

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>			1. CONTRACT ID CODE	PAGE OF PAGES 1 of 2
2. AMENDMENT/MODIFICATION NO. 3	3. EFFECTIVE DATE 25-Jul-2002	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)	
6. ISSUED BY US Army Corps of Engineers, Kansas City District 760 Federal Building, 601 East 12th Street Kansas City, Missouri 64106-2896	CODE	7. ADMINISTERED BY (If other than item 6)	CODE	

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)	(x) 9a. AMENDMENT OF SOLICITATION NO. X DACA41-02-R-0006
	9B. DATED (SEE ITEM 11) 06/28/2002
	10A. MODIFICATION OF CONTRACT/ORDER NO.
	10B. DATED (SEE ITEM 13)
CODE FACILITY CODE	

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above number solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers  is extended,  is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:  
 (a) By completing Items 8 and 15, and returning \_\_\_\_\_ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegraph which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(x) A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
B. THE ABOVE NUMBER CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF:
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor  is not,  is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Construction of Upgrade Night Fire Range and Automated Record Fire Ranges, Fort Leonard Wood, Missouri

The Solicitation is amended in accordance with the attached pages.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)	16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)
15B. CONTRACTOR/OFFEROR	16B. UNITED STATES OF AMERICA
15C. DATE SIGNED	16C. DATE SIGNED
(Signature of person authorized to sign)	BY (Signature of Contracting Officer)

1. SOLICITATION NO. DACA41-02-R-0006 is amended as follows:

a. SPECIFICATIONS:

(1) Revised Pages: The following pages are deleted and replaced with revised pages of the same number. A copy of each revised page accompanies this amendment.

17 of 73	01100-18	B6-2
20 of 73	B1-3	B6-4
66 of 73	B3-11	B6-5
	B4-7	

(2) Revised Sections: The following sections are deleted and replaced with revised sections. A copy of each revised section accompanies this amendment.

<u>Section No.</u>	<u>Title</u>
01130	DELIVERIES OR PERFORMANCE FOR DESIGN-BUILD CONTRACT PROCEDURES

b. DRAWINGS:

(1) Revised Drawings: The following drawings are deleted and are replaced by revised drawings of the same number, dated 19 July 2002. A copy of the revised drawings accompanies this amendment.

C 902	E 901
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2. For convenience, on the revised specification pages, essential changes from the previous issue have been emphasized as follows, however, all portions of the revised specification pages shall apply whether or not changes have been indicated:

Changes within a paragraph are underlined.

New words or sentences, within a paragraph, are underlined.

Paragraphs, containing a word or sentence that was deleted, are underlined.

When an entire paragraph was deleted, the word "Deleted" is underlined and inserted after the paragraph number.

3. Offerors are required to acknowledge receipt of this amendment on the Proposal Form, in the space provided, or by separate letter or telegram prior to receipt of offers. Failure to acknowledge all amendments may cause rejection of the offer.

4. Offers will be received until 2:00 p.m. local time at place of receipt of offers, 8 August 2002 in Room 757, Federal Building, 601 E. 12th Street, Kansas City, Missouri 64106-2896, Attention – Greg Gulledge.

2 Encls

Spec pages as listed

Drawings as listed

**SECTION 00110**

**SUBMISSION REQUIREMENTS AND INSTRUCTIONS**

**1. PROPOSALS**

Proposals for the work described herein, will be received until the date and time indicated on Standard Form 1442 in Section 00010, at the following address:

U.S. Army Engineer District, Kansas City  
 757 Federal Building  
 601 East 12th Street  
 ATTN: CENWK-CT-C/Mr. Gregory C. Gullede  
 Kansas City, Missouri 64106-2896

**2. PROPOSAL FORMAT**

a. The proposals (originals) shall be no more than **50** pages total all volumes, in the following format:

Proposal Document		Original	Copies
VOLUME 1	- Technical Proposal	1	6
<u>VOLUME 2</u>	- Price Proposal	1	1

The information required by paragraph: INSTRUCTIONS TO OFFERORS--COMPETITIVE ACQUISITION, subparagraph (c)(2), shall be included in Volume 1, before Part 1.

b. Proposal Characteristics.

(1) All text must be legible and easily read. The page size of the offeror's proposal shall not exceed 8-1/2 inch by 11 inch. Diagrams, charts and tables shall conform to the paper size. All text shall be typed single-spaced. Margins (1-inch) shall be clean and clear. If fold-out charts are unavoidable and are to be utilized, all sheets shall be reproduced on 11 inch by 17 inch, and folded to 8-1/2 inch by 11 inch sheet size with title clearly visible at bottom right corner. Volume 1 shall be contained within a 3-ring binder (no heat or spiral bound volumes). Volumes 1 & 2 may be in separate 3-ring binders or stapled and provided in separate envelopes.

