

PERFORMANCE WORK STATEMENT

**Joint Base San Antonio (JBSA) Heating Ventilating Air Conditioning (HVAC) Water
Chemicals Treatment**

Final

Rev 1 March 2023

1. GENERAL

The contractor shall provide HVAC water treatment chemicals and chemically treat the water in steam boiler systems, condenser water open loops, condenser water closed loops, hot water closed loops, and chilled water closed loops. Chemicals provided under this contract shall include salt for water softeners. The contractor shall provide HVAC water treatment chemicals and chemically treat the water in steam boiler systems, condenser water open loops, condenser water closed loops, hot water closed loops, and chilled water closed loops. The contractor shall also provide Legionella testing, analysis, and hyperchlorination services on potable and non-potable water. Chemicals provided under this contract shall include salt for water softeners. Services shall be performed at Joint Base San Antonio (JBSA) locations: Camp Bullis, Fort Sam Houston, Chapman Training Annex, Lackland, Kelly Field Annex, and Randolph

1.1. DESCRIPTION

The contractor shall provide all supplies, materials, tools, and equipment necessary for the delivery and application of water treatment chemicals, and associated services to inspect, test, chemically treat, maintain, and perform preventative maintenance on condenser water loops, steam loops, hot and chilled water hydronic loops, and salt for water softeners at JBSA operating locations in a manner that will ensure its serviceability and prevent deterioration in operational effectiveness. The contractor shall comply with manufacturer's recommendations and procedures and all applicable standards, codes, regulations and industry standards. The proposed chemical products shall be completely compatible with the existing chemical treatment program as shown on Appendix A and all facilities covered under this contract are also listed.

1.2. PROGRAM GOALS.

1.2.1. The water treatment program will provide scale, corrosion and biological protection for cooling towers, chillers, steam boiler systems, steam/condensate lines, condenser water open loops, condenser water closed loops, closed chilled water loops, and closed hot water loops, while maximizing program safety, efficiency and performance.

1.3. LABORATORY TESTING.

The contractor shall have access to laboratory facilities capable of performing a complete range of analytical work to assist with monitoring, control and troubleshooting of the facilities' treated water systems.

1.4. TRAINING.

1.4.1. The contractor shall provide yearly Government personnel (max of six personnel) training support that includes reporting, understanding chemical program's test results, and the safe handling of chemical products. The Contractor shall submit the training materials to the Contracting Officer Representative (COR) within 30 days prior to the training. Training shall be conducted within 90 calendar days of the start of the contract and each subsequent ordering period thereafter.

1.5. CHEMICAL STORAGE AND DELIVERY.

1.5.1. The contractor shall provide off base storage of condenser water loop chemicals, hydronic water loop chemicals, steam loop chemicals, and water softener salt prior to delivery.

1.5.2. Chemicals and water softener salts not in direct use shall not be stored on site or in Government facilities. Contractor shall deliver and distribute water softener salt, condenser water loop chemicals, hydronic water loop chemicals, and steam loop chemicals to each point of use location. Contractor shall provide all transportation associated with chemical storage and delivery to point of use or receiving area.

1.6. REQUIREMENT:

1.6.1. INITIAL ASSESSMENT:

1.6.1.1. The Contractor shall submit items listed in paragraph 1.6.1.1.1 thru 1.6.1.1.2 to the COR within 45 days after award.

1.6.1.1.1. Conduct initial water analysis of steam boiler, condenser water open loops to include cooling towers, condensing water closed loops systems, and water softener systems using Appendix A with the recommendations for remedial action.

1.6.1.1.2. Describe the existing state of the treatment program for all systems. This description will serve as a base-line condition to help prioritize immediate corrective actions and future improvement.

1.6.2. FULL SERVICE APPLICATION.

Contractor chemical program are to produce clean heat transfer surfaces which are substantially free of scale, sludge, deposits, corrosion, pitting, and biological growth when treatment is administered in accordance with contractor's directions and recommendations. The contractor shall monitor and adjust existing facility chemical feed or control equipment as required to assure reliable operation of boiler and cooling systems. All testing equipment shall be properly calibrated according to the manufacturer. Any malfunctions with the chemical feed, water softener equipment, bleed and/or critical equipment shall be noted, with recommendations, on all reports that are submitted to the COR,

1.6.2.1. CONDENSER WATER OPEN LOOPS.

1.6.2.1.1. The Contractor shall provide all the necessary chemicals to treat condenser water open loops for scale, corrosion, microbiological growth, and fouling at Fort Sam Houston, Chapman Training Annex, Lackland, and Randolph JBSA locations using Appendix A.

