#### Attachment 8.6

# Fort Bliss Solar PV Project Requirements and Specifications

## **Fort Bliss and Government Contact Information**

The government will provide key contact information to the Contractor on or before contract award, to include Director of Public Works, Contracting Officer, and the Contracting Officer Representative (COR).

## **Solar PV Project Site**

The Solar PV Project Site (Project Site) is approximately 218 acres at Fort Bliss adjacent to the IBCT South Training Area. The Project Site map is provided as Attachment 8.3.

#### Site

The Contractor shall not use property provided by Fort Bliss for any purpose other than in the performance of this contract. At the end of each work day the Contractor shall leave the work site in a clean and orderly fashion. At the end of the contract, the Contractor shall be responsible for removal of all infrastructure, materials, and equipment from the site, and shall restore the site to its pre-contract condition.

#### **Fort Bliss Access**

Contractors shall obtain badges if required by the Director of Public Works, at no charge. When an employee leaves the Contractor's service, the employee's pass and badge shall be returned immediately. Any further requirements will be supplied by the Director of Public Works.

# **Restrictions to Right of Access**

The Contractor will have right of access to the Project Site and the Contractor's designated 5-acre Staging Area (or lay-down and storage area). The Government may limit or restrict the right of access to other areas in any manner considered to be necessary for national security. Questions or concerns should be directed to the Director of Public Works.

## Contractor's Workplace

The Contractor's workplace may be inspected periodically by a Federal or State OSHA inspector for safety violations. Abatement of violations shall be the responsibility of the Contractor in coordination with the Director of Public Works. The Contractor shall provide assistance to Director of Public Works and the inspector if a complaint is filed. The Contractor shall promptly pay any fines levied on the Contractor by Federal or State OSHA offices due to safety/health violations.

The Contractor shall observe all requirements for handling and storing combustible supplies, materials, waste, and trash. Contractor employees operating critical equipment shall be trained to properly respond during a fire alarm or fire in accordance with the applicable agency's fire prevention procedures, rules, or regulations. The Contractor shall obtain all required welding permits from the Federal Fire Department prior to any welding.

The local fire department with coordination from the installation shall have jurisdiction over and shall be principally responsible for fire prevention inspections. Firefighting at any Contractor facility shall be the responsibility of the local fire department. The Contractor shall provide keys to an installation representative identified by the Director of Public Works for access into any Contractor on post fenced area, building, or structure. The keys shall be labeled or permanently tagged for their respective locks and shall be replaced within one hour if the lock is changed. The local Fire Marshall shall be the authority having jurisdiction in all matters relating to fire prevention, fire protection, and firefighting. Ambulance service will not be provided by Fort Bliss.

# Lay-down and Storage Area

A lay-down and storage area, as shown on the site map Attachment 8.3 as "Contractor 5-acre Staging Area," to store materials or locate a temporary office trailers will be made available for use by the Contractor. Contractor may install fencing around the area at its sole cost. Contractor may elect to install area security lighting around the perimeter of the fence, however power must be installed, metered and paid at Contractor's expense. Use of the area will be solely at the Contractor's risk.

#### **Safety Requirements**

The Contractor shall provide for the safety of personnel employed in the performance of the Contract. All work shall be conducted in a safe manner and shall comply with the requirements in the Army Corps of Engineers Safety Manual EM 385-1-1, and all applicable OSHA regulations. The Contractor shall implement a health and safety plan for employees performing work under the contract. The Health and Safety Plan shall be in accordance with standard commercial practices and approved by the Director of Public Works, and subsequently updated annually. Contractor shall maintain an accurate record of accidents resulting in traumatic injury or death and accidents resulting in damage to Installation's property, supplies, and equipment. The Contractor shall report accidents to the Installation in writing within twenty-four (24) hours of their occurrence. Contractor shall design and implement a fall protection plan that, at a minimum, meets the requirements set forth at 29 CFR §1926.500. Contractor shall report all serious or fatal accidents within eight (8) hours to OSHA and immediately by telephone to the Director of Public Works. Prior to commencing work Contractor and Fort Bliss shall meet to agree upon administration of the safety program.

## **Security Requirements**

Contractor personnel or any representative of the Contractor entering Fort Bliss property and facilities shall abide by all security regulations. They shall be subject to security checks according to Title 32, Code of Federal Regulations, Part 40b, and Title 18 USC, Section 930.

