SCOPE OF DESIGN SERVICES (MILCON)

Camp Dodge Construct ERCIP Microgrid, PV Array, etc.

(TITLE I / TYPE A & B)

1. OBJECTIVE:

1.1 To design a complete and usable facility that satisfies the identified requirements in the Project Book (a collection of design criteria, guidelines, standards, programming documents, project descriptions, and other project specific information, to be issued to the successful offeror); is completed within the time frame of the agreed upon design schedule; conforms to State of Iowa mandated design codes, Unified Facilities Criteria (UFC) documents specifically listed in this document or the Project Book, regulations, criteria, and professional design standards; which can be constructed within the maximum construction cost limitation. All possible efforts will be made by the Design Consultant to satisfy the Users' requirements within established criteria.

2. **DEFINITIONS**:

2.1 Owner.

- **2.1.1** The Owner is The Armory Board for the Iowa Army National Guard (IAARNG), a division of the Iowa Department of Public Defense (Military Division)
- 2.1.2 The Federal entity within the Army National Guard (ARNG) which provides oversight to the State for the design and construction of IAARNG facilities is the National Guard Bureau (NGB) Army Installations & Environment Division (I&E).
- **2.1.3** The State entity within the IAARNG responsible for the design, construction, and maintenance of all IAARNG facilities is the Construction and Facilities Management Office (CFMO) and is housed in Building B-61, Camp Dodge.

2.1.4 Owner Personnel:

- .1 Contracting Officer (KO):
 - .a The KO is the official designated Owner's Representative as defined in the Contract for Design Services. The KO is the only person having express authority to execute contracts and changes to contracts on behalf of the Owner and to bind the Owner with respect to all matters requiring the Owner's approval or authorization.
- **.2** Project Manager (PM):
 - .a The PM is responsible for the daily actions and communication on behalf of the Owner and the Users throughout the design phase of the project. The PM will be the primary point of contact for the Design Consultant throughout the design phase.
- .3 Construction Manager (CM):
 - .a The CM is responsible for the daily actions and communication on behalf of the Owner and the Users throughout the construction phase of the project. The CM will be the primary point of contact for the Design Consultant throughout the construction phase and is addressed further in the "Scope of Design Services – Title II / Type C" (to be negotiated after construction contract bid).
- .4 Users:

- .a The Users are IAARNG soldiers and/or state personnel who currently occupy and/or will occupy the facility upon completion. The Users will name a designated representative who will be the primary point of contact throughout the design phase of the project. The PM will relay User requirements and all other correspondence between the Design Consultant and Users. The Design Consultant shall not directly receive instruction from the Users regarding the design.
- 2.1.5 The lowa Department of Public Defense, IAARNG, CFMO, etc., and its personnel will hereafter be referred to as "Owner" as if singular in number. Where the Project Book requires the Design Consultant to forward submittals or other information to the Owner, effort will be made to identify the individual to whom the item should be directed. (i.e. "...to the Owner's Contracting Officer", "...to the Owner's Project Manager", etc.).

2.2 Design Consultant (A/E):

- **2.2.1** The A/E is the person or entity lawfully licensed to practice architecture or engineering in the State of Iowa.
 - .1 The A/E shall name a designated representative who will be the primary point of contact throughout the design phase of the project. This representative will hereafter be referred to as the A/E Project Manager. As part of your proposal, identify the Project Manager and provide contact information (phone and email).
 - **.2** The A/E shall refer to the A/E, the A/E's representative, employees, or consultants as if singular in number.

3. DESIGN SERVICES:

3.1 TITLE 1 / TYPE "A" - Site Investigation Services:

- **3.1.1** Services shall include investigations and documentation of data essential for the Design Services and production of the construction documents; may include, but is not limited to:
 - .1 Topographical surveys
 - .2 Site surveys
 - .3 Geotechnical surveys
 - .4 Surveys of utility locations and capacities
 - .5 Existing building construction, layout, and systems surveys (if applicable)
 - **.6** Review of Owner-provided information
 - .7 Similar fact-finding investigations, and technical studies

3.2 TITLE I / TYPE "B" - Design Services:

- **3.2.1** Production of complete designs, drawings and technical specifications, with services including but not limited to:
 - .1 Schematic Design
 - .2 Design Development and Construction Documentation
 - .3 Bidding Assistance
 - .4 Code review
 - .5 Review and incorporation of Owner criteria, standards, and other items
 - .6 Cost Estimating
 - .7 Development of supporting design data
- **3.2.2** Design Document Submittals shall be made at the completion of each of 5 (five) Design Phases:
 - **.1** Schematic (10%).

