

**6.0 PROJECT SPECIFIC REQUIREMENTS FORT SAM HOUSTON, TX <VER>(REV 1.3 – 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: NONE

**6.3. SITE PLANNING AND DESIGN**

**6.3.1. General:**

6.3.1.1. Site Development Plan (SDP). The SDP provided by the government is included within the Appendices. Bring any discrepancies which are found in the furnished plans to the attention of the Contracting Officer's Representative.

6.3.1.2. Building Setback and Force Protection: Lay the site out based on the facility threat security level to protect against exterior attack by providing standoff distance between an aggressor or bomb, barriers, and to facilitate visual monitoring of the site. See the force protection requirements in UFC 4-010-01.

6.3.1.3. Building Spacing: Fire clearance separations shall be in accordance with UFC 3-600-01 and the International Building Code. Verify that fire clearances and access for equipment is acceptable to the installation's Fire Chief. Separation for buildings shall conform to force protection requirements per UFC 4-010-01.

6.3.1.4. Confine pad preparation operations to the work area defined by the SDP.

6.3.1.5. Walks: Locate walks paralleling buildings beyond the eave drip line and at least 5 feet from the foundation. Walks paralleling parking areas shall be at least 6 feet wide and shall abut the back of the curb.

6.3.1.6. Troop Formation Areas: Walkways for troops marching in formation shall be wide enough to accommodate personnel walking four abreast. The walkways shall be constructed of «WALKWAYS»

**6.3.1.7. Parking Areas:**

«SITE\_PLANNING»

**6.3.2. Site Structures and Amenities**

6.3.2.1. Dumpsters: Coordinate location of the dumpsters with the Installation. Provide concrete loading aprons for the first 15 feet in front of the dumpster pads to accommodate loading and to avoid rutting of the pavement in front of the dumpsters. Provide the following number of dumpsters

«SITE\_STRUCTURES\_AMENITIES»

**6.3.3. Site Functional Requirements:**

**6.3.3.1. Stormwater Management (SWM) Systems.**

(a) Comply with the requirements of general permit number

«STORMWATER\_MANAGEMENT»

(b) Storm Drainage System Plans are shown within the SDP. Tie into these systems as appropriate for his areas of design responsibility. Design and construction of the storm drainage system shall be in accordance with

Federal Aviation Administration Advisory Circular FAA AC 150-5320-5C, Surface Drainage Design; Federal Highway Administration Publication No. FHWA-NHI-01-021, Hydraulic Engineering Circular No. 22, Second Edition, URBAN DRAINAGE DESIGN MANUAL; and U.S. Weather Bureau Technical Paper No. 40, dated May 1961, Rainfall Frequency Atlas of the United States for Durations from 30 minutes to 24 hours, and return periods from 1 to 100 years. Base the design of drainage structures on a 10-year storm frequency. Incorporate the principles of Low Impact Development (LID), as detailed in UFC 3-210-10 DESIGN: LOW IMPACT DEVELOPMENT MANUAL. Construct manholes, surface inlets, and curb inlets of reinforced concrete or pre-cast reinforced concrete. Design structures in pavement to handle H-20 loading. Structures in turfed areas can be constructed for lighter weight loading. Design the storm drainage system to be as economical as possible, while taking into account the topography, drainage area, and outfall locations, as well as coordination with existing drainage systems, and existing and future underground utilities. Profiles are required for underground storm drainage systems and sections are required for culverts.

(c) **Underground Systems:** Whenever possible, match pipe crowns in elevations. Profiles of pipes shall show all existing and new underground utilities and pertinent surface features. Design the minimum pipe gradient shall be designed to provide a minimum velocity (full flow) of 3.0 fps. Design the new outfall and receiving channel to withstand the shear stress acting on the channel from the runoff to prevent erosion. Size new underground storm drainage pipes by computation of backwater surface profiles. The minimum pipe size shall be 12 inches, unless the pipe is a part of the roof drain system, in which case the minimum size of laterals and collector pipes is 4 inches.

(d) **Street Drainage:** Accomplish street drainage by the use of curb and gutter and curb inlets. Curb gaps can be considered in areas where roadside ditches are used. The center one-third of the street shall not convey runoff during the passing of the design storm. Do not use inverted crown sections for the streets without prior approval. Do not locate curb inlets in the radius of street intersections, at curb returns, or where pedestrian traffic is most likely to occur.

(e) **POV Parking and Hardstands:** Do not concentrate the flow of storm runoff on asphalt pavement. Convey storm runoff within POV parking areas to perimeter curbs by sheetflow. However, if it is necessary to concentrate flow within a parking area, provide concrete paving at the swale flowline. Concentrated flow will not be permitted to flow from POV parking or hardstand areas onto adjacent gravel areas or turfed slopes. Examine sheetflow from parking areas and hardstands onto adjacent gravel or turfed areas for possible erosive effects.

