire guides

4. Signage

4.1 Organization signs
4.2 Workstation name signs

8. MANUFACTURER'S SUMMARY LIST

Provide a summary of all the manufactures' used in the CID package. Manufactures name, address, phone, fax and Point of Contact is to be included.

9. FURNISHINGS LOCATION CODE

This CODE is assigned by the interior designer to each conventional furnishing item indicated in the CID. Use of this code is important for quick reference between Order Forms, Furniture Illustrations, and Placement Plans.

The first letter of the code is a GENERAL CATEGORY
EXAMPLE:
A - Accessories
B - Book storage
C - Chairs

The second number of the code is a SPECIFIC CATEGORY

1 - Plant (7' height in brass container)
2 - Clocks, Peter Pepper, #0000 Color Blue
3 - Wastebaskets, FSS, Color Black
4 - Chalkboard: Egan Visual, Oak

OVERALL EXAMPLE: C1, C2 and C3

C - CHAIRS

1 - Guest chair, Knoll, #1234, Color: #12 Red
2 - Ergo Chair, Knoll Bulldog, 1233, Color: #34 Blue
3 - Stacking Chair, Fixtures, Bola, 1234, Color #12 Multi

10. FURNITURE ILLUSTRATION SHEET

A Furniture Illustration Sheet is a pictorial example with finish samples o a single product specified for the CID. Only one product is illustrated per page.

The Furniture Illustration Sheet shall have the following information:

1. A Picture or line drawings of the product specified.

2. A Location Code to Key the specified product to the Footprint Plan and the Furniture Placement Plan.

3. A Sample of the product's finishes.

4. Recap quantity of illustrated item listed by room number
   (e.g. 4 ea. Room 104 Commander
   3 ea. Room 103 Receptionist)

5. Job name, Job Location, Date.

11. FURNITURE PLACEMENT PLAN

A Furniture Placement Plan consist of one room broken out from the Composite Furniture Plan which identifies each furniture component placed in that room. All rooms shown on the Composite Furniture Plan shall be illustrated in the Furniture Placement Plan section. The Furniture Placement Plans shall be drawn at a 1/4" scale. Large rooms/areas shall be drawn at 1/8" scale.

Each Furniture Placement Plan shall contain the following:

1. 1/4" Scale Drawing showing room and furniture.

2. Location Code and quantity of each item specified per room.

3. Name and Number of Room

4. Job Name , Job Location, Date.

The Composite Furniture Plan shall be a full size contract drawing with location codes. Half sizes will not be acceptable for review.

12. ARTWORK ILLUSTRATIONS SHEETS AND PLANS

The Artwork Illustrations Sheets shall have a pictorial example of the artwork with mat colors. Color photos copies are accepted.

Full size drawings of the Artwork Plan are to show plan placement of artwork and an elevation for all the artwork showing placement height and installation instructions.

Each Artwork sheet shall have the following:

1. A Picture of the proposed artwork.

2. Location Code

4. Room Name and Number that artwork will be displayed in.

5. Job name, Job Number, Date.

6. Mounting height and installation instructions.

13. ITEMIZED FURNITURE COST ESTIMATE

The itemized furniture cost estimate sheets list all furnishings, indicate quantities, unit costs and grand totals. The Cost Estimate is organized according to UNICOR and GSA Source/Schedules. The Cost estimate will also include a general 10% contingency and 7% installation. Because some items will include freight in the price, note that freight charges are not included.

14. FURNITURE ORDER FORM

The Furniture Order Forms indicate all information necessary to order products specified in the CID. Only one product shall be listed per page.

Organize and separate the Order Forms according to the Sources and GSA Schedules to coordinate with the Itemized Furniture Cost Estimate. Do not organize forms according to the Locations codes.

15. LETTER FOR WAIVER/JUSTIFICATION

FOR CID ITEMS THAT REQUIRE A JUSTIFICATION, SUCH AS OPEN MARKET ITEMS FOLLOW THE FORMAT EXAMPLE AND ATTACH IT TO THE APPROPRIATE ORDER FORM. See Appendix "C" for UNICOR Waiver information.

JUSTIFICATION FOR ACOUSTICAL PANELS
December 15, 1994

1. REQUESTING ACTIVITY: U.S. Army Corps of Engineers
EN-DA/Peggy Roberson
100 W. Oglethorpe Avenue
Savannah, GA 31402-0889

2. POINT OF CONTACT: Peggy Roberson
(912) 652-5144

3. REQUIREMENTS: To provide acoustical and visual control through a cost effective and timely means. The panels will separate and define workstations for 7 individuals representing 5 engineering disciplines. These individuals are located in 1,470 sq. ft. of open area.

4. PROPOSED SOLUTION: To purchase portable, acoustical panels 62 inches high and various widths from XYZ manufacture. This manufacturer delivers and installs within 30 days from the date they received the order. See the attached order form for stock number, dimensions, colors and manufacturers.

5. UNICOR WAIVER: Market research indicates that the Federal Prison Industry does not supply this type of portable panel.

6. TRIANGLE/INTANGIBLE BENEFITS: The tangible benefits to be gained from this purchase will be an enhancement of employee morale and productivity due to the reduction of sound and visual disturbances currently found in this open space.

7. IMPACT IS REQUEST IS NOT APPROVED: Employee morale will drop, which could impact performance.

8. ESTIMATED DATE ITEMS ARE REQUIRED: ASAP but no later than 30 days.

16. HEALTH AND SAFETY CRITERIA

16.1 PROVIDE PROTECTION AGAINST PERSONAL INJURY AND DEATH FROM:

16.1.1 FALLS

* ASTM D-2047-Test for Slip Resistance of Hard Surfaces

16.1.2 CHEMICAL EMISSIONS
16.1.3 ELECTRONIC EMISSIONS
16.1.4 MICROBIAL CONDITIONS

NOTE: 16.1.2, 16.1.3, and 16.1.4 are not defined by code at the present. OSHA has a proposed regulation in relation to indoor air quality standards. It is currently in the review phase. It is not in

16.1.5 FIRE (Interior Finishes and Furnishings)

* ASTM-E-84-Steiner Tunnel Test.

* NFAP-701-Standard method of Fire Test for Flame Resistant Textiles and Films.

* NFPA-705-Field flame Test for Textiles and Films

* FF 1-70-Standard for the Surface Flammability of Carpet and Rugs (Methenamine Pill Test)

* NFPA 80-Fire Test of Door and Windows

* NFPA 253-Flooring Radiant Panel Test

* NFPA 258-Research Test method for Determining Smoke Generation of Solid Materials.

* NFPA 259-Potential Heat of Building Materials

* NFPA 260 Methods of Tests and Classification System for Cigarette Ignition Resistance of Components

* NFPA 261- Method of Test for Determining Resistance of Mock-up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes.

* NFPA 264- A Standard Test Method of Test for Heat Release Rates for Upholstered Furniture Components or Composites and Mattresses Using an Oxygen Consumption Calometer.

* NFPA 267- Standard on Mattress, subjected to Open Flame Ignition, Using a Large-Scale Oxygen Consumption Calorimeter.

* UL-1056- Fire Test of Upholstered Furniture

* TB 133- Flammability Test Procedure For Seating Furniture for Use in Public Occupancies. State of California Bureau Home Furnishings.

* TB 117- (Section A though E) Test Procedures for Testing the Flame Retardance of Resilient Filling Materials used in Upholstered Furniture.

16.2 PROVIDE FURNISHINGS AND EQUIPMENT WITH ANTHROPOMORPHIC FIT AND STABILITY

* ANSI/BIFMA X5.6-86 Standard for office Furnishings.

16.3 PROVIDE GLARE-FREE ILLUMINATION OF WORK SURFACES
* ANSI E-97

16.4 PROVIDE ACCEPTABLE REFLECTANCE LEVELS

* ASTM E-97-IES

16.5 PROVIDE FOR USE AND MAKE ACCESSIBLE TO PHYSICALLY DISABLED

* American Disabilities Act: ASTM 117.1
* Uniform Federal Accessibility Standards

16.6 PROVIDE SAFE AND SWIFT EGRESS FROM INTERIOR SPACES

* NFPA 101 Fire Safety Code-94
* National Building Code, BOCA
* Standard Building Code
* Uniform Building Code, ICBO

16.7 PROVIDE ACOUSTIC CONTROL
* Airborne sound: ASTM C 423, PBS C.1
* Speech Privacy: SPP, Speech Privacy Potential
* Impact sound transmission: ASTM C 423-66, PBS C-2

17 CHECKLIST FOR SID REVIEWS

17.1 GENERAL

The Checklists are used to ensure that SID/CID binders and all contact drawings and specifications are complete and will meet customer approval.

17.2 CHECKLISTS FOR SID BINDERS

The correct organization of the SID Binder is important to ensure a rapid and accurate evaluation of the submittal and to ensure all the information provided in the binders appears in the contract documents. The SID binder shall include the information in the order indicated in paragraphs 4 and paragraph 5 Submittal Matrix Summary 1-17.
17.2.1 CHECKLIST FOR SID NARRATIVE

Review the statement of DESIGN OBJECTIVES. Design Objectives are to indicate the proposed building materials, color scheme and the philosophy for the selection each. When applicable the design narrative shall discuss Energy Efficiency, Safety, Maintenance, Durability, Image and Occupant Morale.

17.2 CHECKLIST FOR EXTERIOR COLOR LEGEND AND COLOR BOARDS

Exterior Colors are often dictated by the Installation's Design Guidance. In these instances, the Federal Standard 595b paint colors may be referenced for factory finished items. See examples below.

Metal Roof Federal Standard 595b 0000

17.2.2 REVIEW QUESTIONS

1. Are all exterior materials labeled and properly identified?

2. Do all exterior materials and finishes meet standard Installation Design Guidance requirements?

3. Are there any miscellaneous exterior materials and finishes that need to be listed and sampled in the SID Binder OR indicated in Guide Specifications OR contract drawings?

4. Are all the exterior materials sampled in SID Binder and indicated on Finish Schedule?

5. Are all exterior materials indicated on Finish Schedule sampled in SID Binder?

17.3 CHECKLIST FOR SID INTERIOR COLOR SCHEME AND COLOR BOARDS: Review the architectural finish samples for an orderly arrangement on 8 1/2" x 11" color boards according to like rooms/areas receiving like finishes. Each color board will be noted as a COLOR SCHEME. Each Color Board shall consist of a material sample board and a material legend board.

17.3.1 Each Color Scheme shall be properly identified:
[The following information should be on the lower portion of each sheet]

a. Project title
b. Location
c. Date
d. A/E Firm

17.3.2 Each material legend shall have written identification of materials in the order as follows:

1. Alpha Code
2. Material
3. Manufacturer
4. Color name
5. Color Number

The material legend identification shall be consistent with the material legend found in the Exterior and Interior Finish Guide Specification or in the contract drawings. Without exception all rooms and areas shall be identified and their finishes shown.

* The general contractor will not be receiving the SID binders therefore all finishes and their placement must be on the contract drawings or in the Guide Specifications.

17.4 CHECKLIST FOR INTERIOR COLOR SCHEME

17.4.1 SID REVIEW QUESTIONS

COLOR SCHEME

1. What basic color scheme is used?
   a. Monochromatic
   b. Analogous plus complement accent
   c. Complementary
   d. Split Complementary
   e. Triadic

2. Is there a basic neutral color for all walls?

3. Does the color scheme create a sense of order?

4. Are accent colors appropriate in hue value and intensity to create interest? Do they overpower the space?

5. Are Accent Colors clearly indicated on the contract drawings?

6. Are the colors placed to create a "visual balance" throughout the building?

7. Do the Accent colors assist with "pathway finding"?

GENERAL FINISHES

1. Do finishes offer variety in appearance?(soft, hard, smooth, rough, dull, gloss, matte)

2. Do selected finishes enhance the architectural lines of the building?

3. Are materials, finishes,and colors appropriate for the surfaces they will be covering?

4. Are walls painted [Gloss] [Semi-Gloss] [eggshell]? (Flat Latex wall paint is not durable for interior walls.)

5. Do the interior finishes reflect and reinforce the appropriate image for the facility?

6. Is the flooring selected for all areas appropriate in color pattern, texture and scale?

7. Does color and pattern in Carpet/Carpet Tile relate to scale and size of room?

*3

8. Will Carpet/ Carpet Tile color and pattern hide soil and wear path?
9. Are window treatments compatible with architectural detailing?

10. Will window treatment and its installation cause unnecessary wear or abrasion?

11. Are finishes selected creative in use and placement?

12 Will there be acoustical problems because of the materials selected? (A balance of Reflective and Absorptive surfaces is necessary)

13. Will all colors, materials, and finishes retain their appearance long-term?

14. Are all interior finishes labeled and properly identified?

15. Do all interior finishes meet standard codes requirements?

16. Are there any miscellaneous interior finishes and materials that need to be listed, sampled and specified?

17. Are all interior materials sampled in SID Binder listed on the Finish Schedule?

18. Are all materials listed on the Finish Schedule sampled in the SID Binder?

19. Are there any treatments such as bordered carpets, or multi-color ceramic tile borders that need to be illustrated in plans but are not?

20. Are all SID finishes specified according to the quality to ensure quality and performance?

PREWIRED WORKSTATIONS

1. Do the prewired workstations and specifications coordinate to fully cover all the information required for bidding, and installation of the product?

2. Have all the required contract drawings as indicated in paragraph 5 of the Submittal Summary Matrix been provided?

17.4.2 CHECKLIST FOR SAFETY:

Do all finishes selected shall meet code requirements and are appropriate in color, texture, and pattern to insure the well being of the inhabitants?

17.4.3 FACILITY SIGNAGE REVIEW QUESTIONS

1. Is the signage listed on a separate plan and indicated correctly in the specifications?

2. What type face is specified? Does it meet approved standards?

3. Is Symbol Signage used in lieu of Printed identification for restrooms?

4. Are Signs flexible so that names and rooms can be changed easily?

5. Are Signage colors and samples in the SID?

For additional reference on signage refer to Sign Standards relative to the Department of Defense.

18.5. CHECKLIST FOR CID BINDER LAYOUT

The CID Binder is the most detailed of all binders submitted because of the numerous components specified ,priced, and illustrated. The correct organization of the CID Binder is important to insure a rapid and accurate review of the building's furniture components and their relationship to the architecture and it's finishes. The CID Binder shall include the information in the order indicated in paragraph 5 Submittal Matrix Summary items 18-31.

18.5.1 CHECKLIST FOR CID NARRATIVE: Review the statement of DESIGN OBJECTIVES explaining the CID interior design philosophy of the facility. Design Objectives and the proposed method of accomplishing the objectives shall cover, when applicable, the furnishings and their relationship to the building and it's inhabitants, energy, efficiency, safety, health, maintenance, image, personal performance of occupants and functional flexibility.

18.5.2 CID REVIEW QUESTIONS

1. Does the layout of the CID Binder follow the TABLE OF CONTENTS format indicated in paragraph 4.7 and 5?

2. Are all pages properly identified?

3. Are all samples labeled and identified?

4. Are there any miscellaneous components shown on the Footprint Plan that are not shown in the CID Binder?

5. Are there any miscellaneous components shown in the CID Binder that are not reflected on the FURNITURE PLACEMENT PLANS?

CHAIRS

1. Is the chair appropriate for the task?

2. Is the style of the chair in keeping with the overall theme of the building and other components selected?

3. Is the chair scaled correctly for the space it occupies?

4. Are chair costs appropriate for the project?(ERGO $300-350)

5. Is the finish of the chair interesting and in harmony with the elements surrounding it?

6. Are all chairs listed on the composite Footprint Plan, Furniture Placement Plans, Illustration Sheets, Location Code and Order Forms?

DESK

1. Is the desk appropriate for the task?

2. Is the style of the desk in keeping with the overall theme of the building and other components selected?

3. Is the desk too large for the space it occupies?

4. Are the desk costs appropriate for the project?

5. Is the finish of the desk interesting and in harmony with the elements surrounding it?

6. Are all desks listed on the composite Footprint Plan, Furniture Placement Plan, Location Code and Cost Estimate, Furniture Illustration Sheet,and Order Form?

COST ESTIMATES and ORDER FORMS

1. Are cost estimates correct?

2. Are Order Forms completed and accurate?

18.5.3 CHECKLIST FOR SAFETY

1. In the placement of furniture, is emergency egress considered?

2. In the placement of furniture, is consideration given to the requirements for the handicapped. (Reference: Uniform Federal Accessibility Standards and ADA).

19. LESSONS LEARNED

Lessons Learned are for information only and to eliminate lost effort in the development of SID/CID submittals. Lessons learned are from both Air Force and Army projects.

Experience has taught that generally neutral interior environments with color accents used appropriately in SID finishes and all CID finishes provide the best "look" for a government facility. The common sense approach to all projects is the most cost effective way to achieve customer satisfaction.

Interior Design Solutions are important to the treatment and housing of a personnel. If leaders expect excellence in people, the environment in which they are housed should not be created on a whim or by individuals not technically educated and experienced in creating such environments.

Although interior environments cannot motivate people to excel they can provide a background that creates a functional opportunity for them to excel.

The Mobile District considers a quality interior design environment to be one that meets the followings ten (10) objectives:

1. COMPLETE COORDINATION BETWEEN CONTACT DRAWINGS AND SPECIFICATIONS. THE LACK THEREOF IS A POTENTIAL SOURCE OF LIABILITY.

2. The use of durable, easily maintained finishes that support "good housekeeping".

3. Appropriate use of accents colors that are easy to "live with" and cost effectively removed when updating the "look".

4. Spaces that are planned to support life safety.

5. Spaces that meet the functional needs of the user. Maximize flexibility for future change in both SID and CID plans.

6. Furnishing selected that support personal performance and personal health.

7. Appropriate use of All the design elements (Landscape, Architecture and Interior Design)to support "path wayfinding" "up to" and within the facility.

8. Accurate documentation of all the contract documents(SID) and procurement documents (CID).

9. Finishes and furniture selected that meet government procurement regulations.

10. Customer satisfaction.

19.1 EXTERIOR FINISHES

1. Exterior SID: The Exterior building finish materials, colors and signage shall be in accordance with the Master Plan/Installation Design Guide of the installation on which the project is being constructed.

2. Verify with each installation what their current standard exterior finishes are.

3. Use the Federal Standard Number 595B to indicate the range of exterior finish colors.

19.2 INTERIOR DESIGN PHILOSOPHY

1. Interiors building finishes, furnishings and colors schemes are to be appropriate and support the function of the facility.

2. Interior design objectives are to create an environment that enhances public image, employee morale, provide building finishes that are durable, easy to clean, cost effective to maintain and support life safety.

3. Appropriate accent colors are easy to "live with" and can be easy and cost effectively removed when updating the "look" is the objective.

4. Accurate documentation of finishes and furnishings in both the SID and the CID.

5. Talk to the customer. Let them know what you are planning before you submit the color boards. Do more in-process design and review communication with the customer before formal submittals.

19.3 INTERIOR FINISHES

1. Non-slip surfaces at entryway.

2. Semi-gloss for trim only

3. Egg-shell finish for walls if possible.

19.4 INTERIOR COLORS

1. Generally the exterior color scheme should transition and continue into the interior color scheme.

1. A neutral warm or cool color palette with accent colors used in furnishings has generally been the most successful for most interior projects.

2. Colors in a mid-tone range used for door trim and matching base is generally approved.

3. Light colored carpets shows soil easily and will be disapproved.

4. Painted doors, trim and walls to blend (do not use extreme contrast colors for doors and walls).

5. Because the general contractor can substitute colors, textures and patterns during the construction process "permanent interior building finishes" are most successful if they are neutral colors.
The most typical finishes substituted during construction are
* Plastic laminates, vinyl wall coverings, ceramic tile, toilet partitions, wood stains.

19. 5 ACCENT COLORS

1. Ceramic tile accent borders on floors and walls in restrooms (one or two colors on a neutral field.)

2. Multi-colored graphic pattern carpet with solid or fleck colors used as accent borders.

3. Accent vinyl wall covering colors used a visual "pathway finding" guide through a facility.

4. Colorful fabrics with small pattern designs used on guest chairs.

19.6 WALL COVERING

1. Use Type II for all areas. Type III only in heavy use corridors. The additional satin resistant coatings used for health care environments.

2. The architect is to design walls with a correct vapor barrier. Wall covering can be used on both exterior and interior perimeter walls.

3. Must meet NFPA Class A Flame Spread rating.

4. Use chair rail when walls are subject to frequent furniture movement and scarring. ig. conference rooms and waiting areas.

5. Fabric wall covering can only be used in a sprinkled buildings according to NFPA.

19.7 CARPET

1. Primary interior finish and should be the bases for the overall color scheme.

2. Graphic Patterns with random pattern is the best. Avoid large geometric or rigid patterns. They look askew if adjacent to a wall that is not plumb,

3. Avoid bright or light colors which soil easily.

4. Carpet tile is recommended when power and communications are installed in floor raceways.

5. Carpet tile is best for corridors: use patterned fields and solid-colored borders for "pathway finding".

19.8 SIGNAGE

1. Use the Installations' Design Guidance or the appropriate design guide for the Department of Defence agency.

2. Coordinate the signage color with the interiors color scheme.

3. Specify a flexible sign that allows for easy personnel name change or room name change.

4. Signage changes. It is helpful when ordering additional signage that signage specified be on a GSA schedule.

5. Bulletin Boards and fire exit plans are to be included in facility signage package.

19.9 UPHOLSTERY

1. Tweeds and small scaled patterns retain their appearance longer.

2. Avoid solid colors because they show dirt, lint and fade faster that patterns and tweeds.

3. Vinyls are used for wet areas such as labs.

4. Avoid vinyls fabrics in administrative areas or for general use seating.

5. Leather seating is used for only high ranking officers and directors.

6. Use Nylon and Nylon blends seating fabrics that are easy to maintain.

19.10 FURNITURE

1. Black and wood veneer horizontal surfaces are discouraged in general public use areas. A plastic laminate table surface in public areas retains it's appearance longer.

2. Mid-tone range colors for work surfaces are recommended because it will not add to eye fatigue. Light oaks, beige, and grays work best.

3. Black finishes are discouraged for case goods because it is a housekeeping problem.

4. Oak is an acceptable color range for woods and laminated wood surfaces and frames. Darker woods are traditionally accepted for those of higher rank.

5. Use commercial grade, performance tested GSA contracts

6. Laminate tops are recommended for all work surfaces other that executive suite areas (wood veneer may be used).

7. Systems furniture plans require Air Force HQ Interior Design Review and approval.

8. Acoustical panels over 65" in height may restrict light and air distribution. 62-64" high panels are generally the best.

9. Fabric finishes on flipper doors will not be approved.

19.11 ARTWORK

1. Only use in public areas; not in private personnel offices.

2. Use to assist occupants in "pathway finding"

3. Hang artwork at 5'-6" with security type devices.

4. Choose mats and frames which complement other accessories and interior color scheme.

5. Art should be large enough to fill the space.

19.12 PLANTS AND ACCESSORIES

1. Plants help soften the space

2. Do not specify live plants. This type of specification requires a maintenance contract.

3. Use quality artificial plants such as with real trucks, bark etc.

4. Specify sturdy containers. Limit the use of wicker baskets.

19.13 Window Treatments

1. Use doubled return hems and doubled bottom hems.

2. Draperies are not encouraged in areas other that executive suites and living areas.

3. Mini blinds that match the window frame are recommended for admin space.

4. Vertical blinds are accepted and can have a fabric inserts. Do not

specify any fabric vertical blinds without using a PVC insert vain.

5. Specify blackout lining in sleeping areas

6. Fabric valances maybe used over mini blinds.

7. Use decorative rods or top treatments to give draperies a finished appearance.

8. Draperies are to be 2.5 fullness.

9. Ripple fold over pinched pleats recommended.

10. Draperies are to have minimum 4 inch returns and 2 inch overlaps with a 4 inch heading. Weighted at the corners and all seams.

19.14 BEDSPREADS

1. Use a fitted style bedspread.

2. Pattern is recommended.

3. Minimum 5 oz 100% polyester fill

4. Fabric must have dimensional stability with less than 2% shrinkage after washing at 160 F degrees.

19.15 THE DISTINGUISHING CHARACTERISTICS OF SUCCESSFUL INTERIORS

The Mobile District holds firmly to the position that a successful interior design solution consistently incorporates typical finishes, colors and features to obtain quality interior design solutions. The following guidelines shall be the basis from which all projects will be reviewed and judged for their success.

When planning for the interior environment emphases of one from each of the following groups will hopefully achieve good design:

1. Architectural Emphasis or Component Emphasis
2. Color System in Contrast or Color System in Continuity
3. Directional Reinforcement or Directional Change
4. Value Contrast or Value similarity
5. Surface/Texture Emphasis or Surface/Pattern Emphasis
6. Contemporary/Traditional Emphasis or Eclectic Emphasis

Interior SID: Permanent interior building finishes are to be neutral in color. "Permanent finishes" are considered:

1. Plastic Laminates
2. Vinyl Composition Tile
3. Ceramic Tile or other hard tiles
4. Wood doors (stained wood finish)

*3

5. Metal Doors and Metal Trim
6. Toilet Partitions
7. The majority of walls and ceilings.

The appropriate placement of accent hues and patterns for a government project are considered to be:

1. Accent borders on floors and walls in restrooms.
2. Multi-colored graphic patterned carpet used throughout the facility.
3. Accent colors on vertical surfaces used as visual assistant in "path wayfinding".
4. Artwork
5. Upholstery fabric

Although cost constraints can limit complex design details throughout the facility, there are areas where cost effective use of accents hues and identifying architectural features should be considered and used to create an image. The following areas are ranked according to importance:

1. Lobby Areas
2. Main Conference rooms
3. Command Areas
4. Employee Break rooms and Toilet Rooms
5. General Office Areas

Successful "Path wayfinding" is achieved when users and visitors easily find their way "up to" a building and throughout it's interiors. The District's position is that "path wayfinding" can successfully be obtained by incorporating reason and experience offered by a multi-disciplined team of the Landscape Architect, the Architect and the Interior Designer.