(2) All proposals shall contain the requirements stated herein and every volume shall be identified by the volume number and name, address, and telephone number of the prime on the cover sheet. Each volume shall also contain a Table of Contents, List of Tables, List of Figures, List of Appendices, List of Acronyms and at the bottom left side of each page the volume number shall be included. The list of acronyms should include all acronyms appearing in the volume. The offeror's name, address, signature, and telephone number shall appear on any document to be evaluated.

(3) Proposal clarity, organization (as requested in this solicitation) and cross referencing is mandatory. No material shall be incorporated by reference. General cross references or cross referencing guides will not be considered as appropriate cross references. In order for the proposal to receive an in-depth evaluation, it is necessary that the proposal be presented in a manner that will provide clarity, organization and cross referencing as required.

(4) Each evaluation factor and subfactor in Volume 1 shall be described in a separate section, appropriately tabbed in a report form. The information in all volumes shall be concise. Elaborate presentations are not necessary or desirable.

Subfactor 3a: General Management Structure and Plan. Discuss management structure, design/build strategy and tactics to be used. An organizational chart to detail proposed management structure and chain of command.

Subfactor 3b: Coordination of multiple subcontractors including the designer Architect-Engineer firm. Describe work that will be subcontracted and what work will be done by the offeror's own forces, and how the contractor will coordinate with multiple subcontractors including the design AE to meet schedule requirements.

FACTOR 4. Price. Offerors shall submit the Proposal Schedule, as found in Section 00010. The Proposal Schedule will be evaluated in accordance with paragraphs: BASIS FOR AWARD, EVALUATION FACTORS, and PRICE listed below.

d. ADDITIONAL INFORMATION TO BE PROVIDED IN VOLUME 2:

- The Offer (the SF1442) duly executed with an original signature by an official authorized to bind the company.
- Acknowledgement of all amendments to the solicitation in accordance with the instructions on the Standard Form 30 (amendment form).
- The completed Section 00600 of the solicitation (Representations and Certifications).
- For joint ventures, the information required by paragraph "Joint Ventures."

#### JOINT VENTURES

Joint ventures shall submit the following additional documentation regarding their business entities:

- A certified copy of their Joint Venture agreement.
- A detailed statement outlining the following in terms of percentages, where appropriate.
- The relationship of the joint venture parties in terms of business ownership, capital contribution, and profit distribution or loss sharing.
- The management approach of the joint venture in terms of who will conduct, direct, supervise and control the project and have custody and control of the assets of the joint venture and perform the duties necessary to complete the work.
- The structure of the joint venture and decision-making responsibilities of the joint venture parties in terms of who will control the manner and method of performance of the work.
- The bonding responsibilities of the joint venture parties.
- Identification of the key personnel having authority to legally bind the joint venture to subcontracts and state who will provide or contract for the labor and materials for the joint venture.
- Identification of party maintaining the joint venture bank accounts for the payment of all expenses and the deposits of all receipts, keep the books and records, and pay applicable taxes for the joint venture.
- Identification of party furnishing the facilities, such as office supplies and telephone service.
- Identification of party having overall control of the joint venture.

Other sections of the proposal shall identify, where appropriate, whether key personnel are employees of the individual joint venture parties and identify the party, or hired as employees of the joint venture.

SECTION 00800 Special Contract Requirements

CLAUSES INCORPORATED BY REFERENCE:

EM 385-1-1 USACE Safety and Health Requirements Manual, EM 385-1-1 FEB 2001  
 Note

CLAUSES INCORPORATED BY FULL TEXT

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

The Contractor shall be required to (a) commence work under this contract within **TEN (10)** calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than the dates or number of calendar days after the date of receipt by him of notice to proceed set forth on the schedule below except as specified in the various landscaping sections. The time stated for completion shall include final cleanup of the premises.

SCHEDULE

Item of Work	Commencement Time	Completion Time	Liquidated Damages Per Calendar Day
1.1 Design and Construction of Ranges, and all site improvements	10 calendar days after receipt of NTP.	365 calendar days after receipt of NTP	(See 52.211-12)
1.2 Establish of Turf	(See Note 2)		
1.3 Final As-Built Drawings	(See Note 3)		
1.4 Operation and Maintenance (O&M) Manuals	(See Note 4)		

NOTES:

**1. Refer to Section 01130 for Government review periods for 50% and 100% design submittals.**

2. Establishment of Turf. Planting shall be accomplished during the planting season as specified in the technical requirements, or portion thereof (but not less than 15 days), following substantial completion of building construction. No payment will be made for establishment of Turf until all requirements of ESTABLISHMENT OF TURF are adequately performed and accepted, as determined by the Contracting Officer.