(f) **Ditches and Swales:** Use a minimum longitudinal ditch or swale gradient of 0.5% with an absolute minimum of 0.3%. Side slopes on ditches or swales shall be no steeper than 1 vertical on 2-1/2 horizontal. Pave steeper slopes. Use Turf Reinforcement Matting (TRM) in ditches that are subject to high velocity storm runoff. Use erosion control matting as necessary to control erosion on steeper slopes.

(g) **Culverts:** The recommended gradient of culverts shall be 0.5% with an absolute minimum of 0.3%. Provide concrete headwalls or end sections for all culverts. Design headwalls and end sections to reduce velocities to levels that are non-erosive for the soil types encountered.

6.3.3.2. **Erosion and Sediment Control:** Prepare and comply with Storm Water Pollution Prevention Plans (SWPPP) for the limits of the entire construction site. Include silt fences, mulch straw/hay bales around inlets, and sediment traps to control erosion during construction.

6.3.3.3. **Vehicular Circulation.**

(a) **Geometric Features:** Geometric design of all roads, streets, access drives, and parking areas shall conform to the requirements presented in AASHTO, a Policy of Geometric Design of Highways and Streets. Verify with the local installation that access for fire equipment is adequate. Radii, to back of curb, for intersections are standardized as follows:

Primary and Secondary Intersection - 30 feet

Tertiary intersections - 20 feet

Access drives at end parking space - 5 feet

(b) **Parking:** Provide perimeter concrete curbs and gutters for all parking areas and access drives in developed areas. In remote or little used areas, use concrete curbs and gutters only when required to control drainage. Where flexible pavements are used, removable prefabricated reinforced concrete wheel stops, as approved, may be used.

(c) Service Drives: Widths of drives to unloading ramps or docks for usual types of trucks or tractor trailers are:

Trucks, Single-Unit - 12 feet  
Semi-trailers - 16 feet

«VEHICULAR\_CIRCULATION»

#### 6.4. SITE ENGINEERING

6.4.1. Existing Topographical Conditions: The government furnished survey Horizontal and Vertical control complies with EM 1110-1-8005, Table 2-1, Military Construction, Building or Structure Design.

«SITE\_EXIST\_TOPO»

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

6.4.2.1. Existing Subsurface Conditions: A Government Preliminary Geotechnical Report has been prepared, and is appended to these specifications (Appendix A). The Government Geotechnical Report provides a general overview of the areal geologic conditions with detailed descriptions of the subsurface strata encountered during the Government geotechnical field investigation. Based on the results of the field investigation, laboratory testing program, and engineering analyses, the Government Geotechnical Report further provides parameters and minimum foundation design requirements. However, as stated in the Government Geotechnical Report, the Contractor is responsible for drilling additional borings at the site, and performing additional laboratory testing (specified in the Government Geotechnical Report). The Contractor's additional geotechnical field investigations shall be ONLY for the purpose of supplementing the data regarding subsurface conditions provided by the Government geotechnical field investigation, as presented in the Government Geotechnical Report

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 requirements.

«SITE\_FIREFLOW»

#### 6.4.4. Pavement Engineering and Traffic Estimates:

6.4.4.1. Pavements: Geometric design of roads and streets shall follow the guidance provided in AASHTO - A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS and GUIDELINES FOR GEOMETRIC DESIGN OF VERY LOW-VOLUME LOCAL ROADS (ADT≤400). Design pavement structures in accordance with criteria contained in AASHTO - GUIDE FOR DESIGN OF PAVEMENT STRUCTURES. Vehicle types expected to occupy the pavements and their frequency of use are as follows:

«SITE\_PAVEMENT\_ENGINEERING\_AND\_TRAFFIC»

Paved access is required to mechanical rooms/yards. New curb and gutter shall be concrete paved.

6.4.4.2. Emergency Vehicle Access: Provide access drives to allow access for fire trucks and emergency vehicles in accordance with NFPA and UFC 3-600-1. Access to the emergency drive(s) shall be restricted by using removable bollards or metal pipe swing gates with a removable center bollard. Refer to the gate detail in the drawings.

6.4.4.3. Concrete Hardstands for Vehicle Parking and Storage Areas: Develop a joint pattern plan showing locations of each type of joint to be used. Spot elevations are required at the intersection of each joint to facilitate placement of forms during construction.

#### 6.4.5. Traffic Signage and Pavement Markings

6.4.5.1. Permanent and construction roadway signs shall be as required by the FHWA MUTCD and FHWA Standard Highway Signs.

**Comment [sdn1]:** NOTE TO SPECIFIER:  
Describe the performance requirements for roadways, parking and other pavements, including classification, vehicle types, loadings, design volume, climatic conditions, frost penetration Zones, etc.