20. SID/CID ILLUSTRATIONS

30% STRUCTURAL INTERIOR DESIGN

FY-95 UEPH DORMS

EGLIN AIR FORCE BASE

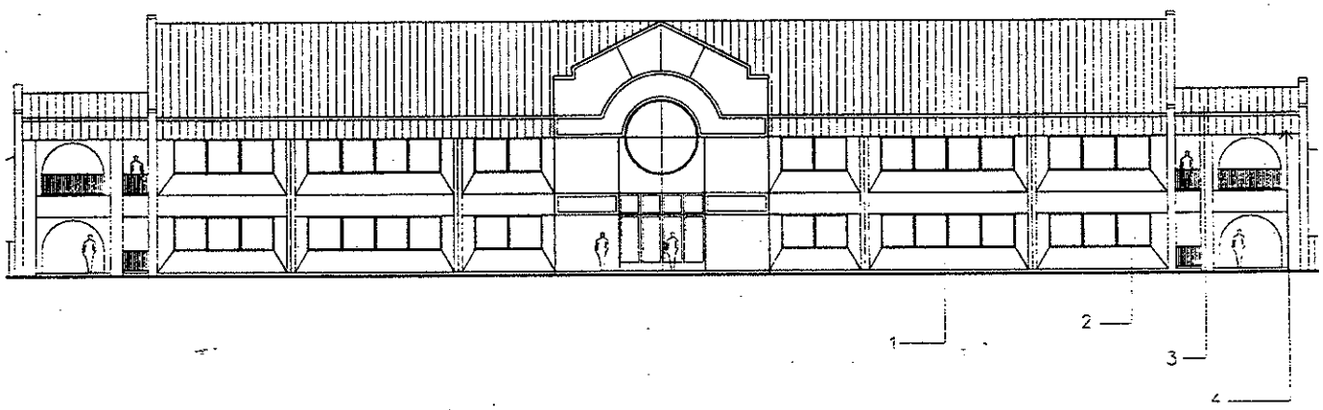
FLORIDA

U.S. ARMY CORPS OF ENGINEERS

MOBILE DISTRICT

MOBILE, ALABAMA

APRIL 1994



1. SMOOTH FACE BLOCK, LT. TAN
2. GLAZING, PPG, SOLARBRONZE TINT
3. METAL ROOF, FEDERAL STANDARD 595B 00000C
4. METAL GUTTER, FEDERAL STANDARD 595B 00000

FRM
DATE

EXTERIOR ELEVATIONS

PROJECT NAME
LOCATION

SAMPLE

1

SAMPLE

2

SAMPLE

3

SAMPLE

4

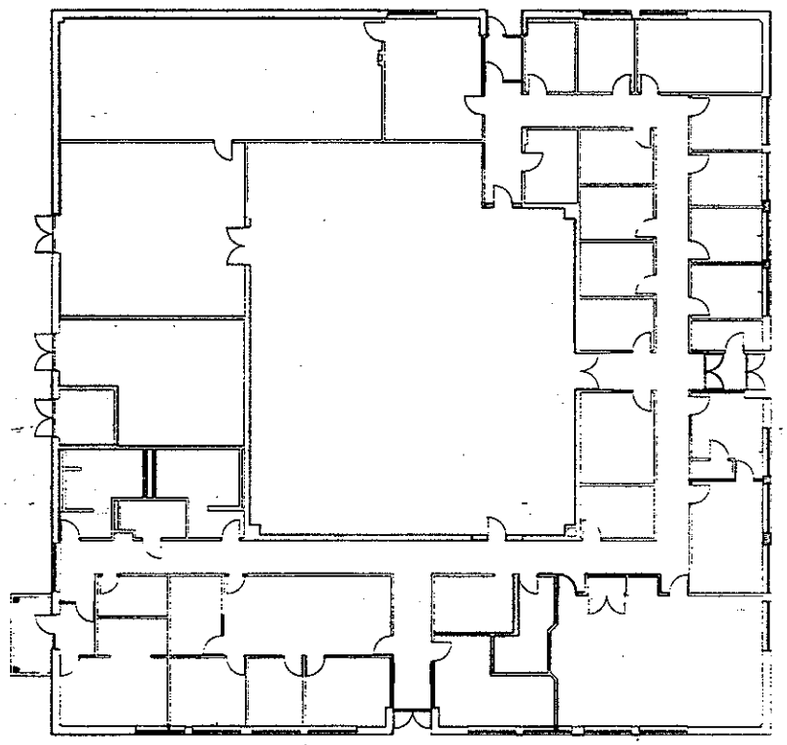
FRM

DATE

EXTERIOR MATERIAL SAMPLES

PROJECT NAME

LOCATION



COLOR SCHEME "A"- GENERAL OFFICE AREAS

COLOR SCHEME "B" TOILET ROOMS

COLOR SCHEME "C" MISCELLANEOUS AREAS

FIRM

DATE

INTERIOR COLOR PLACEMENT

PROJECT NAME

LOCATION

INTERIOR
COLOR BOARDS

FRM

DATE

PROJECT NAME

LOCATION

SAMPLE

FIELD

CT-1

ACCENT

CT-2

SAMPLE

GROUT-1

SAMPLE

CT-3

FLOOR TILE

SAMPLE

P-2

CEILING

SAMPLE

TP-1

PL-1

FIRM

DATE

COLOR SCHEME "C"

PROJECT NAME

LOCATION

CT-1: CERAMIC TILE, AMERICAN OLEAN, 153 ALMOND. 4" X 4"

CT-2: CERAMIC TILE, AMERICAN OLEN, 2" X 2" TEAL

CT-3: CERAMIC TILE, AMERICAN OLEN, 2" X 2" A 20 BEACH TAN

GROUT-1: AMERICAN OLEAN, BROWN

P-2: EPOXY PAINT, WHITE (FOR CEILINGS)

PL-1: PLASTIC LAMINATE, WILSONART, ALMOND, 513 COUNTER TOPS

TP-1: PLASTIC LAMINATE, WILSONART, ALMOND 513 TOILET PARTITIONS

FIRM

DATE

COLOR SCHEME "C"

PROJECT NAME

LOCATION

SAMPLE

APCO WHITE (PLAQUE HOLDER)

SAMPLE

LETTERING

APCO BLACK

SAMPLE

APCO CLEAR (INSERT)

FIRM

DATE

SIGNAGE

PROJECT NAME

LOCATION

*3

XYZ SYSTEMS MFG.

SAMPLE

PANELS FABRIC
466 TAN

SAMPLE

TACKBOARD
033 TEAL

SAMPLE

FLIPPER DOOR AND TRIM
PUTTY

COMPONENTS

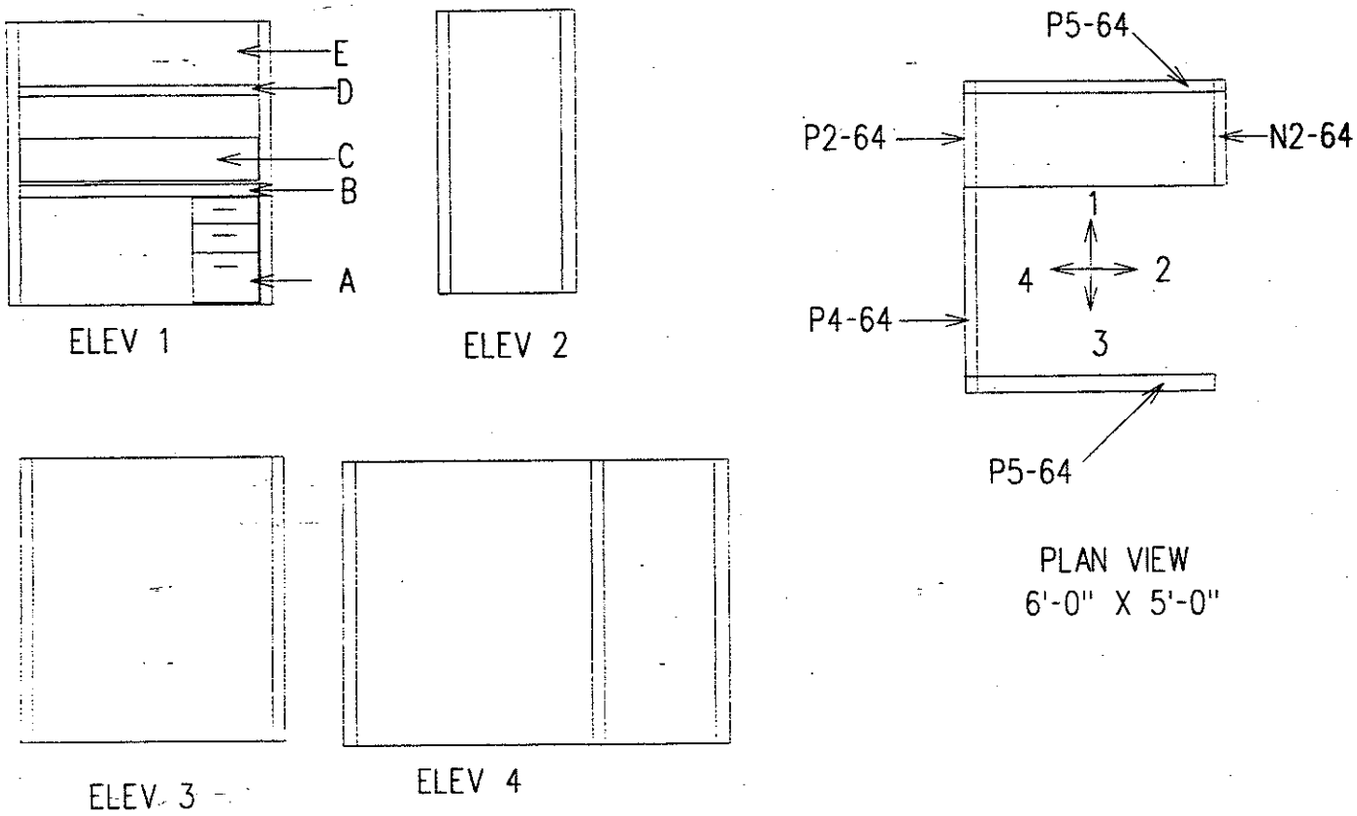
WORKSURFACES

FIRM
DATE

PREWIRED WORKSTATION COLOR BOARD

PROJECT NAME
LOCATION

(Added by Amendment No. 0003)



QTY.	CODE	DESCRIPTION
2	P5-64	2' W X 64"H POWERED ACOUSTICAL PANEL
1	N2-64	2'W X 64"H NON-POWERED ACOUSTICAL PANEL
1	A	3", 3", 12" DRAWER PEDESTAL
1	B	23"D X 60" W HANGING WORK SURFACE

10 EACH TYPICAL" A"

FIRM

DATE

PREWIRED WORKSTATION

TYPICAL "A"

LOCATION

INSERT CONTRACT DRAWINGS OF:

FLOOR PLANS

FINISH SCHEDULE

SIGNAGE PLAN

PREWIRED WORKSTATIONS DRAWINGS

FIRM

DATE

PROJECT NAME

LOCATION

100%
COMPREHENSIVE INTERIOR DESIGN

FY-95
UEPH DORMS

EGLIN AIR FORCE BASE
FLORIDA

U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT
MOBILE, ALABAMA
APRIL 1994

MANUFACTURER ABC
109 MAIN STREET
ANYWHERE, USA 00000
POINT OF CONTACT:
1-800-000-0000

MANUFACTURER XYZ
109 MAIN STREET
ANYWHERE, USA 00000
POINT OF CONTACT:
1-800-000-0000

MANUFACTURER XXX
109 MAIN STREET
ANYWHERE, USA 00000
POINT OF CONTACT:
1-800-000-0000

INSERT COMPOSITE FURNITURE PLANS

FIRM

DATE

PROJECT NAME

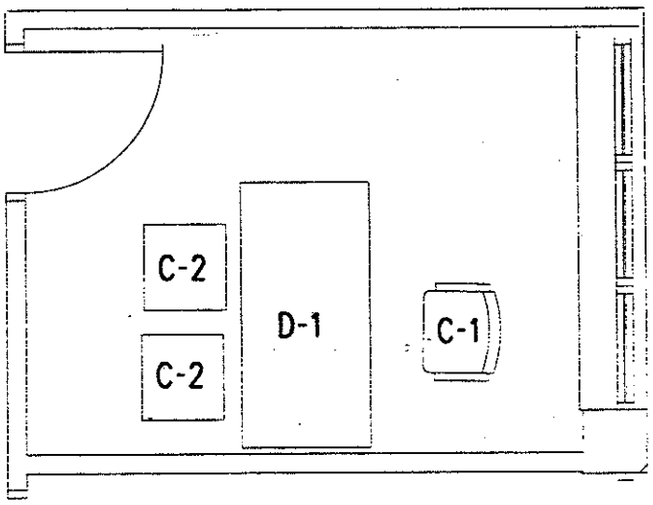
LOCATION

A- ACCESSORIES

B- BOOKCASES

C- CHAIRS

D- DESKS



ROOM:123

QTY.	LOCATION CODE	DESCRIPTION
1 EA.	C-1	KNOLL BULL DOG , BLACK FRAME, COLOR: TEAL
2 EA.	C-2	KRUGER, "VERSA" BLACK FRAME, TEAL
1 EA.	D-1:	XYZ , WOOD: WALNUT

FIRM

DATE

FURNITURE PLACEMENT PLAN

PROJECT NAME

LOCATION

FURNITURE ILLUSTRATION

C-2

SINGLE LINE DRAWING
OR
CUT SHEET

FABRIC:
002 BLUE

SAMPLE

FRAME
BLACK

SAMPLE

ROOM	QTY	TOTALS
123	2	8
124	2	
125	2	
126	2	

FIRM
DATE

FURNITURE ILLUSTRATION SHEET

PROJECT NAME
LOCATION

ARTWORK ILLUSTRATION

A-1

A-1

MAT
002 BLUE

SAMPLE

FRAME
BLACK

SAMPLE

MOUNTING INSTRUCTIONS:

PLACE CENTER OF WALL WITH TOP OF FRAME 64"
ABOVE THE FINISHED FLOOR

ROOM	QTY	TOTALS
123	1	1

FIRM
DATE

ART ILLUSTRATION SHEET

PROJECT NAME
LOCATION

FIRM
DATE

COST ESTIMATE

PROJECT NAME
LOCATION

SOURCE: FSC GROUP 71, PART X CONFERENCE TABLES

CODE	MFG.	ITEM	QT.	UNIT PRICE	TOTAL
T-1	KRUGER	TABLE	04	$ 350.00	1,400.00
T-2	KRUGER	TABLE	01	$ 350.00	350.00
T-3	KRUGER	TABLE	04	$ 350.00	1,400.00
				TOTAL:	$5,4350.00
T-5	VECTA	TABLE	04	$1,000.00	$4,000.00
T-6	VECTA	TABLE	04	$1,000.00	$4,000.00
				TOTAL:	$8,000.00

TOTAL OF ALL CID SOURCES:
10% CONTINGENCY:
7% INSTALLATION:
MISCELLANEOUS FEES:

GRAND TOTAL:

FURNITURE ORDER FORM SAMPLE
PROJECT TITLE

1. LOCATION CODE:
2 DIRECTORATE:
4. DEPARTMENT
5. ACTIVITY:
6. FSC GROUP: 71 PART III SECTION: L CLASS 7110 SIN 499-1 CONTRACT EXPIRATION DATE: MOL:
7. SOURCE: Manufacturer's name etc....
8. PRODUCT NAME:
9. PRODUCT STOCK NUMBER:
10. PRODUCT FABRIC NAME AND COLOR NUMBER:
11. PRODUCT FINISH NAME AND COLOR NUMBER:
12. DIMENSIONS: WEIGHT:
13. DESCRIPTION:(Include construction information; fabric content, finish application)
14. JUSTIFICATION: These guest chairs are coordinated to match the tasks seating at each workstation. The size of the guest chair was critical because of the limited space where they were to be placed. If this company is not selected coordinate the newly proposed finishes with Location Codes: C3, C4 and C5.
15. ROOM LOCATION QUANTITY PER ROOM
16. TOTAL QUANTITY:
17. UNIT PRICE:
18. TOTAL PRICE:
19. FREIGHT CHARGES: FOB DESTINATION (Note if freight charges are included in the price of the CID item.)
20. Additional remarks or justification.

21. APPENDICES

A. ADA REQUIREMENTS

B. COMMANDER'S POLICY

C. UNICOR WAIVER

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

CEMP-EA/CECW-EP

25 JAN 1994

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Access for People with Disabilities

1. Reference Secretary of Defense memorandum dated 20 October 1993, subject as above (enclosure 1).

2. In accordance with the referenced memorandum, the Department of Defense (DoD) has implemented a new policy concerning accessibility standards. In the past, USACE was required to meet the requirements of the **Uniform Federal Accessibility Standards (UFAS)** and not the **Americans with Disabilities Act Accessibility Guidelines (ADAAG)**. The new policy requires that, in addition to meeting UFAS requirements as required by 42 U.S.C. 4151-4157 and consistent with 29 U.S.C. 794, the requirements of the ADAAG that provide equal or greater accessibility then the requirements of the UFAS must also be met in those facilities subject to UFAS. The facilities excluded under UFAS (such as unaccompanied personnel housing) are still excluded under this new policy, even though the ADAAG has no such exclusions. The implementation of this new policy is considered to have *routine application* as defined by ER 1110-345-100.

3. Copies of UFAS and ADAAG criteria are available from the Architectural and Transportation Barriers Compliance Board, telephone (202) 272-5434. Copies of the Title II Technical Assistance Manual which explains differences between the two standards are available from the Department of Justice, (202) 514-0301.

4. The Directorate of Military Programs POC is Mr. D. S. Gim, CEMP-EA, (202) 272-0440, and the Directorate of Civil Works POC is Mr. Douglas J. Kamien, CECW-EP, (202) 272-8894.

FOR THE DIRECTORS OF MILITARY PROGRAMS AND CIVIL WORKS:

Encl

RICHARD C. ARMSTRONG, P.E.
Chief, Engineering Division
Directorate of Military Programs

PAUL D. BARBER, P.E.
Chief, Engineering Division
Directorate of Civil Works

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

CEMP-EA

31 MAR 1993

COMMANDER'S POLICY MEMORANDUM #7

SUBJECT: Comprehensive Interior Designs

1. The Vice Chief of Staff, Army has placed priority on providing quality living conditions for our soldiers wherever stationed. While this initial thrust to improve the quality of interior environments is directed at barracks facilities, my overall concern is that we ensure quality interior living, working, and training conditions for all of our customers.

2. In order for the Army and our other customers to recruit and retain dedicated career professionals, excellent environments are needed to provide a high quality of life. Our customers and our own personnel spend a majority of their time in interior environments. Excellence in building interiors and furnishings is critical in meeting our customer's and our own functional and operations requirements. Excellent comprehensive interior design must be given high priority in the planning, programming, design, and implementation of our construction projects.

ARTHUR E. WILLIAMS
Lieutenant General, USA
Commanding

DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, DC 20314-1000

CEMP-EA

Regulation
No. 1110-345-122

15 April 1994

Engineering and Design
INTERIOR DESIGN

1. **Purpose.** This regulation establishes policy, requirements, and responsibilities to be followed in the planning, design, approval, and procurement of interior designs for military construction projects and improvement programs.

2. **Applicability.** This regulation applies to HQUSACE/OCE elements, major subordinate commands (MSC), district commands and technical centers, laboratories, and field operating activities (FOA) having military construction (MILCON) responsibilities.

3. **References.** References and additional information resources are listed at Appendix A.

4. **Projects Requiring Interior Design.** Interior design is required on all new building construction and renovation projects regardless of funding source. Interior design guidance for most facility types is provided by Design Guide (DG) 1110-3-122. Interior design guidance for medical facilities is furnished by Architectural and Engineering Instructions, Medical Design Standards. Interior design for family housing will be in accordance with Architectural and Engineering Instructions, Army Family Housing.

5. **Interior Design Services.** Two types of interior design services are offered.

a. **Building-Related Interior Design.** Building-related interior design service will be provided for all facilities. This service requires the accommodation of needed furniture and equipment within the building, and the design or selection of items normally provided as part of the building construction project in accordance with AR 415-15. These services will be provided as an integral part of the project design and shall include:

(1) Basic space planning for anticipated furniture and equipment requirements in conjunction with the functional layout of the building design and such requirements as life safety, privacy, lighting, ventilation, and accessibility.

(2) Design, selection, and coordination of surface materials and colors that are applied to or compose walls, floors, ceilings, trims, doors, windows, window treatments, built-in furniture and installed building equipment, lighting, signage and other items which are permanently attached to, or are integral to the building. Appendix B further defines interior design elements that are building-related and furniture-related.

b. **Furniture-Related Interior Design.** Furniture-related interior design should be provided for all facilities where the arrangement of furniture and furnishings is important to building functionality. Furniture-related interior design services relate to the accommodation and selection of items that will be provided or procured by the Government. This service will be provided when requested by the using activity and will normally include:

(1) Selection, and color coordination of furniture and equipment drawn from existing inventory, procured from Government supply sources (see Appendix C), or procured by competitive bid. These items normally include such things as ergonomic chairs, freestanding and mobile furniture, draperies, lamps, rugs, plant materials, planters, and free standing or wall hung art.

(2) Detailed space design, placement planning, and procurement documentation for the selected furniture, furnishings, and equipment.

This regulation supersedes ER 1110-345-122, 31 October 1989.

(3) Coordination of furniture-related items with the building design.

6. General Requirements.

a. **Building-Related Interior Design.** General requirements for building-related interior design are as follows:

(1) Preparation of the basic space layout plans for furniture and equipment, in coordination with the functional layout of the building design.

(2) Specification of the material and color applications for interior component surfaces, and preparation of color and finish schedules.

(3) Design and specification of permanent features such as signage, graphics, casework, and built-in equipment; and the preparation of appropriate schedules.

(4) Coordination of finishes, interior components, lighting, acoustical treatment, electrical, information systems, and mechanical elements.

(5) Preparation of display books or boards showing layout diagrams, special details, and material and color samples, for the purpose of obtaining approval of the design scheme and for facilitating the execution of the design intent through the construction contract or other procurement.

(6) Description of interior design intentions for enhancement of energy efficiency, safety, health, functional flexibility, maintenance, increased personnel performance, and projecting the proper image.

b. **Furniture-Related Interior Design.** General requirements for furniture-related interior design are:

(1) Coordination with all the tasks identified in paragraph 6a above, so that the furniture-related and building-related design schemes reflect a single, coordinated design theme.

(2) Selection and description of furniture and equipment from available Government sources of supply (see Appendix C). Selection will be based on factors indicated in DG 1110-3-122. When Government source items do not meet requirements, purchase specifications to include materials testing and/or rating requirements to meet minimum Federal standards, and any other data necessary for procurement on the open market will be provided.

(3) Preparation of detailed furniture arrangement and placement plans, and coordination with electrical, information systems, and mechanical elements.

(4) Preparation of procurement documents with source data, item identification, color and finish schedules, and cost estimates. Documents will reflect current source data for procurement.

(5) Preparation of display books or boards showing layout diagrams, selected furniture and equipment, material and color samples. Perspectives or sketches may also be necessary to obtaining approval of the design scheme.

(6) Technical consultation during procurement, delivery, and placement, to assure receipt of specified and selected items, and completion and coordination of the overall design scheme.

7. Design Requirements. Preparation of project interior designs will coincide with the project design process described in AR 415-15. An interior design analysis will be prepared as part of the project design analysis required by ER 1110-345-700. Interior design drawings will likewise be prepared as part of the project drawings required by ER 1110-345-710.

a. **Concept Design.** During the concept design phase, those responsible for interior design will meet with representatives of the using activity and the building design team to determine the design concept. The design concept should meet the users functional, physical, and aesthetic needs as defined below.

(1) Functional. Achieve space planning layout which considers all furniture and equipment required to support the users operation. Related design issues include accessibility, privacy, safety, and health.

(2) Physical. Assure that environmental support systems such as electrical, lighting, mechanical,

information systems, and structure meet the users physical requirements.

(3) Aesthetic. Meet the users needs for aesthetic expression. Aesthetic needs are the physical interpretations of the users sociological and psychological needs. Design issues related to these needs include the use of light, color, and texture.

b. **Final Design.** Upon approval of the concept design, those responsible for design will develop the design concept in sufficient detail to assure successful execution. Building-related interior design is the detailed design and specification of building-related elements in the contract documents. Furniture-related interior design includes the detailed design and preparation of procurement documents.

8. **Responsibilities.**

a. **Planning Phase.**

(1) The using activity and installation will:

(a) Provide design and design review funds for furniture-related design, as indicated in paragraphs 10 and 11 of this regulation.

(b) Provide funds for procurement of furniture and equipment, and indicate these funds on DD Form 1391, as required by AR 415-15.

(c) Identify unique functional requirements related to the interior design of the facility.

(d) Identify existing furniture and equipment to be reused in addition to new furniture and equipment required.

(2) USACE MSC and district commands responsible for design will assist, on a reimbursable basis, in determining preliminary design requirements, indicated in paragraphs 8a(l)(c) and (d) above, during development of the planning and programming documents.

b. **Design Phase.**

(1) The designated representative of the using activity, having final approval authority for the project will review and approve interior design in a manner that is compatible with the provisions of AR 415-15.

(2) USACE MSC and district commands will:

(a) Accomplish interior design services within the scope and methods described herein, and as stated in the programming documents and design directives.

(b) Assure that interior design services are coordinated with the architectural design and reflect the requirements of the using activity.

(c) Verify and validate the technical adequacy and professional quality of the interior design.

c. **Construction and Procurement Phases.**

(1) The using activity and installation have the following responsibilities regarding interior design:

(a) Procurement of furniture and equipment for delivery to coincide as closely as possible with beneficial occupancy of the building.

(b) Tracking of procurement to assure timely receipt of required furniture and equipment.

(c) Warehousing of furniture and equipment until it is required for placement in the building.

(d) Delivery, assembly, and placement of furniture and furnishings at the project site.

(e) Verification that furniture and equipment received meet specifications requirements.

(f) Establishment of a move in date for the user. This date should be coordinated with the USACE MSC or district command to assure adequate time to furnish the facility after it is released for beneficial occupancy.

(2) USACE MSC and district commands have the following responsibilities:

(a) Assure that appropriate information is provided to the using activity to fully describe the interior design intentions, and the maintenance and operational aspects of the building.

(b) Establish beneficial occupancy date so that procurement of furniture and equipment by the using activity or by USACE may be scheduled for a timely delivery.

(3) When USACE provides furniture-related interior design services, the using activity or installation may request the following execution services from USACE on a reimbursable basis:

(a) Technical consultation during procurement, delivery and placement of furniture and equipment.

(b) Assistance in evaluating deviations from specified furniture and equipment to avoid installation of inferior or inappropriate furniture and equipment.

(c) Services in support of the using activities responsibilities indicated in paragraphs 8c(l)(a), (b), and (e) above including supervision of assembly and placement.

9. Methods of Accomplishment. Design and design review shall be accomplished by, or in consultation with professional interior designers and architects. Qualification of designers will be based on completion of a recognized program of academic training in interior design and demonstrated interior design experience. When furniture-related services are provided, those services should be accomplished by the same designer providing the building-related services if possible. Methods for accomplishment of interior design may include in-house capability, Architect Engineer (A-E) contract, separate interior design service contract, or indefinite delivery contract for interior design services.

10. Funding. Project design funds will be used for building-related interior design services. Funds for furniture-related interior design services, including design reviews, will be provided separately by the using activity, except as indicated in paragraph 11 of this regulation.

11. Exception. Because the furniture-related interior design is critical to the operational effectiveness of living, administrative, and operational facilities, USACE encourages the use of furniture-related interior design services. USACE will provide furniture-related interior design services as an integral part of the building design without additional cost to the using activity for Category Codes 610, 310 & 171 and for DA Standard Design Packages with comprehensive interior designs. The using activity, however, must commit funds for the procurement of the furniture on the DD Form 1391 and request this additional service.

FOR THE COMMANDER:

WILLIAM D. BROWN
Colonel, Corps of Engineers
Chief of Staff

3 Appendices
APP A - References
APP B - Definitions
APP C - Government Sources of Supply

APPENDIX A

REFERENCES

1. Federal Acquisition Regulations (FAR).

a. Part 8, Required Sources of Supplies and Services.

b. Part 10, Specifications, Standards, and Other Purchase Descriptions.

2. Department of the Army.

a. AR 415-15, Military Construction, Army (MCA) Program Development.

b. AR 415-17, Cost Estimating for Military Programming.

3. U.S. Army Corps Of Engineers.

a. ER 1110-345-700, Engineering and Design, Design Analyses.

b. ER 1110-345-710, Engineering and Design, Drawings.

c. DG 1110-3-122, Design Guide for Interiors.

d. Architectural and Engineering Instructions (AEI), Design Criteria issued by HQUSACE (CEMP-EA). Additional copies are available from HQUSACE (CEMP-EA), 20 Massachusetts Ave., N.W., Washington, DC 20314-1000.

e. Architectural and Engineering Instructions (AEI), Medical Design Standards, issued by HQUSACE (CEMP-EM). Additional copies are available from HQUSACE (CEMP-EM), 20 Massachusetts Ave., N.W., Washington, DC 20314-1000.

APPENDIX B

DEFINITIONS

1. Building-related Interior Design. Design in support of installed building equipment and personal property fixed are an integral part of building-related interior design.

a. Installed Building Equipment. Construction elements of building-related interior design are defined as installed building equipment by Appendix H, Equipment Installation, of AR 415-15. They consist of items that are affixed or built into the facility and become an integral part of the facility. Installed building equipment is MILCON funded and is provided as part of the construction contract. Examples of installed building equipment associated with building-related interior design are listed in paragraph H-1 of AR 415-15.

b. Personal Property Fixed. Personal property fixed is defined by AR 415-15, Appendix H as capital equipment and other equipment of a movable nature that has been fixed in place or attached to real property, but may be severed or removed from buildings without destroying the usefulness of the facilities. Personal property fixed is normally funded as Other Procurement, Army (OPA), however, the utility support for this equipment is MILCON funded. Equipment installation may be funded by either fund source, and installation responsibilities must be defined in the contract documents.

c. Pre-wired Work Stations. Pre-wired work stations are a special area within personal property fixed.

(1) Physical Definition. The physical characteristics of a pre-wired work station should include posts, panels, partitions, wiring for electrical and information systems, task lighting, and partition hung components to support individual or group work efforts. Both panel to panel and post and panel systems are acceptable. Additional system components are ambient lighting and partition supported files. Pre-wired work stations do not include movable furniture and furnishings such as chairs, stand alone file cabinets, coat hooks, file trays, or similar accoutrements.

(2) Functional Definition. A pre-wired work station should, at a minimum, provide for the following functions:

(a) An acoustically treated enclosure defining the limits of an individual or a shared use work station.

(b) Adequate work surfaces to accommodate the individual's equipment, writing surface, and work layout surface.

(c) Storage space for individual files and supplies.

(d) Task lighting and electrical and information systems outlets to support the individual's equipment.

(3) Planning and Design. When pre-wired work stations are planned as an integral part of new construction or MILCON funded renovation they may be MILCON funded. To obtain MILCON funded pre-wired work stations, they must be justified and itemized on programming documents. Indicate number of work stations, unit cost and total cost as a line item under primary facility. Pre-wired work stations must also be itemized in Government estimates, and contractor pricing.

(4) Construction. MILCON funded pre-wired work stations will be provided by the construction contractor based on project drawings and specifications. When the contractor provides pre-wired work stations, the provisions of the FAR that apply to construction are applicable.

2. Furniture-related Interior Design. Elements associated with furniture-related interior design are defined as personal property moveable by Appendix H of AR 415-15. Elements associated with furniture-

related interior design consist of capital equipment and other equipment of a movable nature. Personal property is generally mission specific and can be separated from the building without destroying its use for another function. Personal property should be financed from Operations and Maintenance, Army (OMA) or Other Procurement, Army (OPA) funds, depending on the investment threshold.

a. Physical Definition. Items associated with furniture-related interior design include, but are not limited to, the following items:

(1) Furniture. Including Desks, Tables, Chairs, Sofas, Ergonomic Seating, Free Standing and Mobile Storage, Free Standing Acoustical Screens, and Modular and Automated Data Processing (ADP) Furniture.