- .2 Conceptual (30%) (add 30 days for National Guard Bureau review)
- .3 Preliminary (60%) (add 30 days for National Guard Bureau review)
- .4 Final (90%) (add 30 days for National Guard Bureau review)
- **.5** Bid Final (100%)
- **3.2.3** A description of the Design Document Submittals required at the completion of each Design Phase and number of copies to be submitted is as identified in the Project Book (see attached Tab E from the Project Book for requirements at each phase).
- **3.2.4** Bidding Assistance Services shall include:
 - .1 Preparation of addenda to the bidding documents
 - .2 Response to bidder's questions during the Bidding Phase
 - .3 Attendance at the Pre-Bid Conference
 - .4 Evaluation of the bids

3.3 Design Services Requirements:

- **3.3.1** Maximum Construction Cost (MCC):
 - .1 The MCC is the Owner derived dollar amount expected for the low bid. Construction contingencies are not included in the MCC and should not be included in the A/E's opinion of probable costs. NGB uses an 85% of MCC rule for early cost estimates. If it becomes evident to the A/E at any point during the Design Services that the construction costs will exceed the MCC or 85% of MCC for early submittals, the A/E shall immediately notify the Owner's PM and all work shall cease and be held in abeyance until funding differences, scopes, and/or criteria are resolved and such changes as may be required are executed. Another effort will be to identify alternate bid items to meet these limits. The A/E shall assist the Owner to identify those areas where cost reductions can be made without adversely affecting the design objective. The PM will coordinate this information with the KO.
- **3.3.2** Base Bid and Alternate Bid Items (ABI's):
 - **.1** A project's Base Bid must provide a complete and usable facility that meets the minimum requirements identified in the project book.
 - **.2** Depending on the project type and scope, the Owner may dictate multiple Base Bids.
 - .3 ABI's are required to ensure award and execution of the project within the MCC and as such are separate line items of work that incorporate additional features not absolutely necessary to provide a complete and usable facility. Proposed ABI's shall be reviewed with the Owner at each Design Phase as the A/E's opinion of probable cost is refined.

3.3.3 Code Review:

- .1 Code review shall meet all State Fire Marshal (SFM or Authority Having Jurisdiction) requirements and shall include a preliminary review and final submittal to the SFM with revisions to the construction documents as required until all SFM review comments have been satisfied.
- .2 Design Schedule shall allow (40 days minimum) for SFM review and adequate time for subsequent construction documents revisions. Bid Final document submission should include all such revisions.
 - .a If the Owner mandated Bidding Date does not allow adequate time in the Design Schedule to accomplish the above, revisions to the construction

documents in response to SFM review comments may be addressed by addendum during the bidding phase.

- .3 Design Service (Title I / Type B) shall include:
 - .a All State Fire Marshal review fees.
 - .b Local municipality fees (if applicable)
 - .c Energy Code Review
 - .d Life Cycle Cost Analysis (as required by the applicable Energy Code, if applicable at all).

3.3.4 Unified Facility Criteria (UFC)

- .1 UFCs available at https://www.wbdq.org/ffc/dod/unified-facilities-criteria-ufc
- .2 The following UFCs are universally applied to all IAARNG design efforts
 - .a 4-010-01 DoD Minimum Antiterrorism Standards for Buildings
 - .b 4-021-01 Design and O & M: Mass Notification Systems
 - .c Basis of Design narrative requirements by discipline as described in UFC 1-200-01 DoD Building Code and all discipline specific UFC documents.

3.3.5 Utility Rebate and Energy Analysis Program

.1 The A/E shall make application after the 10% design phase to the local utility company's rebate and energy analysis program. The A/E will have all responsibility for managing this process on behalf of the Owner.

3.3.6 Design Schedule:

.1 The A/E shall promptly, after the execution of the Contract for Design Services, complete and submit to the Owner's PM for review and approval the Owner-provided Design Schedule. The schedule shall provide for completion of all work identified in the Contract within the Contract time. The Design Schedule shall be updated and submitted at the completion of each Design Phase.

3.3.7 Owner Review:

- .1 The A/E shall allow 10 business days in the Design Schedule after each Design Phase Document Submittal for Owner Review.
- .2 The A/E shall allow 30 calendar days minimum in the Design Schedule after 30%, 60%, and 90% Design Phase Document Submittal for NGB Review. The Owner's PM will be responsible for forwarding Design Document submittals to NGB and relaying NGB comments back to the A/E. As NGB comments are often of limited value, the Owner will expedite the review process in order to keep the design schedule on track.

3.3.8 Design Review Meetings:

- .1 Design Review Meetings will be held at the project site, other designated location, or via online distributed means at the 10%, 30%, 60% and 90% Design Phases following Owner review of the respective Design Document Submittals.
 - .a Representatives from each design discipline are required to attend Design Review Meetings.
 - .b Meetings will be Owner-led with an anticipated duration of two hours. This may require meetings be broken out by discipline and multiple review meetings be held.
 - **.c** Owner will forward review comments to the A/E Project Manager prior to the meeting for review.

- .d Meeting Minutes shall be taken by the A/E Project Manager and forwarded to the Owner's PM electronically.
- **.e** A/E shall review the Owner provided comments PRIOR to the Design Review Meeting and identify only those items which require discussion at the Design Review Meeting.
- .f A/E shall submit the review comments document back to the Owner with the subsequent Design Document Submittal. All review comments shall have been addressed with playback by the A/E entered after each line item. Requires specific reference to drawing sheet/detail/note or specification section/part/paragraph where the line item applies.