6.4.5.2. Pavement markings and striping shall be in accordance with state DOT standards and the Manual of Uniform Traffic Control Devices (MUTCD). Channelization and pavement markings shall be as required by the FHWA MUTCD and FHWA Standard Highway Signs.

#### 6.4.6. Base Utility Information

(a) Do not place underground utility lines such as sanitary sewer, water, and gas under existing or proposed pavements. Place the utility between the back slope of a road ditch and building, or back of curb. Coordinate deviations to the aforementioned requirements with the COR. Do not locate above ground utility features in front of, or in such a manner as to detract from the facility, make landscaping more difficult, or restrict or negate close-in recreational areas. Do not locate high pressure gas lines closer than 100 feet from an occupied building without special protective provisions and COR approval.

(b) Coordinate and plan utility information with the Installation's DPW through the COR. The SDP provides existing utility routing and general orientation for points of connection. Specific connection locations not shown are noted hereinafter.

6.4.6.1. Connect all utilities from the building to the service connection points shown on the SDP or listed herein. Coordinate between the SDP and utility providers, as well as coordinating utility outages with the installation and service provider.

6.4.6.2. Water Distribution System: The water distribution system is shown on the SDP. Coordinate points of connection through the COR with the installation DPW. Design and construction of potable water service between the main line and the facility shall be the responsibility of the Contractor. Design and install the water system and meter in accordance with the requirements of the installation DPW through coordination of the COR. Install valves on the water service lines near the connection point and on each service line to the building. For water mains, provide 2 valves at tees and 3 valves at crosses. Velocities in water lines shall be less than 7 feet per second (fps) to prevent possible water hammer effects.

(a) Potable Water Disinfection – Verify water line disinfection per AWWA C651-05. Analyze the samples by an analytical lab that holds a current state license and certification. Repeating disinfection protocols per AWWA C651-05 is required until satisfactory results are obtained (two consecutive sets of acceptable samples taken 24 hours apart). Collect water samples in proper sterilized containers, and perform a bacterial examination in accordance with state approved methods. As a minimum, collect one water sample from each 1000 linear feet segment of disinfected water line. The water supply system disinfection is not approved for usage until each test result is negative for bacteriological examination. Provide the water sample analytical results to the DPW's Environmental Office for record keeping. The commercial laboratory shall be certified by the state's approving authority for examination of potable water.

6.4.6.3. Natural Gas Distribution: Natural Gas distribution lines are shown on the SDP. Coordinate points of connection to the facility with CPS Energy. CPS Energy will provide natural gas service to the face of the building and shall install the site gas distribution piping. CPS Energy shall install the gas meter and connect the meter to the building stub out. The contractor shall stub the gas feed out of the building. The Contractor is not responsible for costs incurred for services provided by CPS Energy Design and construct the natural gas service lines with ANSI B31.8, Gas Transmission Distribution and Piping Systems. Natural gas shall be provided to the building. Provide a meter/regulator assembly for the facility with a valved bypass.

6.4.6.4. Sanitary Sewer System: The sanitary sewer system is shown on the SDP. Coordinate points of connection through the COR with the DPW. Design and construct the sanitary sewer system in accordance with American Society of Civil Engineers (ASCE) and the Water Environment Federation (WEF), Gravity Sanitary Sewer Design and Construction, Second Edition (ASCE Manuals and Reports on Engineering Practice No. 60 / WEF Manual of Practice No. FD-5). Provide sanitary sewer service to the building. Install two-way cleanouts and all structures required by criteria, as well as, all piping between the designated point of connection and the building. Minimize the use of lift stations. If a lift station is required, provide a packaged unit assembled of coated materials that do not easily corrode. Provide an audible and visible alarm. Ensure location of lift station is accessible by service vehicles. Provide manholes at every change of direction and every 400 feet. Provide drop manholes if pipe elevations differ more than 18 inches. The minimum sewer main size shall be 8-inch. Provide 6-inch minimum sewer connections to buildings. Provide two-way cleanouts every 100 feet along a sewer branch connection from a building, and provide two-way cleanouts at the building connection. Construct manhole inlets of reinforced concrete or pre-cast reinforced concrete. Design structures in pavement to handle H-20 loading.

Structures in turfed areas can be constructed for lighter weight loading. Profiles are required for underground sanitary sewer systems.

6.4.6.5. Oil-Water Separators: Provide oil-water separators for the pretreatment of wastewater containing free-floating oils and grease prior to discharge into sanitary sewers. Additionally, determine the pretreatment limits required by the receiving wastewater utility and select or design a system to meet these discharge limits and to resist buoyant forces acting on the structure.

(a) Prepackaged Separators: The design shall consider the anticipated flow rate and the quantity of dirt and grit contained in the wastewater. High-volume wastewater containing large amounts of solids will usually require design of a cast-in-place separator.