Exception to completion time: In case the Contracting Officer determines that seeding is not feasible during the completion time stated above, the Contractor shall accomplish such seeding in the first planting period following the contract completion time. **Contractor must coordinate schedule for seeding at the ranges with the Contracting Officer and Range Control if work is completed after the completion date of the contract.**

3. As-Built Drawings. The Contractor shall commence work on final as- built drawings upon his receipt of the Approved preliminary as-built drawings, the reproducible original contract drawings and CADD. The Contractor shall provide final as-built drawings as specified in section 01780A. The Contractor shall have 60 calendar days after approval and turnover of each separate range facility to complete and return to the Contracting Officer all specified final as-built drawing work. Upon satisfactory completion of this work the Contractor shall have earned

1.52 INSTALLATION ACCESS DURING LABOR DISPUTES

(a) Subject to the limitations outlined in paragraphs (b) and (c), the Contractor may generally seek access to the installation for the performance of the contract utilizing any entrance to the installation open to public transportation.

(b) In case of labor unrest, including but not limited to strikes and informational pickets, the installation Garrison or Installation Commander has the right to implement a "reserve gate" plan. Pursuant to such a plan (1) the picketed contractor may be limited to the use of only one gate for all access on and off the installation; and (2) other contractors may be restricted from the use of the gate utilized by the Contractor(s) involved in the labor dispute. For purposes of this clause the term "picketed contractor" shall include all employees, subcontractors, suppliers, materialmen and agents of the contractor involved in the labor dispute.

(c) The choice of gate or gates to be utilized by the picketed Contractor(s) shall rest solely with the Garrison or Installation Commander based on the needs of the Government. Any delay or costs associated with the inability to use a particular entrance to the installation shall not be grounds for an equitable adjustment. Any entitlement to an extension of the performance period shall be determined pursuant to the Default Clause of the Contract.

1.53 SPECIAL SCHEDULING

The Contractor shall schedule all work to be preformed on Ranges 3 and 9, with the Contracting Officer Representative (COR), a minimum of 14 calendar days prior to the day the work will be performed. The COR will coordinate the Contractors proposed schedule with Range Division and with Directorate of Plans, Training and Mobilization.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

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SECTION 01130  
DELIVERIES OR PERFORMANCE  
FOR  
DESIGN-BUILD CONTRACT PROCEDURES

1. Design Schedule and General Contract Procedures. After the award of the Contract the Contractor shall execute the work in accordance with the following design deliveries and design schedule. Construction is not to commence until the Government has reviewed and approved the applicable design documents for the construction. The Government reviews the Contractor's design documents for compliance with the Contract and acceptability to the customer. The Contractor is totally and solely responsible for the design, coordination, compatibility, completeness, and compliance with the contract requirements. Prior to start of construction, there will be a meeting to discuss the Contractor's Quality Control Plan. See Section 01451 - Contractor Quality Control for details. After notice to proceed with the Contract, a pre-design conference will be held at the Corps of Engineers, Fort Leonard Wood Area Engineer Office, Building 2204, Fort Leonard Wood, Missouri to acquaint the Contractor with the general plan of contract administration and requirements under which the design is to proceed.

a. The design of the Upgrade Night Fire Range (R9) and the Automatic Fire Range (R3) shall follow the standard design manual for Remoted Target System (RETS) Ranges CEHNC-1110-1-23. The Contractor is responsible for acquiring this design manual from the following Army based Web Site:  
<http://www.hnd.usace.army.mil/rtlp/index.htm>

b. After the Contractor completes the engineering and topographic survey on which to base the design referenced in the General Design Requirements Chapter 4, Survey Requirements, the Contractor shall verify the range safety fans with the Fort Leonard Wood Range Safety Officer to locate all buildings, firing positions, and target emplacements on each firing range site plan. If the Contractor's site plans results in violation of the range safety fans, then the ranges shall be shifted at no additional cost to the Government so the range safety fans are in full compliance with the range guide and the design supports the standard range remoted target system. The Contractor has no latitude to move the location of the firing positions or ranges without the approval of the Contracting Officer.

c. DrChecks. DrChecks is an Internet based system for management of project reviews and review comments. DrChecks will be utilized by the contractor and government to make and manage review comments. The access to DrChecks will be at no charge to the contractor. Microsoft Internet Explorer 5.0 is necessary to access and utilize the program. The government will setup the project in DrChecks, and provide the contractor access to the project. The contractor shall provide a point of contact and company information so password can be provided for DrChecks to the contractor. The contractor shall be responsible to provide responses to comments and maintain necessary documentation for the management of all reviews accomplished under this contract. Additional information about the program and how it is used can be found at the Projnet Internet address: <http://www.projnet.org> and going to the Briefing/Training link.