(2) Furnishings. Including Art Work, Curtains, Draperies, and Rugs.

(3) Mission Equipment. Including Computers, ADP, Medical and Dental, Organs and Pianos, Simulators and Training Aids, Printing,
Photographic, and Shop Equipment.

b. Planning and Design. Users should provide OMA or OPA funding for furniture, furnishings, equipment and for the associated installation costs. When furniture-related interior design is requested as part of a MILCON project, furniture and furnishings should be itemized on DD Form 1391 and Government estimates. DD Form 1391 should indicate furniture requirements in Section 13, and furniture cost itemized in Section 2G.

c. Procurement. Procurement of furniture and furnishings is considered Government procurement, and the provisions of FAR Parts 8 and 10 apply. See Appendix C for Government Sources of Supply. When systems furniture is provided as part of an OMA funded renovation project or a reconfiguration, it is to be procured as furniture.

PROCUREMENT PROCEDURES FOR FURNITURE

A. THE MISSION-COMPREHENSIVE INTERIOR DESIGN PACKAGE

B. PRIORITIES FOR USE OF GOVERNMENT SUPPLY SOURCES IN ACCORDANCE WITH FEDERAL ACQUISITION REGULATION 8.001.

- AGENCY INVENTORIES
- EXCESS FROM OTHER AGENCIES
- FEDERAL PRISON INDUSTRIES
- COMMITTEE FOR PURCHASE FROM THE BLIND AND OTHER SEVERELY HANDICAPPED
- GSA STOCK PROGRAMS (DEFENSE LOGISTICS AGENCY, DEPARTMENT OF VETERANS AFFAIRS, MILITARY INVENTORY CONTROL POINTS.
- MANDATORY FEDERAL SUPPLY SCHEDULES
- OPTIONAL USE OF FEDERAL SUPPLY SCHEDULES
- COMMERCIAL SOURCES

C. PROCURING FROM THE FEDERAL PRISON INDUSTRIES, REQUESTS FOR WAIVER.

D. GSA STOCK PROGRAMS

E. PROCUREMENT FROM FEDERAL SUPPLY SCHEDULES

- COMPETITION REQUIREMENTS
- MAXIMUM ORDER LIMITATIONS

F. PROCUREMENT FROM OPEN MARKET SOURCES

- UNDER $25,000, REQUEST FOR QUOTATIONS
- OVER $25,000, INVITATION FOR BID (IFB'S)

G. SPECIFICATIONS

H. COMMUNICATION

APPENDIX C

GOVERNMENT SOURCES OF SUPPLY

1. Priority of Sources. FAR, Part 8.001, indicates the order of preference for acquisition of supplies and services for the Federal Government.

2. Federal Prison Industries (FPI). FPI is a mandatory source of supply and should be considered in accordance with the requirements of FAR, Part 8.6. A furniture catalog and other product information are available from UNICOR, Federal Prisons Industries, Inc., 320 Ist Street, N.W., Washington, DC 20534.

3. General Services Administration (GSA). The use of Federal Supply Schedules is optional for Department of Defense agencies. GSA schedules do provide a wide selection of furniture and furnishing products. GSA Federal Supply Service source information is available through the Centralized Mailing Lists Services (CMLS), P.O. Box 6477, Fort Worth, TX 76115.

WAIVER REQUEST PROCEDURE

In accordance with Title 18, U.S.C., Sec. 4124(a) and Federal Acquisition Regulations subpart 8.6, Federal Prison Industries, Inc. (UNICOR) has a mandatory preference for supplies listed in its "Schedule of Products." When an ordering office wishes to purchase supplies listed in the "Schedule" from sources other than UNICOR, it will submit a request for waiver to the Customer Service Manager, Federal Prison Industries, Inc. (UNICOR). The request will be directed as follows:

Federal Prison Industries, Inc.
320 First St., N. W. (ACACIA)
Washington, DC 20534
Attn: Customer Service Manager

Telephone: 1-800-827-3168
Facsimile: 202-628-1597

Federal Prison Industries, Inc. (UNICOR) will consider requests for waivers based on documented disparities in price, inability to meet reasonable delivery dates, and disqualifying variations in function and "match." Requests will be considered in connection with the standards set out in its Waiver Policy. UNICOR has attempted to set out with the greatest degree of objectivity the standards that it applies in making decisions on waivers. While there must inevitably be some discretion exercised in these decisions, UNICOR will always give careful consideration to a customer's request. It is guided in all its decisions by its commitment to "Total Customer Satisfaction."

A. Requests shall contain the following information:

1. As complete a description as possible of the required items: e.g., National Stock Number, descriptive literature such as cuts, illustrations, drawings, and brochures that explain the characteristics and/or the construction. When applicable, e.g., items built to a military or Federal specification, a complete technical data package should be submitted.
2. Quantity required, price of preferred item and required delivery date.
3. In situations where the waiver request is based on functional differences, a comparison of the functional differences between the requested item and the "schedule" item should be provided identifying as a minimum:

   (a) inadequacies of the "schedule" item to perform the required functions; and
   (b) economic, or other advantages of the item requested.
4. Estimated annual usage or future need for similar items or a statement that the requirement is nonrecurring and no future need is anticipated. Indicate if this or similar items have previously been purchased from UNICOR.

B. UNICOR delivery schedules are consistent with delivery schedules for comparable items appearing on General Services Administration Federal Supply Schedules (FSS). Where schedules for comparable items do not exist, deliveries are consistent with good commercial practices. In the event that delivery times shorter than normally available from the FSS or commercial sources are required, certification, in writing from the contracting officer must be provided stating the reason for the shorter delivery requirement.

C. All factors are considered when a determination is made. This includes customer needs, current factory loading and future requirements. Each request is evaluated on its own merits. UNICOR policy does not permit blanket waivers but evaluates each request on a case-by-case basis considering, primarily, the needs of the customer.

D. Appeals to waiver denials can be made by forwarding reasons for the appeal to the Customer Service Manager by letter. Please note in your transmission that this is an appeal and reference the original waiver identification number. Appeals should be transmitted no later than 30 days after receipt of the original decision.

E. Every attempt will be made to respond to waiver requests and appeals within five (5) working days of receipt.

F. Ordering offices should not initiate action to acquire similar items from sources other than UNICOR until a request for waiver is approved.

To check the status of your request or to inquire about prices, delivery, order status or other concerns please call the UNICOR Customer Service Hotline:

1-800-827-3168

8.403 Types of Federal Supply Schedules.

8.403-1 Single-award schedules.

Single-award schedules cover contracts made with one supplier at a stated price for delivery to a geographic area as defined in the schedule. Most schedules contain all information necessary for placing orders. Some schedules specify that contractor catalogs must be used for additional ordering information to aid in the selection of fabrics, colors, and similar variables.

8.403-2 Multiple-award schedules.

Multiple-award schedules cover contracts made with more than one supplier for comparable supplies and services. Contracts are awarded to suppliers of the same generic types of items at varying prices for delivery within the same geographic area. Contractor catalogs and pricelists must be used with the schedules to prepare delivery orders. The catalogs and pricelists contain information such as item descriptions, prices and discounts, order limitations, and delivery.

8.403-3 New Item Introductory Schedule.

The New Item Introductory Schedule (NIIS) provides the means to introduce new or improved products into the Federal Supply System. The schedule lists brand names of products available from various suppliers. With the exception of GSA, the only mandatory user of this schedule, Federal agencies and agencies authorized by law or agreement may use the NIIS on an optional basis. Ordering offices must use contractor catalogs and pricelists with the schedule to prepare delivery orders.

8.403-4 International Federal Supply Schedule.

(a) The International Federal Supply Schedule (IFSS) provides sources of supply (supplies and services) at reasonable prices to U.S. Government activities located overseas. The use of the schedule is mandatory only on GSA.

(b) The schedule is divided into two sections. Section A includes those items which were awarded under sealed bid procedures, while Section B covers items that were awarded under negotiated procedures.

(c) Ordering offices need to review the information in the schedule and any applicable contractor's catalogs/price lists to ensure the proper placement of orders. Orders are placed directly with the contractors.

(d) Ordering offices shall forward copies of any orders (at the time the orders are issued) to the contracting office designated in the IFSS.

8.404 Using schedules.

(a) The planning, solicitation, and award phases of Federal Supply Schedules comply with FAR requirements. Consequently, contracting officers need not seek further competition, synopsize the solicitation or award, determine fair and reasonable pricing, or consider small business-small purchase set-aside procedures when placing an order under a Federal Supply Schedule.

(b) Before soliciting commercial sources, executive agencies shall determine if the required supplies or services, or similar supplies or services fulfilling the same purpose, are available from schedules (see FPMR 101-26.4). If so, the ordering office shall proceed in accordance with the procedure of 8.404-1 or 8.404-2, as appropriate.

(c) In the case of mandatory schedules, ordering offices shall not (1) solicit bids, proposals, quotations, or otherwise test the market solely for the purpose of seeking alternative sources to Federal Supply Schedules; or (2) request formal or informal quotations from Federal Supply Schedule contractors for the purpose of price comparisons.

8.404-1 Mandatory use. See Deviation per AL-91-7

Schedules identify executive agencies required to use them as mandatory sources of supply. The single-award schedule shall be used as a primary source and the multiple-award schedule as a secondary source. The following are exceptions to the mandatory-use requirement:

(a) *Urgent requirements.* When an ordering office requires supplies or services with a shorter delivery time than specified in the schedules, and time permits, the ordering office shall request the contractor by letter, telegram, mailgram, or telephone conversation (confirmed in writing) to state the best delivery time that can be met under the circumstances and subject to all other terms and conditions of the schedule contract. The contractor shall be instructed to reply to the inquiry within not more than 3 workdays after receipt, by the same or a faster communications medium than the one by which the inquiry was received. If the contractor offers accelerated delivery acceptable to the ordering office, orders shall obligate the contractor to make the shorter delivery under all other terms and conditions of the contract. When the contractor fails to reply, or the best delivery time does not meet the ordering office's requirements, use of the schedule is not mandatory.

(b) *Small requirements.* Dollar or quantity minimums are established for most schedules, below which ordering offices are not obligated to order and contractors are not obligated to accept orders. Ordering offices may submit orders below established minimums, subject to the contractor's acceptance. Once an order is accepted, the contractor is obligated to perform according to all the terms and conditions of the contract. Some schedules require the contractor to accept orders below the dollar or quantity minimum, but authorize the contractor to include a service charge up to a certain dollar amount. In these cases, the

8.405 Ordering office responsibilities.

Ordering offices shall place orders directly with contractors and shall perform contract administration on individual orders. Ordering offices should deal directly with contractors concerning contract performance (see 41 CFR 101-26.403-1).

8.405-1 Ordering from multiple-award schedules.

When ordering from multiple award schedules, ordering offices shall use the procedures set forth below. When these procedures are followed, orders placed against schedules will result in the lowest overall cost alternative to meet the needs of the Government.

(a) Orders should be placed with the schedule contractor offering the lowest delivered price available. The ordering office shall review the schedule price lists that are reasonably available at the ordering office. Where the ordering office has available fewer than three price lists from current schedule contractors that offer the required items, the ordering activity shall obtain additional price lists from schedule contractors listed in the GSA schedule for the required items. The ordering office shall fully justify in the contract file orders for a line item exceeding the price reasonableness verification threshold at 13.106 placed at other than the lowest price identified in its review. Justification for ordering a higher priced item may be based on such considerations as—

(1) Delivery time in terms of actual need that cannot be met by a contractor offering a lower price;

(2) Specific or unusual requirements such as differences in performance characteristics;

(3) Compatibility with existing equipment or systems;

(4) Trade-in considerations that favor a higher priced item and produce the lowest net cost; and

(5) Special features of one item not provided by comparable items that are required in effective program performance.

(b) When two or more items at the same delivered price will meet an ordering office's needs, the ordering office shall give preference to the items of small business and/or labor surplus area concerns by following the order of priority in 14.407-6 for equal low bids.

(c) When a schedule lists both foreign and domestic items that will meet the ordering office's needs, the ordering office shall apply the procedures of Part 25, Foreign Acquisition.

(d) If an item available from a multiple-award schedule is ordered from the schedule contractor at a price lower than the schedule price, the ordering office shall notify the schedule contracting office within 10 days.

8.405-2 Order placement.

Ordering offices may use Optional Form 347, or an agency-prescribed form, to order items from schedules and shall place orders directly with the contractor within the limitations specified in each schedule. Orders shall include, at a minimum, the following information in addition to any information required by the schedule:

(a) Complete shipping and billing addresses.

(b) Contract number and date.

(c) Agency order number.

(d) F.o.b. delivery point; i.e., origin or destination.

(e) Discount terms.

(f) Delivery time.

(g) Special item number or national stock number.

(h) Brief, complete description of each item (when ordering by model number, features and options such as color, finish, and electrical characteristics, if available, must be specified).

(i) Quantity and any variation in quantity.

(j) Number of units.

(k) Unit price.

(l) Total price of order.

(m) Points of inspection and acceptance.

(n) Other pertinent data; e.g., delivery instructions or receiving hours and size-of-truck limitation.

(o) Marking requirements.

(p) Level of preservation, packaging, and packing.

8.405-3 Inspection and acceptance.

(a) Consignees shall inspect supplies at destination except when—

(1) The schedule provides for the schedule contracting agency to perform source inspection (in this case, the schedule will indicate that mandatory source inspection is required); or

(2) A schedule item is covered by a product description, and the ordering office determines that the schedule contracting agency's inspection assistance is needed (inspection assistance may be based on the ordering volume, the complexity of items, or the past performance of the supplier).

(b) When the schedule contracting agency performs the inspection, as specified in the schedule, the ordering office will provide two copies of the order specifying source inspection to the schedule contracting agency. The schedule contracting agency will notify the ordering office of acceptance or rejection of the supplies.

(c) Material inspected at source by the schedule contracting agency, and determined to conform with the product description of the schedule, shall not be reinspected for the same purpose. The consignee shall limit inspection to quantity and condition on receipt.

(d) Unless otherwise provided in the schedule, acceptance shall be conclusive except as regards latent defects, fraud, or such gross mistakes as amount to fraud.

8.405-4 Delinquent performance.

When the contractor fails to perform on the order, the

APPENDIX H

SUSTAINABLE PROJECT RATING TOOL (SPiRiT)

Sustainable Project Rating Tool (SPiRiT)

Version 1.4

U. S. Army Corps of Engineers
U. S. Army Assistant Chief of Staff for Installation Management

April 2001

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1) This Sustainable Project Rating Tool (SPiRiT) is derived from The U. S. Green Building Council LEED 2.0 (Leadership in Energy and Environmental Design) Green Building Rating System™.

2) The SPiRiT numbering scheme parallels, but does not match LEED 2.0. LEED does not number major sections, which it calls 'Credit Categories,' ex. 'Sustainable Sites,' rather it numbers criteria or 'credits' within each major section. SPiRiT credit numbers match those of LEED where there is a 1:1 comparison. Where additional credits have been added they fall at the end of major sections.

3) The SPiRiT Credits all follow the format: Intent, Requirement and Technologies/Strategies.

Intent: A statement of the primary goal for the credit;
Requirement: Quantifiable conditions necessary to achieve stated intent;
Technologies/Strategies : Suggested technologies, strategies and referenced guidance on the means to achieve identified requirements.

4) Projects are evaluated for each SPiRiT credit which are either 'Prerequisites' or result in a point score:
Prerequisites: These credits are a statement of minimum requirements and must be met. No further points will be awarded unless the minimum is achieved. These credits are recognizable by an 'R' in the number scheme, ex. 1.R1, and a 'Reqd.' in the score column.
Point Score: These credits are evaluated and result in a point score. Where the potential score is greater than 1, no partial points are granted.

5) SPiRiT Sustainable Project Certification Levels:

SPiRiT Bronze	25 to 34 Points
SPiRiT Silver	35 to 49 Points
SPiRiT Gold	50 to 74 Points
SPiRiT Platinum	75 to 100 Points

6) SPiRiT credits have been developed to address facility life cycle phases including programming, design, construction, and commissioning. Additional rating tools will be developed to address installation/base master planning and facilities operations and maintenance, rehabilitation, recycling, and disposal.

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9) Army/USACE employees are members of the USGBC with membership privileges accessible via the USGBC web site, http://www.usgbc.org/. For information on membership and access to available LEED resources to support use of SPiRiT and sustainable design in your projects, contact Richard Schneider at (217) 373-6752 or richard.l.schneider@erdc.usace.army.mil (Annette Stumpf at (217) 352-6511 ext. 7542 or annette.l.stumpf@erdc.usace.army.mil alternate).

10) For the latest information on SPiRiT and for access to guidance, tools and resources supporting sustainable design initiatives, visit the CERL 'Sustainable Design and Development Resource' website, http://www.cecer.army.mil/SustDesign. There you may also join the CERL Sustainable Design ListServ to be directly notified of information pertinent to sustainable design.

Sustainable Sites

Reqd.

1.R1 Erosion, Sedimentation, and Water Quality Control (1)

Intent: Control erosion and pollutants to reduce negative impacts on water and air quality.

Requirement: ❑ Design a site sediment and erosion control plan and a pollution prevention plan that conforms to best management practices in the EPA's Storm Water Management for Construction Activities, EPA Document No. EPA-833-R-92-001, Chapter 3, OR local Erosion and Sedimentation Control standards and codes, whichever is more stringent. The plan shall meet the following objectives:

- Prevent loss of soil during construction by storm water runoff and/or wind erosion, including protecting topsoil by stockpiling for reuse.
- Prevent sedimentation of storm sewer or receiving streams and/or air pollution with dust and particulate matter.
- Prevent hazardous material discharge into storm water systems.
- Prevent petroleum oils and lubricants (POL) discharge into storm water systems.

Technologies /Strategies: The EPA standard lists numerous measures such as silt fencing, sediment traps, oil grit separators, construction phasing, stabilization of steep slopes, maintaining vegetated ground cover and providing ground cover that will meet this prerequisite.

1.C1 Site Selection (1)

Intent: Avoid development of inappropriate sites and reduce the environmental impact from the location of a building on a site. Select site based on functional adjacencies/relationships and land use compatibility.

Requirement: ❑ Do not develop buildings on portions of sites that meet any one of the following criteria: **1**

- Prime training or maneuver land.
- Land whose elevation is lower than 5 ft. above the 100-year flood elevation as defined by FEMA.
- Land that provides habitat for any species on the Federal or State threatened or endangered list.
- Within 100 feet of any wetland as defined by 40 CFR, Parts 230-233 and Part 22, OR as defined by local or state rule or law, whichever is more stringent.

❑ Select site based on functional adjacencies/relationships and land use compatibility. **1**

- Select sites close to existing roads and utilities or use an existing structure to minimize the need for new infrastructure.
- Select site in area of high density.
- Site facilities based on the strength of their relationships to other facilities/land-uses to limit travel distances. The stronger the relationship/functional interaction, the closer the distance between two facilities.
- Select for distance to installation/base transit systems and access to pedestrian ways and bike paths.
- Select for development previously used or developed suitable and available sites.

Technologies /Strategies: Screen potential building sites for these criteria and/or ensure that these criteria are addressed by the designer Screen potential building sites for these criteria and/or ensure that these criteria are addressed by the designer during the conceptual design phase. Utilize landscape architects, ecologists, environmental engineers, civil engineers, and similar professionals for the screening process. New wetlands constructed as part of stormwater mitigation or other site restoration efforts are not affected by the restrictions of this prerequisite.

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Sustainable Sites (Continued)

1.C2 Installation/Base Redevelopment (1)

Intent: Channel development to installation/base cantonment areas with existing infrastructure, protecting greenfields and preserving habitat and natural resources.

Requirement: ❑ Increase localized density to conform to existing or desired density goals by utilizing sites that are located within existing cantonment areas of high development density. **1**

❑ Select sites close to existing roads and utilities or use an existing structure to minimize the need for new infrastructure. **1**

Technologies /Strategies: During the site selection process give preference to previously developed sites with installation/base cantonment redevelopment potential such as facility reduction program cleared sites.

1.C3 Brownfield Redevelopment (1)

Intent: Rehabilitate damaged sites where development is complicated by real or perceived environmental contamination, reducing pressure on undeveloped land.

Requirement: ❑ Develop on a site classified as a brownfield and provide remediation as required by EPA's Brownfield

Redevelopment program requirements OR Develop a brownfield site (a site that has been contaminated by previous uses). **1**

Technologies /Strategies:

Screen potential damaged sites for these criteria prior to selection for rehabilitation.

Utilize EPA OSWER Directive 9610.17 and ASTM Standard Practice E1739 for site remediation where required.

1.C4 Alternative Transportation (1)

Intent: Reduce pollution and land development impacts from automobile use.

Requirement: ❑ Locate building within ½ mile of installation/base transit systems. **1**

❑ Provide suitable means for securing bicycles, with convenient changing/shower facilities for use by cyclists, for 5% or more of building occupants. **1**

❑ Locate building within 2 miles of alternative fuel refueling station(s). **1**

❑ Size parking capacity not to exceed minimum installation/base cantonment requirements AND provide preferred parking for carpools or van pools capable of serving 5% of the building occupants, OR, add no new parking for rehabilitation projects AND provide preferred parking for carpools or van pools capable of serving 5% of the building occupants. **1**

Technologies /Strategies: Select sites near public installation/base transit served by safe, convenient pedestrian pathways.

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1.C5 Reduced Site Disturbance (1)

Intent: Conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

Requirement: ❑ On greenfield sites, limit site disturbance including earthwork and clearing of vegetation to 40 feet beyond the building perimeter, 5 feet beyond primary roadway curbs, walkways, and main utility branch trenches, and 25 feet beyond pervious paving areas that require additional staging areas in order to limit compaction in the paved area; OR, on previously developed sites, restore a minimum of 50% of the remaining open area by planting native or adapted vegetation. **1**

❑ Reduce the development footprint (including building, access roads and parking) to exceed the installation/base's/base's master plan local zoning's open space requirement for the site by 25% or in accordance with installation/base policy on open space seasides, whichever is greater. **1**

Technologies /Strategies: Note requirements on plans and in specifications. Establish contractual penalties for destruction of trees and site
Note requirements on plans and in specifications. Establish contractual penalties for destruction of trees and site
areas noted for protection. Reduce footprints by tightening program needs and stacking floor plans. Establish clearly marked construction and disturbance boundaries. Delineate laydown, recycling, and disposal areas. Use areas to be paved as staging areas. Work with local horticultural extension services, or native plant societies, or installation/base agronomy staff to select indigenous plant species for site restoration and landscaping

1.C6 Stormwater Management (1)

Intent: Limit disruption of natural water flows by minimizing storm water runoff, increasing on-site infiltration and reducing contaminants.

Requirement: Implement a stormwater management plan that results in:

❑ No net increase in the rate or quantity of stormwater runoff from undeveloped to developed conditions; OR, if existing imperviousness is greater than 50%, implement a stormwater management plan that results in a 25% decrease in the rate and quantity of stormwater runoff. **1**

❑ Treatment systems designed to remove 80% of the average annual post development total suspended solids (TSS), and 40% of the average annual post development total phosphorous (TP), by implementing Best Management Practices (BMPs) outlined in EPA's Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (EPA-840-B-92-002 1/93). **1**

Technologies /Strategies: Significantly reduce impervious surfaces, maximize on-site stormwater infiltration, and retain pervious and
Significantly reduce impervious surfaces, maximize on-site stormwater infiltration, and retain pervious and
vegetated areas. Capture rainwater from impervious areas of the building for groundwater recharge or reuse within building. Use green/vegetated roofs. Utilize biologically-based and innovative stormwater management features for pollutant load reduction such as constructed wetlands, stormwater filtering systems, bioswales, bio-retention basins, and vegetated filter strips. Use open vegetated swales to reduce drainage velocity and erosion, reduce system maintenance, increase vegetative variety and support wildlife habitat where space permits.

1.C7 Landscape and Exterior Design to Reduce Heat Islands (2)

Intent: Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.

Requirement: ❑ Provide shade (within 5 years) on at least 30% of non-roof impervious surface on the site, including parking lots, walkways, plazas, etc., OR, use light-colored/ high-albedo materials (reflectance of at least 0.3) for 30% of the site's non-roof impervious surfaces, OR place a minimum of 50% of parking space underground OR use open-grid pavement system (net impervious area of LESS than 50%) for a minimum of 50% of the parking lot area. **1**

❑ Use ENERGY STAR Roof compliant, high-reflectance AND low emissivity roofing (initial reflectance of at least .65 and three-year-aged reflectance of at least .5 when tested in accordance with ASTM E408) for a minimum of 75% of the roof surface; OR, install a "green" (vegetated) roof for at least 50% of the roof area. **1**

Technologies /Strategies: Employ design strategies, materials, and landscaping designs that reduce heat absorption of exterior materials.
Note albedo/reflectance requirements in the drawings and specifications. Provide shade (calculated on June 21, noon solar time) using native or climate tolerant trees and large shrubs, vegetated trellises, or other exterior structures supporting vegetation. Substitute vegetated surfaces for hard surfaces. Explore elimination of blacktop and the use of new coatings and integral colorants for asphalt to achieve light colored surfaces.

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1.C8 Light Pollution Reduction(1)

Intent: Eliminate light trespass from the building site, improve night sky access, and reduce development impact on nocturnal environments.

Requirement: ❑ Do not exceed Illuminating Engineering Society of North America (IESNA) footcandle level requirements as stated in the Recommended Practice Manual: Lighting for Exterior Environments, AND design interior and exterior lighting such that zero direct beam illumination leaves the building site. **1**

Technologies /Strategies:
Consult IESNA Recommended Practice Manual: Lighting for Exterior Environments for Commission Internationle de l'Eclairage (CIE) zone and pre and post curfew hour descriptions and associated ambient lighting level requirements. Ambient lighting for precurfew hours for CIE zones range between .01 footcandles for areas with dark landscapes such as parks, rural, and residential areas, and 1.5 footcandles for areas with high ambient brightness such as installation/base areas with high levels of nighttime activity. Design site lighting and select lighting styles and technologies to have a minimal impact off-site and minimal contribution to sky glow. Minimize lighting of architectural and landscape features. Exterior lighting should be consistent with security lighting requirements.

1.C9 Optimize Site Features

Intent: Optimize utilization of the site's existing natural features and placement of man-made features on the site.

Requirement: ❑ Perform both of the following: **1**
- Maximize the use of free site energy.
- Plan facility, parking and roadways to "fit" existing site contours and limit cut and fill.

Technologies /Strategies:
Evaluate site resources to ascertain how each can enhance the proposed project and visa versa. Work to maximum advantage of the site's solar and wind attributes. Use landscaping to optimize solar and wind conditions and to contribute to energy efficiency; Locate and orient the facility on the site to optimize solar and wind conditions.

1.C10 Facility Impact

Intent: Minimize negative impacts on the site and on neighboring properties and structures; avoid or mitigate excessive noise, shading on green spaces, additional traffic, obscuring significant views, etc.
Requirement: ❑ Cluster facilities to reduce impact, access distance to utilities and sufficient occupant density to support mass transit. **1**

❑ Collaborate with installation/base and community planners to identify and mitigate potential impacts of the project beyond site boundaries, and transportation planners to insure efficient public transport. **1**

Technologies /Strategies: Involve local/regional planners and community members in installation/base master planning processes. Recognize the context and the impact of a project beyond site boundaries, and integrate it with the larger installation/base/community context/land use.

1.C11 Site Ecology

Intent: Identify and mitigate all existing site problems including contamination of soil, water, and air, as well as any negative impacts caused by noise, eyesores, or lack of vegetation, enhancing or creating new site habitat.

Requirement: ❑ Develop site environmental management and mitigation plan. **1**
Technologies /Strategies:
Understand site and surrounding ecosystem interdependence and interconnectivity. Plan landscaping scheme to incorporate biodiversity. Preserve/enhance existing trees, hydrological features, ecosystems, habitats, and cultural resources. Increase the existence of healthy habitat for native species. Reintroduce native plants and trees where they have been destroyed by previous development.
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2.C1 Water Efficient Landscaping(2)
Intent: Limit or eliminate the use of potable water for landscape irrigation.

Requirement: ❑ Use high efficiency irrigation technology, OR, use captured rain or recycled site water to reduce potable water consumption for irrigation by 50% over conventional means. **1**

❑ Use only captured rain or recycled site water for an additional 50% reduction (100% total reduction) of potable water for site irrigation needs, OR, do not install permanent landscape irrigation systems. **1**

Technologies /Strategies:
Develop a landscaping water use baseline according to the methodology outlined in the LEED Reference Guide. Specify water-efficient, native or adapted, climate tolerant plantings. High efficiency irrigation technologies include micro irrigation, moisture sensors, or weather data based controllers. Feed irrigation systems with captured rainwater, gray water, or on-site treated wastewater.

2.C2 Innovative Wastewater Technologies (2)
Intent: Reduce generation of wastewater and potable water demand, while increasing local aquifer recharge.