1.6.2.1.1.1. The Contractor shall provide and apply pH adjusters (sulfuric acid) as necessary to balance water chemistry.

1.6.2.1.1.2. The Contractor shall provide and apply corrosion and scale inhibitors as necessary to balance water chemistry.

1.6.2.1.1.3. The Contractor shall provide and apply Biocides as necessary to balance water chemistry

1.6.2.1.1.4. Contractor shall establish control range for all systems to produce clean heat transfer surfaces.

1.6.2.1.1.5. The Contractor shall validate proper feed and control equipment operations and verify system protection is adequate.

1.6.2.1.2. The Contractor shall draw samples from each Condenser Water Open Loops system and analyzed twice (2X) per month. Condensing Water Open Loops shall be analyzed for, but not limited to, pH, Conductivity, Total Hardness, Total Alkalinity, Chloride, and Phosphate.

1.6.2.1.2.1. Contractor shall provide maintenance and calibration of controller, sensors and feed equipment and pumps IAW manufacturer's specifications as necessary to maintain adequate water treatment.

1.6.2.1.2.2. Contractor shall provide corrosion coupon testing and analyzed quarterly (4X/Yr) with reports to the COR

1.6.2.1.2.3. Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be provided to the COR the first (1st) and third (3rd) Monday of each month.

1.6.2.1.3. Contractor shall Conduct legionella testing for each Cooling Tower covered under the contract quarterly (4X/Yr) and provide report to the COR

1.6.2.1.4. Contractor shall conduct legionella testing for each Cooling Tower covered under the contract annually by an independent water treatment lab/consultant. Provide the testing reports to the COR.

1.6.2.2. **CONDENSER WATER OPEN LOOPS (without pH control).**

1.6.2.2.1. The Contractor shall provide all the necessary chemicals to treat condenser water open loops for scale, corrosion, microbiological growth, and fouling at Fort Sam Houston JBSA location using Appendix A.

1.6.2.2.1.1. The Contractor shall provide and apply corrosion and scale inhibitors as necessary to balance water chemistry.

1.6.2.2.1.2. The Contractor shall provide and apply Biocides as necessary to balance water chemistry

1.6.2.2.1.3. Contractor shall establish control range for all systems to produce clean heat transfer surfaces.

1.6.2.2.1.4. The Contractor shall validate proper feed and control equipment operations and verify system protection is adequate.

1.6.2.2.2. The Contractor shall draw samples from each Condenser Water Open Loops system and analyzed twice (2X) per month. Condensing Water Open Loops shall be analyzed for, but not limited to, pH, Conductivity, Total Hardness, Total Alkalinity, Chloride, and Phosphate.

1.6.2.2.2.1. Contractor shall provide maintenance and calibration of controller, sensors and feed equipment and pumps IAW manufacturer's specifications as necessary to maintain adequate water treatment.

1.6.2.2.2.2. Contractor shall provide corrosion coupon testing and analyzed quarterly (4X/Yr) with reports to the COR.

1.6.2.2.2.3. Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR the first (1st) and third (3rd) Monday of each month.

1.6.2.2.3. Contractor shall Conduct legionella testing for each Cooling Tower covered under the contract quarterly (4X/Yr) and provide report to the COR.

1.6.2.2.4. Contractor shall conduct legionella testing for each Cooling Tower covered under the contract annually by an independent water treatment lab/consultant. Provide the testing reports to the COR.

1.6.2.3. **CONDENSER WATER CLOSED LOOPS.**

1.6.2.3.1. The Contractor shall provide and apply the necessary chemicals to treat condenser water closed loops for corrosion at Fort Sam Houston and Lackland JBSA locations using Appendix A.

1.6.2.3.1.1. The Contractor shall provide and apply corrosion inhibitors as necessary to balance water chemistry.

1.6.2.3.1.2. The Contractor shall draw samples from each Condenser Water Closed Loops system and analyzed quarterly (4X/Yr). Condensing Water Closed Loops System shall be analyzed for, but not limited to, pH, Conductivity, and Nitrite.

1.6.2.3.1.3. The Contractor shall provide corrosion coupon testing and analyzed quarterly (4X/Yr) with reports to the COR.

1.6.2.3.1.4. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR quarterly (4X/Yr) the first (1st) Monday of the month.

1.6.2.4. CHILLED WATER CLOSED LOOPS.

1.6.2.4.1. The Contractor shall provide and apply the necessary chemicals to treat chilled water closed loops for corrosion at Camp Bullis, Fort Sam Houston, Chapman Training Annex, Lackland, and Randolph JBSA locations using Appendix A.