## **Vehicle Registration**

Contractor personally owned vehicles or company owned motor vehicles entering DoD facilities shall have a valid state license and shall be registered with Fort Bliss security, if required by the Department of Public Works. If required, the Contractor shall register the vehicles before commencement of contract work. State license, registration, safety sticker, and insurance shall be maintained current while the vehicle is in use at each DoD facility. Contractor personnel operating motor vehicles on Fort Bliss shall have a valid state operator's license for the category of vehicle being operated. The drivers shall comply with Title 32, Code of Federal Regulations, Part 40b regarding motor vehicle use at each installation. The Contractor shall provide transportation for Contractor personnel to and from local security installation sites.

## **Work Scheduling**

The Contractor shall arrange its on-site work so that it will not interfere with normal Fort Bliss operations. The Contractor shall submit within sixty (60) days of award of contract award a full construction work schedule to indicate the major actions and milestones to complete this project. Any work requiring service interruptions or utility outages must be coordinated with the Director of Public Works. Contractor shall coordinate in advance any planned utility outage.

Work Outside Regular Hours: If the Contractor requires access to the work site outside regular hours, including Saturdays, Sundays, and Installation holidays, an application shall be delivered to the Director of Public Works in writing, seven (7) days in advance. During periods of darkness, all work sites shall be lighted in a manner approved by the Contracting Officer. To minimize disruption to Installations employees, all required utility cutovers, potentially affecting the Installation's operation shall be made after normal working hours.

## **Availability of Utilities**

Fort Bliss will not generally be able to furnish utilities at the Project Site and Staging Area. Contractors shall arrange for all utilities, such as but not limited to natural gas, electric, water and sewer, as needed at their own expense. If utilities are required for operation of the Project, the Contractor shall ensure adequate availability of the utility and be responsible for the cost of all connections, metering, and utilities.

The Contractor shall remove all temporary connections, distribution lines, and associated equipment upon completion of work and return the area to its original condition. If a permanent relocation of utilities is required, the Contractor shall provide drawings to show requested relocations.

<u>Conservation of Army Utilities:</u> When provided, Contractor personnel shall practice utilities conservation and shall operate under conditions that preclude waste of Installation furnished utilities.

## **Wireless Communications Equipment**

Wireless communication equipment may be used only with the approval of Fort Bliss Director of Public Works. Fort Bliss is not responsible for interference with wireless communications due to routine operation of Installation's communications equipment.

#### **Fort Bliss Regulations**

The Contractor, his employees, and subcontractors shall become familiar with and comply with all Fort Bliss regulations, including fire, traffic, and security regulations. All personnel employed under this contract shall keep within the limits of the work (and avenues of ingress and egress) and shall not enter any restricted areas unless required by the contract to do so and are cleared for such entry. The Contractor's equipment shall be conspicuously marked for identification. A copy of the Base Regulations may be obtained from the Director of Public Works.

#### **Installation As-Built Drawings and Plans**

If needed by the Contractor, utility and Installation maps and plans will be available upon request, if available. Verification of the accuracy of the plans shall be the sole responsibility of the Contractor. Request for plans shall be made, at least thirty (30) calendar days in advance, to the Director of Public Works.

#### Sanitation

Adequate sanitary conveniences of a type approved for the use of persons employed on the project site shall be constructed, properly secluded from public observation, and maintained by Contractor in such a manner as required or approved by the Contracting Officer based on the recommendation of the COR. These conveniences shall be maintained at all times without nuisance. Upon completion of the work, the conveniences shall be removed by Contractor from the premises, leaving the premises clean and free from nuisance.

## **Environmental Compliance**

The Contractor shall: provide and maintain, during the life of the contract, environmental protection on the Project Site; plan for and provide environmental protection measures to control pollution that develops during normal construction practice, during operations, and at the conclusion of the contract, the disassembly and removal of all property and restoration of the site to substantially the original condition that the property was received at commencement of the contract; comply with Federal, State, and local laws and regulations pertaining to the environment, including water, air, solid waste, hazardous substances, and waste.

<u>Hazardous Substances</u>: The Contractor, at its expense, must comply with all applicable laws and regulations with respect to occupational safety and health, the handling and storage of hazardous materials, and the proper handling and disposal of hazardous wastes and hazardous substances generated by its activities. Applicable laws and regulations govern liability and responsibility for the costs of proper handling and disposal of hazardous wastes and hazardous substances. The terms hazardous materials, hazardous wastes, and hazardous substances are as defined in the Federal Water Pollution Control Act, the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, the Solid Waste Disposal Act, the Clean Air Act, and the Toxic Substances Control Act, and their implementing regulations, as they may be amended from time to time.

<u>Disposal of Waste:</u> Non-hazardous Contractor generated refuse/waste arising from the performance of this contract shall be removed from Fort Bliss property and recycled or disposed of at an authorized landfill at the Contractor's expense.