3.3.9 Design Services Management and Execution:

- .1 Design Services shall:
 - .a Include as many site visits as are required by the A/E to effectively complete the Design Services.
 - .b Recognize input from the CFMO and other Owner entities including but not limited to Anti-Terrorism/Force Protection, Telecommunication, Physical Security, Electronic Security, Energy, Waste Reduction and Safety.
 - **.c** Incorporate into the design all applicable criteria, regulations, and standards provided in this Project Book or otherwise by Owner.
- .2 The Owner's PM or any other Owner representative, apart from the KO, does not have the authority to direct changes in the contract; however, the PM may direct changes to the design and/or the design process.
- .3 If the A/E feels that any information or direction given by the Owner's PM or any other Owner representative, apart from the KO, is in conflict with criteria, direction, or funds provided in the contract or which may be construed as a change in contract requirements, the A/E is to notify the KO prior to any action for clarification.
- .4 The A/E shall furnish sufficient technical, supervisory, and administrative personnel to ensure the progress and completion of the work in accordance with the approved Design Schedule.
- .5 A/E Project Manager shall be responsible for disseminating all relevant Owner correspondence, meeting notes, review comments, instructions, etc. to their employees and consultant's.
- **.6** Drawings shall conform to the IAARNG CADD Standards (Tab T in the project book).
- .7 Specifications format shall conform to CSI Master Format (current edition). Footers shall match template provided by the Owner.
- **.8** Clearly identify any items that will use delegated design by construction contractors.
- .9 Telecommunication design, if part of the scope of work, shall be performed by a Registered Communications Distribution Designer (RCDD). Submit registration certificate upon award of contract.

3.3.10 Errors and Omissions:

.1 The A/E is responsible for the technical competency, accuracy, and completeness of the construction documents. The Owner reserves the right to hold the A/E liable for any additional construction costs resulting from A/E

errors and omissions. In such case, the A/E shall be liable for only the difference between actual construction cost and what it would have cost had the A/E not made the errors and omissions.

3.3.11 Post Bidding Design Revisions:

.1 In the event that no acceptable bona fide bid is received within the MCC, the A/E shall, at the direction of the KO, and at no further cost to the NGB or the Armory Board, revise the construction documents for re-bid until an acceptable bona fide bid is received within the MCC. Revisions shall be coordinated with and approved by the Owner. Reproduction and distribution of revised construction documents for bidding will be provided by the Owner.

3.4 Information/Services provided by the Owner:

- **3.4.1** The following items will be furnished to the Consultant upon Award of Contract:
 - .1 Project Book.
 - **.2** Project scope and programming documents.
 - **.3** Existing site and building plans, including all available drawings and electronic files applicable to the project.
 - **.4** Copies of Army National Guard Design Guides and other Owner criteria, standards, regulations and design requirements applicable to the project.
 - .5 Location of site utilities as best is known by the Owner.
 - **.6** "Boiler-Plate" front-end specification documents (Division 0).
 - .7 Advertisement for bidders and reproduction and distribution of contract documents for bidding purposes.
 - .8 Opening of Bids and award of Construction Contract.

3.5 Fees:

3.5.1 Design service fees shall be lump-sum and will be limited to a not-to-exceed amount of around 3% for Type A services and no more than 6% for Type B services. Percentages to be based on the provided MCC.

3.6 Miscellaneous:

- **3.6.1** OWNERSHIP OF TANGIBLE DOCUMENTS: The Owner shall receive Ownership of all documents, Drawings, Specifications, electronic data, and information prepared, provided, or procured by the A/E or by consultants retained by the A/E and distributed to the Owner for this Project, upon the making of final payment to the A/E or in the event of termination upon payment of all sums due to the A/E.
 - .1 COPYRIGHT: The Owner shall own any resulting copyright in the Construction Documents as a work for hire and shall have the right to use, to reproduce, and to make derivative works of the Construction Documents. The A/E shall not acquire a copyright for Project Construction Documents but shall be permitted to retain copies including reproducible copies or electronic data of the Drawings, Specifications and other Project documents.
 - .2 USE OF DOCUMENTS IN EVENT OF TERMINATION: In the event of a termination of this Agreement, the Owner shall own any resulting copyright and have the right to use, to reproduce, and to make derivative works of the Construction Documents to complete the Project provided payment has been made of all sums due to the A/E.
 - .3 OWNER'S USE OF DOCUMENTS AFTER COMPLETION OF PROJECT:
 After completion of the Project, the Owner may reuse, reproduce, or make
 derivative works from the Documents at the Owner's sole risk, except for any
 A/E indemnification obligations, and the Owner shall be responsible for any and

- all claims, damages, losses, costs, and expenses, including reasonable attorneys' fees and costs, arising out of or resulting from any such prohibited use.
- .4 A/E'S USE OF DOCUMENTS: Where the A/E has transferred its copyright interest in the Construction Documents under Subsection 3.6.1.1, the A/E may reuse Construction Documents prepared by it pursuant to this Agreement in its practice, but only in their separate constituent parts and not as a whole.
- .5 The A/E shall obtain from its consultants rights and rights of use that correspond to the rights given by the A/E to the Owner in this Agreement and the A/E shall provide evidence that such rights have been secured.