d. All design submittals including the 50%, 100%, and 100% Back-Check shall include design of the Upgrade Night Fire Range (R9) and the Automatic Fire Range (R3) as follows:

(1) The 50 percent design submittal shall be complete with building designs, site surveys, site design including utilities, site grading, drainage slopes, maintenance trails, firing positions, range layouts, signage, target emplacements, roadways, parking, etc. The 50% shall be completed within 60 calendar days after the Notice to Proceed and include a design analysis with calculations, drawings, and specifications referenced in ER 1110-345-700, Design Analysis, Drawings, and Specifications. The Contractor shall acquire a copy of the ER from the following Army based Web Site:  
<http://www.usace.army.mil/inet/usace-docs/eng-regs/er1110-345-700/toc.htm>.

(2) The 100 percent design submittal shall incorporate all review comments from the 50 percent design review and complete the design within 30 calendar days after the Contractor receives the letter of approval of the 50 percent design from the Fort Leonard Wood Area Engineer.

(3) The 100 percent back check design submittal shall be complete within 15 calendar days after the Contractor receives the letter of approval of the 100 percent design from the Fort Leonard Wood Area Engineer.

e. Additional back check reviews may be required until the Government is assured that all review comments have been incorporated. The Government review does not constitute approval or acceptance of any variations from the RFP or from the Contractor's proposal unless such variations have been specifically pointed out by the Contractor in writing and authorized by the Government. The responsibility for a total design in accordance with the Contract shall remain with the Contractor and any interim notice to proceed with construction by the Contracting Officer after the approval of the 50% design submittal will in no way mitigate that responsibility.

f. The Government review period for the 50 percent and 100 percent submittals shall be 15 calendar days each. The Government review period for the back check submittal shall be 10 calendar days. The time stated for completion of design for review is incorporated into the overall completion time for the project stated in Section 00800.

g. Each design submittal shall be appropriately stamped, i.e., "For Review Only". Each sheet of the drawings shall be stamped. The back check design submittal after the Government review of the 100% completed design shall be stamped "For Back check Review Only – 100%", accordingly; each sheet of the drawings shall be stamped.

## 2. Submission of Construction Drawings, Specifications and Design Analyses

a. For the final project drawings, the Contractor shall incorporate Government format title blocks on his own sheets.

b. Design documents shall include construction drawings, specifications and design analyses for categories such as, but not limited to, architectural, structural, mechanical, electrical, grading, drainage, paving, and outside utility services in accordance with ER 1110-345-700. Specifications shall be in sufficient detail to fully describe and demonstrate the quality of materials, the installation and performance of equipment, and the quality of workmanship. Detailing and installation of all equipment and materials shall comply with the manufacturers' recommendations. The design analysis shall be for each discipline of work and shall include all features with the necessary design calculations, tables, methods and sources used in determining equipment and material sizes and capacities, and shall provide sufficient information to support the design.

c. All review meetings will be held at the U.S. Army Corps of Engineers Area Engineer Office, Building 2204, Fort Leonard Wood, Missouri.

d. The Contractor shall certify that all items submitted in the design documents comply with the RFP. The criteria specified in the RFP are binding contract criteria and in case of any conflict after award between the RFP criteria and Contractor's submittals, the RFP criteria will govern unless there is a written and a signed agreement between the Contracting Officer and the Contractor waiving a specific requirement. This certification shall be included on each sheet of working drawings.

e. The Contractor shall verify all field conditions which are significant to design including field inspections, topographic surveys, utility information, researching and obtaining all necessary as-built drawings and reproducing them for his own use as necessary, and discussing status with knowledgeable personnel. The information shall be reflected in the design documents.

f. Topographic surveys and any additional geo-technical subsurface and soils testing information, asbestos abatement surveys, permits, etc required by the Contractor for design after award of the contract shall be procured and paid for by the Contractor.

### 3. Material Required for 50 Percent Design Submittal

a. Material submitted for the 50 Percent Design Submittal shall comply with ER 1110-345-700 including all range building designs for the Upgrade Night Fire Range (R9) and the Automatic Fire Range (R3), vicinity maps and site layouts for each firing range showing both the building designs and site designs and range layouts, building demolition, and utility drawings required for 100 percent submittal, but developed to approximately 50 percent completion.

b. All draft specifications for the building and site work, including index and trade sections.

c. Color boards of interior and exterior finish material are not required.

d. Design calculations developed to the extent as required to support the design of that portion of site grading, site drainage, pavement design, utility connections, structural, electrical, and mechanical systems included in this submittal.

