

6.0 PROJECT SPECIFIC REQUIREMENTS FORT BLISS, TX <VER>(REV 2.7 – 30 APR 2012)</VER>

6.1. GENERAL

The requirements of this paragraph augment the requirements indicated in Paragraphs 3 through 5.

6.2. APPROVED DEVIATIONS

The following are approved deviations from the requirements stated in Paragraphs 3 through 5 that only apply to this project.

~~6.2.1. Irrigation Potable Water Use Reduction – The requirement for 100% reduction in potable water usage for irrigation in Paragraph 5.2.7.1 is waived. Instead, the requirement is to reduce irrigation potable water use 50 percent using LEED credit WE1.1 baseline, except where precluded by other project requirements. None.~~

6.3. SITE PLANNING AND DESIGN

6.3.1 General <SITE_OTHER> See Appendix J. </SITE_OTHER><SITE_DB>

6.3.1.1. Site Preparation Plan, design, and construct all functional and technical site requirements listed in this project, including erosion control measures, underground conduit, piping, utility service lines and connections (electrical, communications, cable, water, sewer, stormwater, gas, mechanical), etc. within the project limits. The project limits are shown on the drawings. Base the site design upon conceptual site layouts provided in Appendix J.

6.3.1.2. Confine construction limits to the construction site boundaries for the specific facility location for the project.

6.3.1.3. Do not waste excess soil within the project limits without the written approval of the Government.

6.3.1.4. The Government may modify desired building placement within the site area to ensure adequate spacing between buildings and to ensure access is maintained. The Government will provide coordinates for two corners of the approved building location in order for the Contractor's surveyor to stake the site and building location. </SITE_DB>

6.3.2. Site Structures and Amenities <SITE_OTHER> See Appendix J. </SITE_OTHER>

<SITE_DB>Provide the following site structures and amenities.:

Dumpster Pad and Enclosure: Design and provide enclosure for dumpsters and recycling bins as required for facility size. Provide 6'-0" high rock wall enclosure. See Appendix J for requirements. Dumpster screening should be compatible with the building they serve and incorporates the concepts defined in the architectural theme in paragraph 6.5..

POV Parking and Access Drives. Design and construct POV parking areas and access drives as outlined in Paragraph 5 and paragraph 6.5 .

Provide fencing and enclosures in accordance with Appendix J.

See Appendices AA and GG for additional requirements for Site Structures and Amenities. </SITE_DB>

6.3.3. Site Functional Requirements:

6.3.3.1. Stormwater Management (SWM) Systems. <SITE_OTHER> See Appendix J. </SITE_OTHER><SITE_DB>

a) During construction of the facility the Contractor is responsible for SWPPP of the entire construction site limits. Coordinate the laydown spaces, haul roads and fabrication areas within the SWPPP.

- b) Storm Drainage – Design and install Storm Drainage. In areas where underground storm drainage piping exists, coordinate location and size for connection of roof drain leaders to the a storm water system with the Government prior to finalizing building design, but in any event, no later than 45 days prior to beginning building construction. Coordinate the storm water drainage system plan with the Government prior to finalizing building design. Construct the permanent storm water drainage system concurrently with the construction of the facility and will require coordination with the Installation.
- c) Most of the storm water runoff from the Main Cantonment Area drains via channels and lift stations to the Fort Bliss sump to the north of Fred Wilson Road and east of the Union Pacific Railroad. From the Fort Bliss Sump outlet, storm water drains to a series of basins including Pershing Dam Basin and connects to the river through the City of El Paso's municipal separate storm sewer system (MS4). Fort Bliss Sump and Pershing Dam Basin are the operational responsibility of the City and are located on Fort Bliss Property under long term leases. There are other smaller interconnections with the City of El Paso's MS4 at the post boundary, mainly via curb and gutter flows from access roads to the post.
- d) Storm water drainage from Biggs AAF flight line area is collected via a system of catch-basins and conduits which ultimately flow into a retention pond located east of taxiway G. Prior to the current construction of new Biggs AAF facilities, storm water conveyance within the remaining Biggs Army Airfield area was handled by swales and sheet flow. These flows would then collect in low areas and evaporate and infiltrate over time.
- e) Prior to current development of the East Biggs Area, drainage was via sheet flow through natural topography where storm water would infiltrate and evaporate. The existing Biggs AAF area and the East Biggs Area are being developed using on-site storm water retention basins as there are no natural drainages or adjacent urban drainage infrastructure sufficient to receive the increased post development runoff. Consistent with City of El Paso design requirements, the design criteria used by the Land Development Engineer for the new Biggs AAF and East Biggs infrastructure is the 10 year event for storm water conveyance and 25 year event for storm water retention.
- f) Fort Bliss maintains a TCEQ Multi-Sector General Storm Water Permit (TXR050000) for industrial activities at the post and a Phase II Small (MS4) General Permit (TXR040000) for operation of the installation urban MS4.
- g) Graded Slope and Fills: The angle for graded slopes and fills shall be no greater than the angle that can be retained by vegetative cover or other adequate erosion control devices or structures generally not to exceed 3:1 slope. In any event, plant slopes left exposed will, within 21 calendar days of completion of any phase of grading, or otherwise provide with temporary or permanent ground cover, devices, or structures sufficient to restrain erosion. Demonstrate the angle for graded slopes and fills to be stable. Stable is the condition where the soil remains in its original configuration, with or without mechanical constraints.
- h) Ground Cover: Whenever land-disturbing activity is undertaken on a tract, the entity conducting the land-disturbing activity shall install plant or otherwise provide a permanent ground cover per Fort Bliss seeding specification or Blue Grama, 11.25 Kg/ha of Pure Live Seed, unhulled, for erosion control.
- i) Final Inspection. When all construction on the project is complete, the Erosion and Sediment Control Inspector will evaluate the site and all permanent erosion control features, permanent ground cover and off-site impacts to other properties. If found to be in compliance, a close-out letter will be issued.
- j) Design Storm. Provide erosion and sedimentation control measures, structures, and devices to provide protection from the calculated maximum peak rate of runoff from the twenty-five (25) year storm.
- k) Grade. Provide newly constructed open channels and storm drainage ponds with side slopes no steeper than three horizontal to one vertical if a vegetative cover is used for stabilization unless soil conditions permit a steeper slope or where the slopes are stabilized by using mechanical devices, structural devices, or other acceptable ditch lines. In any event, the angle for side slopes shall be sufficient to restrain accelerated erosion. Typically the storm drainage ponds shall have a 3-strand barb wire fence, except if approved otherwise by the DPW.
- l) Acceptable Management Measures. Measures applied alone or in combination to satisfy the intent of this section are acceptable if there are no objectionable secondary consequences. The Installation recognizes that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. <SITE_DB>

6.3.3.2. Erosion and Sediment Control

The Texas Pollutant Discharge Elimination System (TPDES) oversees the Stormwater Sediment and Erosion Control Management Plan for the post. Comply with requirement general permit number TXR150000. <SITE_OTHER> See Appendix J. </SITE_OTHER><SITE_DB> Provide and maintain the SWPPP over the life of the project. Qualifying construction activities (greater than 1 acre) in the Texas portion of the installation are conducted under the TCEQ Construction General Permit (TXR150000) or, in New Mexico, under the EPA Region VI Construction General Permit (FRL-8690-8; EPA-HQ-OW-2008-0238). Construction site operators on Fort Bliss meeting the definition in the permits of primary or secondary operator must comply with the appropriate state construction general permit. Depending on the execution mechanism of the project, the construction site operator may be all, or a combination of the Directorate of Public Works, US Army Corps of Engineers, the Land Development Engineer, Land Development Infrastructure Contractor, Design Build contractor or other entities meeting the definition. </SITE_DB>

