

<b>SOLICITATION, OFFER, AND AWARD</b> <i>(Construction, Alteration, or Repair)</i>	1. SOLICITATION NO. W917PM-09-R-0085	2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)	3. DATE ISSUED 24-Jun-2009	PAGE OF PAGES 1 OF 149
	<b>IMPORTANT - The "offer" section on the reverse must be fully completed by offeror.</b>			

4. CONTRACT NO.	5. REQUISITION/PURCHASE REQUEST NO.	6. PROJECT NO.
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7. ISSUED BY AFGHANISTAN ENGINEER DISTRICT US ARMY CORPS OF ENGINEERS KABUL APO AE 09356	CODE W917PM	8. ADDRESS OFFER TO <i>(If Other Than Item 7)</i> CODE  <b>See Item 7</b>
TEL:	FAX:	TEL: FAX:

9. FOR INFORMATION CALL:	A. NAME LINDA M RUCH	B. TELEPHONE NO. <i>(Include area code) (NO COLLECT CALLS)</i>
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**SOLICITATION**

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

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

CEID Road Kapisa Supply Route (North) Kapisa Province, Afghanistan

This is a firm fixed price construction solicitation for the CEID Road Kapisa Supply Route (North) Kapisa Province, Afghanistan.

The estimated magnitude of construction is \$10,000,000.00 to \$25,000,000.00

The Point of Contact (POC) is linda.m.ruch@usace.army.mil

The award decision will be based on technical factors: experience; project management plan; personnel; preliminary design and past performance. The technical factors are equal to price.

11. The Contractor shall begin performance within 3 calendar days and complete it within 495 calendar days after receiving  award,  notice to proceed. This performance period is  mandatory,  negotiable. (See \_\_\_\_\_.)

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

A. Sealed offers in original and 1 copies to perform the work required are due at the place specified in Item 8 by 05:00 PM (hour) local time 24 Jul 2009 (date). If this is a sealed bid solicitation, offers must be publicly opened at that time. Sealed envelopes containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

B. An offer guarantee  is,  is not required.

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

D. Offers providing less than 60 calendar days for Government acceptance after the date offers are due will not be considered and will be rejected.

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

CODE

FACILITY CODE

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

AMOUNTS

SEE SCHEDULE OF PRICES

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

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

AMENDMENT NO.

DATE

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

20B. SIGNATURE

20C. OFFER DATE

**AWARD (To be completed by Government)**

21. ITEMS ACCEPTED:

22. AMOUNT

23. ACCOUNTING AND APPROPRIATION DATA

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

25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO

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

26. ADMINISTERED BY

CODE

27. PAYMENT WILL BE MADE BY:

CODE

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

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

30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN *(Type or print)*31A. NAME OF CONTRACTING OFFICER *(Type or print)*

30B. SIGNATURE

30C. DATE

TEL:

EMAIL:

31B. UNITED STATES OF AMERICA  
BY

31C. AWARD DATE

CEID Road Kapisa Supply Route (North)  
Kapisa Province, Afghanistan

Section 00010 - Solicitation Contract Form

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DESIGN BUILD SPECIFICATIONS  
FOR  
2009 MILCON Roads  
CEID Road Kapisa Supply Route (North)  
Kapisa Province, Afghanistan

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CEID Road Kapisa Supply Route (North)  
Kapisa Province, Afghanistan

01780A                      Closeout Submittals

CEID Road Kapisa Supply Route (North)  
 Kapisa Province, Afghanistan

Section 00100 - Bidding Schedule/Instructions to Bidders

SECTION 00100 - BIDDING SCHEDULE

**SECTION 00010**

**1.1. PROPOSAL SCHEDULE**

**PROPOSAL SCHEDULE:** The Contractor shall provide a price for all items, including those labeled, "Options." The Government will evaluate the Contractor's entire proposal to determine which proposal represents the best value to the Government. See schedule at the end of this section.

**SCHEDULE**

<b>CLIN No.</b>	<b>Description:</b>	<b>Quantity:</b>	<b>Unit:</b>	<b>Price:</b>
<b>0001</b>	<b><u>DBA Insurance:</u></b>	1	LS	\$ _____
<b>0002</b>	<b><u>Design:</u></b>			
000201	Survey	1	LS	\$ _____
000202	Design	1	LS	\$ _____
<b>0002 Total Design:</b>				<b>\$ _____</b>
<b>0003</b>	<b><u>Mobilization &amp; Demobilization:</u></b>			
000301	Mobilization / Demobilization	1	LS	\$ _____
<b>0004</b>	<b><u>Construction:</u></b>			
000401	Provide 23 KM of Asphalt pavement road as required	1	LS	\$ _____
<b>0005</b>	<b><u>As-built Drawings:</u></b>			
000501	As-Builts Drawings	1	LS	\$ _____
<b>TOTAL PROPOSAL (CLINS 0001 + 0002 + 0003 + 0004 + 0005):</b>				<b>\$ _____</b>

**PROPOSAL SCHEDULE NOTES**

1. Offeror shall submit prices on all items.
2. Only one contract for the entire schedule will be awarded under this solicitation. This project will be awarded as a **lump sum** firm fixed price contract.
3. All costs associated with this project (i.e., security, insurance etc.) shall be included in the line items in the bidding schedule. Costs associated with this project shall also include design and construction costs for site, facilities and utilities preparation but, no less than all items as shown in proposal schedule.
4. **DESIGN COSTS DEFINITION:** Design costs shall consist of preparation of master planning and site designs, plans, drawings, and specifications.
5. **NON-DESIGN COSTS DEFINITION:** Non-design costs shall be included in the construction line item and include the following: initial site visits; field, topographic, property, boundary, utility, and right-of-way surveys; subsurface explorations and borings; feasibility, functional, and economic studies and other investigations; flow gauging and model testing; preparation or verification of as-built drawings; preparation of general and development criteria; preparation of general and feature design memoranda; services of consultants where not specifically applied to the preparation of working drawings or specifications; construction phase services; models, renderings, or photographs of completed designs; reproduction of designs for review purposes; and travel and per diem allowances in connection with the above excludable services.
6. **SEPARATION OF WORK:** All work for Design and Construction shall be included in the respective Proposal Items.

-- END OF SECTION --

SECTION 00110 PROPOSAL PREP**SECTION 00110  
CONSTRUCTION (DESIGN-BUILD) – BEST VALUE****PROPOSAL PREPARATION****1. INQUIRIES**

Perspective offerors should submit inquiries related to this solicitation by writing or sending email to the following (collect calls will not be accepted):

All questions will be submitted in writing by letter or e-mail to:

U.S. Army Corps of Engineers (USACE)  
Afghanistan Engineer District (AED)  
Qalaa House, Attention: **Linda M. Ruch, Contracting Officer**  
Kabul, Afghanistan

E-MAIL ADDRESS: [linda.m.ruch@usace.army.mil](mailto:linda.m.ruch@usace.army.mil)

Please include the solicitation number, and project title with your questions. Written inquiries must be received by this office not later than 4 calendar days prior to **the proposal submission date**.

Oral explanations or instructions are not binding. Any information given to an offeror which impacts the solicitation and/or offer will be given in the form of a written amendment to the solicitation.

As this is a competitive negotiation acquisition, there is no public bid opening and no information will be given out as to the number of offerors or the results of the competition until all awards are made.

## 2. DIRECTIONS FOR SUBMITTING PROPOSALS

Offers must be in sealed envelopes/packages, marked and addressed as follows:

**MARK AND ADDRESS PACKAGES:**

Solicitation No: W917PM-09-R-0084

Offer Closing Date: **July 24, 2009**

Offer Closing Time: **5:00 P.M. (local Kabul time)**

**ADDRESS PACKAGES TO:**

U.S. Army Corps of Engineers (USACE)

Afghanistan Engineer District (AED)

Qalaa House, Attention: **Linda M. Ruch, Contracting Officer**

Kabul, Afghanistan

Special Instruction Pertaining to Hand Carried Offers: Hand-carried offers must be delivered to the USACE AED offices, Qalaa House, Kabul, Afghanistan. Offers who desire to hand-deliver their offers notify the Contract Specialist **in advance** in order to be met at the entrance gate to Qalaa House Compound.

## 3. PREPROPOSAL CONFERENCE / SITE VISIT

The Pre-proposal Conference shall be held at USACE Qalaa House Compound Kabul, Afghanistan 2 p.m. **30 June 2009**. If your company plans on attending the pre-proposal conference, contact the Project Manager **Larry M. Bergmooser** by no later than 5 p.m. 27 June 2009 at e-mail address [larry.m.bergmooser@usace.army.mil](mailto:larry.m.bergmooser@usace.army.mil). No Site Visit will be conducted.

**IMPORTANT NOTES.** (1) Remarks and explanations addressed during the conference shall not qualify or alter the terms and conditions of the solicitation. (2) The terms and conditions of the solicitation remain unchanged unless the solicitation is formally amended in writing.

## 4. TELEGRAPHIC OFFERS/**WITHDRAWALS** - - TELEGRAPHIC OFFERS/**WITHDRAWALS** ARE NOT ACCEPTABLE.

## 5. FACSIMILE **OR E-MAILS** OFFERS

Facsimile **or e-mail** offers, modifications thereto, or cancellations of offers will not be accepted.

## 6. PROPOSAL SUBMISSION REQUIREMENTS AND INSTRUCTIONS

a. REQUIREMENT FOR SEPARATE PRICE AND TECHNICAL PROPOSALS.

(1) Each Offeror must submit both a Technical Proposal and a Price Proposal. The Technical Proposal and the Price Proposal must be submitted as separate volumes. Ensure that the outside of each separate volume is clearly marked to indicate its contents; Volume I, Technical and Volume II, Price and the identity of the offeror. Additionally, clearly identify the "original" cost/price proposal and the "original" technical proposal on the outside cover.

(2) Both the Technical Proposal and the Price Proposal must be received by the closing date and time set for receipt of proposals.

(3) No dollar amounts from the Price Proposal are to be included in the Technical Proposal.

(4) All information intended to be evaluated as part of the Technical Proposal must be submitted as part of the Technical Proposal. Do not cross-reference similar material in the Price Proposal, or vice versa. Also, do not include links to websites in lieu of incorporating information into your proposal.

(5) Do not include exceptions to the terms and conditions of the solicitation in either the technical or price proposal. Should the offer include any standard company terms and conditions that conflict with the terms and conditions of the solicitation, the offer may be determined "unacceptable" and thus ineligible for award. Should the offeror have any questions related to specific terms and conditions, these should be resolved prior to submission of the offer. The Offeror must clearly describe in the Proposal Cover Sheet submitted with the Price Proposal any exceptions to the contractual and/or technical terms and conditions of the solicitation contained in the Offer.

b. DISCUSSIONS. The Government does not intend to enter into discussions. **However, the Government reserves the right to hold discussions if they are deemed to be in the best interest of the Government.**

c. COST OR PRICING DATA. Offerors are not required to submit Cost or Pricing Data with their offers.

d. GENERAL INSTRUCTIONS.

(1) Submit only the hard-copy paper documents and the electronic files specifically authorized and/or required elsewhere in this section. Do not submit excess information, to include audio-visual materials, electronic media, etc.

(2) Use only 8 ½ by 11 inch paper for hard copy submissions, unless another paper size is specifically authorized elsewhere in this section for a particular submission. Do not use fold-outs. Do not use a font size smaller than 12, or an unusual font style such as script, or condensed print for any submission. All page margins must be at least 1 inch wide, but may include headers and footers.

(3) The preferred method for assembling your proposals is to use three-ring binders; however, the use of pressboard or other report covers with compression or other type fasteners is acceptable. Do not use spring clamps or exceed the recommended capacity of the fastener or binder. Do not use plastic multi-hole/spiral binding systems, heat binding systems, or other systems which do not facilitate the ready insertion of additional pages.

(4) "Confidential" projects cannot be submitted to demonstrate capability unless all of the information required for evaluation as specified herein can be provided to the Government as part of the Offeror's technical proposal. Offerors that include in their proposals information that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, must

be clearly marked in accordance with the instructions at FAR 52.215-1, "Instructions to Offerors—Competitive Acquisition", paragraph (e), "Restriction on disclosure and use of data".

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

e. SPECIFIC INSTRUCTIONS FOR THE PRICE PROPOSAL

(1) Number of Sets of the Price Proposal. Submit the ORIGINAL and ONE additional hard copy set of the Price Proposal.

(2) Size Restrictions and Page Limits. Use only 8 ½" x 11" pages. There are no page limits set for the price proposal. However, limit your response to information required by this solicitation. Excess information will not be considered in the Government's evaluation.

(3) Format and Contents of the Price Proposal and List of Tabs. The Price Proposal shall be appropriately labeled as such and shall be organized as indicated in the following chart. Note: If the Offeror is not required to submit any information under a listed Tab in accordance with the instructions below, that tab can be omitted. However, do not renumber the subsequent tabs.

<b>TAB</b>	<b>CONTENTS OF THE PRICE PROPOSAL</b>
<b>#1</b>	The Proposal Cover Sheet
<b>#2</b>	The SF1442 and Acknowledgement of Amendments
<b>#3</b>	Section 00010, Pricing Schedule
<b>#4</b>	JV Agreement, if applicable.

(4) Detailed Submission Instructions for the Price Proposal

**TAB 1:** The proposal cover sheet is required by FAR 52.215-1(2) (c) (i)-(v) and must be submitted by all offerors. This provision, titled "Instructions to Offerors—Competitive Acquisition," and the format for the proposal cover sheet are furnished elsewhere in this section.

**TAB 2:** The SF 1442, Solicitation, Offer, and Award is to be completed by all Offerors and duly executed with an original signature by an official authorized to bind the company in accordance with FAR 4.102.

Any and all amendments must be acknowledged by all Offerors in accordance with the instructions on the Standard Form 30, Amendment of Solicitation.

**TAB 3:** Section 00010, Pricing Schedule is to be completed in its entirety by all Offerors. See Section 00010 with attached notes, for further instructions.

**TAB 4:** If the Offeror is a Joint Venture (JV), include a copy of the JV Agreement. If a JV Agreement has not yet been finalized/approved, indicate its status. JV Agreements must clearly indicate the percentages of the JV participants, in particular the percent of the controlling party, and a clear delineation of responsibilities and authorities between the JV parties.

f. SPECIFIC INSTRUCTIONS FOR THE TECHNICAL PROPOSAL

(1) Number of Sets of the Technical Proposal. Submit the **ORIGINAL** and **ONE** additional sets of the written Technical Proposal, with each set separately packaged.

(2) Format and Contents of the Technical Proposal and List of Tabs. The original and all copies of the technical proposal will be appropriately labeled as such. Each set shall be organized using the tabs specified in the following chart. Note: The main tabs directly correlate to the evaluation factors identified in Section 00120.

TAB	CONTENTS OF THE TECHNICAL PROPOSAL
Factor #1	EXPERIENCE
Factor #2	PROJECT MANAGEMENT PLAN
Factor #3	PERSONNEL
Factor #4	PRELIMINARY DESIGN
Factor #5	PAST PERFORMANCE

(3) Page Limitations. See paragraphs 6.d.(2) and 6.d.(6) above for format and page count instructions. The following page limitations are established for each factor described above:

- Factor #1, Experience – Limited to 1 Experience Form per project (maximum 10 forms).
- Factor #2, Project Management Plan – Limited to 6 pages total, not including organizational charts
- Factor #3, Personnel – Limited to 1 page for each resume provided.
- Factor #4, Preliminary Design – Limited to 20 pages in total for the design narrative. Drawings do not count against this page limitation.
- Factor #5, Past Performance – Limited to two pages per experience form.

Tables of content, proposal cover letters, and tabs between proposal information do not count toward any page limitations in the proposal.

(4) Detailed Submission Requirements for the Technical Proposal. The following is a detailed description of the information to be submitted under each TAB including prime and subcontractor information.

(i) **TAB 1: FACTOR 1, EXPERIENCE:** In response to this factor the Offeror shall provide at least five (5), but no more than ten (10) completed "Experience Information" forms that are attached to the end of this section. All blocks must be filled in and all data should be accurate, current, and complete. All projects submitted must have been underway or completed within the last 3 years. At least three (3) of the projects provided must be valued at over \$3,000,000.00. The projects submitted must demonstrate

that the Contractor and/or team, including sub-contractors, has experience on projects that are the same or similar to that described in the solicitation. The projects submitted must have been performed by the Offeror and/or same team member(s) who will be providing similar services under the prospective contract.

(ii) **TAB 2: FACTOR 2, PROJECT MANAGEMENT PLAN:** The Offeror shall provide a narrative that addresses the Offeror's project management plan. The plan must, at a minimum, address the following elements:

- Describe the procedures used to manage **this** project, to include project management, quality control, safety, community relations, and security.
- Describe knowledge of Community Relations as it relates to village customs, ethnicity, experience in meeting, coordinating and negotiating with local and provincial officials.
- Describe how the Offeror plans to meet major design and construction project milestones in the specifications that reflect completion of all work within the period of contract performance.
- Provide a narrative response that addresses timely delivery and receipt of equipment and materials at the job site which coincides with the major construction project milestones and provides for protection of equipment and materials to and from an isolated project site in a hostile environment.
- Provide information on how he will complete the minimum 20% of the work with his forces per Section 01060 para 1.4. MINIMUM CONTRACTOR WORK".

The Offeror shall provide an organizational chart depicting lines of authority and responsibility for all personnel/entities on the project, including subcontractors, from the lowest level to the corporate level. The organizational chart shall clearly indicate which entity has overall authority for the contract and identify by name and title the single Point of Contact to the Government for all project-related matters.

(iii) **TAB 3: FACTOR 3, PERSONNEL:** Key personnel resumes will be evaluated to determine the depth and breadth of personnel experience on the same or similar projects and as it relates to the responsibilities that person will have on this contract. The Civil Engineer shall have a degree in Civil Engineering and a minimum of three (3) years of professional experience in their field. All other personnel must have 3 years of professional experience in their field. In order to receive a Satisfactory rating for this factor, the Offeror must meet the following requirements:

- The Civil Engineer shall have a degree in Civil Engineering and a minimum of three (3) years of professional experience in their field.
- The offeror must provide resume data for the following key personnel:
  - Project Manager,
  - Senior Civil Engineer,
  - Field Safety Officer,
  - Field Quality Control Manager,
  - Site Project Manager,
  - Site Foreman,
  - Community Relations Manager, and
  - Security Manager
- Resume information to be provided for personnel identified above shall be limited to no more than one (1) page per person and shall include the following information as a minimum:
  - Name and title
  - Project assignment
  - Name of firm with which associated
  - Years experience with this firm and with other firms
  - Education degree(s), year, specialization, if applicable
  - Active professional registration, year first registered, if applicable

o Other experience and qualifications relevant to same/similar work required

(iv) **TAB 4: FACTOR 4, PRELIMINARY DESIGN:** The Offeror shall provide a narrative that describes the engineering soundness of the basic approach to the design for each technical discipline, including as a minimum civil engineering and structural engineering. It should also indicate the industry or Government criteria, standards, codes and publications on which the design is based. The offeror shall have the data necessary to insure the design provided is a thoroughly engineered, coordinated, and cost effective design. Sample CADD drawings of the following sections and structural details should be provided:

- Road alignment with horizontal curve data (1 sheet)
- Road profile for above road alignment with vertical curve data (1 sheet)
- Road structural detail section (1 sheet)
- Road surveyed cross sections (1 sheet)
- Small culvert detail (1 sheet)
- Large culvert detail (1 sheet)
- Wadi Crossing Detail (1 sheet)
- Retaining wall (roadside) (1 sheet)
- Sample culvert hydraulic analysis and design (1- 2 sheets)
- Sample structural analysis and design (1 - 2 sheets)

(v) **TAB 5: FACTOR 5, PAST PERFORMANCE:** *Past performance* pertains to how well an Offeror has performed past work which is an indicator of future performance. ***Past performance information is not the same as experience information. Experience pertains to what types of work an Offeror has performed. Past performance pertains to how well an Offeror performs project work.*** For the purpose of this evaluation, *past performance* means an Offeror's reputation for satisfying its customers by delivering (i) quality work (ii) in a timely manner (iii) at a reasonable cost (iv) in a safe working environment and an Offeror's reputation for (v) reasonable and cooperative conduct and (vi) overall commitment to customer satisfaction. Offerors are reminded that while the Government may elect to consider past performance information obtained from other sources, the responsibility of proving past performance information rests with the Offeror.

For the projects listed under Factor 1-- Experience provide: letters of recommendations, performance evaluations, letters of appreciation, commendations, awards or certificates of appreciation, also provide:

**(The projects submitted for past performance shall be the same projects that were submitted under Factor 1: Experience.)**

1. Project Name & Location
2. Customer Point of Contact (Note: the Government may contact this customer to verify the Information provided on this form)

Name:  
Address:  
Phone number:  
Email Address:

3. Problems encountered and corrective actions taken,
4. List Change Orders and their circumstances,
5. Project scheduled Completion date Actual Completion date,

IF the above dates are different, explain reason for the change:

6. **Awarded Project Budget (US Dollars)**  
**Actual Project cost (US Dollars).**

IF the above dates are different, explain reason for the change.

7. Safety record and accident reports;

8. References: Submit the following, Customer Satisfaction letters, Letters of Appreciation, Performance Evaluations, Certification of Achievements, and Letters of Recommendation. (Note: A neutral rating will be assigned IF no past performance is submitted) ATTACHMENT- (CONTRACTOR PERSONNEL'S EXPERIENCE & QUALIFICATION)

The Government may utilize any past performance information available to it, including information about other contracts to evaluate past performance.

The Contractor Performance Assessment Reporting System (to include ACASS, CCASS, and CPARS) will be utilized to validate past performance ratings on Department of Defense contracts and any other past performance information the Government deems necessary to evaluate a contractor's past performance. Firms without a history of relevant past performance will be given a neutral rating.

The Government may contact references provided as part of Factor 1 – Experience for Information regarding the Offeror's past performance on the project and for the purposes of assessing and verifying the scope of the work performed. Offerors should provide accurate, current, and complete contact information for references provided in the project descriptions.

**7. Proposal Cover Sheet:**

<b>PROPOSAL COVER SHEET</b>	
1.	Solicitation Number:
2.	The name, address, and telephone and facsimile numbers of the Offeror (and electronic address if available):
3.	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. Statement to include any exceptions in technical or cost/price proposal or exceptions inherent in Offeror's standard terms and conditions.
4.	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:
5.	Name, title, and <u>signature</u> 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.

**8. SOURCE SELECTION USING THE BEST VALUE PROCESS.** The Government will select the offer that represents the best value to the Government by using the trade-off process described in FAR Part 15. This process permits tradeoffs between cost/price and technical ("non-cost") factors and allows the

Government to accept other than the lowest priced offer. The award decision will be based on a comparative assessment of proposals against all source selection criteria in the solicitation. See Section 00120.

**9. DEFENSE BASE ACT INSURANCE RATES – LIMITATION – FIXED-PRICE (APR 2008)**

(a) The U. S. Army Corps of Engineers (USACE) has entered into a contract with **CNA/Continental Insurance Company** to provide all Defense Base Act (DBA) insurance to USACE contractors at a contracted rate. The rates for this insurance are as follows:

Services @ \$3.50 per \$100 of compensation;

Construction @ \$7.25 per \$100 of compensation;

Security @ \$10.30 per \$100 of compensation;

Aviation @ \$17.50 per \$100 of compensation.

(b) Bidders/Offerors should compute the total compensation (direct salary plus differential, but excluding per diem, housing allowance and other miscellaneous post allowances) to be paid to employees who will be covered by DBA insurance and the cost of DBA totals in the spaces provided for the base period and whatever extension there may be thereafter, if applicable.

(1) Compensation of Covered Employees: \_\_\_\_\_

(2) Defense Base Act Insurance Costs: \_\_\_\_\_

(3) Total Cost: \_\_\_\_\_

(c) Bidders/Offerors shall include a statement as to whether or not local nationals or third country nationals will be employed on the resultant contract.

(d) CNA Insurance is utilizing Rutherford International as their managing Broker. The primary POC is the USACE DBA Program Administrator is Ramoan Jones, (703) 813-6571 [ramoan.jones@rutherford.com](mailto:ramoan.jones@rutherford.com). The alternate POC is Sara Payne, Senior Vice President, (703) 813-6503 [sara.payne@rutherford.com](mailto:sara.payne@rutherford.com).

**EXPERIENCE INFORMATION****(To be completed by Contractor)**

<b>1. Contractor:</b> <b>Name:</b>  <b>Address:</b>	<b>2. Contract /Task Order(TO) /Purchase Order (PO) Number:</b>
	<b>3. Contract/TO/PO Dollar Value:</b>
	<b>4. Contract/TO /PO Status:</b> <input type="checkbox"/> Active <input type="checkbox"/> Complete <b>Completion Date (w/ extensions):</b>
<b>5. Project Title:</b>  <b>Location:</b>	
<b>6. Project Description:</b>	
<b>7. Project Owner or Project Manager for the Client – provide:</b> <b>Name:</b>  <b>Address:</b>  <b>Telephone Number and E-mail:</b>	

SECTION 00120 PROPOSAL EVALUATION

**SECTION 00120**  
**CONSTRUCTION (DESIGN-BUILD) – BEST VALUE**  
**PROPOSAL EVALUATION AND CONTRACT AWARD**

1. ELIGIBILITY FOR CONTRACT AWARD. No contract shall be entered into unless the Contracting Officer ensures that all requirements of law, executive orders, regulations, and all other applicable procedures, including clearances and approvals, have been met. FAR 9.103 requires that no award shall be made unless the Contracting Officer makes an affirmative determination of responsibility. To be determined responsible, a prospective contractor must meet the general standards in FAR 9.104-1 and any special standards set forth in the solicitation.

2. SOURCE SELECTION USING THE BEST VALUE PROCESS. The Government will select the offer that represents the best value to the Government by using the trade-off process described in FAR Part 15. This process permits tradeoffs between cost/price and technical (“non-cost”) factors and allows the Government to accept other than the lowest priced offer. The award decision will be based on a comparative assessment of proposals against all source selection criteria in the solicitation.

3. RELATIVE IMPORTANCE OF PRICE TO THE TECHNICAL EVALUATION FACTORS

All evaluation factors other than cost or price, when combined, are equal to price. In evaluating proposals and in making the contract award, the Government is as concerned with obtaining the best non-pricing/non-cost features as it is doing so at a competitive reasonable price. The government will not make an award to an offeror whose superior non-pricing/non-cost features causes the total cost of the project to become unreasonably high. Nor is the Government willing to make an award to an offeror submitting the lowest prices/lowest costs if the non-pricing/non-cost features of its proposal indicate a reasonable likelihood that successful project completion will not occur. An unsuccessful project would be amongst other things, a project that fails to meet acceptable quality standards.

4. EVALUATION OF THE PRICE PROPOSALS

a. Price will be evaluated and considered but will not be scored. The proposed prices will be analyzed for reasonableness. Prices may also be analyzed for completeness; whether the price proposal reflects a clear understanding of the requirements; and is the price proposal consistent with the offeror's technical proposal. Additionally, all offers will be analyzed for unbalanced pricing.

b. The price will be used along with the technical evaluation to make selection for award. Since evaluation of the price proposal will represent a portion of the total evaluation, it is possible that an offeror might not be selected for award because of unreasonable, incomplete, or unbalanced price proposal information. The Government will evaluate the format and clarity of the price proposal.

5. EVALUATION OF THE TECHNICAL PROPOSAL. The Technical Proposal will be evaluated based on the following evaluation criteria:

a. **Factor 1 - Experience:** The Government will evaluate the relevant work experience of the offeror and their proposed team, including subcontractors, on projects that are the same or similar to that described in this solicitation. Offerors with experience on same or similar projects (type of services, similar dollar

value, complexity, USACE design / construction requirements, and applicable quality standards) will receive a higher rating than those with dissimilar projects. In order to receive a Satisfactory rating, the Contractor must meet the following requirements:

- The Contractor shall submit a minimum of five (5), but no more than ten (10), "Experience Information" forms, attached at the end of this section, in response to this factor.
- All blocks must be filled in and all data should be accurate, current, and complete.
- All projects submitted must have been underway or completed within the last 3 years.
- At least three (3) of the projects provided must be valued at over \$3,000,000.00.
- The projects submitted must demonstrate that the Contractor and/or team, including sub-contractors, has experience on projects that are the same or similar to that described in the solicitation. The projects submitted must have been performed by the offeror and/or same team member(s) who will be providing similar services under the prospective contract.

b. **Factor 2 – Project Management Plan:** The Offeror's Project Management Plan will be evaluated for:

- The Offeror's ability to manage **this** project, control quality safety, community relations, and security.
- The Offeror's knowledge of Community Relations as it relates to village customs and ethnicity, and previous experience in meeting, coordinating and negotiating with local and provincial officials.
- How the offeror plans to meet the major design and construction project milestones.
- The Offeror's understanding of the work efforts and its ability to provide quality, responsive, and timely performance over the planned life of the project;
- If the offeror has a sound plan addressing timely delivery and receipt of equipment and materials at the job site which coincides with the major construction project milestones and provides for protection of equipment and materials to and from an isolated project site in a hostile environment.
- Provide information on how he will complete the minimum 20% of the work with his forces per Section 01060 para 1.4. MINIMUM CONTRACTOR WORK".

The organizational chart will be evaluated for a clear depiction of the lines of authority and responsibility for all personnel/entities on the project, including subcontractors, from the lowest level to the corporate level. The organizational chart shall clearly indicate which entity has overall authority for the contract and identify by name and title the single Point of Contact to the Government for all project-related matters.

c. **Factor 3 - Personnel:** Key personnel resumes will be evaluated to determine the depth and breadth of personnel experience on the same or similar projects and as it relates to the responsibilities that person will have on this contract. The Civil Engineer shall have a degree in Civil Engineering and a minimum of three (3) years of professional experience in their field. All Key personnel shall have 3 years of professional experience in their field. In order to receive a Satisfactory rating for this factor, the Offeror must meet the following requirements:

- The Civil Engineer shall have a degree in Civil Engineering and a minimum of three (3) years of professional experience in their field.
- The offeror must provide resume data for the following key personnel:
  - Project Manager,
  - Senior Civil Engineer,
  - Field Safety Officer,
  - Field Quality Control Manager,
  - Site Project Manager,
  - Site Foreman,
  - Community Relations Manager, and

- Security Manager

- Resume information to be provided for personnel identified above shall be limited to no more than one (1) page per person and shall include the following information as a minimum:
  - Name and title
  - Project assignment
  - Name of firm with which associated
  - Years experience with this firm and with other firms
  - Education degree(s), year, specialization, if applicable
  - Active professional registration, year first registered, if applicable
  - Other experience and qualifications relevant to same/similar work required under this contract.

d. **Factor 4 – Preliminary Design:** The Preliminary Design proposal shall be evaluated to determine if the offeror has a clear understanding of the basic specification requirements for this project. The Preliminary Design shall clearly demonstrate that the offeror has the ability to design and construct this project in a manner that meets the requirements of this contract and specification. The Government will evaluate the data provided to insure the design provided is a thoroughly engineered, coordinated, and cost effective design. Sample CADD drawings and the narrative provided as the response to this factor will be evaluated for presentation of a quality design that is presented with a demonstrated level of engineering soundness for the basic approach to the design for each technical discipline. The evaluation will also determine if the design meets all required and applicable codes, standards, publications, and criteria. In order to receive a Satisfactory rating for this factor, the Contractor must submit the following requirements:

- The offeror shall provide a narrative that describes the engineering soundness of the basic approach to the design for each technical discipline, including as a minimum civil engineering and structural engineering. It should also indicate the industry or Government criteria, standards, codes and publications on which the design is based.
- The offeror shall have the data necessary to insure the design provided is a thoroughly engineered, coordinated, and cost effective design.
- Sample CADD drawings of the following sections and structural details shall be provided:
  - Road Alignment with horizontal curve data (1 sheet)
  - Road profile for above road alignment with vertical curve data (1 sheet)
  - Road structural detail section (1 sheet)
  - Road surveyed cross sections (1 sheet)
  - Small culvert detail (1 sheet)
  - Large culvert detail (1 sheet)
  - Wadi Crossing Detail (1 sheet)
  - Retaining Wall (roadside) (1 sheet)
  - Sample culvert hydraulic analysis and design (1- 2 sheets)
  - Sample structural analysis and design (1 - 2 sheets)

e. **Factor 5 - Past Performance:** *Past performance* pertains to how well an offeror has performed past work that is an indicator of future performance. ***Past performance information is not the same as experience information. Experience pertains to what types of work an offeror has performed. Past performance pertains to how well an offeror performs project work.*** For the purpose of this evaluation, *past performance* means an offeror's reputation for satisfying its customers by delivering (i) quality work (ii) in a timely manner (iii) at a reasonable cost (iv) in a safe working environment and an offeror's reputation for (v) reasonable and cooperative conduct and (vi) overall commitment to customer satisfaction. Offerors are reminded that while the Government may elect to consider past performance information obtained from other sources, the responsibility of proving past performance information rests with the offeror.

All blocks must be filled in and all data should be accurate, current, and complete.

- The Government will evaluate past performance information to assess the level of performance risk associated with the Offeror's likelihood of success in performing the requirements stated in the solicitation.
- The currency and relevance of the information (as determined by the Government), the source of the information, context of the data, and general trends in the contractor's performance may be considered.
- Information submitted by the Offeror pertaining to recent, relevant contracts, including those not identified by the offeror, will be evaluated, as well as data obtained from other sources, including automated databases and questionnaires.
- References other than those identified by the Offeror may be contacted by the Government. The Government may take into consideration the Offeror's performance of contracts with the agency; other Federal, State, and local government activities; and commercial concerns. The result will be a performance risk rating based on each Offeror's record of past performance.

For the purpose of the past performance evaluation, offerors shall be defined as business arrangements and relationships, such as Joint Venture participants, teaming partners, and major subcontractors. The past performance record of each firm in the business arrangement may be evaluated by the Government.

In the case of an Offeror without a record of recent, relevant past performance (and for which there is also no recent, relevant past performance information for its predecessor companies or key subcontractors), or for whom information on past performance is not available or cannot be verified, the Offeror will not be evaluated favorably or unfavorably on past performance. This does not preclude the Government from making award to a higher-priced Offeror with a favorable past performance record over a lower-priced Offeror with **an unknown** past performance rating.

f. **Factor 6 - Price Evaluation Factor:** The Price Team shall conduct a price analysis. Review of contractor price data will consist of analysis to determine that prices are complete and reasonable. Completeness will be determined by comparing the items contained within an Offeror's price proposal with the Government's estimate. Reasonableness will be determined by comparison of an Offeror's proposed prices against each other and the Government's estimate. Since the Government's evaluation of the cost proposal will represent a portion of the total evaluation, it is possible that an offeror might not be selected for an award because of unreasonable, incomplete, inaccurate, non-current cost proposal information. Offerors are cautioned to make all accompanying written descriptions complete, clear and understandable. The Government will not be responsible for any misunderstandings concerning the basis for costs proposed by an offeror that results from that Offeror's failure to provide written descriptions that are clear, complete and easily understood.

#### 6. RELATIVE IMPORTANCE OF THE TECHNICAL EVALUATION FACTORS.

All Non-Cost Factors **have** equal **importance** with one another.

#### 7. GENERAL TECHNICAL CRITERIA

a. Material omission(s) may cause the technical proposal to be rejected as unacceptable.

b. Technical proposals which do not provide the specified information in the specified location in accordance with the submission instructions **will find that their evaluation will reflect the lack of information**. The Government is under no obligation to search for information that is not in the specified location.

c. Proposals which are generic, vague, or lacking in detail **will find that their evaluation will reflect the generic language, vagueness, and lack of detail.** The Offeror's failure to include information that the Government has indicated should be included may result in the proposal being found deficient if inadequate detail is provided.

d. The Government cannot make award based on a deficient offer. Therefore, a rating of "Unsatisfactory" under any subfactor will make the offer ineligible for award, unless the Government elects to enter into discussions with that Offeror and all deficiencies are remedied in a revised proposal.

(End of provision)

#### CLAUSES INCORPORATED BY REFERENCE

52.204-6	Data Universal Numbering System (DUNS) Number	APR 2008
52.214-34	Submission Of Offers In The English Language	APR 1991
52.214-35	Submission Of Offers In U.S. Currency	APR 1991
52.215-1	Instructions to Offerors--Competitive Acquisition	JAN 2004
52.215-20	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data	OCT 1997
52.216-1	Type Of Contract	APR 1984
52.217-7	Option For Increased Quantity-Separately Priced Line Item	MAR 1989
52.222-23	Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction	FEB 1999
52.230-1	Cost Accounting Standards Notices And Certification	OCT 2008
52.233-2	Service Of Protest	SEP 2006
52.236-28	Preparation of Proposals--Construction	OCT 1997
252.204-7001	Commercial And Government Entity (CAGE) Code Reporting	AUG 1999

#### CLAUSES INCORPORATED BY FULL TEXT

##### 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)

SECTION 00150 D-B PROCESS**SECTION 00150****THE DESIGN-BUILD PROCESS****PART 1 - GENERAL:**

**I.1. DESIGN-BUILD (DB) PROCESS:** The road shall be designed and built by a single design-build (DB) contractor. The DB contractor may be a single firm or a team of firms that includes registered Engineers either employed by or subcontracted to the DB contractor. Licensing jurisdiction of Engineers of record shall be verifiable. The DB contractor is the Architect/Engineer-of-Record, whether the DB contractor uses registered engineers employed by its firm or subcontracts with independent architectural and engineering firm(s). The DB contractor is solely liable for design errors and/or omissions and will be the designer on record.

**I.2. OUTLINE DESCRIPTION OF THE DB PHASE:** No work can begin on any phase of the process until authorization to proceed for that phase is issued. Authorization shall be issued by the Contracting Officer Representative.

**I.2.A. PROPOSAL PHASE:** The Proposal Phase includes the period from the time from the issuance of the Request for Proposals (RFP) through the selection process and the final award of the DB contract. The proposals to be submitted include a Management/Technical Proposal, a Preliminary Design Proposal, and a Cost/Price Proposal. The contents and organization of the proposal is described in SECTION 00110 - PROPOSAL PREPARATION. The Government will evaluate and award the DB contract to a single Offeror based upon the criteria which are outlined in SECTION 00120 - PROPOSAL EVALUATION AND CONTRACT AWARD.