Requirement: ❑ Reduce the use of municipally provided potable water for building sewage conveyance by a minimum of 50%, OR, treat 100% of wastewater on site to tertiary standards. **1**

Technologies /Strategies:
Develop a wastewater baseline according to the methodology outlined in the LEED Reference Guide. Implement decentralized on-site wastewater treatment and reuse systems. Decrease the use of potable water for sewage conveyance by utilizing gray and/or black water systems. Non-potable reuse opportunities include, toilet flushing, landscape irrigation, etc. Provide advanced wastewater treatment after use by employing innovative, ecological, on-site technologies including constructed wetlands, a mechanical recirculating sand filter, or aerobic treatment systems.

2.C3 Water Use Reduction (1)
Intent: Maximize water efficiency within buildings to reduce the burden on municipal water supply and wastewater systems.

Requirement: ❑ Employ strategies that in aggregate use 20% less water than the water use baseline calculated for the building (not including irrigation) after meeting Energy Policy Act (EPACT) of 1992 fixture performance requirements. **1**
❑ Exceed the potable water use reduction by an additional 10% (30% total efficiency increase). **1**

Technologies /Strategies:
Develop a water use baseline including all water consuming fixtures, equipment, and seasonal conditions according to methodology guidance outlined in the LEED Reference Guide. Specify water conserving plumbing fixtures that exceed Energy Policy Act (EPACT) of 1992 fixture requirements in combination with ultra high efficiency or dry fixture and control technologies. Specify high water efficiency equipment (dishwashers, laundry, cooling towers, etc.). Use alternatives to potable water for sewage transport water. Use recycled or storm water for HVAC/process make up water. Install cooling tower systems designed to minimize water consumption from drift, evaporation and blowdown.

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3.0 Energy and Atmosphere Score 28

3.R1 Fundamental Building Systems Commissioning (1) Reqd.

Intent: Verify and ensure that fundamental building elements and systems are designed, installed and calibrated to operate as intended.

Requirement: ❑ Implement all of the following fundamental best practice commissioning procedures.

- Engage a commissioning authority.
- Develop design intent and basis of design documentation.
- Include commissioning requirements in the construction documents.
- Develop and utilize a commissioning plan.
- Verify installation, functional performance, training and documentation.
- Complete a commissioning report.

Technologies /Strategies:

Introduce standards and strategies into the design process early, and then carry through selected measures by clearly stating target requirements in the construction documents. Tie contractor final payments to documented system performance. Perform additional commissioning in accordance with the DOE Building Commissioning Guide, Version 2.2. Refer to the LEED Reference Guide for detailed descriptions of required elements and references to additional commissioning guides. Specify pre-occupancy baseline IAQ testing at time of commissioning. Test for indoor air concentrations of CO, CO_2, total VOCs and particulates. Test to assure that adequate ventilation rates have been achieved prior to initial occupancy.

3.R2 Minimum Energy Performance (1) Reqd.

Intent: Establish the minimum level of energy efficiency for the base building and systems.

Requirement: ❑ Design to meet building energy efficiency and performance as required by TI 800-01 (Design Criteria).

Technologies /Strategies:

Use building modeling and analysis techniques to establish and document compliance. ASHRAE/IESNA 90.1-1999 provides guidance for establishing building base case development and analysis. Refer to the LEED Reference Guide for a wide variety of energy efficiency strategy resources.

Use a professionally recognized and proven computer program or programs that integrate architectural features with air-conditioning, heating, lighting, and other energy producing or consuming systems. These programs will be capable of simulating the features, systems, and thermal loads used in the design. Using established weather data files, the program will perform 8760 hourly calculations. BLAST, DOE-2 or EnergyPlus are acceptable programs for these purposes.

3.R3 CFC Reduction in HVAC&R Equipment (2) Reqd.

Intent: Reduce ozone depletion.

Requirement: ❑ Zero use of CFC-based refrigerants in new base building HVAC&R systems. When reusing existing base building HVAC equipment, complete a comprehensive CFC phaseout conversion.

Technologies /Strategies:

Specify only non-CFC-based refrigerants in all base building HVAC&R systems.

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3.C1 Optimize Energy Performance (1)

Intent: Achieve increasing levels of energy performance above the prerequisite standard to reduce environmental impacts associated with excessive energy use.

Requirement: ❑ Reduce design energy usage (DEU) compared to the energy use budget (EUB) in joules per square meter per year for regulated energy components as described in the requirements of Chapter 11 of the TI 809-01 (Design Criteria), as demonstrated by a whole building simulation.

- 1 Point will be awarded for every reduction in design energy use of 2.5% for both new and existing facilities for a maximum score of 20 points.

20

Regulated energy components include HVAC systems, building envelope, service hot water systems, lighting and other regulated systems as defined by ASHRAE.

Technologies /Strategies:

Develop and use building modeling and analysis techniques to establish a base case that meets the minimum prerequisite standard. ASHRAE/IESNA 90.1-1999 provides guidance for establishing building base-case development and analysis. Perform interactive energy use analysis for selected design elements that affect energy performance and document compliance.

Unit of measure for performance shall be annual energy usage in joules per square meter. Life-Cycle energy costs shall be determined using rates for purchased energy, such as electricity, gas, oil, propane, steam, and chilled water and approved by the adopting authority. Refer to the LEED Reference Guide or Whole Building Design Guide for a wide variety of energy efficiency resources and strategies including conservation measures, electromechanical energy efficiency technologies (for example ground-source heat pumps), passive heating and cooling strategies, solar hot water, and daylighting.

Life-Cycle costing will be done in accordance with 10 CFR 436.

Consider installation of an Energy Management and Control System (EMCS), which is compatible with exiting installation systems to optimize performance. Use sensors to control loads based on occupancy, schedule and/or the availability of natural resources use (day light or natural ventilation).

3.C2 Renewable Energy (1)

Intent: Encourage and recognize increasing levels of self-supply through renewable technologies to reduce environmental impacts associated with fossil fuel energy use.

Requirement: ❑ Supply a net fraction of the building's total energy use through the use of on-site renewable energy systems.

% of Total Annual Energy Usage in Renewables	
5%	**1**
10%	**2**
15%	**3**
20%	**4**

Technologies /Strategies:

Employ the use of on-site non-polluting-source renewable technologies contributing to the total energy requirements of the project. Consider and use high temperature solar and/or geothermal, photovoltaics, wind, biomass (other than unsustainably harvested wood), and bio-gas. Passive solar, solar hot water heating, ground-source heat pumps, and daylighting do not qualify for points under this credit. Credit for these strategies is given in Energy & Atmosphere Credit 1: Optimizing Energy Performance.

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3.0 Energy and Atmosphere (Continued)

3.C3 Additional Commissioning (2)

Intent: Verify and ensure that the entire building is designed, constructed, and calibrated to operate as intended.

Requirement: ❑ In addition to the Fundamental Building Commissioning prerequisite, implement the following additional commissioning tasks: **1**

1. Conduct a focused review of the design prior to the construction documents phase.
2. Conduct a focused review of the construction documents when close to completion.
3. Conduct a selective review of contractor submittals of commissioned equipment.
4. Develop a system and energy management manual.
5. Have a contract in place for a near-warranty end or post occupancy review.

Items 1, 2, and 3 must be performed by someone other than the designer.

Technologies /Strategies:

Introduce standards and strategies into the design process early, and then carry through selected measures by clearly stating target requirements in the construction documents. Tie contractor final payments to documented system performance. Refer to the LEED Reference Guide for detailed descriptions of required elements and references to additional guidelines.

3.C4 << Deleted >> (1)

3.C5 Measurement and Verification (1)

Intent: Provide for the ongoing accountability and optimization of building energy and water consumption performance over time.

Requirement: ❑ Comply with the installed equipment requirements for continuous metering as stated in selected Measurement and Verification Methods - Option B: Retrofit Isolation of the US DOE's International Performance Measurement and Verification Protocol (IPMVP) for the following: **1**

- Lighting systems and controls.
- Constant and variable motor loads.
- Variable frequency drive (VFD) operation.
- Chiller efficiency at variable loads (kW/ton).
- Cooling load.
- Air and water economizer and heat recovery cycles.
- Air distribution static pressures and ventilation air volumes.
- Boiler efficiencies.
- Building specific process energy efficiency systems and equipment.
- Indoor water risers and outdoor irrigation systems.

Technologies /Strategies:

Design and specify equipment to be installed in base building systems to allow for comparison, management, and optimization of actual vs. estimated energy and water performance. Employ building automation systems to perform M&V functions where applicable. Tie contractor final payments to documented M&V system performance and include in the commissioning report. Provide for ongoing M&V system maintenance and operating plan in building operations and maintenance manuals. Consider installation/base of an Energy Management and Control System (EMCS), which is compatible with exiting installation/base systems to optimize performance.

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3.0 Energy and Atmosphere (Continued)

3.C6 Green Power(1)

Intent: Encourage the development and use of grid-source, renewable energy technologies on a net zero pollution basis.

Requirement: ❑ Engage in a two year contract to purchase the amount of power equal to projected building consumption generated from renewable sources that meet the Center for Resource Solutions (CRS) Green-E requirements.

1

Technologies /Strategies:

Purchase power from a provider that guarantees a fraction of its delivered electric power is from net nonpolluting renewable technologies. Begin by contacting local utility companies. If the project is in an open market state, investigate Green Power and Power Marketers licensed to provide power in that state. Grid power that qualifies for this credit originates from solar, wind, geothermal, biomass, or low-impact hydro sources. Low-impact hydro shall comply with the Low Impact Hydropower Certification Program.

3.C7 Distributed Generation

Intent: Encourage the development and use of distributed generation technologies, which are less polluting than grid-source energy.

Requirement: ❑ Reduce total energy usage and emissions by considering source energy implications and local co-generation and direct energy conversion. Generate at least 50% of the building's projected annual consumption by on-site distributed generation sources.

1

Technologies /Strategies:

Investigate the use of integrated generation and delivery systems, such as co-generation, fuel cells, micro-turbines and off-peak thermal storage.

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4.R1 Storage & Collection of Recyclables(1) **Reqd.**

Intent: Facilitate the reduction of waste generated by building occupants that is hauled to and disposed of in landfills.
Requirement: ❑ Provide an easily accessible area that serves the entire building that is dedicated to the separation, collection and storage of materials for recycling including (at a minimum) paper, glass, plastics, and metals.

Technologies /Strategies:
Establish a waste management plan which meets requirements of the installation/base environmental and/or solid waste management plans in cooperation with users to encourage recycling. Reserve space for recycling functions early in the building occupancy programming process and show areas dedicated to collection of recycled materials on space utilization plans. Broader recycling support space considerations should allow for collection and storage of the required elements and newspaper, organic waste (food and soiled paper), and dry waste. When collection bins are used, bin(s) should be able to accommodate a 75% diversion rate and be easily accessible to custodial staff and recycling collection workers. Consider bin designs that allow for easy cleaning to avoid health issues.

4.C1 Building Reuse(1)
Intent: Extend the life cycle of existing building stock, conserve resources, retain cultural resources, reduce waste, and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.
Requirement: Reuse large portions of existing structures during renovation or redevelopment projects.
❑ Maintain at least 75% of existing building structure and shell (exterior skin and framing excluding window assemblies). **1**

❑ Maintain an additional 25% (100% total) of existing building structure and shell (exterior skin and framing excluding window assemblies). **1**
❑ Maintain 100% of existing building structure and shell AND 50% non-shell (walls, floor coverings, and ceiling systems). **1**

Technologies /Strategies:
Evaluate retention of existing structure. Consider facade preservation, particularly in installation/base areas. During programming and space planning, consider adjusting needs and occupant use patterns to fit within existing building structure and interior partition configurations. Identify and effectively address energy, structural, and indoor environmental (lead & asbestos) issues in building reuse planning and deconstruction documents. Percentage of reused non-shell building portions will be calculated as the total area (s.f.) of reused walls, floor covering, and ceiling systems, divided by the existing total area (s.f.) of walls, floor covering, and ceiling systems.

4.C2 Construction Waste Management(1)
Intent: Divert construction, demolition, and land clearing debris from landfill disposal. Redirect recyclable material back to the manufacturing process.
Requirement: Develop and implement a waste management plan, quantifying material diversion by weight:
❑ Recycle and/or salvage at least 50% (by weight) of construction, demolition, and land clearing waste. **1**
❑ Recycle and/or salvage an additional 25% (75% total by weight) of the construction, demolition, and land clearing debris. **1**

Technologies /Strategies:
Develop and specify a waste management plan which meets requirements of the installation/base environmental and/or solid waste management plans that identifies licensed haulers and processors of recyclables; identifies markets for salvaged materials; employs deconstruction, salvage, and recycling strategies and processes, includes waste auditing; and documents the cost for recycling, salvaging, and reusing materials. Source reduction on the job site should be an integral part of the plan.
The plan should address recycling of corrugated cardboard, metals, concrete brick, asphalt, land clearing debris (if applicable), beverage containers, clean dimensional wood, plastic, glass, gypsum board, and carpet; evaluate the cost-effectiveness of recycling rigid insulation, engineered wood products and other materials; hazardous materials storage and management; and participation in manufacturers' "take-back" programs to the maximum extent possible. Refer to the LEED Reference Guide for guidelines and references that provide waste management plan development and implementation support including model bid specifications.

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4.C3 Resource Reuse[2]

Intent: Extend the life cycle of targeted building materials, reducing environmental impacts related to materials manufacturing and transport.

Requirement: ❑ Specify salvaged or refurbished materials for 5% of building materials. **1**

❑ Specify salvaged or refurbished materials for 10% of building materials. **1**

Technologies /Strategies:

Commonly salvaged building materials include wood flooring/ paneling/cabinets, doors and frames, mantels, iron work and decorative lighting fixtures, brick, masonry and heavy timbers. See the LEED Reference Guide for calculation tools and guidelines. Determine percentages in terms of dollar value using the following steps:

1. Calculate total dollars* (see exclusions) of the salvaged or refurbished material.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.

Exclusions: In total dollar calculations, exclude; labor costs; all mechanical and electrical material and labor costs, and project overhead and fees. *If the cost of the salvaged or refurbished material is below market value, use replacement cost to estimate the material value, otherwise use actual cost to the project.

4.C4 Recycled Content[1]

Intent: Increase demand for building products that have incorporated recycled content material, reducing the impacts resulting from extraction of new material.

Requirement: ❑ Specify a minimum of 25% of building materials that contain in aggregate a minimum weighted average of 20% post-consumer recycled content material, OR, a minimum weighted average of 40% post-industrial recycled content material.

1

❑ Specify an additional 25% (50% total) of building materials that contain in aggregate, a minimum weighted average of 20% post-consumer recycled content material, OR, a minimum weighted average of 40% post industrial recycled content material.

1

Technologies /Strategies:

Specify building materials containing recycled content for a fraction of total building materials. Select products and materials with supporting information from the AIA Resource Guide or the EPA Environmentally Preferable Purchasing (EPP) Program. Common building materials and products with recycled content include; wall, partition, and ceiling materials and systems; insulation; tiles and carpets; cement, concrete, and reinforcing metals; structural and framing steel. For products/materials not listed, selection should be made on the basis of EPP criterion and/or:

- Toxicity;
- Embodied energy;
- Production use of water, energy and ozone depleting substances (ODSs);
- Production limits on toxic emissions and effluents;
- Minimal, reusable or recycled/recyclable packaging;
- Impact on indoor environmental quality (IEQ);
- Installation that limits generation of waste;
- Materials that limit waste generation over their life;
- EPA guideline compliance; and
- Harvested on a sustainable yield basis.

See the LEED Reference Guide for a summary of the EPA guidelines and calculation methodology guidelines. Determine percentages in terms of dollar value using the following steps:

1. Calculate total dollars (see exclusions) of the material that contain recycled content.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.

Exclusions: Labor costs; all mechanical and electrical material and labor costs; project overhead and fees)

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4.0 Materials and Resources (Continued)

4.C5 Local/Regional Materials (2)

Intent: Increase demand for building products that are manufactured locally, reducing the environmental impacts resulting from transportation, and supporting the local economy.
Requirement: ❑ Specify a minimum of 20% of building materials that are manufactured regionally within a radius of 500 miles. **1**
❑ Of these regionally manufactured materials, specify a minimum of 50% that are extracted, harvested, or recovered within 500 miles. **1**

Technologies /Strategies:
Specify and install regionally extracted, harvested, and manufactured building materials. Contact the state and local waste management boards for information about regional building materials. See the LEED Reference Guide for calculation methodology guidelines. Determine percentages in terms of dollar value using the following steps:
1. Calculate total dollars (see exclusions) of material that is locally or regionally manufactured.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.
Exclusions: Labor costs; all mechanical and electrical material and labor costs; project overhead and fees.

4.C6 Rapidly Renewable Materials (2)

Intent: Reduce the use and depletion of finite raw and long cycle renewable materials by replacing them with rapidly renewable materials.
Requirement: ❑ Specify rapidly renewable building materials for 5% of total building materials. **1**

Technologies /Strategies:
Rapidly renewable resources are those materials that substantially replenish themselves faster than traditional extraction demand (e.g. planted and harvested in less than a 10 year cycle) and do not result in significant biodiversity loss, increase erosion, air quality impacts, and that are sustainably managed. See the LEED Reference Guide for calculation methodology guidelines. Determine percentages in terms of dollar value using the following steps:
1. Calculate total dollars (see exclusions) of materials that are considered to be rapidly renewable.
2. Calculate total dollars (see exclusions) of all building materials.
3. Divide Step 1 by Step 2 to determine the percentage.
Exclusions: Labor costs; all mechanical and electrical material and labor costs; project overhead and fees.

4.C7 Certified Wood (2)

Intent: Encourage environmentally responsible forest management.
Requirement: ❑ Use a minimum of 50% of wood-based materials certified in accordance with the Forest Stewardship Council guidelines for wood building components including but not limited to framing, flooring, finishes, furnishings, and non-rented temporary construction applications such as bracing, concrete form work and pedestrian barriers. **1**

Technologies /Strategies:
Refer to the Forest Stewardship Council guidelines for wood building components that qualify for compliance to the requirements and incorporate into material selection for the project.

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5.0 Indoor Environmental Quality (IEQ) Score 17

5.R1 Minimum IAQ Performance (1) Reqd.

Intent: Establish minimum IAQ performance to prevent the development of indoor air quality problems in buildings, maintaining the health and well being of the occupants.
Requirement: ❑ Meet the minimum requirements of voluntary consensus standard ASHRAE 62-1999, Ventilation for Acceptable Indoor Air Quality and approved Addenda.

Technologies /Strategies:
Include proactive design details that will eliminate some of the common causes of indoor air quality problems in buildings. Introduce standards into the design process early. Incorporate references to targets in plans and specifications. Ensure ventilation system outdoor air capacity can meet standards in all modes of operation. Locate building outdoor air intakes (including operable windows) away from potential pollutants/contaminant sources such as sporulating plants (allergens), loading areas, building exhaust fans, cooling towers, sanitary vents, dumpsters, vehicular exhaust, and other sources. Include operational testing in the building commissioning report. Design cooling coil drain pans to ensure complete draining. Include measures to control and mitigate radon buildup in areas where it is prevalent. Limit humidity to a range that minimizes mold growth and promotes respiratory health.

5.R2 Environmental Tobacco Smoke (ETS) Control (1) Reqd.

Intent: Prevent exposure of building occupants and systems to Environmental Tobacco Smoke (ETS).
Requirement: ❑ Zero exposure of nonsmokers to ETS by prohibition of smoking in the building, OR, by providing a designated smoking room designed to effectively contain, capture and remove ETS from the building. At a minimum, the smoking room shall be directly exhausted to the outdoors with no recirculation of ETS-containing air to the non-smoking area of the building, enclosed with impermeable structural deck-to-deck partitions and operated at a negative pressure compared with the surrounding spaces of at least 7 Pa (0.03 inches of water gauge). Performance of smoking rooms shall be verified using tracer gas testing methods as described in ASHRAE Standard 129-1997. Acceptable exposure in non-smoking areas is defined as less than 1% of the tracer gas concentration in the smoking room detectable in the adjoining non-smoking areas. Smoking room testing as described in the ASHRAE Standard 129-1997 is required in the contract documents and critical smoking facility systems testing results must be included in the building commissioning plan and report or as a separate document.

Technologies /Strategies:
Prohibit smoking in the building and/or provide designated smoking areas outside the building in locations where ETS cannot reenter the building or ventilation system and away from high building occupant or pedestrian traffic.

5.C1 IAQ Monitoring (1)

Intent: Provide capacity for indoor air quality (IAQ) monitoring to sustain long term occupant health and comfort.
Requirement: ❑ Install a permanent carbon dioxide (CO_2) monitoring system that provides feedback on space ventilation performance in a form that affords operational adjustments, AND specify initial operational set point parameters that maintain indoor carbon dioxide levels no higher than outdoor levels by more than 530 parts per million at any time.

1

Technologies /Strategies:
Install an independent system or make CO_2 monitoring a function of the building automation system. Situate monitoring locations in areas of the building with high occupant densities and at the ends of the longest runs of the distribution ductwork. Specify that system operation manuals require calibration of all of the sensors per manufacturer recommendations but not less than one year. Include sensor and system operational testing and initial set point adjustment in the commissioning plan and report. Also consider periodic monitoring of carbon monoxide (CO), total volatile organic compounds (TVOCs), and particulates (including PM10).

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5.C2 Increase Ventilation Effectiveness(2)

Intent: Provide for the effective delivery and mixing of fresh air to building occupants to support their health, safety, and comfort.

Requirement: ❑ For mechanically ventilated buildings, design ventilation systems that result in an air change effectiveness (E) greater than or equal to 0.9 as determined by ASHRAE 129-1997. For naturally ventilated spaces demonstrate a distribution and laminar flow pattern that involves not less than 90% of the room or zone area in the direction of air flow for at least 95% of hours of occupancy. **1**

Technologies /Strategies:
Employ architectural and HVAC design strategies to increase ventilation effectiveness and prevent short-circuiting of airflow delivery. Techniques available include use of displacement ventilation, low velocity, and laminar flow ventilation (under floor or near floor delivery) and natural ventilation. Operable windows with an architectural strategy for natural ventilation, cross ventilation, or stack effect can be appropriate options with study of inlet areas and locations. See the LEED Reference Guide for compliance methodology guidelines.

5.C3 Construction IAQ Management Plan(2)

Intent: Prevent indoor air quality problems resulting from the construction/renovation process, to sustain long term installer and occupant health and comfort.
Requirement: Develop and implement an Indoor Air Quality (IAQ) Management Plan for the construction and pre-occupancy phases of the building as follows:
❑ During construction meet or exceed the minimum requirements of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings under Construction, 1995, AND protect stored on-site or installed absorptive materials from moisture damage, AND replace all filtration media immediately prior to occupancy (Filtration media shall have a Minimum Efficiency Reporting Value (MERV) of 13 as determined by ASHRAE 52.2-1999). **1**

❑ Conduct a minimum two-week building flushout with new filtration media at 100% outside air after construction ends and prior to occupancy, OR, conduct a baseline indoor air quality testing procedure consistent with current EPA protocol for Environmental Requirements, Baseline IAQ and Materials, for the Research Triangle Park Campus, Section 01445. **1**
Technologies /Strategies:
Specify containment control strategies including protecting the HVAC system, controlling pollutant sources, interrupting pathways for contamination, enforcing proper housekeeping and coordinating schedules to minimize disruption. Specify the construction sequencing to install absorptive materials after the prescribed dry or cure time of wet finishes to minimize adverse impacts on indoor air quality. Materials directly exposed to moisture through precipitation, plumbing leaks, or condensation from the HVAC system are susceptible to microbial contamination. Absorptive materials to protect and sequence installation include; insulation, carpeting, ceiling tiles, and gypsum products. Appoint an IEQ Manager with owner's authority to inspect IEQ problems and require mitigation as necessary.

5.C4 Low-Emitting Materials(2)

Intent: Reduce the quantity of indoor air contaminants that are odorous or potentially irritating to provide installer and occupant health and comfort.
Requirement: Meet or exceed VOC limits for adhesives, sealants, paints, composite wood products, and carpet systems as follows:
❑ Adhesives must meet or exceed the VOC limits of South Coast Air Quality Management District Rule #1168 by, AND all sealants used as a filler must meet or exceed Bay Area Air Resources Board Reg. 8, Rule 51. **1**
❑ Paints and coatings must meet or exceed the VOC and chemical component limits of Green Seal requirements. **1**
❑ Carpet systems must meet or exceed the Carpet and Rug Institute Green Label Indoor Air Quality Test Program. **1**
❑ Composite wood or agrifiber products must contain no added urea-formaldehyde resins. **1**
Technologies /Strategies:
Evaluate and preferentially specify materials that are low emitting, non-irritating, nontoxic and chemically inert. Request and evaluate emissions test data from manufacturers for comparative products. Ensure that VOC limits are clearly stated in specifications, in General Conditions, or in each section where adhesives, sealants, coatings, carpets, and composite woods are addressed.

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5.C5 Indoor Chemical and Pollutant Source Control(1)

Intent: Avoid exposure of building occupants to potentially hazardous chemicals that adversely impact air quality.

Requirement: ❑ Design to minimize cross-contamination of regularly occupied areas by chemical pollutants: **1**
▪ Employ permanent entryway systems (grills, grates, etc.) to capture dirt, particulates, etc. from entering the building at all high volume entryways, AND provide areas with structural deck to deck partitions with separate outside exhausting, no air recirculation and negative pressure where chemical use occurs (including housekeeping areas and copying/print rooms), AND provide drains plumbed for appropriate disposal of liquid waste in spaces where water and chemical concentrate mixing occurs.

Technologies /Strategies:
Design to physically isolate activities associated with chemical contaminants from other locations in the building, providing dedicated systems to contain and remove chemical pollutants from source emitters at source locations. Applicable measures include eliminating or isolating high hazard areas; designing all housekeeping chemical storage and mixing areas (central storage facilities and janitors closets) to allow for secure product storage; designing copy/fax/printer/printing rooms with structural deck to deck partitions and dedicated exhaust ventilation systems; and including permanent architectural entryway system(s) to catch and hold particles to keep them from entering and contaminating the building interior.

Consider utilization of EPA registered anti-microbial treatments in carpet, textile or vinyl wall coverings, ceiling tiles or paints where microbial contamination is a concern. Utilize "breathable" wall finishes where circumstances require, to reduce moisture build-up and prevent microbial contamination. Minimize selection of fibrous materials, e.g. insulation, carpet and padding and flexible fabrics, whose exposed surfaces when exposed to the air stream or occupied space can contribute significant emissions and absorb and re-emit other contaminants over time.

5.C6 Controllability of Systems(2)
Intent: Provide a high level of individual occupant control of thermal, ventilation, and lighting systems to support optimum health, productivity, and comfort conditions.
Requirement: ❑ Provide a minimum of one operable window and one lighting control zone per 200 s.f. for all occupied areas within 15 feet of the perimeter wall.
1

❑ Provide controls for each individual for airflow, temperature, and lighting for 50% of the non perimeter, regularly occupied areas.
1

Technologies /Strategies:
Provide individual or integrated controls systems that control lighting, airflow, and temperature in individual rooms and/or work areas. Consider combinations of ambient and task lighting control and operable windows for perimeter and VAV systems for non perimeter with a 1:1: 2 terminal box to controller to occupant ratio.

5.C7 Thermal Comfort(2)
Intent: Provide for a thermally comfortable environment that supports the productive and healthy performance of the building occupants.
Requirement: ❑ Comply with ASHRAE Standard 55-1992, Addenda 1995 for thermal comfort standards including humidity control within established ranges per climate zone.
1

❑ Install a permanent temperature and humidity monitoring system configured to provide operators control over thermal comfort performance and effectiveness of humidification and/or dehumidification systems in the building.
1

Technologies /Strategies:
Integrated envelope and HVAC system design strategies that achieve thermal comfort conditions based on mean radiant temperature, local air velocity, relative humidity, and air temperature. Install and maintain a temperature and humidity monitoring system for key areas of the building (i.e., at the perimeter, and spaces provided with humidity control). This function can be satisfied by the building automation system. Specify in system operation manuals that all sensors require quarterly calibration. Include criteria verification and system operation in commissioning plan and report.

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5.0 Indoor Environmental Quality (IEQ) (Continued)

5.C8 Daylight and Views[2]

Intent: Provide a connection between indoor spaces and the outdoor environment through the introduction of sunlight and views into the occupied areas of the building.

Requirement: ❑ Achieve a minimum Daylight Factor of 2% (excluding all direct sunlight penetration) in 75% of all space occupied for critical visual tasks, not including copy rooms, storage areas, mechanical, laundry, and other low occupancy support areas. Exceptions include those spaces where tasks would be hindered by the use of daylight or where accomplishing the specific tasks within a space would be enhanced by the direct penetration of sunlight.

1

❑ Direct line of sight to vision glazing from 90% of all regularly occupied spaces, not including copy rooms, storage areas, mechanical, laundry, and other low occupancy support areas.

1

Technologies /Strategies:
Implement design strategies to provide access to daylight and views to the outdoors in a glare-free way using exterior sun shading, interior light shelves, and /or window treatments. Orient buildings to maximize daylighting options. Consider shallow or narrow building footprints. Employ courtyards, atriums, clerestory windows, skylights, and light shelves to achieve daylight penetration (from other than direct effect or direct rays from the sun) deep into regularly occupied areas of the building.