6.3.3.3. Vehicular Circulation.

NOT USED

6.4. SITE ENGINEERING

6.4.1. <SITE_OTHER>See Appendix J. </SITE_OTHER><SITE_DB>The existing site survey for the project is included as «SITE_EXIST_APPENDIX». After award, conduct a site survey to establish survey control points and a coordinate system, based on UTM, 13N, WGS83. Identify horizontal and vertical data used. Bring any discrepancies which are found in the existing surveys to the attention of the Contracting Officer. </SITE_DB>

6.4.2. Existing Geotechnical conditions: See Appendix A for a preliminary geotechnical report.

6.4.2.1. <SITE_DB>Geotechnical borings, a boring location map, and the raw data on the subsurface conditions described in 5.2.2 are furnished as part of the RFP in Appendix A. </SITE_DB>

6.4.3. Fire Flow Tests. See Appendix D for Results of Fire Flow Tests to use for Basis of Design for Fire Flow and Domestic Water Supply Registration. In areas under development or planned development, see Appendix D for fire flow data to be used for the basis of proposal preparation and for design in lieu of actual fire flow tests.

6.4.4. Pavement Engineering and Traffic Estimates:

NOT USED

6.4.5. Traffic Signage and Pavement Markings

NOT USED

6.4.6. Base Utility Information (See Appendix J.)

6.4.7. Cut and Fill

NOT USED

6.4.8. Borrow Material

NOT USED

6.4.9. Haul Routes and Staging Areas

6.4.9.1. A Map with available haul routes, construction water distribution point, construction entrance gate, common staging areas, landfill, and borrow areas (if applicable) is included in Appendix J. <SITE_DB> Disposal areas are off site and are the Contractor's responsibility. </SITE_DB>

6.4.10. Clearing and Grubbing:

Site grading will include clearing and grubbing for access drives, parking lots, and any site development

6.4.11. Landscaping:

6.4.11.1. <SITE_OTHER>See Appendix J.</SITE_OTHER><SITE_DB>Landscaping. Design and install landscaping in accordance with Appendix AA. Install landscaping perimeters required for ATPF</SITE_DB>

6.4.12. Turf:

NOT USED

6.5. ARCHITECTURE

6.5.1. General: To the maximum extent possible within the contract cost limitation, the buildings shall conform to the look and feel of the architectural style and shall use the same colors as adjacent facilities as expressed herein<IMCOM_APPROVED> and shall conform with the Real Property Master Plan<IMCOM_APPROVED>. The Government will evaluate the extent to which the proposal is compatible with the architectural theme expressed in the RFP during the contract or task order competition. The first priority in order of importance is that the design provides comparable building mass, size, height, and configuration compared to the architectural theme expressed herein. The second priority is that design is providing compatible exterior skin based upon façade, architectural character (period or style), exterior detailing, matching nearby and installation material/color pallets, as described herein.

6.5.2. Design

6.5.2.1. Appendix F is provided "For Information Only", to establish the desired site and architectural themes for the area. Appendix F identifies the desired project look and feel based on the Installation's Architectural Theme from existing and proposed adjacent building forms; i.e. building exterior skin, roof lines, delineation of entrances, proportions of fenestration in relation to elevations, shade and shadow effects, materials, textures, exterior color schemes, and organizational layout.

6.5.2.2. The design should address the installation's identified preferences. Implement these preferences considering the following:

- (a) Achievable within the Contract Cost Limitation
- (b) Meets Milestones within Maximum Performance Duration.
- (c) Achieves Full Scope identified in this Solicitation.
- (d) Best Life-Cycle Cost Design
- (e) Meets the Specified Sustainable Design and LEED requirements.
- (f) Complies with Energy Conservation Requirements Specified in this RFP.

6.5.2.3. Priority #1. Visual Compatibility: Facility Massing (Size, Height, Spacing, Architectural Theme, etc.) Exterior Aesthetic Considerations: The buildings massing, exterior functional aesthetics, and character shall create a comprehensive and harmonious blend of design features that are sympathetic to the style and context of the Installation. The Installation's intent for this area is:

«THEME_DESCRIPTION» Site and Architectural conceptual drawings that meet this objective are shown in Appendix J.

6.5.2.4. Priority #2. Architectural Compatibility: Exterior Design Elements (Materials, Style, Construction Details, etc.) Roofs, Exterior Skin, and Windows & Door Fenestrations should promote a visually appealing compatibility with the desired character while not sacrificing the integrity and technical competency of building systems.

6.5.2.5. See Appendix F for exterior colors that apply to Architectural character . The manufacturers and materials referenced are intended to establish color only, and are not intended to limit manufacturers and material selections.

6.5.2.6. Additional architectural requirements:

- (a) Install fall protection anchor points on all roofs with a slope greater than 2:12
- (b) Architectural Design Objectives

a. 1. Exterior Walls: If a stucco look is desired in the Theme, use more durable materials such as EIFS or stucco-like finish on prefabricated metal panels or concrete panels. If EIFS is used, use a heavy duty reinforcing mesh around all doors and window openings, and extend a minimum 8'0" above finished floor elevation on all exterior walls. The heavy duty reinforcing mesh used on the EIFS shall have a minimum combined weight of 20 ounces per square yard and this standard can be met by using multiple layers. Use high impact mesh on all other surfaces.

2. Roof:

- a. Fully adhered, single ply Hypalon 45 mil / TPO 60 mil with a white color finish is required for flat roof systems. Minimum slope for flat roof system shall be 1/4 inch in 12 inches
- b. Roof Mounted Equipment: Unless specifically required in Section 3 of the Scope of Work or the standard design provided herein, do not provide roof-mounted equipment. If roof-mounted equipment is provided, use modified bitumen roofing system.
- c. Roof access from building exterior is prohibited.
- d. Submit a Sample Warranty Certificate and Maintenance Guidelines for government review and concurrence prior to submission of final warranty. Provide a manufacturer's standard 20 year warranty. Warrant for 100 mph wind speed.

3. Trim and Flashing

Gutters, downspouts, and fascias shall be factory pre-finished metal and shall comply with SMACNA Architectural Sheet Metal Manual. Provide for bird habitat mitigation.

4. Bird Habitat Mitigation

Provide details necessary to eliminate the congregating and/or nesting of birds at, on, or in the facility.

5. Connect boot wash drains to underground drainage.

6. Exterior Doors and Frames

- a. Main Entrance Doors: Main Entrance Doors: Aluminum storefront doors and frames with Architectural Class 1 anodized finish, fully glazed, with medium or wide stile are preferred for entry into lobbies or corridors.
- b. Exterior Non-Main Entrance Doors: Exterior doors and frames opening to spaces other than corridors or lobbies shall be insulated hollow metal.
- c. Side Entrance / Exit Doors: Exterior doors and frames opening to corridors shall be insulated hollow metal and comply with ANSI A250.8/SDI 100. Fire-rated openings shall comply with NFPA 80, and the requirements of the labeling authority. Door and frame installation shall comply with applicable codes and UFC 4-010-01 requirements.