**I.2.B. POST-NTP, SURVEY AND DESIGN PHASE:** The successful DB contractor shall develop and submit for review five submittals: One Post-Notice-to-Proceed (Post-NTP) submittal, consisting of Community Relations Plan and Security Protection Plan, and four design submittals, consisting of 15% survey, 65% design, 95% design and 100% final design. The DB contractor is encouraged to develop and submit multiple cost saving proposals for innovative design alternatives. It is recommended that the design phases be submitted incrementally in 3km to 8km sections. All submittals shall comply with SECTION 01335.

**2.B.1. Community Relations Plan and Security Protection Plan:** The Post-NTP submittal shall include the Community Relations Plan and Security Protection Plan. The Contractor shall not commence any field activities until both submittals have been reviewed and accepted by the Afghanistan Engineer District (AED).

**2.B.2. 15% Survey:** The first design submittal shall include: full topographical survey, with accurate existing horizontal and vertical layout, profiles, existing drainage structures, and cross sections, and drainage structure evaluations. The contractor shall survey cross section of all rivers, streams and wadis at least 25m from the centerline of the road. The Contractor shall, as part of their survey, conduct inspections and evaluations of all existing drainage structures and provide their findings and recommendations in a report as part of this submission. The report shall describe the structure i.e., length, width, height, materials, etc. and contain a photo. The report should have recommendations, for each structure, on whether it should be replaced, rehabilitated, or remain in place as is. Structures not recommended for replacement must have sufficient evidence (provided by the contractor by a competent engineer) in the report that shows by calculations that the culvert is properly sized hydraulically and is structurally capable of handling the design load and dead load of all required road layers.

**2.B.3. 65% Design:** The second design submittal shall include, 65% complete drawings with accurate horizontal and vertical curves layout, profiles, cross sections at every 50m, retaining walls and drainage structure locations, and specifications. A design analysis shall be submitted, at a minimum, it shall include complete geotechnical, hydraulics, and structural

analysis. Structures shall have plans, sections, and details to go along with the specifications.

**2.B.4. 95% Design:** The third design submittal shall include all design services required to complete the 95% design. Design plan of 95% shall not begin until the 65% submittal is submitted for review and acceptance. This submittal stage shall include complete drawings with accurate horizontal and vertical curves layout, profiles, cross sections, specifications, design analysis and structure design plan and details, and all other requirements for completion of the road design. All comments from the 65% design shall be incorporated into the 95% design.

**2.B.5. 100% Design:** The fourth design submittal shall include all design services required to complete the third design submittal 100%. Design of 100% shall not begin until 95% submittal is submitted for review and acceptance. All comments from the 95% design shall be incorporated into the 100% design. The 100% design comments shall be incorporated in the final design package.

**I.2.C. BUILD PHASE:** The Build Phase will be initiated by an authorization letter. Only the Administrative Contracting Officer (ACO) or Contracting Officer (KO) has the authority to issue the partial or full clearance for construction for each phase of the work. The authorization letter will be provided separately by the Contracting Officer for each phase of the work. The Government may give the DB Contractor authorization for the Build Phase for portions of the work following review and approval of the Second Design Submittal. Weekly coordination meetings will be held at which, as a minimum, the DB Contractor's Project Manager, a representative of the Designer, the site Superintendent, and the Contractor's Quality Control Manager shall be present.

**2.C.1.** After the 65% design submittal is accepted by engineering branch, the field office will request the ACO to issue the partial clearance for construction for clearing, widening, grading and preparing the sub-grade work only.

**2.C.2.** After the 95% design submittal, sub-grade compaction, sub-base and base materials are accepted by AED, the field office will request the ACO to issue another partial clearance for construction for placing sub-base and base courses. Other items like culverts and retaining structures may be approved at the ACO's discretion.

**2.C.3.** After the 100% final design submittal is accepted by AED, the field office will request the ACO to issue a final full clearance construction for completing the road such as structures.

**2.C.4.** Prior to completion of the 95% and 100% submittals, the contractor may also submit a design plan for any particular structure with design calculations if required for review and acceptance. This separate design submittal shall physically identify the name of the structure (culvert, wadi crossing, retaining wall, etc) the location (station, coordinates) and detailed sections. After this stand alone design submittal is accepted by AED, the field office will request the ACO to issue another partial clearance for construction for that particular structure.

**I.3. PROJECT SCHEDULE:** The following is a suggested internal design schedule and is subject to modification by the Offeror to suit their particular method of operation. Overall time constraints are required and cannot be changed except by contract modification. Prospective offerors shall be required to submit a complete schedule for design and construction that meets or exceeds the overall time goals of the Government for this project.

<b>I.3.A.</b>	Notice to Proceed (NTP)	Following award of contract (upon written notification)
<b>I.3.B</b>	Community Relations Plan, Post-NTP, submitted for AED review	No later than 15 days following NTP

	and acceptance, prior to commencing Survey Phase	
<b>I.3.C.</b>	Security Protection Plan, Post-NTP, submitted for AED review and acceptance, prior to commencing Survey Phase	No later than 15 days following NTP
<b>I.3.D.</b>	15% Survey Submittal First Design Submittal Due	45 days following NTP
<b>I.3.E.</b>	15% Design Conference/Approval	15 days after 15% Survey submittal
<b>I.3.F.</b>	65% Design Submittal Second Design Submittal Due	30 days following approval of 15% Survey
<b>I.3.G.</b>	65% Design Conference/Approval	15 days after 65% Design submittal
<b>I.3.H.</b>	95% Design Submittal Third Design Submittal Due	30 days following approval of 65% Design
<b>I.3.I.</b>	95% Design Conference/Approval	15 days after 95% Design submittal
<b>I.3.J.</b>	100% Design Submittal Fourth Design Submittal Due	15 days following approval of 95% Design
<b>I.3.K.</b>	100% Design Conference/Approval	15 days after 100% Design submittal
<b>I.3.L.</b>	Total Design and Construction Period	See SECTION 01010 Part 4 (performance period includes design and construction activities)

***All days are in calendar days.***

--End of Section--

SECTION 00555 DESIGN CONCEPT**SECTION 00555****DESIGN CONCEPT DOCUMENTS****PART 1 - GENERAL:****1.1 GENREAL**

This section identifies documents issued with this RFP which establish the concept or basis for the project design. These requirements are minimum standards and may be exceeded by the Offeror. Deviations from these concepts and standards may be approved if considered by the Government to be in its best interests.

The extent of development of these requirements in no way relieves the successful Offeror from the responsibility of completing the design, construction documentation, and construction of the facility in conformance with applicable criteria and codes.

**1.2 ENGINEERING AND DESIGN CRITERIA**

General design requirements are set forth in this RFP herein. The Specifications Divisions 02 thru 16 are the primary specifications criteria for the design and construction of the project. No design criteria will be furnished by the Afghanistan Engineer District except that which may be required for design and is not available from commercial sources or from the Construction Criteria Base (CCB) or 'Techinfo' website located at <http://www.wbdg.org/ccb/>. The references within CCB must be obtained by the A/E if the criteria are required or desired. All design, unless otherwise specified, shall be based on nationally recognized industry standard, criteria, and practice.

**1.3 APPENDIX DOCUMENTS**

See Appendices for further technical requirements, criteria, and parameters that are a part of this contract.

**1.4 SPECIFICATIONS**

Specifications included herein shall be utilized as design criteria and minimum standards for the corresponding construction work. The successful Offeror shall develop complete construction specifications using the criteria included in these specifications.

The Government will provide Division 1 specifications sections as required, to the successful Offeror; and these sections shall be included in the final construction specifications without change. The Design Build Contractor shall furnish these specifications on electronic media for the production of construction specifications when requested. These specifications shall be submitted together with other required contractor prepared project construction documents during the Second Design Submittal of the Design Phase, Part II.

**1.5 ORDER OF PRECEDENCE**

In case of conflict, duplication, or overlap of design criteria specified in the documents referenced in this section, the following order of precedence shall be followed:

1. Contract Award Document and referenced publications therein.
2. Written requirements supersede drawings."

**1.6 MANDATORY CRITERIA**

Portions of the design criteria documents provide mandatory criteria. Mandatory criteria consists of drawings, schematics, specifications, and other requirements which shall not be altered or modified for proposal submittal or subsequent final design except for minor adjustments for coordination or except for cost reduction proposals as specified in Section 00150 - THE DESIGN BUILD PROCESS. Non-mandatory criteria shall be considered minimum requirements and may be enhanced, improved, or substituted to better suit design requirements or to improve evaluation consideration. All other design criteria shall be considered non-mandatory.

#### **1.7 ADDITIONAL DOCUMENTS/CRITERIA FURNISHED BY THE GOVERNMENT**

The following documents will be furnished to the Design/Build Contractor when requested by the Offeror or Contractor:

Design Criteria published by the Government such as Technical Manuals (TM), Engineer Manuals (EM), Engineer Technical Letters (ETL) and other documents related to the design referenced herein which are not available on the Internet, including the CCB website.

Commercial design criteria and specifications will not be furnished by the Government.

Conversion of electronic media to other formats shall be the responsibility of the Design Build Contractor.

**PART 2 - PRODUCTS:** (NOT APPLICABLE)

**PART 3 - EXECUTION:** (NOT APPLICABLE)

**-- End of Section --**

## Section 00600 - Representations &amp; Certifications

## CLAUSES INCORPORATED BY REFERENCE

52.203-3	Gratuities	APR 1984
52.203-11	Certification And Disclosure Regarding Payments To Influence Certain Federal Transactions	SEP 2007
52.204-8	Annual Representations and Certifications	FEB 2009
52.209-5	Certification Regarding Responsibility Matters	DEC 2008
52.215-20 Alt I	Requirements for Cost or Pricing Data or Information Other Than Cost or Pricing Data (Oct 1997) - Alternate I	OCT 1997
52.222-22	Previous Contracts And Compliance Reports	FEB 1999
52.222-38	Compliance With Veterans' Employment Reporting Requirements	DEC 2001
252.209-7001	Disclosure of Ownership or Control by the Government of a Terrorist Country	JAN 2009
252.225-7042	Authorization to Perform	APR 2003
252.225-7044	Balance of Payments Program--Construction Material	JAN 2009
252.247-7022	Representation Of Extent Of Transportation Of Supplies By Sea	AUG 1992

## Section 00700 - Contract Clauses

## CLAUSES INCORPORATED BY REFERENCE

52.202-1	Definitions	JUL 2004
52.203-2	Certificate Of Independent Price Determination	APR 1985
52.203-3	Gratuities	APR 1984
52.203-5	Covenant Against Contingent Fees	APR 1984
52.203-6	Restrictions On Subcontractor Sales To The Government	SEP 2006
52.203-7	Anti-Kickback Procedures	JUL 1995
52.203-8	Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity	JAN 1997
52.203-10	Price Or Fee Adjustment For Illegal Or Improper Activity	JAN 1997
52.203-12	Limitation On Payments To Influence Certain Federal Transactions	SEP 2007
52.204-4	Printed or Copied Double-Sided on Recycled Paper	AUG 2000
52.209-6	Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment	SEP 2006
52.215-2	Audit and Records--Negotiation	MAR 2009
52.215-13	Subcontractor Cost or Pricing Data--Modifications	OCT 1997
52.215-18	Reversion or Adjustment of Plans for Postretirement Benefits (PRB) Other than Pensions	JUL 2005
52.215-19	Notification of Ownership Changes	OCT 1997
52.222-21	Prohibition Of Segregated Facilities	FEB 1999
52.222-26	Equal Opportunity	MAR 2007
52.222-27	Affirmative Action Compliance Requirements for Construction	FEB 1999
52.222-29	Notification Of Visa Denial	JUN 2003
52.222-35	Equal Opportunity For Special Disabled Veterans, Veterans of the Vietnam Era, and Other Eligible Veterans	SEP 2006
52.222-36	Affirmative Action For Workers With Disabilities	JUN 1998
52.222-37	Employment Reports On Special Disabled Veterans, Veterans Of The Vietnam Era, and Other Eligible Veterans	SEP 2006
52.222-50	Combating Trafficking in Persons	FEB 2009
52.225-13	Restrictions on Certain Foreign Purchases	JUN 2008
52.225-14	Inconsistency Between English Version And Translation Of Contract	FEB 2000
52.227-4	Patent Indemnity-Construction Contracts	DEC 2007
52.229-6	Taxes--Foreign Fixed-Price Contracts	JUN 2003
52.232-5	Payments under Fixed-Price Construction Contracts	SEP 2002
52.232-17	Interest	OCT 2008
52.232-18	Availability Of Funds	APR 1984
52.232-27	Prompt Payment for Construction Contracts	OCT 2008
52.233-1	Disputes	JUL 2002
52.233-3	Protest After Award	AUG 1996
52.233-4	Applicable Law for Breach of Contract Claim	OCT 2004
52.236-1	Performance of Work by the Contractor	APR 1984
52.236-2	Differing Site Conditions	APR 1984
52.236-3	Site Investigation and Conditions Affecting the Work	APR 1984
52.236-5	Material and Workmanship	APR 1984
52.236-6	Superintendence by the Contractor	APR 1984
52.236-7	Permits and Responsibilities	NOV 1991

52.236-8	Other Contracts	APR 1984
52.236-10	Operations and Storage Areas	APR 1984
52.236-11	Use and Possession Prior to Completion	APR 1984
52.236-12	Cleaning Up	APR 1984
52.236-13 Alt I	Accident Prevention (Nov 1991) - Alternate I	NOV 1991
52.236-15	Schedules for Construction Contracts	APR 1984
52.236-17	Layout of Work	APR 1984
52.236-21 Alt I	Specifications and Drawings for Construction (Feb 1997) - Alternate I	APR 1984
52.236-23	Responsibility of the Architect-Engineer Contractor	APR 1984
52.236-24	Work Oversight in Architect-Engineer Contracts	APR 1984
52.236-26	Preconstruction Conference	FEB 1995
52.242-13	Bankruptcy	JUL 1995
52.242-14	Suspension of Work	APR 1984
52.243-4	Changes	JUN 2007
52.243-6	Change Order Accounting	APR 1984
52.244-4	Subcontractors and Outside Associates and Consultants (Architect-Engineer Services)	AUG 1998
52.244-5	Competition In Subcontracting	DEC 1996
52.246-21	Warranty of Construction	MAR 1994
52.247-34	F.O.B. Destination	NOV 1991
52.247-63	Preference For U.S. Flag Air Carriers	JUN 2003
52.248-3	Value Engineering-Construction	SEP 2006
52.249-2 Alt I	Termination for Convenience of the Government (Fixed-Price) (May 2004) - Alternate I	SEP 1996
52.249-10	Default (Fixed-Price Construction)	APR 1984
52.252-2	Clauses Incorporated By Reference	FEB 1998
52.253-1	Computer Generated Forms	JAN 1991
252.201-7000	Contracting Officer's Representative	DEC 1991
252.203-7001	Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies	DEC 2008
252.204-7004 Alt A	Central Contractor Registration (52.204-7) Alternate A	SEP 2007
252.204-7006	Billing Instructions	OCT 2005
252.209-7004	Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country	DEC 2006
252.215-7000	Pricing Adjustments	DEC 1991
252.215-7002	Cost Estimating System Requirements	DEC 2006
252.222-7002	Compliance With Local Labor Laws (Overseas)	JUN 1997
252.223-7002	Safety Precautions For Ammunition And Explosives	MAY 1994
252.223-7003	Changes In Place Of Performance--Ammunition And Explosives	DEC 1991
252.223-7004	Drug Free Work Force	SEP 1988
252.225-7005	Identification Of Expenditures In The United States	JUN 2005
252.225-7041	Correspondence in English	JUN 1997
252.225-7043	Antiterrorism/Force Protection Policy for Defense Contractors Outside the United States	MAR 2006
252.227-7013	Rights in Technical Data--Noncommercial Items	NOV 1995
252.227-7022	Government Rights (Unlimited)	MAR 1979
252.227-7023	Drawings and Other Data to become Property of Government	MAR 1979
252.227-7030	Technical Data--Withholding Of Payment	MAR 2000
252.227-7033	Rights in Shop Drawings	APR 1966
252.229-7001	Tax Relief	JUN 1997
252.231-7000	Supplemental Cost Principles	DEC 1991

252.232-7003	Electronic Submission of Payment Requests and Receiving Reports	MAR 2008
252.232-7008	Assignment of Claims (Overseas)	JUN 1997
252.232-7010	Levies on Contract Payments	DEC 2006
252.233-7001	Choice of Law (Overseas)	JUN 1997
252.236-7000	Modification Proposals-Price Breakdown	DEC 1991
252.236-7008	Contract Prices-Bidding Schedules	DEC 1991
252.243-7001	Pricing Of Contract Modifications	DEC 1991
252.243-7002	Requests for Equitable Adjustment	MAR 1998
252.247-7023	Transportation of Supplies by Sea	MAY 2002

## CLAUSES INCORPORATED BY FULL TEXT

## 52.249-5000 BASIS FOR SETTLEMENT OF PROPOSALS

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

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

(End of Clause)

## Section 00800 - Special Contract Requirements

## CLAUSES INCORPORATED BY REFERENCE

52.211-10	Commencement, Prosecution, and Completion of Work	APR 1984
52.211-12	Liquidated Damages--Construction	SEP 2000
52.211-13	Time Extensions	SEP 2000
52.236-4	Physical Data	APR 1984
52.246-12	Inspection of Construction	AUG 1996
52.232-7003	Electronic Submission of Payment Requests and Receiving Reports	MAR 2008

## CLAUSES INCORPORATED BY FULL TEXT

52.232-5000 PAYMENT FOR MATERIALS DELIVERED OFF-SITE (MAR 1995)-  
-EFARS

(a) Pursuant to FAR clause 52.232-5, Payments Under Fixed Priced Construction Contracts, materials delivered to the contractor at locations other than the site of the work may be taken into consideration in making payments if included in payment estimates and if all the conditions of the General Provisions are fulfilled. Payment for items delivered to locations other than the work site will be limited to: (1) materials required by the technical provisions; or (3) materials that have been fabricated to the point where they are identifiable to an item of work required under this contract.

(b) Such payment will be made only after receipt of paid or receipted invoices or invoices with canceled check showing title to the items in the prime contractor and including the value of material and labor incorporated into the item. In addition to petroleum products, payment for materials delivered off-site is limited to the following items: \_\_\_\_\_

(End of clause)

SECTION 01010 STATEMENT OF WORK

**SECTION 01010  
SCOPE OF WORK**

**PART 1 - GENERAL**

The scope of this project includes the survey, design, and construction of a 7m wide asphalt carriageway with 1.5m gravel shoulders for the CEID Road Kapisa Supply Route (North) in Kapisa Province of Afghanistan. The asphalt surface shall be 120mm minimum including 300mm subbase, 150mm Base Course, from near Tageb (69.64592 E, 34.85627 N) to Sherwani Bala (69.59957 E, 35.01341 N) in the

Kapisa Province of Afghanistan. The road alignment, from beginning to end point, is approximately 23 km. The contractor shall commence his work activities from the northern section of the road alignment to the southern end point.

Bridge: The bridge shall be designed in accordance with the the Islamic Republic of Afghanistan Ministry of Public Works Interim Road and Highway Standards and ensuring/using using design live loads of AASHTO Vehicular - HS25 or LRFD HL93 loading. HS25 shall be considered an operating rating of 68 metric tons (75 US tons). Designs shall be submitted as a separate work item for this effort. A 65% design submittal of drawings, specifications and calculations shall be required before mobilization of construction shall be authorized. Submitted calculations shall include hydraulic, geotechnical, and structural calculations. The end state requires a 7m wide paved roadway with 1.5m shoulders.

Prior to starting the work, the contractor shall submit to AED - Kabul, for verification, the actual starting and ending coordinates, gathered in the field by the contractor. The contractor will be notified within seven (7) business days of receipt of said coordinates if AED concurs with them as the field-verified starting and ending coordinates.

The contractor shall develop the proposed roadway alignment and survey generally based upon existing roadway alignment, adjusting the alignment and profile to meet applicable design standards. No construction activity shall be allowed until the proposed roadway alignment and profile have been approved by the COR.

The work within this contract shall also meet and be constructed in accordance with the Ministry of Rural Rehabilitation and Development (MRRD) "Standard Drawings" Ministry of Public Works (MPW), and "Islamic Republic of Afghanistan Ministry of Public Works Interim Road and Highway Standards" dated 21 March 2005 or latest edition, and safety and security standards and other references as stated in Section 01015 "Technical Requirement". In the event of discrepancies between the contract documents and the MRRD / MPW Standards, the requirements of this contract take precedence.

- 1.1. ENGLISH LANGUAGE REQUIREMENT:** All Information shall be presented in English. The Contractor shall have a minimum of one English-speaking representative to communicate with the Contracting Officer Representative (COR) at all times.
- 1.2. COMMUNITY RELATIONS PLAN:** Contractor is required to submit and implement a Community Relations Plan (CRP). Prior to completion and submittal of the CRP, the Contractor shall initially meet and coordinate the CRP with local tribes and villages. No field activities shall be started until the CRP is approved by the Contracting Officer's Representative (COR). The CRP shall include but not be limited to the following:
  - 1.2.A.** Name of the Contractor's community relations point-of-contact (POC). The Contractor must submit proof regarding the CRP POC's knowledge of village customs, ethnicity, etc. and experience in meeting, coordinating and negotiating with local and provincial officials.
  - 1.2.B.** Identify all communities along the route within 5 kilometers of the new road alignment.
  - 1.2.C.** Hold initial meetings with local and provincial officials and the local PRT Commander to discuss the project and the CRP.
    - 2.C.1.** Hold an initial organizational kick-off meeting with each village.
    - 2.C.2.** Hold regularly scheduled monthly meetings with the communities. Ensure that there is representation from all major tribal elements.
    - 2.C.3.** Determine the number of available skilled and unskilled workers in the region and how they can be utilized for the project.
    - 2.C.4.** Identify local businesses in the region that can be utilized for the project.
    - 2.C.5.** Solicit comments and concerns about the project.
    - 2.C.6.** Provide meeting minutes to the COR:



**PART 3 - SUMMARY OF WORK:** The contractor shall design and construct roads in accordance to the Afghanistan "Standard Drawings Revision -1" by the Ministry of Rural Rehabilitation and Development (MRRD) and the Ministry of Public Works (MPW). The design phase of the project shall consist of 4 design submittal stages as defined in SECTION 00150.

**3.1. CONTRACTOR REQUIREMENTS:** The Contractor shall accomplish required work at the aforementioned site within the contract and shall be in accordance with the requirements stated in Section 01015: TECHNICAL REQUIREMENTS and others sections herein. Refer to Section 01015 for further direction. Contractor shall report to the Contracting Office Representative (COR) progress of the project in weekly progress reports that include, but are not limited to, required submittals, work being performed, quantity of blasting and excavation, current location of ongoing construction, photographs, climate data, equipment on site, safety issues, security issues, number of workers and type of work being performed.

**3.1.A. Roads and Pavements:** Road design and construction shall be in accordance with the MRRD and MPW Standards, latest edition, and based upon criteria included in Section 01015. In the event of discrepancies between the contract documents and the MRRD / MPW Standards, the requirements of this contract take precedence. Contractor is responsible for all required soil testing and surveying for pavement, structures, surface road design. The design requires a comprehensive topographic survey.

**3.1.B. Construction:** Construction specifications shall be submitted to the USACE for approval and shall be in accordance with technical references in this contract. The Contractor shall submit, prior to the commencement of construction, a plan for maintaining traffic flow during road construction.

**3.1.C. SECURITY:** The Contractor is solely responsible to provide every aspect of security protection during all field activities and construction to safeguard, protect and defend his employees' lives, equipment and the worksite from insurgent (terrorist) activities; i.e., armed attacks, improvised explosive devices (IED), etc.. Prior to the commencement of any field activities, the Contractor shall submit, a Security Protection Plan, which, at the minimum, shall include:

- o Purpose.
- o Scope.
- o Responsibilities. Security Manager; Team Leader(s); Guard Forces; Drivers;
- o Chain-of-Command/Communications.
- o Manpower. Makeup and number of employed security/guard personnel; resumes of key personnel;
- o Security Functions. Ingress/Egress; Perimeter Patrol; Intrusions; Emergency Response; Protection Duties;
- o Weapons and Ammunition. Safe storage; inventory; control; registration;
- o Serious Incident Report(s) (SIR) Filing Procedures.
- o Reporting to AED and Coalition Forces
- o Addendum Procedures.
- o A Plan for coordination and conduct of Shuras, coordination/meetings with Coalition Forces, etc. throughout the contract duration.

Prior to completion and submittal of the Security Protection Plan, the Contractor shall initially meet and coordinate with local tribes, villages, Corps of Engineers Resident and Area Offices, local Provisional Reconstruction Team and all other levels of security and forces along the project route, including the Afghan National Police and Afghan National Army. Proof (meeting minutes, etc.) of such initial coordination shall be submitted with the Security Protection Plan. The Contractor shall appoint a point-of-contact who shall be responsible for continued security coordination with the

affected tribes, villages and security levels and for daily reporting to the AED Contracting Officer's Representative (COR). The Contractor shall provide coordinates of construction base camps, quarries, and current worksites to AED and outer security points-of-contact, and shall continually update and provide addendums to the Security Protection Plan as personnel and work locations change during survey, inspection or construction activities.

The Contractor shall provide the names, photos, and tazkira number for all security personnel and those with access to weapons, ammunition, and/or explosives to AED and shall provide documentation that all security personnel, weapons, etc., have been properly registered per local and/or national Afghan law. The Contractor shall be responsible for daily communication with all outer security levels to assure that they are aware of the Contractor's current work and base camp locations, jobsite personnel and plans for movement to future sites along the project route. The Contractor shall at all times have immediate access to cellular and satellite phones and maintain an accurate and current list of medical and security personnel that can be contacted in the event that workers, equipment or base camps are attacked or individuals injured. The AED COR will provide names/numbers of US Government points-of-contact.

**1.C.1. Serious Incident Reporting Requirement:** Any significant criminal or terrorist-related event which occurs at the worksite or related to the Contractor's performance under this contract must be immediately reported by the Contractor to the COR. Reportable events include, but are not limited to death threats, murder, kidnapping, assault, vehicle theft, destruction of worksites, theft of materials or equipment, mining of work locations, etc. Failure to report significant criminal or terrorist-related events will be documented and may be considered grounds for termination. The Contractor agrees to cooperate with Coalition Forces in identifying and prosecuting persons involved in criminal/terrorist related events involving Contractor or its employees, at the worksite or related to its performance under this contract.

**PART 4 - PERFORMANCE PERIOD:** All work required under this contract shall be completed within 515 calendar days from Notice to Proceed.

**PART 5 - LIQUIDATED DAMAGES:** Liquidated damages in the amount of \$2,300 for every calendar day of delay shall be assessed and charged to the Contractor.

**PART 6 - WARRANTY:** Contractor shall warranty all asphalt pavement, culverts, bridges and other drainage structures for a period of one year after final acceptance of the project. The contractor shall warranty all other work for a period of one year after the final acceptance of the project. Warranty work shall include grading, repairing and upgrading eroded areas, structures and drainages as necessary to bring the road back to 100% serviceability.

**PART 7 - REFERENCES:** Refer to Section 01015 for required references.

-- End of Section --

SECTION 01010 ATTACHMENT A

# ATTACHMENT A

# MAP

SECTION 01010 ATTACHMENT A MAP

**ATTACHMENT A MAP  
KAPISA**

**Separate attachment**

SECTION 01015 - ATTACHMENT A -

**ATTACHMENT A – CULVERT PROTECTION**

**Separate attachment**

SECTION 01015 - ATTACHMENT B -

**ATTACHMENT B – BYPASS TURNOUT**

**Separate attachment**

SECTION 01015 - TECHNICAL

**SECTION 01015**

**TECHNICAL REQUIREMENTS**

**PART 1 - GENERAL:**

**1.1. CONTRACTOR DESIGN OBLIGATION:** The Contractor's design and construction must comply with technical requirements contained herein. The Contractor shall provide design and construction using the best blend of cost, construction efficiency, system durability, ease of maintenance and environmental compatibility.

**1.2. CONTRACTOR OBLIGATION:** These design and product requirements are minimum requirements. The Contractor is encouraged to propose alternate design or products (equipment and material) that are more commonly used in the region, will be equally or more cost effective or allow for more timely completion, but furnish the same system durability, ease of maintenance and environmental compatibility. The Contractor will be required to submit information as requested by the Contracting Officer to make a comparison of the proposed alternate. All variations must be approved by the Contracting Officer.

**1.3. SAFETY:**

**1.3.A. UNEXPLODED ORDNANCE (UXO) AND MINES:**

**3.A.1. UXO/Mine Discovery During Project Construction:**

The Contractor shall be aware of the risks of encountering UXO and take all actions necessary to assure a safe work area to perform the requirements of this contract. It is the Contractor's responsibility to de-mine and obtain certificates of UXO clearance prior to bringing workers and or equipment on to the project site.

If during construction, the Contractor becomes aware of or encounters UXO or potential UXO, the Contractor shall immediately stop work at the site of encounter, move equipment and personnel to a safe location, notify the Contracting Officer's Representative (COR), and then mitigate any delays to scheduled or unscheduled contract work. Once the Contractor has informed the COR of the presence of UXO, the Contractor shall immediately proceed to safely remove the item in accordance with their Security Protection Plan. Only UXO-trained personnel shall deactivate and remove UXO.

The Contractor assumes the risk of any and all personal injury, property damage or other liability arising out of or resulting from any Contractor action taken hereunder. Scrap metal shall be the property of the Host Government. The scrap metal on site shall be moved to an area away from the site perimeter as directed by the COR and left for the Host Government to remove and/or salvage.

For previous UXO/mine information, the following points of contact from the UN Mine Action Center of Afghanistan are provided:

Mohammad Sediq, Chief of Operations  
UN Mine Action Centre for Afghanistan (UNMACA)  
Email: [sediq@unmaca.org](mailto:sediq@unmaca.org)  
Cell: +93 070 295207  
0093 (0) 799 248 934

Hansie Heymans, Chief Information Officer  
UN Mine Action Centre for Afghanistan (UNMACA)  
Email: [hansie@unmaca.org](mailto:hansie@unmaca.org)  
[hansie@unops.org](mailto:hansie@unops.org)  
Cell: +93 070 294286

**3.A.2. EXPLOSIVES SAFETY:**

**3.A.3. General Safety Considerations:** General safety considerations applicable to personnel, both essential and non-essential, at project sites where UXO may be encountered include:

**3.A.3.a.** Do not carry fire or spark-producing devices.

**3.A.3.b.** Do not conduct explosive or explosive-related operations without approved procedures and proper supervision and UXO safety support.

**3.A.3.c.** Do not become careless by reason of familiarity with UXO or the reported probability level of UXO contamination.

**3.A.3.d.** Do not conduct explosive or potentially explosive operations during inclement weather.

**3.A.3.e.** Avoid contact with UXOs. Only UXO-trained personnel shall handle the proper deactivation and disposal of UXO. The Contractor and its subcontractors may not handle, work with, move, transport, render safe, or disarm any UXO/mine, unless they have appropriate accreditations from the MAC.

**3.A.3.f.** Employ the "buddy system" at all times.

**3.A.4. Activity Hazard Analysis (AHA) Briefings:**

**3.A.4.a.** Activity Hazard Analysis's shall be prepared in accordance with the United States Corps of Engineers Safety (USACE) and Health Requirements Manual, EM 385-1-1.

**3.A.4.b.** Hazard analyses will be prepared and briefed by personnel that are knowledgeable in UXO and explosives safety standards and requirements.

**3.A.4.b.i.** These personnel should understand the specific operational requirement and hazard analysis methodologies. A hazard analysis will be performed for each activity to determine the significance of any potential explosive-related hazards.

**3.A.4.b.ii.** Explosive residues may be discovered or exposed during UXO operations in the form of powder or various granular and powder based pellets.

**3.A.4.b.iii.** The contaminants can enter the body through the skin or by ingestion if proper personal hygiene practices are not followed.

**3.A.4.b.iv.** Explosive fillers, such as white phosphorus, are dangerously reactive in air and a fire hazard.

**3.A.4.b.v.** Acute exposure can result in serious injury to the skin, eyes, and mucous membranes.

**3.A.5.** Safety requirements (or alternatives) that will either eliminate the identified hazards, mitigate or control them to reduce the associated risks to an acceptable level will be developed. The adequacy of the operational and support procedures that will be implemented to eliminate, control, or abate identified hazards or risks will then be evaluated and a second risk assessment completed to verify that a satisfactory safety level has been achieved.

**1.3.B. NOTIFICATION OF NONCOMPLIANCE:** The COR 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 COR may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall make no part of the time lost due to such stop orders the subject of claim for extension of time or for excess costs or damages.

**1.4. LIMITATION OF WORKING SPACE:** The Contractor shall confine his operations strictly within the boundaries of the work site. Workmen will not be permitted to trespass on adjoining property. Any operations or use of space outside the boundaries of the site shall be by arrangement with all interested parties. It must be emphasized the Contractor must take all practical steps to prevent his workmen from entering adjoining property and in the event of trespass occurring the Contractor will be held responsible.

**1.5. TEMPORARY STRUCTURES:** The Contractor shall erect suitable temporary fencing, lighting, and necessary structures to safeguard his equipment, materials and plant against damage, theft, for the protection of the general public and from insurgency attacks. The Contractor shall adequately maintain the same throughout the course of the contract.

**1.6. SUBCONTRACTORS:** Compliance with the provisions of this project by subcontractors will be the responsibility of the contractor.

**1.7. LIST OF CODES AND TECHNICAL CRITERIA:** The following codes and technical criteria and those referenced therein shall be required for this project. ***References within each reference below shall be required and adhered to.*** This list is not exhaustive and is not necessarily complete.

- **Ministry of Rural Rehabilitation and Development (MRRD) and Ministry of Public Works (MPW) Standards, latest edition**
- AASHTO – American Association of State Highway and Transportation Officials
- AASHTO – A Policy on Geometric Design of Highways and Streets, latest edition.
- AASHTO – Manual on Uniform Traffic Control Devices, latest edition.

- AASHTO – Model Drainage Manual
- ASTM - American Society for Testing and Materials
- International Mine Action Standards, latest edition; see <http://www.mineactionstandards.org> for copy of standards.
- UFC 3-230-17FA Design: Drainage for Areas Other than Airfields
- UFC 3-230-18FA Design: General Provisions and Geometric Design for Roads, Streets, Walks, and Open Storage Areas
- UFC 3-250-01FA Design: Pavement Design for Roads, Streets, Walks and Open Storage Areas
- UFC 3-250-09FA Design: Aggregate Surfaced Roads and Airfields Areas
- UFC 3-270-01 Asphalt Maintenance and Repair
- UFC 3-320-05FA Design: Structural Design Criteria for Structures Other than Buildings
- [EM 1110-3-136](#) Drainage and Erosion Control - Mobilization Construction

The publications to be taken into consideration shall be those of the most recent editions. Standards, other than those mentioned above, may be accepted if the standards chosen are internationally recognized and meet the minimum requirements of the specified standards. The Contractor shall be prepared to submit proof of this if requested by the COR.

## **PART 2 - ENVIRONMENTAL PROTECTION:**

**2.1. APPLICABLE REGULATIONS:** The Contractor shall comply with all Host Nation laws, rules, regulations or standards concerning environmental pollution control and abatement with regard to discharge of liquid waste into natural streams or manmade channels. The contractor shall review host nation and U.S. Government environmental regulations with the COR prior to design and discharge of any liquid wastes into natural streams or manmade channels.

**2.2. NOTIFICATION:** The COR will notify the Contractor, in writing, of any observed non-compliance with the foregoing provisions. The Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the COR may issue an order stopping part or all of the work until satisfactory corrective action has been taken. No extension of time or damages will be awarded to the Contractor unless it was later determined that the Contractor was in compliance.

**2.3. SPILLAGES:** Measures shall be taken to prevent chemicals, fuels, oils, greases, bituminous materials, waste washings, herbicides and insecticides and construction materials from polluting the construction site and surrounding area.

**2.4. DISPOSAL:** Disposal of any materials, wastes, effluents, trash, garbage, oil, grease, chemicals, etc., shall be taken to a dumpsite off site and subject to the approval of the Contracting Officer.

## **PART 3 - ROAD DESIGN DEVELOPMENT:**

**3.1. GENERAL:** Contractor is responsible for verifying information and quantities before bidding this project and shall design and construct the new road as specified in this RFP. The attachments indicate the location of the beginning and ending point for the roadway. Information provided in the attachments is for informational purposes only. The roadway alignment shown is for illustrative purposes only. The Contractor is responsible for locating the proposed roadway alignment between the beginning and ending point. Contractor is responsible for verifying information and quantities before bidding this project and shall design and construct the new road as specified in this RFP. The project includes but is not limited to furnishing all materials, equipment and labor for constructing roads, temporary detours, storm water drainage ditches, bridges, culverts, erosion control structures, and retaining structures, as applicable, and connecting to the existing road networks. Traffic control is required to safely navigate traffic around the construction areas shall be the responsibility of the Contractor.

**3.2. ROADS:** The work within this contract shall also meet and be constructed in accordance with the

Ministry of Rural Rehabilitation and Development (MRRD) and Ministry of Public Works (MPW) "Road and Highway Standards," safety and security standards and other references as stated in Section 01015 "Technical Requirement". In the event of discrepancies between the contract documents and the MRRD / MPW Standards, the requirements of this contract take precedence.

**3.3. CURRENT CONDITIONS:** The width of the current road varies, the road section needs rebuilt, and structures need replaced.