(b) Cast-in-Place Separators: Cast-in-place reinforced concrete separators are required for the pretreatment of wastewater generated at outdoor facilities such as washracks. Provide a grit chamber either upstream of the separator, or integrally with the separator at the upstream end of the separator when large quantities of sediments are expected. In all cases, when the flow rate resulting from storm runoff significantly exceeds the normal operating flow rate, include a bypass in order to divert the storm water into the storm drainage system instead of allowing it to flow into the treatment system. Design cast-in-place oil/water separators to conform to Chapters 5 and 6 of the American Petroleum Institute's Manual on Disposal of Refinery Wastes. This manual provides minimum detention times. Provide slotted, rotation-type or belt type oil skimmer and waste oil storage tanks in accordance with user requirements.

6.4.6.6. Cable TV (CATV): Cable TV is privatized and provided by others. Privatized utility will provide design and service to the building(s) and is not in this contract.

#### 6.4.7. **Cut and Fill**

6.4.7.1. Strive to achieve a balanced cut and fill for earthwork. Do not waste excess soil within the SDP work area without the written approval of the Contracting Officer's Representative (COR).

6.4.7.2. Grading Requirements:

(a) Finished Floor Elevations: A building's finished floor elevation shall be a minimum of 12 inches above the highest point of the adjacent outside finished grade, unless there is an overriding technical reason to deviate. Slope the finished grade a minimum of 5% for the first 10 feet away from the building.

(b) Turfed Areas Adjacent to Buildings: Slope outside finished grade away from the building at a 5% grade for the first 10 feet. Extend the 5% grade to 20 to 30 feet in areas with expansive soils. When site conditions require the use of steep slopes near buildings, provide a berm that is a minimum of 6 feet wide at a 5% grade adjacent to the building. Indicate these requirements on the grading plan with critical spot elevations.

(c) Lawn Areas: Lawn areas beyond the 5% finished grade stated above shall have a 1% minimum slope and a desirable maximum slope of 25%. If it becomes necessary to use slopes steeper than 25%, provide slope protection, but in no case shall the slope exceed 33%. Base the type and amount of slope protection provided on the soil type, slope length, and aesthetic, environmental, and economic considerations.

(d) Roads, Streets, and Access Drives: Gradients for roads, streets and access drives shall be as outlined in AASHTO, A Policy of Geometric Design of Highways and Streets. Accomplish grade changes in excess of 1% by means of vertical curves. Determine the length of vertical curves in accordance with the aforementioned AASHTO criteria. Profiles are mandatory for vertical control of centerline gradients. Show roads, streets and highways using of half-plan/half-profile type drawings.

(e) Parking Areas: Pavement grades shall provide positive surface drainage with a 1 percent minimum slope in the direction of drainage. Provide a maximum slope within a 90-degree parking space of 5 percent from front to rear end and 1-½ percent from side to side. Provide a maximum slope within a 45-degree or 60-degree parking space of 5 percent from front to rear end and 1 percent from side to side. Slope grade perpendicular to direction of parking 5 percent maximum for bituminous or concrete surfaces and 3 percent for other surfaces.

(f) Finish Grade Contours and Spot Elevations: Provide finish grade contours at 1-foot intervals and spot elevations to construct all site development features. Spot elevations on the drawings should be sufficient so that interpolation between contours is not required for structures, grading or paved areas. Provide spot elevations where grade changes a minimum of 1 percent and use at point of tangency for curbs on end islands and at corners of parking lots.

Comment [sdn2]: NOTE TO SPECIFIER: DO NOT SPECIFY MINIMUM COMPACTION REQUIREMENTS. THE IBC COVERS THIS AND THE GEOTECH REPORT MUST INCLUDE THE COMPACTION REQUIREMENTS.

«SITE\_CUT»

6.4.8. Borrow Material

«BORROW\_MATERIAL»

6.4.9. Haul Routes and Staging Areas

6.4.9.1. See Appendix J, DRAWINGS for the project location and the location of haul routes and Contractor's staging area. Construction limits shall be confined to the construction site boundaries as shown on the Site Development Plan (SDP) within the Appendices.

6.4.9.2. The Contractor will be allotted an area as shown on the SDP for the placement of a construction trailer complex and storage for the Contractor and respective Subcontractors. Permanent Trailers are not permitted within the building envelope work areas. Trailers within the work area may be required to be relocated at no additional cost to the Government to accommodate site activities. The Contractor shall be responsible for the site preparation, fencing, access drives, and maintenance of the compound at all times. Upon completion of the project and after removal of trailers, materials, and equipment from within the fenced area, remove the fence. Restore areas used by the Contractor for the storage of equipment or material, or other use, to the original or better condition. Remove gravel used to traverse grassed areas and restore the area to its original condition, including top soil and seeding as necessary.