7. Exterior Doors Finish and Hardware

- a. Hardware General: All hardware in the facility shall be consistent and shall conform to ANSI/BMHA. Standards for Grade 1. Hardware finishes shall conform to ANSI/BHMA A156.18. Provide ANSI 626 (Satin Chromium plated on Brass or Bronze) or 630 (Stainless Steel). Disassembly of knob or lockset is not allowed in order to remove interchangeable core from lockset.
- b. Key locksets for mechanical rooms, electrical closets, and Telecommunications Rooms to the existing Post Engineer Key System without key removable cores.
- c. Auxiliary Hardware: ANSI/BHMA A156.16. Provide wall or floor stops for all exterior doors that do not have overhead holder/stops. Provide other hardware as necessary for a complete installation. <HQ>

d. As part of the Interim Design Review or Over the Shoulder Review process, coordinate with Fort Bliss and end-user Security personnel for exact locations and required configurations of security door hardware and its interaction with life safety requirements. </HQ>

8. Exterior Windows:

Unless specifically required by the standard design, provide fixed windows. If the standard design requires operable windows, furnish windows with fiberglass or aluminum insect screens removable from the inside, secured with interior metal clips.

9. Exterior Louvers:

Design exterior louvers to exclude wind-driven rain, with bird screens and to withstand wind loads in accordance with the applicable codes. Wall louvers shall bear the AMCA certified ratings program seal for air performance and water penetration in accordance with AMCA 500-D and AMCA 511. Louver finish shall be factory applied color.

10. Roof Hatches:

Roof access hatches shall be a minimum of 16 square feet in opening area, with no dimension smaller than 4'-0". Equip roof hatches with Post Engineer Master Lock on operating hardware.

11. Exterior Signage

See Appendix H for Exterior Signage requirements

12. Additional Requirements

See Appendix AA for additional architectural design requirements.

6.5.3. <UEPH>Provide manufacturer's longest-lasting magnetic strip card. </UEPH><UEPH_NO>Programmable Electronic Key Card Access Systems; «PROGRAMMABLE_KEY_CARD»</UEPH_NO>

Comment [sdn1]: NOTE TO SPECIFIER: For non-UEPH type facilities only. If the installation has information on brand names of existing key card access system, identify here and coordinate with paragraph 3. For UEPH type Facilities NOT USED

6.5.4. INTERIOR DESIGN

6.5.4.1. Interior building signage requirements: Furnish paper and software for creating text and symbols for computers for Owner production of paper inserts after project completion. Coordinate with user and installation facilities engineer (DPW). Provide Room Number and Room Function signage for all rooms, except apartment modules. <UEPH>Provide two (one on each side of apartment entry door) Room Number and changeable two-line message strip signage for all apartment modules. Room numbering is to be in accordance with Fort Bliss Room Numbering Standard. See Appendix U. Review signage and Room Numbering plan with USACE and Fort Bliss DPW prior to installation. </UEPH>

Comment [sdn2]: NOTE TO SPECIFIER: For non-UEPH type facilities only. If the installation has information on brand names of existing key card access system, identify here and coordinate with paragraph 3. For UEPH type Facilities NOT USED

6.5.4.2. Interior Design Considerations:

- (a) Interior Partitions and Walls.
- (b) Interior Glass and Glazing: Coordinate the arrangement of fenestrations with the proposed furniture layout.
- (c) Floors: <TEMF>

Provide durable and low maintenance materials <TEMF><COF_TEMF_DF>

Carpet is not an allowable floor finish in corridors. </COF_TEMF_DF><UEPH>

Carpet is not an allowable floor finish. </UEPH><HQ>

The use of easy to maintain floors is encouraged. Listed below are the preferred floor finishes:

- 1. Resilient flooring: Vinyl Composition Tile, through-color, asbestos free, to meet ASTM F1066, Comp. 1, Class 2. Tile shall have the color uniformly distributed throughout the thickness of the tile. For flooring in any one continuous area, each color represented shall be from the same dye lot and shall have the same shade and

patterns for all exterior doors that do not have overhead holder/stops. Provide other hardware as necessary for a complete installation.

2. Carpet. Carpet shall be first quality, free of visual blemishes, streaks, poorly dyed areas, fuzzing of pile yarn, spots or stains, and other physical and manufacturing defects. Carpet materials and treatment shall be nonallergenic and free of other recognized health hazards. All grade carpets shall have a static control construction which gives adequate durability and performance. Carpet shall bear the Carpet and Rug Institute (CRI) Indoor Air Quality Label. Carpet type bearing the label will indicate that carpet has been tested and meets the criteria of the CRI Green label Requirements for Indoor Air Quality Test Criteria

3. Wall Base: Allowable materials shall be porcelain ceramic tile, rubber, and carpet. Rubber base shall be continuous roll rather than 4-foot lengths in order to give a smooth finished appearance with a minimum of joints between corners. The carpet wall base shall be the same color and pattern of the floor carpet and be 4-inches high with a bound edge

4. Concrete floors. Where a floor finish is not specified, concrete floors shall be sealed against water using a clear, non-sheen, impregnating sealer. Stained or acid etched concrete is not allowed. </HQ>

(d) Metal Support Systems

Non-load bearing metal studs and furring shall comply with ASTM C 645; stud gauge shall be as required by height and loading. Metal framing and furring system shall be capable of carrying a transverse load of 5psf without exceeding either allowable stress or a deflection of L/240, but shall not be less than 20 gauge. Provide galvanized finish.

(e) Gypsum Board

Comply with ASTM C 36. Minimum panel thickness shall be 5/8 inch. Provide moisture resistant panels (glass-mat panels are preferred) at locations subject to moisture. Glass-mat gypsum panels or water-resistant "greenboard" gypsum drywall shall be used as substrate for ceramic tile wall applications except at showers where cementitious backer board shall be used. Gypsum Board systems are to be constructed using Joint treatment per ASTM C 475, screws per ASTM C 646, and drywall installation per the requirements of ASTM C 840.

(f) Interior Doors and Frames

Provide hollow metal, flush solid core wood, or hollow core wood doors as specified below. All door frames shall be hollow metal.

1. Wood Doors: Provide flush solid core wood doors conforming to WDMA I.S.-1A. Stile edges shall be non-finger jointed hardwood compatible with face veneer. Provide Architectural Woodwork Institute (AWI) Grade A hardwood face veneer for transparent finished doors; provide AWI Sound Grade hardwood face veneer for painted doors. (Transparent finished doors are preferred.)

<UEPH>Apartment Entry and Bedroom Doors: Provide flush solid core wood doors conforming to WDMA I.S.-1A. Stile edges shall be non-finger jointed hardwood compatible with face veneer. Provide Architectural Woodwork Institute (AWI) Grade A hardwood face veneer transparent finished doors.</UEPH>

2. Wood Doors – Provide hollow core, Type II flush doors conforming to WDMA I.S 1-A. Provide Architectural Woodwork Institute (AWI) Grade A hardwood face veneer for transparent finished doors; provide AWI Sound Grade hardwood face veneer for painted doors. (Transparent finished doors are preferred.)

<UEPH>All Other Doors Within Apartments: Provide hollow or solid core, Type II flush doors confirming to WDMA I.S 1-A. Provide Architectural Woodwork Institute (AWI) Grade A hardwood face veneer transparent finished doors.</UEPH>

3. Hollow Metal Doors: Comply with ANSI A250.8/SDI 100. Doors shall be minimum Level 2, physical performance Level B, Model 2; factory primed.

4. Hollow Metal Frames: Comply with ANSI A250.8/SDI 100. Frames shall be minimum Level 2, 16 gauge, with continuously welded corners and seamless face joints; factory primed.