**3.4. END STATE:** The base contract final improved state for the road shall consist of a 7 meter wide carriageway with 1.5m gravel shoulders. The surface for the carriageway shall be 120mm asphalt pavement. The subbase and base course shall be 300mm and 150mm, respectively. The road shall be designed and constructed to support a minimum 12,000 kg load per single axle. The road shall be realigned as needed to provide minimum curve radii and to limit grades to the maximum allowed by the design guidance. The roadway shall be constructed with good drainage and erosion protection. High erosion areas, such as shallow drainage crossings and wadi crossings, shall be armored with a hard surfaced crossing such as an at-grade concrete crossing structure. Erosion structures shall be constructed in slide and flood areas to prevent road blockage and wash-out; this includes the construction of check dams and groynes upstream and downstream of low water crossings (aka fords, aka causeways). Dry stacking for retaining walls, bridges and associated structures will not be allowed. The bridge shall be designed in accordance with the the Islamic Republic of Afghanistan Ministry of Public Works Interim Road and Highway Standards and ensuring/using using design live loads of AASHTO Vehicular - HS25 or LRFD HL93 loading.

Percentage by Weight Passing  
Square Mesh Laboratory Sieves

Size Numbers

<u>Sieves</u>	<u>1</u>	<u>2</u>	<u>3</u>
50.0 mm	100	-	-
37.5 mm	70-100	100	-
25.0 mm	45-80	60-100	100
12.5 mm	30-60	30-65	40-70
4.75 mm	20-50	20-50	20-50
2.0 mm	15-40	15-40	15-40
425 micrometers	5-25	5-25	5-25
75 micrometers	0-10	0-10	0-10

Roadway base course shall meet the requirements of gradation No. 2 for all proposed gravel surfaced roadways.

**3.5. GENERAL DESIGN REQUIREMENTS:**

**3.5.A.** Road alignment and profile shall be determined by Contractor. The Contractor shall design the roadway with good drainage and erosion protection. Contractor shall straighten road alignment as much as possible. Drainage ditching is required on both sides of the road and ditches shall terminate in areas where water can drain away from road structure. Hydrology of the region shall be used to determine drainage ditch and structure sizes. All intersecting roads, paths, driveways and culvert crossing are required to have a smooth transition to the new road alignment.

**3.5.B.** In mountainous areas: 1) The road width may be reduced to 6m with 0.5m shoulders (7M wide total) upon the approval of the Contracting Officer. 2) The road shall have vehicle bypass

turnouts at a minimum of every 750m regardless of road width. 3) At the bypass turnout locations, the roadway width will be 9m wide. 4) The length of the turnouts will be 25m with 15m tapers (see Attachment B).

**3.5.C.** The road crosses streams and other drainage areas. Portions of the road that follow a river bed or wadi shall be re-aligned and constructed out of the river bed or wadi at an elevation greater than the anticipated 25-year water level. Bridges, culverts, gabion crossings, concrete wadi crossings or other related structures shall be constructed as required over rivers, creeks, causeways and wadis that contain water and deep drainages that fill with water during storm events. Existing drainage structures shall be replaced; exceptions may be allowed on a case by case basis if sufficient evidence is provided by the contractor by a competent engineer that shows by calculations that the culvert is properly sized hydraulically and is structurally capable of handling the design load and dead load of all required road layers for a minimum period of 25 years. The granting of exceptions are at the sole discretion of the contracting officer.

**3.5.D.** Mountainous sections of road, which have steeper and longer grades, may require significant blasting, excavation, drainage and slope protection.

**3.5.E.** The road shall be built up above existing grade for storm water protection where necessary. Poor subgrade material shall be removed and replaced with clean, compactable, gravel. Portions of the road that follow a river bed or wadi shall be re-aligned and constructed at an elevation greater than the anticipated 25 year water level.

**3.5.F.** Speed humps shall be designed and installed approaching highly populated areas where the local population and businesses are located immediately adjacent to the road. Speed humps shall also be installed on the approach to police and ANA check points. Speed humps on paved roads shall be marked with high visibility traffic paint. Speed hump locations shall be shown on the plans.

**3.6. SURVEY:** Survey plans shall be in SI (metric) units of measurements.

**3.6.A. HORIZONTAL AND VERTICAL CONTROL:** Universal Transverse Mercator Grid Zone 42, World Geodetic System (WGS84) and the elevation should be height above ellipsoid (WGS84) and sea level (EGM96). If there has been gravitational surveys performed nearby, these shall be noted. A survey database file for all features should show both ellipsoid height and Geoid height and WGS84 latitude/longitude as well as UTM coordinates. WGS84 data shall be corrected to WGS84 (G1150) datum reference. GPS benchmarks shall be documented at ITRF2000 coordinates referenced to epoch 1997. Basic project control surveys will be performed using precise differential carrier-phase tracking Navstar GPS measurement procedures.

The Contractor shall submit raw GPS survey files in the RINEX format. The GPS files shall be submitted using the following naming convention for RINEX files: (ssssddd.yy)

ssss:	4-character station name designator
ddd:	day of the year of first record
f:	file sequence number within day
0:	file contains all the existing data of the current day
yy:	year
t:	file type:
O:	Observation file
N:	Navigation file
M:	Meteorological data file
G:	GLONASS Navigation file
H:	Geostationary GPS payload nav mess file

All of the control points established at the site shall be plotted at the appropriate coordinate point and shall be identified by name or number, and adjusted elevations. The location of the project

site, as determined by the surveyor shall be submitted in writing to the Contracting Officer. The site location shall be identified by temporary markers, approved by the Contracting Officer before proceeding with the surveying work.

### **3.6.B. TOPOGRAPHY REQUIREMENTS:**

**6.B.1.** A sufficient quantity of horizontal and vertical control shall be established to provide a detailed topographic survey at 1:500 scale with 1.0 meter contour intervals. Intermediate elevations shall be provided as necessary to show breaks in grade and changes in terrain.

**6.B.2.** The contours shall accurately express the relief detail and topographic shapes. In addition, 90 percent of the elevations or profiles interpolated from the contours shall be correct to within one-half of the contour interval and spot elevations shall be correct within plus or minus 20 millimeters.

**6.B.3.** Spot elevations affecting design of facilities shall be provided. Specifically, break points or control points in grades of terrain such as tops of hills, bottoms of ditches and gullies, high bank elevations, top and toe of retaining walls, flowline and headwalls of existing culverts, etc.

**6.B.4.** All surface and sub-surface structures features within the area to be surveyed shall be shown and identified on the topographic maps. In addition, these features shall be located by sufficient distance ties and labeled on the topographic sheets to permit accurate scaling and identification.

**3.6.C. SURVEY DOCUMENTS:** Survey plans shall be in SI (metric) units of measurements. Survey documents shall include, **at a minimum**, the following:

#### **6.C.1. Topographic survey:**

**6.C.1.a.** Complete topographic survey of existing road alignment out 15m on both sides of the road centerline, extending 100m from both ends of the proposed project.

**6.C.1.b.** Survey drawings shall show contours, elevations and road stationing as well as all facilities, utilities, buildings, trees, drainages and other features located in survey area

**6.C.1.c.** Contours shall be drawn and labeled at 0.5m intervals

**6.C.1.d.** Centerline profile drawings shall also be provided

**6.C.1.e.** Cross sections of rivers will be provided at 25M & 50m left and right of the proposed bridge alignment.

#### **6.C.2. Cross sections:**

**6.C.2.a.** Cross sections shall be generated at 50m intervals throughout the project.

**6.C.2.b.** Additional cross sections shall be provided through any existing and proposed drainage structures. These cross sections shall be obtained through the flowline of the drainage system and note the angle from the road centerline noted.

#### **6.C.3. Profile drawings of existing alignment.**

#### **6.C.4. Overall site key map that depicts project design area with respect to the project.**

#### **6.C.5. Structure Evaluation Reports:**

**6.C.5.a.** Structure number and Description: Include the length, width, height, materials, etc. and a photo.

**6.C.5.b.** Recommendation: Replace, Rehabilitate, or Remain in place as is.

**6.C.5.c.** Report Calculations: Overall structure evaluation. If the recommendation is other than replacement, calculations shall be provided and show that the culvert is properly sized hydraulically and is structurally capable of handling the design load and dead load of all

required road layers.

**3.7. DESIGN:** Roads shall be constructed with a minimum cross-slope or crown of 2.5% with drainage ditches along the sides to allow good drainage and road structure protection. Bridges, culverts, gabion crossings, at-grade concrete wadi crossings or other related structures shall be constructed as required over rivers and wadis that contain water and deep drainages that fill with water during rainy season. Road sections that cross wide drainages, flood areas or wadis shall be designed and constructed with additional water and erosion control measures to allow the road to be passable during rain and flood conditions. High erosion areas, such as shallow drainage crossings and wadis, shall be armored with a hard surfaced crossing such as a reinforced concrete crossing slab. To meet the requirement of this portion of the project, the following items must be completed as a portion of the submittal:

**3.7.A. DESIGN LAYOUT:**

**7.A.1.** Design layout drawings with stationing, road curves, drainage ditches, road transitions, drainage structures (size and location), erosion structures, crossing structures, new road alignment, etc, shall be produced. Plan and profile views of project segments shall be shown on the same plan sheet.

**7.A.2.** Dimensions and locations of all existing and proposed features and structures shall be shown.

**7.A.3.** Design drawings shall show contours and stationing as well as all facilities, utilities, buildings, drainages and any other features located in the road project area.

**7.A.4.** Centerline stationing shall be set at intervals of 50m.

**3.7.B. VERTICAL ALIGNMENT:**

**7.B.1.** The plans shall show the vertical alignment for the finished road with the existing grade along this alignment.

**7.B.2.** The road shall be built up above existing grade for storm water protection. In agricultural areas, the finished road surface shall be a minimum of 450 mm above the adjoining fields to reduce the potential of damage when irrigating fields.

**7.B.3.** The normal road grade shall be less than 8%. The maximum road grade shall be 10%, any grade above 8% shall not be sustained for more than 100m.

**7.B.4.** The vertical profile shall be labeled with the following at a minimum:

Tangents	Percent of slope - Shall not exceed 10%, normal maximum grade 8%
Curves	Vertical Point of Intersection Station (VPI-S) - At an even meter stations Vertical Point of Intersection Elevation (VPI-E) Algebraic Difference (AD) Rate of Curvature (K) – Shall meet AASHTO minimums Curve Length (L) - In even meter increments Begin Vertical Curve Station (BVC-S) Begin Vertical Curve Elevation (BVC-E) End Vertical Curve Station (EVC-S) End Vertical Curve Elevation (EVC-E) Crest (high point) or Sag (low point) station & elevation.

**3.7.C. HORIZONTAL ALIGNMENT:**

**7.C.1.** Curves shall be eliminated or widened and the alignment of the road straightened as much as possible. The plans shall show the horizontal alignment for the finished road, to

include the edge of the proposed road surface and the proposed edge of shoulder. Should existing infrastructure prevent the construction of the road to its full width as determined by the COR, the narrowed section of the proposed surface shall be labeled showing the recommended width. Should the narrowed portion of the road exceed 750m, turn outs shall be provided every 500m.

**7.C.2. Switchbacks (If Required):**

**7.C.2.a.** Shall be designed with the largest radius possible, but not less than 20 m.

**7.C.2.b.** Shall have a wider road section to allow vehicles to maneuver easily around the corners.

**7.C.2.c.** Shall have a reduced grade than the approaching road.

**7.C.3.** Speed humps shall be shown approaching highly populated areas where the local population and businesses are located immediately adjacent to the road. Speed humps shall also be installed on the approach to police and ANA check points.

**7.C.4.** The horizontal alignment shall be labeled with the following as a minimum:

Tangents	Bearing and distance on each segment
Curves	Point of Curve (PC) station
	Point of Tangent (PT) station
	Point of Intersection (PI)
	PI Station
	Deflection Angle
	Tangent (T)
	Length (L)
	Deflection Angle (Delta)
	Degree of Curve (Dc) – Shall not exceed 10 unless on a switchback, if in excess of 10, the minimum outer turning radius shall be 13m.
	Radius (R)
Begin of Curve (BC)	
End Curve (EC)	

**7.C.5. Bridges, Culverts, and Drainage structures:**

**7.C.5.a.** In addition to the data on all of the existing structures, proposed bridges, culverts and drainage/irrigation structures shall be shown. Structures shall be shown in both the plan and the profile view of the plans and will include notes on the proposed sizes.

**7.C.5.b.** The contractor shall provide all necessary hydrological data, drainage calculations, drainage design and grading to insure adequate drainage so that no areas will be flooded due to a rainfall of a 10-year frequency. Drainage of the area should be compatible with the existing terrain. A site grading plan shall be designed that provides positive drainage and minimizes the requirement for major structures in a cost effective manner.

**7.C.5.c.** Drainage structures, including bridges, culverts, and low water crossings shall be constructed where required. Culverts smaller than 1m by 1m shall not be built; low water crossings (aka fords, aka causeways) shall be built instead of according to MRRD standards. All existing culverts smaller than 1m by 1m shall be replaced with low water crossings; exceptions will be considered by the contracting officer on a case by case basis . All culverts shall be equipped with counter improvised explosive device (CIED) protection (see 01015 Attachment A). The type of protection at particular locations is defined below. The CIED protection shall be installed on both ends of new and existing culverts. The device in 01015 Attachment A is the basic design for a 1.2m by 1.2m box culvert. Culverts

shall have their CIED protection designed/sized accordingly. The protection shall be adapted to fit other types of structures installed by the contractor. All culvert and low water crossing locations shall be reported by station and grid coordinates on all submissions.

**7.C.5.c.i.** Areas of high water flow which may be subject to rock wash shall have the "Trash Rack - Rocky Roads Version" culvert protection device installed on the upstream end of all existing and new culverts.

**7.C.5.c.ii.** Areas of high water flow that are not subject to rock wash shall have the "Trash Rack" style culvert protection device installed on the upstream end of all existing and new culverts.

**7.C.5.c.iii.** The downstream end of all existing and new culverts and upstream end in low flow areas shall have the "Salerno Box" culvert protection device installed.

**7.C.5.d.** Erosion structures shall be constructed in slide and flood areas to prevent road blockage and wash-out. New culverts shall not be less than 1m square if possible. A minimum of 300mm of compacted road sub-structure shall be placed on top of the culverts. The roadway profile shall have a smooth transition over the concrete culvert and the aggregate surface width and thickness shall be maintained throughout the crossing.

**7.C.5.e.** Mountainous sections of road have steeper and longer grades and may require significant drainage and slope protection. High roadside embankments shall be cut and sloped back for stability (see attached excavation safety requirement).

**7.C.5.f.** The design and construction of bridges shall Not include concrete parapet guard rail. Clear bridge width shall be at least 7m carriageway. However, a 30 cm concrete barrier curb will be required along the edge of all bridge structures.

#### **7.C.6. SITE GRADING:**

**7.C.6.a.** Embankments, at approaches to curves and wadi crossings, shall be cut and sloped to allow good sight distance. Blind corners shall be corrected so oncoming traffic can be seen and to allow for better sight distance for approaching traffic with a minimum sight distance of 50m or as stated within the MRDD and MPW standards, whichever is greater.

**7.C.6.b.** Built up road sections (with rock or structures) shall be structurally sound to meet seismic requirements.

**7.C.6.c.** All site plans and master plans shall be drawn in the following projection and datum for incorporation into the U.S. Army Corps of Engineers GIS system: WGS 1984 UTM Zone 42 N

**7.C.7. PLANS:** Design shall be performed and design documents signed by a registered professional engineer. Calculations shall be in SI (metric) units of measurements. In addition to the survey documents, the design documents shall include, **at a minimum**, the following:

#### **7.C.7.a. Design layout:**

**7.C.7.a.i.** Design layout drawings with stationing, road curves, drainage ditches, designed slopes adjacent to road, cut and fill areas, road transitions, drainage structures (size and location), erosion structures, crossing structures and new road alignment

**7.C.7.a.ii.** Dimensions and locations of all designed features and structures shall be shown

**7.C.7.a.iii.** Design drawings shall show contours and stationing as well as all facilities, utilities, buildings, drainages and any other features located in the road project area

**7.C.7.a.iv.** Contours shall be drawn at 1.0m intervals

**7.C.7.a.v.** Centerline stationing shall be set at intervals of no less than 50m

#### **7.C.7.b. Cross sections:**

**7.C.7.b.i.** Cross section drawings at each station and additional cross sections as needed to show specific road and drainage features

**7.C.7.b.ii.** Cross sections shall provide design slope angles for road bed and road drainage and design slopes for areas adjacent to the road alignment

**7.C.7.b.iii.** Cross sections of the existing flow lines will be provided at 25m and 50m left and right at all existing and proposed culvert and bridge locations.

**7.C.7.b.iv.** Cross section drawings shall show the location and height of retaining walls.

**7.C.7.c.** Profile drawings of designed centerline alignment with the existing grade at this centerline.

**7.C.7.d.** Overall site key map that depicts project design area with respect to road system

**7.C.7.e.** Legends and notes

**7.C.7.f.** Drawing showing a typical cross-section:

**7.C.7.f.i.** Show pavement thickness, sub-base thickness, and ditching criteria

**7.C.7.f.ii.** Show cross slope

**7.C.7.f.iii.** Show roadway widths

**7.C.7.f.iv.** Show the back angles, the slope that must be constructed from the road, based on the material type.

**7.C.7.f.v.** Show slopes tying into existing grade.

**7.C.7.g.** Detail drawings:

**7.C.7.g.i.** Detail drawings for all structures, erosion control, drainage ditching and any other facilities incorporated into the design. Slopes shall be designed to be stable or shall be designed with retaining structures. Details of erosion structures and bridge structures shall include engineered foundations for anchoring and materials such as cement type and mix.

**7.C.7.h.** Structure design:

**7.C.7.h.i.** All components of the structures shall be designed and constructed to support, safely, all loads without exceeding the allowable stress for the materials of construction in the structural members and connections.

**7.C.7.i.** Geotechnical information:

**7.C.7.i.i.** Design analysis with geotechnical information, identification of in-situ material, selection of road construction materials, type, analysis of structures and other road features

**7.C.7.i.ii.** Design analysis shall include local hydrology calculations used to determine adequacy or upgrade of existing culverts and drainages, location of new drainage structures

**7.C.7.i.iii.** Types of drainage structures to be used and size calculations to provide adequate capacity shall be include

**7.C.7.j.** Material specifications:

**7.C.7.j.i.** Complete specifications for materials, techniques and equipment to be used in constructing the road, including mortar mixes, road gravels, aggregates, etc.

**3.7.D. STRUCTURAL:** The contractor shall provide designs, specifications, and analysis showing the reinforcement, concrete and bituminous asphalt placement and compaction test of soil.

**7.D.1. GENERAL:** The project may include erosion control structures, water diversion structures, box culverts, water crossing pavements, retaining walls or bridge structures.

**7.D.2. BRIDGE AND CULVERT INSPECTIONS:** All existing bridges shall be inspected for structural soundness, to ensure that each one can meet the required 12,000 kg loading. Upon completion of the bridge inspections, the Contractor shall determine if the bridge needs to be replaced, rehabilitated, or is adequate and provide their findings, along with the required technical analysis, as part of the 65%, 95% and 100% submittals. The Contractor's report shall include pictures, findings, analysis and recommendations that will clearly depict the condition of the bridge and actions needed, if any.

**7.D.3. DEAD AND LIVE LOADS:** Dead loads consist of the weight of all materials of construction incorporated in the structures. Live loads used for design shall be in accordance with the American Society of Civil Engineers, ASCE STANDARD or AASHTO whichever is more stringent, and Minimum Design Loads for Buildings and Other Structures, ASCE 7, edition as referenced herein.

**7.D.4. WIND LOADS:** Wind loads shall be calculated in accordance with ASCE 7 using a "3-second gust" wind speed of 125 km/hr. All facilities shall be classified as a minimum of Category II in accordance with Table 1-1 in ASCE 7, referenced herein.

**7.D.5. SEISMIC:** Structures and all parts thereof shall be designed for Seismic Zone 4. The computation of seismic loads shall be based on using Spectral Ordinates  $S_s = 0.65g$  &  $S_1 = 0.25g$ .

**7.D.6. STRUCTURAL STEEL:** Structural steel shall be designed and constructed in accordance with the provisions of American Institute of Steel Construction (AISC). Design of cold-formed steel structural members shall be in accordance with the provisions of American Iron and Steel Institute (AISI) and Specifications for Design of Cold-Formed Steel Structural Members.

**3.7.E. GEOTECHNICAL:** Existing geotechnical information is not available for the road sites included in the project. Any site-specific geotechnical data required to develop foundations, materials, earthwork, and other geotechnical related design and construction activities for this project shall be the Contractor's responsibility. The Contractor shall develop all pertinent geotechnical design and construction parameters by appropriate field and laboratory investigations and analyses.

**3.7.F. CONSTRUCTION:** Construction requirements include the following as a **minimum**:

**7.F.1.** Equipment shall be in good working order and shall be operated safely at all times.

**7.F.2.** Crusher material shall be hard rock. Shale, sandstone, mudstone and soft rock shall not be used for crushed material product.

**7.F.3.** Cement and mortar mixes shall be mixed proportionally as designed with a cement mixer. If cement is hand mixed, it shall be measured carefully and kept segregated from the adjacent ground area to prevent contamination.

**7.F.4.** All rock structures shall be mortared completely between each rock. Mortar shall not be allowed to dry out during the construction process.

**7.F.5.** Dry-stacked rock construction is not acceptable or allowed. All erosion control walls and structural elements constructed with rock shall be fully mortared. Loose rip rap without mortar may be used only for river embankment stabilization.

**7.F.6.** Mortar shall be a mix, by volume, of 1 part cement to 3 parts of damp, loose mortar sand. Enough water shall be added to make the mortar a workable consistency that is not too dry. Dried out mortar shall be discarded and shall not be re-used.

**7.F.7.** Road embankments adjacent to rivers shall be armored to prevent erosion.

-- END OF SECTION --

SECTION 01060 SPECIAL CLAUSES**SECTION 01060  
SPECIAL CLAUSES****PART 1 - GENERAL:****1.1. PRECONSTRUCTION CONFERENCE:**

**1.1.A. Schedule of Meeting:** At the earliest practicable time, prior to commencement of the work, the Contractor and any Subcontractors whose presence is necessary or requested, shall meet in conference with representatives of the Contracting Officer to discuss and develop a mutual understanding relative to the details of the administration and execution of this contract. This will include but not necessarily be limited to the Contractor's Community Relations Plan, the Contractor's Security Protection Plan, the Contractor's Quality Control (CQC) Program, the Contractors Accident Prevention Program, submittals, correspondence, schedule, access to the work site, security requirements, interface requirements, temporary facilities and services, hazards and risks, working after normal hours or on weekends or holidays, assignment of inspectors, representations, special requirements, phasing, and other aspects of this project that warrant clarification and understanding.

**1.1.B. Meeting Minutes:** It shall be the responsibility of the Contractors CQC System Manager to prepare detailed minutes of this meeting and submit those minutes to the Contracting Officer for approval within three (3) workdays. Any corrections deemed necessary by the Contracting Officer shall be incorporated and resubmitted within two (2) calendar days after receipt. Upon approval of the minutes by the Contracting Officer, the Contractor shall distribute the minutes to all parties present or concerned.

**1.2. SITE PLAN:** The Contractor shall prepare a site plan indicating the proposed location and dimensions of any area to be fenced and used by the Contractor, avenues of ingress/egress to the fenced area and details of the fence installation. 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.

**1.3. IDENTIFICATION OF EMPLOYEES:** The Contractor shall be responsible for furnishing to each employee, and for requiring each employee engaged on the work to display, identification as approved and directed by the Contracting Officer. Prescribed identification shall immediately be delivered to the Contracting Officer for cancellation upon release of any employee. Contractor and subcontractor personnel shall wear identifying markings on hard hats clearly identifying the company for whom the employee works.

**1.4. MINIMUM CONTRACTOR WORK.** The Contractor shall perform a minimum of 20% of this contract with own forces. Sub-contracting more than 80% of the work is explicitly not allowed.

**1.5. AVAILABILITY AND USE OF UTILITY SERVICES:**

**1.5.A. SANITATION:** The Contractor shall provide and maintain within the construction area minimum field-type sanitary facilities approved by the Contracting Officer.

**1.5.B. TELEPHONE:** The Contractor shall make arrangements and pay all costs for telephone facilities desired.

**1.6. PROJECT SIGN, AND PROJECT SAFETY SIGN:**

**1.6.A. PROJECT AND SAFETY SIGNS:** The requirements for the signs, their content, and location shall be as shown on the drawings. The signs shall be erected within 15 days after receipt of the notice to proceed. The data required by the safety sign shall be corrected daily, with light

colored metallic or non-metallic numerals. Upon completion of the project, the signs shall be removed from the site.

#### **1.7. TRAFFIC:**

**1.7.A. 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 Host Nation and base 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 regular road 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.

**7.A.1. Haul Roads:** The Contractor shall, at its own expense, construct access and haul roads necessary for proper prosecution of the work under this contract. Haul roads shall be constructed with suitable grades and widths; sharp curves, blind corners, and dangerous cross traffic shall be avoided. The Contractor shall provide necessary lighting, signs, barricades, and distinctive markings for the safe movement of traffic. The method of dust control, although optional, shall be adequate to ensure safe operation at all times. Location, grade, width, and alignment of construction and hauling roads shall be subject to approval by the Contracting Officer. Lighting shall be adequate to assure full and clear visibility for full width of haul road and work areas during any night work operations. Upon completion of the work, haul roads designated by the Contracting Officer shall be removed.

**7.A.2. Barricades:** The Contractor shall erect and maintain temporary barricades to limit public access to hazardous areas. Barricades shall be required whenever safe public access to paved areas such as roads or parking areas 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. Travel to and from the project site shall be restricted to a route approved by the Contracting Officer.

**7.A.3. Host Nation Authorizations, Permits and Licenses:** It shall be the Contractor's responsibility to obtain such local authorizations, permits and licenses necessary to establish his quarry operations, batching operations and haul routes (See Special Clause entitled: COMPLIANCE WITH HOST COUNTRY RULES AND CUSTOMS).

#### **1.8. CONTRACTOR'S TEMPORARY FACILITIES:**

**1.8.A. ADMINISTRATIVE FIELD OFFICES:** The Contractor shall provide and maintain administrative field office facilities within the construction area at the designated site. Government office and warehouse facilities will not be available to the Contractor's personnel.

**1.8.B. STORAGE AREA:** The Contractor shall construct a temporary 1.8m high chain link fence around storage area. Fence posts may be driven, in lieu of concrete bases, where soil conditions permit. Materials, or equipment shall not be placed or stored outside the fenced area unless such 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. Equipment or materials shall not be open to public view with the exception of those items which 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.

**1.8.C. 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.

**1.8.D. SECURITY LIGHTING 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.

**1.8.E. 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 1.1m high, supported and tightly secured to steel posts located on maximum 3m 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.F. CLEANUP:** Construction debris, waste materials, packaging material and the like shall be removed from the work site daily. Any dirt or mud which is tracked onto paved or surfaced roadways shall be cleaned away. Materials resulting from demolition activities which are salvageable shall be stored within the fenced area described above.

**1.8.G. 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 top soil and seeding as necessary.

**1.9. RESPONSIBILITY FOR PERSONNEL AND PHYSICAL SECURITY:** The Contractor is solely responsible to provide every aspect of personnel and physical security protection during all field activities and construction. Prior to the commencement of any field activities, the Contractor shall submit a Security Protection Plan, which details his proposed means to safeguard, protect and defend his employees' lives, equipment, materials, documents and the worksite from insurgent (terrorist) activities; i.e., armed attacks, improvised explosive devices (IED), etc. sabotage, damage, and theft. The Contractor shall be responsible for physical security of all materials, supplies, and equipment of every description, including property which may be Government-furnished or owned, for all areas occupied jointly by the Contractor and the Government, as well as for all work performed. The plan shall address in detail the Contractor's proposed procedures, and organization necessary to produce and maintain effective security within the contract limits twenty-four (24) hours a day seven (7) days a week. Refer to Section 01010, Paragraph 3.1.C for detailed discussion of the Security Protection Plan requirements and for the Contractor's security responsibilities. Refer to Section 01335 for Submittal Procedures.

**1.10. PREPARATION OF AS-BUILT DRAWINGS (CONTRACTOR):**

**1.10.A. General:** Upon completion of each road under this contract, the Contractor shall prepare and furnish as-built drawings to the Contracting Officer. The as-built drawings shall be a record of the construction as installed and completed by the Contractor. They shall include all the information shown on the contract set of drawings, and all deviations, modifications, or changes from those drawings, however minor, which were incorporated in the work, including all additional work not appearing on the contract drawings, and all changes which are made after any final inspection of the contract work. In the event the Contractor accomplished additional work that changes the as-built conditions of the road after submission of the final as-built drawings, the Contractor shall furnish revised and/or additional drawings and drawing files as required depicting

final as-built conditions. The requirements for these additional drawings shall be the same as for the as-built drawings specified in this paragraph.

**1.10.B. Final As-Built Drawings:** The Contractor shall update the digital contract drawing files to reflect the approved final as-built conditions and shall furnish those updated drawing files and plots of the final as-built drawings to the Contracting Officer. *As-built drawings shall include the addition of the predominant native language of the region in addition to the English language.*

**10.B.1.** Only personnel proficient in the use of Computer Assisted Design and Drafting (CADD) for the preparation of drawings shall be employed to modify the contract drawing files or prepare new drawing files.

**10.B.2.** Existing digital drawing files shall be updated to reflect as-built conditions. Independent drawing files containing only as-built information are not acceptable. The modifications shall be made by additions and deletions to the original drawing files, and where additional drawings are necessary, they shall be developed in individual digital files for each new drawing. All additions and corrections to the contract drawing files shall be clear and legible, and shall match the adjacent existing line work and text in type, size, weight, and style. New or revised information placed into the design files shall be placed on the levels and in the colors used for placement of the corresponding initial data. Similarly, the drawing size, title block, and general format of new drawings shall be consistent with the format established by the original drawings.

**10.B.3.** In the preparation of as-built drawings, the Contractor shall remove "Bubbles" used by the Government to highlight drawing changes made during design/construction. Triangles associated with those earlier drawing changes shall be left on the drawings and the Contractor shall not add triangles to designate modifications associated with representation of the as-built condition. The revision block identification of the drawing modifications shall be left intact and the date of completion and the words "REVISED AS-BUILT" shall be placed in the revision block above the latest existing notation. Each drawing shall have the words "DRAWING OF WORK AS-BUILT" in letters 4.5mm (3/16") high placed below the drawing title portion of the drawing title block, between the border and the trim line.

**10.B.4.** The Contractor shall check all final as-built drawing files for accuracy, conformance to the initial drawing scheme and the above instructions. The Contracting Officer will review the drawings and drawing files for conformance to these standards.

**10.B.5.** The Contractor shall furnish the digital as-built drawing files in the format native to either AutoDesk AutoCAD 2004 or Bentley Microstation version 8 (which is easily convertible in both directions to/from AutoCAD). The Government will only accept the final product for full operation, without conversion or reformatting, in these formats.

**10.B.6.** Digital drawing files shall be furnished to the Contracting Officer on CD-ROM or other media and format as approved by the Contracting Officer. A transmittal sheet containing the name of the files, the date of creation, the CD-ROM number, and a short description of the contents, shall accompany the CD-ROM.

**10.B.7.** A sample drawing shall be furnished to the Contracting Officer before delivery of final as-built drawings as a test to demonstrate compliance with the above instructions and file format compatibility with the described CADD software.

**10.B.8.** One (1) complete set of the updated final Record Copy digital drawing files and one (1) paper plot or copy of the final Record drawings shall be delivered to the Contracting Officer upon completion of each road. If upon review of the final as-built drawings, errors or omissions are found, the drawings and drawing files will be returned to the Contractor for corrections. The Contractor shall complete the corrections and return both the digital files and the as-built prints to the Contracting Officer within ten (10) calendar days.

**1.11. CERTIFICATES OF COMPLIANCE:** Any certificates required for demonstrating proof of compliance of materials with specification requirements shall be executed in accordance with Section 01335 SUBMITTAL PROCEDURES FOR DESIGN/BUILD. Each certificate shall be signed by an official authorized to certify in behalf of the manufacturing company involved and shall contain the

name and address of the Contractor, the project name and location, description and the quantity of the items involved, and date or dates of shipment or delivery to which the certificates apply. Copies of laboratory test reports submitted with certificates shall contain the name and address of the testing laboratory and the date or dates of the tests to which the report applies. Certification shall not be construed as relieving the Contractor from furnishing satisfactory material.

**1.12. ACCIDENT PREVENTION:** The Contractor shall comply with all applicable Host Country laws and with such additional measures as the Contracting Officer may find necessary in accordance with CONTRACT CLAUSE 52.236-13 entitled ACCIDENT PREVENTION (NOV1991)-ALTERNATE 1 (APR 1984). Applicable provisions of the Corps of Engineers manual entitled Safety and Health Requirements Manual EM 385-1-1 will be applied to all work under this contract. The referenced manual may be obtained from the Contracting Officer at the jobsite or from the Afghanistan Engineer District at Kabul, Afghanistan.

**1.12.A. Accident Prevention Program:** Within fifteen (15) days after award of this task order, and at least ten (10) days prior to the accident prevention pre-work conference, four (4) copies of the Accident Prevention Plan required by the CONTRACT CLAUSE 52.236-13 entitled ACCIDENT PREVENTION (NOV 1991)- ALTERNATE I shall be submitted for review by the Contracting Officer. The Contractor shall not commence physical work at the site until the Accident Prevention Plan (APP) has been reviewed and accepted by the Contracting Officer. The APP shall meet the requirements listed in Appendix "A" of EM385-1-1. The program shall include the following: "Activity Hazard Analysis (AHA)" fully completed and signed by an executive officer of the company in block No. 13. The Activity Hazard Analysis is a method in which those hazards likely to cause a serious injury or fatality are analyzed for each phase of operations. Corrective action is planned in advance, which will eliminate the hazards. An analysis is required for each new phase of work. On large or complex jobs the first phase may be presented in detail with the submittal of the Accident Prevention Plan rather than presenting the complete analysis. If the plan is to be presented in phases, a proposed outline for future phases must be submitted as a part of the initial Accident Prevention Plan submittal. Accident Prevention Plans will be reviewed for timeliness and adequacy at least monthly with a signature sheet signed and dated documenting that these reviews took place. Accident Prevention Plan shall include a copy of company policy statement of Accident Prevention and any other guidance as required by EM 385-1-1, Appendix A.

**1.13. HAZARDOUS MATERIALS:** Should the Contractor encounter asbestos or other hazardous materials, during the construction period of this contract, he shall immediately stop all work activities in the area where the hazardous material is discovered. The Contractor shall then notify the Contracting Officer; identify the area of danger; and not proceed with work in that area until given approval from the Contracting Officer to continue work activities. Hazardous material is considered to be asbestos, explosive devices, toxic waste, or material hazardous to health and safety. The Contractor shall secure the area from daily traffic until it is safe to resume normal activities.

**1.14. TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER:**

**1.14.A. General:** This provision specifies the procedure for determination of time extensions for unusually severe weather in accordance with the Contract Clause 52.249-10 entitled DEFAULT (FIXED-PRICE CONSTRUCTION) APR 1984. The listing below defines the anticipated monthly unusually severe weather for the contract period and is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the geographic location of the project. The schedule of anticipated unusually severe weather will constitute the baseline for determining monthly weather time evaluations. Upon award of this contract and continuing throughout the contract each month, actual unusually severe weather days will be recorded on a calendar day basis (including weekends and holidays) and compared to the monthly anticipated unusually severe weather in the schedule below. The term "actual unusually severe weather days" shall include days actually impacted by unusually severe weather. The Contractor's schedule must reflect the anticipated unusually severe weather days on all weather dependent activities.

**1.14.B. MONTHLY ANTICIPATED UNUSUALLY SEVERE WEATHER CALENDAR DAYS:**

<b>14.B.1.</b> December	8 Days
<b>14.B.2.</b> January	31 Days
<b>14.B.3.</b> February	28 Days
<b>14.B.4.</b> March	8 Days
<b>14.B.5.</b> April thru November	0 Days

**1.14.C. Time Extensions:** The number of actual unusually severe weather days shall be calculated chronologically from the first to the last day in each month. Unusually severe weather days must prevent work for fifty percent (50%) or more of the Contractor's workday and delay work critical to the timely completion of the project. The Contractor shall submit a report at the end of each month that states the number of weather delay or other delay days experienced during the month. If the number of actual unusually severe weather days exceeds the number of days anticipated in the paragraph above, the Contracting Officer will determine whether the Contractor is entitled to a time extension. The Contracting Officer will convert any qualifying delays to calendar days and issue a modification in accordance with the Contract Clause 52.249-10 entitled DEFAULT (FIXED-PRICE CONSTRUCTION) APR 1984.

**1.14.D. Other Delays:** Construction delays due to full or partial base closures due to incidents such as demonstrations, civil unrest and outright attacks will be examined on an individual basis for consideration of time extensions.

**1.15. COMPLIANCE WITH HOST COUNTRY RULES AND CUSTOMS:** The laws of Host Country may prohibit access to certain areas of the country that are under military control. The Contractor shall furnish the Contracting Officer the names of personnel, type, and amounts of equipment, dates and length of time required at the site, and the purpose of entering the host country. It is understood that areas to which rights of entry are provided by the Host Government are to be used only for work carried out under the contract and no destruction or damages shall be caused, except through normal usage, without concurrence of the Host Government.

**1.15.A. Contractor's Responsibilities:** The following items are the sole responsibility of the Contractor to investigate, estimate as to cost, and assume the risk, as normally encountered by Contractors. The Contractor shall be responsible for determining the effect of the following on his own cost of performance of the contract and for including sufficient amount in the contract price:

**15.A.1.** Official language and type of accounts required to satisfy the officials of the Local Government.

**15.A.2.** Entry and exit visas, residence permits, and residence laws applicable to aliens. This includes any special requirements of the Host Government, including those required by local Labor Offices, which the Contractor may have to fulfill before an application for a regular block of visas will be accepted.

**15.A.3.** Passports, health and immunization certificates, and quarantine clearance.

**15.A.4.** Compliance with local labor and insurance laws, including payment of employer's share of contribution, collecting balance from employee and paying into insurance funds.