5.C9 Acoustic Environment /Noise Control

Intent: Provide appropriate acoustic conditions for user privacy and comfort.
Requirement: ❑ Minimize environmental noise through appropriate use of insulation, sound-absorbing materials and noise source isolation.

1

Technologies /Strategies:
Evaluate each occupied environment and determine the appropriate layout, materials and furnishings design.

5.C10 Facility In-Use IAQ Management Plan

Intent: Insure the effective management of facility air quality during its life.

Requirement: ❑ Perform all of the following: **1**

- Develop an air quality action plan to include scheduled HVAC system cleaning.
- Develop an air quality action plan to include education of occupants and facility managers on indoor pollutants and their roles in preventing them.
- Develop an air quality action plan to include permanent monitoring of supply and return air, and ambient air at the fresh air intake, for carbon monoxide (CO), carbon dioxide (CO_2), total volatile organic compounds (TVOCs), and particulates (including PM10).

Technologies /Strategies:
Provide action plan for periodic system maintenance, monitoring, occupant/manager training.

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6.C1 Holistic Delivery of Facility

Intent: Encourage a facility delivery process that actively engages all stakeholders in the design process to deliver a facility that meets all functional requirements while effectively optimizing tradeoffs among sustainability, first costs, life cycle costs and mission requirements.

Requirement:

- ❑ Choose team leaders that are experienced in holistic delivery of facilities. **1**

- ❑ Train the entire team in the holistic delivery process. The team must include all stakeholders in the facility delivery, including the users, the contracting staff, the construction representatives, project manager, and design/engineering team members. **1**

- ❑ Identify project goals and metrics. **1**

- ❑ Plan and execute charrettes with team members at critical phases of the facility delivery. **1**

- ❑ Identify and resolve tradeoffs among sustainability, first costs, life cycle costs and mission requirements through charrettes and other collaborative processes. **2**

- ❑ Document required results for each phase of project deliverables that achieve the project goals and are measurable throughout the facility lifespan. **1**

Technologies /Strategies:

Develop performance specifications or choose competitive range of products that meet environmental criteria.

Use automated modeling and analysis tools to assess site and facility design alternatives.

Conduct life-cycle cost analysis (LCCA) in the design process according to the Federal Facilities Council Technical Report, Sustainable Federal Facilities: A Guide To Integrating Value Engineering, Life Cycle Costing, and Sustainable Development, FFC # 142, 2000.

Conduct a full ecological assessment to include soil quality, water resources and flows, vegetation and trees, wildlife habitats and corridors, wetlands, and ecologically sensitive areas to identify the least sensitive site areas for development. Evaluate space utilization/functions to reduce overall space requirements, considering networking, flextime, flexi-place, dual-use, and other strategies to reduce space requirements/optimize facility size.

7.C1 Operation and Maintenance

Intent: Encourage the development of a facility delivery process that enhances efficient operation and maintenance of the facility.

Requirement: ❑ Develop a facility operations and maintenance program to include: **2**

- Commissioning instructions for all facility systems.
- Comprehensive facility operations and maintenance instructions for system operation, performance verification procedures and results, an equipment inventory, warrantee information, and recommended maintenance schedule. The instructions should include a comprehensive, preventive maintenance program to keep all facility systems functioning as designed.
- A periodic training program for occupants, facilities managers, and maintenance staff in all facility operations and maintenance activities.
- Instructions on sustainable cleaning and pest control practices.
- Develop a comprehensive site/facility recycling/waste management plan.

❑ Provide surfaces, furnishings, and equipment that are appropriately durable, according to life cycle cost analysis. **1**

Technologies /Strategies:
Maintain facility elements, systems and subsystems on a routine maintenance schedule to ensure integrity and longevity.

Perform scheduled cleaning and maintenance activities with nontoxic environmentally preferable cleaning products and procedures. Keep air ducts clean and free of microorganisms through a structured program of preventive maintenance. Clean lighting systems following a regular maintenance schedule to ensure optimum light output and energy efficiency.

Use pesticides and herbicides sparingly and only when necessary with preference to natural methods and materials over poisons and toxic agents.

Use automated monitors and controls for energy, water, waste, temperature, moisture, and ventilation monitors and controls. Turn off the lights, computers, computer monitors, and equipment when not in use. Enable power-down features on office equipment.

7.C2 Soldier and Workforce Productivity and Retention

Intent: Provide a high-quality, functional, healthy and safe work environment to promote soldier and workforce productivity and retention.

Requirement:

❑ Provide a high quality indoor environment to enhance user/occupant quality of life (QOL). **1**

❑ Provide a highly functional work environment to promote user/occupant work productivity. **1**

❑ Provide a healthy and safe work environment to sustain QOL and productivity. **1**

Technologies /Strategies:
Use a registered/certified interior designer to provide stimulating interior environments with pleasant colors, surface treatments, room proportions and ceiling heights, external views, natural lighting, and quality detailing for interior furnishings, equipment, materials and finishes. Use IES standards to provide light to occupied space with variations in level, comfortable contrasts, natural color rendition, natural/man-made, and adequate controls to optimize light aesthetic qualities. Provide occupant control of individual work areas configuration, and lighting, thermal and ventilation systems.

Collaborate with end users to identify functional and technical requirements and to perform adjacency studies.

Configure occupied space to address the specific workers/occupants functions and activities that will be carried out there. Meet TI 800-01 Design Guide requirements. Design and configure occupied space, and select furniture and equipment using human ergonomics. Identify existing user amenities, such as dining, recreation, socialization, shopping and child care facilities. Identify what amenities should be incorporated into the project or provided in the future, nearby facility. Provide ventilation air in sufficient volume free from natural and man made contaminants.

8.C1 Functional Life of Facility and Supporting Systems

Intent: Assess the functional life of a facility and its supporting systems to optimize the infrastructure investment.

Requirement:

❑ Identify how long the designed function is likely to occupy the current facility. **1**

❑ Identify how long the envelope, structure, HVAC, plumbing, communications, electrical, and other systems are likely to last before requiring replacement or upgrade. Consider economic, functional and physical obsolescence.

1

Technologies /Strategies:

Assess the typical or likely lifespan of the function(s) to be accommodated to forecast eventual adaptation to a different use(s). Assess the life spans of the various building systems/components to forecast their revision/replacement during the facility lifespan and design in a manner that facilitates revision/replacement.

Consider the life span of the weapon systems, doctrines, or other programs supported by the facility.

Use life cycle data and other sources to identify the life span of the embodied systems.

8.C2 Adaptation, Renewal and Future Uses

Intent: Encourage facility design that is responsive to change over time to maximize accommodation of future uses without creating waste and insuring maximum useful life of products.

Requirement:

❑ Identify possible future uses for the facility; consider alternatives that expand the list of possible future uses. AND Design the building to accommodate as wide a range of future uses, as practical. AND Design the installation of building systems to accommodate foreseeable change with a minimum amount of disruption, cost, and additional materials.

1

❑ Build the smallest facility necessary to meet current mission functional requirements, using the most efficient shape and form, while taking into consideration expansion capabilities and potential future mission requirements. AND Design the facility for recycling of materials and systems.

1

Technologies /Strategies:

Create durable, long-lasting and adaptable facility shell and structural system. Create an adaptable, flexible facility design using open planning, service corridors, interstitial space, access floors, demountable walls/partitions, modular furniture and other adaptable space configuration/utilization strategies.

Select materials that are recyclable, avoiding composite materials, such as reinforced plastics and carpet fibers and backing. Consider selecting materials and labeling construction materials with identification information to facilitate recycling. Use pre-cut/pre-fabricated materials and use standard lengths and sizes (dimensional modularity) in design. Design facility systems and subsystems for reconfiguration and/or disassembly/recycling using reversible/reusable connectors.

Facility Point Summary

1.0	Sustainable Sites (S)	Score	0	Max 20
1.R1	❑ Erosion, Sedimentation and Water Quality Control			[Required]
1.C1	❑ Site Selection			2
1.C2	❑ Installation/Base Redevelopment			2
1.C3	❑ Brownfield Redevelopment			1
1.C4	❑ Alternative Transportation			4
1.C5	❑ Reduced Site Disturbance			2
1.C6	❑ Stormwater Management			2
1.C7	❑ Landscape and Exterior Design to Reduce Heat Islands			2
1.C8	❑ Light Pollution Reduction			1
1.C9	❑ Optimize Site Features			1
1.C10	❑ Facility Impact			2
1.C11	❑ Site Ecology			1

2.0	Water Efficiency (W)	Score	0	Max 5
2.C1	❑ Water Efficient Landscaping			**2**
2.C2	❑ Innovative Wastewater Technologies			**1**
2.C3	❑ Water Use Reduction			**2**

3.0	Energy and Atmosphere (E)	Score	0	Max 28
3.R1	❑ Fundamental Building Systems Commissioning			[Required]
3.R2	❑ Minimum Energy Performance			[Required]
3.R3	❑ CFC Reduction in HVAC&R Equipment			[Required]
3.C1	❑ Optimize Energy Performance			20
3.C2	❑ Renewable Energy			4
3.C3	❑ Additional Commissioning			1
3.C4	❑ <<Deleted>>			
3.C5	❑ Measurement and Verification			1
3.C6	❑ Green Power			1
3.C7	❑ Distributed Generation			1

4.0	Material and Resources (M)	Score	0	Max 13
4.R1	❑ Storage & Collection of Recyclables			[Required]
4.C1	❑ Building Reuse			3
4.C2	❑ Construction Waste Management			3
4.C3	❑ Resource Reuse			3
4.C4	❑ Recycled Content			3
4.C5	❑ Local/Regional Materials			3
4.C6	❑ Rapidly Renewable Materials			1
4.C7	❑ Certified Wood			1

5.0	Indoor Environmental Quality (IEQ) [Q]	Score	0	Max 17
5.R1	❑ Minimum IAQ Performance			[Required]
5.R2	❑ Environmental Tobacco Smoke (ETS) Control			[Required]
5.C1	❑ IAQ Monitoring 1			1
5.C2	❑ Increase Ventilation Effectiveness 1			1
5.C3	❑ Construction IAQ Management Plan 2			2
5.C4	❑ Low-Emitting Materials 4			4
5.C5	❑ Indoor Chemical and Pollutant Source Control 1			1
5.C6	❑ Controllability of Systems 2			2
5.C7	❑ Thermal Comfort 2			2
5.C8	❑ Daylight and Views 2			2
5.C9	❑ Acoustic Environment /Noise Control 1			1
5.C10	❑ Facility In-Use IAQ Management Plan 1			1

Facility Point Summary (Continued)

6.0	Facility Delivery Process (P)	Score	0	Max 7
6.C1	? ? Holistic Delivery of Facility			7

7.0	Current Mission	Score	0	Max 6
7.C1	❑ Operation and Maintenance			3
7.C2	❑ Soldier and Workforce Productivity and Retention			3

8.0	Future Missions	Score	0	Max 4
8.C1	❑ Functional Life of Facility and Supporting Systems			2
8.C2	❑ Adaptation, Renewal and Future Uses			2

	Total Score	0	Max 100

SpiRiT Sustainable Project Certification Levels		
SPiRiT Bronze		25 to 34 Points
SPiRiT Silver		35to 49 Points
SPiRiT Gold		50 to 74 Points
SPiRiT Platinum		75 to 100 Points

Please forward any comments that you may have on this Sustainable Project Rating Tool, preferably by Email, to:

Mr. Harry Goradia
U. S. Army Corps of Engineers
ATTN: CEMP-ET
7701 Telegraph Road
Alexandria, VA 22315-3862
Phone 703-428-6460
FAX 703-428-7903
Email harry.goradia@hq02.usace.army.mil
SPiRiT Para.

APPENDIX I
BORROW PIT PROCEDURES

APPENDIX I

BORROW PIT PROCEDURES

The following procedures are required at borrow pits. The excavation permit will be filled out and submitted to the Department of Public Works for each pit utilized.

EXCAVATION PERMIT

*Date of Application: _____

*Date to Begin: _____

*Date to End: _____

*Applicant (user/unit): _____

*POC (On-site Manager): _____

*Phone Number: _____

*Borrow Pit # (location, intersection): _____

*Cubic Yards required: _____

*Type of Material: _____

*Final Destination: _____

_____

Below line for office use only.

_____

On-Site Manager

Approved for borrow pit #_____

_____

Borrow Pit Project Manager

Please retain a copy of this Permit while excavating

BORROW PIT SOP

Excavation Procedures:
Contractor will maintain or create a rim ditch to maximize accessibility to the material and optimize excavation of that material. Contractor will utilize a pump, where and when appropriate to minimize water from interfering with the excavation. Average depth, when abandoned, will be 6 feet minimum and 12 feet maximum (water depth will range from 3-8 feet). Contractor will pursue depth before any expansion (expansion of the pit, will require POC approval from concerned DPW branches). Borrow pits will be excavated in a manner, from the beginning, to ultimately move them to a useable recreational fishpond.

**** The following Environmental Protection measures shall be adhered to at all times!***

Erosion & Sedimentation Control Measures:
Remain within the boundaries of the borrow pit which are marked by "surrounding trees and re-bar" in order to leave buffer zone(s) undisturbed and retain natural vegetation for a distance of 50 feet.

Water Quality Control Measures:
Borrow pit excavation shall not be conducted within 50 feet of the banks of any state waters, nor discharges to the water or ground to ensure no adverse affects on these waters. No Point Source discharges shall be allowed without coordination with the Environmental Branch.

Sensitive/Special Sites Measures:
If historical or archaeological resources are encountered during excavation of this borrow pit. Stop working until the Environmental Branch has cleared the pit. Immediately contact the *DPW – Environmental Branch at 767-2010*.
No borrow pit may be expanded that is in the proximity of a protected cultural resource site or within the cantonment area.
Seasonal conditions may be such as to merit utilization of another site to offset unsafe conditions. These sites will require coordination with your POC for utilization. If necessary, another borrow pit of the same material type that is near your final destination will be assigned for your use.
**Where applicable, adverse effects from audible elements (blasting), and visual elements are to be avoided near these sites so as not to diminish the integrity of the location, design, setting, materials, workmanship, or other structural details.*

Endangered/Protected Species Measures:
If the borrow pit you are proposing to use is near a protected species, another borrow pit of the same type of material which is near your final destination will be assigned for your use. If threatened or endangered species are encountered during excavation of this borrow pit, all work is to be discontinued, and immediately contact the *DPW- Fish & Wildlife at 767-2584 or 767-7263.*

Fish and Wildlife Measures:
Borrow pits or portions of the pits that are no longer suitable for further excavation for fill may be moved toward a final excavation phase that will produce a manageable fish pond. The following construction criteria shall strive to be incorporated during excavation for this purpose:

1. A water depth of 3 to 8 feet
2. An area of 3 to 10 acres
3. Edges sloped to 3:1, with a 4:1 entrance/exit point for gopher tortoise escape, to be converted to a boat ramp upon pond completion (*one side of the pit must be sloped from day one!*).
4. Earthen piers may be left within the excavated pond
5. Soil and erosion controls to stabilize slope and pond margins with appropriate ground cover plants
6. Borrow pit/pond shall be free of hazards including pilings, poles, abandoned equipment, etc.

**Be aware of these guidelines because any borrow pit in use may become a pond.*

If the borrow pit you are proposing to use has been moved into this final excavation phase or has already been converted into a fish pond, another borrow pit of the same type of material which is near your final destination will be assigned for your use.

Reclamation Measures:
If the borrow pit you are proposing to use is in the process of being reclaimed, another borrow pit of the same type of material which is near your final destination will be assigned for your use.

Wetlands Measures:
Maintain a minimum distance of 50 feet from borrow pit banks to wetlands delineation (footprints).

Solid/Hazardous Waste Measures:
All solid and hazardous wastes shall be disposed of properly. No debris will be left at, in or around the borrow pit.

Air Quality Measures:
Where applicable, adverse effects from atmospheric elements, specifically fugitive dust, are to be prevented so as to avoid any significant deterioration of the air quality.

APPENDIX J

FIRE FLOW TEST

1000 AM

WATER FLOW TEST

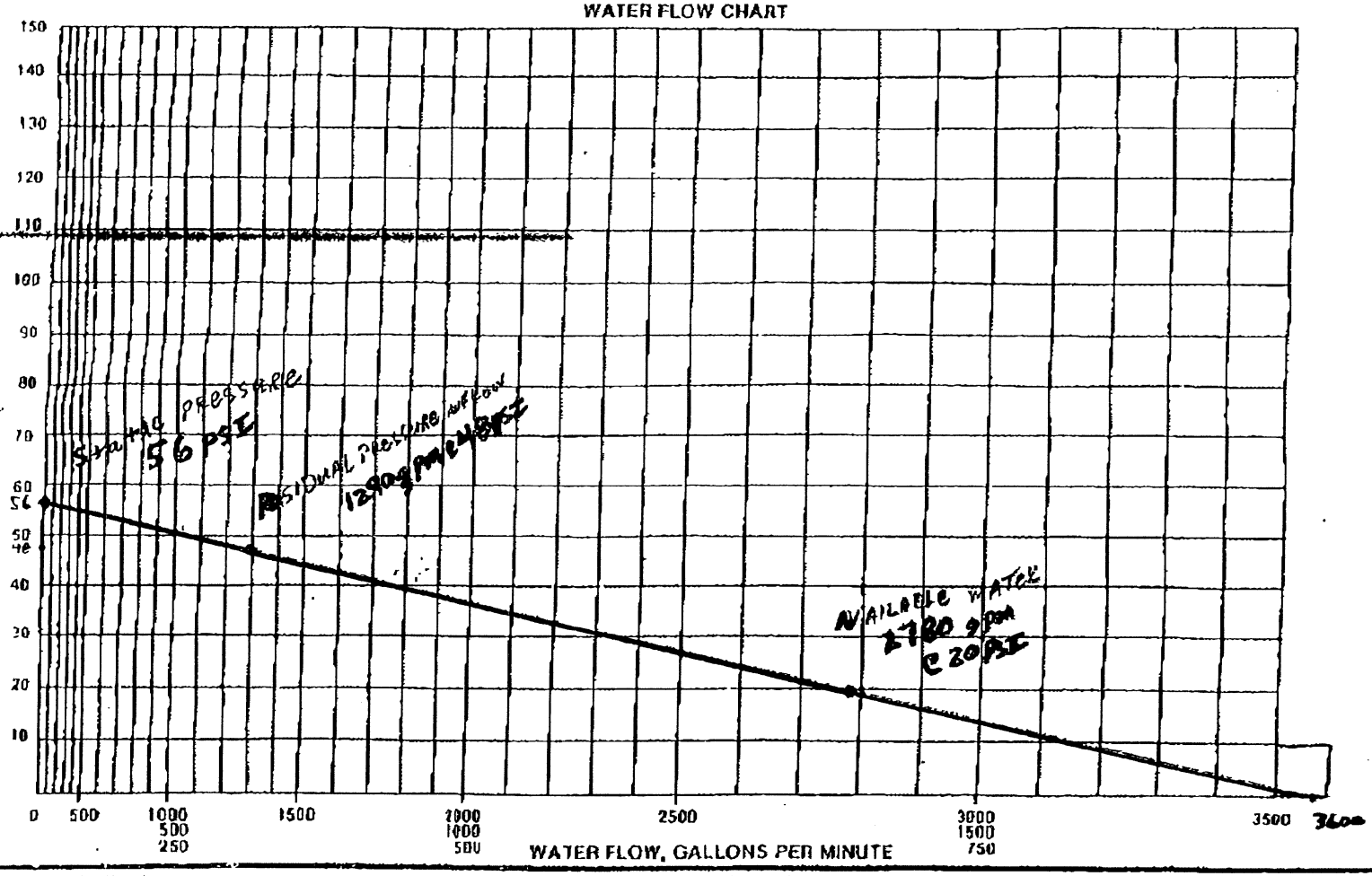
For use of this form see AR 420-90; the proponent agency is USACE

LOCATION	DATE
HYD ACROSS Rd IN FRONT of FBLD T-25	21 SEPT 2001

HYDRANT NUMBER	OUTLET DIAMETER (Inches)	PITOT PRESSURES (PSI)	DISCHARGE (Gallons per Minute)
1	2½"	42	1209
2	2½"	41	1195
3	2½"	40	1179

STATIC PSI	RESIDUAL PSI
56	56/48
TOTAL DISCHARGE DURING TEST (Gallons per Minute)	**AVAILABLE GALLONS PER MINUTE (At 20 PSI)**
3583	2780

WATER FLOW CHART



DA FORM 5384-R, SEP 92 EDITION OF JAN 85 IS OBSOLETE

SECTION 01030

DESIGN AFTER AWARD

1. GENERAL

The requirements within this section establish the design efforts of the successful proposer, following Design Notice to Proceed. Design documents shall include construction drawings, specifications, design analysis and color boards. The design documents shall conform to Section 01020, DESIGN REQUIREMENTS.

1.1 Design Submittals After Award

In addition to the initial proposal of about 30% design effort there will be a 60%, final and corrected final design submittal required in this contract.

1.1.1 Completion of Design

Delays caused by the Proposer in completion of the 60%, final or corrected final design will not be considered as valid reason to delay completion of the entire design.

1.2 Corrected Final Design and Reproduction

Upon Government approval of Final, 100 percent design documents, the Contractor shall immediately provide the Government the documents on CD ROM. If the CADD drawings are converted to MicroStation format from another CADD software program, the native format is to be provided as well. In addition to the CD ROM, the drawings, specifications, design analysis, and color boards, shall be provided to the Government in hard copy. The Contractor will be responsible for his own reproduction. The originals will be retained by the Contractor for recording of as-built conditions.

1.2.1 As-Built Drawings

As-built drawings are to be provided in hardcopy and on CD ROM.

1.3 Time Extension

If for any reason the Government requires more time than the notice given prior to the review conference and that delay causes the Contractor to exceed the set milestones, the Contractor will be granted an extension of time equal to the number of calendar days of delay.

1.4 Compliance and Certification

The Contractor shall certify that all items submitted in the design documents (after construction award) comply with all the stated RFP requirements. This certification shall be included on each sheet of working drawings. All items included in the Contractor's proposal that exceed the RFP criteria shall be provided.

1.5 Joint Occupation Plan

*5

The Contractor and the using agency shall develop a joint occupation plan for the existing facilities and the new Soldier Service Center ~~Consolidated Maintenance Facility~~ to insure timely occupation and safe operating conditions in preparation for demolition.

2. ORDER OF DESIGN CRITERIA PRECEDENCE

Section 01020, DESIGN REQUIREMENTS, is intended to identify specific project requirements for design. In cases of criteria conflict, the most stringent shall apply, or the Contractor shall ask for clarification. Project specifications define minimum material quality requirements and installation execution procedures. National standards and Codes shall govern in cases not covered in Section 01020 or other technical sections.

2.1 Field Verification

The Contractor shall verify field conditions which are significant to design by field inspection, researching and obtaining all necessary as-built drawings and reproducing them for his own use as necessary, and discussing status with knowledgeable personnel. The information shall be reflected in the design documents.

2.2 Topographical Information

The Government has supplied necessary topographic and existing utility information required for the project as part of the RFP. These files are also provided on computer compact disk. Any additional topographic information required by the Contractor for design after award of the contract shall be procured and paid for by the Contractor.

2.3 Drawings

Drawing format shall be in accordance with Savannah District Design Manual for Military Construction, dated May 2000.

2.4 Design Analysis

The Design Analysis shall be developed in accordance to the criteria and requirements specified in Section 01020, DESIGN REQUIREMENTS. The Design Analysis shall include all features with the necessary calculations, tables, methods and sources used in determining equipment and material sizes and capacities, and shall provide sufficient information to support the design.

2.5 Specifications

See section 01020 for specifics on project specifications. Submit the specifications in hard copy and electronic format on CD.

2.6 Certification of Computer Media

All delivery media (floppy disks, compact disk (CD’s)) for computer data shall be certified by the Contractor to be free of known computer viruses. The name(s) and release date(s) of the virus scanning software used to analyze the delivery media shall be furnished to the Government at the time of delivery. The release or revision date of the virus scanning software shall be the current version which has detected the latest known viruses at the time of delivery of the media. If analysis of the delivery media by the Government finds evidence of virus infection, the media will be returned to the Contractor. The Contractor shall resubmit the media at no cost to the Government.

3. DESIGN SUBMITTALS

3.1 General

The Layout Plan design issued with the RFP is considered final. Grading and Erosion Control Plans are consider preliminary and shall be adjusted by the Contractor to meet the design requirements set forth in Section 01020, DESIGN REQUIREMENTS. The Contractor's 60% and final design submittal shall include the final site and utility design and the final building architectural, structural, electrical and mechanical design. These documents shall be packaged separately and stamped "For Review Only 60 percent or 100 percent Design Submittal," accordingly, and each sheet of the drawings shall also be so stamped. The corrected final design submittal shall include the 100 percent complete building design and the 100 percent Utility Design. They shall be stamped separately "For Backcheck Review Only - Corrected Final," and each sheet of the drawings shall also be stamped. The approved corrected final submittal shall be stamped "Approved for Construction."

3.2 Structural Interior Design Submittal at final. Provide 3 ring binders (8 1/2" x 11") with Design Narrative and Material Sample Boards (8 1/2 x 11). Color photocopies of manufacturers' color chips or printed color examples shall not be acceptable. Color Sample Boards shall remain the property of the Government and only one copy shall be returned for use at the project site.

4. 60 PERCENT PRELIMINARY SUBMITTAL REQUIREMENTS:

The 60 percent preliminary submittal shall be submitted 45 days after Notice to Proceed and include complete set of drawings combining the site and architectural design features plus 60 percent of the effort for addressing other discipline requirements. The review of this submittal is primarily to ensure that the contract documents and design analysis are proceeding in an acceptable manner and that the design criteria is being correctly interpreted. The submittal shall consist of the following:

Design analysis, developed to the 60 percent stage.
All 60 percent drawings.
Geotechnical report.

4.1 Energy Analysis

a. Printouts of Input and Output data for Design Energy Use Budget simulations.

b. U-valve calculations for exterior surfaces.

c. Printouts of Input and Output data for Life Cycle Cost Analysis simulations. Provide documentation for initial costs and maintenance costs.

d. Energy conservation methods report.

5. 100 PERCENT SUBMITTAL REQUIREMENTS:

5.1 The 100 percent design shall include complete detailed drawings, specifications, design analysis, color boards, CD ROM of drawings in Microstation by Bentley Systems, Inc. and CD ROM of specifications. The specifications shall include all specification sections and appendices necessary to construct the Consolidated Maintenance Facility.

a. General:

(1) Cover sheet and index of drawings.

(2) Revised geotechnical report if required.

b. Civil:

(1) Plans as provided in this RFP, plus: Utility Plans, Profiles, and Details.

(2) Utility calculations (100 percent complete).

(3) Storm run-off calculations (100 percent complete).

(4) Storm drain line calculations (100 percent complete).

c. Architectural:

(1) Floor plan(s).

(2) Building elevations.

(3) Reflected ceiling plan.

(4) Room finish and color schedules.

(5) Door and window schedules.

(6) Fire protection plan.

d. Structural:

(1) All sections and partial details illustrating typical new work and modifications to framing, flooring, and foundation structural elements.

(2) All plans, sections, and details of special structural new work and modifications to framing, flooring, and foundation elements unique to the project.

(3) Super structure design load and stress computations (100 percent complete).

(4) Lateral load design (100 percent complete).

e. Mechanical:

(1) Mechanical Drawings: All of the mechanical features shall be shown on the drawings for the proposed project. The floor plans shall show all principle architectural features of the building that will affect the mechanical design. Construction details, sections, elevations, etc., shall be provided where required for clarification of methods and materials of design. All roof and exterior wall penetrations shall be detailed on the drawings. Complete equipment schedules shall be provided. Schedules shall indicate all required design parameters and functional requirements, but not limited to electrical characteristics, efficiency (if applicable), Manufacturer's name, optional features to be provided, physical size restraints, etc. All drawings submitted shall be developed to 100 percent completion. All details shown shall be referenced to floor plans, elevations or sections. In addition, drawings shall include, but not limited to the following:

Room designations
Mechanical legend and applicable notes
Location of all ductwork or piping (double line ductwork required
Location and capacity of all terminal units (i.e., registers, diffusers, grilles, unit heaters, etc.)
Exhaust fan location
Size of all ductwork and piping

Thermostat locations
Location of equipment (i.e., chiller, pumps, etc.)
Return air paths (i.e., undercut doors, transfer grilles)
Piping Riser Diagrams and Schematic
Equipment schedules/locations.
Plumbing fixture Schedules
Plumbing plans, risers, and details.
Enlarged Mechanical room plans with equipment clearances.
HVAC plans, risers and major
Location of utility entrances
Roof and wall penetrations
Fixture designations
HVAC Control Drawings (in accordance with TI-810-11, HVAC Control Systems and Specification Section 15951, DDC for HVAC Controls)
HVAC Controls: HVAC Control System Drawings shall include the following:
HVAC Control System Legend.
Control System Schematic
Equipment Schedule.
Valve Schedule
Damper Schedule.
Sequence of Operation
I/O summary table and Data Terminal Strip Layout.
Wiring Diagram
DDC Panel Locations
Communication Network and Block Diagram.
Metering of Utilities (gas, electric, water)

(2) Mechanical Design Analysis: Design Analysis shall be 100 percent completed and shall include detailed design calculations to support all of the mechanical systems, equipment, components, and features required for this project. Design Analysis shall include but not limited to the following:

Computer-generated HVAC load calculations (ASHRAE-based)
Plumbing System and Equipment Sizing Calculations
Duct Systems Sizing Calculations
Piping Systems Sizing Calculation
Equipment Sizing Calculations
Manufacturer’s Catalog cuts and specification data for all equipment (catalog cuts submitted shall be the actual equipment to be installed on project and are not allowed to be changed or revised after submission approval)

f. Fire Protection:

(1) Submit the qualifications of the fire protection designer. Design of the system shall not be initiated until approval of the designer has been granted by the contracting officer.