<UEPH>Contractor's Option – option to furnish lighter 18 gauge door frames at closets and bathroom doors in the apartment units. Knockdown frames are acceptable for closet and bathroom doors. 16 gauge frames with

continuously welded corners and seamless face joints at closets and bathroom doors in the apartment units, shall be considered as betterments. </UEPH>

(g) Interior Door Finish Hardware:

1. Hardware General: All hardware in the facility shall be consistent and shall conform to ANSI/BMHA standards for Grade 1. All requirements for hardware keying shall be coordinated with the Contracting Officer. Hardware finish shall conform to ANSI/BHMA A156.18. Provide ANSI 626 (Satin Chromium plated on Brass or Bronze) or 630 (Stainless Steel).
2. Key locksets for mechanical rooms, electrical closets, telecommunications rooms (TR), and crawl spaces to the existing Post Engineer Key System, consisting of a lever with a dead bolt cylinder above passage lockset, AR-1 keyway, without key removable cores.
3. Auxiliary Hardware: ANSI/BHMA A156.16. Provide other hardware as necessary for a complete installation.
4. Locksets: Provide cylinders and cores with seven-pin tumblers for locks. Cylinders shall be products of one manufacturer, and cores shall be products of one manufacturer. Mortise cylinders, and knobs of bored locksets shall have interchangeable cores that are removable by special control keys. Stamp each interchangeable core with a key control symbol in a concealed place on the core. Cylinders shall be fully compatible with products of the Best Lock Corporation, Arrow Lock Corporation, or Falcon Lock. Submit a core code sheet with the cores. Provide cores master keyed in one system for this project. Disassembly of knob or lockset is not allowed in order to remove interchangeable core from lockset. For interior locksets, use bored type vs. mortise lockset, to the maximum extent possible. The bored type lock will have a metal plate to prevent jimmying of lockset. <HQ>
5. Not later than Interim Design Review, coordinate with Fort Bliss and end-user Security personnel for exact locations and required configurations of security door hardware and its interaction with life safety requirements. <HQ>

(h) Specialties And Furnishings:

1. Window Treatments: Provide aluminum horizontal mini-blinds or roller tube window shades (MechoEuroveil or equal) at all exterior glazing, except where noted otherwise. Provide roller tube window shades at clerestory windows or other difficult to access windows.
- (i) Thermal Insulation: Do not install insulation directly on top of suspended acoustical panel ceiling systems.
- (j) Elevators: Provide a State of Texas (or State of New Mexico, as applicable) licensed elevator inspector to inspect the elevator, test all new elevators, as applicable to the project, and to certify in writing that the installation meets all requirements. <COF_TEMP>
- (k) Provide 4 eye-bolts in each Arms Room / Vault, one in each corner. Eye bolts are to be drop forged steel, hot dip galvanized with a 1" diameter shank and a 2" diameter eye. Place bolt centered 6" above finished floor. Place each bolt 24" to the left of each room corner. Bolt shall be anchored so as to provide a minimum of 3.5 kips pull out strength. Place bolt to allow 1" of exposed shank between eye and surface of wall. </COF_TEMP>

6.6. STRUCTURAL DESIGN

6.6.1. Site Specific Loading Requirements:

- 6.6.1.1. The basic wind speed, in miles per hour, for the determination of the wind loads shall be 100 mph 3-second-gust wind speed.
 - 6.6.1.2. Use ground snow load of 5psf.
 - 6.6.1.3. Use frost penetration of zero inches.
 - 6.6.1.4. Use the following seismic acceleration parameters for mapped Maximum Considered Earthquake spectral response at short periods and at 1-second period, respectively: Ss: 31 (%g) and S1: 10 (%g).
- 6.6.2. Equipment Pads: Elevate floor or on-grade mounted equipment on minimum 4 inch thick concrete pads to prevent accumulation of water and metal corrosion.

6.7. THERMAL PERFORMANCE

There are no additional requirements other than those previously stated/referenced.

6.8. PLUMBING

6.8.1. Piping Materials: Use Type K copper for water supply under slab. Use CPVC and Type L (or above) copper for water supply above slabs. Use plastic pipe (schedule 40 PVC) for drainage and venting including under concrete slabs or inside buildings. Do not use exposed PVC for exposed vent piping above roof. Type M copper is not allowed.

6.8.2. Cross Connection Control: See the Fort Bliss Cross Connection Control Manual, located in Appendix E, for specific requirements for cross connection control and backflow prevention.

6.8.3. Provide gas plumbing for GF Clothes dryers (provided by others).

6.8.4. Do not use electric water heaters, except that small on-demand applications may be used.

6.8.5. Natural Gas Supply: Furnish standard gas pressures from building regulator of 8-15 ounces, 2 psi or 5 psi.

6.8.6. Gas Regulator Venting: Vent all gas regulators in building to the outside

6.8.7. Exterior Water Piping Freeze Protection: Design seasonally (not used in winter) utilized water supply piping for complete drain down including interior or below grade isolation valve. Insulate exposed water piping that is utilized year round and heat trace and protect with pipe jacketing to ensure that the piping will not freeze.

6.8.8. Fixture Faucet Mixing Valves: Provide single handle type mixing faucet valves with seals and seats combined into one replaceable cartridge; the cartridge shall be designed to be interchangeable between lavatories, bathtubs, kitchen and bar sinks, etc. or provide replaceable seals and seats that are removable either as a seat insert or as a part of a replaceable valve unit. Approved manufacturers are Delta, Kohler, Price Pfister, Crane.

6.8.9. Use automatic infrared metered-flow faucets at lavatory sinks in public areas.

6.8.10. ~~TEMP_NOT~~Not Used~~TEMP_NOT~~~~TEMP~~Provide monitoring panel with Oil-Water Separators. Submit design for Government concurrence. Post a sign at entry locations to drain systems including oil-water separators (OWS), as specified in Appendix Y.~~TEMP~~

6.8.11. ~~METER_DB~~Provide cast iron valve boxes and covers. Water meter vaults shall have covers weighing 20 lbs or less or shall have a closeable opening in the cover directly above the meter to allow reading of the meter. Distance from top of cover to top of water meter consumption reading (dial) shall be less than 18 inches. ~~METER_DB~~~~METER_GOV~~Not Used.~~METER_GOV~~

6.9. SITE ELECTRICAL AND TELECOMMUNICATIONS SYSTEMS

6.9.1. Exterior Lighting: Exterior site and area lighting, including lighting for parking areas, roadways, walkways, and ball courts shall be high pressure sodium, except compact fluorescent lighting shall be acceptable for walkway lighting. Photo control devices for exterior lighting shall conform to ANSI C136.10 and shall have an adjustable operation range of approximately 0.5 to 5.0 footcandles.

6.9.2. Utility Metering: Provide Watt Node Plus LON Electric Power meter or equal. Provide pulse meter for gas and water. Provide a legibly and indelibly printed multiplier on the face of the meter. Wiring for UMCS system shall be compatible with Fort Bliss system. Install communications wiring in a 1" conduit from the Mechanical Room to the Pulse Kit on the Gas Meter for use by the UMCS system. Install communications wiring in a 1" conduit from the Mechanical Room to the Electric Meter for use by the UMCS system. Install communications wiring in a 1" conduit from the Mechanical Room to the Pulse Kit on the Water Meter for use by the UMCS system

6.9.3. Exterior Communications: Install communications infrastructure as required by the drawings in Appendix J. Cable TV is to be included in the Site Communication duct bank. Coordinate with Fort Bliss DOIM / NEC Plans Office.

6.9.4. Corrosion Control: Obtain the services of a "corrosion expert" to design, supervise, inspect, and test the installation and performance of the cathodic protection system. "Corrosion expert" refers to a person, who by thorough knowledge of the physical sciences and the principles of engineering and mathematics, acquired by professional education and related practical experience, is qualified to engage in the practice of corrosion control of buried or submerged metallic surfaces. Such a person must be accredited or certified by the National Association of Corrosion Engineers (NACE) as a NACE Accredited Corrosion Specialist or a NACE certified Cathodic Protection (CP) Specialist or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metallic piping and tank systems, if such certification or licensing includes 5 years experience in corrosion control on underground metallic surfaces of the type under this contract. The corrosion expert shall obtain soil resistivity data, acknowledging the type of pipeline coatings to be used and reporting to the Contractor the type of cathodic protection required. Use sacrificial anode type cathodic protection.