6.4.9.3. For proposal purposes, assume Contractor will be responsible for providing temporary utilities (water, sewer, and electricity, etc.) during construction at the project site. A water fill point will be provided as indicated on the SDP. It may be necessary, initially, for the Contractor to truck water to the project site until new utilities are constructed. Contractor is responsible for installation and maintenance of the haul road from the water fill point to the entrance of the construction site. Coordinate routing of haul roads with the COR.

6.4.10. Clearing and Grubbing:

«SITE\_CLEAR\_GRUB»

6.4.11. Landscaping:

(a) Provide native or well adapted species of plants in the landscaping plan. Choose trees, shrubs, and ground covers from the preferred plant list included in Appendix I. Provide shade trees. Use flowering vegetation at focal points to provide visual interest. All landscaping within 33 feet of the facility shall adhere to force protection clear zone requirements as specified in UFC 4-010-01.

(b) The landscaping integrated design shall emphasize the goal to achieve energy efficiency and water conservation. Select vegetation based on hardiness, availability, and drought tolerance, which aids in the conservation of water, as well as, maintenance resources. Locate the trees to optimize shading opportunities, which aids in energy efficiency of the buildings by cooling during the summer.

(c) Landscape Irrigation.

«LANDSCAPING»

6.4.12. Turf: Turfing is required on all graded, unpaved and disturbed areas resulting from the Contractor's operations. Use sod in areas with steep slopes ( $\geq 3:1$ ) or ditch linings to assist in establishing turf and to aid in erosion protection. Use Turf Reinforcement Matting (TRM) in ditches that are subject to high velocity storm runoff. Use erosion control matting as necessary to control erosion on steeper slopes.

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 Fort Sam Houston's 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

Comment [sdn3]: NOTE TO SPECIFIER: DESCRIBE SOURCES OF ACCEPTABLE BORROW, OR STATE THAT NO BORROW IS AVAILABLE ON THE INSTALLATION, ETC.

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 appearance 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 **Fort Sam Houston’s** Installation 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 Fort Sam Houston’s identified preferences. Implement these preferences considering the following:

- (a) Achievable within the Construction Contract Cost Limitation (CCL)
- (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»

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 at Fort Sam Houston. 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) The wall and ceiling/roof will have a continuous insulative/vapor barrier connection with no air gaps.
- (c) Screen mechanical equipment by parapets at flat or low slope roofs.
- (d) Roof shapes may be gabled or hip roofs or a combination of these roof shapes with flat roofs concealed by a parapet wall.

6.5.3. <UEPH>Not Used</UEPH><UEPH\_NO> Programmable Electronic Key Card Access Systems:

«PROGRAMMABLE\_KEY\_CARD»</UEPH\_NO>

## 6.5.4. INTERIOR DESIGN

«INTERIORS»

Interior building signage requirements:

**Comment [sdn4]:** 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

«INTERIOR\_SIGNAGE»

6.6. STRUCTURAL DESIGN

6.6.1. General

Place floor mounted mechanical and electrical equipment on a 4" minimum concrete pad.

6.6.2. Project Specific Design Loads:

6.6.2.1. Ground Snow: 5 psf

6.6.2.2. Wind Speed: 90 mph

6.6.2.3. Seismic Design Data: The mapped maximum considered earthquake (MCE) spectral response accelerations for site class B are:

$S_s$  (at short periods) = 11% g

$S_1$  (at 1-second period) = 3% g.

The acceleration values identified are for the general location of the facility. Verify and use site specific criteria based on the final site location of the facility. Adjust site class per IBC to match specific site information in geotechnical report.

6.6.2.4. For design of structural components subjected to dynamic loads, the U.S. Army Corps of Engineers Protective Design Center (PDC) developed SBEDS, Single-Degree-of-Freedom Blast Effects Design Spreadsheets (SBEDS). SBEDS is available at the software tab of the PDC website, <https://pdc.usace.army.mil/>.

6.6.3. Foundation

Use a vapor barrier system with a minimum 10-mil polyethylene membrane under all slabs-on-grade.

6.6.4. Site Features – Retaining Walls/Bridges/etc.

Design site features, e.g. retaining walls, culverts, bridges, in accordance with the appropriate American Association of State Highway and Transportation Officials (AASHTO) criteria including AASHTO LRFD Bridge Design Specifications, AASHTO Standard Specifications for Highway Bridges, and AASHTO Guide Specifications for Design of Pedestrian Bridges. Consider operation and maintenance requirements, e.g. painting, mowing, inspecting, routine maintenance. Design site features to drain properly in order to meet loading assumptions.

6.7. THERMAL PERFORMANCE

Consider moisture protection. Consider protection from damage to flooring and wall finishes when designing floor slabs and walls. This could be as simple as placing a vapor barrier under the floor slab, building wrap, or vapor barrier on the walls.

6.8. PLUMBING

6.8.1. The storm drainage system will consist of gutters and downspouts on each building. Direct all drainage to the existing storm sewer system.