1.6.2.4.1.1. The Contractor shall provide and apply corrosion inhibitors as necessary to balance water chemistry.

1.6.2.4.1.2. The Contractor shall draw samples from each Chilled Water Closed Loops system and analyzed quarterly (4X/Yr). Chilled Water Closed Loops system shall be analyzed for, but not limited to, pH, Conductivity, and Nitrite.

1.6.2.4.1.3. The Contractor shall provide maintenance and calibration of controller, sensors and feed equipment and pumps IAW manufacturer's specifications as necessary to maintain adequate water treatment.

1.6.2.4.1.4. The Contractor shall provide corrosion coupon testing and analyzed quarterly (4X/Yr) with reports to the COR.

1.6.2.4.1.5. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR quarterly (4X/Yr) the first (1st) Monday of the month.

1.6.2.5. HOT WATER CLOSED LOOPS.

1.6.2.5.1. The Contractor shall provide and apply the necessary chemicals to treat hot water closed loops for corrosion at Camp Bullis, Fort Sam Houston, Chapman, Lackland, Randolph JBSA locations using Appendix A.

1.6.2.5.1.1. The Contractor shall provide and apply corrosion inhibitors as necessary to balance water chemistry.

1.6.2.5.1.2. The Contractor shall draw samples from each Hot Water Closed Loops system analyzed quarterly (4X/Yr) . Hot Water Closed Loops system shall be analyzed for, but not limited to, pH, Conductivity, and Nitrite.

1.6.2.5.1.3. The Contractor shall provide corrosion coupon testing and analyzed quarterly (4X/Yr) with reports to the COR the first (1st) Monday of the month.

1.6.2.5.1.4. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR quarterly (4X/Yr) the first (1st) Monday of the month.

1.6.2.6. **STEAM BOILER SYSTEMS.**

1.6.2.6.1. The Contractor shall provide and apply all the necessary chemicals to treat steam boiler systems for scale and corrosion at Fort Sam Houston, Lackland, and Randolph JBSA locations using Appendix A.

1.6.2.6.1.1. The Contractor shall provide and apply corrosion and scale inhibitors as necessary to balance water chemistry.

1.6.2.6.1.2. Contractor shall establish control range for all systems to produce clean heat transfer surfaces.

1.6.2.6.1.3. The Contractor shall validate proper feed and control equipment operations and verify system protection is adequate.

1.6.2.6.1.4. The Contractor shall draw samples from each Steam Boiler system and analyzed twice (2X) per month. Steam Boiler Systems shall be analyzed for, but not limited to, pH, Conductivity, Total Hardness, P-Alkalinity, OH-Alkalinity, Chloride, Phosphate, Sulfite, hardness of make-up water, hardness of feed water, and conductivity of condensate.

1.6.2.6.1.5. The Contractor shall provide maintenance and calibration of controller, sensors and feed equipment and pumps IAW manufacturer's specifications as necessary to maintain adequate water treatment.

1.6.2.6.2. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR the first (1st) and third (3rd) Monday of each month.

1.6.2.7. **WATER SOFTENERS.**

1.6.2.7.1. The Contractor shall provide and apply the necessary salt for water softeners at Camp Bullis, Fort Sam Houston, Chapman, Lackland and Randolph JBSA locations using Appendix A. Water softener salt must be food grade and have the National Sanitation Foundation (NSF)/American National Standards Institute (ANSI) approved labels.

1.6.2.7.1.1. The Contractor shall conduct twice (2X) per month site service visits to test on all softened water system and control equipment operations and verify system protection is adequate.

1.6.2.7.1.2. The Contractor shall provide—calibration of controller and sensors IAW manufacturer's specifications as necessary to maintain adequate water treatment.

1.6.2.7.1.3. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR the first (1st) and third (3rd) Monday of each month.

1.6.2.7.2. The Contractor shall respond when needed to correct and treat a system should it become scaled or fouled due to poor product quality or application.

1.6.3. LEGIONELLA TESTING AND ANALYSES.

Contractor shall provide Legionella testing and analyses for any JBSA facility's potable and non-potable water system, when requested via work order. The testing shall be invoiced against established pricing on CLIN 0X10

1.6.4. HYPERCHLORINATION SERVICES.

1.6.4.1. Contractor shall provide hyperchlorination services to cleaning and disinfect potable and non-potable domestic water system for any JBSA facility's potable and non-potable water system, when requested via work order. The testing shall be invoiced against established pricing on CLIN 0X11. Any facility can be requested for this service via work order. The estimated gross square footage of the facility is approximately 216,873 square feet (SF) for a 5 -story dormitory facility with 180 dwellings.