6.10. FACILITY ELECTRICAL AND TELECOMMUNICATIONS SYSTEMS

6.10.1. Facility Telecommunications systems:

6.10.1.1. Telephone and Local Area Network (LAN):

- (a) All equipment racks shall have both vertical and horizontal cable management.
- (b) Line all walls in the telecommunications rooms with 4' X 8' X 3/4" plywood, painted flat white. All plywood shall be fire-rated and the fire-retardant stamp are shall remain unpainted and open to view. Provide a ladder type cable tray around the perimeter of the telecommunications room and from the perimeter ladder tray to the 19" communications rack. Mount the ladder cable tray 7-1/2 feet above finished floor. Install all horizontal cabling into the TR in this cable tray routing them around the room and into the 19" rack.
- (c) Terminate the incoming fiber optic cable on a 19" twelve port single mode fiber optic patch panel with SC type connectors.
- (d) No construction deviations in the communications system from the accepted design will be permitted without prior Government review and concurrence.
- (e) Submit a detailed test plan for all the cable plant installation for government review and concurrence. Include information on the test equipment and its calibration documentation.
- (f) Feed all electrical circuits within a TR from an electrical panel installed within that room.
- (g) Provide a 1" conduit from the electrical panel in the TR to outside of the building for future commercial cable television power. Provide a 2" conduit (adjacent to the 1" conduit) from the TR to outside of the building for future commercial cable television service entrance.
- (h) Terminate Single-Mode and Multi-Mode Fiber Optic cables on separate patch panels.
- (i) Terminate voice and data cables on separate patch panels located in the same equipment rack. Install voice patch panels in the copper equipment rack or cabinet.
- (j) All raised flooring shall have a cable tray management system in compliance with UFC 3-580-01 under the floor for communications cabling. Submit a cable management plan showing cable routing and cable management system installation for review and concurrence prior to commencement of work.
- (k) Install the horizontal cabling conduit from the outlet box, extending to the cable tray. The use of J-hooks is not permitted without prior written approval.
- (l) Terminate exterior communications drops for testing purposes and cover with a blank weatherproof faceplate.
- (m) Use green insulation on all bonding jumpers, regardless of size.
- (n) Floor mount communications and power drops to be used by modular furniture including those for modular furniture near a wall. Submit a communications and power plan showing locations of communications and power drops superimposed over modular furniture plan with the interim and final design packages.

- (o) Manholes shall be splayed type communications MH's with preinstalled terminators and internal grounding.
- (p) Provide lockable, waterproof CMH covers. Submit for approval prior to use in accordance with Fort Bliss Force Protection Standards.
- (q) Use the following color scheme for Telecommunications wiring and voice/data jacks:

NIPRNET – Green

SIPRNET – Red

TACNET – Yellow

Voice - Gray

6.10.2. Cable TV (CATV): Provide and install a pre-wired CATV system throughout the designated spaces. CATV system shall include but not limit to cables, conduits, pull boxes, and CATV jacks. Route all CATV signals conduits and cables back to the telecommunication room.

6.10.3. Closed Circuit TV (CCTV): Provide and install a conduit system to support CCTV throughout the designated spaces. Conduit system shall include but not limit to conduits, pull boxes, and pull wires. Route all conduits for CCTV signals back to the designated monitoring room. As part of the Interim Design Review, present the proposed Floor Plan to representatives of Fort Bliss and 1AD Security personnel to identify specific locations of security cameras, location of monitoring room, conduit routing, and system details.

6.10.4. Intrusion Detection (IDS): Provide and install conduit for IDS in the designated areas. The devices (motion sensors, contact switches, duress buttons, keypads and security panels) are provided by others. Provide conduit and a junction box for each device. Route all device conduits to a j-box in a designated wall space (for a security panel) near the entrance of the room. Provide and install a 1" conduit with a Category 6 cable routed from the j-box to the nearest communications room. Terminate and certify the cable inside the j-box on an RJ-45 Female Jack and inside the communications room on a patch panel. Provide a dedicated 120V single-phase circuit for IDS.

6.10.5. General: Ground and bond all inside plant cable pathways (e.g. cable trays, cable ladders, and conduits) to the Main Telecommunication Room (TR) ground bar (TMGB). Bond individual sections of all metallic cable tray and ladder systems to each other and to the raceway (e.g. EMT) in which they support.

6.10.6. Landscape/Irrigation Controls – Provide power and outlet to accommodate the irrigation controller for each building. Make space available for the irrigation controller in the mechanical room or where designated by the Government.

6.10.7. ~~Not Used~~ Provide a weathertight through-roof conduit from Comm Room to roof for installation of communication cable and Government installed roof-mounted antenna.

6.10.8. Outside electrical panels: all electrical panels located in exterior areas shall be dustproof.

6.10.9. Control exterior security lighting by a switch and photocell.

6.10.10. ~~Not Used~~ Arms Rooms / Vaults: Provide a tamper-proof light fixture on separate switch outside the entrance to each Arms Room / Vault. Position the switch so that unauthorized personnel may not have access.

6.10.11. Where SIPRNET is required, the USAISEC-FDED SIPRNET Team will determine and engineer the SIPRNET.

6.11. HEATING, VENTILATING, AND AIR CONDITIONING

6.11.1. General: The existing UMCS is LonWorks Open.

6.11.2. System Selection: Current local utility rates for gas, electric, water and sewer are contained in Appendix K. These are rates paid by Fort Bliss to the local utility providers and are for use in LEED energy cost

calculations. Provide CO2 sensors in return air stream to minimize the amount of outside air required to satisfy ASHRAE 62.1 requirements for building Indoor Air Quality. Provide one CO2 sensor per HVAC zone. Installation infrastructure has insufficient capacity to support use of electric HVAC systems. Provide gas-fired and/or renewable energy sources for heating.

6.11.3. Communication Rooms: Air condition communications equipment rooms to space comfort conditions as per applicable criteria by separate year round direct expansion cooling systems.

6.11.4. Mechanical Room Ventilation: Automatically ventilate mechanical, fire protection, electrical, and storage spaces to limit space temperatures to 10 degrees F above design outdoor air temperature.

6.11.5. Equipment Coordination: For Variable Air Volume (VAV) systems, limit size of any individual VAV box to approximately 2500 cfm to promote better zoning and fit of equipment to space available. Coordinate all mechanical systems and equipment with space available to prevent conflict with other building systems.

6.11.6. UMCS Base-wide System and Building Control Interface: A base-wide UMCS/EMCS system has been installed as part of a separate contract. Provide a 3/4" conduit with CAT VI cable from the EMCS router to the nearest comm room for connection to the building LAN. Integration to the base-wide system shall be done under separate contract and is not part of this scope of work. The building shall be capable of running stand alone until such time it is integrated into the base-wide system. Energy saving controls are desired such as schedule start/stop, optimized start/stop, occupancy sensors, etc. Locate AC control panels and routers in the Mechanical Room.

6.11.7. Existing IP Network: Existing IP network consist of Gig-backbone: 10/100MB to the user, 1GB between the end user building and ADN, and a 10GB core backbone.