(2) Indicate sprinkler design criteria, for example MIL-HDBK-1008C, NFPA 101, and NFPA 13.

(3) Indicate fire flow test results (static, residual, and flow), location of test, and date conducted.

(4) Indicate sprinkler hazard classifications, design densities, design areas, and exterior hose stream demand per MIL-HDBK-1008C.

(5) Provide detailed sprinkler system drawings showing sprinkler system piping and sprinklers for all areas. Sprinkler and piping locations shall be

coordinated with all other trades and equipment within the facility. Include the fire water main, fire pump installation, double check backflow preventer, sprinkler riser, hose standpipe with hose valves, sprinkler mains, cross mains and branches. Provide details of the sprinkler riser assembly and inspectors test assembly. Indicate connection of flow and tamper switches to the fire alarm control panel. Provide a sprinkler system/hose standpipe riser diagram similar to that shown on plate MP-8. The sizes of piping and equipment shall indicated on the drawings. If the addition of sprinkler piping and sprinklers to the MP-plates results in illegible drawings, dedicated fire suppression drawings shall be provided. If required, these shall be labeled FS-plates.

(6) Provide details of the fire pump installation in both plan and elevation. Indicate all piping, valves, jockey pump, pump controller cabinets, test header, fire department connection and all other required equipment. Indicate connection of flow and tamper switches to the fire alarm control panel. The sizes of piping and equipment shall be indicated on the drawings.

(7) Provide computer generated hydraulic sprinkler system calculations for the facility. Include the fire pump and exterior hose stream demand in the hydraulic calculations. Provide sprinkler system layout drawings indicating node and pipe number identification as used in the calculations. The node/pipe identification may be shown on the contract sprinkler system drawings or be provided on drawings in the design analysis.

(8) Provide manufacturer's catalog data for all sprinkler system piping and components including piping, sprinklers, valves, alarm check value, double check back flow preventer, fire department connection, flow and tamper switches, hangers, and alarm devices.

g. Interior Electrical:

(1) Complete 100 percent demand load, voltage drop and loadflow, and fault analyses, typical for each building type.

(2) Feeder and branch circuit sizing calculations.

(3) Lighting calculations.

(4) Catalog sheets for electrical equipment.

5.2 Design Analysis

Design analysis shall include all completed design calculations developed to the extent required to support the design of utility system extensions, taps, foundation, structural, electrical and mechanical systems design.

5.3 100 Percent Drawings

All drawings included in the required technical data for the proposal submission shall be developed to 100 percent completion. In addition to the utility plans, submit mechanical and electrical plans, with complete schematics, to show all air conditioning, plumbing and electrical work.

5.3.1 Show the construction of fire and sound rated assemblies in detail and note on the drawings the tested design upon which the construction is based. Note any modification to materials or method of construction. Detail all penetrations of rated partitions.

5.3.2 All details shall be referenced to floor plans, elevations or sections.

5.3.3 Building Sections

Transverse and longitudinal sections [1:100] make necessary corrections to the design provided if necessary.

5.3.4 Overall Site Layout

5.3.4.1 Site, Grading, and Utility Plans

Site, and grading plans plan are provided with the RFP and are available in electronic format for development of utility plans. Utility plans shall show all utilities and associated products, i.e., cleanouts, manholes, fire hydrants, valve boxes, etc.

5.3.4.2 Sanitary Sewer

Sanitary sewer main plans and profiles showing location and elevation of pipe, thrust blocks, manholes, etc. Construction of main and appurtenances shall be indicated.

5.3.5 Water

5.3.5.1 Provide a plan showing existing water lines, point of connection, new distribution piping (Scale 1 inch = 40 feet).

5.3.6 Fire Protection submittal items shall be a completion of the 60 percent submittal requirements to 100 percent.

5.3.7 Electrical submittal items shall include the following:

(1) Site plans; as included in this RFP.

(2) Exterior lighting plan.

(3) Power plan.

(4) Lighting plan.

(5) Electrical one line diagrams.

(6) Details; including equipment foundations, trenches, switchboard supports, including service, grounding, etc.

(7) Schedules; including fixture and panel schedules.

5.4 Corrected Drawings and Specifications for Backcheck Review

Within 21 calendar days following the final Government approval of the 100 percent complete site and utility design and within 21 calendar days following the Government review of the 100 percent complete building design, the Contractor shall submit copies of the corrected drawings and specifications and distribute to the agencies in the quantities listed in paragraph 6. TRANSMITTAL TO GOVERNMENT AGENCIES.

5.5 Equipment Schedule

Based on the results of calculations, provide a complete list of the materials and equipment proposed for heating and plumbing, with the manufacturer's published cataloged product installation specifications and roughing-in data. The heating equipment data shall include the manufacturer's wiring diagrams,

installation specifications, ARI certification, and the standard warranty for the equipment. In addition, provide the manufacturer's published cataloged capacities for supply diffusers as evidence that the arrangement of supply air outlets in each room will provide the throw and spread characteristics required to cover completely all exterior wall surfaces with the blanket of warm air at the proper design velocities.

5.6 Upon completion of the 100 percent design, including all accepted annotated comments, the Contractor shall immediately submit electronic copies of all drawings in the Microstation format. All final drawings that are to be prepared and furnished under the Contract shall be original plotted tracings produced from CADD, and compatible with Microstation, Version J (or later), directly as .DGN files on CD-ROM. All drawings shall be prepared to conform with applicable provisions of the Savannah District Design Manual for Military Construction, dated May 2000, Chapter A-10 "Drawings" and the discipline-specific provisions for drawing file layer (level) assignments, line colors, line weights and line types of the Tri Service A/E/C CADD Standard, dated July 1998. CD ROM of all files shall be furnished in addition to paper hard copy drawings. In accordance with the above, written documentation of the electronic data will accompany each CD ROM submittal. Upon completion of the work, CDs, and documentation shall become the property of the Government.

5.7 Design Review Conferences

Two design review conferences (60% and 100%) shall be held at Fort Stewart, GA.

6. TRANSMITTAL TO GOVERNMENT AGENCIES

*5

6.1 Government agencies shall receive review documents as indicated in the following DISTRIBUTION SCHEDULE. The Government shall return the submittals with review comments within 21 days. This 21 days for Government review will not be reduced as part of the contractor's "fast track" initiative. Agencies' reviewing documents, and in the quantities indicated, are listed below. All documents must contain an index of contents. Work shall be 100 percent complete when the 100 percent design is submitted. All submittals shall be transmitted by express mail. Originals of transmittal letters should be sent to the Savannah District and copies should accompany each mail package. Transmittal letters shall indicate distribution by use of the "ATTN" code shown in the address. Design documents shall include design analysis, drawings, calculations, specifications and color boards and shall be distributed as indicated:

6.1.1 The Contractor shall submit complete design documents for the required submittal in the same quantity and to the same offices listed below, for each review (one or more) until the Government is satisfied that all review comments have been addressed and resolved. Following the last review, the Contractor shall forward the completed construction documents specified as follows:

DISTRIBUTION SCHEDULE

	NUMBER OF COPIES PER ADDRESSEE					
SUBMITTAL - Preliminary	(A)	(B)	(C)	(D)	(E)	(F)
DRAWINGS (HALF-SIZE)	0	0	0	0	0	0
DRAWINGS (FULL SIZE)	14	10	3	4	2	2
SPECIFICATIONS	14	10	3	4	2	2

DESIGN ANALYSIS	14	10	3	4	2	2
REVISED COLOR BOARDS	2	1	1	2	0	0

DISTRIBUTION SCHEDULE

	NUMBER OF COPIES PER ADDRESSEE					
SUBMITTAL - Final, Corrected Final	(A)	(B)	(C)	(D)	(E)	(F)
FINAL DESIGN SUBMITTAL						
FINAL (100 percent)						
DRAWINGS (HALF-SIZE)	0	0	0	0	0	0
DRAWINGS (FULL SIZE)	14	10	3	4	2	2
SPECIFICATIONS	14	10	3	4	2	2
DESIGN ANALYSIS	14	10	3	4	2	2
REVISED COLOR BOARDS	2	1	1	2	0	0
DRAWINGS ON CD	1	1	1	1	0	0
CORRECTED FINAL DESIGN SUBMITTAL						
DRAWINGS (HALF-SIZE)	0	0	0	0	0	0
DRAWINGS (FULL SIZE)	10	4	3	4	0	0
SPECIFICATIONS	10	4	3	4	0	0
DESIGN ANALYSIS	10	4	3	4	0	0
DRAWINGS ON CD	1	1	1	1	0	0
APPROVED CORRECTED FINAL[1]						
DRAWINGS (HALF-SIZE)	3	3	2	5	0	0
DRAWINGS (FULL SIZE)	1	1	0	2	0	0
SPECIFICATIONS	4	4	2	5	0	0
ELECTRONIC SPECIFICATIONS & DRAWING FILES IN MICROSTATION.DGN FORMAT	3	0	0	0	0	0
CD	2	2	1	2	0	0

NOTES FOR SUBMITTALS

[1]Include one set of original full-size reproducible drawings, computer generated drawing files and complete specifications on CD-ROM.

(A) US Army Engineer District, Savannah
ATTN: CESAS-PM-MC (Mr. Robert Sauntry)
100 West Oglethorpe Avenue
Savannah, GA 31401

(B) Commander, 3d Infantry Division (Mech) & Fort Stewart
Directorate of Public Works
ATTN: Anthony White, EP&S Division
1117 Frank Cochran Drive
Fort Stewart, GA 31314

(C) Commander, 3rd Infantry Division (Mechanized) & Fort Stewart
ATTN: AFZP-DPW (Mr. Rose)
Building 1114, Frank Cochran Street
Fort Stewart, GA 31314-5000

(D) US Army Engineer District – Savannah

ATTN: CESAS-CD-ST (Jack Bartholet)
Area Engineer, Building 436, Wilson Ave
Hinesville, Georgia 31313-6801

(E) Director, USAISEC-FDEO
ATTN: AMSEL-IE-DE-IN-CO (Gaffney)
1435 Porter Street, Suite 2000
Fort Detrick, MD 21702-5047

(F) Eastern Paralyzed Veterans Association
Architecture & Facilities Management
75-20 Astoria Boulevard
Queens, NY 11370-1178

6.2 Pre Design Conference and Design Review Conference Action

Pre design (prework) conference will be held after the contract award to technically discuss the Contractors offer. Preliminary (60%) design and 100 percent design conferences will occur after review submittal to insure complete understanding of government review comments.

6.2.1 Government personnel will present review comments for discussion and resolution at the design review conferences. Copies of comments, annotated with comment action agreed upon, will be made available to all parties before the design review conference adjourns. Unresolved problems will be resolved by immediate follow-on action at end of conferences. Valid, acceptable comments will be incorporated. On receipt of corrected designs, the Savannah District will formally provide Government approval necessary to initiate construction. The Contractor shall submit to the Contracting Officer within 5 calendar days, two copies of a memorandum of the design review meetings summarizing major decision points and issues which requires resolution and the action office.

6.2.2 The Government, however, reserves the right to disapprove design document submittals if comments are of too great a significance. In this case, every effort shall be made during follow-up action between the Contractor and the Savannah District to resolve conflicts and problems such that documents can be fully approved. However, if required submittal(s) are incomplete or deficient, requiring correction by the Contractor and resubmittal for review, the cost of corrections and resubmittals will be at the Contractor's expense.

6.3 Review Comment Annotation and Compliance

a. The Government's review will consist of quality assurance (QA) checks. It will center primarily on the design's functional aspects with limited technical review. Comments will be provided electronically via the Corps of Engineers DrChecks software. The Contractor shall annotate the review comments in the development of data for the next design level. If any review comment requires clarification and/or amplification to assure understanding, the contractor shall notify the Contracting Officer in writing.

DrChecks is the required method for preparing and annotating comments. This is an Internet based database available on the Internet at:

http://www.buildersnet.org/drchecks/

The review will be for conformance with the technical requirements of the solicitation. The Government will take twenty-one (21) days to review and comment on each design submittal. If the Contractor disagrees technically

with any comment or comments and does not intend to comply with the comment, he shall clearly outline, with ample justification, the reasons for noncompliance within five (5) days after receipt of these comments in order that the comment can be resolved. The disposition of all comments shall be furnished in writing with the next scheduled submittal. The Contractor is cautioned in that if he believes the action required by any comment exceeds the requirements of this contract, that he should take no action and notify the District in writing immediately.

b. The Contractor shall furnish all annotated comments to the Government no later than 7 calendar days after receipt of all comments associated with the particular submittal.

c. After each submittal, the Contractor shall make any corrections necessary (because of errors or omissions occasioned by review comments) including the preparation of addenda during the bidding period that may be required as a result of such deficiencies. The Contractor shall not proceed or initiate any work on any successive design level prior to receipt of approval of the preceding design level.

-- End of Section --

SECTION 01330

SUBMITTAL PROCEDURES

1.1 SUBMITTAL CLASSIFICATION

Submittals are identified with submittal description (SD) numbers and are classified as follows:

1.1.1 Government Approved

Governmental 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."

These items are tagged GA/AE or GA/RE in the submittal register.

The designer of record approves GA/AE review materials. This is usually an architectural-engineering design firm hired by the construction contractor. The Corps of Engineers construction resident engineer approves GA/RE review materials. This is usually a group of engineers who work for the installation’s resident engineer.

1.1.2 For Information Only (FIO)

All submittals not requiring Government approval will be for information only. These items are tagged FIO in the submittal register. They are not considered to be "shop drawings" within the terms of the Contract Clause referred to above.

1.2 APPROVED SUBMITTALS

The Contracting Officer's approval of submittals shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory.

Approval will not relieve the Contractor of the responsibility for any error, which may exist, as the Contractor under the CQC requirements of this contract is responsible for dimensions, the design of adequate connections and details, and the satisfactory construction of all work.

After submittals have been approved by the Contracting Officer, no re-submittal for the purpose of substituting materials or equipment will be considered unless accompanied by an explanation of why a substitution is necessary.

1.3 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies specified for the initial submittal.

If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice in accordance with the Contract Clause "Changes" shall be given promptly to the Contracting Officer.

1.4 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

2.1 GENERAL

The Contractor shall make submittals as required by the specifications. The Contracting Officer may request submittals in addition to those specified when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same as those used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

Prior to submittal, all items {GA and FIO} shall be checked and approved by the Contractor's Quality Control (CQC) representative and each item shall be stamped, signed, and dated by the CQC representative indicating action taken.

Proposed deviations from the contract requirements shall be clearly identified.

Submittals shall include items such as: Contractor's, manufacturer's, or fabricator's drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, operating charts or curves; test reports; test cylinders; samples; O&M manuals (including parts list); certifications; warranties; and other such required submittals.

Submittals requiring Government approval shall be scheduled and made prior to the acquisition of the material or equipment covered thereby.

Samples remaining upon completion of the work shall be picked up and disposed of in accordance with manufacturer's Material Safety Data Sheets (MSDS) and in compliance with existing laws and regulations.

2.2 SUBMITTAL REGISTER (ENG FORM 4288)

At the end of this section is one set of ENG Form 4288 listing items of equipment and materials for which submittals are required by the specifications; this list may not be all-inclusive and additional submittals may be required.

The Contractor will also be given the submittal register as a diskette containing the computerized ENG Form 4288 and instructions on the use of the diskette. Columns "d" through "r" have been completed by the Government; the Contractor shall complete columns "a" and "s" through "u" and submit the forms (hard copy plus associated electronic file) to the Contracting Officer for approval within 30 calendar days after Notice to Proceed.

The Contractor shall keep this diskette up-to-date and shall submit it to the Government together with the monthly payment request. The approved

submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract.

The submittal register and the progress schedules shall be coordinated.

2.3 SCHEDULING

Submittals covering component items forming a system or items that are interrelated shall be scheduled to be coordinated and submitted concurrently.

All submittals for all interior finishes (wall, floor, ceiling), all base, casework, toilet partitions, window treatments and all other similar items requiring coordinated color selection shall be submitted concurrently.

Certifications to be submitted with the pertinent drawings shall be so scheduled.

The contractor shall allow 30 calendar days, exclusive of mailing time, and this period shown on the submittal register and NAS schedule for submittals requiring Government review and approval.

No delay damages or time extensions will be allowed for time lost in late submittals or resubmittals.

An additional 10 calendar days shall be allowed and shown on the register and NAS schedule for the review and approval of submittals for food service equipment and refrigeration and HVAC control systems.

2.4 TRANSMITTAL FORM (ENG FORM 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both Government approved and for information only submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted.

Special care shall be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

2.5 SUBMITTAL PROCEDURE

Submittals shall be made as follows:

2.5.1 Procedures

The Contractor shall be responsible for the scheduling and control of all submittals.

The Contractor is responsible for confirming that the submittal register includes all submittals required by the contract documents.

In addition to those items listed on ENG Form 4288, the Contractor will furnish submittals for any deviation from the plans or specifications. The scheduled need dates must be recorded on the document for each item for

control purposes and critical items must be tied to the contractor's approved schedule where applicable.

The Contractor will submit to the Contracting Officer for approval five (5) copies of all G/AE or G/RE level and for all FIO level submittals. This number of copies of submittals specified in this portion of the contract shall be as specified in lieu of the number as specified by FAR 52.236-21.

For those contracts requiring project schedule--Network Analysis System (NAS), the Contractor will schedule on the NAS, critical or key items of material or equipment which the procurement activities will, or have the potential to, significantly impact project critical path and completion. The list of key or critical items of material or equipment shall be submittal approved by the Contracting Officer. See attachment to Section 0800 for NAS scheduling requirements.

Where ENG Form 4025 must be submitted prior to approval of the Construction Progress Schedule, the Contractor shall submit an initial annotated ENG Form 4288 upon which dates for submittal, approval and delivery of procurement items shall be included for the first 60 days of the work.

Upon approval of the Construction Progress Schedule, or no later than 60 days after Notice to Proceed, the Contractor shall submit final annotated copies of ENG Form 4288-Submittal Register. Dates shall be coordinated with the approved Construction Progress Schedule to logically interface with the sequence of construction. Critical item numbers will be shown on the listing if NAS is required.

Furnishing the schedule shall not be interpreted as relieving the Contractor of his obligation to comply with all the specification requirements for the items on the schedule.

Contractor's Quality Control representative shall review the listing at least every 30 days and take appropriate action to maintain an effective system.

The Contractor shall furnish a list each 30 days of all submittals on which either Government's or Contractor's action is past due. This monthly list of delayed items shall also be annotated by the Contractor to show what corrective action he is taking with regard to slippages in submittal schedule that are attributable to actions by him, his subcontractors, or suppliers.

The Contractor shall provide updated submittal register data, electronically or on floppy disk, to the contracting Officer, monthly, indicating the current status and codes of all submittals in order update the master submittal register maintained by the Contracting Officer and to assure that the contractor’s schedule is being maintained.

He shall also furnish revised due dates in those cases when the original submittal schedule is no longer realistic.

The Contractor shall certify that each submittal is correct and in strict conformance with the contract drawings and specifications. All submittals not subject to the approval of the Contracting Officer will be submitted for Information purposes only, (FIO).

No Corps of Engineers action will be required for FIO submittals prior to incorporating these items into the work, but the submittal shall be furnished to the Area/Resident Engineer not less than 2 weeks prior to procurement of Contractor certified material, equipment, etc.

These Contractor approved submittals (FIO), will be used to verify that material received and used in the job is the same as that described and approved and will be used as record copies.

All samples of materials submitted as required by these specifications shall be properly identified and labeled for ready identification, and upon being certified by the Contractor and reviewed by the Contracting Officer, shall be stored at the site of the work for job site use until all work has been completed and accepted by the Contracting Officer.

Delegation of this approval authority to Contractor Quality Control does not relieve the Contractor from the obligation to conform to any contract requirement and will not prevent the Contracting Officer from requiring removal and replacement of construction not in contract conformance; nor does it relieve the Contractor from the requirement to furnish "samples" for testing by the Government Laboratory or check testing by the Government in those instances where the technical specifications so prescribe.

Contractor certified drawings will be subject to quality assurance review by the Government at any time during the duration of the contract.

No adjustment for time or money will be allowed for corrections required as a result of noncompliance with plans and specifications.

Submittals Requiring Government Approval (G/AE Level or G/RE Level). Where the review authority is designated to the Government, the Contractor is required to sign the certification on ENG Form 4025 in the box beside the remarks block in Section I. The Government will code the items in block h and sign the approval action block in Section II as the approving authority.

Operating and Maintenance Instructions. Six (6) complete sets of instructions containing the manufacturer's operating and maintenance instructions for each piece of equipment shall be furnished. Each set shall be permanently bound and shall have a hard cover.

One (1) complete set shall be furnished at the time test procedures are submitted.

Remaining sets shall be furnished to the Contracting Officer on the date of final/acceptance inspection of the project.
The following identification shall be inscribed on the covers: The words "OPERATING AND MAINTENANCE INSTRUCTIONS," name and location of the facility, name of the Contractor, and contract number. Flysheets shall be placed before instructions covering each subject. Instruction sheets shall be approximately 8-1/2 by 11 inches, with large sheets of drawings folded in. Instructions shall include but are not limited to:

(1) System layout showing piping, valves and controls;

(2) Approved wiring and control diagrams;

(3) A control sequence describing startup, operation and shutdown;

(4) Operating and maintenance instructions for each piece of equipment, including lubrication instructions and troubleshooting guide; and

(5) Manufacturer’s bulletins, cuts and descriptive data; parts lists and recommended parts.

2.5.2 Deviations

For submittals, which include proposed deviations requested by the Contractor, the column "variation" of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the reason for any deviations and annotate such deviations on the submittal.

The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

The contractor is not authorized to take action on an approved deviation until the deviation is included in a final contract modification.

2.6 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

2.7 GOVERNMENT APPROVED SUBMITTALS

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated.

Three (3) copies of the GA submittals will be retained by the Contracting Officer and two (2) copies of the submittal will be returned to the Contractor-within the time specified-with action code.

Submittals requiring re-submittal to the Government are due immediately upon receipt by the contractor to avoid contractor delay to the project.

2.8 INFORMATION ONLY SUBMITTALS

Three (3) copies of the submittal will be retained by the Contracting Officer and two (2) copies returned to the contractor.

Not all FIO submittals will be reviewed by the Government. This Government review will be a quality assurance review only of a sample of the entire number of submittals. 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. FIO submittals

noted for re-submittal to the Government for clarification or additional data are due immediately upon receipt by the contractor.

2.9 STAMPS

Stamps used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

CONTRACTOR
(Firm Name)

_____ Approved

_____ Approved with corrections as noted on submittal data and/or attached sheet(s).

SIGNATURE: _____-
_____

TITLE:
_____

DATE:

--End of Section--

SECTION 01415

METRIC MEASUREMENTS

1.1 REFERENCES

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM E 380	(1993) Practice for Use of the International System of Units (SI)
ASTM E 621	(1994; R 1999el) Practice for Use of Metric (SI) Units in Building Design and Construction

1.2 GENERAL

This project may include metric units of measurements. The metric units used are the International System of Units (SI) developed and maintained by the General Conference on Weights and Measures (CGPM); the name International System of Units and the international abbreviation SI were adopted by the 11th CGPM in 1960. A number of circumstances require that both metric SI units and English inch-pound (I-P) units be included in a section of the specifications. When both metric and I-P measurements are included, the section may contain measurements for products that are manufactured to I-P dimensions and then expressed in mathematically converted metric value (soft metric) or, it may contain measurements for products that are manufactured to an industry recognized rounded metric (hard metric) dimensions but are allowed to be substituted by I-P products to comply with the law. Dual measurements are also included to indicate industry and/or Government standards, test values or other controlling factors, such as the code requirements where I-P values are needed for clarity or to trace back to the referenced standards, test values or codes.

1.3 USE OF MEASUREMENTS

Measurements shall be either in SI or I-P units as indicated, except for soft metric measurements or as otherwise authorized. When only SI or I-P measurements are specified for a product, the product shall be procured in the specified units (SI or I-P) unless otherwise authorized by the Contracting Officer. The Contractor shall be responsible for all associated labor and materials when authorized to substitute one system of units for another and for the final assembly and performance of the specified work and/or products.

1.3.1 Hard Metric

A hard metric measurement is indicated by an SI value with no expressed correlation to an I-P value, i.e., where an SI value is not an exact mathematical conversion of an I-P value, such as the use of 100 mm in lieu of 4 inches. Hard metric measurements are often used for field data such as

distance from one point to another or distance above the floor. Products are considered to be hard metric when they are manufactured to metric dimensions or have an industry recognized metric designation.

1.3.2 Soft Metric

a. A soft metric measurement is indicated by an SI value which is a mathematical conversion of the I-P value shown in parentheses (e.g. 38.1 mm (1-1/2 inches)). Soft metric measurements are used for measurements pertaining to products, test values, and other situations where the I-P units are the standard for manufacture, verification, or other controlling factor. The I-P value shall govern while the metric measurement is provided for information.

b. A soft metric measurement is also indicated for products that are manufactured in industry designated metric dimensions but are required by law to allow substitute I-P products. These measurements are indicated by a manufacturing hard metric product dimension followed by the substitute I-P equivalent value in parentheses (e.g., 190 x 190 x 390 mm (7-5/8 x 7-5/8 x 15-5/8 inches)).

1.3.3 Neutral

A neutral measurement is indicated by an identifier which has no expressed relation to either an SI or an I-P value (e.g., American Wire Gage (AWG) which indicates thickness but in itself is neither SI nor I-P).

1.4 COORDINATION

Discrepancies, such as mismatches or product unavailability, arising from use of both metric and non-metric measurements and discrepancies between the measurements in the specifications and the measurements in the drawings shall be brought to the attention of the Contracting Officer for resolution.

1.5 RELATIONSHIP TO SUBMITTALS

Submittals for Government approval or for information only shall cover the SI or I-P products actually being furnished for the project. The Contractor shall submit the required drawings and calculations in the same units used in the contract documents describing the product or requirement unless otherwise instructed or approved. The Contractor shall use ASTM E 380 and ASTM E 621 as the basis for establishing metric measurements required to be used in submittals.

-- End Of Section --

SECTION 01420

SOURCES FOR REFERENCE PUBLICATIONS
06/01

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. The designations "AOK" and "LOK" are for administrative purposes and should not be used when ordering publications.