### 4. Material Required for 100 Percent Design Submittal

a. General Requirements (see ER 1110-345-700).

b. All drawings, including building design and site design, specifications, and design analysis calculations.

a. Preparation of grading plans and erosion control plans are critical for the range target emplacement locations, firing positions, and maintenance trails.

b. Specifications. Specifications for the building and site work, upgraded to 100 percent completion. Contractor shall provide final proposal of all materials and finishes.

c. Design Analysis. All design and calculations shall be performed by a licensed professional engineer and/or registered architect, and shall be stamped as such. The design analysis shall be a separate bound assembly, in one or more volumes, of all the functional and engineering criteria, design information and calculations applicable to the project design as noted in ER 1110-345-700. The analysis shall be organized in a format appropriate for review, approval and record purposes. The design calculations shall be presented in a clear and legible form, with all methods and references identified and all assumptions and conclusions explained. Calculations submitted shall include all of those required to support design of the RFP. The design analysis shall cover each discipline of work and shall include all features. The design analysis shall include complete site and pre-engineered metal building design calculations for framing, structural elements (including structural anchorage system, wind load analysis, reinforcing steel, concrete mixes, etc.), electrical and mechanical systems and roadway pavement and shoulder design. Design calculations shall include computations for sizing equipment, air duct design, energy analysis and U-factors for ceilings, roofs, exterior walls and floors. Electrical design calculations shall include lighting and load calculations, cathodic protection, lightning protection, secondary power and data distribution systems. Design calculations that are developed for standardized or repetitive features of the building shall be extended, as may be appropriate, to account for nonstandard siting features such as building orientation, and drainage characteristics.

d. Equipment Schedule. Based on the results of calculations, provide a complete list of the materials and equipment proposed for heating and cooling with the manufacturer's published catalogued product installation specifications and roughing-in data. The heating and cooling equipment data shall include the manufacturer's wiring diagrams, installation specifications, ARI certification, and the standard warranty for the equipment, propane tanks, and septic tanks. In addition, provide the manufacturer's published

catalogued capacities for supply diffusers as evidence that the arrangement of supply air outlets in each room will provide the throw and spread characteristics required to completely cover all exterior wall surfaces with a blanket of warm and cool air at the proper design velocities.

e. Specific Design Requirements.

(1) Site Utilities: Information on existing lines shall be provided where existing utilities are involved with new construction. Additional detail drawings shall be provided where required. Specifications shall be provided for valves, pipes, etc. Materials and construction of all mains and appurtenances shall be indicated.

(2) General site grading, maintenance trails, firing positions, target emplacements, and drainage of each range site shall be indicated by contour lines with an interval of not more than 0.50-meter.

(3) Site grading plans and designs of entrance roads and parking including road profiles, pavement section profiles, ditches, drainage structures, etc.

(4) Site demolition plans of existing buildings to be demolished, utilities, and other site appurtenances.

(5) The foundation plan shall be coordinated with the pre-engineered metal building manufacturer.

5. Design Review Distribution

a. The Contractor shall transmit the 50 percent, 100 percent, and 100 percent back check submittals to the Government agencies and in the quantities indicated below. All documents shall contain an index of contents. The Contractor shall enclose a letter of transmittal with the contract number of each submittal package indicating the type of submittal (e.g., 50 percent design, 100 percent design, 100 percent back check, etc.), the project name and number and the date written comments are due at the Office of the Contracting Officer. Provide copies to the following distribution:

- Six (6) copies of all transmittals shall be sent to the U.S Army Corps of Engineers, Kansas City District, ATTN: CENWK-PM-MM (Michelle Riley), 601 E. 12<sup>th</sup> Street, 700 Federal Building, Kansas City, Missouri 64106-2896
- Three (3) copies to the U.S. Army Corps of Engineers, Fort Leonard Wood Area Engineer Office, ATTN: FM-WD (Rex Ostrander), Building 2204, 1334 1<sup>st</sup> Street, Fort Leonard Wood, Missouri, 65473-8944
- Six (6) copies to Fort Leonard Wood Directorate Public Works, ATTN: Angie Rolufs, Building 2201, 134 1<sup>st</sup> Street, Fort Leonard Wood, Missouri, 65473-8944
- Two (2) copies to CDR, ATSC, ATIC-ATMD-LTD-RT (Attn: Mr. Thompson), Building 1745, Fort Eustis, VA 23604-5166
- One (1) copy to Commander, USAESCH, ATTN: CEHNC-IS-SP (Mae Parker), 4820 University Square, Huntsville, AL 35816-1822
- One (1) copy to USAISEC-FDEO, ATTN: AMSEL-IE-DE-IN-CO (Tina Reed), 1435 Porter Street, Suite 208, Fort Detrick, Maryland 21702-5047