6.11.8. Network Media: Existing network media consist of single-mode fiber optic.

6.11.9. Head-end hardware/Software location: Location of head-end UMCS hardware/software will be in Bldg. 777.

6.11.10. Water Quality Analysis and Treatment: Water quality for Fort Bliss and surrounding area is 'hard'. Treatment will be required for use as make-up water in HVAC equipment. Water Quality Analysis reports are inserted as Appendix DD. Additional water analysis data from water treatment contractor (POC: Gary Hamilton, Delta Water Laboratories, 915-892-8227) are as follows:

Chlorides: 70 ppm

P Alkalinity: 0 ppm

M Alkalinity: 100 ppm (Total alkalinity)

Total Hardness: 130 ppm (CaCO3)

ph: 7.89

Silica: 4 to 7 ppm (Can go as high as 11 ppm)

Iron: 0.01- 0.5 Reactive

Total Dissolved Solids: 475 to 680 ppm

Coordinate with water treatment contractor to confirm above data and current water treatment methods to obtain the required quantity and types of chemicals to be initially introduced into the closed loop heating and chilled water systems. Material Safety Data Sheets for current Ft. Bliss DPW chemical treatment method for hydronic water systems (Boiler heating hot water and chilled water) are contained in Appendix EE (Corrshield NT402).

6.11.11. Coordinate locations of emergency shut-off switches, central control area, and switch features with Fort Bliss DPW during design.

6.11.12. ~~<COF_TEMP_DF_NOT>~~Not Used~~</COF_TEMP_DF_NOT>~~~~<COF_TEMP_DF>~~Evaporative cooling - Where evaporative cooling is provided, the preference for user occupied areas is that control be provided by temperature sensors instead of thermostats. The intent is to provide control of the space while not allowing occupant adjustment or intervention by adjustment of the space temperature set point. Provide ability for adjustment and maintenance of sensors by authorized personnel . Water softening is required where evaporative cooling is provided. Provide drain lines to drain to a specific location and not drain directly onto the roof.
~~</COF_TEMP_DF>~~

6.11.13. HVAC Controls: Admin/Classrooms/Labs/Dining Facilities are to have a three-hour override switch on the thermostat.

6.11.14. HVAC Controls in Apartment Areas: The preference is that thermostatic control in each living unit be adjustable in allowing 2 deg F adjustment either side of design setpoints for heating and cooling. The UMCS system shall control the +/- 2 Deg F range limits and shall not be adjustable by the area occupant.

6.11.15. HVAC system preferences and requirements are:

(a) For air-conditioned core and related areas (central core work rooms, offices, conference rooms, laboratories, electronics repair shops, etc.): the preference is for heating, ventilating and air-conditioning systems that provide appropriate zoning and number of zones to allow comfort in spaces with varying occupancy (by time of day, etc.), exterior exposures, and internal loads due to equipment, door usage, etc. The expectation is for more rather than less zones to create an optimum balance of initial cost versus occupant comfort for peak human efficiency based upon temperature setpoints and thermal comfort requirements of this RFP. System complexity: provide integrated HVAC air handling system or systems that re only complex enough to meet all energy, quality and system longevity requirements and other goals of this RFP; this may entail economizers, will require proper air filtration provisions, etc.; additionally systems shall be fully accessible for maintenance and shall be easily and completely replaceable via removal through mechanical room doors, etc. HVAC system cooling shall occur within the HVAC air handling system(s) and be provided by electric refrigerated means, such as electric direct expansion, chilled water or other refrigerated cooling system.

(b) Mechanical and Fire Protection Room Heating and Ventilation; It is preferred that main mechanical and/or fire protection equipment spaces be heated with gas or hydronic unit heaters.~~<TEMP>~~

(c) Arms Vaults: Provide a ceiling fan and unit heater only. Arms Vault is not to be served by the building central HVAC system.~~<TEMP>~~

6.11.16. Piping Materials: Do not use Type M copper.

6.11.17. Equipment Placement: Place air handling equipment within the building spaces (i.e. equipment rooms, etc.) which are sound isolated, within exterior on-grade equipment yards which are enclosed with screen walls. Or, if placed on roof, provide equipment with screening to prevent viewing of the equipment from a point 6 feet above any ground level at a distance of up to 300 feet from the building exterior wall in any direction. Organize vents, stacks, grilles, and placement of mechanical or electrical service fixtures into locations which do not provide visually negative design impacts. Avoid catwalks, especially when up and down travel is required to service multiple equipment pieces (coordinate with Architectural designer). Enclose mechanical and electrical equipment (transformers, chillers, boilers, etc.) installed at grade with screen walls. Screen wall finishes and appearance are subject to Government review and approval.

6.11.18. Outdoor design conditions

~~«HVAC»~~

6.12. ENERGY CONSERVATION

6.12.1. Inclusion of Renewable Energy Features. The following renewable energy features have been determined lifecycle cost effective, are included in the project budget and shall be provided:

Comment [sdn3]: NOTE TO SPECIFIER: In accordance with paragraph 5.9.2, provide the outdoor design conditions that are referred to in paragraph 2.2 in UFC 3-410-01FA.

«RENEWABLE ENERGY FEATURES»

Comment [sdn4]: Indicate here all renewable energy features that are included in project DD1391 and supported by LCCA. Be specific in description of features.

6.13. FIRE PROTECTION

6.13.1. The Fire Alarm Control Panel shall be fully compatible with the existing Monaco system presently in use at Fort Bliss. See Section 6.13.8 below for additional requirements.

6.13.2. HVAC Equipment Restart: After a fire alarm shut-down is cleared at fire alarm panel, affected mechanical equipment shall automatically restart.

6.13.3. Sprinkler Freeze Protection: Provide temperature sensor and alarm to notify fire department of possible freezing conditions for wet pipe sprinkler systems in spaces where heat may not be available due to being unoccupied or heating system may have failed.

6.13.4. Riser Location: Install fire risers in dedicated space or mechanical room with external access for fire department.

6.13.5. Provide and install a Fire Department Connection near the street curb, PIV, and fire hydrant. Coordinate exact location of Fire Department Connection with LDE and Fort Bliss Fire Department.

6.13.6. Fire Sprinkler Backflow Prevention: Backflow prevention shall be in accordance with the Fort Bliss Cross-Connection Control Manual. This requirement may be more stringent than the requirement in UFC 3-600-01.

6.13.7. Fire Alarm System:

6.13.7.1. The RF Transceiver shall be compatible with the Fire Department receiving system, operating on an RF frequency.

6.13.7.2. The RF transceiver shall be a Monaco BT-XM or approved equal operating on a frequency of 165.0625 MHZ.

6.13.7.3. The Fire alarm receiving system is a Monaco D-21 system.

6.13.7.4. The information sent to the Fire Department receiving system shall be zone by zone information.

6.13.7.5. All tamper devices shall be sent to the D-21 system as a supervisory tamper.

6.13.7.6. All initiating devices shall be connected, Style D, to signal line circuits (SLC), Style 6.

6.13.7.7. All alarm appliances shall be connected to notification appliance circuits (NAC), Style Z.

6.13.7.8. Provide photoelectric smoke detectors with 2.5% obscuration, pigtails for permanent connections, continuous power indicator light, test button, and metal base.

6.13.7.9. RF transceiver shall be equipped with a directional antenna.

6.13.7.10. Fire alarm pull boxes shall be of metal construction, dual-action, and key operable."

6.13.8. Provide keyed alike fire alarm panels, keys C415A, 17021, & PK625; C415 for MNS panels. PK625 on manual pull stations. Sample keys are available from Fort Bliss Fire Department upon request..

6.13.9. <UEPH_NO>Not Used.</UEPH_NO><UEPH>Provide fire extinguisher bracket inside base cabinets of food preparation areas in accordance with UFC 4-721-11.1, section 2-2.1.3.3, dated November 1, 2002. Coordinate height of bracket mounting with DPW. </UEPH>

6.13.10. Do not use glass or lockable doors in fire extinguisher cabinets.

6.13.11. Mass Notification System. Mount a speaker system on the exterior of the building that will cover a 16' wide area around the perimeter of the buildings.