1.7. REPLACEMENT/REPAIR PARTS.

1.7.1. The contractor shall furnish at no cost to the Government all part/materials valued at \$50.00 or less. The contractor shall not charge labor costs for minor repairs relating to chemical treatment to Government owned equipment where the part/materials is \$50.00 or less. When corrective or preventive maintenance is required to restore Government owned chemical injection equipment to an operating condition and the part/materials cost exceeds \$50.00, the contractor shall furnish the respective CO an itemized written quote and work order on a Government provided work order report form. All work orders shall include the work location of each requirement. The quote shall include all part/materials and labor hours needed to complete any repairs.

1.7.2. The labor rate used for work orders will be the agreed upon rate and listed in the CLIN 0X09. The contractor shall provide the quote and work order to the COR within 2 working days after discovery or assessment. All work shall be completed within 10 working days after approved by the contracting officer. The contractor shall identify on the quote if additional time is needed for material(s) delivery/installation. The contractor shall not automatically order parts or begin repairs until the quote and work orders are authorized and signed by the CO. The contractor shall be reimbursed for parts/material and labor, when approved by the CO.

1.7.3. The contractor shall request parts or materials from Government furnished item identified in Appendix B. All part requests shall include the work location of each requirement.

1.7.4. Contractor shall install all Government furnished parts or materials per manufacturer installation instruction.

1.8. EMERGENCY RESPONSE TIMES

1.8.1. The contractor shall respond to emergencies within 8 hours of verbal or telephone notification by the COR. An emergency situation is any spill or leak involving acid. All other situations shall be considered non-emergency

1.9. REPORT

1.9.1. CONDENSING WATER OPEN LOOPS.

1.9.1.1. Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR the first (1st) and third (3rd) Monday of each month.

1.9.1.2. Contractor shall Conduct legionella testing for each Cooling Tower covered under the contract quarterly (4X/Yr) and provide report to the COR.

1.9.1.3. Contractor shall conduct legionella testing for each Cooling Tower covered under the contract annually by an independent water treatment lab/consultant. Provide the testing reports to the COR.

1.9.1.4. CONDENSING WATER OPEN LOOPS (no pH control).

1.9.1.5. Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR the first (1st) and third (3rd) Monday of each month.

1.9.1.6. Contractor shall Conduct legionella testing for each Cooling Tower covered under the contract quarterly (4X/Yr) and provide report to the COR.

1.9.1.7. Contractor shall conduct legionella testing for each Cooling Tower covered under the contract annually by an independent water treatment lab/consultant. Provide the testing reports to the COR.

1.9.2. CONDENSING WATER CLOSED LOOPS.

1.9.2.1. The Contractor shall provide corrosion coupon testing and analyzed quarterly (4X/Yr) with reports to the COR.

1.9.2.2. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR quarterly (4X/Yr) the first (1st) Monday of the month.

1.9.3. CHILLED WATER CLOSED LOOPS.

1.9.3.1. The Contractor shall provide corrosion coupon testing and analyzed quarterly (4X/Yr) with reports to the COR.

1.9.3.2. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR quarterly (4X/Yr) the first (1st) Monday of the month.

1.9.4. HOT WATER CLOSED LOOPS.

1.9.4.1. The Contractor shall provide corrosion coupon testing and analyzed quarterly (4X/Yr) with reports to the COR.

1.9.4.2. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR quarterly (4X/Yr) the first (1st) Monday of the month.

1.9.5. STEAM BOILER SYSTEMS.

1.9.5.1. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR the first (1st) and third (3rd) Monday of each month.

1.9.6. WATER SOFTENERS.

1.9.6.1. The Contractor shall provide a report of all activities completed, test results and program evaluation findings as well as all corrective actions taken or still required must be delivered to the COR the first (1st) and third (3rd) Monday of each month.

1.9.7. CHEMICAL FORMULATION AND SERVICE.

1.9.7.1. The contractor shall provide monthly report summarizing the quantity of each chemical formulation and service provided for each of the facilities steam boiler systems, condensing water open loops, condensing water closed loops, hot water closed loops, chilled water closed loops, and water softeners by using Appendix E report template. The report must be delivered to the COR.

1.10. ENVIRONMENTAL CONTROLS.

The contractor shall be knowledgeable and comply with all applicable Federal, State, and local laws, regulations, and requirements regarding environmental protection. The contractor shall ensure policies and procedures are established that protect the health and safety of employees and the community and minimize/eliminate the risk of environmental pollution. Contractor shall be knowledgeable about secondary containment requirements for the storage of Sulfuric acids and any other chemicals requiring special storage practices.