**15.A.5.** Strikes, demonstrations and work stoppage.

**15.A.6.** Collection through withholding and payment to local Government, of any Host Country income tax on employees subject to tax.

**15.A.7.** Arranging to perform work in the Host Country, to import personnel, to employ non-indigenous labor, to receive payments and to remove such funds from the country.

**15.A.8.** Operating under local laws, practices, customs and controls, and with local unions, in connection with hiring and firing, mandatory wage scales, vacation pay, severance pay, overtime, holiday pay, 7th day of rest, legal notice or pay in lieu thereof for dismissal of employees, slowdown and curtailed schedules during religious holidays and ratio of local labor employed in comparison to others.

**15.A.9.** Possibility of claims in local bureaus, litigation in local courts, or attachment of local bank

accounts.

**15.A.10.** Compliance with workmen's compensation laws and contributions into funds. Provisions of necessary medical service for Contractor employees.

**15.A.11.** Special license required by the local Government for setting up and operating any manufacturing plant in the Host Country, e.g. concrete batching, precast concrete, concrete blocks, etc.

**15.A.12.** Sales within the host country of Contractor-owned materials, and equipment.

**15.A.13.** Special licenses for physicians, mechanics, tradesmen, drivers, etc.

**15.A.14.** Identification and/or registration with local police of imported personnel.

**15.A.15.** Stamp tax on documents, payments and payrolls.

**15.A.16.** Compliance with all customs and import rules, regulations and restrictions, including, but not limited to, local purchase requirements.

**1.15.B. Contractor Vehicles:** Contractor vehicles shall be maintained in a good state of repair, shall be insured, licensed and registered in accordance with Afghan Law.

**1.16. PUBLIC RELEASE OF INFORMATION:**

**1.16.A. Prohibition:** There shall be no public release of information or photographs concerning any aspect of the materials or services relating to this bid, contract, purchase order, or other documents resulting there from without the prior written approval of the Contracting Officer.

**1.16.B. Subcontract and Purchase Orders:** The Contractor agrees to insert the substance of this clause in all purchase orders and subcontract agreements issued under this contract.

**1.17. RIGHT-OF-WAY (ROW) & LAND ACQUISITION:**

**1.17.A. COMMUNITY COORDINATION:** In accordance with specification 01010 (SOW), Section 1.2, the Contractor is required to meet with local and provincial officials. At these meetings the required road width and road ROW shall be brought up as a subject and discussed.

**1.17.B. CONTRACTOR RESPONSIBILITIES:** It is the responsibility of the Contractor to verify required road ROW and resolve all ROW issues that arise for the project. It is within the Design-Build scope to propose alternate routes when land issues cannot be resolved. The Contractor shall keep the Government informed of all ROW and real estate issues both resolved and unresolved for the duration of the contract in a timely manner.

**1.18. ATTACHMENTS:**

**1.18.A.** Activity Hazard Analysis (01060 Attachment A)

**PART 2 - PRODUCTS:** (NOT APPLICABLE)

**PART 3 - EXECUTION:** (NOT APPLICABLE)

-- End of Section --

SECTION 01060 ATTACHMENT A

<b>ACTIVITY HAZARD ANALYSIS</b>		
<b>Contract No.</b>	<b>Project:</b>	<b>Location:</b>
<b>Date:</b>	<b>Activity:</b>	<b>Estimated Start Date:</b>
<b>PRINCIPAL STEPS</b> <i>Identify the principal steps involved and the sequence of work activities.</i>	<b>POTENTIAL SAFETY/HEALTH HAZARDS</b> <i>Analyze each principal step for potential hazards.</i>	<b>RECOMMENDED CONTROLS</b> <i>Develop specific controls to eliminate or reduce each hazard to an acceptable level of risk.</i>
<b>EQUIPMENT TO BE USED</b> <i>List equipment to be used in the work activity.</i>	<b>INSPECTION REQUIREMENTS</b> <i>List inspection requirements for the work activity.</i>	<b>TRAINING REQUIREMENTS</b> <i>List training requirements, include hazard communication.</i>
<p><b>Prepared by: Contractor's competent/qualified person(s) (Signature &amp; Date)</b></p> <p>This AHA has been reviewed by the designated AED COR and is acceptable for use on this project. This acceptance is predicated on satisfactory implementation in the field by the contractor and will be rescinded if the contractor fails to enforce the controls identified in this document and/or the requirements identified in EM385-1-1. This AHA will be reviewed and modified as necessary to address changing site conditions, operations, or change of competent/qualified person(s).</p>		
		<b>Name, COR (Signature &amp; Date)</b>

## QUALITY CONTROL SYSTEM (QCS)

### PART 1 - GENERAL

**1.1. GENERAL:** The Government will use the Resident Management System for Windows (RMS) to assist in its monitoring and administration of this contract. The Contractor shall use the Government-furnished Construction Contractor Module of RMS, referred to as QCS, to record, maintain, and submit various information throughout the contract period. The Contractor module, user manuals, updates, and training information can be downloaded from the RMS web site. This joint Government-Contractor use of RMS and QCS will facilitate electronic exchange of information and overall management of the contract.

**1.1.A. QCS:** QCS provides the means for the Contractor to input, track, and electronically share information with the Government in the following areas:

**1.1.A.1. ADMINISTRATION**

**1.1.A.2. FINANCES**

**1.1.A.3. QUALITY CONTROL**

**1.1.A.4. SUBMITTAL MONITORING**

**1.1.A.5. SCHEDULING**

**1.1.A.6. IMPORT/EXPORT OF DATA**

**1.1.B. Correspondence and Electronic Communications:** For ease and speed of communications, both Government and Contractor will, to the maximum extent feasible, exchange correspondence and other documents in electronic format. Correspondence, pay requests and other documents comprising the official contract record shall also be provided in paper format, with signatures and dates where necessary. Paper documents will govern, in the event of discrepancy with the electronic version.

**1.1.C. Other Factors:** Particular attention is directed to specifications "SUBMITTAL PROCEDURES", "CONTRACTOR QUALITY CONTROL", "PROJECT SCHEDULE", and Contract Clause, "Payments", which have a direct relationship to the reporting to be accomplished through QCS. Also, there is no separate payment for establishing and maintaining the QCS database; all costs associated therewith shall be included in the contract pricing for the work.

**1.2. QCS SOFTWARE:** QCS is a Windows-based program that can be run on a stand-alone personal computer or on a network. The Government will make available the QCS software to the Contractor after award of the construction contract. Prior to the Pre-Construction Conference, the Contractor shall be responsible to download, install and use the latest version of the QCS software from the Government's RMS Internet Website. Upon specific justification and request by the Contractor, the Government can provide QCS on 3-1/2 inch high-density diskettes or CD-ROM. Any program updates of QCS will be made available to the Contractor via the Government RMS Website as they become available.

**1.3. SYSTEM REQUIREMENTS:** The following is the minimum system configuration that the Contractor shall have to run QCS:

**1.3.A. QCS and QAS System Hardware:** IBM-compatible PC with 1000 MHz Pentium or higher processor 256+ MB RAM for workstation / 512+ MB RAM for server 1 GB hard drive disk space for sole use by the QCS system 3 1/2 inch high-density floppy drive Compact Disk (CD) Reader 8x speed or higher SVGA or higher resolution monitor (1024x768, 256 colors) Mouse or other pointing device Windows compatible printer. (Laser printer must have 4 MB+ of RAM) Connection to the Internet, minimum 56k BPS.

**1.3.B. Software:** MS Windows 2000 or higher QAS-Word Processing software: MS Word 2000 or newer Latest version of: Netscape Navigator, Microsoft Internet Explorer or other browser that supports HTML 4.0 or higher Electronic mail (E-mail) MAPI compatible Virus protection software that is regularly upgraded with all issued manufacturer's updates.

**1.4. RELATED INFORMATION:**

**1.4.A. QCS User Guide:** After contract award, the Contractor shall download instructions for the installation and use of QCS from the Government RMS Internet Website; the Contractor can obtain the current address from the Government. In case of justifiable difficulties, the Government will provide the Contractor with a CD-ROM containing these instructions.

**1.4.B. CONTRACTOR QUALITY CONTROL (CQC) TRAINING:** The use of QCS will be discussed with the Contractor's QC System Manager during the mandatory CQC Training class.

**1.5. CONTRACT DATABASE:** Prior to the pre-construction conference, the Government shall provide the Contractor with basic contract award data to use for QCS. The Government will provide data updates to the Contractor as needed, generally by files attached to E-mail. These updates will generally consist of submittal reviews, correspondence status, QA comments, and other administrative and QA data.

**1.6. DATABASE MAINTENANCE:** The Contractor shall establish, maintain, and update data for the contract in the QCS database throughout the duration of the contract. The Contractor shall establish and maintain the QCS database at the Contractor's site office. Data updates to the Government shall be submitted by E-mail with file attachments, e.g., daily reports, schedule updates, payment requests. If permitted by the Contracting Officer, a data diskette or CD-ROM may be used instead of E-mail (see Paragraph DATASUBMISSION VIA COMPUTER DISKETTE OR CD-ROM). The QCS database typically shall include current data on the following items:

**1.6.A. ADMINISTRATION:**

**1.6.A.1. CONTRACTOR INFORMATION:** The database shall contain the Contractor's name, address, telephone numbers, management staff, and other required items. Within fourteen (14) calendar days of receipt of QCS software from the Government, the Contractor shall deliver Contractor administrative data in electronic format via E-mail.

**1.6.A.2. SUB CONTRACTOR INFORMATION:** The database shall contain the name, trade, address, phone numbers, and other required information for all sub Contractors. A sub Contractor must be listed separately for each trade to be performed. Each sub Contractor/trade shall be assigned a unique Responsibility Code, provided in QCS. Within fourteen (14) calendar days of receipt of QCS software from the Government, the Contractor shall deliver sub Contractor administrative data in electronic format via E-mail.

**1.6.A.3. CORRESPONDENCE:** All Contractor correspondence to the Government shall be identified with a serial number. Correspondence initiated by the Contractor's site office shall be prefixed with "S". Letters initiated by the Contractor's home(main) office shall be prefixed with "H". Letters shall be numbered starting from 0001. (e.g., H-0001 or S-0001). The Government's letters to the Contractor will be prefixed with "C".

**1.6.A.4. EQUIPMENT:** The Contractor's QCS database shall contain a current list of equipment planned for use or being used on the jobsite, including the most recent and planned equipment inspection dates.

**1.6.A.5. MANAGEMENT REPORTING:** QCS includes a number of reports that Contractor management can use to track the status of the project. The value of these reports is reflective of the quality of the data input, and is maintained in the various sections of QCS. Among these reports are: Progress Payment Request worksheet, QA/QC comments, Submittal Register Status, Three-Phase Inspection checklists.

**1.6.B. FINANCES:**

**1.6.B.1. PAY ACTIVITY DATA:** The QCS database shall include a list of pay activities that the Contractor shall develop in conjunction with the construction schedule. The sum of all pay activities shall be equal to the total contract amount, including modifications. Pay activities shall be grouped by Contract Line Item Number (CLIN), and the sum of the activities shall equal the amount of each CLIN. The total of all CLINs equals the Contract Amount.

**1.6.B.2. PAYMENT REQUESTS:** All progress payment requests shall be prepared using QCS. The Contractor shall complete the payment request worksheet and include it with the payment request. The work completed under the contract, measured as percent or as specific quantities, shall be updated at least monthly. After the update, the Contractor shall generate a payment request report using QCS. The Contractor shall submit the payment requests with supporting data by E-mail with file attachment(s). If permitted by the Contracting Officer, a data diskette may be used instead of E-mail. A signed paper copy of the approved payment request is also required, which shall govern in the event of discrepancy with the electronic version.

**1.6.C. QUALITY CONTROL (QC):** QCS provides a means to track implementation of the 3-phase QC Control System, prepare daily reports, identify and track deficiencies, document progress of work, and support other Contractor QC requirements. The Contractor shall maintain this data on a daily basis. Entered data will automatically output to the QCS generated daily report. The Contractor shall provide the Government a Contractor Quality Control (CQC) Plan within the time required in Section 01451, Contractor QUALITY CONTROL. Within seven (7) calendar days of Government acceptance, the Contractor shall submit a data diskette or CD-ROM reflecting the information contained in the accepted CQC Plan: schedule, pay activities, features of work, submittal register, QC requirements, and equipment list.

**1.6.C.1. DAILY CONTRACTOR QUALITY CONTROL (CQC) REPORTS:** QCS includes the means to produce the Daily CQC Report. The Contractor may use other formats to record basic QC data. However, the Daily CQC Report generated by QCS shall be the Contractor's official report. Data from any supplemental reports by the Contractor shall be summarized and consolidated onto the QCS-generated Daily CQC Report. Daily CQC Reports shall be submitted as required by Section 01451, Contractor QUALITY CONTROL. Reports shall be submitted electronically to the Government using E-mail or diskette within 24 hours after the date covered by the report. Use of either mode of submittal shall be coordinated with the Government representative. The Contractor shall also provide the Government a signed, printed copy of the daily CQC report.

**1.6.C.2. DEFICIENCY TRACKING:** The Contractor shall use QCS to track deficiencies. Deficiencies identified by the Contractor will be numerically tracked using QC punch list items. The Contractor shall maintain a current log of its QC punch list items in the QCS database. The Government will log the deficiencies it has identified using its QA punch list items. The Government's QA punch list items will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of both QC and QA punch list items.

**1.6.C.3. THREE-PHASE CONTROL MEETINGS:** The Contractor shall maintain scheduled and actual dates and times of preparatory and initial control meetings in QCS.

**1.6.C.4. ACCIDENT/SAFETY TRACKING:** The Government will issue safety comments, directions, or guidance whenever safety deficiencies are observed. The Government's safety comments will be included in its export file to the Contractor. The Contractor shall regularly update the correction status of the safety comments. In addition, the Contractor shall utilize QCS to advise the Government of any accidents occurring on the jobsite. This brief supplemental entry is not to be considered as a substitute for completion of mandatory reports, e.g., ENG Form 3394 and OSHA Form 300.

**1.6.C.5. FEATURES OF WORK:** The Contractor shall include a complete list of the features of work in the QCS database. A feature of work may be associated with multiple pay activities. However, each pay activity (see subparagraph "Pay Activity Data" of paragraph "Finances") will only be linked to a single feature of work.

**1.6.C.6. REQUIREMENTS:** The Contractor shall develop and maintain a complete list of QC testing, transferred and installed property, and user training requirements in QCS. The Contractor shall update all data on these QC requirements as work progresses, and shall promptly provide this information to the Government via QCS.

**1.6.D. SUBMITTAL MANAGEMENT:** The Government will provide the initial submittal register in electronic format. Thereafter, the Contractor shall maintain a complete list of all submittals, including completion of all data columns. Dates on which submittals are received and returned by the Government will be included in its export file to the Contractor. The Contractor shall use QCS to track and transmit all submittals. ENG Form 4025, submittal transmittal form, and the submittal register update shall be produced using QCS. RMS will be used to update, store and exchange submittal registers and transmittals, but will not be used for storage of actual submittals.

**1.6.E. SCHEDULE:** The Contractor shall develop a construction schedule consisting of pay activities, in accordance with Specification Section Project Schedule. This schedule shall be input and maintained in the QCS database either manually or by using the Standard Data Exchange Format (SDEF). The updated schedule data shall be included with each pay request submitted by the Contractor.

**1.6.F. IMPORT/EXPORT OF DATA:** QCS includes the ability to export Contractor data to the Government and to import submittal register and other Government-provided data, and schedule data using SDEF.

**1.7. IMPLEMENTATION:** Contractor use of QCS as described in the preceding paragraphs is mandatory. The Contractor shall ensure that sufficient resources are available to maintain its QCS database, and to provide the Government with regular database updates. QCS shall be an integral part of the Contractor's management of quality control.

**1.8. DATA SUBMISSION VIA COMPUTER DISKETTE OR CD-ROM:** The Government-preferred method for Contractor's submission of updates, payment requests, correspondence and other data is by E-mail with file attachment(s). For locations where this is not feasible, the Contracting Officer may permit use of computer diskettes or CD-ROM for data transfer. Data on the disks or CDs shall be exported using the QCS built-in export function. If used, diskettes and CD-ROMs will be submitted in accordance with the following:

**1.8.A. FILE MEDIUM:** The Contractor shall submit required data on 3-1/2 inch double-sided high-density diskettes formatted to hold 1.44 MB of data, capable of running under Microsoft Windows 95 or newer. Alternatively, CD-ROMs may be used. They shall conform to industry standards used in the United States. All data shall be provided in English.

**1.8.B. DISK OR CD-ROM LABELS:** The Contractor shall affix a permanent exterior label to each diskette and CD-ROM submitted. The label shall indicate in English, the QCS file name, full contract number, contract name, project location, data date, name and telephone number of person responsible for the data.

**1.8.C. FILE NAMES:** The Government will provide the file names to be used by the Contractor with the QCS software.

**1.9. MONTHLY COORDINATION MEETING:** The Contractor shall update the QCS database each workday. At least monthly, the Contractor shall generate and submit an export file to the Government with schedule update and progress payment request. As required in Contract Clause "Payments", at least one week prior to submittal, the Contractor shall meet with the Government representative to review the planned progress payment data submission for errors and omissions. The Contractor shall make all required corrections prior to Government acceptance of the export file and progress payment request. Payment requests accompanied by incomplete or incorrect data submittals will be returned. The Government will not process progress payments until an acceptable QCS export file is received.

**1.10. NOTIFICATION OF NONCOMPLIANCE:** The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification.

**PART 2 - PRODUCTS:** (NOT APPLICABLE)

**PART 3 - EXECUTION:** (NOT APPLICABLE)

-- End of Section -

SECTION 01321 PROJECT SCHEDULE

**SECTION 01321  
PROJECT SCHEDULE**

**PART 1 - GENERAL:**

**1.1. SUBMITTALS:** The following shall be submitted for Government approval in accordance with Section 01335 SUBMITTAL PROCEDURES: SD-07 Schedules Project Schedule; Horizontal Bar Chart and Periodic Payment Request Updates; and Projected Earnings Curve and Periodic Payment Request Updates. Revisions to the Project Schedule and Projected Earnings Curve for Modifications Issued to this Contract shall be coordinated with the Contracting Officer Representative (COR).

**PART 2 - PRODUCTS:** (Not Applicable)

**PART 3 - EXECUTION:**

**3.1. GENERAL:** The Contractor shall furnish a Project Schedule as described below. The scheduling of construction shall be the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Subcontractors and suppliers working on the project should also contribute in developing and maintaining an accurate Project Schedule. The approved Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

**3.2. BASIS FOR PAYMENT:** The schedule shall be the basis for measuring Contractor progress. Lack of an approved schedule or scheduling personnel shall result in an inability of the COR to evaluate Contractor progress for the purposes of payment. Failure of the Contractor to provide all information, as specified below, shall result in the disapproval of the entire Project Schedule submission and the inability of the COR to evaluate Contractor progress for payment purposes. In the case where Project Schedule revisions have been directed by the COR and those revisions have not been included in the Project Schedule, then the COR may hold retainage up to the maximum allowed by contract, each payment period, until revisions to the Project Schedule have been made.

**3.3. PROJECT SCHEDULE:**

**3.3.A. SCHEDULE OF CONSTRUCTION:** Within seven (7) calendar days after notice to proceed (NTP), the Contractor shall submit a construction schedule to the COR for approval. This schedule shall address each payment line item and/or sub-line item listed in the Proposal Schedule separately.

**3.3.B. NON-COMPLIANCE:** Failure of the Contractor to comply with the requirements of the COR shall be grounds for determination by the COR 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 COR 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.

**3.3.C. HORIZONTAL BAR CHART:** The required schedule shall utilize an automated scheduling program and shall be in the form of a horizontal bar chart. The line or sub-line item schedule of activities shall be listed down the left side of the page. A time scale shall run across the bottom of the page. Each work item shall be represented by a bar starting with the schedule start date and running continuously to the completion date.

**3.3.D. COST:** Listed with each work item shall be a corresponding cost representing the total cost, such as material, labor, equipment, and overhead associated with that item. The total cost of the work items shall be equal to the Bid Price for that sub-line item of the Proposal Schedule.

**3.3.E. SCHEDULED PROJECT COMPLETION:** The schedule interval shall extend from Notice-To-Proceed to the contract completion date.

**3.3.F. PROJECTED EARNING CURVE:** Submitted with the Construction Schedule shall be a Projected Earning Curve. The Projected Earning Curve is a plot of the Contractor's earnings on the vertical axis and the contract duration on the horizontal axis. The earnings figure shall relate to the complete value of the contract and need not reflect each facility separately.

**3.3.G. CONSTRUCTION SCHEDULE:** The Construction Schedule shall be on one page with a maximum dimension of 90 cm by 120 cm. The Contractor shall submit the Projected Earnings Curve on the same page. The initial submittal shall include one (1) reproducible and four (4) copies, one (1) copy of which will be returned to the Contractor when approved.

**3.3.H. SUBMISSION WITH PARTIAL PAYMENT ESTIMATE:** Each time the Contractor submits a payment request under this contract he shall also submit three (3) copies of the Bar Chart. The Bar Chart shall be annotated by indicating the percent complete for each activity directly on the bar. The Projected Earnings Curve shall be annotated by plotting actual earnings versus time on the same graph. Those work items reflecting performance which is behind schedule by fifteen (15) calendar days or more shall be fully explained in detail giving the reason for delay and the Contractor's plan for timely completion within the schedule.

**3.3.I. MODIFICATIONS:** The Construction Schedule and Projected Earning Curve shall be revised to reflect any and all modifications issued to this contract as they are issued. Format and numbers of copies as defined in paragraph CONSTRUCTION SCHEDULE shall be submitted for approval by the COR.

**3.4. PERIODIC PROGRESS MEETINGS:** Progress meetings to discuss payment shall include a monthly on-site meeting or shall be conducted at other regular intervals mutually agreed to at the preconstruction conference. During this meeting the Contractor shall describe, on an activity-by-activity basis, all proposed revisions and adjustments to the project schedule required to reflect the current status of the project. The COR will approve activity progress, proposed revisions, and adjustments as appropriate.

**3.4.A. UPDATE SUBMISSION FOLLOWING PROGRESS MEETING:** A complete update of the project schedule containing all approved progress, revisions, and adjustments, based on the regular progress meeting, shall be submitted not later than four (4) working days after the monthly progress meeting.

**3.4.B. PROGRESS MEETING CONTENTS:** Update information, including Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost to Date, shall be subject to the approval of the COR.

**3.4.C. EARNINGS REPORT:** A compilation of the Contractor's Total Earnings on the project from the Notice-to-Proceed until the most recent Monthly Progress Meeting shall be recorded. This report shall reflect the Earnings of specific activities based on the agreements made in the field and approved between the Contractor and the COR 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. This report shall: sum all activities and provide a percent complete by individual activity and total project percent complete. The report shall contain, for each activity: activity identification, activity description, original budgeted amount, total quantity, quantity to date, percent complete (based on cost), and earnings to date.

**3.4.D. COST COMPLETION:** The earnings for each activity started shall be reviewed. Payment shall be based on earnings for each in-progress or completed activity. Payment for individual activities shall not be made for work that contains quality defects. A portion of the overall project amount may be retained based on delays of activities.

**3.4.E. NETWORK ANALYSIS SYSTEM:** The Contractor may, as an option, submit to the COR for approval, a time related network analysis in lieu of the previously specified bar chart.

-- End of Section --

SECTION 01335 SUBMITTAL PROCED

**SECTION 01335**

**SUBMITTAL PROCEDURES FOR PROJECTS**

**PART 1 GENERAL**

**1.1 REFERENCE**

The publication listed below forms a part of this specification to the extent referenced. The publication is referenced to in the text by basic designation only.

**CONSTRUCTION SPECIFICATIONS INSTITUTE**

Manual of Practice  
Construction Specifications Institute  
[http://www.csinet.org/s\\_csi/index.asp](http://www.csinet.org/s_csi/index.asp)  
601 Madison Street  
Alexandria, Virginia  
22314-1791

**NATIONAL INSTITUTE OF BUILDING SCIENCES (NIBS)**

Unified Master Reference List (UMRL)  
National Institute of Building Sciences  
1090 Vermont Avenue, NW, Suite 700  
Washington, DC 20005-4905  
Email: [nibs@nibs.org](mailto:nibs@nibs.org)  
FAX: (202) 289-1092  
Tele: (202) 289-7800

**AFGHANISTAN ENGINEER DISTRICT**

AFGHANISTAN ENGINEER DISTRICT  
<http://www.aed.usace.army.mil>  
U.S. Army Corps of Engineers  
Attn.: Qalaa House  
APO AE 09356

**1.2 SUBMITTAL CLASSIFICATION**

Refer to the *Submittal Distribution and Quantities Table* in Attachment A for minimum submission requirements and delivery address

Submittals are classified as follows:

**1.2.1 DESIGN SUBMITTALS**

The Government reserves the right to issue an NTP (notice to proceed) for any phase for fast-track projects.

## 1.2.2 CONSTRUCTION SUBMITTALS

### 1.2.2.1 Contractor Furnished Government Approved Construction Submittals

Government approved construction submittals are primarily related to plans (Contractor Quality Control, Accident Prevention, Resident Management System, Area Use, etc.) schedules (Project Schedule/Network Analysis), and certificates of compliance.

1.2.2.2. Contractor furnished Government Approved Construction Submittals (GA) shall be submitted to the Area or Resident Office, per directions given at the Pre-Construction meeting. Adequate time (a minimum of fourteen (14) full calendar days exclusive of mailing time) shall be allowed for AED review and comment.

## 1.3 SUBMITTAL CERTIFICATION

### 1.3.1 DETERMINATION OF COMPLIANCE

Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer. The contractor shall submit all required documentation with submittals. The U.S. Army Corps of Engineer (USACE) will not accept partial submittals.

### 1.3.2 EFFECTIVE QUALITY CONTROL SYSTEM

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with Contract Clause 52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION - ALTERNATE I and specification section 01451 CONTRACTOR QUALITY CONTROL.

#### 1.3.2.1 ORGANIZATIONAL RESPONSIBILITY

The quality control system shall cover all design, construction, subcontractor, manufacturer, vendor, and supplier operations at any tier, both onsite and offsite.

#### 1.3.2.2 CQC SYSTEM MANAGER REVIEW AND APPROVAL

Prior to submittal, all items shall be checked and approved by the Contractor's Quality Control (CQC) System Manager. If found to be in strict conformance with the contract requirement, each item shall be stamped, signed, and dated by the CQC System Manager. Copies of the CQC organizations review comments indicating action taken shall be included within each submittal.

#### 1.3.2.3 STAMPS

Stamps shall be used by the Contractor on all design and post design construction submittals to certify that the submittal meets contract requirements and shall be similar to the following:

Contractor (Firm Name)  
Contract Number  
Contract Name

I certify that this submittal accurate, is in strict conformance with all contract requirements, has been thoroughly coordinated and cross checked against all other applicable disciplines to prevent the omission of vital information, that all conflicts have been resolved, and that repetition has been avoided and, it is complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer.

Name of CQC System Manager: \_\_\_\_\_

Signature of CQC System Manager: \_\_\_\_\_

Date: \_\_\_\_\_

#### 1.3.2.4 DETERMINATION OF COMPLIANCE

Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements by the Contracting Officer. The contractor shall submit all required documentation with submittals. The U.S. Army Corps of Engineer (USACE) will not accept partial submittals.

#### 1.3.3 RESPONSIBILITY FOR ERRORS OR OMISSIONS

It is the sole responsibility of the Contractor to ensure that submittals comply with the contract documents. Government review, clearance for construction, or 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.

##### 1.3.3.1 GOVERNMENT REVIEW

Government review or approval of post assessment submittals shall not be construed as a complete check, but will indicate only that the assessment is satisfactory.

#### 1.3.4 UNTIMELY AND UNACCEPTABLE SUBMITTALS

If the Contractor fails to submit submittals in a timely fashion, or repetitively submits submittals that are not in strict conformance with the contract documents, no part of the time lost due to such actions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

#### 1.4 ENGLISH LANGUAGE

All schedules, drawings, photographs, and assessments shall be in the English language.

#### 1.5 UNITS OF MEASUREMENT

Design documents shall be prepared in METRIC 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.

##### 1.5.1 DRAWINGS

1.5.1.1 All site layout data shall be dimensioned in meters or coordinates, as appropriate. All details and pipe sizes shall be dimensioned in millimeters.

1.5.1.2 All site plans shall be geo-referenced using the WGS 1984 coordinate system, specifically the following: WGS 1984 UTM one 42 N. If the designer is not able to use the stated coordinate system the coordinate system used shall be correlated to the stated coordinate system. A table shall be provided within the site drawing set cross referencing the WGS84 system to that utilized. This is required to allow AED to incorporate the plans into GIS for storage, map production, and possible geospatial analysis of the different work sites.

## 1.5.2 DESIGN CALCULATIONS

Calculations shall be in English or SI units as deemed appropriate by the designer to meet the requirements of the design. Calculations shall be in SI (metric) units to meet the requirements of the design. Quantities on the contract drawings stated in SI (metric) units, may also be stated in English units.

## 1.6 WITHHOLDING OF PAYMENT FOR SUBMITTALS

Payment for work will not be made in whole or in part until the Government has reviewed and cleared the assessment.

### 1.6.1. Design Submittals.

Payment for Design work will not be made in whole or in part until the Government has reviewed and cleared the design for construction.

### 1.6.2. Construction Submittals.

Payment for materials incorporated in the work will not be made if required approvals have not been obtained. In the event under separate clause of the contract, the Design-Build Contractor is allowed partial or total invoice payment for materials shipped, and/or stored at the site, the Design-Build Contractor shall with his request for such payment, submit copies of approvals (ENG Form 4025) certifying that the materials that are being shipped and/or stored have been approved and are in full compliance with the Contract technical specifications.

## **PART 2 PRODUCTS**

### 2.1 GENERAL

The following are contract deliverables which give further details about and finalize the design parameters/requirements outlined within the contract documents. They shall be prepared in such a fashion that the Prime Contractor is responsible to the Government and not as an internal document between the Prime Contractor and its Subcontractors, Vendors, Suppliers, etc.

### 2.2 SUBMITTAL REQUIREMENTS

There are a total of 2 pre-design submittals, 4 design submittals and 1 construction submittal (see Appendix A for quantities, media and submittal methods) required for this project. Additional details are provided in SECTION 00150.

Security Protection Plan

Community Relations Plan

Survey (15%)

Design Review (65%)

Design Review (95%)

“Cleared for Construction” Design Review Submittal (100%)

As-Built Drawings

2.2.1. Security Protection Plan (Post-NTP/Pre-design). The Security Protection Plan shall be completed in accordance with Section 00150 and submitted for review not more than 15 days from the NTP date. No field activities, including the road Survey, shall commence prior to Government acceptance of the Security Protection Plan.

2.2.2. Community Relations Plan (Post-NTP/Pre-design). The Community Relations Plan shall be completed in accordance with Section 00150 and submitted for review not more than 15 days from the NTP date. No field activities, including the road Survey, shall commence prior to Government acceptance of the Community Relations Plan.

2.2.3. Survey Report Review (15%): The Survey Report Review (15%) plans shall be completed in accordance with SECTION 00150 and submitted for review not more than 45 days from the NTP date.

- Full topographical survey.
  - Existing horizontal and vertical layout.
  - Existing drainage structures.
  - Existing road cross sections.
- Cross sections of all rivers, streams, and wadis 25m & 50m from centerline of the road, upstream and downstream. These cross sections shall be the centerline of the feature and not of the road.
- Individual drainage structure reports:
  - Properties:
    - Assigned number & station.
    - Length.
    - Width.
    - Height.
    - Materials.
    - Photo.
  - Recommendation: Narrative on whether to replace, rehabilitate, or remain in place as is.
  - Calculations: For structures not recommended for replacement, provide sufficient evidence and calculations to support the recommendation. Necessary calculations include, but are not limited to:
    - Hydraulic capacity and sizing.
    - Structural capacity and ability to handle design load and dead load of all required road layers.
    - Detailed repair plan with narrative and drawings.

2.2.4. Design Review (65%) Plans

The Design Review (65%) plans shall be completed and submitted in accordance with SECTION 00150.

All submittals shall be provided digitally and on paper as described in Attachment A. Based on sound professional engineering considerations, cost and other factors described in Section 01015 the

contractor shall prepare the documents described below. Section 01015, Technical Requirements, describes specific information that must be included. The plans shall include but not necessarily limited to:

- Site Assessment
  - Cover
  - Table of Contents
  - Written portion that provides pertinent data on the following topics:
    - General information about the local village(s)
      - Tribal information
      - Temperature range
      - Snow and rainfall information
    - Existing road conditions
    - Existing drainage and erosion areas
    - Security conditions
  - Table of drainage structures
    - Structure number
    - Structure type (bridge, culvert, etc)
    - Dimensions
    - Structure stationing
    - Structure location (grid coordinates)
    - Size and skew
    - Notes on condition
  - Photographs shall be inserted into a Microsoft Word document and labeled with the following:
    - Date photo take (unless on the photo)
    - Location photo take from
    - Direction facing when photo taken
    - Description of specific notable items shown in photo
  - Survey field notes (If using a total station, the raw data shall also be provided)
- Drawings:
  - Cover sheet
    - Name of project
    - Name of submittal (ie 65% Design Review)
    - US Army Corps of Engineers Afghanistan Engineer District name and symbol
    - Contractor name
  - Table of Contents
  - Legend of symbols and lists of abbreviations
  - Super-elevation data
  - Table of drainage structures
    - Structure number
    - Note 'Existing' or 'Proposed'
    - Structure type (bridge, culvert, etc)
    - Dimensions
    - Structure stationing
    - Structure location (grid coordinates)
    - Size and skew
    - Notes on condition
  - Plan and profile sheets (plan and profile views must be on the same plan sheet)
    - coordinates at the start and end of each sheet
    - horizontal alignment with curve and other data shown
    - vertical profile with curve and other data shown
    - location, types, sizes and flowline elevations of drainage structures
    - location of all existing and proposed structures
  - Cross sections with typical section applied
  - Design Analysis

- All backup material previously submitted
- Design Calculations and reports
- Shall contain explanatory materials giving the design rationale for any design decisions which would not be obvious to an engineer reviewing the Final Drawings.
- Design Plans
- Structures design analysis/calculations
- Detailed drawings for all structures, including culverts, retaining walls, causeway, bridges, etc
- Specifications
- See Attachment C for additional drawing format information

#### 2.2.5. Final Design Review (95%) Plans

Final Design Review (95%) plans shall be completed and submitted in accordance with SECTION 00150.

The review of this submittal is to insure that the design is in accordance with directions provided the Contractor during the design process. The only effort remaining between the Final Design Review and the "Cleared for Construction" Design Review submittal is the incorporation of the Government Review Comments. The Contractor shall submit the following documents for Final review:

The Contractor is expected to have completed all of his coordination checks and have the drawings in a design complete condition. The drawings shall be finalized at this time including the incorporation of any comments generated by the Design Review submittal. The drawings shall contain all the details necessary to assure a clear understanding of the work throughout construction.

The Final Design Review (95%) plans shall include at a minimum but is not limited to:

- Changes incorporated from 65% design review comments
- Design Analysis
  - All backup material previously submitted
  - Design Calculations and reports
  - Shall contain explanatory materials giving the design rationale for any design decisions which would not be obvious to an engineer reviewing the Final Drawings.
- Design Plans
- Structures design analysis/calculations
- Detailed drawings for all structures, including culverts, retaining walls, causeway, bridges, etc
- Final Revised Construction Cost Estimate
- Government's Design Review Comments with the Contractor's annotation to each comment

#### 2.2.6. "Cleared for Construction" Design Review Submittal (100%) plans

After the Final Design Review submittal, the Contractor shall revise the Contract Documents by incorporating any comments generated during the review and submit in accordance with SECTION 00150. At a minimum but not limited to, the Contractor shall submit the following documents for the design complete submittal:

- ALL information related to the design of this project with correction made related to issues identified during the 95% review.
- Design analysis
- Construction drawings
- Government's Final Design Review (95%) Comments with the Contractor's annotation to each comment

Once the design documents have been "Cleared for Construction" by the Contracting Officer, the Contractor shall clearly identify each document by annotating it as "Cleared for Construction."

## 2.3 DESIGN ANALYSIS

2.3.1 The Contractor shall prepare and present design analyses with calculations necessary to substantiate and support all design documents submitted. For parts including drainage structures, site specific civil calculations shall be included. For parts including structural work, structural calculations shall be included. The Contractor shall submit the geotechnical evaluation report, reports of soil borings and any other investigations performed in support of the design. Follow Ministry of Rural Rehabilitation and Development/Ministry of Public Works Standard Drawings.

2.3.2 When design calculations are voluminous, they shall be bound separately from the narrative part of the design analysis. Design calculations will include a title page, table of contents, and be indexed (tabbed) to separate distinct parts of the various analysis and design actions being accomplished to support plan drawings submitted. They shall be presented in a clear, consistent and legible format in order to quickly understand the analysis and design accomplished. Presentation shall be such that a person unfamiliar with the project features and associated analysis and design can quickly understand the overall design process and procedures, review the information in conjunction with the given set of plans and specifications, and verify the suitability of all information submitted.

All design calculations shall explain the source of loading conditions with assumptions and conclusions explained. The analysis and design methods shall also be explained, including assumptions, theories and formulae. Include applicable diagrams that are clearly explained and correlated with related computations, whether computer or hand generated. The design calculations shall include a complete and comprehensive list of the criteria (and date or version of the criteria) that the design/analysis will be compared to (codes, Corps of Engineers Engineering Regulations, Engineering Manuals, etc.). Within the separable elements of design calculations, the engineer shall cite the specific code or reference paragraph or section as appropriate to indicate conformance to requirements.

At the beginning of each project component design section, present a summary of all load conditions and combinations required per applicable code or Corps of Engineers manual or regulation. Then clearly identify the particular load case governing the design and clearly show how the particular analysis, construction materials to be used, and the specific design meet the governing load combination.