6.13.11.1. Connect the MNS to the Fort Bliss Fire Alarm System utilizing the Monaco BT-XM All equipment must be compatible with the existing Monaco D21 Central Receiving Unit utilized by the Fort Bliss Fire Department.

6.13.11.2. Program the following 8 pre-recorded messages into the system:

(a) MESSAGE #1. Label message "Fire". Five seconds of siren are played, followed by the message:

"Attention, attention. A fire emergency has been reported. Please leave the building using the nearest exit or exit stairway. Do not use the elevators if installed within this facility".

(b) MESSAGE #2. Label message "Severe Weather." Five seconds of 100-kHz steady tone are played, followed by the message:

"This is the Fort Bliss Installation Operations Center. The National Weather Service has issued a severe weather alert for this area. Turn on your radios or televisions for the latest update and take required action. Again, this is the Fort Bliss Installation Operations Center. The National Weather Service has issued a severe weather alert for this area. Turn on your radios or televisions for the latest update and take required action.

(c) MESSAGE #3. Label message "Bomb" A horn sound is played for 5 seconds, followed by the message:

"Attention, attention. This building has received a bomb threat. All personnel are to evacuate immediately using the nearest exit and to report to our designated re-assembly area for accountability and additional instruction. Again, this building has received a bomb threat. All personnel are to evacuate immediately using the nearest exit and to report to our designated re-assembly area for accountability and for additional instruction.

(d) MESSAGE # 4. Label message "Shelter In Place" Three 1-kHz tones (one second each) are played, followed by the message:

"Attention, attention. All personnel "shelter in place". Turn off fans, heating, ventilation and air condition systems. Close all doors and windows and remain indoors until the "All Clear" announcement is given."

(e) MESSAGE #5. Label message "FPCON C" Three seconds of HI/LOW tones, followed by the message:

"Attention, attention. Fort Bliss is now at FPCON Charlie. Implement FPCON Alpha, Bravo and Charlie security plans immediately. Again, Fort Bliss is now at FPCON Charlie. Implement FPCON Alpha, Bravo and Charlie security plans immediately and stand by for additional information from the Fort Bliss Installation Operation Center.

(f) MESSAGE # 6. Label message "FPCON D" Three seconds of HI/LOW tones, followed by the message:

"Attention, attention. Fort Bliss is now at FPCON Delta. Implement all FPCON security plans, Alpha through Delta immediately. Again, Fort Bliss is now at FPCON Delta. Implement all FPCON security plans, Alpha through Delta immediately and stand by for additional information from the Fort Bliss Installation Operation Center.

(g) MESSAGE #7. Label message "All Clear". Five seconds of chime sound are played, followed by the message:

"The emergency has now ended. Please resume normal operations. Thank you for your cooperation."

(h) MESSAGE #8. Label message "Test" A 1-kHz tone is sounded for 2 seconds, followed by the message:

"May I have your attention, please? This is the Fort Bliss Installation Operations Center conducting a test of the mass notification system. Repeat, this is only a test."

6.14. SUSTAINABLE DESIGN

6.14.1. LEED Rating Tool Version. Execute the project using «LEED_VERSION».

Comment [sdn5]: [LEED-NC Version 2.2][LEED-NC Version 3][text block for other to be filled in by specifier]

6.14.2. <ONLY_EXEMPT> This project includes no facilities that are required to achieve a specific LEED achievement level. Project shall achieve and document all points required by other portions of the RFP and all points that are feasible, but there is no minimum required LEED achievement level.

<ONLY_EXEMPT><NOT_ONLY_EXEMPT> The minimum requirement for this project is to achieve LEED «LEED_MIN» level. Each non-exempt facility (building plus sitework) must achieve this level. In addition to any facilities indicated as exempt in paragraph 3, the following facilities are exempt from the minimum LEED achievement requirement: «SD_EXEMPT_FACILITIES». <NOT_ONLY_EXEMPT>

Comment [sdn6]: [Silver][Gold][Platinum]

6.14.3. <SINGLECO>Credit Validation: LEED registration, compiling of documentation at LEED OnLine and use of the LEED Letter Templates is required. Registration and payment of registration fees will be by the «FEES_PAID_BY». Administration/team management of the online project will be by the «ADMIN_PERFORMED_BY». <USGBC>The Government will validate credits. LEED certification of the project by the Contractor is required. The Contractor will obtain LEED certification prior to project closeout. Contractor will apply, pay certification of fees and coordinate with GBCI during the certification process. GBCI interim review of design phase data is not required by the Government but is recommended. Government validation during project execution does not relieve or modify in any way the Contractor's responsibility to satisfy all requirements for certification as defined by LEED and GBCI. Contractor is not responsible for design phase LEED documentation of any unaltered portion of the design that is accomplished by others. If the project includes unaltered complete design by others, during the certification process Contractor will coordinate all GBCI comments on LEED credits that fall outside Contractor's scope of responsibility with the Government for coordination with the Designer of Record, and Contractor will not be penalized if project fails to achieve certification at the minimum required level due to loss of credits that are the responsibility of others. <USGBC><USGBC_NO>Validation of credits will be accomplished by the Government. LEED certification of the project by the Contractor is not required. The Government may choose to seek LEED certification of the project, in which case the Government will pay certification fees and coordinate with the GBCI and the Contractor will furnish audit data as requested at no additional cost. <USGBC_NO> <SINGLECO><SITE_BLDGOTHER>Credit Validation: The project is the site work <ADDITIONAL>and building(s)<ADDITIONAL> portion of a multiple contractor Combined Project. LEED registration, compiling of documentation at LEED OnLine and use of the LEED Letter Templates is required. Registration and payment of registration fees will be by the «FEES_PAID_BY». Administration/team management of the online project will be <ADMINGOV>by the Government</ADMINGOV><ADMINSHARED>shared between the Contractor and the Government per Appendix LEED Requirements for Multiple Contractor Combined Projects</ADMINSHARED>.

Comment [sdn7]: Select paragraph below if the project includes COS standard design buildings and a single contractor is doing all buildings and site work in the project. Edit for either Contractor or Government fees and administration (PDT choice). Registration is required.

<ADMINCONTRACTOR>Administration/team management of the online project will be by the Contractor per Appendix LEED Requirements for Multiple Contractor Combined Projects. </ADMINCONTRACTOR>Validation of credits will be accomplished by the Government. LEED certification of the project by the Contractor is not required. The Government may choose to seek LEED certification of the project, in which case the Government will pay certification fees and coordinate with GBCI and the Contractor will furnish audit data as requested at no additional cost. </SITE_BLDGOTHER><STDANDSITE>Credit Validation: The project is a standard design building(s) portion of a multiple contractor Combined Project. LEED registration, compiling of documentation at LEED OnLine and use of the LEED Letter Templates is required. Registration and payment of registration fees will be by the «FEES_PAID_BY». Administration/team management of the online project will be by the «ADMIN_PERFORMED_BY». See Appendix LEED Requirements for Multiple Contractor Combined Projects for information about registered standard designs. Validation of credits will be accomplished by the Government. LEED certification of the project by the Contractor is not required. The Government may choose to seek LEED certification of the project, in which case the Government will pay certification fees and coordinate with GBCI and the Contractor will furnish audit data as requested at no additional cost. </STDANDSITE><NSTDMULTI>Credit Validation: The project is a non-standard design building(s) portion of a multiple contractor Combined Project. LEED registration, compiling of documentation at LEED OnLine and use of the LEED Letter Templates is required. Registration and payment of registration fees will be by the «FEES_PAID_BY». Administration/team management of the online project will be by the «ADMIN_PERFORMED_BY». Validation of credits will be accomplished by the Government. LEED certification of the project by the Contractor is not required. The Government may choose to seek LEED certification of the project, in which case the Government will pay certification fees and coordinate with GBCI and the Contractor will furnish audit data as requested at no additional cost. </NSTDMULTI><ONLY_EXEMPT>Credit Validation: LEED registration, compiling of documentation at LEED OnLine and use of the LEED Letter Templates is <CREDIT_NO>not required. Contractor has the option to register the project, compiling of documentation at LEED OnLine and use the LEED Letter Templates. In this case, payment of registration fees and administration/team management of the online project will be by the Contractor. </CREDIT_NO><CREDIT>required. Registration and payment of fees will be by the