All submittals shall be transmitted by overnight express mail. One (1) copy of each submittal includes the following: one copy of the half-size set of drawings, one set of specifications, and one design analysis.

b. If for any reason the Government requires more time than stated for review of submittals, the Contractor will be granted an extension of time equal to the number of calendar days of delay.

c. Design Review Meetings at 50% and 100% design. Design review meetings shall be held at Fort Leonard Wood Area Engineer Office not later than 15 days after receipt of submittal after each non-back check submittal.

d. The Contractor and his representatives involved in the design shall attend. Government personnel will present review comments for discussion and resolution. Copies of comments, annotated with comment action agreed on, will be made available to all parties by the Contractor within 14 calendar days from the conference date. Unresolved problems will be resolved by immediate follow-up action at the end of meetings. In addition to the annotated review comments, the Contractor shall submit copies of a memorandum of the design review meetings, summarizing major decision points and issues, which require resolution and the action office. Valid comments will be incorporated. On receipt of final corrected designs, subsequent to completion of the back check reviews, the Kansas City District will provide formal Government approval necessary to initiate construction. The Government, however, reserves the right to disapprove design document submittals if comments are of too great a significance. In this case, every effort shall be made during follow-up action between the Contractor and the Kansas City District to resolve conflicts and problems such that documents can be fully approved. However, if the final submittal is incomplete or deficient, requiring correction by the Contractor and re-submittal for review beyond; the first back check review, the cost of handling and re-reviewing will be deducted from payment due the Contractor at the rate of \$500 per submittal.

e. The Contractor shall submit complete design documents in the same quantity to the same office described in paragraph 5. For each back check (one or more) until the Government is satisfied that all review comments have been addressed and resolved. Following government approval of the last back check submittal, the Contractor shall submit 2 copies of the electronic CADD .dgn files within seven (7) calendar days, including three (3) complete sets of full size copies and six (6) half scale copies of the drawings and nine (9) copies of the specifications and one reproducible set of complete half size drawings to Fort Leonard Wood Area Engineer Office, three (3) complete sets of half size drawings and specifications to the Fort Leonard Wood Public Works, and five (5) complete sets of half size drawings and specifications to the Kansas City District Office. The contractor shall retain the mylar + originals until completion of as-built drawings.

f. Government review does not constitute approval or acceptance of any variations from the RFP or from the proposal, unless such variations have been specifically requested in writing by the proposers and approved in writing by the Contracting Officer.

6. Approvals Prior to Construction. Review and acceptance of the final plans and specifications must be obtained from the Contracting Officer before start of construction. However, the Army may accept a design submission for site development, and if found satisfactory, allow the contractor to proceed with earthwork and other elements of site development while final plans and specifications for total work being completed. The responsibility for a totally integrated design in accordance with the contract will remain with the contractor and this interim NOTICE TO PROCEED will in no way mitigate against that responsibility.

7. Submittal Registers. On receipt of approval to start construction, the Contractor shall submit copies of ENG Form 4288, Submittal Register, in accordance with Section 01330: Submittal Procedures, paragraph: Submittal Register.

8. As-Built Drawings: See Section 01100. Provide final as-built drawings in CADD using Microstation format. Design criteria and referenced drawings furnished by the Government are intended to serve as minimum standard in the preparation of acceptable working drawings and specifications. Applicable details of these drawings shall be incorporated into the working drawings and specifications without reference to their source. Incorporation by reference only is not acceptable. Plan sheet size preferred is "D" size (24 by 36 inches)(full size). Sheet size "E" (28 by 40 inches) is acceptable. Construction drawings shall be provided in both original hard copy and on a CD-ROM compact disk and produced in a Bentley MicroStation 95 CADD format.

a. Cover Sheet. The Contractor shall provide a cover sheet for the drawings and the cover sheet shall include, as a minimum, the project number and title, project location, installation map, contract number, and execution year.

b. Format. Drawings shall be produced in a Bentley MicroStation 95 CADD format and compatible without conversion with the CADD system hardware and software in use at Fort Leonard Wood PW.

c. CADD files must display as plotted and vice versa (WYSIWYG). Formatting and layering in CADD drawing design files shall be in accordance with the Tri-Service Architectural/Engineering/Construction Computer-Aided Design and Drafting (CADD) standards. Half-scale drawings shall be exact half-scale reproductions of the full-scale drawings.

d. CADD Design Files. Design files shall be fully compatible with Bentley MicroStation 95 version or earlier version. Plotted files shall provide final deliverable CADD files that display all design file features correctly when plotted on the current Public Works plotters. Currently Public Works plotters are HP 650c plotters. CADD reference files shall be merged when used to create drawings and cover sheets.