1.11. SPECIAL QUALIFICATIONS.

1.11.1. Contractor shall have the capability to provide service as required in the specialized delivery, storage, handling and application of all chemicals IAW AFMAN32-7002.

1.11.2. Contractor personnel shall be fully trained, experienced, and qualified to work in the fields of chemical treatment of water for HVAC systems.

1.11.3. The technicians shall have either a technical certification or associate degree in the fields of chemical treatment of water for HVAC systems from an accredited institution. In addition at least one (1) of technicians shall have a Class C or above Water license.

1.11.4. Contractor personnel or employees shall have passed all background investigations, including a criminal investigation.

2. SERVICE SUMMARY.

The contract service requirements are summarized in performance objectives that relate directly to mission essential items. The performance threshold briefly describes the minimally acceptable levels of service required for each requirement. The Services Summary (SS) provides information on contract requirements and the expected level of contractor performance. These thresholds are critical to mission success.

Service Summary Table

Performance Objective (PO)	PWS Section	Performance Threshold
PO- 1– CHEMICAL STORAGE AND DELIVERY: Chemicals and water softener salts not in direct use shall not be stored on site or in Government facilities. Contractor shall deliver and distribute water softener salt, condenser water loop chemicals, hydronic water loop chemicals, and steam loop chemicals to each point of use location.	1.5	No more than 4 monthly defects
PO- 2– CONDENSING WATER OPEN LOOPS: Provide and apply pH adjusters; provide and apply corrosion and scale inhibitors; provide and apply Biocides; validate	1.6.2.1	No more than 4 monthly defects

proper feed and control equipment operations and verify system protection is adequate. Draw samples from each Condensing Water Open Loops system and analyzed twice (2X) per month.		
PO- 3– CONDENSING WATER OPEN LOOPS (no pH control): provide and apply corrosion and scale inhibitors; provide and apply Biocides; validate proper feed and control equipment operations and verify system protection is adequate. Draw samples from each Condensing Water Open Loops system and analyzed twice (2X) per month.	1.6.2.2	No more than 4 monthly defects
PO-4 – CONDENSING WATER CLOSED LOOPS: Provide and apply corrosion inhibitors; draw samples from each Condensing Water Closed Loops system and analyzed quarterly (4X/Yr).	1.6.2.3	No more than 4 monthly defects
PO-5 – CHILLED WATER CLOSED LOOPS: Provide and apply corrosion inhibitors; draw samples from each Condensing Water Closed Loops system and analyzed quarterly (4X/Yr).	1.6.2.4	No more than 4 monthly defects
PO-6 – HOT WATER CLOSED LOOPS: Provide and apply corrosion inhibitors; draw samples from each Condensing Water Closed Loops system and analyzed quarterly (4X/Yr) .	1.6.2.5	No more than 4 monthly defects
PO-7 – STEAM BOILER SYSTEMS: Provide and apply corrosion and scale inhibitors; validate proper feed and control equipment operations and verify system protection is adequate; draw samples from each Steam Boiler system and analyzed twice (2X) per month.	1.6.2.6	No more than 4 monthly defects
PO-8 – WATER SOFTENERS: Provide and apply the necessary salt; conduct twice (2X) per month site service visits to test on all softened water system and control equipment operations and verify system protection is adequate.	1.6.2.7	No more than 4 monthly defects

PO-9 – REPORTS: Provide completed reports within times frames established in the PWS	1.9.1 – 1.9.8	No more than 1 monthly defect

* Valid Defect – A service that does not meet the requirements of the PWS, which may be found during a government inspection or reported on a valid customer complaint form or a combination of the two (2) for each category. Multiple defects may be found during one (1) inspection or reported on one (1) valid complaint.

Exceeding the performance threshold for any of these performance objectives for any month will result in the issuance of a Contract Discrepancy Report (CDR), DD 2772 for issuance to the Contractor. The Contractor shall respond to the CDR IAW instructions provided and return it to the CO within the suspense established on the CDR.

Exceeding the performance threshold for any two (2) or more months during a contract period shall results in a letter of concern from the CO and constitute an immediate progress meeting with the MFT. All remedies shall be in accordance with FAR 52.212-4 (a), Contract Terms and Conditions - Commercial Items, Inspection/Acceptance. Defects identified, and re-performed, shall still count against the overall threshold.

2.1. QUALITY CONTROL.

2.1.1. The Contractor shall provide a written description of the company Quality Control Plan (QCP) to include identification of the commercial/industrial practices and procedures to be used.

2.1.2. The Contractor shall develop and implement procedures to identify, track, prevent, remedy, and ensure non-performance and continual repeat of defective service does not occur. A written Quality Control Plan (QCP) shall be submitted with the contractor's proposal for evaluation and acceptance.