Calculation sheets shall carry the names or initials of the engineer and the checker and the dates of calculations and checking. No portion of the calculations shall be computed and checked by the same person.

### 2.3.3 Computer Analysis

Provide a clear summary of all computer outputs and highlight in the outputs information used in the analysis and design accomplished elsewhere in the calculations.

If a computerized analysis or design program is used (either commercial software packages or unique, designer-written computer analysis/design tools), the computations shall provide clear reference to the software program and version application (where has the program been used before, what input and output does the program provide, is the program a recognized Corps of Engineers or industry standard). If the program is proprietary to the Contractor (not recognized by the Corps of Engineers or industry), the Contractor shall provide a sample hand calculation to verify the results of one set of data generated by the computer program.

State exactly the computation performed by the computer. Include applicable diagrams, adequately identified. Provide all necessary explanations of the computer printout format, symbols, and

abbreviations. Use adequate and consistent notation. Provide sufficient information to permit manual checks of the results.

Each set of computer printouts shall be preceded by an index and by a description of the computation performed. If several sets of computations are submitted, they shall be accompanied by a general table of contents in addition to the individual indices.

When the computer output is large, it shall be divided into volumes at logical division points. All final computer results used in design shall be separated from the total pages of computer output that might be included in the design calculations for ease of review.

## 2.4 DRAWINGS

Drawings, prepared in the English language with SI units of measure, are a part of each submittal. The working drawings shall be adequately labeled and cross-referenced for review. Complete, thoroughly checked and coordinated contract drawings shall be submitted. The contract drawings submitted for final review shall include the drawings previously submitted which have been revised and completed as necessary. The Contractor shall have incorporated any design review comments generated by previous design review(s), have completed all of his constructability and coordination checks, and have the drawings in a Ready-to-Build condition. The drawings shall be complete at this time and contain all the details necessary to ensure a clear understanding of the work throughout construction.

### 2.4.1 Computer Assisted Design and Drafting (CADD)

Computer Assisted Design and Drafting (CADD) is required for all work related to this contract. Only personnel proficient in the preparation of CADD drawings shall be employed to modify the contract drawings or prepare new drawings. The CADD deliverables shall meet the requirements of the A/E/C CADD Standard (Release 3.0). Emphasis is on drawings meeting sheet layout standards, level/layer naming standards and sheet naming conventions. The CADD standards may be downloaded at the CAD/BIM Technology Center at the following link:

<https://cadbim.usace.army.mil/default.aspx?p=s&t=13&i=4>

The Contractor shall furnish all softcopy design submittals (and As-Builts) using software applications in either .dwg (AutoCAD, AutoDesk release 2005 or later) or in .dgn (MicroStation, Bentley Systems version 8.0 or later) format. In addition, the Contractor is required to submit the softcopy design submittals in .pdf (Adobe Acrobat) format. Drawings prepared in any convention other than CADD, must have the written approval of the Contracting Officer.

### 2.4.2 Drawing Size Border Sheets

All drawings shall be prepared in size "A1" border sheets (594mm by 841mm). Hardcopy design submissions may be printed on half size drawing sheets ("A3", 279 mm by 420 mm) for purposes of saving paper and for ease of review. If drawings are not readable in the half size reduction, the Contractor shall submit all drawings in A1 border sheets. All final contract drawing sets (As-Builts) shall be submitted on A1 border sheets. Drawing sheets shall be trimmed to specified size if necessary.

### 2.4.3 Sequence of Design Drawings

Referencing the A/E/C CADD Standard (pg. 13, Table 2-1 of the A/E/C CADD standards) the sequence of drawings shall follow the sequence as shown below:

Discipline

1. General
2. Hazardous Materials
3. Survey/Mapping
4. Geotechnical
5. Civil
6. Landscape
7. Structural
  8. Architectural
9. Interiors
10. Equipment
11. Fire Protection
12. Plumbing
13. Process
14. Mechanical
15. Electrical
16. Telecommunications
17. Resource
18. Other Disciplines
19. Sub-Contractor/Shop Drawings
20. Operations

#### 2.4.4 Drawing Folder Structure

CADD files shall be organized in a folder structure to what is described in Paragraph 2.6.4. For multi-building projects, a folder of each building type shall be created and the applicable folders shown in each building type folder.

#### 2.4.5 Drawing Sheet Assembly

CADD files shall be organized to what is described in “Option 2 – Use of Design Model Only” (page 10, Figure 2-3 of the A/E/C CADD Standard). This method will utilize one view and the use of “paper space” is not used. The border sheet shall be X-REF into each model file and scaled up to the applicable scale.

#### 2.4.6 Model Files

Model files represent the building’s physical layout and components such as floor plans and elevations. Model files shall be drawn to full size (1:1) in the default view. Floor Plan Model files represent one floor. Model files shall have coordinates (x,y,z) of 0,0,0 in paper space on layout. The exception for model files with coordinates 0,0,0 shall be the civil site plan (see section 1.5.1.2 Georeferencing).

#### 2.4.7. Border Sheet Files

Border sheet files are used to assemble model files for plotting and viewing purposes. Every border sheet file has a drawing area, title block and border and represents one plotted drawing.

#### 2.4.8. Layer/Level names

Layer or level files names shall follow the guidelines of appendix A and B of the A/E/C CADD standards. For AutoCAD, .dwt (drawing template files) shall be used to import the proper layers that will be inclusive of the correct line type, color, and line thickness of the respective layer.

#### 2.4.9. Drawing File Naming Convention

CADD files shall follow the naming convention as described in the A/E/C CADD Standards. For model files reference pg 12 - 16, figure 2-4, tables 2-1 and 2-2. For sheet files reference pg 18 – 22, figure 2-5, table 2-3.

#### 2.4.10 Sheet Identification Block

The sheet identifier will follow the name of the border sheet file. This will consist of the discipline designator, the sheet type designator and the sheet sequence number as referenced in pg 23, figure 2-6 of the A/E/C CADD Standards.

#### 2.4.11 Drawing Scales

The scales indicated on the following list shall, in general, be used for all drawings. The Contractor may, at its option, make exceptions to scales indicated, if approved in writing by the Contracting Officer.

<b>TYPICAL DRAWING SCALES</b>	
<b>DRAWING TYPE</b>	<b>METRIC</b>
SITE PLAN	1:200
	1:400
	1:500
	1:600
	1:700
	1:1000
	1:2000
	1:5000
	1:6000
	1:10000
	1:20000
FLOOR PLAN	1:50
	1:100
	1:200
ROOF PLAN	1:200
EXTERIOR ELEVATIONS	1:100
	1:200
INTERIOR ELEVATIONS	1:50
CROSS SECTIONS	1:100
	1:50
	1:100
WALL SECTIONS	1:20
STAIR DETAILS	1:10
DETAILS	1:5

#### 2.4.12 Symbols, Line styles, & Patterns

Approved symbols, line styles, and patterns shall be in accordance with AEC CAD Standard Release 3.0 or current version (see Appendix D of the A/E/C CADD Standards). The approved symbols, line styles, and patterns associated with AutoCAD software maybe downloaded in the following link:

<https://tsc.wes.army.mil/products/standards/aec/aecstdsym.asp>

#### 2.4.13 Plotter Prepared Original Drawings

Plotter prepared original drawings shall be prepared on 20 pound bond paper, unless otherwise approved and shall be plotted on the matte side. Raster plotters must provide a minimum resolution of 400 dpi while vector plotters shall provide a minimum resolution of 0.0010 inch with an accuracy of +0.1% of the move and a repeatability error of not more than 0.005 inch. Drawings produced from dot matrix plotters are not acceptable. Plots accompanied by the digital design file may be prepared on

vellum: translucent bond is not acceptable. Line density shall be equivalent to that produced by black India ink: half tone plots are only acceptable where the half-tone color setting of RGB (red, green blue) settings equal a value of 153 (see pg. 27, Table 3-4 of the A/E/C CADD Standards). Drawings plotted in color are not acceptable. Manual changes to plotted originals are not acceptable.

#### 2.4.14 Title and Revision Block

Title and revision block shall match the examples shown in Attachment B, AED Drawing Title Block Standards, Figures 1 through 4, furnished as an attachment to this RFP.

#### 2.4.15 Legends

For each submittal, legends of symbols and lists of abbreviations shall be placed on the drawings. They shall include all of the symbols and abbreviations used in the drawing set, but shall exclude any symbols and abbreviations not used. Since many symbols are limited to certain design disciplines, there is a definite advantage to the use of separate legends on the initial sheet of each design discipline or in the Standard Details package for each discipline. If legends have not been shown by discipline, a legend shall be placed on the first drawing.

#### 2.4.16 Location Grid

To facilitate the location of project elements and the coordination of the various disciplines' drawings, all plans shall indicate a column line or planning grid, and all floor plans (except structural plans) shall show room numbers.

#### 2.4.17 Composite and Key Plans

If the plan of a large building or structure must be placed on two or more sheets in order to maintain proper scale, the total plan shall be placed on one sheet at a smaller scale. Appropriate key plans and match lines shall appear on segmented drawings. Key plans shall be used not only to relate large scale plans to total floor plans but also to relate individual buildings to complexes of buildings. Key plans shall be drawn in a convenient location and shall indicate the relative location of the represented plan area by crosshatching.

#### 2.4.18 Specifications Placed on the Drawings

Details of standard products or items which are adequately covered by specifications shall not be included on the drawings.

#### 2.4.19 Revisions

Drawing revisions shall be prepared only on the original CADD files. A revision area is required on all sheets.

#### 2.4.20 Binding

All volumes of drawing prints shall be firmly bound and shall have covers of heavier bond than the drawing sheets. If posts are used to fasten sheets together, the drilled holes on the bond edges of the sheets shall be on 8-1/2-inch centers.

#### 2.4.21 Government Provided files

At the Preconstruction meeting, the Contractor shall be provided a CD that shall contain the AED border sheet, the A/E/C CADD standards, and various other files related to the compliancy of CADD files to the A/E/C CADD standards.

## 2.5 SPECIFICATIONS

Specifications shall be prepared in accordance with the Construction Specifications Institute (CSI) format. The Contractor-prepared specifications shall include as a minimum, all applicable specification sections referenced by the CSI. Where the CSI does not reference a specification section for specific work to be performed by this contract, the Design-Build Contractor shall be responsible for creating the required specification.

### 2.5.1 Use of Unified Facilities Guide Specifications (UFGS)

UFGS (Uniform Federal Guide Specifications) are required for this project. Current UFGS information may be obtained at the following location: [http://www.wbdg.org/ccb/browse\\_org.php?o=70](http://www.wbdg.org/ccb/browse_org.php?o=70).

Specifications for UFGS are in SpecsIntact format. SpecsIntact is government sponsored software used to edit specifications for government contracts. The software is available at the following link: <http://specsintact.ksc.nasa.gov/index.asp>.

### 2.5.2 Quality Control and Testing

Specifications shall include required quality control and further indicate all testing to be conducted by the Contractor, its subcontractors, vendors and/or suppliers.

### 2.5.3 Ambiguities and indefinite specifications

Ambiguities, indefinite specification requirements (e.g., highest quality, workmanlike manner, as necessary, where appropriate, as directed etc) and language open to interpretation is unacceptable.

### 2.5.4 Industry Standards

#### 2.5.4.1 U.S. Industry Standards

The Specifications shall be based on internationally accepted U.S. industry Standards. Customarily accepted publications may be found in the UNIFIED MASTER REFERENCE LIST (UMRL) which may be located at the following URL: <http://www.hnd.usace.army.mil/techinfo/UFGS/UFGSref.htm>.

To access the UMRL select the "Unified Facilities Guide Specifications" tab and scroll down to Unified Master Reference List (UMRL) (PDF version).

Examples of U.S. standards are: National Fire Protection Association (NFPA), International Building Code (IBC), American Concrete Institute (ACI), American Water Works Association (AWWA), ADAAG (ADA Accessibility Guidelines) for Buildings and Facilities, etc. Standards referenced shall be by specific issue; the revision letter, date or other specific identification shall be included.

This document lists publications referenced in the Unified Facilities Guide Specifications (UFGS) of the Corps of Engineers (USACE), the Naval Facilities Engineering Command (NAVFAC), the Air Force Civil Engineer Support Agency (AFCEA), and the guide specifications of the National Aeronautics and Space Administration (NASA). This document is maintained by the National Institute of Building Sciences (NIBS) based on information provided by the agencies involved and the standards producing organizations. The listing is current with information available to NIBS on the date of this publication.

Standards referenced in specifications and drawings prepared by the Contractor shall be by specific issue; the revision letter, date or other specific identification shall be included.

#### 2.5.4.2 Non U.S. Industry Standards

If non-U.S. industry standards (e.g., codes, regulations, or technical references and norms) are authorized for use under this contract and are incorporated in the Contractor's design, one (1) copy of each standard referenced shall be provided to the Government.

Where a U.S. design and/or construction standard cannot be referenced due to non-availability of products and/or systems, another specification format using the CSI guidelines may be utilized for that particular product and/or system. If a majority of the specifications within this project reference non-U.S. products due to availability and/or other factors, the entire set of specifications are not required to be in UFGS and SpecsIntact format.

### **PART 3 EXECUTION**

#### 3.1 GENERAL

##### 3.1.1 DESIGN CONCEPT COORDINATION MEETING

Shortly after Notice To Proceed (NTP) the Government or contractor may suggest meeting(s) to review the Design Submittal process or discuss various aspects of the contract to enable prompt and efficient initiation of contract actions. Meeting(s) will be held to assure attention is focused on key project requirements (necessary contractor design and Government review that is required to provide Construction Clearance), to discuss features and items of work that need to be submitted early due to long lead time items, or discuss other concepts/ideas that will help accelerate the contract work. Other Design Coordination meetings may be requested throughout the contract period if Government review of various contractor Design Submittals indicate poor design and plan or specification quality in order to clearly explain the changes and improvements required of the contractor, assure understanding of Government comments, code references and required investigations and calculations, to move forward with acceptable design and satisfactory plans and specifications.

##### 3.1.2 GOVERNMENT DESIGN CHANGES

Government project changes which do not increase contractor costs shall be made at no charge to the Government.

#### 3.2 SUBMITTAL REGISTERS

No formal submittal registers are required as part of this contract. The contractor is responsible for maintaining a record of all correspondence with the Government, including comments to design submittals.

#### 3.3 TRANSMITTAL FORM (ENG Form 4025)

The sample transmittal form (ENG Form 4025) attached to this section shall be used for submitting both design and construction 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 will 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.

### 3.4 SCHEDULING

#### 3.4.1 DESIGN SUBMITTALS

Adequate time (a minimum of fourteen (14) full calendar days exclusive of mailing time) shall be allowed for Government review and comment in DrChecks<sub>SM</sub>. If the Contractor fails to submit design submittals in a timely fashion, or repetitively submits design submittals that are not in strict conformance with the Contract documents, no part of the time lost due to such actions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

### 3.5 SUBMITTAL PROCEDURE

#### 3.5.1 Refer to Submittal Distribution and Quantities in Attachment A for minimum submission requirements.

This is a project and in accordance with Contract Clause 52.227-7022 GOVERNMENT RIGHTS (UNLIMITED), the Government has non-exclusive rights to use the information on other projects. In accordance with section 01060 SPECIAL CLAUSES clause PREPARATION OF AS-BUILT DRAWINGS (CONTRACTOR), one (1) set of the Government approved As-Builts shall be submitted in an editable CADD format.

This requirement is in addition to all other submission requirements stated elsewhere in the contract.

#### 3.5.2 DIGITAL TRANSMISSION OF DESIGN SUBMITTALS

The Contractor shall not be permitted to submit design deliverables in digital format in lieu of hard copies without the expressed written approval from the government.

#### 3.5.3 DESIGN SUBMITTALS

##### 3.5.3.1 Afghanistan Engineer District (AED)

One (1) half-size hard copy and two (2) soft copies on CD-ROM (electronic version) of all design submittals (calculations, reports of field tests, design analysis, plans, specifications, etc) shall be transmitted to the Government at the following address, by means of ENG Form 4025:

##### AFGHANISTAN ENGINEER DISTRICT

(1) DHL, FEDEX, UPS or any other courier service:

U.S. Army Corps of Engineers  
Afghanistan Engineer District  
House # 1, St. #1 West  
West Wazir Akbar High School  
Behind Amani High School  
Kabul, Afghanistan  
Attention: Chief, Engineering Branch

The Contractor shall scan the soft copy (electronic version) of each Design Submittal using most up-to-date version of recognized Industry-standard anti-virus software (Symantec, Norton, etc.) to insure that no viruses are contained in it prior to acceptance by AED. The label shall indicate it has been scanned for viruses and the anti-virus software and version clearly indicated.

##### 3.5.3.2 Resident/Area Engineer Office

Complete design submittals shall be provided to the Area and/or Resident Engineer Office such that these are received **at the same time** as the Contractor provides them to the address noted in Paragraph 3.5.3.1. At the Pre-Construction meeting, the Contractor will be furnished the Area and/or Resident Office addresses to which these submittals shall be provided and the specific number of hard copies (full and half sizes) and soft copies (CD-ROM) required by the Area and/or Resident Office as per Paragraph 3.5.3.1, soft copies are to be properly labeled and checked for viruses by the Contractor prior to delivery.

### 3.5.3.3 Editable CADD Format As-Builts

This is a Design-Build project and in accordance with Contract Clause 52.227-7022 GOVERNMENT RIGHTS (UNLIMITED), the Government has non-exclusive rights to use the design on other projects. Therefore, the As-Builts furnished to the Government must be in an editable format. See Section 01780A CLOSEOUT SUBMITTALS, Paragraphs 1.1 and 1.2, for all requirements associated with submission of editable CADD format As-Builts required as part of this contract.

### 3.6.1 Submittal Numbering System

Instructions on the numbering system to be used for construction submittals follows.

#### 3.6.1.1 Submittals

Shop drawings and materials are listed on the Submittal Register (ENG Form 4288) as follows:

- a. List is prepared according to contract specifications and drawings, picking up all items involved in the project.
- b. This list is divided into sections as indicated in the specifications. For example:

Section 01015	"Technical Requirement
Section 01335	"Design Submittals"
Section 02831	"Chain-Link Fence"
Section 02710	"Subdrainage System"
Section 03300	"Concrete For Building Construction"
Section 04200	"Masonry"

#### 3.6.1.2 Numbering procedures for transmittal on ENG FORM 4025

Each Specification Section will have various requirements for submittals (design information, product data, test reports, procedures, etc.) to the Government for Approval (GA) or For Information Only (FIO). Items from different Sections cannot be submitted on the same ENG Form 4025. When furnishing one or more items from the same Section at a given time, a single ENG Form 4025 can be used to identify and submit these items. Block 'b' of the 4025 entitled "DESCRIPTION OF ITEM SUBMITTED" should provide an accurate and unique description of each item being proposed by the Contractor. Item numbers (block "a" of the 4025 entitled "ITEM NO.") will be automatically generated in QCS for each ENG Form 4025. QCS will track and automatically generate the "ITEM NO." for all following ENG Form 4025s for the same Section number. To illustrate, a transmittal for the 35% Design Submittal required by Section 01335 might have the following Items:

- ITEM NO. 1 Topographic Information
- ITEM NO. 2 Geotechnical Report
- ITEM NO. 3 Foundation Design
- ITEM NO. 4 35% Plans
- ITEM NO. 5 Outline of Construction Specifications to be used

If this was the first submittal furnished by the Contractor for Section 01335, then a Transmittal Number of 01335-1 would be generated using QCS. As new transmittals are generated in QCS, the last digit of the transmittal is increased incrementally, as follows:

Transmittal No. 01335-2  
Transmittal No. 01335-3  
Transmittal No. 01335-4

and so forth. The first transmittal submitted from each Specification Section will be "-1", in other words, there will never be a "Transmittal No. 01335-0".

The above illustration is true for all other Specification Sections included in the Request for Proposal or in the Construction Specifications compiled by the Contractor in the prosecution of work under the RFP.

### 3.6.1.3 Resubmittals

Should the Contractor be required to resubmit any transmittal due to one or more items on that transmittal being Coded "C" (Cleared for Construction, except as noted in attached comments, Resubmission Required) or "E" (NOT Cleared for Construction, see attached comments, Resubmission Required) by the Government, QCS will be used to generate the same transmittal number followed by the number "-1" for the first resubmittal, "-2" for the second resubmittal, "-3" for the third resubmittal, etc.

As an example, assume the 65% Design Submittal is provided to the Government as Transmittal 01335-9. Due to omissions or errors in that Submittal which result in a Code "E" being given, then the subsequent 65% Design Resubmittal #1 would be "Transmittal 01335-9.1". Should a resubmittal again be necessary, it would be Design Resubmittal #2 and would be submitted as "Transmittal 01335-9.2".

The purpose of this system is to avoid deviations from the Submittal Register and to track submittals in both RMS and DrChecks<sub>SM</sub>. It should be noted that a new transmittal number following the above system CANNOT be generated in QCS unless the prior transmittal has been given a Code If the Contractor is having difficulty generating the correct transmittal number, contact the COR to resolve the matter.

The Contractor use the above nomenclature and date of submission to the Government for Plan Cover Sheets; title blocks for all drawings; all Specification Cover Sheets; all specification pages; all Design Analysis Cover Sheets and associated pages; and similar labeling for all other documents included in the submittal.

See Attachment B, AED Drawing Title Block Standards, Figure 3, for AED Issue Block and Required Annotations drawing guidance.

### 3.6.2 Variations

If Design or construction submittals show variations from the contract parameters and/or requirements, the Contractor shall justify such variations in writing, at the time of submission. Additionally, the Contractor shall also annotate block "h" entitled "variation" of ENG FORM 4025. After design submittals have been reviewed and cleared for construction by the Contracting Officer, no resubmittal for the purpose of substituting materials, equipment, systems, and patented processes will be considered unless accompanied by the following:

- a. Reason or purpose for proposed variation, substitution, or revision.

- b. How does quality of variation compare with quality of the specified item? This shall be in the form of a technical evaluation tabulating differences between the item(s) originally specified and what is proposed.
- c. Provide a cost comparison. This shall include an acquisition and life cycle cost comparison.
- d. For proprietary materials, products, systems, and patented processes a certification signed by an official authorized to certify in behalf of the manufacturing company that the proposed substitution meets or exceeds what was originally specified.
- e. For all other actions, a certification signed by a licensed professional engineer or architect certifying that the proposed variation or revision meets or exceeds what was originally specified.
- f. Advantage to the Government, if variation is approved, i.e. Operation and Maintenance considerations, better product, etc.
- g. Ramifications and impact, if not approved.

If the Government review detects any items not in compliance with contract requirements or items requiring further clarification, the Contractor will be so advised. Lack of notification by the Contracting Officer of any non-complying item does not relieve the Contractor of any contractual obligation.

### 3.6.3 Non-Compliance

The Contracting Officer will notify the Contractor of any detected noncompliance with the requirements of this specification. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the worksite, 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.

## 3.7 REVIEW OF CONTRACTOR PREPARED DOCUMENTS

### 3.7.1 GENERAL

The work under contract will be subject to continuous review by representatives of the Contracting Officer. Additionally, joint design review conferences with representation by all organizations having a direct interest in the items under review may be held. The Contractor shall furnish copies of all drawings and related documents to be reviewed at the review conference on or before the date indicated by the Government. Additional conferences pertaining to specific problems may be requested by the Contractor or may be directed by the Contracting Officer as necessary to progress the work. The Contractor shall prepare minutes of all conferences and shall furnish two copies to the Contracting Officer within seven (7) days after the conference.

All submittal reviews shall be reviewed and comments entered into DrChecks located on the website at: <https://www.projnet.org/projnet/binKornHome/index.cfm>

### 3.7.2 INDEPENDENT REVIEW

The Contractor shall have someone other than the Designer or Design Team perform an Independent Technical Review of all specifications, drawings, design analysis, calculations, and other required data prior to submission to the Government. This review shall insure the professional

quality, technical accuracy, and the coordination of all design analysis, drawings and specifications, and other services furnished under this contract have been accomplished. Work must be organized in a manner that will assure thorough coordination between various details on drawings, between the various sections of the specifications, and between the drawings and specifications. The Contractor shall thoroughly cross-check and coordinate all work until he is professionally satisfied that no conflicts exist, vital information has not been omitted, and that indefinite language open to interpretation has been resolved. Upon completion of this review, the Contractor shall certify that each design submittal is complete, accurate, is in strict conformance with all contract requirements, that repetition has been avoided, that all conflicts have been resolved, and that the documents have thoroughly coordinated and cross checked against all the applicable disciplines to prevent the omission of vital information.

### 3.7.3 CONTRACTOR'S QUALITY CONTROL ORGANIZATION REVIEW

The Contractor shall thoroughly review each submittal prior to submission to the Contracting Officer to assure it is complete, correct and unified. This review shall be for the purposes of eliminating errors, interferences, and inconsistencies, and of incorporating design criteria, review comments, specifications, and any additional information required. The Contractor will give evidence of such review of all items in each submittal ENG Form 4025, by annotating Column "g" (titled "For Contractor Use Code") of this Form with the letter "A," meaning the Contractor has reviewed it and is indicating it is "Approved as Submitted". Design submittals submitted to the Contracting Officer without evidence of the above requirements or the Contractor's certified approval will be returned for resubmission. No part of the time lost due to such resubmissions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

### 3.7.4 GOVERNMENT REVIEW

Within fourteen (14) days after Notice to Proceed, the Contractor shall submit, for approval, a complete project design schedule with all submittals and review times indicated in calendar dates. The Contractor shall update this schedule monthly. After receipt, the Government will be allowed fourteen (14) days to review and comment on each submittal, except as noted below. For each design review submittal, comments from the various design sections and from other concerned agencies involved in the review process will be made in the on-line review management system DrChecks<sub>SM</sub> (<https://www.projnet.org/projnet/bin/KornHome/index.cfm>). Contractor shall coordinate with the Contracting Officer and/or Representative(s) to register for DrChecks<sub>SM</sub> use. The review will be for conformance with the technical requirements of the solicitation and the Successful Offeror's (Contractor's) RFP proposal.

If a design submittal is deficient (errors on ENG Form 4025, incorrect drawing title block information, missing or incomplete features required in the Submittal, etc.), it will be returned immediately without further review for correction and resubmission. The review time will begin when the corrected submittal is received. The Contractor may be liable for liquidated damages owed to the Government for returned design submittals due to deficiencies.

The contractor shall not begin construction work until the Government has reviewed the contractor's design and has cleared it for construction. Clearance for construction does not mean Government approval. Government review shall not be construed as a complete check but will evaluate the general design approach and adherence to contract parameters. The Government Review is often limited in time and scope. Therefore, the Contractor shall not consider any review performed by the Government as an excuse for incomplete work. Upon completion of the review, all comments will be posted on the online DrChecks<sub>SM</sub> review system for the Contractor. The Contracting Officer will indicate whether the design submittal has or has not been cleared for construction using the following action codes:

- 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 with separate correspondence.
- E – Disapproved (See attached).
- F -- Receipt acknowledged.
- FX – Receipt acknowledged, does not comply as noted with contract requirements.
- G -- Other (Specify).

These codes shall NOT be used by the Contractor. Contractor's Quality Control Organization will annotate Block "g" entitled "FOR CONTRACTOR USE CODE" of Eng Form 4025-R using the action codes listed on the reverse side of the form.

Design submittals Cleared for Construction by the Contracting Officer shall not relieve the Contractor from responsibility for any design errors or omissions and any liability associated with such errors, nor from responsibility for complying with the requirements of this contract.

#### 3.7.4.1 INCORPORATION OF GOVERNMENT REVIEW COMMENTS

- a. The Contractor shall review each comment, furnish a complete response in DrChecks<sub>SM</sub> as to how the comment will be addressed in the Design Analysis, Plans and Specifications, or other Design Submittal stipulations required in this Contract. The Contractor will then incorporate each comment into the design submittal along with other work required at the next Design Submittal stage. The Contractor shall furnish disposition of all comments in DrChecks<sub>SM</sub>, with the next scheduled submittal. The disposition shall identify action taken with citation of location within the relevant design document. Generalized statements of intention such as "will comply" or "will revise the specification" are not acceptable. During the design review process, comments will be made on the design submittals that will change the drawings and specifications. The Government will make no additional payments to the Contractor for the incorporation of comments. Review comments are considered part of the contract administration process.
- b. If the Contractor disagrees technically with any comment or comments and does not intend to comply with the comment, he must clearly outline, with ample justification, the reasons for noncompliance within five (5) days after close of review period in order that the comment can be resolved.
- c. The Contractor is cautioned that if he believes the action required by any comment exceeds the requirements of this contract, he should flag the comment in DrChecks<sub>SM</sub> as a scope change, and notify the COR in writing immediately.
- d. If a design submittal is over one (1) day late in accordance with the latest design schedule, the Government review period may be extended 7 days. Submittal date revisions must be made in writing at least five (5) days prior to the submittal.

#### 3.7.4.2 CONFERENCES

As necessary, conferences will be conducted between the Contractor and the Government to resolve review comments. A Pre-Design Conference should be held as soon as possible after Notice to Proceed in order for the Contractor's Design Team to meeting with AED Engineering Branch in order to assure DrChecks use is understood and access is functional; Design Submittal requirements are explained and understood; other specific Contract requirements are highlighted as necessary and understood; and future interactions between the Contractor, the Area/Resident Office, Engineering Branch and PPMD is initiated and nurtured.

A review conference may be held at the completion of any AED review and subsequent Contractor response for each Design Submittal. The review conference will be held at the Corps District Office in Kabul, Afghanistan or the Kandahar Program Office, Kandahar, Afghanistan. The Contractor shall bring the personnel that developed the Design Submittal to the review conference.

### 3.7.5 DESIGN DISCREPANCIES

The Contractor shall be responsible for the correction of incomplete design data, omissions, and design discrepancies which become apparent during construction. The Contractor shall provide the Contracting Officer with a proposed recommendation for correcting a design error, within three (3) calendar days after notification by the Contracting Officer. 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 worksite, 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. Should extensions of design, fabrication plans and/or specific manufacturer's details be required as a result of a Government issued Change Order, the Government will make an equitable adjustment in accordance with Contract Clause 52.243-4 entitled CHANGES.

## 3.6 DESIGN SUBMITTALS

### 3.6.1 PARTIAL DESIGN SUBMITTALS

In the interest of expediting construction, the Contracting Officer may approve partial design submittals, procurement of materials and equipment, as well as issue the Notice To Proceed (NTP) for construction of those elements of the design which have been cleared for construction. Such partial notices to proceed shall be solely at the discretion of the Contracting Officer.

### 3.6.2 DESIGN SUBMITTALS NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS

The Contractor shall, without additional compensation, correct or revise any errors or deficiencies in its design analysis, specifications, and drawings, and promptly furnish a corrected submittal in the form and number of copies as specified for the initial submittal. No part of the time lost due to such resubmissions shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, a notice shall be given promptly to the Contracting Officer.

### 3.6.3 IN-PLACE CONSTRUCTION PAYMENT

No payment will be made for any in-place construction until all required submittals have been made, reviewed and are satisfactory to the Government.

### 3.6.4 COMMENCEMENT OF CONSTRUCTION

Construction of work may begin after receipt of the clearance for construction (Notice to Proceed) for each design phase. Any work performed by the Contractor prior to receipt of the clearance for construction, shall be at the Contractor's own risk and expense. Work cleared for construction that does not conform to the design parameters and/or requirements of this contract shall be corrected by the Contractor at no additional cost or time to the Government.

### 3.7 GENERAL DESIGN INSTRUCTIONS

#### 3.7.1 RESPONSIBILITY OF THE CONTRACTOR

##### 3.7.1.1 PROFESSIONAL QUALITY, TECHNICAL ACCURACY, AND COORDINATION

The Contractor shall be responsible for the professional quality, technical accuracy, and the coordination of all drawings and other services furnished under this contract. The Contractor shall thoroughly cross-check and coordinate all work, until he is professionally satisfied that no conflicts exist, vital information has not been omitted, and that indefinite language open to interpretation has been resolved.

##### 3.7.1.2 DEVIATING FROM THE "CLEARED-FOR-CONSTRUCTION" DESIGN

- (a.) The Contractor must obtain the approval of the Designer of Record (DOR) and the Government's concurrence for any Contractor proposed revision to the professionally stamped and sealed design reviewed and Cleared for Construction by the Government, before proceeding with the revision.
- (b.) The Government reserves the right to non-concur with any revision to the design.
- (c.) Any revision to the design, which deviates from the contract requirements (i.e., the RFP and the accepted proposal), will require a modification, pursuant to the Changes clause, in addition to Government concurrence. The Government reserves the right to disapprove such a revision.
- (d.) Unless the Government initiates a change to the contract requirements, or the Government determines that the Government furnished design criteria are incorrect and must be revised, any Contractor initiated proposed change to the contract requirements, which results in additional cost, shall strictly be at the Contractor's expense.
- (e.) The Contractor shall track all approved revisions to the reviewed and cleared for construction design and shall incorporate them into the as-built design documentation, in accordance with section 01060 SC entitled PREPARATION OF AS-BUILT DRAWINGS (CONTRACTOR). The Designer of Record shall document its professional concurrence on the As-Built for any revisions by affixing its stamp and seal on the drawings and specifications.

##### 3.7.1.3 GOVERNMENT OVERSIGHT

The extent and character of the work to be done by the Contractor shall be subject to the general oversight, supervision, direction, control, and review by the Contracting Officer.

##### 3.7.1.4 UNLIMITED DRAWING RIGHTS

The Government shall have unlimited rights in all drawings, notes and all 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.

### 3.7.1.5 CONFLICTS

Any conflicts, ambiguities, questions or problems encountered by the Contractor in following the criteria shall be immediately submitted in writing to the Contracting Officer with the Contractor's recommendations. Prior to submission to the Government the Contractor shall take appropriate measures to obtain clarification of design criteria requirements, to acquire all pertinent design information, and to incorporate such information in the work being performed.

### 3.8.1 CONDUCT OF WORK

#### 3.8.1.1 PERFORMANCE

Perform the work diligently and aggressively, and promptly advise the Contracting Officer of all significant developments.

#### 3.8.1.2 TELEPHONE CONVERSATIONS

Prepare a summary, and promptly furnish a copy thereof to the Contracting Officer, of all telephone conversations relating to the work under this contract.

#### 3.8.1.3 COOPERATION WITH OTHERS

Cooperate fully with other firms, consultants and contractors performing work under the program to which this contract pertains, upon being advised by the Contracting Officer that such firms or individuals have a legitimate interest in the program, have need-to-know status, and proper security clearance where required.

#### 3.8.1.4 TECHNICAL CRITERIA

All drawings shall be prepared in accordance with the contract documents and with the applicable publications referenced therein. As soon as possible, the Contractor shall obtain copies of all publications applicable to this contract. Availability of publications (where to purchase) is contained in Specification Section 01015. Any deviations from the technical criteria contained in the contract documents or in the applicable publications, including the use of criteria obtained from the user or other sources, must receive prior approval of the Contracting Officer. Where the technical criteria contained or referred to herein are not met, the Contractor will be required to conform his design to the same at his own time and expense.

### 3.8.2 TOPOGRAPHIC SURVEYS, EASEMENTS, AND UTILITIES

Unless otherwise stated in the contract, the Contractor will be responsible for detailed topographic mapping, available easements, and utility information for the project.

### 3.8.3 DESIGN PRIORITIES

The design of this project shall consider the remote location and harsh environment of this project and the impact this will have on sources of technical supply, the cost of construction, and the low level of maintenance.

### 3.8.4 GEOTECHNICAL INVESTIGATION

Unless otherwise stated in the contract, the Contractor will be responsible for Geotechnical investigation, including subsurface explorations, sampling, field and laboratory testing, and water studies where applicable.

### 3.9 SUBMITTAL OF CONTRACTOR FURNISHED DESIGN DOCUMENTS AND DRAWINGS

The requirements of this paragraph pertain to the submittal of design documents, design calculations, surveys, testing reports and other documents prepared by the Contractor to meet the design requirements of this project. The following information must be submitted:

- Geo-technical investigation reports
- Design Analysis
- Design Drawings
- Full Size and True Half-Size Design drawings shall be submitted for the following:
- Refer to Submittal Distribution and Quantities Table
- Samples
- Schedules
- Reports
- Records
- Engineering Studies
- Accident Prevention and Safety

### 3.10 GOVERNMENT APPROVED CONSTRUCTION SUBMITTALS (Required During Construction)

#### 3.10.1 GENERAL

Since this contract requires that the drawings and specifications specify specific proprietary materials, equipment, systems, and patented processes by trade name, make, or catalog number, it is anticipated that construction shop drawings will primarily be limited to testing, construction plans (e.g., Contractor Quality Control, Accident Prevention, Resident Management System, Area Use etc), schedules (Project Schedule/Network Analysis), certificates of compliance, reports, records/statements and variations.

#### 3.10.2 ADDITIONAL SHOP DRAWINGS AND SUBMITTALS

In accordance with the paragraph entitled DESIGN DISCREPANCIES, the Government may request the Contractor to provide additional drawings and submittal type data subsequent to completion of the design.

#### 3.10.3 INCOMPLETE DESIGN

The Contractor shall not use construction submittals as a means to supplant and/or supplement an incomplete design effort.

#### 3.10.4 Government Approval of Construction Submittals

The approval of construction submittals by the Contracting Officer shall not be construed as a complete check, but will indicate only that the general method of design construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as it is the sole responsibility of the Contractor to certify that each submittal has been reviewed in detail and is in strict conformance with all the contract documents and design criteria referenced therein.

Virtually all design related construction submittals can and must be incorporated directly into the design specifications and drawings prepared by the Contractor. Since the Contractor has sole responsibility for the design, procurement, and construction, impediments do not exist which would impair his ability to specifically identify what is being furnished to the Government prior to the start of

construction. Generic/non-proprietary specifications are indicative of an incomplete design effort and as such must be rejected as unacceptable

### 3.10.5 SUBMITTALS

Submittals shall be limited to items such as Plans (e.g., Quality Control Plan, Accident Prevention Plan, etc.), Certificates of Compliance, and Field Test Reports.