Comment [sdn8]: Select paragraph below if the project includes the site work for COS standard design buildings by others. Include bracketed text in first sentence as applicable if project also includes standard design and/or non-standard design buildings in addition to site work for COS buildings by others. Registration and fees may be either by Contractor or Government (PDT choice). Administration may be by Government or shared - Contractor administers until construction phase, when Government must take over administration in order to compile and summarize data from the other contractors (PDT choice).

Comment [sdn9]: Select paragraph below if the project includes COS standard design building(s) only and site work is by others. If only a single contractor will ever be working on all the projects for a particular standard design, the COS may require the Contractor to register the standard design as part of the initial project and administer the online standard design on all subsequent projects. If multiple contractors will be working on projects for a particular standard design, registration and administration must be by the Government (COS).

Comment [sdn10]: Select paragraph below if the project includes non-standard design building(s) only and site work and COS standard design buildings are by others. Edit for either Contractor or Government fees and administration (PDT choice).

Comment [sdn11]: Select paragraph below if the project ONLY has exempt facilities and is not required to achieve LEED Silver.

«FEES_PAID_BY». Administration/team management of the online project will be by the «ADMIN_PERFORMED_BY». </CREDIT></ONLY_EXEMPT>

6.14.4. **Commissioning:** See Appendix M for Owner's Project Requirements document(s).

6.14.5. **LEED Credits Coordination.** The following information is provided relative to Sustainable Sites and other credits. </MULTI_NOT>

SS Credit 1 Site Selection:

Project site «FARMLAND» considered prime farmland.

<FLOOD1>Project site is five feet or more above 100-year flood elevation.</FLOOD1><FLOOD2>Delineation of 100-year flood elevation is shown on site drawings provided in this CONTRACT.</FLOOD2>

<HABITAT1>Project site contains no habitat for threatened or endangered species.</HABITAT1><HABITAT2>Delineation of threatened or endangered species habitat is shown on site drawings provided in this CONTRACT.</HABITAT2>

<WETLAND1>No portion of project site lies within 100 feet of any water, wetlands or areas of special concern.</WETLAND1><WETLAND2>Delineation of water, wetlands and areas of special concern is shown on site drawings provided in this CONTRACT.</WETLAND2>

Project site «PARKLAND» previously used as public parkland.

SS Credit 2 Development Density & Community Connectivity.

Project site «DENSITY» meets the criteria for this credit.

SS Credit 3 Brownfield Redevelopment.

Project site «BROWN» meets the criteria for this credit.

SS Credit 4.1 Public Transportation Access.

Project site «TRANS» meets the criteria for this credit.

EA Credit 6 Green Power.

35% of the project's electricity «GREEN» be provided through an Installation renewable energy contract. Do not purchase Renewable Energy Credits (REC's) to earn this credit.

</MULTI_NOT>MR Credit 2 Construction Waste Management.

The Installation <DOESNOT>does not have an on-post recycling facility available for Contractor's use.</DOESNOT><DOES>has an on-post recycling facility.</DOES> <CONTACT_KNOWN>Contact «CONSTRUCTION_WASTE_CONTACT» for information about materials accepted.</CONTACT_KNOWN><LEED3>

Regional Priority Credits (Version 3 only)

The project zip code is «ZIP_CODE». </LEED3>

<MULTIPLE>See LEED Multiple Contractor Responsibilities Table(s) for additional information.</MULTIPLE>

6.14.6. LEED Credit Preferences, Guidance and Resources. See Appendix L LEED Project Credit Guidance for supplemental information relating to individual credits.

Comment [sdn12]: Attach Owner Project Requirements (OPR) document for each climate controlled facility/facility type in the project. Obtain OPR for Standard Designs from COS. Develop OPR for each non-standard facility using USACE template at <http://en.sas.usace.army.mil>. Refer to SOW whenever possible in this document to avoid conflict with SOW.

Comment [sdn13]: If site work and building(s) are by separate contractors, this is a MULTIPLE CONTRACTOR COMBINED PROJECT and you should skip to the MR2 section (edit to indicate whether buildings or site is by others and identify the buildings by others).

6.14.7. ~~<MULTI_NOT>~~Not Used~~<MULTI_NOT>~~~~<MULTIPLE>~~Multiple Contractor Combined Project. When site work and building(s) are accomplished by separate contractors, it is a Multiple Contractor Combined Project for purposes of LEED scoring and documentation. This project is part of a Multiple Contractor Combined Project that includes site work and building(s) accomplished by separate contractors. See Appendix LEED Requirements for Multiple Contractor Combined Projects and Appendix LEED Multiple Contractor Responsibilities Table(s) for special requirements for this project.~~<MULTIPLE>~~

6.14.8. Additional Information

«MR2»

6.15. ENVIRONMENTAL

6.15.1. Do not use Asbestos containing materials in the new construction.

6.15.2. The impacts of the Fort Bliss Expansion have been adequately addressed in the Fort Bliss, Texas and New Mexico Mission and Master Plan Programmatic Environmental Impact Statement (MMPEIS). The environmental documents that apply to this task order are the City of El Paso Rule Regulation #9 (available at http://www.epwu.org/PDF/rules_regs.pdf), as well as the following documents included in Appendix E: Potable Regulatory Policy (Policy Letter #16, Cross connection control manual for Fort Bliss, Installation environmental Noise Management Plan, Installation hazardous waste management plan, and the Cost Schedule for Hazmat disposal. Comply with all Federal, State, and Local environmental requirements.

6.16. PERMITS

6.16.1. Obtain digging permit from Fort Bliss DPW, unless any government installed utilities have not been turned over to Fort Bliss. In this case, coordinate with USACE prior to any digging.

6.16.2. See Appendix FF for Fort Bliss Access Control Policy

«PERMITS»

6.17. DEMOLITION

6.17.1 See Appendix E.

6.18. ADDITIONAL FACILITIES

«ADDITIONAL_FACILITIES»

End of Section 01 10 00<TO>.«TONUM»<TO>

Comment [sdn14]: If site work and building(s) are accomplished by separate contractors, identify the project as a Combined Project

If site work and building(s) are accomplished by separate contractors, include general instructions on how LEED is handled for Combined Projects (standard text appendix LEED Requirements for Multiple Contractor Combined Projects), (STANDARD APPENDIX "N" IN WIZARD)

If site work and building(s) are accomplished by separate contractors, include LEED Strategy Tables (STANDARD APPENDIX "O" IN WIZARD), which indicate the status of site selection points, establish the number of points each contractor must earn relative to each building, and establish each contractor's requirements for shared building/site points.

If site work and building(s) are by separate contractors, add the MULTIPLE CONTRACTOR COMBINED PROJECT paragraph below.

Comment [sdn15]: Indicate here all project-specific differences from the default assumptions in Appendix L. For Multiple Contractor Combined Projects, describe here the other contacts and buildings in the combined project.