2.1.3. The plan shall specifically address the Contractor's strategy to provide quality workmanship, continual process improvement and for correcting deficiencies as required.

2.2. FRAUD, WASTE AND ABUSE.

2.2.1. The contractor shall make sure their employees practice utilities conservation. The contractor shall be responsible for operating under conditions that prevent the waste of any utilities used. The contractor shall be responsible for maintaining proper conduct and good discipline within the contractor occupied work area(s). Contractor personnel shall be encouraged to be alert to report to the COR any suspected situations of fraud, waste, and abuse, or other intentionally dishonest conduct against the Government observed during, or in the performance of this contract.

2.3. QUALITY ASSURANCE.

2.3.1. The Government shall inspect and evaluate the contractor's performance to ensure supplies are received in accordance with requirements set forth in this contract.

2.3.2. The COR shall inspect by validating actual work performance, physically checking an attribute of the completed task, or otherwise inspecting the task or its results to determine whether or not performance meets the standards contained in this PWS. Any unsatisfactory inspection (defect) result shall be recorded and the Contractor shall re-perform the service at no additional cost to the Government within 2 hours after notification. All remedies shall be in accordance with the FAR 52.212-4 (a), Contract Terms and Conditions - Commercial Items, Inspection/Acceptance.

2.3.3. MONTHLY SCHEDULE. The Contractor shall provide the Government COR with a monthly written schedule which shows the areas being provided chemicals for that month. This schedule shall be given to the COR at least 7 calendar days prior to the month the schedule is to begin. When an unforeseen facility closure, inclement weather, or other event is found to be an acceptable delay by the CO or COR and precludes completion of services on a regularly scheduled workday, the Contractor shall reschedule the work to be performed and notify the COR of the new time. The preferred method of notification is e-mail.

2.3.4. All visits by the service technicians shall be logged on-site as to date and time (i.e. time in and time out). Each service technician must sign-in and sign-out at the HVAC Maintenance Shop (B4197, JBSA-FSH, B5132-Camp Bullis, B0230 - Chapman, B5595-Lackland, and B0002-Randolph) to verify their presence

2.4. PERIODIC PROGRESS MEETING AND VALIDATIONS.

2.4.1. PROGRESS MEETING:

2.4.1.1. Contractor shall establish quarterly (4X/Yr) meetings after contract award. The CO, COR and Technical representative, other Government personnel as appropriate, and meet to discuss the contractor's performance. The following issues shall be discussed, opportunities to improve the contract, any modifications required of the contract, unsatisfactory inspections. The contractor shall provide a summation of unsatisfactory inspections and customer complaints and provide insight into any identified trends.

2.4.2. PERIODIC VALIDATIONS.

2.4.2.1. This method requires the COR to employ a "spot check" style of evaluation based on the contract standards.

3. GOVERNMENT FURNISHED PROPERTY (GFP) AND SERVICES.

3.1. Government will provide all parts and materials listed on Appendix B. Contractor shall install all government furnished parts or materials per manufacturer installation instruction.

3.2. FACILITIES. N/A

3.3. UTILITIES.

3.3.1. The Government will furnish electricity and water, as necessary for the accomplishment of work in accordance with this contract. The Contractor shall not change or modify any utility system or component; or connect any Contractor property, equipment or system without prior COR and CO review and approval.

3.4. SOLID WASTE COLLECTION AND DISPOSAL.

The Contractor shall use existing Government furnished bulk trash containers (dumpsters) to dispose of trash or refuse generated from accomplishment of services detailed in this PWS. Containers shall not be used for disposal of refuse for personal use. Hazardous materials shall not be placed in any Government refuse container. The Contractor shall adhere to all base level recycling programs to include disposal of waste in specified dumpster collection stations or at the recycling collection center on base.

4. GENERAL INFORMATION.

4.1. SECURITY, FIRE AND MEDICAL SERVICES.

4.1.1. The Government will provide Security Forces and Fire Protection. Contractor shall dial 911 from a base phone line (or 210-671-0911 from a private line) for Emergency Force Protection or Fire Response. Base medical facilities are restricted to military personnel, active/retired, and provide limited service. Emergency medical treatment, for contractor employees must be administered at an off base hospital. The Contractor may be required to prepare necessary documentation and reimburse the Government for the cost of emergency medical treatment performed at a military medical treatment facility. All Contractor injuries will be promptly reported to the COR and Contracting Officer (CO).