9. Conflicting Documents. In cases of conflicts between the RFP, contractor's proposal and contractor's design, the following will be the order of precedence: the RFP; contractor's proposal contractor's specifications; contractor's plans. Other conflicts that arise shall be referred to the Contracting Officer for determination.

10. Schedules After Award of Contract. The Contractor shall provide a detailed schedule, which shall include a phasing plan, utility disruptions, demolition/asbestos abatement plan, erosion control plan, UXO procedures and subsurface dedudding, and any other activities that would affect existing construction, on or off the project site.

11. Construction Requirements. After the Contractor has completed the applicable project design documents the Government will issue to the Contractor a notice to proceed with construction. Prior to commencement of construction a Pre-construction Conference will be held to acquaint the Contractor with the general plan of contract administration and requirements under which the construction operation is to proceed. This conference will also inform the Contractor of the obligations concerning equal opportunity and Federal wage rates reporting system.

12. Contract Closeout. Completion, acceptance, and contract settlement are accomplished when final punch list items (see Contract Clause Inspection of Construction) have been completed and approved, as-built drawings are complete, and warranty provisions and dates are established.

### 1.1.2 Project Description - Range 9

This contract includes design and construction of alterations, improvements and additions to the existing Range 9 at Ft. Leonard Wood, Missouri. The existing Modified Record Fire Range at Range 9 consists of fifteen lanes, each with a walk-in, one-person foxhole, and nine stationary pop-up targets.

The design/build contractor will be responsible for the design and construction of new support facilities at this range. These facilities include a multi-story control tower, a 251 square meter classroom/storage/latrine building, a 100-person covered mess facility, a 300-person bleacher enclosure, an ammunition breakdown building, water service (consisting of a new water main connecting to the existing Base water system), sanitary service (consisting of a combination of a gravity sewer and a lift station and force main connecting to the existing Base sewer system), access and maintenance roads, all necessary earthwork, seeding, and erosion control measures, electrical service, telephone service, night lighting, HVAC systems, anti-terrorism/force protection measures, and other ancillary improvements. The design/build contractor will also modify the existing walk-in foxholes to add wing walls at the foxhole entrances. Building furniture, control tower equipment, and bleachers will be provided by others.

In addition, the design/build contractor will be responsible for the demolition and removal of four existing buildings. Two buildings, the existing bleacher enclosure and a wood shed will be removed by others. The contractor will be responsible for the removal of the bleacher enclosure foundation. The existing compressor / controls building and the control tower (Building 5382) will remain.

Verification of existing site conditions, additional site surveys, additional geotechnical investigations, and all other information prerequisite for design and construction of a complete and usable facility, and not contained in this Request for Proposal (RFP) are the expressed responsibility of the Contractor.



**Photo 1 - Range 9: Building 5382 (Control Tower)**

- Building 5382 – Two-story steel control tower. Building area = 29.6 square meters. The control tower will be removed by others. The security fence shall be removed by the contractor after the new control tower is constructed, operational, and accepted by the Contracting Officer.



**Photo 2 - Range 9: Building 5385**

*Remoted Target System (RETS) Ranges* handbook and as described in the electrical section of this RFP.

#### 4.6.2 Classroom Building

##### 4.6.2.1 General Description

One new classroom building shall be located at each range. The classroom building shall be similar (except for size and interior layout) to the standard instruction building as shown in the *Design Manual for Remoted Target System (RETS) Ranges* handbook. The classroom building shall be one-story with a minimum eave height of 4.27 meters and approximately 251 square meters in size (including the latrine for trainees). The interior of the building will consist of a classroom area, an office, an externally accessible storage area, a small bathroom area for cadre (internally accessible), an externally accessible latrine for trainees, and a mechanical room. The office area, which shall be directly accessible through the interior only, shall be sized to accommodate four personnel, two standard office-sized desks, and two file cabinets. The furniture will be supplied by others. The storage area shall be approximately 21 square meters in size and shall be accessible through both interior and exterior doors. The internally accessible bathroom shall be sized to accommodate one toilet and one sink. The externally accessible latrine shall be designed to accommodate three male toilets, three urinals, and four female toilets. Four sinks shall be located in the male latrine. Three sinks shall be located in the female latrine. The mechanical space shall be sized for the building mechanical equipment.