6.8.2. Consider the use of tankless domestic water heaters.

6.8.3. General Plumbing Requirements:

6.8.3.1. Each building will have a domestic water service entrance with a floor drain for backflow preventer testing and discharge.

6.8.3.2. Wall Hydrants: Provide a minimum of 4 exterior wall hydrants, at least one per face of the building. These shall have a removable key and freeze protection. Mount wall hydrants 2 feet above finished grade and spaced around the building perimeter to allow watering of all grass areas with no greater than 100 feet of garden hose. Provide a minimum of one (1) hose-bib in each mechanical room, mechanical area, or utility area.

6.8.3.3. Install all backflow preventers in mechanical rooms for accessibility and comply with the requirements of Texas Commission on Environmental Quality, International Building Code, and International Plumbing Code. Backflow preventers shall pass certification testing for compliance with Title 30 Texas Administrative Code Rule 290.44(h). State licensed plumbers shall install and/or test backflow preventers, and cross connection devices. Initial testing and certification of new backflow devices needs to be performed, and submitted for approval prior to domestic water usage.

6.8.3.4. Water Meters: Locate the water meter inside the building. Meters shall have a pulse generator with each pulse representing an adjustable volume of water. The meter shall be capable of operating up to speeds of 500 pulses per minute with no false pulses. Pulse generators shall provide the maximum number of pulses up to five hundred (500) per minute that is obtainable from the manufacturer. Connect meters to the building control system. Provide meters with isolation valves upstream and downstream of the meter and with a building piping drain valve downstream of the meter. Connect meters to the Post wide Utility Control System (UCS).

6.8.3.5. Water Service Utility Provider (WSUP) Coordination: Provide separate service for the fire water and domestic water services. The domestic water service shall include a meter inside the building and fire water service line shall have a backflow preventer with a post indicator valve.

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

6.8.3.7. Irrigation: Potable water irrigation is generally prohibited due to water reduction best management practices. Use gray (re-use) water (where available) for all outdoor irrigation unless building purpose is health related for treatment of patients where gray water would be considered a risk factor.

#### 6.8.4. Natural Gas Meters for Buildings Only:

6.8.4.1. Install a shutoff valve, meter set assembly, and service regulator set assembly on the service line outside each building, eighteen (18) inches above the ground on the building gas service riser.

6.8.4.2. Install an insulating joint on the inlet side of the meter set assembly and service regulator and construct to prevent flow of electrical current. A 3/8 inch tapped fitting equipped with a plug shall be provided on both sides of the service regulator, downstream of the gas shutoff valve; for installation of pressure gages for adjusting the regulator.

6.8.4.3. Terminate all service regulator vents and relief vents in the outside air in rain and insect resistant fittings. Locate the open end of the vent where gas can escape freely into the atmosphere, away from any openings into the building and above areas subject to flooding.

6.8.4.4. Meters shall have a pulse generator with each pulse representing an adjustable volume of gas. The meter shall be capable of operating up to speeds of five hundred (500) pulses per minute with no false pulses. Pulse generators shall provide the maximum number of pulses up to five hundred (500) per minute that is obtainable from the manufacturer. Connect meters to the Post wide Utility Control System (UCS).

6.8.4.5. Include a seismic shutoff valve on the gas service entrance to each building.

6.8.4.6. Normally utilize the standard gas pressure from utility provider's building regulator of 5.3 ounces. If higher pressures are needed, coordinate those requirements with the utility provider. Additionally, provide the utility provider with their required flow rate and expected gas usage diversity. Provide an allowance of \$25,000.00 for the costs associated with the installation and design that will be required by CPS Energy for the new natural service extension to the site. The Contractor is responsible for all costs associated with the natural gas service to

the site in accordance with the requirements of CPS Energy. Do not contact CPS Energy for pricing during the bidding process..

## 6.9. SITE ELECTRICAL AND TELECOMMUNICATIONS SYSTEMS

### 6.9.1. Power

Primary electrical power is privatized and owned by City Public Service (CPS). Both temporary and permanent power for buildings will be provided by CPS Energy. The solicitation drawings show a suggested route for distribution based on CPS Energy standards. A separate bid item is included in this request for proposal with CPS Energy's preliminary connection charge. CPS will perform electrical field surveys at the D/B Contractor's expense. There will be a charge for any upgrades to the primary distribution system (both overhead and underground). For complete design and connection details

### 6.9.2. Lighting:

«SITE\_ELECTRICAL»

### 6.9.3. Telecommunications

«SITE\_TELECOM»

## 6.10. FACILITY ELECTRICAL AND TELECOMMUNICATIONS SYSTEMS

### 6.10.1. Power

6.10.1.1. Connect the pulse initiator on the electric meter to the building's Direct Digital Control System. Connect meters to the Post wide Utility Control System (UCS).

6.10.1.2. Provide an exterior entrance to the main electrical room containing service equipment.

6.10.1.3. Locate panelboards in designated electrical rooms or non public areas. Do not install panelboards in hallways or general access areas.