### 3.10.6 Government Review

Upon completion of review of construction submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Two ( 2 ) copies of the submittal will be retained by the Contracting Officer and one (1) copy of the submittal will be returned to the Contractor.

### 3.11 FOR INFORMATION ONLY SUBMITTALS

These submittals shall be checked, stamped, signed and dated by the Contractor's Quality Control Engineer, certifying that such submittal complies with the contract requirements. All Contractor submittals shall be subject to review by the Government at any time during the course of the contract. Any Contractor submittal found to contain errors or omissions shall be resubmitted as one requiring "approval". No adjustment for time or money will be allowed for corrections required as a result of noncompliance with plans or specifications. Normally submittals for information only will not be returned. Approval of the Contracting Officer is not required on information only submittals. These submittals will be used for information purposes. 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 and will not prevent the Contracting Officer from requiring removal and replacement if nonconforming material is incorporated in the work.

### 3.12 VALUE METHODOLOGY/VALUE ENGINEERING

The Contractor during the course of his design shall be alert for and shall identify those high-cost low-value items or areas which he considers may be accomplished in different ways that will increase the value of the project at the same or less cost. Potential value engineering study items shall be reported to the Value Engineer through the Contracting Officer.

#### 3.12.1 Performance Oriented Value Engineering Change Proposal (VECP)

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 Contract Documents which were addressed in the Contractor's accepted contract proposal and which were evaluated in competition with other Proposers for award of this contract. For purposes of this clause, the term "performance oriented" refers to those aspects of the design criteria or other contract requirements which allow the Proposer or the 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 fulfill 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.

#### 3.12.2 Prescriptive Oriented Value Engineering Change Proposal (VECP)

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. 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 Proposers little or no freedom in the choice of design approach, materials, fabrication techniques, methods of installation or other approach to fulfill the contract requirements.

### 3.13 SUBMITTAL OF CONTRACTOR FURNISHED DESIGN DRAWINGS

#### 3.13.1 SURVEY DOCUMENTS

##### 3.13.1.2 Horizontal and Vertical Control

The mapping shall be based on the base coordinate system. If the base system cannot be found, the surveyor shall use any established monuments. If monuments have been destroyed or do not exist, an assumed horizontal and vertical datum shall be established, using arbitrary coordinates of 10,000n and 10,000e and an elevation of 1,000 meters. The horizontal and vertical control established on site shall be a closed loop with third order accuracy and procedures. Provide three (3) concrete survey monuments at the survey site. All of the control points established at the site shall be plotted at the appropriate coordinate point and shall be identified by name or number, and adjusted elevations. The location of the project site, as determined by the surveyor shall be submitted in writing to the Contracting Officer. The site location shall be identified by temporary markers, approved by the Contracting Officer before proceeding with the surveying work.

##### 3.13.1.3 Topography Requirements

A sufficient quantity of horizontal and vertical control shall be established to provide a detailed topographic survey at 1:500 scale with one quarter meter contour intervals minimum. Intermediate elevations shall be provided as necessary to show breaks in grade and changes in terrain.

The contours shall accurately express the relief detail and topographic shapes. In addition, 90 percent of the elevations or profiles interpolated from the contours shall be correct to within one-half of the contour interval and spot elevations shall be correct within plus or minus 20 millimeters.

Spot elevations affecting design of facilities shall be provided. Specifically, break points or control points in grades of terrain such as tops of hills, bottoms of ditches and gullies, high bank elevations, etc.

All surface and sub-surface structures features within the area to be surveyed shall be shown and identified on the topographic maps. In addition, these features shall be located by sufficient distance ties and labeled on the topographic sheets to permit accurate scaling and identification.

The location and sizes of potable water, sanitary, electrical and mechanical utilities within the survey site shall be shown on the survey map. Sanitary manholes and appurtenances shall show top elevations and invert elevations.

The surveyor shall provide a tabulated list (bound booklet) with adjusted coordinates and elevations of all permanent survey monuments established on the project. The surveyor shall complete and submit with field books, the field adjustments computation sheets. The surveyor shall submit raw GPS survey files in the RINEX format. The surveyor shall complete and submit the final survey and mapping.

#### 3.13.2 COMPREHENSIVE SITE SURVEY ASSESSMENT

The Contractor shall provide the assessment as described in Section 01015.

### 3.13.2 SAFETY PLANS

The contractor shall submit safety plans as described in EM 385-1-1.

### 3.13 ATTACHMENTS

The following attachments form an integral part of this specification:

A Submittal Distribution and Quantities Table

B AED Drawing Title Block Standards

Figure 1 - AED Title Block

Figure 2 - AED Management Block

Figure 3 - AED Issue Block & Required Notations

Figure 4 - Border Sheet Size

C Dr. Checks tracking requirements

D ENG FORM 4025 - Transmittal of Shop Drawings, Equipment Data, Material Samples,  
or Manufacturer's Certificate of Compliance (2 pages)

ENG FORM 4288 - Submittal Register

-- End of Section --

### SECTION 01335 ATTACHMENT A

**ATTACHMENT A**  
***SUBMITTAL DISTRIBUTION AND QUANTITIES TABLE***

Submittal Distribution and Quantities for Post-NTP, 15%, 65%, 95% & 100% design and As-Built submittals and re-submittals. The documents which the Contractor shall submit to the Government for each submittal are listed and generally described in preceding paragraphs in this Section.

Activity and Address	Post NTP	15%	65%	95%	100%	As-Built
Community Relations Plan <sup>1</sup> (Pre-Design Submittal)	[3] <sup>1</sup>	[3]	[3]	[3]	[3]	[0]
Security Protection Plan <sup>2</sup> (Pre-Design Submittal)	[3] <sup>2</sup>	[3]	[3]	[3]	[3]	[0]
Drawing Size [Full Size] [Half Size]		[3_Half]	[3_Half]	[3_Half]	[2_Half] [1_Full]	[2_Full] [2_Half]
Surveyed Plan & Profile & Structure Analysis		[3]	[0]	[0]	[0]	[0]
Design Analyses & Calcs		[0]	[3]	[3]	[3]	[0]
Quality Control Plan		[0]	[3]	[3]	[3]	[0]
Accident Prevention Plan		[0]	[3]	[3]	[3]	[0]
Subcontractor Data		[0]	[3]	[3]	[3]	[2]
Quality Control System		[0]	[3]	[0]	[0]	[0]
Project Schedule		[3]	[3]	[3]	[3]	[0]
Certificates of Compliance		[0]	[3]	[3]	[3]	[0]
CD-ROM (PDF & DWG)		[3]	[3]	[3]	[3]	[3]

Note:

<sup>1</sup> The Contractor shall submit the Community Relations Plan following NTP and prior to commencement of any field activities which includes performance of Road Survey. No work may begin until the Community Relations Plan has been approved by the Contracting Officer's Representative (COR). Updates submitted, as necessary, for 15% - 100% design submittals and during construction.

<sup>2</sup> The Contractor shall submit the Security Protection Plan following NTP and prior to commencement of any field activities, which includes performance of Road Survey. No work may begin until the Security Protection Plan has been approved by the COR. Updates submitted, as necessary, for 15% - 100% design submittals and during construction.

***Submittal Mailing or Delivery Information***

Mail or delivery all design submittals to the Government during design and construction, using an overnight mailing service. The submittals shall be mailed or delivered to the USACE, AED Headquarters at the following address and one copy to the **Resident Field Office (To Be Determined at a later Date)**

(a) DHL, FEDEX, UPS or other courier:

U.S. Army Corps of Engineers  
Afghanistan Engineer District  
House # 1, St. #1 West  
West Wazir Akbar High School  
Behind Amani High School  
Kabul, Afghanistan  
Attn.: Engineering Office

(b) U.S. Postal Service:

USACE, AED,  
ATTN: QALAA House  
APO AE 09356  
Attn: Engineering Office

Each design submittal shall have a transmittal letter accompanying it indicating the date, design percentage, type of submittal, list of items submitted, transmittal number and point of contact with telephone number.

SECTION 01335 ATTACHMENT B

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE <small>(Read instructions on the reverse side prior to initiating this form)</small>					DATE	TRANSMITTAL NO.		
<b>SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS</b> <small>(This section will be initiated by the contractor)</small>								
TO:		FROM:		CONTRACT NO.		CHECK ONE: <input type="checkbox"/> THIS IS A NEW TRANSMITTAL <input type="checkbox"/> THIS IS A RESUBMITTAL OF TRANSMITTAL		
SPECIFICATION SEC. NO. <small>(Cover only one section with each transmittal)</small>		PROJECT TITLE AND LOCATION		CHECK ONE: THIS TRANSMITTAL IS FOR <input type="checkbox"/> P10 <input type="checkbox"/> GOV'T. APPROVAL				
ITEM NO.	DESCRIPTION OF ITEM SUBMITTED <small>(Type size, model number/etc.)</small>	MFG OR CONTR. CAT., CURVE DRAWING OR BROCHURE NO. <small>(See instruction no. 8)</small>	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT		FOR CONTRACTOR USE CODE	VARIATION <small>(See instruction No. 8)</small>	FOR CE USE CODE
				SPEC. PARA. NO.	DRAWING SHEET NO.			
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				
<b>SECTION II - APPROVAL ACTION</b>								
ENCLOSURES RETURNED <small>(List by Item No.)</small>		NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY			DATE			

SECTION 01335 ATTACHMENT C

**ATTACHMENT C**

**TRACKING COMMENTS IN DRCHECKS**

**PART 4 - GENERAL:** Throughout the design process, the DB Contractor shall enter, track, and back-check comments using the DrChecks system. Designers of Record shall annotate comments timely and specifically to indicate exactly what action will be taken or why the action is not required. Comments considered critical by the conference participants shall be flagged as such.

**4.1. DRCHECKS REVIEW COMMENTS:**

**4.1.A.** The DB Contractor shall monitor DrChecks to assure all comments are annotated and agreed to by the designers and reviewers prior to the next submittal. The DrChecks comments and responses shall be printed and included in the design analysis for record.

**4.1.B.** Conference participants (reviewers) will expect coordination between Design Analysis calculations and the submitted design. Reviewers will also focus on the design submittal's satisfaction of the contract requirements.

**4.1.C.** The Designers of Record shall answer each comment in DrChecks with a formal response prior to the next submittal, clearly indicating what action will be taken and what drawing/spec will change. Designers of Record are encouraged to directly contact reviewers to discuss and agree to the formal comment responses rather than relying only on DrChecks and review meetings to discuss comments. With the next design conference, reviewers will back-check answers to the comments against the submittal, in addition to reviewing additional design work.

**4.1.D.** Comments that, in the DB Contractor's opinion, require effort outside the scope of the contract shall be clearly indicated as such in DrChecks. The DB Contractor shall not proceed with work outside the contract until a modification to the contract is properly executed, if one is necessary.

#### **4.2. DRCHECKS INITIAL ACCOUNT SET-UP:**

**4.2.A.** To initialize an office's use of DrChecks, choose a contact person within the office to call the DrChecks Help Desk at 800-428-HELP, M-F, 8AM-5PM, Central time. This POC will be given an office password to distribute to others in the office. Individuals can then go to the hyperlink at {<http://www.projnet.org>} and register as a first time user. Upon registration, each user will be given a personal password to the DrChecks system.

**4.2.B.** Once the office and individuals are registered, the COE's project manager or lead reviewer will assign the individuals and/or offices to the specific project for review. At this point, persons assigned can make comments, annotate comments, and close comments, depending on their particular assignment.

**4.3. DRCHECKS REVIEWER ROLE:** The DB Contractor shall take the role of the reviewer to enter comments into the DrChecks system that result from each design conference. To enter comments:

**4.3.A.** Log into DrChecks.

**4.3.B.** Click on the appropriate project.

**4.3.C.** Click on the appropriate review conference. An Add comment screen will appear.

**4.3.D.** Select or fill out the appropriate sections (particularly comment discipline and type of document for sorting) of the comment form and enter the comment in the space provided.

**4.3.E.** Click the Add Comment button. The comment will be added to the database and a fresh screen will appear for the next comment you have.

**4.3.F.** Once comments are all entered, exit DrChecks by choosing "My Account" and then Logout.

**4.4. DRCHECKS COMMENT EVALUATION:** The role of the designers of record is to evaluate and respond to the comments entered by the DB Contractor. To respond to comments:

**4.4.A.** Log into DrChecks.

**4.4.B.** Click on the appropriate project.

**4.4.C.** Under "Evaluate" click on the number under "Pending".

**4.4.D.** Locate the comments that require your evaluation. (Note: If you know the comment number you can use the Quick Pick window on your home page in DrChecks; enter the number and click on go.)

**4.4.E.** Select the appropriate evaluation (concur, non-concur, for information only, or check and resolve) and add the response.

**4.4.F.** Click on the Add button. The evaluation will be added to the database and a fresh screen will appear with the next comment.

**4.4.G.** Once evaluations are all entered, exit DrChecks by choosing "My Account" and then Logout.

**4.5. DRCHECKS BACK-CHECK:** At the following design conference, participants will back-check comment annotations against newly presented documents to verify that the designers' responses are acceptable and completed. The DB Contractor shall enter additional back-check comments, as necessary or close those that are resolved as a result of the design conferences:

**4.5.A.** Log into DrChecks.

**4.5.B.** Click on the appropriate project.

**4.5.C.** Under "My Backcheck" click on the number under "Pending".

**4.5.D.** If you agree with the designer’s response select “Close Comment” and add a closing response if desired.

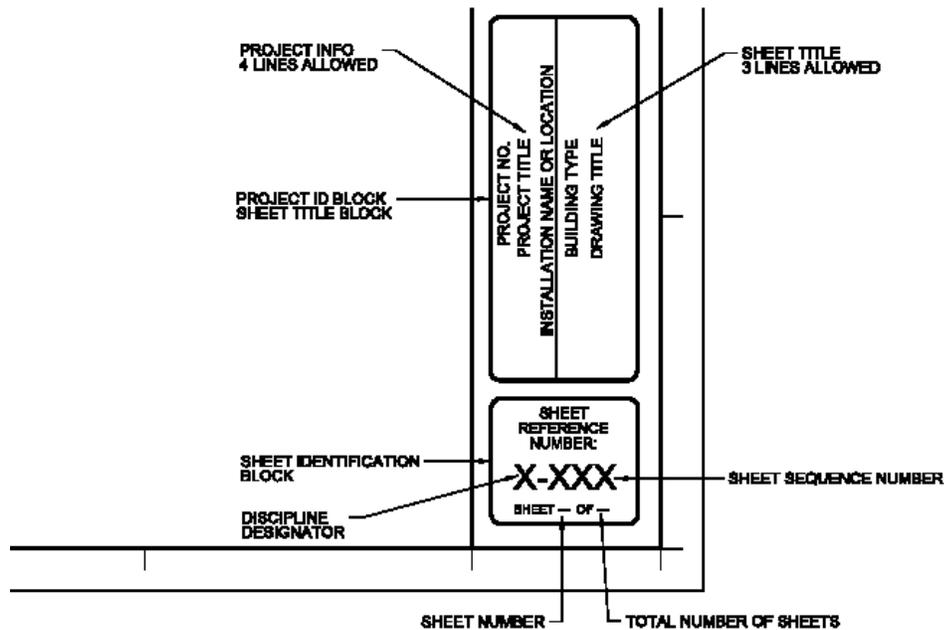
**4.5.E.** If you do not agree with the designer’s response or the submittal does not reflect the response given, select “Issue Open”, enter additional information.

**4.5.F.** Click on the Add button. The back-check will be added to the database and a fresh screen will appear with the next comment.

**4.5.G.** Once back-checks are all entered, exit DrChecks by choosing "My Account" and then Logout. The design is completed and final when there are no pending comments to be evaluated and there are no pending or open comments under back-check.

**-- END SECTION --**

SECTION 01335 ATTACHMENT D



01415

**SECTION 01415  
METRIC MEASUREMENTS**

**PART 5 - GENERAL:**

**5.1. REFERENCES:** The publications listed below form a part of this specification to the extent referenced.

The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM E 621	(1994; R 1999e1) Use of Metric (SI) Units in Building Design and Construction (Committee E-6 Supplement to E380)
ASTM SI 10	(2002) American National Standard for Use of the International System of Units (SI): The Modern Metric System

**5.2. GENERAL:** This project includes 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.

**5.3. USE OF MEASUREMENTS IN SPECIFICATIONS:** Measurements in specifications 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.

**5.3.A. HARD METRIC:** A hard metric measurement is indicated by an SI value with no expressed correlation to an I-P value. 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.

**5.3.B. SOFT METRIC:**

**5.3.B.1.** 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.

**5.3.B.2.** 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)).

**5.3.C. 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).

**5.4. 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.

**5.5. 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 SI 10 and ASTM E 621 as the basis for establishing metric measurements required to be used in submittals.

**PART 6 - PRODUCTS:** (NOT APPLICABLE)

**PART 7 - EXECUTION:** (NOT APPLICABLE)

-- End Section --

SECTION 01451 CQC

**SPECIFICATION SECTION 01451  
CONTRACTOR QUALITY CONTROL**

**PART 1 - GENERAL:**

**1.1. REFERENCES:** The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

**1.1.A. U.S. ARMY CORPS OF ENGINEERS (USACE):**

**1.1.A.1.** ER 1110-1-12 (1993)                      Quality Management

**1.1.A.2.** EM 385-1-1(latest edition)        Safety and Health Requirements Manual

**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.

**PART 2 - PRODUCTS:** (Not Applicable)

**PART 3 - EXECUTION:**

**3.1. GENERAL REQUIREMENTS:** The Contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with the Contract Clauses and this specification section. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Contracting Officer for non-compliance with the quality requirements specified in the contract. The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site project superintendent shall maintain a physical presence at the site at all times, except as otherwise acceptable to the Contracting Officer, and shall be responsible for all construction and construction related activities at the site.

**3.2. CQM TRAINING REQUIREMENT:** Before project design and construction begin, the Contractor's Quality Control Manager is required to have completed the U.S. Army Corps of Engineers CQM course, or equivalent. The Commercial Technical Training Center (CTTC), operated by the United Rehabilitation Bureau in Jalalabad, Afghanistan, provides a course that satisfies the requirement. Courses are offered at regular intervals. For enrollment and course information contact CTTC at the following:

**3.2.A.** Dr Pervez Mojadidi  
Project Manager, United Rehabilitation Bureau  
Email: [adpzmuj@yahoo.com](mailto:adpzmuj@yahoo.com)  
Phone: (93) 0700-613-133, 0786489933

**3.2.B.** Said Wali Shinwari  
Director, United Rehabilitation Bureau  
Email: [urb1992@yahoo.com](mailto:urb1992@yahoo.com)

Phone: (93) 0700-287-626, 0797520380

**3.3. QUALITY CONTROL PLAN:** The Contractor shall furnish for review by the Government, not later than five (5) days after receipt of Notice-to-Proceed (NTP) the proposed Contractor Quality Control (CQC) Plan. The plan shall identify personnel, procedures, control, instructions, records, and forms to be used.

**3.3.A. Content of the CQC Plan:** The CQC Plan shall include, as a minimum, the following to cover all construction operations, both on site and off-site, including work by subcontractors, fabricators, suppliers and purchasing agents:

**3.3.A.1.** 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.

**3.3.A.2.** The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.

**3.3.A.3.** 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.

**3.3.A.4.** Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, offsite fabricators, suppliers, consultants, and purchasing agents. These procedures shall be in accordance with Specification 01335 SUBMITTAL PROCEDURES.

**3.3.A.5.** 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.

**3.3.A.6.** Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.

**3.3.A.7.** Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

**3.3.A.8.** Reporting procedures, including proposed reporting formats.

**3.3.A.9.** A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section. This list will be agreed upon during the coordination meeting.

**3.3.B. Additional Requirements for Design Quality Control (DQC) Plan.** The following additional requirements apply to the Design Quality Control (DQC) plan:

**3.3.B.1.** The Contractor shall provide and maintain a Design Quality Control (DQC) Plan as an effective quality control program which will assure that all services required by this design contract are performed and provided in a manner that meets professional architectural and engineering quality standards. As a minimum, all documents shall be technically reviewed by competent, independent reviewers identified in the DQC Plan. The same element that produced the product shall not perform the independent technical review (ITR). The Contractor shall correct errors and deficiencies in the design documents prior to submitting them to the Government.

**3.3.B.2.** The Contractor shall include the design schedule in the master project schedule, showing the sequence of events involved in carrying out the project design tasks within the specific contract period. This should be at a detailed level of scheduling sufficient to identify all major design tasks, including those that control the flow of work. The schedule shall include review and correction periods associated with each item. This should be a forward planning as well as a project monitoring tool. The schedule reflects calendar days and not dates for each activity. If the schedule is changed, the Contractor shall submit a revised schedule reflecting the change within 7 calendar days. The Contractor shall include in the DQC Plan the discipline-specific checklists to be used during the design and quality control of each submittal. These completed checklists shall be submitted at each design phase as part of the project documentation. Example checklists can be found in ER 1110-1-12.

**3.3.B.3.** The DQC Plan shall be implemented by a Design Quality Control Manager who has the responsibility of being cognizant of and assuring that all documents on the project have been coordinated. This individual shall be a person who has verifiable engineering or architectural design experience and is a registered professional engineer or architect. The Contractor shall notify the Contracting Officer, in writing, of the name of the individual, and the name of an alternate person assigned to the position.

**3.3.C. Acceptance of Plan:**

**3.3.C.1.** The Contracting Officer will notify the Contractor in writing of the acceptance of the DQC Plan. After acceptance, any changes proposed by the Contractor are subject to the acceptance of the Contracting Officer.

**3.3.C.2.** 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 the CQC plan and operations including removal of personnel, as necessary, to obtain the quality specified.

**3.3.D. Notification of Changes:** Notification of Changes. After acceptance of the QC plan, the Contractor shall notify the Contracting Officer in writing a minimum of seven calendar days prior to any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

**3.4. COORDINATION MEETING:** After the Pre-construction Conference, before start of construction, and prior to acceptance by the Government of the Quality Control 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 5 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 on-site and off-site work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures, which may require corrective action by the Contractor.

**3.5. QUALITY CONTROL ORGANIZATION:**

**3.5.A. Personnel Requirements:** The requirements for the CQC organization are a CQC System Manager, and sufficient number of additional qualified personnel to ensure safety and contract compliance. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization. The Contractor's CQC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Contracting Officer. The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization. Complete records of all

letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Contracting Officer.

**3.5.B. CQC System Manager:** The Contractor shall identify an individual within his organization at the site of the work who shall be responsible for overall management of the CQC and have the authority to act in all CQC matters for the Contractor. The CQC system manager shall be a graduate engineer, graduate architect, or a graduate construction manager, with experience on construction projects similar in type to this contract OR a construction person with a minimum of ten (10) years in related work. The CQC System Manager shall be on the site at all times during construction and shall be employed by the Contractor. The CQC System Manager shall be assigned no other duties. An alternate for the CQC System Manager will be identified in the plan to serve in the event of the CQC system manager's absence. The requirements for the alternate will be the same as for the designated CQC manager.

**3.5.C.** Not Used.

**3.5.D. Additional Requirements:** In addition to the above experience and/or education requirements, the CQC System Manager shall have completed the course entitled "Construction Quality Management For Contractors". This course is periodically offered by the government, and inquiries as to the next course offering may be directed to the local construction field office.

**3.5.E. Organizational Changes:** The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the Contractor shall revise the CQC Plan to reflect the changes and submit the changes to the Contracting Officer for acceptance.

**3.6. SUBMITTALS AND DELIVERABLES:** Submittals, if needed, shall be made as specified in the STR titled SUBMITTAL PROCEDURES. The CQC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

**3.7. 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 the construction work as follows:

**3.7.A. Preparatory Phase:** This phase shall be performed prior to beginning work on each definable feature of work, after all required documents and materials are approved/accepted, and after copies are at the work site. This phase shall include:

**3.7.A.1.** A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards, in the English language unless specifically approved otherwise by the Contracting Officer, applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by Government personnel until final acceptance of the work.

**3.7.A.2.** A review of the contract drawings.

**3.7.A.3.** A check to assure that all materials and/or equipment have been tested, submitted, and approved.

**3.7.A.4.** A check to assure that provisions have been made to provide required control inspection and testing.

**3.7.A.5.** Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.

**3.7.A.6.** A physical examination of required materials, equipment, and sample work to verify that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.

**3.7.A.7.** Reviews of the appropriate activity hazard analysis to ensure safety requirements are met.

**3.7.A.8.** Discussion of procedures for constructing the work including repetitive deficiencies, construction tolerances and workmanship standards for that feature of work.

**3.7.A.9.** A check to ensure that the Contracting Officer has accepted the portion of the plan for the work to be performed.

**3.7.A.10.** Discussion of the initial control phase.

**3.7.A.11.** The Government shall be notified at least 24 hours in advance of beginning any of the required action of the preparatory phase. This phase shall include a meeting conducted by the CQC system manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC system manager and attached to the daily QC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

**3.7.B.** Initial Phase: This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

**3.7.B.1.** A check of preliminary work to ensure that it is in compliance with contract requirements. Review minutes of the preparatory meeting.

**3.7.B.2.** Verification of full contract compliance. Verify required control inspection and testing.

**3.7.B.3.** Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with sample panels as appropriate.

**3.7.B.4.** Resolve all differences.

**3.7.B.5.** Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.

**3.7.B.6.** The Government shall be notified at least 24 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC system manager and attached to the daily QC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.

**3.7.B.7.** The initial phase should be repeated for each new crew to work on-site, or any time acceptable specified quality standards are not being met.

**3.7.C.** Follow-up Phase: Daily checks shall be performed to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted, and all noted deficiencies corrected, prior to the start of additional features of work that may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

**3.7.D.** Additional Preparatory and Initial Phases: Additional preparatory and initial phases may be required by the Contracting Officer on the same definable features of work if the quality of on-going work is unacceptable; if there are changes in the applicable QC staff or in the on-site production supervision or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop.

### **3.8. TESTS:**

**3.8.A.** Testing Procedure: The Contractor shall perform tests specified or required to verify that control measures are adequate to provide a product that conforms to contract requirements. Upon request, the Contractor shall furnish to the Government duplicate samples of test specimens for possible testing by the Government. Costs incidental to the transportation of samples or materials shall be borne by the Contractor.

**3.8.B.** Testing includes operation and/or acceptance tests when specified. A list of tests to be performed shall be furnished as a part of the CQC plan. The list shall give the test name, frequency, specification paragraph containing the test requirements, the personnel and laboratory responsible for each type of test, and an estimate of the number of tests required. The Contractor shall perform the following activities and record and provide the following data:

**3.8.B.1.** Verify that testing procedures comply with contract requirements.

**3.8.B.2.** Verify that facilities and testing equipment are available and comply with testing standards.

**3.8.B.3.** Check test instrument calibration data against certified standards.

**3.8.B.4.** Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.

**3.8.B.5.** Results of all tests taken, both passing and failing tests, shall be recorded on the Quality Control report for the date taken. Specification paragraph/item reference, location where tests were taken, and the sequential control number identifying the test will be given. Actual test reports may be submitted later, if approved by the Contracting Officer, with a reference to the test number and date taken. An information copy of tests performed by an off-site or commercial test facility will be provided directly to the Contracting Officer. Failure to submit timely test reports, as stated, may result in nonpayment for related work performed and disapproval of the test facility for this contract.

### **3.9. COMPLETION INSPECTION:**

**3.9.A.** Punch-Out Inspection: Near the end of the work, or any increment of the work established by a time stated in the SPECIAL CONTRACT REQUIREMENTS Clause, "Commencement, Prosecution, and Completion of Work", or by the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by paragraph DOCUMENTATION. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Government that the facility is ready for the Government Pre-Final inspection.

**3.9.B.** Pre-Final Inspection: The Government will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. A Government Pre-Final Punch List may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Government, so that a Final inspection with the customer can be scheduled. Any items noted on the Pre-Final inspection shall be corrected in a timely manner. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work if the project is divided into increments by separate completion dates.

**3.9.C.** Final Acceptance Inspection: The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Contracting Officer's Representative shall be in attendance at the final acceptance inspection. Additional Government personnel including, but not limited to, those from Base/Post Civil Facility Engineer user groups, and major commands may also be in attendance. The final acceptance inspection will be formally scheduled by the Contracting Officer based upon results of the Pre-Final inspection. Notice shall be given to the Contracting Officer at least 14 days prior to the final acceptance inspection and shall include the Contractor's assurance that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection. Failure of the Contractor to have all contract work acceptably complete for this inspection will be cause for the Contracting Officer to bill the Contractor for the Government's additional inspection cost in accordance with the contract clause titled "Inspection of Construction".

**3.10. DOCUMENTATION:** The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed.

**3.10.A.** 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:

**3.10.A.1.** Contractor/subcontractor and their area of responsibility.

**3.10.A.2.** Operating plant/equipment with hours worked, idle, or down for repair.

**3.10.A.3.** 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.

**3.10.A.4.** Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified (Preparatory, Initial, Follow-up). List of deficiencies noted, along with corrective action.

**3.10.A.5.** Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawings requirements.

**3.10.A.6.** Submittals and deliverables reviewed, with contract reference, by whom, and action taken.

**3.10.A.7.** Offsite surveillance activities, including actions taken.

**3.10.A.8.** Job safety evaluations stating what was checked, results, and instructions or corrective actions.

**3.10.A.9.** Instructions given/received and conflicts in plans and/or specifications.

**3.10.A.10.** Contractor's verification statement.

**3.10.B.** 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 forty-eight (48) hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC System Manager. The report from the CQC System Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

**3.11. SAMPLE FORMS:** In accordance with Specification 01312 QUALITY CONTROL SYSTEM, the contractor shall use the forms produced by and printed from QCS. Samples of any forms required to meet the requirements of this section which are not produced by that system shall be included in the contractors Quality Control Plan.

**3.12. 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 Section --

01525 - SOHR**SECTION 01525****SAFETY AND OCCUPATIONAL HEALTH REQUIREMENTS****PART 1 GENERAL**

For contractor safety on projects associated with this program, compliance with EM 385-1-1 safety requirements will be the long-term goal reached by growing a safety culture. This compliance will, by necessity, be achieved through a phased-in process. In the Commander's letter at the preface of the EM 385-1-1, he acknowledges that in OCONUS locations, strict compliance with the manual may not be possible – and through the hazard analysis process, safety measures can be developed to attain the same degree of safety.

This specification consists of two parts:

- 1) Sections 1.1 through 3.12.1, which are the standard safety specifications for work in Europe District and;
- 2) Appendix A, Phasing approach for safety in emerging countries where there is little or no national safety standards.

**1.1 REFERENCES**

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

**AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)**

ANSI A10.32	Personal Fall Protection - Safety Requirements for Construction and Demolition Operations
ANSI Z359.1(1992; R 1999)	Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components
ANSI/ASSE A10.34(2001)	Protection of the Public on or Adjacent to Construction Sites
ASME B30.3(1996)	Construction Tower Cranes

**ASME INTERNATIONAL (ASME)**

ASME B30.22(2000)	Articulating Boom Cranes
ASME B30.5(2004)	Mobile and Locomotive Cranes

**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)**

NFPA 10(2002)	Portable Fire Extinguishers
NFPA 241(2000)	Safeguarding Construction, Alteration, and Demolition Operations
NFPA 51B(2003)	Fire Prevention During Welding, Cutting, and Other Hot Work

NFPA 70(2005)	National Electrical Code
NFPA 70E(2004)	Electrical Safety in the Workplace
U.S. ARMY CORPS OF ENGINEERS (USACE)	
EM 385-1-1(2008) Safety	Safety and Health Requirements
U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)	
29 CFR 1910	Occupational Safety and Health Standards (OSHA)
29 CFR 1910.146	Permit-required Confined Spaces
29 CFR 1915	Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment
29 CFR 1919	Gear Certification
29 CFR 1926	Safety and Health Regulations for Construction
29 CFR 1926.500	Fall Protection

## 1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with SR SUBMITTAL PROCEDURES:

- SD-01 Preconstruction Submittals
  - Accident Prevention Plan (APP); G, ACC
  - Activity Hazard Analysis (AHA); G, ACC
  - Crane Critical Lift Plan; G, ACC
  - Proof of qualification for Crane Operators; G, ACC
- SD-06 Test Reports
  - Reports: Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports."
  - Accident Reports
  - Monthly Exposure Reports
  - Crane Reports
  - Regulatory Citations and Violations
- SD-07 Certificates

- Confined Space Entry Permit
- Contractor Safety Self-Evaluation Checklist; G, ACC
- Submit one copy of each permit/certificate attached to each Daily Quality Control Report.

### **1.3 DEFINITIONS**

Competent Person for Fall Protection. A person who is capable of identifying hazardous or dangerous conditions in the personal fall arrest system or any component thereof, as well as their application and use with related equipment, and has the authority to take prompt corrective measures to eliminate the hazards of falling.

- 1) High Visibility Accident. Any mishap which may generate publicity and/or high visibility.
- 2) Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even through provided by a physician or registered personnel.
- 3) Qualified Person for Fall Protection. A person with a recognized degree or professional certificate, extensive knowledge, training and experience in the field of fall protection who is capable of performing design, analysis, and evaluation of fall protection systems and equipment.
- 4) Recordable Injuries or Illnesses. Any work-related injury or illness that results in:
- 5) Death, regardless of the time between the injury and death, or the length of the illness;
  - a. Days away from work (any time lost after day of injury/illness onset);
  - b. Restricted work;
  - c. Transfer to another job;
  - d. Medical treatment beyond first aid;
  - e. Loss of consciousness; or
  - f. A significant injury or illness diagnosed by a physician or other licensed health care professional, even if it did not result in (1) through (6) above.
- 6) "USACE" property and equipment specified in USACE EM 385-1-1 should be interpreted as Government property and equipment.

### **1.4 DRUG PREVENTION PROGRAM**

Conduct a proactive drug and alcohol use prevention program for all workers, prime and subcontractor, on the site. Ensure that no employee uses illegal drugs or consumes alcohol during work hours. Ensure there are no employees under the influence of drugs or alcohol during work hours. After accidents, collect blood, urine, or saliva specimens and test the injured and involved employees for the influence of drugs and alcohol. A copy of the test shall be made available to the Contracting Officer upon request.

### **1.5 REGULATORY REQUIREMENTS**

In addition to the detailed requirements included in the provisions of this contract, work performed shall comply with USACE EM 385-1-1, and in particular, the requirements of the European Union Council Directive 92/57/EEC of 24 June 1992 on the implementation of minimum safety and health requirements at temporary or mobile construction sites. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply.

## **1.6 SITE QUALIFICATIONS, DUTIES AND MEETINGS**

### 1.6.1 Personnel Qualifications

#### 1.6.1.1 Site Safety and Health Officer (SSHO)

Site Safety and Health Officer (SSHO) shall be provided at the work site at all times to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor. The Contractor Quality Control (QC) person can only be the SSHO on this project if approved by the Contracting Officer. Any project exceeding \$1 Million US dollars in value shall have a full time SSHO. The SSHO shall meet the following requirements: A minimum of five (5) years safety work on similar projects; 30-hour OSHA construction safety class or European Union equivalent within the last five (5) years; an average of at least 24 hours of formal safety training each year for the past five (5) years. Competent person training as needed.

#### 1.6.1.2 Competent Person for Confined Space Entry

Provide a competent person meeting the requirements of EM 385-1-1 who is assigned in writing by the Government Designated Authority (GDA) to assess confined spaces and who possesses demonstrated knowledge, skill and ability to:

- 1) Identify the structure, location, and designation of confined and permit-required confined spaces where work is done;
- 2) Calibrate and use testing equipment including but not limited to, oxygen indicators, combustible gas indicators, carbon monoxide indicators, and carbon dioxide indicators, and to interpret accurately the test results of that equipment;
- 3) Perform all required tests and inspections specified in Section 06.I of EM 385-1-1;
- 4) Assess hazardous conditions including atmospheric hazards in confined space and adjacent spaces and specify the necessary protection and precautions to be taken;
- 5) Determine ventilation requirements for confined space entries and operations;
- 6) Assess hazards associated with hot work in confined and adjacent space and determine fire watch requirements; and,
- 7) Maintain records required.

#### 1.6.1.3 Crane Operators

Crane operators shall meet the requirements in USACE EM 385-1-1, Section 16 and Appendix G. In addition, crane operators shall be designated as qualified by a source that qualifies crane operators (i.e., union, a government agency, or and organization that tests and qualifies crane operators). Proof of current qualification shall be provided.

## 1.6.2 Personnel Duties

### 1.6.2.1 Site Safety and Health Officer (SSHO)/Superintendent

- 1) Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection, identified hazards, recommended corrective actions, estimated and actual dates of corrections. Safety inspection logs shall be attached to the Contractors' daily quality control report.
- 2) Conduct mishap investigations and complete required reports. Maintain an accident/injury log such as the OSHA Form 300 or host nation equivalent, and Daily Production reports for prime and sub-contractors.
- 3) Maintain applicable safety reference material on the job site.
- 4) Attend the pre-construction conference, pre-work meetings including preparatory inspection meeting, and periodic in-progress meetings.
- 5) Implement and enforce accepted APPS and AHAs.
- 6) Maintain a safety and health deficiency tracking system that monitors outstanding deficiencies until resolution. A list of unresolved safety and health deficiencies shall be posted on the safety bulletin board.
- 7) Ensure sub-contractor compliance with safety and health requirements.

Failure to perform the above duties will result in dismissal of the superintendent and/or SSHO, and a project work stoppage. The project work stoppage will remain in effect pending approval of a suitable replacement.

## 1.6.3 Meetings

### 1.6.3.1 Preconstruction Conference

- 1) Contractor representatives who have a responsibility or significant role in accident prevention on the project shall attend the preconstruction conference. This includes the project superintendent, site safety and health officer, quality control supervisor, or any other assigned safety and health professionals who participated in the development of the APP (including the Activity Hazard Analyses (AHAs) and special plans, program and procedures associated with it).
- 2) The Contractor shall discuss the details of the submitted APP to include incorporated plans, programs, procedures and a listing of anticipated AHAs that will be developed and implemented during the performance of the contract. This list of proposed AHAs will be reviewed at the conference and an agreement will be reached between the Contractor and the Contracting Officer's representative as to which phases will require an analysis. In addition, a schedule for the preparation, submittal, review, and acceptance of AHAs shall be established to preclude project delays.
- 3) Deficiencies in the submitted APP will be brought to the attention of the Contractor at the preconstruction conference, and the Contractor shall revise the plan to correct deficiencies and re-submit it for acceptance. Work shall not begin until there is an accepted APP.
- 4) The functions of a Preconstruction conference may take place at the Post-Award Kickoff meeting for Design Build Contracts.