4.2. DAMAGES TO GOVERNMENT BUILDINGS, EQUIPMENT.

4.2.1. Contractor shall be liable for repair/replacement/cost for any Government or private property damaged by Contractor personnel, vehicles, equipment or negligence. Contract manager shall immediately advise the COR of any damages and provide an action plan for repair. Provide a completed copy of the Accident/Incident Investigation Report to the CO within 5 calendar days of each occurrence. Damage to safety or security items shall be immediately repaired by the Government and the contractor shall be billed for the repair, to include any labor costs.

4.3. ENVIRONMENTAL REQUIREMENTS.

4.3.1. The Contractor shall comply with all federal, DOD, Air Force, state, city and base environmental laws and regulations. Personnel from the Base Environmental Office and other base offices will conduct periodic inspections to determine compliance with base and state environmental laws and regulations.

4.3.2. NOTIFICATION OF ENVIRONMENTAL SPILLS.

4.3.2.1. The contractor shall notify Civil Engineering and the COR when an environment hazardous material spill occurs. If the contractor spills or releases any hazardous substance into the environment, the contractor shall immediately report the incident to the CO, COR, base fire department, and base civil engineering Customer Support Unit (210) 671-5555. The contractor shall be liable for containment and environmental cleanup of the spill or release of such substance per The National Oil and Hazardous Substances Pollution Contingency Plan. <https://www.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview>.

4.4. HAZARDOUS MATERIALS.

The Contractor shall obtain approval using the application requirements of the AF Form 3952, Chemical/Hazardous Material Request/Authorization. Once the process is implemented and contractor is trained, the contractor may submit the AF Form 3952 electronically. The contractor shall use JBSA HazMat approves chemicals, per AFMAN 32-7002 Chapter 3. The CO has the right to prohibit the use of hazardous materials he/she deems to be especially hazardous to human health and the environment. In the event the CO does not approve a hazardous material for use, the CO may provide the contractor a list of suitable substitutes; however, the Contractor shall retain responsibility for finding an acceptable substitute. The Contractor shall take appropriate actions to comply with waste minimization and pollution prevention practices and policies at JBSA San Antonio, TX. The Contractor shall maintain spill control material on hand at all times sufficient to contain a worse case spill, both volume and hazard level.

4.4.1. HAZARD COMMUNICATIONS PROGRAM.

4.4.1.1. The Contractor is responsible for complying with all local, state, DOD, and Federal laws or regulations involving disposal of waste products and containers, to include hazardous waste, in accordance with applicable regulations and other documentation.

4.4.1.2. The Contractor shall develop and maintain a comprehensive communication training program in accordance with 29 CFR 1910 and 29 CFR 1926.

4.4.1.3. A Hazard Communications Plan of this program shall be submitted to the Contracting Officer within 10 calendar days after award of the contract. This employee-training program shall ensure that information concerning the hazards of all materials utilized and appropriate protective measures are transmitted to employees.

4.4.1.4. A list of all hazardous materials utilized in the work areas and Safety Data Sheets (SDS) for each material shall be provided to the COR within 5 calendar days from start date of contract.

4.4.1.5. The contractor shall post one (1) of the MSDS, in its entirety, explaining the water treatment chemicals utilized at each location at the treatment system. All MSDS shall be protected against damage. The selected contractor will be responsible for updating the MSDS as needed.

4.4.1.6. All chemical treatment tanks shall be properly labeled with the chemical name, concentration/chemical dilution and pH level. This is to be done with a sticker label, not physically writing on the tanks.

4.4.2. HAZMAT OFFICE.

4.4.2.1. The contractor shall register with the JBSA Hazmat Office POC at (210)-295-0936, located at JBSA Fort Sam Houston, and comply with all the rules and regulations for the storage, usage and disposal of hazardous materials and products. The contractor shall not bring any hazardous materials on base until all registration and documentation has been accomplished with the HAZMAT Office. The contractor shall provide a copy of each MSDS on all hazardous materials to be used by the contractor in performance of work on this contract. The contractor shall forward the monthly usage reports to 502ces.ceiea.hazmat@us.af.mil and the COR at the end of each month.

4.5. HAZMAT DISPOSITION AND LABELING.

The contractor shall dispose of all contractor furnished hazardous material in accordance with Base Environmental procedures. Contractor shall ensure hazardous material used on base are properly accounted for, labeled and all documentation accomplished in accordance with the Environmental Office instructions. The contractor is responsible for all fees, permits, manifests, etc. for the disposal of hazardous material. Contractor shall not dispose of hazardous material until a Government representative from the Environmental Office has signed a hazardous waste manifest.