The remainder of the building space shall be used as a classroom area. The classroom area shall be sized for 200 persons sitting on bleachers. Each bleacher can seat 50 people and is approximately 3.05 meters by 6.10 meters by 1.52 meters high. Bleachers will be furnished by others under separate contract.

##### 4.6.2.2 Exterior Design Criteria

- a. Exterior Walls - Exterior walls shall be insulated metal panels
- b. Roof – The roof shall be a standing seam metal roof system
- c. Windows and Doors – The exterior door shall be insulated, galvanized, hollow steel construction. A concrete pad shall be located in front of all exterior doors. Exterior windows will be aluminum-sliding type with insulated glass and steel guards installed on the exterior for intrusion resistance.

The plumbing design shall comply with the requirements of the latest editions of the following codes, standards, and specifications:

- National Standard Plumbing Code, Latest edition
- TM 5-810-5, Plumbing

### 6.3 Technical Specifications

The design/build contractor shall use and edit standard Corps of Engineers Guide Specifications obtained from the US Army Corps of Engineers web site (<http://www.hnd.usace.army.mil/techinfo>) for all applicable mechanical and plumbing items where a Guide Specification exists. If a Guide Specification does not exist for the item, then the design/build contractor will be required to create the technical specifications. All technical requirements contained in the final design shall be incorporated into the edited specifications and/or drawings.

The following is a list of specifications that shall be used on this project. Other applicable sections as mentioned above, shall be added by the design/build contractor as necessary.

- Section 02510 - Water Distribution System
- deleted
- Section 02530 - Sanitary Sewerage
- Section 10800 – Toilet Accessories
- Section 11310 – Pumps; Sewage and Sludge
- deleted
- Section 15080 – Thermal Insulation for Mechanical Systems
- Section 15400 – Plumbing, General Purpose
- Section 15565 – Heating System, Gas-Fired Heaters
- Section 15566 – Warm Air Heating System
- Section 15700 – Unitary Heating and Cooling Equipment
- Section 15845 – Energy Recovery Systems
- Section 15895 – Air Supply, Distribution, Ventilation, and Exhaust System
- Section 15950 – Heating, Ventilating, and Air Conditioning (HVAC) Control Systems

Section 15990 – Testing, Adjusting, and Balancing of HVAC Systems

supply air shall be balanced to maintain a negative net flow of 25 lps for each entry door.

#### 6.6.3 Ammo Breakdown Building

An electric resistance heater will be provided for each of the ammo breakdown buildings.

### 6.7 Ventilation

#### 6.7.1 Control Tower

Ventilation air will be provided by through-the-wall heat pumps.

#### 6.7.2 Classroom Building

Each classroom will be ventilated by a pad-mounted package unit with an energy recovery module. The recovery module capacity will be based on the average occupancy 129 people over a four hour period. Separate exhaust fans will be provided for the men and women's section of the latrine.

#### 6.7.3 Ammo Breakdown Building

Each building will be ventilated by wall louvers located 300 mm above the ground.

### 6.8 Plumbing Scope of Work

#### 6.8.1 Range 3

Water service at Range 3 will be provided by the construction of a new 152 mm water main connecting to the existing Ft. Leonard Wood water system. Sanitary sewer service will be provided by the construction of a new lift station and force main that will connect to the existing Ft. Leonard Wood sanitary sewer system. For additional information, see the Civil section of this RFP. Yard hydrants will be placed at the covered mess, bleacher enclosure, and ammunition breakdown building.

#### 6.8.2 Range 9

Water service at Range 9 will be provided by the construction of a new 305 mm water main connecting to the existing Ft. Leonard Wood water system. Yard hydrants will be placed at the covered mess, bleacher enclosure, and ammunition breakdown building. Sanitary sewer service will be provided by the construction of gravity sewers, lift station(s), and

force main(s) that will connect to the existing Ft. Leonard Wood sanitary sewer system. For additional information, see the Civil section of this RFP.

### 6.8.3 Building Plumbing

Interior hot and domestic potable water shall be run in CPVC pipe. Interior building waste piping shall be constructed of pre-lined PVC pipe.

All water closets shall be of the flush valve type. All fixtures shall be vitreous china. Lavatories shall be supported by chair carriers. Water closets shall be floor-mounted, floor outlet.

A single 1,900-liter liquid propane tank shall be provided. Buried polyethelene pipe shall be used to transport the gaseous propane to each building requiring service. Tracer wire and warning tape shall be buried with all buried service piping. Annodless risers shall be provided at each propane tank, and at each building. The color of the tank shall be designated by the Ft. Leonard Wood – DPW office.