### 1.6.3.2 Safety Meetings

Shall be conducted and documented as required by EM 385-1-1. Minutes showing contract title, signatures of attendees and a list of topics discussed shall be attached to the Contractors' daily quality control report.

## 1.7 TRAINING

### 1.7.1 New Employee Indoctrination

New employees (prime and sub-contractor) will be informed of specific site hazards before they begin work. Documentation of this orientation shall be kept on file at the project site.

### 1.7.2 Periodic Training

Provide Safety and Health Training in accordance with USACE EM 385-1-1 and the accepted APP. Ensure all required training has been accomplished for all onsite employees.

### 1.7.3 Training on Activity Hazard Analysis (AHA)

Prior to beginning a new phase, training will be provided to all affected

## 1.8 ACCIDENT PREVENTION PLAN (APP)

The Contractor shall use a qualified person to prepare the written site-specific APP in both English and in the host nation language. Prepare the APP in accordance with the format and requirements of USACE EM 385-1-1 and as supplemented herein. Cover all paragraph and subparagraph elements in USACE EM 385-1-1, Appendix A, "Minimum Basic Outline for Accident Prevention Plan". Specific requirements for some of the APP elements are described below. The APP shall be job-specific and shall address any unusual or unique aspects of the project or activity for which it is written. The APP shall interface with the Contractor's overall safety and health program. Any portions of the Contractor's overall safety and health program referenced in the APP shall be included in the applicable APP element and made site-specific. The Government considers the Prime Contractor to be the "controlling authority" for all work site safety and health of the subcontractors. Contractors are responsible for informing their subcontractors of the safety provisions under the terms of the contract and the penalties for noncompliance, coordinating the work to prevent one craft from interfering with or creating hazardous working conditions for other crafts, and inspecting subcontractor operations to ensure that accident prevention responsibilities are being carried out. The APP shall be signed by the person and firm (senior person) preparing the APP, the Contractor, the on-site superintendent, the designated site safety and health officer.

Submit the APP to the Contracting Officer 15 calendar days prior to the date of the preconstruction conference for acceptance. Work cannot proceed without an accepted APP.

Once accepted by the Contracting Officer, the APP and attachments will be enforced as part of the contract. Disregarding the provisions of this contract or the accepted APP will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

Once work begins, changes to the accepted APP shall be made with the knowledge and concurrence of the Contracting Officer, project superintendent, SSHO and quality control manager. Should any hazard become evident, stop work in the area, secure the area, and develop a plan to remove the hazard. Notify the Contracting Officer within 24 hours of discovery. In the interim, all necessary action shall be taken to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public, and the environment.

Copies of the accepted plan will be maintained at the Contracting Officer's office and at the job site.

The APP shall be continuously reviewed and amended, as necessary, throughout the life of the contract. Unusual or high-hazard activities not identified in the original APP shall be incorporated in the plan as they are discovered.

#### 1.8.1 EM 385-1-1 Contents

In addition to the requirements outlines in Appendix A of USACE EM 385-1-1, the following is required:

- 1) Names and qualifications (resumes including education, training, experience and certifications) of all site safety and health personnel designated to perform work on this project to include the designated site safety and health officer and other competent and qualified personnel to be. The duties of each position shall be specified.
- 2) Qualifications of competent and of qualified persons. As a minimum, competent persons shall be designated and qualifications submitted for each of the following major areas: excavation; scaffolding; fall protection; hazardous energy; confined space; health hazard recognition, evaluation and control of chemical, physical and biological agents; personal protective equipment and clothing to include selection, use and maintenance.
- 3) Confined Space Entry Plan. Develop a confined space entry plan in accordance with USACE EM 385-1-1, Section 06.I, and any other federal, state and local regulatory requirements identified in this contract. Identify the qualified person's name and qualifications, training, and experience. Delineate the qualified person's authority to direct work stoppage in the event of hazardous conditions. Include procedure for rescue by contractor personnel and the coordination with emergency responders. (If there is no confined space work, include a statement that no confined space work exists and none will be created.)
- 4) Crane Critical Lift Plan. Prepare and sign weight handling critical lift plans for lifts over 75 percent of the capacity of the crane or hoist (or lifts over 50 percent of the capacity of a barge mounted mobile crane's hoists) at any radius of lift; lifts involving more than one crane or hoist; lifts of personnel; and lifts involving non-routine rigging or operation, sensitive equipment, or unusual safety risks. The plan shall be submitted 15 calendar days prior to on-site work and include the requirements of USACE EM 385-1-1, paragraph 16.C.18. and the following:
  - a. For lifts of personnel, the plan shall demonstrate compliance with the requirements of EM 385-1-1, Section 22.F.
  - b. For barge mounted mobile cranes, barge stability calculations identifying barge list and trim based on anticipated loading; and load charts based on calculated list and trim. The amount of list and trim shall be within the crane manufacturer's requirements.
- 5) Fall Protection and Prevention (FP&P) Plan. The plan shall be site specific and address all fall hazards in the work place and during different phases of construction. It shall address how to protect and prevent workers from falling to lower levels when they are exposed to fall hazards above 1.8 m (6 feet). A qualified person for fall protection shall prepare and sign the plan. The plan shall include fall protection and prevention systems, equipment and methods employed for every phase of work, responsibilities, assisted rescue, self-rescue and evacuation procedures, training requirements, and monitoring methods. Fall Protection and Prevention Plan shall be revised every six months for lengthy projects, reflecting any changes during the course of construction due to changes in personnel, equipment, systems or work habits. The accepted Fall Protection and Prevention Plan shall be kept and maintained at the job site for the duration of the

project. The Fall Protection and Prevention Plan shall be included in the Accident Prevention Plan (APP).

### **1.9 ACTIVITY HAZARD ANALYSIS (AHA)**

The Activity Hazard Analysis (AHA) format shall be in accordance with USACE EM 385-1-1, and shall be written in both English and the host nation language. Submit the AHA for review at least 15 calendar days prior to the start of each phase. Format subsequent AHAs as amendments to the APP. The analysis should be used during daily inspections to ensure the implementation and effectiveness of the activity's safety and health controls.

The AHA list will be reviewed periodically (at least monthly) at the Contractor supervisory safety meeting and updated as necessary when procedures, scheduling, or hazards change.

The activity hazard analyses shall be developed using the project schedule as the basis for the activities performed. Any activities listed on the project schedule will require an AHA. The AHAs will be developed by the contractor, supplier or subcontractor and provided to the prime contractor for submittal to the Contracting Officer.

### **1.10 DISPLAY OF SAFETY INFORMATION**

Within 1 calendar day after commencement of work, erect a safety bulletin board at the job site. The safety bulletin board shall include information and be maintained as required by EM 385-1-1, section 01.A.06.

### **1.11 SITE SAFETY REFERENCE MATERIALS**

Maintain safety-related references applicable to the project. Maintain applicable equipment manufacturer's manuals.

### **1.12 EMERGENCY MEDICAL TREATMENT**

Contractors will arrange for their own emergency medical treatment. The Government has no responsibility to provide emergency medical treatment. Military medical clinics may provide emergency treatment for serious injuries; the contractor is responsible for coordination with the local military medical clinic prior to mobilization.

### **1.13 REPORTS**

#### **1.13.1 Accident Reports**

For recordable injuries and illnesses, and property damage accidents resulting in at least \$2,000 in damages, the Prime Contractor shall conduct an accident investigation to establish the root cause(s) of the accident, complete the USACE Accident Report Form 3394 and provide the report to the Contracting Officer within five (5) calendar day(s) of the accident. The Contracting Officer will provide copies of any required or special forms.

#### **1.13.2 Accident Notification**

Notify the Contracting Officer as soon as practical, but not later than four hours, after any accident meeting the definition of Recordable Injuries or Illnesses or High Visibility Accidents, property damage equal to or greater than \$2,000. Information shall include contractor name; contract title; type of contract; name of activity, installation or location where accident occurred; date and time of accident; names of personnel injured; extent of property damage, if any; extent of injury, if known, and brief description of accident (to include type of construction equipment used, PPE used, etc.). Preserve the conditions and evidence on the accident site until the Government investigation team arrives on-site and Government investigation is conducted.

#### 1.13.3 Monthly Exposure Reports

Monthly exposure reporting to the Contracting Officer is required to be attached to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both prime and subcontractor. The Contracting Officer will provide copies of any special forms.

#### 1.13.4 Crane Reports

Submit crane inspection reports required in accordance with USACE EM 385-1-1, Appendix H and as specified herein with Daily Reports of Inspections.

### 1.14 HOT WORK

Prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame-producing/spark producing devices, a written permit shall be requested from the Installation. CONTRACTORS ARE REQUIRED TO MEET ALL CRITERIA BEFORE A PERMIT IS ISSUED. The Contractor will provide at least two (2) six kilogram ABC rated extinguishers for normal "Hot Work". All extinguishers shall be current inspection tagged, approved safety pin and tamper resistant seal. It is also mandatory to have a designated FIRE WATCH for any "Hot Work" done at this activity. The Fire Watch shall be trained in fire fighting techniques and remain on-site for a minimum of 120 minutes after completion of the task or as specified on the hot work permit.

When starting work in the facility, Contractors shall require their personnel to familiarize themselves with the location of the nearest fire alarm boxes and place in memory the emergency phone numbers. ANY FIRE, NO MATTER HOW SMALL, SHALL BE REPORTED TO THE RESPONSIBLE FIRE DIVISION/DEPARTMENT IMMEDIATELY.

## PART 2 PRODUCTS

Not used for this project.

## PART 3 EXECUTION

### 3.1 CONSTRUCTION AND/OR OTHER WORK

Before initiation of work at the job site, an accident prevention plan, written by the Contractor for the specific work and hazards of the contract and implementing in detail the pertinent requirements of EM 385-1-1, will be reviewed and found acceptable by designated Government personnel. Specific requirements for development of the accident prevention plan are found in sections 01.A and Appendix A of EM 385-1-1.

Before beginning each activity involving a type of work presenting hazards not experienced in previous project operations or where a new work crew or subcontractor is to perform the work, activity hazard analysis (AHA) shall be prepared by the Contractor performing the work activity. See paragraph 01.A.09 of EM 385-1-1.

The Contractor shall require subcontractors to submit their plan of operations showing methods they propose to use in accomplishing major phases of work.

The Contractor shall be prepared to discuss the plans in conferences convened by the Contracting Officer prior to starting work on each major phase of operation. Plans shall include all pertinent information such as layout of haul roads, access roads, storage areas, electrical distribution lines, methods of providing minimum exposure to overhead loads, and methods of access to work areas. The plan for accomplishing the initial work phase shall be submitted within 15 calendar days after award of the contract. Plans for subsequent major phases of work shall be submitted not later than 15 calendar days prior to initiation of work on each major phase.

All areas where construction, demolition, alteration, building, or similarly related activities take place, all workers shall have the following minimum personal protective clothing and equipment:

- 1) Short sleeve shirt.
- 2) Long trousers.
- 3) Steel-toed safety boots.
- 4) Hard hat.

### 3.1.1 Falling Object Protection

All areas must be barricaded to safeguard employees. When working overhead, barricade the area below to prevent entry by unauthorized employees. Construction warning tape and signs shall be posted so they are clearly visible from all possible access points. When employees are working overhead all tools and equipment shall be secured so that they will not fall. When using guardrail as falling object protection, all openings shall be small enough to prevent passage of potential falling objects.

### 3.1.2 Hazardous Material Use

Each hazardous material must receive approval prior to being brought onto the job site or prior to any other use in connection with this contract. Allow a minimum of ten (10) working days for processing of the request for use of a hazardous material. Any work or storage involving hazardous chemicals or materials must be done in a manner that will not expose Government or Contractor employees to any unsafe or unhealthful conditions. Adequate protective measures must be taken to prevent Government or Contractor employees from being exposed to any hazardous condition that could result from the work or storage. The Prime Contractor shall keep a complete inventory of hazardous materials brought onto the work-site. Approval by the Contracting Officer of protective measures and storage area is required prior to the start of the work.

### 3.1.3 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with USACE EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials.

### 3.1.4 Unforeseen Hazardous Material

The design should have identified materials such as PCB, lead paint, and friable and non-friable asbestos. If material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer

immediately. Within fourteen (14) calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions."

### **3.2 FALL HAZARD PROTECTION AND PREVENTION PROGRAM**

The Contractor shall establish a fall protection and prevention program, for the protection of all employees exposed to fall hazards. The program shall include company policy, identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection, storage, care and maintenance of fall protection equipment and rescue and evacuation procedures.

#### **3.2.1 Training**

The Contractor shall institute a fall protection training program. As part of the Fall Hazard Protection and Prevention Program, the Contractor shall provide training for each employee who might be exposed to fall hazards. A competent person for fall protection shall provide the training. Training requirements shall be in accordance with USACE EM 385-1-1, section 21.A.16.

#### **3.2.2 Fall Protection Equipment and Systems**

The Contractor shall enforce use of the fall protection equipment and systems designated for each specific work activity in the Fall Protection and Prevention Plan and/or AHA at all times when an employee is exposed to a fall hazard. Employees shall be protected from fall hazards as specified in EM 385-1-1, section 21. In addition to the required fall protection systems, safety skiff, personal floatation devices, life rings etc., are required when working above or next to water in accordance with USACE EM 385-1-1, paragraphs 05.H. and 05.I. Personal fall arrest systems are required when working from an articulating or extendible boom, swing stages, or suspended platform. In addition, personal fall arrest systems are required when operating other equipment such as scissor lifts if the work platform is capable of being positioned outside the wheelbase. The need for tying-off in such equipment is to prevent ejection of the employee from the equipment during raising, lowering, or travel. Fall protection must comply with USACE EM 385-1-1 and host nation requirements, whichever is more stringent.

##### **3.2.2.1 Personal Fall Arrest Equipment**

Personal fall arrest equipment, systems, subsystems, and components shall meet ANSI Z359.1 or European Union equivalent. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Body belts may only be used as a positioning device system (for uses such as steel reinforcing assembly and in addition to an approved fall arrest system). Harnesses shall have a fall arrest attachment affixed to the body support (usually a Dorsal D-ring) and specifically designated for attachment to the rest of the system. Only locking snap hooks and carabiners shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 1.8 m (6 feet). The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration when attaching a person to a fall arrest system.

##### **3.2.3 Fall Protection for Roofing Work**

Fall protection controls shall be implemented based on the type of roof being constructed and work being performed. The roof area to be accessed shall be evaluated for its structural integrity including weight-bearing capabilities for the projected loading.

- 1) Low Sloped Roofs:
  - a. For work within 1.8 m (6 feet) of an edge, on low-slope roofs, personnel shall be protected from falling by use of personal fall arrest systems, guardrails, or safety nets. A safety monitoring system is not adequate fall protection and is not authorized.
  - b. For work greater than 1.8 m (6 feet) from an edge, warning lines shall be erected and installed in accordance with USACE EM 385-1-1.
- 2) Steep-Sloped Roofs: Work on steep-sloped roofs requires a personal fall arrest system, guardrails with toe-boards, or safety nets. This requirement also includes residential or housing type construction.

#### 3.2.4 Existing Anchorage

Existing anchorages, to be used for attachment of personal fall arrest equipment, shall be certified (or re-certified) by a qualified person for fall protection in accordance with ANSI Z359.1 or European Union equivalent. Existing horizontal lifeline anchorages shall be certified (or re-certified) by a registered professional engineer with experience in designing horizontal lifeline systems.

#### 3.2.5 Horizontal Lifelines

Horizontal lifelines shall be designed, installed, certified and used under the supervision of a qualified person for fall protection as part of a complete fall arrest system which maintains a safety factor of 2.

#### 3.2.6 Guardrails and Safety Nets

Guardrails and safety nets shall be designed, installed and used in accordance with EM 385-1-1 or Host Nation requirements, whichever is more stringent.

#### 3.2.7 Rescue and Evacuation Procedures

When personal fall arrest systems are used, the contractor must ensure that the mishap victim can self-rescue or can be rescued promptly should a fall occur. A Rescue and Evacuation Plan shall be prepared by the contractor and include a detailed discussion of the following: methods of rescue; methods of self-rescue; equipment used; training requirement; specialized training for the rescuers; procedures for requesting rescue and medical assistance; and transportation routes to a medical facility. The Rescue and Evacuation Plan shall be included in the Activity Hazard Analysis (AHA) for the phase of work, in the Fall Protection and Prevention (FP&P) Plan, and the Accident Prevention Plan (APP).

### 3.3 SCAFFOLDING

Employees shall be provided with a safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Access to scaffold platforms greater than 6 m in height shall be accessed by use of a scaffold stair system. Vertical ladders commonly provided by scaffold system manufacturers shall not be used for accessing scaffold platforms greater than 6 m in height. The use of an adequate gate is required. Contractor shall ensure that employees are qualified to perform scaffold erection and dismantling. Do not use scaffold without the capability of supporting at least four times the maximum intended load or without appropriate fall protection as delineated in the accepted fall protection and prevention plan. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward. Special care shall be given to ensure scaffold systems are not overloaded. Side brackets used to extend scaffold

platforms on self-supported scaffold systems for the storage of material is prohibited. The first tie-in shall be at the height equal to 4 times the width of the smallest dimension of the scaffold base. Work platforms shall be placed on mud sills. Scaffold or work platform erectors shall have fall protection during the erection and dismantling of scaffolding or work platforms that are more than six feet. Delineate fall protection requirements when working above six feet or above dangerous operations in the Fall Protection and Prevention (FP&P) Plan and Activity Hazard Analysis (AHA) for the phase of work.

### **3.4 EQUIPMENT**

#### **3.4.1 Material Handling Equipment**

- 1) Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufacturer's printed operating instructions.
- 2) The use of hooks on equipment for lifting of material must be in accordance with manufacturer's printed instructions.
- 3) Operators of forklifts or power industrial trucks shall be trained/licensed in accordance with Host Nation requirements.

#### **3.4.2 Weight Handling Equipment**

- 1) Cranes and derricks shall be equipped as specified in EM-385-1-1 section 16.
- 2) The Contractor shall notify the Contracting Officer 15 days in advance of any cranes entering the activity so that necessary quality assurance spot checks can be coordinated. Contractor's operator shall remain with the crane during the spot check.
- 3) The Contractor shall comply with the crane manufacturer's specifications and limitations for erection and operation of cranes and hoists used in support of the work. Erection shall be performed under the supervision of a designated person. All testing shall be performed in accordance with the manufacturer's recommended procedures.
- 4) Under no circumstance shall a Contractor make a lift at or above 90% of the cranes rated capacity in any configuration.
- 5) When operating in the vicinity of overhead transmission lines, operators and riggers shall be alert to this special hazard and shall follow the requirements of USACE EM 385-1-1 section 11.
- 6) Crane suspended personnel work platforms (baskets) shall not be used unless the Contractor proves to the satisfaction of the Contracting Officer that using any other access to the work location would provide a greater hazard to the workers or is impossible. Personnel shall not be lifted with a line hoist or friction crane.
- 7) Portable fire extinguishers shall be inspected, maintained, and recharged.
- 8) All employees shall be kept clear of loads about to be lifted and of suspended loads.
- 9) The Contractor shall use cribbing when performing lifts on outriggers.
- 10) The crane hook/block must be positioned directly over the load. Side loading of the crane is prohibited.

- 11) A physical barricade must be positioned to prevent personnel from entering the counterweight swing (tail swing) area of the crane.
- 12) Certification records which include the date of inspection, signature of the person performing the inspection, and the serial number or other identifier of the crane that was inspected shall always be available for review by Contracting Officer personnel.
- 13) Written reports listing the load test procedures used along with any repairs or alterations performed on the crane shall be available for review by Contracting Officer personnel.
- 14) Certify that all crane operators have been trained in proper use of all safety devices (e.g. anti-two block devices).
- 15) Take steps to ensure that wind speed does not contribute to loss of control of the load during lifting operations. Prior to conducting lifting operations the contractor shall set a maximum wind speed at which a crane can be safely operated based on the equipment being used, the load being lifted, experience of operators and riggers, and hazards on the work site. This maximum wind speed determination shall be included as part of the activity hazard analysis plan for that operation.

### **3.5 EXCAVATIONS**

The competent person for excavations performed as a result of contract work shall be on-site when excavation work is being performed, and shall inspect, and document the excavations daily prior to entry by workers. The competent person must evaluate all hazards, including atmospheric, that may be associated with the work, and shall have the resources necessary to correct hazards promptly.

#### **3.5.1 Utility Locations**

Prior to any excavation, all underground utilities in the work area must be positively identified by the contractor utilizing a) a private utility locating service in addition to any station locating service, and/or b) a metal and/or cable-detecting device along the route of the excavation. All underground utilities discovered will be flagged a distance of one-half (1/2) meter on each side of the location, and any markings made during the utility investigation must be maintained throughout the contract.

Damage occurring to existing utilities, when the above procedures are not followed, will be repaired at the Contractor's expense.

#### **3.5.2 Utility Location Verification**

The Contractor must physically verify underground utility locations by hand digging using wood or fiberglass handled tools when any adjacent construction work is expected to come within three feet of the underground system. Digging within 0.61 m (2 feet) of a known utility must not be performed by means of mechanical equipment; hand digging shall be used. If construction is parallel to an existing utility the utility shall be exposed by hand digging every 30.5 m (100 feet) if parallel within 1.5 m (5 feet) of the excavation.

#### **3.5.3 Shoring Systems**

Trench and shoring systems must be identified in the accepted safety plan and AHA. Manufacturer tabulated data and specifications or registered engineer tabulated data for shoring or benching systems shall be readily available on-site for review. Job-made shoring or shielding shall have the registered professional engineer stamp, specifications, and tabulated data. Extreme care must be used when excavating near direct burial electric underground cables.

### 3.5.4 Trenching Machinery

Trenching machines with digging chain drives shall be operated only when the spotters/laborers are in plain view of the operator. Operator and spotters/laborers shall be provided training on the hazards of the digging chain drives with emphasis on the distance that needs to be maintained when the digging chain is operating. Documentation of the training shall be kept on file at the project site.

## 3.6 UTILITIES WITHIN CONCRETE SLABS

Utilities located within concrete slabs or pier structures, bridges, and the like, are extremely difficult to identify due to the reinforcing steel used in the construction of these structures. Whenever contract work involves concrete chipping, saw cutting, or core drilling, the existing utility location must be coordinated with station utility departments in addition to a private locating service. Outages to isolate utility systems shall be used in circumstances where utilities are unable to be positively identified. The use of historical drawings does not alleviate the contractor from meeting this requirement.

## 3.7 ELECTRICAL

### 3.7.1 Conduct of Electrical Work

Underground electrical spaces must be certified safe for entry before entering to conduct work. Cables that will be cut must be positively identified and de-energized prior to performing each cut. Positive cable identification must be made prior to submitting any outage request for electrical systems. Arrangements are to be coordinated with the Contracting Officer and Station Utilities for identification. The Contracting Officer will not accept an outage request until the Contractor satisfactorily documents that the circuits have been clearly identified. Perform all high voltage cable cutting remotely using hydraulic cutting tool. When racking in or live switching of circuit breakers, no additional person other than the switch operator will be allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method. When working in energized substations, only qualified electrical workers shall be permitted to enter. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personal protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. In addition, provide electrical arc flash protection for personnel as required by NFPA 70E. Insulating blankets, hearing protection, and switching suits may also be required, depending on the specific job and as delineated in the Contractor's AHA.

### 3.7.2 Portable Extension Cords

Portable extension cords shall be sized in accordance with manufacturer ratings for the tool to be powered and protected from damage. All damaged extension cords shall be immediately removed from service. Portable extension cords shall meet the requirements of NFPA 70 or European Union equivalent.

## 3.8 WORK IN CONFINED SPACES

The Contractor shall comply with the requirements in Section 06.1 of USACE EM 385-1-1. Any potential for a hazard in the confined space requires a permit system to be used.

- 1) Entry Procedures. Prohibit entry into a confined space by personnel for any purpose, including hot work, until the qualified person has conducted appropriate tests to ensure the confined or enclosed space is safe for the work intended and that all potential hazards are controlled or eliminated and documented. (See Section 06.I.06 of USACE EM 385-1-1 for entry procedures). All hazards pertaining to the space shall be reviewed with each employee during review of the AHA.
- 2) Forced air ventilation is required for all confined space entry operations and the minimum air exchange requirements must be maintained to ensure exposure to any hazardous atmosphere is kept below its' action level.
- 3) Ensure the use of rescue and retrieval devices in confined spaces greater than 1.5 m (5 feet) in depth. Conform to Sections 06.I.08, 06.I.09 and 06.I.10 of USACE EM 385-1-1.
- 4) Sewer wet wells require continuous atmosphere monitoring with audible alarm for toxic gas detection.
- 5) Include training information for employees who will be involved as entrants and attendants for the work. Conform to Section 06.I.07 of USACE EM 385-1-1.
- 6) Daily Entry Permit. Post the permit in a conspicuous place close to the confined space entrance.

### **3.9 CRYSTALLINE SILICA**

Grinding, abrasive blasting, and foundry operations of construction materials containing crystalline silica, shall comply with USACE EM 385-1-1, Appendix C. The Contractor shall develop and implement effective exposure control and elimination procedures to include dust control systems, engineering controls, and establishment of work area boundaries, as well as medical surveillance, training, air monitoring, and personal protective equipment.

### **3.10 DEMOLITION**

#### **3.10.1 Demolition Plan**

The Contractor shall submit a written demolition plan for all demolition work to be carried on the site. In addition, the demolition plan shall be signed by a Professional Registered Engineer and meet the requirements of the Corps of Engineers Safety and Health Manual, EM 385-1-1, section 23. The demolition plan shall be submitted to the COR at least 1 week before the beginning of the work, including structural calculations for the demolition, if necessary. The demolition work shall not begin before the Contractor has received a written approval from the COR.

#### **3.10.2 Protection of Personnel**

During the demolition work the Contractor shall continuously evaluate the condition of the structure being demolished and take immediate action to protect all personnel working in and around the demolition site. No area, section, or component of floors, roofs, walls, columns, pilasters, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workers remove debris or perform other work in the immediate area.

#### **3.10.3 Protection of Structures**

Floors, roofs, walls, columns, pilasters, and other structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, shall remain standing without additional bracing, shoring, or lateral support until demolished, unless directed

otherwise by the COR. The Contractor shall ensure that no elements determined to be unstable are left unsupported and shall be responsible for placing and securing bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, or demolition work performed under this contract.

Interior concrete or masonry walls shall be demolished from the top down unless a Registered Engineer can demonstrate that an alternate method poses no additional safety hazards

### **3.11 HOUSEKEEPING**

#### **3.11.1 Clean-Up**

The Contractor shall be responsible for cleaning up. The Contractor shall require his personnel to keep the immediate work site clean of all dirt and debris resulting from work under this contract. Accumulated dirt and debris shall be hauled off and disposed of in accordance with local law and at least once a week by the Contractor. Additionally, all debris in work areas shall be cleaned up daily or more frequently if necessary. Construction debris may be temporarily located in an approved location; however garbage accumulation must be removed each day.

Stairwells used by the Contractor during execution of work shall be cleaned daily. Cloths, mops, and brushes containing combustible materials shall be disposed of or stored outside of the buildings in tight covered metal containers. Paints and thinners shall not be poured into inlets of the interior or exterior sewage system. Paint, stains, and other residues on adjacent surfaces or fixtures caused by the Contractor shall be carefully removed and cleaned to original finish. Upon completion of the work, the Contractor shall remove all construction equipment, materials and debris resulting from the work. The entire work site and the area used by Contractor personnel shall be left clean.

- End of Section -

**STR 015250 - SAFETY AND OCCUPATIONAL HEALTH PHASING PLAN****1. PURPOSE AND RESPONSIBILITIES:**

- a. The purpose of this SOH Phasing Plan is to establish controls and procedures to reduce the safety and occupational health risks on associated projects to an acceptable level. This SOH Phasing Plan is not intended to address all program SOH requirements, but provides general emphasis to certain procedures and requirements addressed in: EM 385-1-1, U.S. Army Corps of Engineers Safety and Health Requirements Manual
- b. For contractor safety on projects associated with this program, compliance with EM 385-1-1 safety requirements will be the long-term goal reached by growing a safety culture. This compliance will, by necessity, be achieved through a phased-in process. In the Commander's letter at the preface of the EM 385-1-1, he acknowledges that in OCONUS locations, strict compliance with the manual may not be possible – and through the hazard analysis process, safety measures can be developed to attain the same degree of safety.
  - i. The exact timeline and methods of compliance, based generally on the Phase plan below will be determined by in-theater Project Delivery Team (PDT) partners responsible for safety, to include USACE Field Engineering/Construction/ Safety personnel, Prime Contractors and Local Subcontractors. The Prime Contractor, in partnership with the USACE and subcontractors, will develop a Safety and occupational Health Plan (SOHP) consisting of a specific Accident Prevention Plan (APP) and Activity Hazard Analysis for each project.
  - ii. Each project SOHP will evolve as a living document, starting by dividing into phases to provide a goal with a timeline. Focus for the project safety program areas will be based on the following time-based phases.
    1. Phase I: "Saving Lives". Establish achievable compliance methods and basic worker safety education to eliminate or reduce to an acceptable level the life-threatening conditions associated with high hazard construction activities.
      - a. The initial high-hazard focus areas shall include:
        - i. Excavations
        - ii. Fall Hazards
        - iii. Electrical Work
        - iv. Mobile Construction Equipment
        - v. Machinery
        - vi. Confined Spaces
      - b. Develop a basic worker safety and health practices manual/ guide and associated mandatory training for each Focus area listed above. These will be in English and local language, based on local conditions and practices and targeted at high-hazard activities.
      - c. On all contract sites, the basic life-support will include First Aid Kits, and emergency communication.

- d. Contractor Accident Prevention Plans, Activity Hazard Analyses, and other safety-related systems under development with assistance by PDT
2. Phase II: "Building A Safety Culture" (Approximately one year, beginning at end of Phase I) Advanced safety education of local contractors and LN work force. Full contractor compliance with USACE safety standards related to high-hazard situations, increased application of standards on all work.
    - a. Workforce education and training to include all applicable requirements of EM 385-1-1 and International Safety Standards
    - b. All required Personal Protective Equipment (PPE) available and used by workers in applicable work practices, as outlined in the EM 385-1-1.
    - c. Contractor Accident Prevention Plans, Activity Hazard Analyses, and other safety-related systems refined to meet standard USACE expectations with assistance by PDT
    - d. Standard Contractor Safety administrative responsibilities required, i.e.: Accident reporting, man-hour tracking, training documentation, First Aid personnel certification, fire protection, etc.
  3. Phase III, "Full Performance" (beginning at end of Phase II) Full performance in compliance with EM 385-1-1 and other applicable laws, regulations, design codes and standards.
    - a. Where standard compliance is not possible, local methods may be used in accordance with implementing letter of EM 385-1-1 or through formal waiver process.
  - c. The PDT shall employ the "Plan, Do, Check, Act" process for implementing this SOHP as a living document. Each PDT member is responsible for planning for safety and health management within their area of responsibility, implementing agreed-on mitigation, checking to assure that the SOHP is being implemented and acting to adjust plans and implementation with a goal of continuous improvement. This plan will be reviewed and revised as needed at the initiation of each Phase listed above.
  - d. The PDT members shall cooperate in developing a listing of potential hazards associated with each project.

## 2. GOALS AND OBJECTIVES:

- a. Goals. The safety and health goals of all projects are:
  - i. Be accident free
  - ii. Detect and address safety and health problems early in the life of each project
  - iii. Do not accept unnecessary risk
  - iv. Every team member, to include contractors shall contribute to the safety and health of their fellow team members and assure that the product is free of inherent hazards to the user.
  - v. Educate the workforce and promote Safety as a new way of doing business, show how the project and the employee benefit from Safety.

- b. Objectives. The safety and health objectives of this program are:
  - i. Managers, supervisors, and workers shall be held accountable, based on the current Phase, for safety and health.
  - ii. Safety and health expectations shall be communicated with the work force in their native language through the use of banners, flyers, and periodic safety meetings
  - iii. The work force shall have the safety and health training needed to perform the work at hand, based on the Phase.
  - iv. Injury and property damage shall be avoided through early detection and management of hazards
- c. Phase I Interim Safety and Occupational Health Work Practices for USACE Contractor Projects
- d. Phase I Safety Program
  - i. Contractors shall strive to maintain full compliance with the USACE Safety Requirements Manual, EM 385-1-1. This may not be easily achieved during this Phase, due to a number of factors. The focus for safety and health efforts during this Phase is Saving Lives – the prevention of deaths, permanently disabling injuries, and major property loss. The goal during this period is to provide the equipment and methods needed to save lives and to train the workforce in working safely and using the correct personal Protective Equipment (PPE).
  - ii. In order to assist in achieving this goal immediately, the following interim standards shall be used (as a minimum acceptable standard) when full compliance with the EM 385-1-1 is not possible. Contractor shall provide these standards in to their workforce in the local language and shall provide training as needed to ensure worker awareness.

### **BASIC SAFETY AND HEALTH STANDARDS FOR CONSTRUCTION**

- 1) In order to assist in achieving this goal immediately, the following interim standards shall be used (as a minimum acceptable standard) when full compliance with the EM 385-1-1 is not possible. Contractors shall provide these standards in to their workforce in the local language and shall provide training as USACE and the contractors must form a team to assure safety on every job site and prevent serious accidents. All unsafe conditions must be reported and the hazard reduced before work may proceed.
- 2) Personal Protective Equipment (PPE) may not always be available to every worker during this Phase. Where the equipment required by the USACE Safety Manual, EM 385-1-1, cannot be provided in a timely manner, the contractor shall develop methods that will provide a similar degree of safety (as accepted by USACE) and not expose the workers to serious risk. The mandatory minimum standards for all PPE are:
  - a) Footwear: Closed-toe durable shoes or boots shall be worn by all workers on the project site. No sandals or sports shoes will be allowed, at no time will workers be allowed on the project site with bare feet. Safety footwear (steel-toe or other protection) should be worn by workers using steel rollers, tampers, jack hammers or carrying heavy objects (metal, concrete, stone)
  - b) Head Protection: When they are available, hard hats should be worn by all construction workers when they are at the project. Hard Hats must be worn in overhead hazard areas including material hoisting/ lifting operations, areas below scaffolds and other elevated work, in excavations, and low ceiling areas that have sharp or hazardous projections. If they are not available, then workers must be kept away from these and other overhead hazard areas.

- c) Respirators: Workers exposed to toxic chemicals, vapors, gases and dusts must wear proper respiratory protection. Such exposure is expected in asbestos removal/ repair work, working with paints and solvents in rooms or enclosed spaces, and fuel production facilities. The employer must train the workers in the uses of the respirator and how to properly wear it. The minimum acceptable respirator is a negative pressure filter or cartridge half-face respirator that is correctly equipped for the hazard. Contractors shall consult and follow the ACGIH guidance for length of allowable exposure to the contaminant and workers shall not exceed the recommended time for exposure. Dust Masks will be worn when the work is producing visible dust.
  - d) Eye Protection: Workers shall wear protective glasses, goggles, or visors when exposed to eye hazards. These hazards include concrete dust, stone and concrete chips from hammering, sandblasting, and power tool cutting or milling. Workers performing welding and cutting with torches or arc-welding equipment shall wear the proper shaded lenses in face shields and/ or goggles.
  - e) Hearing Protection: Protective ear plugs shall be worn when workers are exposed to potentially damaging noise including jack hammers, flight line operations, power saws and grinders, and combustion engines without mufflers.
  - f) Gloves: All workers shall have protective gloves appropriate to the task.
  - g) Clothing: Workers shall wear clothing that protects their skin from damage – shirts and long pants at a minimum. Workers exposed to welding operations, chemicals, abrasive blasting, wet concrete, asbestos, and other hazardous contaminants will wear appropriate clothing for the hazard. Workers using power tools or operating equipment shall not wear very loose or flowing clothing that may get caught in the equipment.
- 3) Work Methods for Highly Hazardous Work: The following types of work and hazards are recognized as the leading cause of serious injuries and deaths in construction work. Each type of work has specific PPE and safety equipment that is required to do the work and also specific procedures that must be followed every time the work is done. These interim measures are the minimum acceptable precautions. For each project, an Activity Hazard Analysis (AHA) shall be completed and, when possible, compliance with more restrictive methods of the EM 385-1-1 shall be achieved.