ACI INTERNATIONAL (ACI)
P.O. Box 9094
Farmington Hills, MI 48333-9094
Ph: 248-848-3700
Fax: 248-848-3701
Internet: www.aci-int.org
AOK 5/01
LOK 2/01

ACOUSTICAL SOCIETY OF AMERICA (ASA)
2 Huntington Quadrangle
Melville, NY 11747-4502
Ph: 516-576-2360
Fax: 516-576-2377
email: asa@aip.org
Internet: www.asa.aip.org
To order ASA Standards, contact:
Standards and Publications Fulfillment Center
P.O. Box 1020
Sewickley, PA 15143-9998
Phone: 412-741-1979
Fax: 412-741-0609
Email: asapubs@abdintl.com
AOK 5/01
LOK 2/01

AIR CONDITIONING AND REFRIGERATION INSTITUTE (ARI)
4301 North Fairfax Dr., Suite 425

ATTN: Pubs Dept.
Arlington, VA 22203
Ph: 703-524-8800
Fax: 703-528-3816
E-mail: ari@ari.org
Internet: www.ari.org
AOK 5/01
LOK 2/01

AIR CONDITIONING CONTRACTORS OF AMERICA (ACCA)
2800 Shirlington Road, Suite 300
Arlington, VA 22206
Ph: 703-575-4477
FAX: 703-575-4449
Internet: www.acca.org
AOK 5/01
LOK 6/00

AIR DIFFUSION COUNCIL (ADC)
104 So. Michigan Ave., No. 1500
Chicago, IL 60603
Ph: 312-201-0101
Fax: 312-201-0214
Internet: www.flexibleduct.org
AOK 5/01
LOK 6/00

AIR MOVEMENT AND CONTROL ASSOCIATION (AMCA)
30 W. University Dr.
Arlington Heights, IL 60004-1893
Ph: 847-394-0150
Fax: 847-253-0088
Internet: www.amca.org
AOK 5/01
LOK 2/01

ALUMINUM ASSOCIATION (AA)
900 19th Street N.W.
Washington, DC 20006
Ph: 202-862-5100
Fax: 202-862-5164
Internet: www.aluminum.org
AOK 5/01
LOK 2/01

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA)
1827 Walden Ofc. Sq.
Suite 104
Schaumburg, IL 60173-4268
Ph: 847-303-5664
Fax: 847-303-5774
Internet: www.aamanet.org
AOK 5/01
LOK 2/01

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO)

444 N. Capital St., NW, Suite 249
Washington, DC 20001
Ph: 800-231-3475 202-624-5800
Fax: 800-525-5562 202-624-5806
Internet: www.transportation.org
AOK 5/01
LOK 2/01

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)
P.O. Box 12215
Research Triangle Park, NC 27709-2215
Ph: 919-549-8141
Fax: 919-549-8933
Internet: www.aatcc.org
AOK 5/01
LOK 2/01

AMERICAN BEARING MANUFACTURERS ASSOCIATION (ABMA)
2025 M Street, NW, Suite 800
Washington, DC 20036
Ph: 202-429-5155
Fax: 202-828-6042
Internet: www.abma-dc.org
AOK 5/01
LOK 2/01

AMERICAN BOILER MANUFACTURERS ASSOCIATION (ABMA)
4001 North 9th Street, Suite 226
Arlington, VA 22203-1900
Ph: 703-522-7350
Fax: 703-522-2665
Internet: www.abma.com
AOK 5/01
LOK 2/01

AMERICAN CONCRETE PIPE ASSOCIATION (ACPA)
222 West Las Colinas Blvd., Suite 641
Irving, TX 75039-5423
Ph: 972-506-7216
Fax: 972-506-7682
Internet: www.concrete-pipe.org
e-mail: info@concrete-pipe.org
AOK 5/01
LOK 6/00

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)
1330 Kemper Meadow Dr.
Suite 600
Cincinnati, OH 45240
Ph: 513-742-2020
Fax: 513-742-3355
Internet: www.acgih.org
E-mail: pubs@acgih.org
AOK 5/01
LOK 2/01

AMERICAN FOREST & PAPER ASSOCIATION (AF&PA)

American Wood Council
ATTN: Publications Dept.
1111 Nineteenth St. NW, Suite 800
Washington, DC 20036
Ph: 800-294-2372 202-463-2700
Fax: 202-463-2471
Internet: www.afandpa.org
AOK 5/01
LOK 6/00

AMERICAN GAS ASSOCIATION (AGA)
400 N. Capitol St. N.W.Suite 450
Washington, D.C. 20001
Ph: 202-824-7000
Fax: 202-824-7115
Internet: www.aga.org
AOK 5/01
LOK 2/01

AMERICAN GAS ASSOCIATION LABORATORIES (AGAL)
400 N. Capitol St. N.W.Suite 450
Washington, D.C. 20001
Ph: 202-824-7000
Fax: 202-824-7115
Internet: www.aga.org
AOK 5/01
LOK 0/00

AMERICAN GEAR MANUFACTURERS ASSOCIATION (AGMA)
1500 King St., Suite 201
Alexandria, VA 22314-2730
Ph: 703-684-0211
Fax: 703-684-0242
Internet: www.agma.org
AOK 5/010
LOK 3/01

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
One East Wacker Dr., Suite 3100
Chicago, IL 60601-2001
Ph: 312-670-2400
Publications: 800-644-2400
Fax: 312-670-5403
Internet: www.aisc.org
AOK 5/01
LOK 3/01

AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC)
7012 So. Revere Parkway, Suite 140
Englewood, CO 80112
Ph: 303-792-9559
Fax: 303-792-0669
Internet: www.aitc-glulam.org
AOK 5/01
LOK 3/01

AMERICAN IRON AND STEEL INSTITUTE (AISI)

1101 17th St., NW Suite 1300
Washington, DC 20036
Ph: 202-452-7100
Internet: www.steel.org
AOK 5/01
LOK 3/01

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
1819 L Street, NW, 6th Floor
Washington, DC 20036
Ph: 202-293-8020
Fax: 202-293-9287
Internet: www.ansi.org/
Note: Documents beginning with the letter "S" can be ordered from:
Acoustical Society of America
Standards and Publications Fulfillment Center
P. O. Box 1020
Sewickley, PA 15143-9998
Ph: 412-741-1979
Fax: 412-741-0609
Internet: http://asa.aip.org
General e-mail: asa@aip.org
Publications 3 e-mail: asapubs@abdintl.com
AOK 5/01
LOK 6/00

AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA)
1250 I St., NW, Suite 500
Washington, DC 20005-3922
Ph: 202-789-2900
FAX: 202-789-1893
Internet: www.anla.org
AOK 5/01
LOK 3/01

AMERICAN PETROLEUM INSTITUTE (API)
1220 L St., NW
Washington, DC 20005-4070
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e-mail: wwpi@teleport.com
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e-mail: info@wwpa.org
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-- End Of Section --

SECTION 01451

CONTRACTOR QUALITY CONTROL

1.1 REFERENCES

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

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 3740	(1994a) 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	(1995b) Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

2.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clause titled "Inspection of Construction." The quality control system shall consist of plans, procedures, and organization necessary to produce an end product, which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with quality requirements specified in the contract. The project superintendent in this context shall mean the individual with the responsibility for the overall management of the project including quality and production.

2.2 QUALITY CONTROL PLAN

2.2.1 General

The Contractor shall furnish for review by the Government, not later than 5 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause titled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, test, records, and forms to be used. 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 features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

2.2.2 Content of the CQC Plan

The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:

a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the project superintendent.

b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.

c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Government.

d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, and purchasing agents. These procedures shall be in accordance with Section 01330 SUBMITTAL PROCEDURES.

e. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Contracting Officer.)

f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

g. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

h. Reporting procedures, including proposed reporting formats.

i. A list of the definable features of work.

j. 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.

k. This list will be agreed upon during the coordination meeting.

2.2.3 Acceptance of Plan

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

2.2.4 Notification of Changes

After acceptance of the CQC Plan, the Contractor shall notify the Contracting Officer in writing of any proposed change.

Proposed changes are subject to acceptance by the Contracting Officer.

2.3 COORDINATION MEETING

After the Preconstruction Conference, before start of construction, and prior to acceptance by the Government of the CQC Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system.

The CQC Plan shall be submitted for review a minimum of 7 calendar days prior to the Coordination Meeting.

During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance.

Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures, which may require corrective action by the Contractor.

2.4 QUALITY CONTROL ORGANIZATION

2.4.1 General

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. The Contractor shall provide a CQC organization which shall be at the site at all times during progress of the work and with complete authority to take any action necessary to ensure compliance with the

contract. All CQC staff members shall be subject to acceptance by the Contracting Officer.

2.4.2 CQC System Manager

The Contractor shall identify as CQC System Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC System Manager shall be a construction person with a minimum of 5 years' experience in related work. This CQC System Manager shall be on the site at all times during construction and shall be employed by the prime Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

2.4.3 CQC Personnel

In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC System Manager for the following areas: at least one (1) each -------electrical, mechanical, structural/civil, submittals clerk. 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 not perform other duties and satisfactorily perform their assigned quality control duties as described in the Quality Control Plan.

Experience Matrix	
Area	Qualifications
a. Mechanical	Graduate Mechanical Engineer with 2 years' related experience or person with 5 yrs related experience.
b. Electrical	Graduate Electrical Engineer with 2 years’ related experience or person with 5 yrs related experience.
c. Structural/Civil	Graduate Structural/Civil Engineer with 2 years' experience or person with 5 yrs related experience.
d. Submittals	Submittal Clerk with 1 year experience.

2.4.4 Additional Requirement

In addition to the above experience and education requirements the CQC System Manager and staff shall have completed the course entitled "Construction Quality Management For Contractors." This course is offered on a quarterly basis within the Savannah District boundaries. CQC system Managers and staff who have not successfully completed this course must attend the next available training session. Failure to successfully complete this training within the next available training date will be grounds for removal as CQC System Manager.

2.4.5 Organizational Changes

The Contractor shall maintain the CQC staff at full strength at all times and be physically present at the construction site within 30 days after notice to proceed. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

2.5 SUBMITTALS

Submittals shall be made as specified in Section 01330 SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals are in compliance with the contract requirements.

2.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least three phases of control shall be conducted by the CQC System Manager for each definable feature of work as follows:

2.6.1 Preparatory Phase

The Government shall be notified at least 48 hours in advance of beginning the preparatory control phase.

This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature and prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved/accepted, and after copies are at the work site. This phase shall include:

a. A review of each paragraph of applicable specifications.

b. A review of the applicable contract drawings and details.

c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.

d. Review of provisions that have been made to provide required control inspection and testing.

e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.

f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

g. A review of the--CQC prepared-- appropriate activity hazard analysis to assure safety requirements is met.

h. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.

i. A check to ensure that the prior portion of the necessary to allow the work to be performed has been accepted by the Contracting Officer.

j. Discussion of the initial control phase.

k. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily CQC report.

l. The Contractor shall instruct applicable subcontractor workers as to the acceptable level of workmanship required in order to meet contract specifications.

2.6.2 Initial Phase

This phase shall be accomplished after a complete sample of the work for a definable feature of work is in progress or completed—as applicable. The following shall be accomplished:

The Government shall be notified at least 24 hours in advance of beginning the initial phase.

a. A check of work to ensure that it is in full compliance with technical 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. This initial sample of the work shall serve as the sample for the remainder of the work –upon acceptance by the Government.

d. Compare with required sample panels--- as appropriate.

e. Resolve all differences.

f. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis.

g. Review the activity analysis with each worker.

h. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily CQC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

i. The initial phase should be repeated for each new crew to work onsite, or any time acceptable specified quality standards are not being met.

2.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements and the acceptable sample of work established during the initial inspection, until all work is completed for this particular feature of work.

The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work, which may be affected by the deficient work.

The Contractor shall not build upon nor conceal non-conforming work.

2.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases shall be conducted on the same definable features of work if the quality of on-going work is unacceptable, if there are changes in the applicable CQC staff, onsite production supervision or work crew, if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

2.7 TESTS

2.7.1 Testing Procedure

The Contractor shall perform specified or required tests to verify that control measures are adequate to provide a product, which conforms to contract requirements.

Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government.

Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory or establish an approved testing laboratory at the project site. The Contractor shall perform the following activities and record and provide the following data:

a. Verify that testing procedures comply with contract requirements.

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

c. Check test instrument calibration data against certified standards.

d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.

e. Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Contracting Officer, actual test reports may be submitted later with a reference to the test number and date taken.

An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Contracting Officer. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.

2.7.2 Testing Laboratories

2.7.2.1 Capability Check

The Government reserves the right to check laboratory equipment in the proposed laboratory for compliance with the standards set forth in the contract specifications and to check the laboratory technician's testing procedures and techniques. Laboratories utilized for testing soils, concrete, asphalt, and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329.

2.7.2.2 Capability Recheck

If the selected laboratory fails the capability check, the Contractor will be assessed a charge (as appropriate determined by Contracting Officer) 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.

2.7.3 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.

2.7.4 Furnishing or Transportation of Samples for Testing

Costs incidental to the transportation of samples or materials shall be borne by the Contractor. Samples of materials for test verification and acceptance testing by the Government shall be delivered to the Corps of Engineers Division Laboratory, f.o.b., at the following address:

For delivery by mail:
P.O. Box 51
Marietta, GA 30061

For other deliveries:
611 Cobb Drive
Marietta, GA 30060-3112

Coordination for each specific test, exact delivery location, and dates will be made through the Area Office.

2.8 COMPLETION INSPECTION

2.8.1 CQC Completion Inspection of entire project

Near the completion of all work, (when the project is substantially completed), or any increment thereof established by a completion time stated in the Special Clause entitled "Commencement, Prosecution, and Completion of

Work," or stated elsewhere in the specifications, the CQC System Manager and staff shall conduct a detailed-comprehensive inspection of the entire project and develop a list of deficiencies, items which are not totally completed or do not conform to the approved drawings and specifications and any items remaining of the CQC deficiency tracking list.

Such a list of deficiencies shall be included in the CQC documentation, as required by paragraph DOCUMENTATION below, and shall include the estimated date by which the deficiencies will be corrected.

The CQC System Manager and staff shall make a second follow-up inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the CQC completion inspection punchlist has been completed.

2.8.2 Pre-Final Inspection

Notice shall be given to the Contracting Officer on the completion of the CQC inspection punchlist at least 14 days prior to completion to allow the scheduling of the prefinal inspection.

The Government will perform a verification inspection to assure that the facility is complete and ready for the prefinal inspection.

All mechanical and electrical systems must be completed and the contractor has performed the Government witnessed acceptance testing prior to the scheduling the prefinal inspection.

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at this 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.

A Government Prefinal Punch List will be developed as a result of this inspection.

The Contractor's CQC System Manager shall ensure that all items on this Government prefinal punchlist have been corrected before notifying the Government that a Final inspection with the customer should be scheduled.

Any items noted on the Pre-Final inspection shall be corrected in a timely manner and the contractor provide the contracting officer a schedule for completion of each item noted on the prefinal punchlist.

These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

2.8.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at this inspection. Additional Government personnel including, but not limited to, those from

Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance.

The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection.

Notice shall be given to the Contracting Officer of the completion of the prefinal punchlist at least 14 days prior to completion to allow the final acceptance inspection to be scheduled. This notification shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection.

Failure of the Contractor to have all contract work acceptably complete for this inspection may 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".

2.9 DOCUMENTATION

The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

a. Contractor/subcontractor and their area of responsibility.

b. Operating plant/equipment with hours worked, idle, or down for repair.

c. Work performed each day, giving location, description, and by whom. When Network Analysis (NAS) is used, identify each phase of work performed each day by NAS activity number.

d. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase should be identified (Preparatory, Initial, Follow-up). List 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 reviewed, with contract reference, by whom, and action taken.

g. Off-site surveillance activities, including actions taken.

h. Job safety evaluations stating what was checked, results, and instructions or corrective actions.

i. Instructions given/received and conflicts in plans and/or specifications.

j. Contractor's verification statement.

These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

2.10 SAMPLE FORMS

Sample forms enclosed at the end of Section 00800.

2.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements.

The Contractor shall take immediate corrective action after receipt of such notice.

Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

--End of Section--

SECTION 01500

TEMPORARY CONSTRUCTION FACILITIES

1.1 GENERAL REQUIREMENTS

1.1.1 Site Plan

The Contractor shall prepare a site mobilization plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor, the location of the project sign, the number of trailers to be used, avenues of ingress/egress to the fenced area and details of the fence installation and submit the plan to the contracting officer prior to mobilization on the site. Any areas which may have to be graveled to prevent the tracking of mud shall also be identified. The Contractor shall also indicate if the use of a supplemental or other staging area is desired.

1.1.2 Identification of Employees and Vehicles

All personnel shall have badges and vehicle passes or decals to enter the installation. Badges will be required to be worn at all times while on the installation. Decals will be required to enter the installation or the driver will be required to go to the MP station for a permit which will require driver license, proof of insurance, contract number, and point of contact for company before being allowed to enter.

1.1.2.1 Fort Stewart requires the following information to remain on file throughout the life of this contract. Provide the following information to the Contracting Officer at the Pre-work and/or Pre-Construction meeting.

Contract No.
Contractor Name
Contractor Mailing Address
POC for Contractor (Name) and Phone No.
POC for Contract (COE or Installation) and Phone No.
Installation that contractor needs access; i.e. Hunter or Stewart

This requirement applies to Construction Firms, Design AE firms, Consultants and Studies firms. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee.

1.1.2.2 Personnel Badges

The contractor (President or Principle) must prepare a letter to HQ, 3d Inf Div (Mech) and Ft Stewart. Attn: Directorate of Contracting, Bernice Harper, 1042 William H. Wilson Ave., Ste 219, Ft. Stewart, GA 31314-3324. The letter must include the information and data as indicated in the sample letter included in the "Vehicle pre-registration packet for contractors." Enclosures must include Personnel Roster and Cover Page of Contract issued by Corps of Engineers Contracting Officer.

The Contractor must also prepare a second letter to HQ, 3d Inf Div (Mech) and Ft Stewart, Civilian Personnel Advisory Center, Attn: Karen Bandera, 101 W Bultman Ave., Ste 100, Ft. Stewart, GA. This letter must include the information and data as indicated in the sample letter included in the "Vehicle pre-registration packet for contractors." Enclosures must include contract number and employee Information for each Contractor personnel requiring access to the installation (full name, SSN, date of birth, weight, height, color of hair, color of eyes, sex, identified as Recovery Personnel (yes /no)).

1.1.2.3 Vehicle Registration

The individual employee will proceed to the vehicle registration building (Ft. Stewart, Bldg. 285; Hunter Army Air Field, Bldg. 1240) with written certification from the Contractor that the individual is an employee of the Contractor and that vehicle registration is requested. Data required at time of vehicle registration: Drivers License, proof of insurance, state vehicle registration, Special Power of Attorney (if you wish to register a vehicle and your name does not appear on the state vehicle registration).

1.1.3 Employee Parking

Contractor employees shall park privately owned vehicles in an area designated by the Contracting Officer. This area will be within the area Construction limits. Contractor employee parking shall not interfere with existing and established parking requirements of the military installation.

1.2 AVAILABILITY AND USE OF UTILITY SERVICES

1.2.1 Payment for Utility Services

The Government will make all reasonably required utilities available to the Contractor from existing outlets and supplies, as specified in the contract. Unless otherwise provided in the contract, the amount of each utility service consumed shall be charged to or paid for by the Contractor at prevailing rates charged to the Government or, where the utility is produced by the Government, at reasonable rates determined by the Contracting Officer. The Contractor shall carefully conserve any utilities furnished without charge.

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1.2.2 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, meters and meter bases required to measure the amount of each utility used for the purpose of determining charges. The contractor shall submit its proposed temporary power installation including tie-in to the contracting officer for review prior to installation. The Contractor shall notify the Contracting Officer, in writing, 5 working days before final electrical connection is desired so that a utilities contract can be established. The Government will not furnish meters or make final hot connections. This is the contractors responsibility. If necessary, the contractor is also required to supply their own 25KV transformer to distribute their own temporary power throughout their site. The contractor will be allowed to make the system hot after DPW inspects the contractors' temporary installation. DPW will witness the contractor energizing the power if DPW so desires. If they do not choose to witness, then the contractor will be allowed to energize at his discretion by properly trained personnel. The contractor will give the initial meter reading to the Corps rep, to be used for billing purposes, which will be forwarded to DPW. Brent Rose will supply the contractor with the current SOP. ~~The Government will make the final hot connection after inspection and approval of the Contractor's temporary wiring installation. The Contractor shall not make the final electrical connection.~~ The contractor shall perform a weekly electrical inspection by a qualified electrician, for all temporary electrical service and provide a report to the contracting officer.

1.2.3 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.

1.2.4 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 disconnect service. The Contractor shall then remove all the temporary distribution lines, meter and meter bases, and associated paraphernalia. The Contractor shall pay all outstanding utility bills before final acceptance of the work by the Government. The amount of electric power consumed by the contractor after permanent power connection (for contractor use in testing, heating/cooling and lighting) shall be estimated by the government and contractor will be advised of the estimated kwh consumed monthly until acceptance of the facility.

1.2.5 Sanitation

The Contractor shall provide and maintain within the construction area minimum field-type sanitary facilities approved by the Contracting Officer. Government toilet facilities will not be available to Contractor's personnel.

1.2.6 Telephone

The Contractor shall make arrangements and pay all costs for telephone facilities desired with off post providers.

1.3 BULLETIN BOARD, PROJECT SIGN, AND PROJECT SAFETY SIGN

1.3.1 Bulletin Board

Immediately upon beginning of work, the Contractor shall 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. The bulletin board shall be located at the project site in a conspicuous place easily accessible to all employees, as approved by the Contracting Officer. Legible copies of the aforementioned data shall be displayed until work is completed. Upon completion of work the bulletin board shall be removed by and remain the property of the Contractor.

1.3.2 Project Signs

The Contractor shall furnish and install a project sign at the location selected by the Contracting Officer. The wording on the project sign must be approved by the contracting officer. The project sign shall be painted on 1/2 inch thick exterior grade plywood. The sign layout shall be in accordance with the graphic format shown in Attachment 1 to Section 00800. The 4' by 4' right-hand section shall be painted white (Color No. 37875, Fed. Std. 595a) with black (Color No. 37038, Fed. Std. 595a) lettering. The 2' by 4' left-hand section shall be painted red (Color No. 12199, Fed. Std. 595a) with white lettering. Eight additional signs of similar construction and finish shall be furnished and installed at locations selected by the Contracting Officer. These signs shall be 36 inches wide, 15 inches high, with red letters 2 inches high on a white background and shall read as follows:

"OFF LIMITS TO UNAUTHORIZED PERSONNEL"

1.4 PROTECTION AND MAINTENANCE OF TRAFFIC

During construction the Contractor shall provide access and temporary relocated roads as necessary to maintain traffic. The Contractor shall 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 and the work, and the erection and maintenance of adequate warning, danger, and direction signs, shall be as required by the State and local authorities having jurisdiction. The traveling public shall be protected from damage to person and property. The Contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. The Contractor shall investigate the adequacy of existing roads and the allowable load limit on these roads.

The Contractor shall be responsible for the repair of any damage to roads caused by construction operations.

1.4.1 Haul Roads

The Contractor will be required to use the haul routes shown on the plans unless otherwise permitted in writing by the Contracting Officer. When haul routes are not designated on the plans, the Contractor must obtain approval of the Contracting Officer of haul routes he intends to use. The Contractor shall maintain the haul routes and shall keep the dust problem under control by wetting the surface as needed. Sweeping and cleaning of pavements will be done as necessary to remove spillage resulting from the hauling operations. After all hauling has been completed; the Contractor shall restore the earth areas used for the haul routes to original condition by final grading, shaping, compacting, and grassing, and shall clean and sweep all paved areas as required. Any pavement damaged as a result of hauling operations under this contract for both the earth and the Contractor, as approved by the Contracting Officer, shall promptly repair other materials. The cost of maintenance and repair of the haul routes, as mentioned above, shall be considered as a subsidiary obligation of the Contractor. The axle load of earth hauling equipment operating on paved streets shall not exceed 12,000 pounds.

1.4.2 Barricades

The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Such barricades shall be required 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 shall be securely placed, clearly visible with adequate illumination to provide sufficient visual warning of the hazard during both day and night.

1.5 CONTRACTOR'S TEMPORARY FACILITIES

1.5.1 Administrative Field Offices

The Contractor shall provide and maintain administrative field office facilities within the area construction limits at the project site. Government office and warehouse facilities will not be available to the Contractor's personnel.

1.5.2 Storage Area

The Contractor shall construct a temporary 6-foot high chain link fence around trailers and materials. The fence shall include plastic strip inserts, colored brown, so that visibility through the fence is obstructed. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit.

Trailers, materials, or equipment shall not be placed or stored 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 military boundaries. Trailers, equipment, or materials shall not be open to public view with the exception of those items that are in support of ongoing work on any given day. Materials shall not be stockpiled outside the fence in preparation for the next day's work. Mobile equipment, such as tractors, wheeled lifting equipment, cranes, trucks, and like equipment, shall be parked within the fenced area at the end of each workday.

1.5.3 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 shall be within the military boundaries. Fencing of materials or equipment will not be required at this site; however, the Contractor shall be responsible for cleanliness and orderliness of the area used and for the security of any material or equipment stored in this area. The Government will not provide utilities to this area.

1.5.4 Appearance of Trailers

Trailers utilized by the Contractor for administrative or material storage purposes shall present a clean and neat exterior appearance and shall be in a state of good repair. Trailers that, in the opinion of the Contracting Officer, require exterior painting or maintenance will not be allowed on the military property.

1.5.5 Maintenance of Storage Area

Fencing shall be kept in a state of good repair and proper alignment. Should the Contractor elect to traverse, with construction equipment or other vehicles, grassed or unpaved areas which are not established roadways, such areas shall be covered with a layer of gravel as necessary to prevent rutting and the tracking of mud onto paved or established roadways; gravel gradation shall be at the Contractor's discretion. Grass located within the boundaries of the construction site shall be mowed for the duration of the project. Grass and vegetation along fences, buildings, under trailers, and in areas not accessible to mowers shall be edged or trimmed neatly.

1.5.6 New Building

In the event a new building is constructed for the temporary project field office, it shall be a minimum 12 feet in width, 16 feet in length and have a minimum of 7 feet headroom. It shall be equipped with approved electrical wiring, at least one double convenience outlet and the required switches and fuses to provide 110-120 volt power. It shall be provided with a worktable with stool, desk with chair, two additional chairs, and one legal size file cabinet that can be locked. The building shall be waterproof, shall be supplied with heater, shall 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 shall be furnished. The windows and doors shall be screened and the doors provided with dead bolt type locking devices or a padlock and heavy-duty hasp bolted to the door. Door hinge pins shall be non-removable. The windows shall be arranged to open and to be securely fastened from the inside. Glass panels in windows shall be protected by bars or heavy mesh screens to prevent easy access to the building through these panels. In warm weather, 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, shall be furnished. Any new building erected for a temporary field

office shall be maintained by the Contractor during the life of the contract and upon completion and acceptance of the work shall become the property of the Contractor and shall be removed from the site. All charges for telephone service for the temporary field office shall be borne by the Contractor.

1.5.7 Security Provisions

Adequate outside security lighting shall be provided at the Contractor's temporary facilities. The Contractor shall be responsible for the security of its own equipment; in addition, the Contractor shall notify the appropriate law enforcement agency requesting periodic security checks of the temporary project field office.

1.5.8 Utilities

All utilities will be metered and paid for by contractor.

Rates to Charge Contractor: Water: $0.91 per 1000 Gallons
Electricity: $0.0583 per KWH
Sewer: $1.08 per 1000 gallons

1.6 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 shall install a satisfactory means of communication, such as telephone or other suitable devices. The devices shall be made available for use by Government personnel.

1.7 TEMPORARY PROJECT SAFETY FENCING

As soon as practicable, but not later than 15 days after the date established for commencement of work, the Contractor shall furnish and erect temporary project safety fencing at the work site. 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 contract and, upon completion and acceptance of the work, shall become the property of the Contractor and shall be removed from the work site.

1.8 OMITTED

1.9 INSTALLATION REGULATIONS

The employees of the Contractor will be required to abide by all installation regulations as published by the Commanding Officer. A copy of these regulations can be obtained from the Area/Resident Engineer at the installation. All costs in connection therewith shall be included in the contract price for the work. All costs in connection therewith shall be included in the contract price for the work.

1.10 TESTING LABORATORIES

Testing is required by the Contractor as part of his Quality Control Program to verify contract compliance. This Quality Control Testing is to be conducted by a project or commercial laboratory that has been found adequate and qualified by a Corps of Engineers Division Laboratory Inspection Team.

1.10.1 Approved Testing Laboratories

A composite listing of approved testing laboratories within the South Atlantic Division is available upon request. The Contractor should engage the services of a laboratory contained in the composite list. Contractors may obtain the

list by calling (912) 652-5382 or (678) 354-0310. Fax requests can be made to number (678) 354-0330.

1.10.2 Other Laboratory Services

The Contractor may engage the services of a laboratory other than those approved by Corps of Engineers Division Laboratory Inspection Team if they comply with the following:

a. The Contractor identifies and proposes the unapproved laboratory a minimum of 90 days prior to the start of testing. This time is necessary to allow for scheduling an inspection by a Corps of Engineers Division Laboratory team. The time for Government inspection will not be the basis for an increase in the contract performance period.

b. All costs of Government inspection shall be the responsibility of the Contractor.

c. The Contractor may request Government inspection and approval prior to award by forwarding a written request to:

US Army Engineer District, Savannah
Environmental and Materials Unit
ATTN: Mike Wielputz
200 North Cobb Parkway
Building 400, Suite 404
Marietta, GA 30062

1.11 CONTAMINATION

1.11.1 Site Evaluation

The job site has been evaluated for potential site contamination. See RFP Section 1020 and 1110 for more information.

1.11.2 Contractual Responsibilities of All Parties in the Event of Encounter with Contamination

If the Contractor encounters materials or conditions which indicate that there may be contamination on the site, the Contractor shall stop all work on the job site and report the discovery of the contaminants to the Contracting Officer's Representative (COR). The COR, will issue a written order to the Contractor to resume work or to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government as provided in FAR 52.212-12 - SUSPENSION OF WORK. The Government will be responsible for making an assessment of the contaminated site if this course of action is determined to be appropriate. After the assessment has been completed, the Government reserves the right to the following courses of action:

a. Direct the Contractor to resume work.

b. Clean up the contaminated site prior to directing the Contractor to resume work. The COR will determine whether the cleanup is to be accomplished by others or the Contractor.

c. Relocate the project site.

d. Terminate the contract for the convenience of the Government as provided in FAR 52.249-1 - TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) (SHORT FORM) or FAR 52.249-2 - TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED-PRICE) - ALTERNATE I as applicable.