### 6.10.2. Telecommunications

6.10.2.1. Coordinate with the Directorate of Information Management (DOIM) during the design process. The POC for DOIM is Ms. Erma Brown at (210) 221-4546 or email at [Erma.M.Brown@us.army.mil](mailto:Erma.M.Brown@us.army.mil).

6.10.2.2. In waiting areas and courtyards (if applicable) provide one 8-pin modular jack in a single gang outlet faceplate with mounting lugs labeled "voice". In the mechanical room provide two 8-pin modular jacks (in addition to UFC requirement) in an outlet box with one labeled "voice" and the other "DDC".

6.10.2.3. Provide LC-LC patch cord for fiber patch panel.

6.10.2.4. Install pull wires in conduits which have spare capacity.

6.10.2.5. Provide fiber patch panels with LC connectors.

6.10.2.6. Coordinate with EMCS/UMCS paragraphs in section 01 10 00 to provide two 8-pin modular jacks adjacent to the Building Point of Connection hardware for connection to Fort SAM's existing EMCS.

6.10.2.7. Provide sufficient space on one of the walls in the main telecommunications room for a customer provided locked cabinet. Clear area for cabinet will be minimum 48 inches wide and 24 inches deep.

### 6.10.3. Cable TV (CATV)

See Appendix «SITE\_CABLE\_TV», Special Project Procedures for Fort Sam for additional requirements.

6.10.3.1. Route all CATV conduits and cables in accordance with specifications provided by local CATV provider. Provide 10' of slack for cables at the designated CATV box location.

6.10.4. Elevators (if applicable) shall have a dedicated "hot" telecommunications line to the fire department for emergency situations. Provide a 1" conduit with pull wire from the elevator machine room to the nearest telecommunications room.

## 6.11. HEATING, VENTILATING, AND AIR CONDITIONING

6.11.1. General: Integrate the control system to the installation's existing UMCS. The existing UMCS is FSH Industrial Grade Direct Digital Control System (IGDDCS) using Rockwell RSView Front End Operating Software.

6.11.2. System Selection:

6.11.2.1. HVAC System for Communications Room: All Communication Rooms shall have air-conditioning provided for cooling 365 days per year, regardless of outdoor air temperature.

6.11.2.2. HVAC System for Mechanical Room and other Service, Storage and Utility spaces: Mechanical, fire protection, electrical, and storage spaces shall be automatically ventilated to limit space temperatures to 10 degrees F above design outdoor air temperature.

6.11.3. EMCS

6.11.3.1. EMCS/UMCS at Fort Sam Houston: Fort Sam Houston does have a central utility monitoring and control system. The basewide UMCS system uses front end software RS View, Version 3.2 by Rockwell, to the individual buildings via a VLAN provided by ITBC. All heating, ventilating, and air-conditioning (HVAC) controls shall use a programmable logic control (PLC) based FSH Industrial Grade DDC System (IGDDCS). The PLC system shall be compatible with the Fort Sam Houston UMCS. PLC's shall be networked. All LAN equipment shall fully comply with IEEE 802.3 (10 BASE 2 or 10 Base T) Ethernet networks. See Specification 23 09 10.00 44 PROGRAMMABLE LOGIC CONTROL FOR HVAC (FORT SAM HOUSTON) in the Appendix for further requirements.

6.11.3.2. Integration of new facilities into the existing UMCS database and monitoring and controls software (such as the post-wide demand limiting) will require generation of custom graphics matching the style and complexity of the existing graphics. Integration of new facilities shall also include programming of alarm handling and demand load limiting which will require Directorate of Public Works (DPW) input for critical alarm lists and priority of building for demand load limiting. This will have to be done at the existing UMCS "front-end". Integration will be limited to experienced companies and personnel.

6.11.4. Water Quality Analysis and Treatment: Water quality for the installation and surrounding area is 'hard'. Treatment will be required for use as make-up water in HVAC equipment. Water analysis data from water treatment contractor and as given below:

- Chlorides: 20 ppm
- Total Alkalinity: 264 ppm
- Total Hardness: 292 ppm (CaCO<sub>3</sub>)
- Calcium: 81 ppm
- Magnesium: 23 ppm
- Total Dissolved Solids: 321 ppm

Coordinate with water treatment contractor to confirm water 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 condensing water systems.

**6.11.5. Mandatory Equipment Requirements:** All mechanical equipment shall automatically restart after a power outage. Provide equipment such as low water boiler cut-offs and controls that can restart in a normal mode after power is restored. Protect all mechanical equipment and controls against power surges and low and high supply

voltage situations. Power loss, surges or low or high voltage shall not in any way effect HVAC or plumbing equipment or controls, set points, controls bindings etc.