Workers shall be trained on the following safety precautions, the nature of the hazards involved, and any additional work methods used before performing each type of work

- a) Excavations
  - i) The Site Safety and Health Officer will be contacted for inspection of the work prior to digging. The SSHO will assist in any safety equipment or techniques that are required to avoid injury. They will also provide a safety check on the location to assure there are no underground hazards at the site.
  - ii) All excavations or unsafe areas will be marked with barricades or warning tape. These warnings must be maintained and visible until the area is restored to a safe condition.
  - iii) When workers will enter trenches, the walls shall be sloped according to the type of soil or shoring, trench boxes, or other structures will be used to protect workers from collapsing walls
  - iv) Soil removed from trenches will not be placed at the edge of the trench – it must be placed back at least 1 meter from the edge.
  - v) Vehicles and construction equipment must not be parked closer than 2 meters from the edge of an excavation.
  - vi) Excavation walls shall be inspected regularly during each day to check for cracks, bulges, large stones, sandy areas, and failure of the wall. If these conditions are found, nobody may enter the excavation and the damaged area must be dug out or braced.
- b) Fall Hazards
  - i) When working above 2 meters from the ground or another level, all workers shall be protected from falling. The SSHO will inspect prior to beginning work to be sure the work

- methods are safe. Inspection will include work on ladders, scaffolds, and other elevated work areas.
- ii) Protection systems shall be sturdy railings, walls, or other structures
  - iii) If there are no structures to protect workers, body belts or harnesses shall be used along with lanyards.
  - iv) Body belts should be mainly be used only to prevent a worker from falling over an edge or off a structure.
  - v) Body belts and harnesses can both be used as fall protection (stopping a falling worker). The lanyard shall be rope strong enough to withstand the shock of stopping the worker's weight, and they shall be as short as possible, to limit the shock force. Lanyards shall never allow a worker to fall more than 2 meters. It is recommended that lanyards without shock absorber devices be no longer than 1 meter.
- c) Electrical Work
- i) All circuits, wires, and electrical devices shall be tested with a volt meter and found to be de-energized before workers touch the energized parts
  - ii) Controls, switches, and other means for energizing the circuit or equipment shall be tagged "do not operate"
  - iii) Workers shall not work closer to energized systems than the distances listed in the USACE manual.
  - iv) Temporary electrical systems shall be grounded and tested for good ground resistance before use.
  - v) Power tools shall be protected from water and damage, and their cords must be insulated. Cords must be factory installed or equivalent replacements, including safety grip plug and cord boot.
  - vi) Extension cords will be in safe, good working order.
- d) Mobile Construction Equipment
- i) If equipment, particularly cranes, are damaged the repairs shall be done by a competent repair person and verified by the SSHO prior to being brought back into service.
  - ii) Nobody may ride outside the cab of construction equipment. Specifically, no riders may ever be in loader buckets, bulldozer blades, on forklift forks, or suspended by a crane.
  - iii) When workers are nearby, construction equipment must have reverse signal alarms or shall use a spotter standing away from the equipment. The spotter must be visible by the driver and positioned to see the area behind the equipment.
  - iv) Construction equipment must work a safe distance from electrical systems, based on the voltage.
  - v) Cranes must be used according to the manufacturer. If no manufacturer data is available, a load chart shall be developed by a qualified engineer.
  - vi) Workers should stay out of the radius of the crane boom during a lift.
  - vii) Lifting ropes shall be inspected daily for breaks and failure of hardware and fittings.
  - viii) Nobody shall ever ride the hook or load of a crane.
- e) Machinery
- i) Rotating shafts, wheels, blades, and other hazardous parts shall have guards to prevent workers from being injured.
  - ii) Fuel-powered machinery must not be operated indoors or near enclosed areas without using powered ventilation to prevent toxic CO build-up.
  - iii) Metal housings of electrically powered equipment must be grounded
- f) Confined Spaces
- i) The SSHO will pre-approve any work in a confined space, such as in a tank, sewer, manhole or any other enclosed area. The SSHO will inspect the work and assist with any safety equipment or techniques that are required.
  - ii) All permit-required confined spaces (PRCS) on a project shall have signs prohibiting entry.
  - iii) Entrants, supervisors, and attendants for PRCS shall be properly trained.

- iv) When available, oxygen/flammable/toxic gas meters shall be used for all PRCS. This equipment must be used to evaluate the air in all spaces known or suspected to have contained flammable or toxic chemicals or contain sewage, rotting vegetation or other organic matter.
  - v) For spaces not meeting the above criteria, mechanical ventilation fans shall be used to clear the air in the space when meters are not available. Based on the air flow of the fan, it shall exhaust the total volume of the space a minimum of seven times prior to entry.
  - vi) All entrants shall wear a harness, body belt, or other device attached to a rope sufficient to retrieve the worker in an emergency.
  - vii) Permits should be used during PRCS entry. If not possible, then some visible means, such as flags or tags outside the entrance, shall be used so supervisors can see when workers are in the space.
- g) Gas Cylinders
- i) Pressurized gas cylinders, such as Oxygen and Acetylene tanks will be stored in a holding stand/ cart to prevent them from falling over. Cylinders will not be placed free on the ground or standing free. If the bottle is not in use the valve will be removed.
- 4) Child Labor. Minors under the age of 18 may not perform any of the above hazardous work. Additionally, these minors can not perform any hazardous work such as operating dangerous power tools (circular saws, jack hammers, lathes, etc), driving vehicles, be exterior assistants for vehicle operators or operating mobile construction equipment, explosives work, work at heights over 2 meters without standard railings, electrical work, entering excavations, and work with toxic substances.

--- End of Section ---

SECTION 01770 CLOSEOUT PROCEDU

**SPECIFICATION SECTION 01770**

**CLOSEOUT PROCEDURES**

**PART 1: GENERAL**

**1.1 SUBMITTALS**

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01335 SUBMITTAL PROCEDURES:

SD-10 Operation and Maintenance Data  
Equipment/Product Warranty List; G  
Submit Data Package 1 in accordance with Section 01781 OPERATION AND MAINTENANCE DATA.

SD-11 Closeout Submittals  
As-Built Drawings; G  
Record Of Materials; G  
Equipment/Product Warranty Tag; G

**1.2 PROJECT RECORD DOCUMENTS**

**1.2.1 As-Built Drawings**

As built drawings shall be submitted in accordance with Section 01015 SPECIAL CONDITIONS

1.2.2 As-Built Record of Materials

Furnish a record of materials.

Where several manufacturers' brands, types, or classes of the item listed have been used in the project, designate specific areas where each item was used. Designations shall be keyed to the areas and spaces depicted on the contract drawing. Furnish the record of materials used in the following format:

MATERIALS DESIGNATION	SPECIFICATION	MANUFACTURER	MATERIALS USED (MANUFACTURER'S DESIGNATION)	WHERE USED

1.3 EQUIPMENT/PRODUCT WARRANTIES

1.3.1 Equipment/Product Warranty List

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, 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 one-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 of Warranty Work

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.

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 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.**

**1.4 MECHANICAL TESTING AND BALANCING**

All contract requirements for testing/adjusting/balancing shall be fully completed, including all testing, prior to contract completion date. The time required to complete all testing/adjusting/balancing is included in the allotted calendar days for completion.

**1.5 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 01780A CLOSEOUT SUBMIT

**SECTION 01780A**

**CLOSEOUT SUBMITTALS**

**PART 1 GENERAL**

**1.1 SUBMITTALS**

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for Contractor Quality Control approval. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01335 SUBMITTAL PROCEDURES:

## SD-02 Shop Drawings

### As-Built Drawings

Drawings showing final as-built conditions of the project. The local language of Afghanistan shall be added to project As-Built drawings. The final CADD as-built drawings shall consist of three (3) sets of electronic CADD drawing files in the specified format (PDF and DWG), and two (2) half-size and two (2) full-size paper copies of the approved as-built drawings.

## SD-03 Product Data

### As-Built Record of Equipment and Materials

Two copies of the record listing the as-built materials and equipment incorporated into the construction of the project.

### Warranty Management Plan

One set 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

Two record copies of the warranty tags showing the layout and design.

### Final Cleaning

Two 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 preconstruction conference for projects requiring CADD file as-built drawings.

#### 1.2.1.2 Working As-Built and Final As-Built Drawings

a. 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:

b. 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.

c. The location and dimensions of any changes within the building structure.

d. Correct grade, elevations, cross section, or alignment of roads, earthwork, structures or utilities if any changes were made from contract plans.

e. Changes in details of design or additional information obtained from working drawings specified to be prepared and/or furnished by the Contractor; including but not limited to fabrication, erection, installation plans and placing details, pipe sizes, insulation material, dimensions of equipment foundations, etc.

f. The topography, invert elevations and grades of drainage installed or affected as part of the project construction.

g. Changes or modifications which result from the final inspection.

h. Where contract drawings or specifications present options, only the option selected for construction shall be shown on the final as-built prints.

i. 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.

j. Systems designed or enhanced by the Contractor, such as HVAC controls, fire alarm, fire sprinkler, and irrigation systems.

k. 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

a. 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. The Contractor will be furnished "as-designed" drawings in AutoCAD Release 2007 or Microstation V8 format compatible with a Windows XP operating system. The 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.

b. Prior to submittal of the first design submittal involving CADD drawings, the Contractor shall prepare one typical CADD drawing for the project and furnish, via ENG Form 4025, the electronic CADD drawing file for review and approval by the Contracting Officer. All Government comments involving changes to this single drawing shall be accomplished and resubmittal(s) made until the Government is satisfied that all CADD Standards are being followed and all subsequent drawings will also be in compliance with these Standards.

c. 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.

d. 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.

e. 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.

f. 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 full size paper copy prints of these drawings for Government review, comparison with approved red-line marked up drawings, and approval. The Government will promptly return one set of prints annotated with any necessary corrections to the CADD file(s) if corrections are required prior to approval. Within 20 days 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 full size paper 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 is the responsibility of the Contractor. The Government reserves the right to reject any drawing files it deems incompatible with the CADD system. Upon approval by the Government of the final as-built drawing package for the entire project, the Contractor shall provide the number of as-built copies noted in Paragraph 1.1 of this Section.

g. 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 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 one copy of preliminary record of equipment and materials used on the project 15 days prior to final inspection. This preliminary submittal will be reviewed and returned 2 days after final inspection with Government comments. 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
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#### 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 name plate. 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, 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 one-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 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.

### 1.3.3 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 backcharge 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 other work to be initiated within 3 work days and work continuously to completion or relief.
- d. The "Construction Warranty Service Priority List" is as follows:

Code 1-Air Conditioning Systems

- 1) Recreational support.
- 2) Air conditioning leak in part of building, if causing damage.
- 3) Air conditioning system not cooling properly.

Code 1-Doors

- 1) Overhead doors not operational, causing a security, fire, or safety problem.
- 2) Interior, exterior personnel doors or hardware, not functioning properly, causing a security, fire, or safety problem.

Code 3-Doors

- 1) Overhead doors not operational.
- 2) Interior/exterior personnel doors or hardware not functioning properly.

Code 1-Electrical

- 1) Power failure (entire area or any building operational after 1600 hours).
- 2) Security lights
- 3) Smoke detectors

Code 2-Electrical

- 1) Power failure (no power to a room or part of building).
- 2) Receptacle and lights (in a room or part of building).

Code 3-Electrical

Street lights.

Code 1-Gas

- 1) Leaks and breaks.

- 2) No gas to family housing unit or cantonment area.

Code 1-Heat

- 1) Area power failure affecting heat.
- 2) Heater in unit not working.

Code 2-Kitchen Equipment

- 1) Dishwasher not operating properly.
- 2) All other equipment hampering preparation of a meal.

Code 1-Plumbing

- 1) Hot water heater failure.
- 2) Leaking water supply pipes.

Code 2-Plumbing

- 1) Flush valves not operating properly.
- 2) Fixture drain, supply line to commode, or any water pipe leaking.
- 3) Commode leaking at base.

Code 3 –Plumbing

Leaky faucets.

Code 3-Interior

- 1) Floors damaged.
- 2) Paint chipping or peeling.
- 3) Casework.

Code 1-Roof Leaks

Temporary repairs will be made where major damage to property is occurring.

Code 2-Roof Leaks

Where major damage to property is not occurring, check for location of leak during rain and complete repairs on a Code 2 basis.

Code 2-Water (Exterior)

No water to facility.

Code 2-Water (Hot)

No hot water in portion of building listed.

Code 3-All other work not listed above.

### 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.

#### **1.4 MECHANICAL TESTING, ADJUSTING, BALANCING, AND COMMISSIONING**

Prior to 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**

Three (3) copies of all Operation and Maintenance (O&M) manuals shall be submitted as follows:

AFGHANISTAN ENGINEER DISTRICT

(1) DHL, FEDEX, UPS or any other courier service:

U.S. Army Corps of Engineers  
Afghanistan Engineer District  
House # 1, St. #1 West  
West Wazir Akbar High School  
Behind Amani High School  
Kabul, Afghanistan  
Attn: Chief, Engineering Branch

or

(2) U.S. Postal Service:  
U.S. Army Corps of Engineers  
Afghanistan Engineer District (CEAED-EC)  
Attn.: Chief, Engineering Division  
APO AE 09356

Operation manuals and maintenance manuals shall be provided in a common volume, complete, clearly differentiated and 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 -

### AI ACQUISITION INSTRUCTIONS

#### **AI 22.1705-100**

#### **PROHIBITION AGAINST HUMAN TRAFFICKING, INHUMANE LIVING CONDITIONS, AND WITHHOLDING OF EMPLOYEE PASSPORTS (MAR 2009)**

(a) All contractors (“contractors” refers to both prime contractors and all subcontractors at all tiers) are reminded of the prohibition contained in Title 18, United States Code, Section 1592, against knowingly destroying, concealing, removing, confiscating, or possessing any actual or purported passport or other immigration document, or any other actual or purported government identification document, of another person, to prevent or

restrict or to attempt to prevent or restrict, without lawful authority, the person's liberty to move or travel, in order to maintain the labor or services of that person, when the person is or has been a victim of a severe form of trafficking in persons.

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(b) Contractors are also required to comply with the following provisions:

(1) Contractors shall only hold employee passports and other identification documents discussed above for the shortest period of time reasonable for administrative processing purposes.

(2) Contractors shall provide all employees with a signed copy of their employment contract, in English as well as the employee's native language that defines the terms of their employment/compensation.

(3) Contractors shall not utilize unlicensed recruiting firms, or firms that charge illegal recruiting fees.

(4) Contractors shall be required to provide adequate living conditions (sanitation, health, safety, living space) for their employees. Fifty square feet is the minimum acceptable square footage of personal living space per employee. Upon contractor's written request, contracting officers may grant a waiver in writing in cases where the existing square footage is within 20% of the minimum, and the overall conditions are determined by the contracting officer to be acceptable. A copy of the waiver approval shall be maintained at the respective life support area.

(5) Contractors shall incorporate checks of life support areas to ensure compliance with the requirements of this Trafficking in Persons Prohibition into their Quality Control program, which will be reviewed within the Government's Quality Assurance process.

(6) Contractors shall comply with international laws regarding transit/exit/entry procedures, and the requirements for work visas. Contractors shall follow all Host Country entry and exit requirements.

(c) Contractors have an affirmative duty to advise the Contracting Officer if they learn of their employees violating the human trafficking and inhumane living conditions provisions contained herein. Contractors are advised that contracting officers and/or their representatives will conduct random checks to ensure contractors and subcontractors at all tiers are adhering to the law on human trafficking, humane living conditions and withholding of passports.

(d) The contractor agrees to incorporate the substance of this clause, including this paragraph, in all subcontracts under his contract.

(End of Requirement)

#### **AI 23.1000-100**

#### **REPORTING KIDNAPPINGS, SERIOUS INJURIES AND DEATHS**

**(MAR 2009)**

Contractors shall notify the Contracting Officer, as soon as practicable, whenever employee kidnappings, serious injuries or deaths occur.

Report the following information:

Contract Number:

Contract Description & Location:

Company Name:

Reporting party:

Name:

Phone number:

e-mail address:

Victim:

Name:

Gender (Male/Female):

Age:

Nationality:

Country of permanent residence:

Incident:

Description:

Location:

Date and time:

Other Pertinent Information:

(End of Requirement)

#### **AI 25.1103-101**

#### **ARMING REQUIREMENTS AND PROCEDURES FOR PERSONAL SECURITY SERVICES CONTRACTORS AND FOR REQUESTS FOR PERSONAL PROTECTION (MAR 2009)**

**General.** Contractor and its subcontractors at all tiers that require arming under this contract agree to obey all laws, regulations, orders, and directives applicable to the use of private security personnel in Iraq and Afghanistan, including U.S. CENTCOM, Multi-National Force Commander and Multi-National Corps Commander orders, instructions and directives. Contractors will ensure that all employees, including employees at any tier of subcontracting relationships, armed under the provisions of this contract, comply with the contents of this clause and with the requirements set forth in the following:

DODI 3020.41, *Program Management for Acquisition and Operational Contract Support in Contingency Operations*;

DFARS 252.225-7040, *Contractor Personnel Supporting a Force Deployed Outside the United States*;

Class Deviation 2007-O0010, Contractor Personnel in the United States Central Command Area of Responsibility

CPA Order #17, *Registration Requirements for Private Security Companies*, dated 27 Jun 04;

U.S. CENTCOM Policy Letter, Mod 1, *Personal Protection and Contract Security Service Arming*, dated 7 Nov 2006

**Required Government Documentation.** The unit requesting the contractor security shall provide a description of the following to the arming approval authority and to the contracting officer:

The specific location where the PSC will operate;

The persons and/or property that require protection;

The anticipated threat;

The required weapon types; and

The reason current security/police forces are inadequate.

**Required Contractor Documentation.** Contractors and their subcontractors at all tiers that require arming approval shall provide the following to the contracting officer representative (COR):

Documentation that each employee who will be armed under the contract received the following training—

Weapons Qualification/Familiarization. All employees must meet the qualification requirements established by any DoD or other U.S. government agency

Law of Armed Conflict (LOAC);

Rules for the Use of Force (RUF), as defined in the U.S. CENTCOM Policy, dated 23 December 2005; and

Distinction between the above-prescribed RUF and the Rules of Engagement (ROE), which are applicable only to military forces.

Completed DD Form 2760 (or equivalent documentation) for each armed employee, indicating that the employee is not otherwise prohibited under U.S. law from possessing the required weapon or ammunition.

One (1) copy of a business license from the Iraqi or Afghani Ministry of Trade or Interior;

One (1) copy of an operating license (or a temporary operating license) from the Ministry of Interior;

A communications plan that, at a minimum, sets forth the following:

The contractor's method of notifying military forces and requesting assistance where hostilities arise or combat action is needed;

How relevant threat information will be shared between contractor security personnel and U.S. military forces; and

How the contractor will coordinate transportation with appropriate military authorities.

An acceptable plan for accomplishing background checks on all contractor and subcontractor employees who will be armed under the contract. The contractor shall, at a minimum, perform the following (which will be specifically addressed in its plan and which will be documented and furnished to the COR upon completion):

Use one or more of the following sources when conducting the background checks:

Interpol, FBI, Country of Origin Criminal Records, Country of Origin U.S. Embassy Information Request, CIA records, and/or any other records available;

Verify with MNC-I or Afghanistan RCE – CG Provost Marshal that no employee has been barred by any commander within Iraq or Afghanistan; and

Certify, after completing all checks, that all persons armed under this contract are not prohibited under U.S. law from possessing a weapon or ammunition.

**Required Contractor Acknowledgements.** Contractors and their subcontractors at all tiers that require arming approval will provide written acknowledgement of the following to the COR:

Penalties for Non-Compliance. Failure of contractor or subcontractor employee(s) to comply with the laws, regulations, orders, and rules (including those specified herein) governing the use of force may result in the revocation of weapons authorization for such employee(s). Where appropriate, such failure may also result in the total revocation of weapons authorization for the contractor (or subcontractor) and sanctions under the contract, including termination.

Criminal and Civil Liability. Arming of contractor or subcontractor employees under this contract may subject the contractor, its subcontractors, and persons employed by the same, to U.S. and Host Nation prosecution and civil liability. "Host Nation" refers to the nation or nations where services under this contract are performed.

Lapses in Training. Failure to successfully retrain an employee who is armed under this contract within twelve (12) months of the last training date will constitute a lapse in the employee's authorization to possess and carry the weapon. All unauthorized employees will immediately surrender their weapon to the contractor and will remain unarmed until such time as they are retrained and the COR determines that the retraining is sufficient.

**Authorized Weapon & Ammunition Types.** Unless DCDRUSCENTCOM (or a designee) provides otherwise, all arming requests and authorizations for contractor or subcontractor employees under this contract shall be limited to U.S. Government approved weapons and ammunition. This restriction applies to all weapons in the possession of contractor employees, even if such weapons are required for personal protection. The following weapons and ammunition are currently authorized by the U.S. Government for use in Iraq and Afghanistan:

The M9, M4, M16, or equivalent (e.g. .45 CAL, AK-47).

The M9 or equivalent sidearm will be the standard personal protection weapon unless other weapons are specifically requested and approved.

U.S. government Ball ammunition is the standard approved ammunition.

**Requirements for Individual Weapons Possession.** All employees of the contractor and its subcontractors at all tiers who are armed under this contract must:

Possess only those U.S. Government-approved weapons and ammunition for which they are qualified under the training requirements of section (c);  
Carry weapons only when on duty or at a specific post;  
Not conceal any weapons, unless specifically authorized;  
Carry proof of authorization to be armed. Employees not possessing such proof will be deemed unauthorized and must surrender their weapon to their employer; and  
IAW USCENTCOM G.O. #1, consumption of alcohol in Iraq or Afghanistan is prohibited. In the event of a suspension or an exception to G.O. #1, employees shall not consume any alcoholic beverage while armed or within eight (8) hours of the next work period where they will be armed.

***Weapons/Equipment Restrictions and Responsibilities.*** Unless otherwise provided, the U.S. Government will not provide any weapons or ammunition to contractors, their subcontractors, or any employees of the same. The Contractor will provide all weapons and ammunition to those employees that will be armed under the contract. The contractor and its subcontractors at all tiers will also provide interceptor body armor, ballistic helmets, and the Nuclear, Biological, and Chemical (NBC) protective masks to those employees that require such equipment in the performance of their duties.

***Rules for the Use of Force (RUF).*** In addition to the RUF and ROE training referenced in paragraph (c), the contractor and its subcontractors at all tiers will monitor and report all activities of its armed employees that may violate the RUF. Prompt reporting demonstrates a desire by the contractor and its subcontractors to minimize the impact of any violations and, therefore, will be given favorable consideration. Violations of the RUF include, though are not limited to:

Taking a direct part in hostilities or combat actions, other than to exercise self-defense;  
Failing to cooperate with Coalition and Host Nation forces;  
Using deadly force, other than in self-defense where there is a reasonable belief of imminent risk of death or serious bodily harm;  
Failing to use a graduated force approach;  
Failing to treat the local civilians with humanity or respect; and  
Detaining local civilians, other than in self-defense or as reflected in the contract terms.

***Retention and Review of Records.*** The Contractor and all subcontractors at all tiers shall maintain records on weapons training, LOAC, RUF and the screening of employees for at least six (6) months following the expiration (or termination) of the contract. The Contractor and its subcontractors at all tiers shall make these records available to the Contracting Officer or designated representative, at no additional cost to the government, within 72 hours of a request.

***Contractor Vehicles.*** Vehicles used by contractor and subcontractor personnel in the course of their security duties shall not be painted or marked to resemble U.S./Coalition or host nation military and police force vehicles.

***Quarterly Reporting.*** The prime contractor will report quarterly (i.e. NLT 1 January, 1 April, 1 July and 1 October for each quarter of the calendar year) to the Contracting Officer responsible for this contract, and any other organization designated by the Contracting Officer, the following information under this contract:

The total number of armed civilians and contractors;

The names and contact information of its subcontractors at all tiers; and

A general assessment of the threat conditions, adequacy of force numbers, and any problems that might require a change to force levels. Note: this information is in addition to the information the contractor promises to immediately provide under the communications plan referenced at paragraph (c)(5).

(End of Requirement)

**AI 25.1103-2  
ARMED PERSONNEL INCIDENT REPORTS  
(MAR 2009)**

- (a) All contractors and subcontractors in the Multi-National Forces-Iraq (MNF-I) or Combined Joint Task Force (Afghanistan) theater of operations shall comply with and shall ensure that their personnel supporting MNF-I or CJTF forces are familiar with and comply with all applicable orders, directives, and instructions issued by the respective MNF-I or CJTF Commanders relating to force protection and safety.
- (b) **IRAQ:** Contractors shall provide all incidents and use of weapons firing incidents to the MNC-I Contractor Operations Cell (CONOC) as soon as practical, based upon the situation, and submit a written report to CONOC within 4 hours. The initial report shall include the name of the company, location of the incident, time when the incident occurred, a brief description of the events leading up to the incident, and a company point of contact. A follow-up, comprehensive written report shall be provided to the CONOC within 96 hours of the incident. Reports shall be submitted to CONOC at: [mncic3conoc@iraq.centcom.mil](mailto:mncic3conoc@iraq.centcom.mil); DSN 318-435-2369; Iraqna 0044 203 286 9851 or 0044 203 239 5894; or Skype: MNCICONOC.
- (c) **AFGHANISTAN:** Contractors shall report all incidents and use of weapons through their Contracting Officers who will notify the JOC Watch at Bagram AB. (JOC SHIFT DIRECTOR, DSN: 318-431-4116; SVOIP: 431-7108) Information should include: the name of the company, where the incident occurred, time when the incident occurred, a brief description of the events leading up to the incident, and a point of contact for the company. The JOC Watch duty officer will issue guidance for further reporting requirements.
- (d) Contractors shall provide first aid and request MEDEVAC of injured persons, and remain available for U.S. or Coalition response forces, based upon the situation. In the event contractor personnel are detained by U.S. or Coalition Forces, prolonged detention due to lack of proper identification can be alleviated by contractor personnel possessing on their person information that includes the contractor's name, the contract number, a contractor management POC, and the phone number of the CONOC/JOC Watch.

(End of Requirement)

### **AI 25.1103-103**

#### **FITNESS FOR DUTY AND MEDICAL/DENTAL CARE LIMITATIONS (MAR 2009)**

- (1) The contractor shall perform the requirements of this contract notwithstanding the fitness for duty of deployed employees, the provisions for care offered under this section, and redeployment of individuals determined to be unfit. The contractor bears the responsibility for ensuring all employees are aware of the conditions and medical treatment available at the performance. The contractor shall include this information and requirement in all subcontracts with performance in the theater of operations.
- (2) The contractor shall not deploy an individual with any of the following conditions unless approved by the appropriate CENTCOM Service Component (ie. ARCENT, AFCENT, etc.) Surgeon: Conditions which prevent the wear of personal protective equipment, including protective mask, ballistic helmet, body armor, and chemical/biological protective garments; conditions which prohibit required theater immunizations or medications; conditions or current medical treatment or medications that contraindicate or preclude the use of chemical and biological protectives and antidotes; diabetes mellitus, Type I or II, on pharmacological therapy; symptomatic coronary artery disease, or with myocardial infarction within one year prior to deployment, or within six months of coronary artery bypass graft, coronary artery angioplasty, or stenting; morbid obesity (BMI  $\geq$  40); dysrhythmias or arrhythmias, either symptomatic or requiring medical or electrophysiologic control; uncontrolled hypertension, current heart failure, or automatic implantable defibrillator; therapeutic

anticoagulation; malignancy, newly diagnosed or under current treatment, or recently diagnosed/treated and requiring frequent subspecialist surveillance, examination, and/or laboratory testing; dental or oral conditions requiring or likely to require urgent dental care within six months' time, active orthodontic care, conditions requiring prosthodontic care, conditions with immediate restorative dentistry needs, conditions with a current requirement for oral-maxillofacial surgery; new onset (< 1 year) seizure disorder, or seizure within one year prior to deployment; history of heat stroke; Meniere's Disease or other vertiginous/motion sickness disorder, unless well controlled on medications available in theater; recurrent syncope, ataxias, new diagnosis (< 1 year) of mood disorder, thought disorder, anxiety, somatoform, or dissociative disorder, or personality disorder with mood or thought manifestations; unrepaired hernia; tracheostomy or aphonia; renalithiasis, current; active tuberculosis; pregnancy; unclosed surgical defect, such as external fixator placement; requirement for medical devices using AC power; HIV antibody positivity; psychotic and bipolar disorders. (Reference: Mod 8 to USCENTCOM Individual Protection and Individual/Unit Deployment Policy, PPG-Tab A: Amplification of the Minimal Standards of Fitness for Deployment to the CENTCOM AOR).

(3) In accordance with military directives (DoDI 3020.41, DoDI 6000.11, CFC FRAGO 09-1038, DoD PGI 225.74), resuscitative care, stabilization, hospitalization at Level III (emergency) military treatment facilities and assistance with patient movement in emergencies where loss of life, limb or eyesight could occur will be provided. Hospitalization will be limited to emergency stabilization and short-term medical treatment with an emphasis on return to duty or placement in the patient movement system. Subject to availability at the time of need, a medical treatment facility may provide reimbursable treatment for emergency medical or dental care such as broken bones, lacerations, broken teeth or lost fillings.

**(4) Routine and primary medical care is not authorized. Pharmaceutical services are not authorized for routine or known, routine prescription drug needs of the individual. Routine dental care, examinations and cleanings are not authorized.**

(5) Notwithstanding any other provision of the contract, the contractor shall be liable for any and all medically-related services or transportation rendered. In accordance with OUSD(C) Memorandum dated 4 June 2008, the following reimbursement rates will be charged for services at all DoD deployed medical facilities. These rates are in effect until changed by DoD direction.

(a) Inpatient daily rate: \$2,041.00. Date of discharge is not billed unless the patient is admitted to the hospital and discharged the same day.

(b) Outpatient visit rate: \$195.00. This includes diagnostic imaging, laboratory, pathology, and pharmacy provided at the medical facility.

(End of Requirement)

#### **AI 25.1103-104**

#### **COMPLIANCE WITH LAWS AND REGULATIONS (MAR 2009)**

(a) The Contractor shall comply with, and shall ensure that its employees and its subcontractors and their employees, at all tiers, are aware of and obey all U.S. and Host Nation laws, Federal or DoD regulations, and Central Command orders and directives applicable to personnel in Iraq and Afghanistan, including but not limited to USCENTCOM, Multi-National Force and Multi-National Corps operations and fragmentary orders, instructions, policies and directives.

(b) Contractor employees shall particularly note all laws, regulations, policies, and orders restricting authority to carry firearms, rules for the use of force, and prohibiting sexual or aggravated assault. Contractor employees are subject to General Orders

Number 1, as modified from time to time, including without limitation, their prohibition on privately owned firearms, alcohol, drugs, war souvenirs, pornography and photographing detainees, human casualties or military security measures.

(c) Contractor employees may be ordered removed from secure military installations or the theater of operations by order of the senior military commander of the battle space for acts that disrupt good order and discipline or violate applicable laws, regulations, orders, instructions, policies, or directives. Contractors shall immediately comply with any such order to remove its contractor employee.

(d) Contractor employees performing in the USCENTCOM Area of Operations (AOR) may be subject to the jurisdiction of overlapping criminal codes, including, but not limited to, the Military Extraterritorial Jurisdiction Act (18 U.S.C. Sec. 3261, et al) (MEJA), the Uniform Code of Military Justice (10 U.S.C. Sec. 801, et al)(UCMJ), and the laws of the Host Nation. Non-US citizens may also be subject to the laws of their home country while performing in the USCENTCOM AOR. Contractor employee status in these overlapping criminal jurisdictions may be modified from time to time by the United States, the Host Nation, or by applicable status of forces agreements.

(e) Under MEJA, a person who engages in felony misconduct outside the United States while employed by or accompanying the Armed Forces is subject to arrest, removal and prosecution in United States federal courts. Under the UCMJ, a person serving with or accompanying the Armed Forces in the field during a declared war or contingency operation may be disciplined for a criminal offense, including by referral of charges to a General Court Martial. Contractor employees may be ordered into confinement or placed under conditions that restrict movement within the AOR or administratively attached to a military command pending resolution of a criminal investigation.

(f) Contractors shall immediately notify military law enforcement and the Contracting Officer if they suspect an employee has committed an offense. Contractors shall take any and all reasonable and necessary measures to secure the presence of an employee suspected of a serious felony offense. Contractors shall not knowingly facilitate the departure of an employee suspected of a serious felony offense or violating the Rules for the Use of Force to depart Iraq or Afghanistan without approval from the senior U.S. commander in the country.

(End of Requirement)

**AI 25.1103-105**  
**MONTHLY CONTRACTOR CENSUS REPORTING**  
**(MAR 2009)**

Contractor shall provide monthly employee census information to the Contracting Officer, by province, for this contract. Information shall be submitted either electronically or by hard-copy. Information shall be current as of the 25<sup>th</sup> day of each month and received by the Contracting Officer no later than the first day of the following month. The following information shall be provided for each province in which work was performed:

- (1) The total number (prime and subcontractors at all tiers) employees.
- (2) The total number (prime and subcontractors at all tiers) of U.S. citizens.
- (3) The total number (prime and subcontractors at all tiers) of local nationals (LN).
- (4) The total number (prime and subcontractors at all tiers) of third-country nationals (TCN).
- (5) Name of province in which the work was performed.
- (6) The names of all company employees who enter and update employee data in the Synchronized Predeployment & Operational Tracker (SPOT) IAW DFARS 252.225-7040 or DFARS DOD class deviation 2007-O0010.

(End of Requirement)

**AI 25.1103-109**

**MEDICAL SCREENING AND VACCINATION REQUIREMENTS  
FOR LOCALLY HIRED EMPLOYEES**

**(MAR 2009)**

(a) Contractors, and subcontractors at any tier shall ensure and provide satisfactory evidence that all locally hired employees, including Local National (LN), Third Country National, and U.S. employees, working on military have been screened for and do not currently have active tuberculosis (TB).

(1) Contractors may utilize a testing method of either a chest x-ray or TB skin test (TST).

(i) Chest x-rays shall be taken and TBTs administered within 90 days prior to the start of employment.

(ii) Screening may be performed either by a licensed medical provider from the local economy or by contractors' licensed medical staffs. Contractors shall maintain medical screening documentation and make it available to the Contracting Officer upon request.

(2) TB screening documentation will be required by the responsible Base Defense Operations Center (BDOC) prior to issuance of base access badges.

(b) Contractor employees, including subcontractors at any tier, who work in positions where they are working with food or water production and distribution shall have current Typhoid and Hepatitis "A" (full series) vaccinations, in addition to the TB tests required above.

(a) At least the first inoculation in the Hepatitis "A" series must be given prior to the start of employment, with continuation and completion of the inoculation series. The Typhoid inoculation must be completed within two years prior to the date of employment in the food and water service capacity.

(i) Once the complete Hepatitis "A" vaccination series is completed, it does not have to be repeated. The Typhoid vaccination requires a booster immunization every three years.

(ii) Proof of individual employee vaccinations shall be provided to the Contracting Officer and maintained by the Contractor for examination by the Contracting Officer.

(End of Requirement)

**AI 25.1103-110**

**CONTRACTOR EMPLOYEE LEGAL REQUIREMENTS**

**(MAR 2009)**

(a) The contractor shall not employ, nor allow a subcontractor to employ, any person that has ever been convicted, in any U.S. court, including a court-martial, of any crime against an Iraqi and/or an Afghan national, regardless of the place at which the crime occurred.

(b) For the purpose of this clause, "crime" is defined as: "a violation of a law in which there is injury to the public or a member of the public and a term in jail or prison, and/or a fine as possible penalties." Further, the crime must be an offense that could be classified as a Class B misdemeanor, or any higher class up to a Class A felony, as referenced at 18 USC §3559.

(c) Contractors shall exercise effective screening processes to ensure that individuals not conforming to this standard are identified and prohibited from, or removed from (if already employed) working under this contract.

(d) Contractor employees discovered to have one of more prior convictions as described above shall be removed from the contract at the contractor's expense.

(e) Failure to adhere to the requirements of this clause could result in a termination for cause or termination for default, in accordance with the terms and conditions of this contract.

#### **AI 36.521-100**

#### **ELECTRICAL AND STRUCTURAL BUILDING STANDARDS FOR CONSTRUCTION PROJECTS (MAR 2009)**

(a) The standards set forth herein are the minimum requirements for the contract. These standards must be followed unless a more stringent standard is specifically included. In such case the most stringent standard shall be required for contract acceptance.

(b) The contractor, in coordination with the Contracting Officer, Base Camp Mayor, Base/Unit Engineers, and requiring activity shall evaluate, upgrade, build, and/or refurbish buildings to a safe and livable condition. This work may include refurbishment, construction, alterations, and upgrades. All work shall be in accordance with accepted standards of quality.

(c) As dictated by the Unified Facilities Criteria (UFC) the contract shall meet:

(1) "the minimum requirements of United States' National Fire Protection Association (NFPA) 70,

(2) National Electrical Code (NEC),

(3) the American National Standards Institute (ANSI) C2, and

(4) the United States' National Electrical Safety Code (NESC).

(d) These standards must be met when it is reasonable to do so with available materials. When conditions dictate deviation, then provisions within the International Electrical Code (IEC) or British Standard (BS 7671) shall be followed. Any deviations from the above necessary to reflect market conditions, shall receive prior written approval from a qualified engineer and the Contracting Officer.

(e) The following internet links provide access to some of these standards:

UFC: [http://65.204.17.188/report/doc\\_ufc.html](http://65.204.17.188/report/doc_ufc.html)

NFPA 70: <http://www.nfpa.org>

NESC: <http://www.standards.ieee.org/nesc>

#### **AI 26.6 Projected Afghan and Third Country National (TCN) Employment (5 Nov 07)**

##### Projected Afghan Employment

##### Collecting & Reporting Employment Statistics

The purpose of this clause is to collect data on the projected number of Afghans employed for the term of the contract. Offerors are required to identify in the space provided below the total projected number that will be directly employed in the performance of this contract.

Employment is the total number of Afghan persons expected to be on the payroll (contractors, subcontractors, & sub-subcontractors) employed full or part time who received pay for my part of the term of the contract. Temporary and intermittent employees are included, as are any workers who are on paid sick leave, on paid holiday, R&R leave or who work during only part of the pay period." Enter into spaces provided in item #1. Next enter in the spaces provided in item #2 what is the average number employed throughout the term of the contract. Item #3 An "Afghan-Based Company" is a company (including a subsidiary company) whose principal place of business is located within Afghanistan.

1. Total Afghan (Afghan Residents) Employed:

Afghan: Men \_\_\_\_\_

Afghan: Females \_\_\_\_\_

Total: \_\_\_\_\_

2. Average Afghans (Afghan Residents) Employed:

Afghan: Men \_\_\_\_\_

Afghan: Females \_\_\_\_\_

Total: \_\_\_\_\_

1. Is your company an "Afghan Based" company? Yes \_\_\_ No\_\_\_. If no, what country is your company registered/incorporated: \_\_\_\_\_

2. Afghan Company Certification. The offeror \_\_\_\_\_ is or \_\_\_\_\_ is not an Iraqi owned firm. If the firm is Afghan owned, the Ministry of Trade registration/license number is: \_\_\_\_\_.

(End)

(End of Requirement)