1.12 CONSTRUCTION SCHEDULE RESTRAINTS - FORT STEWART, GA

1.12.1 Occupancy

All buildings listed to be demolished are fully occupied and will be occupied during construction. It is the intent of these provisions to provide for maximum coordination between construction activities pursuant to this contract and concurrent ongoing routine activities of base personnel. Interference with and inconvenience to the occupants or routine of the facility shall be held to an absolute minimum.

1.12.2 Protection

Contractor is responsible to provide such covering, shields and barricades as are required to protect building occupants, equipment, stores, supplies, etc., from dust, debris, weather intrusion, water, moisture or other cause of damage resulting from construction.

1.12.3 Phasing and Sequence

1.12.3.1 General

In addition to the submittals required by clause SCHEDULES FOR CONSTRUCTION CONTRACTS (see SECTION 00700, FAR 52.236-15) the Contractor shall submit for approval a summary work schedule setting forth schedule dates for initiation and completion of construction in each work area. No work shall be performed prior to approval of this schedule and all work shall be performed in strict adherence thereto. If departures from this schedule appear to be required or desired, the Contracting Officer shall be promptly notified and his approval will be required prior to implementation of said departure(s).

1.12.3.2 Special Phasing and Coordination Restraints

Extraordinary coordination is required for this project. Close coordination is required for all demolition including fencing, gates, etc. Work will involve daily communication with Administrative Contracting Officer (ACO), Directorate of Public Works (DPW).

All buildings listed to be demolished are fully occupied and will be occupied during construction. These building will not be demolished before all new construction has been completed and the users allowed adequate time, as noted below, to move into the new facilities.

The following is the priority of demolition and time required by the user to vacate each building. Some buildings can be moved at the same time.

Building No. T251	2 Weeks	Building No. T251	2 Weeks
Building No. T470	2 Weeks	Building No. T920	2 Weeks
Building No. T1191	2 Weeks	Building No. T1192	2 Weeks

Schedule: Phasing and Sequencing will be required prior to construction of new facility and prior to demolition of buildings. The work schedule should be 7:30 AM to 4:00 PM. Completion of the parking lot will take place only after the demolition has been complete. The construction of the parking lot that will under the foot print of the existing buildings will be complete within the minimum time after demolition is completed and will not impact the use of other areas of the new parking area.

Office and Staging: Contractor’s office and staging area shall occupy space within the limits of construction for the Soldier Service Center. Do not expect to occupy this area until after the 60% design review is complete and approved. The construction will be required to be kept extremely clean and

orderly at all time during construction due its close proximity to the Installation Headquarters building, which is directly across the street.

The building number for the new building will be 253, and shall be shown on the sign specified in the contract.

Point of Contact Data: ACO – Mr. ELTON COBB, 912-6767-4389
DPW – MR. ANTHONY WHITE, 912-767-5115

1.12.4 TIME OF PERFORMANCE

1.12.4.1 Access to Buildings

All work requiring access to building interiors excluding attics, crawl spaces, etc., and all other work shall be performed between 7:30 a.m. and 4 p.m. (normal working hours for base where project is located) excluding official holidays, unless otherwise indicated or approved by the Contracting Officer. Requests to work during other than these normal hours shall be made in writing at least 36 hours in advance. For example, a request to work on a Saturday shall be submitted no later than Thursday at noon.

1.12.4.2 Work Requiring Outages

Work requiring outages of utilities or building systems will be accomplished during normal working hours in accordance with prior approved schedule(s).

1.12.5 Outages

Contractor's work requiring outages of utility systems or building systems will require 14 calendar days advance notice and will be subject to the approval of the Contracting Officer. Notice shall include type of outage, date, and time outage will commence and estimated duration of outage.

1.12.6 Continuity

All tools, labor and materials required to complete any item of work within a given work area or requiring an outage of any building utility or system, shall be available at the site prior to commencement thereof. Once work has commenced on an item of work, said work shall be continuously and diligently performed to completion and acceptance.

1.12.7 Excavation Permits

Excavation permits will require 1 week's advance written notice and will be subject to the Contracting Officer's approval. Notice shall be accompanied with a sketch showing the location of the proposed excavation.

1.12.8 Road and/or Railroad Closures

Road and/or railroad closures will require 2 weeks' advance written notice and be subject to the Contracting Officer's approval. Notice shall state reason for closure; date and time closure will commence and estimated duration of closure. A sketch shall be provided showing location of excavated area and placement of barricades and signs. Closures shall be limited to a maximum of 5 calendar days.

1.12.9 Entry

Entry to all areas, except the cantonment area, to be coordinated with Range Control, Building 7901 (intersection of Georgia Highway 144 and Fort Stewart Road 47) and the Provost Marshal's office.

1.12.10 Fire Zone

The Contractor is required to provide 72-hour notice to the Contracting Officer prior to the final programming of the fire zone information at the main fire station.

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1.12.11 Excavated Debris, Borrow Material, and Haul Route

All construction and demolition debris will be removed from Ft. Stewart. ~~taken to Fort Stewart landfills for disposal. Landfills are within a 10 mile radius of the construction site.~~

~~Construction and demolition debris will be segregated and delivered to the area listed below. Loads of debris that are not properly segregated will be rejected at the landfill.~~

~~a. Sanitary Landfill - for disposal of household municipal waste and mixed construction demolition debris.~~

~~b. Non-Putrescible Landfill - for products that are not likely to produce leachate of environmental concern such as clean earth, concrete, cured asphalt, rocks, bricks, etc..~~

~~c. Inert Yard Waste Landfill - for trees, limbs, leaves, stumps, and all natural tree products.~~

~~d. Inert Concrete Landfill - For concrete, blocks, bricks, and cured asphalt.~~

~~e. Recycling Center/Processing Station - for all recyclables.~~

~~The landfill or disposal location for each of these classes of debris will be identified at the Pre-construction Conference.~~

The borrow site is approximately 10 miles from the construction site.

The haul route can be through the main gate, as well as other gates that may be identified later.

1.13 REQUEST FOR INFORMATION (RFI) SYSTEM

The Government has developed an electronic database, the Request for Information (RFI) System, to track and answer Contractor questions and requests for information and clarification during construction. The use of the RFI System for all requests (the Contractor's as well as the subcontractors'/suppliers') is a contractual requirement for this project. The Contractor will enter the system over the Internet using any WEB browser and any Internet service provider. The Government will provide the Contractor a user identification and password for the system that will only allow the Contractor to enter and view the requests for this project. The Contractor will provide the Government the E-mail address for the individual(s) inputting into the system in order that E-mail messages can be sent from the Government to the Contractor indicating a response to the request. The Government will provide training in the use of the software, which is a Lotus NOTES application. The Contractor will enter all requests indicating the question, recommended solution (if applicable), and needed response date. The Government will be notified through an E-mail message that the Contractor has entered a request into the system. When the Government has answered the request, an E-mail message will be sent to the Contractor, informing the Contractor that the answer to the request is in the system. The Contractor will enter the system to retrieve the answer using the same procedure to enter the question. The RFI System assigns a unique number to each request. The Contractor will not be reimbursed separately for the required use of this

system. The Contractor shall include any costs associated with the use of this system into the appropriate bid item.

1.14 PROGRESS PHOTOGRAPHS

The Contractor shall, during the progress of the project, furnish the Contracting Officer progress digital photographs to depict progress of construction. A qualified, established, commercial photographer shall perform the photographic work. The photographs shall be taken between the 1st and 5th day of each month and be delivered to the Contracting Officer not later than the 20th day of the same month taken. The photographs shall be taken from not less than ten positions for each month as selected by the Contracting Officer. They shall show, inasmuch as practicable, work accomplished during the previous month. Each photograph shall be identified showing date made, contract title and number and a brief description of work depicted and shall be sequentially numbered. The identifying data shall be placed on the back of the prints. No separate payment will be made for these services and all costs in connection therewith shall be considered incidental to costs of the overall project.

1.15 CLEANUP

Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud that is tracked onto paved or surfaced roadways shall be cleaned away. Materials resulting from demolition activities that are salvageable shall be stored within the fenced area described above or at the supplemental storage area. Stored material not in trailers, whether new or salvaged, shall be neatly stacked when stored.

1.16 RESTORATION OF STORAGE AREA

Upon completion of the project and after removal of trailers, materials, and equipment from within the fenced area, the fence shall be removed and will become the property of the Contractor. Areas used by the Contractor for the storage of equipment or material, or other use, shall be restored to the original or better condition. Gravel used to traverse grassed areas shall be removed and the area restored to its original condition, including topsoil and seeding as necessary.

--End of Section--

SECTION 01780

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.1 SUBMITTALS

SD-02 Shop Drawings

As-Built Drawings; G, RE

Drawings showing final as-built conditions of the project. The final CADD as-built drawings shall consist of one set of electronic CADD drawing files in the specified format, two sets of blue-line prints, and one set of the approved working as-built drawings.

SD-03 Product Data

As-Built Record of Equipment and Materials;

Three copies of the record listing the as-built materials and equipment incorporated into the construction of the project.

Warranty Management Plan; G, RE

Two sets of the 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; G, RE

Three record copies of the warranty tags showing the layout and design.

Final Cleaning; G, RE

Three copies of the listing of completed final clean-up items.

1.2 PROJECT RECORD DOCUMENTS

1.2.1 As-Built Drawings

This paragraph covers as-built drawings complete, as a requirement of the contract. The terms "drawings," "contract drawings," "drawing files," "working as-built drawings" and "final as-built drawings" refer to contract drawings, which are revised to be used for final as-built drawings.

1.2.1.1 Government Furnished Materials

One set of electronic CADD files in the specified software and format revised to reflect all bid amendments will be provided by the Government at the prework conference for projects requiring CADD file as-built drawings.

1.2.1.2 Working As-Built and Final As-Built Drawings

The Contractor shall revise 2 sets of paper drawings by red-line process to show the as-built conditions during the prosecution of the project. These working as-built marked drawings shall be kept current on a weekly basis and at least one set shall be available on the jobsite at all times. Changes from the contract plans which are made in the work or additional information, which might be uncovered in the course of construction, shall be accurately and neatly recorded as they occur by means of details and notes. Final as-

built drawings shall be prepared after the completion of each definable feature of work as listed in the Contractor Quality Control Plan (Foundations, Utilities, Structural Steel, etc., as appropriate for the project). The working as-built marked prints and final as-built drawings will be jointly reviewed for accuracy and completeness by the Contracting Officer and the Contractor prior to submission of each monthly pay estimate. If the Contractor fails to maintain the working and final as-built drawings as specified herein, the Contracting Officer will deduct from the monthly progress payment an amount representing the estimated cost of maintaining the as-built drawings. This monthly deduction will continue until an agreement can be reached between the Contracting Officer and the Contractor regarding the accuracy and completeness of updated drawings. The working and final as-built drawings shall show, but shall not be limited to, the following information:

a. The actual location, kinds and sizes of all sub-surface utility lines. In order that the location of these lines and appurtenances may be determined in the event the surface openings or indicators become covered over or obscured, the as-built drawings shall show, by offset dimensions to two permanently fixed surface features, the end of each run including each change in direction. Valves, splice boxes and similar appurtenances shall be located by dimensioning along the utility run from a reference point. The average depth below the surface of each run shall also be recorded.

b. The location and dimensions of any changes within the building structure.

c. Correct grade, elevations, cross section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.

d. 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.

e. The topography, invert elevations and grades of drainage installed or affected as part of the project construction.

f. Changes or modifications, which result from the final inspection.

g. Where contract drawings or specifications present options, only the option selected for construction shall be shown on the final as-built prints.

h. If borrow material for this project is from sources on Government property, or if Government property is used as a spoil area, the Contractor shall furnish a contour map of the final borrow pit/spoil area elevations.

i. Systems designed or enhanced by the Contractor, such as HVAC controls, fire alarm, fire sprinkler, and irrigation systems.

j. Modifications (change order price shall include the Contractor's cost to change working and final as-built drawings to reflect modifications) and compliance with the following procedures.

(1) Directions in the modification for posting descriptive changes shall be followed.

(2) A Modification Circle shall be placed at the location of each deletion.

(3) For new details or sections, which are added to a drawing, a Modification Circle shall be placed by the detail or section title.

(4) For minor changes, a Modification Circle shall be placed by the area changed on the drawing (each location).

(5) For major changes to a drawing, a Modification Circle shall be placed by the title of the affected plan, section, or detail at each location.

(6) For changes to schedules or drawings, a Modification Circle shall be placed either by the schedule heading or by the change in the schedule.

(7) The Modification Circle size shall be 12.7 mm 1/2 inch diameter unless the area where the circle is to be placed is crowded. Smaller size circle shall be used for crowded areas.

1.2.1.3 Drawing Preparation

The as-built drawings shall be modified as may be necessary to correctly show the features of the project as it has been constructed by bringing the contract set into agreement with approved working as-built prints, and adding such additional drawings as may be necessary. These working as-built marked prints shall be neat, legible and accurate. These drawings are part of the permanent records of this project and shall be returned to the Contracting Officer after approval by the Government. Any drawings damaged or lost by the Contractor shall be satisfactorily replaced by the Contractor at no expense to the Government.

1.2.1.4 Computer Aided Design and Drafting (CADD) Drawings
Only personnel proficient in the preparation of CADD drawings shall be employed to modify the contract drawings or prepare additional new drawings. Additions and corrections to the contract drawings shall be equal in quality and detail to that of the originals. Line colors, line weights, lettering, layering conventions, and symbols shall be the same as the original line colors, line weights, lettering, layering conventions, and symbols. If additional drawings are required, they shall be prepared using the specified electronic file format applying the same graphic standards specified for original drawings. The title block and drawing border to be used for any new final as-built drawings shall be identical to that used on the contract drawings. Additions and corrections to the contract drawings shall be accomplished using CADD files. Electronic files will be supplied on compact disc, read-only memory (CD-ROM). The Contractor shall be responsible for providing all program files and hardware necessary to prepare final as-built drawings. The Contracting Officer will review final as-built drawings for accuracy and the Contractor shall make required corrections, changes, additions, and deletions.

a. CADD colors shall be the "base" colors of red, green, and blue. Color code for changes shall be as follows;

(1) Deletions (red) -Deleted graphic items (lines) shall be colored red with red lettering in notes and leaders.

(2) Additions (Green) -Added items shall be drawn in green with green lettering in notes and leaders.

(3) Special (Blue) -Items requiring special information, coordination, or special detailing or detailing notes shall be in blue.

b. The Contract Drawing files shall be renamed in a manner related to the contract number (i.e., 98-C-10.DGN) as instructed in the Pre-Construction conference. Marked-up changes shall be made only to those renamed files. All

changes shall be made on the layer/level as the original item. There shall be no deletions of existing lines; existing lines shall be over struck in red. Additions shall be in green with line weights the same as the drawing. Special notes shall be in blue on layer #63.

c. When final revisions have been completed, the cover sheet drawing shall show the wording "RECORD DRAWING AS-BUILT" followed by the name of the Contractor in letters at least 5 mm 3/16 inch high. All other contract drawings shall be marked either "AS-Built" drawing denoting no revisions on the sheet or "Revised As-Built" denoting one or more revisions. Original contract drawings shall be dated in the revision block.

d. Within 20 days for contracts $5 million and above after Government approval of all of the working as-built drawings for a phase of work, the Contractor shall prepare the final CADD as-built drawings for that phase of work and submit two sets of blue-lined prints of these drawings for Government review and approval. The Government will promptly return one set of prints annotated with any necessary corrections. Within 10 days for contracts $5-million and above the Contractor shall revise the CADD files accordingly at no additional cost and submit one set of final prints for the completed phase of work to the Government. Within 20 days for contracts $5 million and above of substantial completion of all phases of work, the Contractor shall submit the final as-built drawing package for the entire project. The submittal shall consist of one set of electronic files on compact disc, read-only memory (CD-ROM), one set of mylars, two sets of blue-line prints and one set of the approved working as-built drawings. They shall be complete in all details and identical in form and function to the contract drawing files supplied by the Government. Any transactions or adjustments necessary to accomplish this are the responsibility of the Contractor. The Government reserves the right to reject any drawing files it deems incompatible with the customer's CADD system. Paper prints, drawing files and storage media submitted will become the property of the Government upon final approval. Failure to submit final as-built drawing files and marked prints as specified shall be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final as-built drawings shall be accomplished before final payment is made to the Contractor.

1.2.1.5 Manually Prepared Drawings

Only personnel proficient in the preparation of manually prepared drawings shall be employed to modify the original contract drawing or prepare additional new drawings. Additions and corrections to the contract drawings shall be neat, clean and legible, shall be done to the same level of detail, and shall match the adjacent existing line work, and lettering being annotated in type, density, size and style. Drafting work shall be done using the same medium (pencil, plastic lead or ink) that was employed on the original contract drawings and with graphite lead on paper base material. The Contracting Officer will review as-built drawings for accuracy and conformance to the above specified drafting standards. Corrections, changes, additions, and deletions required shall meet these standards. The title block to be used for any new as-built drawings shall be similar to that used on the original drawings.

a. When final revisions have been completed, each drawing shall be lettered or stamped with the words "RECORD DRAWING AS-BUILT" followed by the name of the Contractor in letters at least 5 mm (3/16 inch) high. Original contract drawings shall be marked either "As-Built" drawings denoting no revisions on the sheet or "Revised As-Built" denoting one or more revisions. All original contract drawings shall be dated in the revision block.

b. Within 20 days for contracts $5 million and above after Government approval of all of the working as-built drawings for a phase of work, the

Contractor shall prepare the final as-built drawings for that phase of work and submit two sets of blue-line prints of these drawings for Government review and approval. The Government will promptly return one set of prints annotated with any necessary corrections. Within 10 days for contracts $5 million and above the Contractor shall revise the drawings accordingly at no additional cost and submit one set of final prints for the completed phase of work to the Government. Within 20 days for contracts $5 million and above of substantial completion of all phases of work, the Contractor shall submit the final as-built drawing package for the entire project. The submittal shall consist of the completed final as-built drawings, two blue-line prints of these drawings and the return of the approved marked as-built prints. The drawings shall be complete in all details. Paper prints and reproducible drawings will become the property of the Government upon final approval. Failure to submit final as-built drawings and marked prints, as required herein, will be cause for withholding any payment due the Contractor under this contract. Approval and acceptance of final as-built drawings shall be accomplished before final payment is made to the Contractor.

1.2.1.6 Payment

No separate payment will be made for as-built drawings required under this contract, and all costs accrued in connection with such drawings shall be considered a subsidiary obligation of the Contractor.

1.2.2 As-Built Record of Equipment and Materials

The Contractor shall furnish two copies 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. Two sets of final record of equipment and materials shall be submitted 10 days after final inspection. The designations shall be keyed to the related area depicted on the contract drawings. The record shall 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

1.2.3 Final Approved Shop Drawings

The Contractor shall furnish final approved project shop drawings 30 days after transfer of the completed facility.

1.2.4 Construction Contract Specifications

The Contractor shall furnish final as-built construction contract specifications, including modifications thereto, 30 days after transfer of the completed facility.

1.2.5 Real Property Equipment

The Contractor shall furnish a list of installed equipment furnished under this contract. The list shall include all information usually listed on manufacturer's nameplate. The "EQUIPMENT-IN-PLACE LIST" shall 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. A draft

list shall be furnished at time of transfer. The final list shall be furnished 30 days after transfer of the completed facility.

1.3 WARRANTY MANAGEMENT

1.3.1 Warranty Management Plan

The Contractor shall develop a warranty management plan, which shall contain information relevant to the clause Warranty of Construction. At least 30 days before the planned pre-warranty conference, the Contractor shall submit the warranty management plan for Government approval. The warranty management plan shall include all required actions and documents to assure that the Government receives all warranties to which it is entitled. The plan shall 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 shall include due date and whether item has been submitted or was accomplished. Warranty information made available during the construction phase shall be submitted to the Contracting Officer for approval prior to each monthly pay estimate. Approved information shall be assembled in a binder and shall be turned over to the Government upon acceptance of the work. The construction warranty period shall begin on the date of project acceptance and shall continue for the full product warranty period. A joint 4-month and 9-month warranty inspection shall be conducted, measured from time of acceptance, by the Contractor, Contracting Officer and the Customer Representative. Information contained in the warranty management plan shall include, but shall not be 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. 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.

c. A list for each warranted equipment, item, and 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. This shall include 1 year overall warranty of construction. Items which have extended warranties shall 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.

d. The Contractor's plans for attendance at the 4- and 9-month post-construction warranty inspections conducted by the Government.

e. Procedure and status of tagging of all equipment covered by extended warranties.

f. Copies of instructions to be posted near selected pieces of equipment where operation is critical for warranty and/or safety reasons.

1.3.2 Performance Bond

The Contractor's performance bond shall 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, the Contractor shall 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.

1.3.3 Pre-Warranty Conference

Prior to contract completion, and at a time designated by the Contracting Officer, the Contractor shall 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 shall be established/reviewed at this meeting. In connection with these requirements and at the time of the Contractor's quality control completion inspection, the Contractor shall 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 point of contact will be located within the local service area of the warranted construction, shall be continuously available, and shall 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.

1.3.4 Contractor's Response to Construction Warranty Service Requirements

Following oral or written notification by the Contracting Officer, the Contractor shall respond to construction warranty service requirements in accordance with the "Construction Warranty Service Priority List" and the three categories of priorities listed below. The Contractor shall submit a 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 will perform the work and back charge the construction warranty payment item established.

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 remaining work shall be initiated within 3 workdays and work progress shall be continuous to completion or relief.

d. The "Construction Warranty Service Priority List" is as follows:

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

(l) 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
Streetlights.

Code l-Gas
(l) Leaks and breaks.
(2) No gas to family housing unit or cantonment area.

Code l-Heat

(1). Area power failure affecting heat. (2). Heater in unit not working.

Code 2-Kitchen Equipment
(l) 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.

1.3.5 Warranty Tags

At the time of installation, each warranted item shall be tagged with a durable, oil and water-resistant tag approved by the Contracting Officer. Each tag shall be attached with a copper wire and shall be sprayed with a silicone waterproof coating. The date of acceptance and the QC signature shall remain blank until project is accepted for beneficial occupancy. The tag shall show the following information.

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.

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1.4 MECHANICAL TESTING, ADJUSTING, BALANCING, AND COMMISSIONING

Prior to pre-final inspection and transfer of the completed facility; all reports, statements, certificates, and completed checklists for testing, adjusting, balancing, and commissioning of mechanical systems shall be submitted to and approved by the Contracting Officer as specified in applicable technical specification sections.

1.5 OPERATION AND MAINTENANCE MANUALS

Operation manuals and maintenance manuals shall be submitted as specified. Operation manuals and maintenance manuals provided in a common volume shall be clearly differentiated and shall be separately indexed.

1.6 FINAL CLEANING

The premises shall be left broom clean. Stains, foreign substances, and temporary labels shall be removed from surfaces. Carpet and soft surfaces shall be vacuumed. Equipment and fixtures shall be cleaned to a sanitary condition. Filters of operating equipment shall be replaced. Debris shall be removed from roofs, drainage systems, gutters, and downspouts. Paved areas shall be swept and landscaped areas shall be raked clean. The site shall have waste, surplus materials, and rubbish removed. The project area shall have temporary structures, barricades, project signs, and construction facilities removed. A list of completed clean-up items shall be submitted on the day of final inspection.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

--End of Section --

SECTION 01781N

OPERATION AND MAINTENANCE DATA
03/98

PART 1 GENERAL

1.1 SUBMISSION OF OPERATION AND MAINTENANCE DATA

Submit Operation and Maintenance (O&M) Data/Manuals which are specifically applicable to this contract and a complete and concise depiction of the provided equipment or product. 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 01330, "Submittal Procedures."

1.1.1 Quantity

Submit five sets of the supplier/manufacturers' O&M information specified herein for the components, assemblies, subassemblies, attachments, and accessories. The items for which O&M Data/Manuals are required are listed in the technical sections which specifies those particular items.

1.1.2 Package Quality

Documents must be fully legible. Poor quality copies and material with hole punches obliterating the text or drawings will not be accepted.

1.1.3 Package Content

Data package content shall be as shown in the paragraph titled "Schedule of Operation and Maintenance Data Packages." For each product, system, or component piece of equipment requiring submission of O&M Data, submit the Data Package specified in the individual technical section.

1.1.4 Delivery

Submit O&M Data Manuals to the Contracting Officer for review and acceptance; submit data specified for a given item within 30 calendar days after the item is delivered to the contract site.

In the event the Contractor fails to deliver O&M Data/Manuals within the time limits set forth above, the Contracting Officer may withhold from progress payments 50 percent of the price of the item with which such O&M Data/Manuals are associated.

1.1.5 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 TYPES OF INFORMATION REQUIRED IN O&M DATA PACKAGES

1.2.1 Operating Instructions

Include specific instructions, procedures, and illustrations for the following phases of operation:

1.2.1.1 Safety Precautions

List personnel hazards and equipment or product safety precautions for all operating conditions.

1.2.1.2 Operator Prestart

Include procedures required to set up and prepare each system for use.

1.2.1.3 Startup, Shutdown, and Postshutdown Procedures

Provide narrative description for each operating procedure including control sequence for each.

1.2.1.4 Normal Operations

Provide narrative description of normal operating procedures. Include control diagrams with data to explain operation and control of systems and specific equipment.

1.2.1.5 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 on emergency operations of all utility systems including valve locations and portions of systems controlled.

1.2.1.6 Operator Service Requirements

Include instructions for services to be performed by the operator such as lubrication, adjustment, inspection, and gage reading recording.

1.2.1.7 Environmental Conditions

Include a list of environmental conditions (temperature, humidity, and other relevant data) which are best suited for each product or piece of equipment and describe conditions under which equipment should not be allowed to run.

1.2.2 Preventive Maintenance

Include the following information for preventive and scheduled maintenance to minimize corrective maintenance and repair.

1.2.2.1 Lubrication Data

Include lubrication data, other than instructions for lubrication in accordance with 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; and

c. A lubrication schedule showing service interval frequency.

1.2.2.2 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 and repair. 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.

1.2.3 Corrective Maintenance (Repair)

Include manufacturer's recommendations on procedures and instructions for correcting problems and making repairs.

1.2.3.1 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.

1.2.3.2 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 numbering.

1.2.3.3 Maintenance and Repair Procedures

Include instructions and list tools required to restore product or equipment to proper condition or operating standards.

1.2.3.4 Removal and Replacement Instructions

Include step-by-step procedures and 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.

1.2.3.5 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.

1.2.3.6 Corrective Maintenance Work-Hours

Include manufacturer's projection of corrective maintenance work-hours including craft requirements by type of craft. Corrective maintenance that requires participation of the equipment manufacturer shall be identified and tabulated separately.

1.2.4 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:

1.2.4.1 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 which will cross-reference the illustrated part to the listed part. Parts shown in the listings shall be grouped by components, assemblies, and subassemblies. Parts data may cover more than one model or series of equipment. components, assemblies, subassemblies, attachments, or accessories, such as a master parts catalog, in accordance with the manufacturer's standard commercial practice.

1.2.4.2 Warranty Information

List and explain the various warranties and include the servicing and technical precautions prescribed by the manufacturers or contract documents to keep warranties in force. Include warranty information for primary components such as the compressor of air conditioning system.

1.2.4.3 Personnel Training Requirements

Provide information available from the manufacturers to use in training designated personnel to operate and maintain the equipment and systems properly.

1.2.4.4 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.

1.2.4.5 Contractor Information

Provide a list that includes the name, address, and telephone number of the General Contractor and each subcontractor installing the product or equipment. Include local representatives and service organizations most convenient to the project site. Provide the name, address, and telephone number of the product or equipment manufacturers.

1.3 SCHEDULE OF OPERATION AND MAINTENANCE DATA PACKAGES

Furnish the O&M Data Packages specified in individual technical sections. The required information for each O&M Data Package is as follows:

1.3.1 Data Package 1

a. Safety precautions

b. Maintenance and repair procedures

c. Warranty information

d. Contractor information

1.3.2 Data Package 2

a. Safety precautions

b. Normal operations

c. Environmental conditions

d. Lubrication data

e. Preventive maintenance plan and schedule

f. Maintenance and repair procedures

g. Removal and replacement instructions

h. Spare parts and supply list

i. Parts identification

j. Warranty information

k. Contractor information

1.3.3 Data Package 3

a. Safety precautions

b. Normal operations

c. Emergency operations

d. Environmental conditions

e. Lubrication data

f. Preventive maintenance plan and schedule

g. Troubleshooting guides and diagnostic techniques

h. Wiring diagrams and control diagrams

i. Maintenance and repair procedures

j. Removal and replacement instructions

k. Spare parts and supply list

l. Parts identification

m. Warranty information

n. Testing equipment and special tool information

o. Contractor information

1.3.4 Data Package 4

a. Safety precautions

b. Operator prestart

c. Startup, shutdown, and postshutdown procedures

d. Normal operations

e. Emergency operations

f. Operator service requirements

g. Environmental conditions

h. Lubrication data

i. Preventive maintenance plan and schedule

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. Corrective maintenance man-hours

p. Parts identification

q. Warranty information

r. Personnel training requirements

s. Testing equipment and special tool information

t. Contractor information

1.3.5 Data Package 5

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. Spare parts and supply list

k. Testing equipments and special tools

l. Warranty information

m. Contractor information

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

-- End Of Section --