#### 6.11.6. 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:

«RENEWABLE\_ENERGY\_FEATURES»

6.12.2. Minimize roof penetrations.

### 6.13. FIRE PROTECTION

6.13.1. The Fire Alarm Control Panel shall be fully compatible with the existing Monaco presently in use at Fort Sam Houston.

6.13.1.1. The RF transceiver shall be a Monaco BT-X2 or approved equal.

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

6.13.1.3. Provide a remote enunciator panel for the fire alarm system.

6.13.1.4. Key all fire alarm equipment. Keys shall be per Fort Sam Houston requirements.

6.13.1.5. All tamper devices shall be supervised with supervisory signals sent to the Fort Sam Houston monitoring station.

6.13.1.6. Mark aire lanes in accordance with Fort Sam Houston requirements.

6.13.1.7. All FA tampers (PIV, valves, etc.) shall have cover tampers.

6.13.1.8. Provide a list of special tools and spare parts for the fire alarm and fire sprinkler systems. List shall include cost and source of supply for each item. In addition, provide a copy of computer software and technical data for the fire alarm system. Computer software shall include any special hardware required to operate the system.

### 6.13.2. Fire Sprinkler System

6.13.2.1. The water flow data given in this RFP is historical water flow data taken near this project site. Refer to Appendix D for the water flow test data. Verify this water flow data with a Contractor performed flow test. If the test indicates that the available flow or pressure has deteriorated from the data given in this RFP, bring this to the attention of the Government. If the test indicates that the available water flow or pressure has not deteriorated, use the water flow test data given in this RFP as the basis of design for the fire extinguishing systems.

6.13.2.2. Perform the water flow test at hydrants near to this project site. Perform flow testin accordance with the procedures contained in NFPA 291 to determine the available water supply. Report the flow test using a form containing all the data and having the same format as on the Sample Report of a Hydrant Flow Test found in NFPA 291. A fire protection engineer or an engineer experienced in water flow testing shall perform or witness the required flow tests prior to the first sprinkler system design submittal. Submit the qualifications of the engineer performing or witnessing the test. The Government won't concur with the sprinkler system design before the Government concurs with the water flow tests.

**Comment [sdn5]:** 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.

**Comment [sdn6]:** Indicate here all renewable energy features that are included in project DD1391 and supported by LCCA. Be specific in description of features.

6.13.2.3. Identify and locate the test hydrants on the sprinkler system submittal drawings.

6.13.2.4. Install a double detector check assembly on the fire water service line for the building. Systems utilizing antifreeze require reduced pressure principle backflow preventers. Backflow preventers shall pass certification testing for compliance with Title 30 Texas Administrative Code Rule 290.44(h).

6.13.2.5. Install fire risers in dedicated space or mechanical room with external access for fire department.

### 6.13.3. Fire Alarm System

The fire alarm system shall send a trouble signal to the Installation's central fire receiving station for the Post Indicator Valve. Central receiving station is a radio based Monaco system.

### 6.13.4. Mass Notification System (MNS)

Program the MNS with standard Fort Sam Houston prerecorded messages. Ft. Sam personnel will provide messages thru the Contracting Officer's Representative.

«FIRE\_PROTECTION»

## 6.14. SUSTAINABLE DESIGN

6.14.1. LEED Rating Tool Version. This project shall be executed using «LEED\_VERSION»

6.14.2. **<ONLY\_EXEMPT>**LEED Minimum Rating. 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>**

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>**Validation of credits will be accomplished by the Government. LEED certification of the project by the Contractor is required. The Contractor will obtain LEED certification prior to project closeout. Application, payment of certification of fees and all coordination with USGBC during the certification process will be by the Contractor. 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». **<ADMININGOV>**Administration/team management of the online project will be by the Government. **<ADMININGOV><ADMINSHARED>**Administration/team management of the online project will be shared between the Contractor and the Government per Appendix LEED Requirements for Multiple Contractor Combined Projects. **<ADMINSHARED>** **<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

Comment [sdn7]: [LEED-NC Version 2.2][LEED-NC Version 3][text block for other to be filled in by specifier]

Comment [sdn8]: [Silver][Gold][Platinum]

Comment [sdn9]: 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.

Comment [sdn10]: 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).

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 «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.

**Comment [sdn11]:** 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 [sdn12]:** 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 [sdn13]:** Select paragraph below if the project ONLY has exempt facilities and is not required to achieve LEED Silver.

**Comment [sdn14]:** 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 [sdn15]:** 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).

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.

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

CPS Energy may offers rebate programs. Check their website for additional information at: <http://www.cpsenergy.com>.

6.16. PERMITS

«PERMITS»

6.17. DEMOLITION

«DEMOLITION»

6.18. ADDITIONAL FACILITIES

«ADDITIONAL\_FACILITIES»

End of Section 01 10 00<TO>.<TONUM></TO>

**Comment [sdn16]:** 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 [sdn17]:** 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.