<u>Protection of Natural and Cultural Resources:</u> The Contractor shall preserve the natural resources within the area in which the Contractor is authorized to own and operate the Solar PV Project. The Contractor shall confine construction activities to within the limits of the work area indicated or specified. The Contractor shall minimize the disturbance of soils and native vegetable to the maximum degree possible, when the vegetation is removed, the Contractor shall plan and conduct earthwork to minimize the duration of exposure of unprotected soils. The use of water trucks, silt fences and straw bales, and the installation of gravel roads may be needed to prevent dust and erosion. The Contractor shall carefully protect in-place and report immediately to the Director of Public Works any discovery of historical and/or archaeological items (including human remains) that are found on the site.

# **Drainage**

The Project and associated construction will not adversely affect water drainage patterns on Fort Bliss. The Solar PV Project shall also comply with all environmental requirements and standards. Where grading is necessary to control drainage on the site storm water impoundment basins will be installed to allow recharge of subsurface aquifers in compliance with local storm water best management practices.

## Liability

The Contractor releases, remits and forever discharges the Government, its officers and employees from any all causes of action, judgments, expenses, liabilities, damages, claims, and charges of whatever kind or nature, whether in law or equity, tortious, contractual, or other, that may arise as a result of or in connection with the activities of the Contractor, its officers, employees, agents and sub-contractors. The Contractor shall indemnify, defend and hold harmless the Government and its officers and employees against any and all causes of action, judgments, expenses, liabilities, damages, claims, and charges of whatever kind or nature, whether in law or equity, tortious, contractual, or other, that may arise as a result of or in connection with the activities of the Contractor, its officers, employees, agents and subcontractors.

#### **Employees**

The Contractor shall not employ or allow any person to work on this contract or enter Government property if such person is identified to the Contractor as a potential threat to the health, safety, security, general well-being, or operational mission of the Government Installation or personnel. No employee or representative of the Contractor shall be admitted to the work site unless that employee furnishes satisfactory proof that he/she is a citizen of the United States or otherwise legally authorized to work in the United States.

## **Housekeeping and Practices**

Contractor shall perform normal housekeeping functions inside and outside of Contractor's facilities and job site locations. Such functions include sweeping, mopping, dusting, disposal of accumulated waste materials and rubbish, and other operations necessary to present a neat appearance. Contractor shall properly recycle or dispose of all rubbish and waste materials pursuant to applicable laws and regulations. Contractor shall store all supplies and equipment only at approved storage areas so as to preclude theft or damage and maintain the site in a neat and orderly manner. Loose debris on trucks leaving the site shall be loaded in a manner that will prevent dropping of materials on the streets and other areas and shall have a suitable cover, such as a tarpaulin, over the load before entering surrounding streets. Contractor shall be responsible for immediately cleaning up any materials that fall from trucks.

#### Micro-grid-Ready Inverter Requirements

The inverters for the Fort Bliss Project shall have the capability to support a future micro-grid system. The system shall be capable of connecting and operating with a utility connection (utility-interactive mode) and with a future micro-grid (multimode) that could include engine generators, other inverter based renewable resources and energy storage in accordance with IEEE 1547. For the purposes of this RFP, the inverters shall be UL 1741 approved and have an Adjustable Trip Limit (ATL) capability as defined by Underwriters Laboratory (UL) as well as being capable of real-time monitoring and management in the utility-interactive mode and with ATL capability via a power system controller. The inverters shall be capable of adjusting its power factor, voltage and frequency range to support a micro-grid system.

# **Acquisition and Security Restrictions**

The Army is committed to reducing physical security risks and protecting national security at its installations. Accordingly, Contractor shall comply with, and incorporate into all project-related contracts and subcontracts, certain Defense and Army Federal Acquisition Regulations Supplement solicitation provisions and contractual clauses. These provisions and clauses impose Buy American Act restrictions on contracts for photovoltaic devices, prohibit the award of contracts to terrorist countries, restrict contracts to companies controlled by a foreign government in certain circumstances, and require foreign representatives providing contractual services on Army installations to be screened.

## **NERC Standards Compliance**

The Contractor and its subcontractors shall comply with and implement the latest North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection (CIP) standards that have received regulatory approval as they apply to the contract, the contract's supporting energy infrastructure in all its operating environments, and the contract's supporting energy suppliers; in addition to incorporating updates to the standards as they are formally adopted by NERC.

## **Inspections**

In order to carry out a program of inspection to safeguard against threats and hazards to the security, confidentiality, integrity, and availability of the contract, the Contractor shall afford the Government unrestricted access to inspect any Contractor assets that are operated on or are present on Government property; to include assets on property that is purchased, rented, or leased by the Contractor.