4.6. RECOGNIZED HOLIDAYS.

The Contractor is not required to provide service on federal holidays, except in emergency situations. These federal holidays are as follows:

New Year's Day - 1 January
Birthday of Martin Luther King, Jr. - 3rd Monday in January
Presidents' Day - 3rd Monday in February
Memorial Day - last Monday in May
Juneteenth - 19 June
Independence Day - 4 July
Labor Day - 1st Monday in September
Columbus Day - 2nd Monday in October
Veteran's Day - 11 November
Thanksgiving Day - 4th Thursday in November
Christmas Day - 25 December

If these holidays fall on Saturday, the preceding Friday will be observed. If these holidays fall on Sunday, the following Monday will be observed. If a holiday falls on a scheduled service day, the Contractor will be responsible for rescheduling services for the first (1st) day post the holiday observance.

4.6.1. BASE CLOSURES.

Work scheduled not accomplished because of base closure due to weather, natural disasters, training exercises, or actual alert, will be accomplished as soon as possible after reopening the base. The Contractor will coordinate and communicate with the COR and CO during all base

closures.

4.7. SECURITY REQUIREMENTS.

The contractor shall comply with all requirements and procedures IAW AFFARS 5352.242-9000 “Contractor Access to Air Force Installations.” Contractor employees will be required to obtain and display identification badges. Anticipate delays in getting commercial vehicles on base and allow time for commercial vehicles to reach their destination by driving designated routes at posted speed limits through-out the base. Procedures for commercial vehicle access to the base are subject to change without prior notice.

The Contractor shall be required to work in restricted and controlled areas of the base. The Contractor shall furnish and obtain all proper documentation and permits for entry in the restricted and control areas. The Contractor shall be responsible for ensuring all Contractor personnel authorized to perform work under this contract obtain installation access as required by DODM1000.13, All Contractor personnel working on JBSA, must have a completed background check prior to being employed on JBSA San Antonio, TX, and must have a Government issued Contractor I.D. badge. Government furnished identification shall be returned to the Government when the employee no longer performs work for the Contractor under this contract. The Contractor shall also obtain personnel identification badges as required for entry to the installation. The Government will provide all forms and procedures to the contractor to obtain personnel identification during the pre-performance conference. It is the Contractor’s responsibility to renew passes/badges in a timely manner to ensure no interruption of service. Contractor personnel and property shall be subject to search and seizure upon entering the confines of JBSA San Antonio, TX, while on JBSA San Antonio, TX, and upon leaving the confines of JBSA San Antonio, TX.

4.7.1. PHYSICAL SECURITY.

The Government will not be responsible in any way for damage to the Contractor’s supplies, materials, vehicles, equipment, and property or to Contractor personnel’s personal belongings that are damaged or destroyed by fire, theft, accident or other disaster, including terrorist attack. Contractor personnel and any representative of the Contractor entering Joint Base San Antonio, TX, shall abide by all security regulations and shall be subject to security checks.

4.7.2. KEY CONTROL.

The Contractor shall be responsible for keys provided to the Contractor by the Government. Keys shall not be lost, misplaced, or duplicated by Contractor personnel, nor used by unauthorized Contractor personnel. The Contractor shall develop and implement key control procedures in their Quality Control Program to ensure that keys issued to the Contractor, by the Government, are safeguarded.

4.7.3. LOST KEYS.

The Contractor shall report any occurrence of duplicated, misplaced, or lost keys to the Contracting Officer within 24 hours after discovery of occurrence and submit a written report to the Contracting

Officer by close of business the next workday. The written report shall provide complete details relating to duplication, misplacement, or loss. In the event a key is duplicated, misplaced, or lost, all locks and keys for that system will be replaced at the discretion of the Government. The Contractor shall reimburse the Government for replacement of locks or rekeying required as a result of keys being duplicated, misplaced, or lost by Contractor personnel. The Contractor shall also reimburse the Government for any Government property lost or stolen as a result of unauthorized key duplication, misplaced key, or loss of key by the Contractor or Contractor personnel.

4.7.4. VEHICLE OPERATIONS.

The Contractor shall ensure all employees operating vehicles on the military base have a proper license as required by the installation commander and Texas law and comply with all base, and local traffic and hauling regulations. All vehicles shall have all proper accessories, tie-downs, signal, safety devices, and lights when towing or hauling equipment, materials or supplies.

The Contractor shall not transport any personnel in the bed of trucks. Contractor shall have adequate liability insurance on all vehicles as required by Texas law. Vehicles shall be kept clean, operational, and present a professional appearance at all times. All vehicles must meet the proper OSHA standard 29 CFR part 1915.93 for safety equipment, i.e. flashing yellow lights, reflective signs, fire extinguishers etc.

4.7.5. CONTRACTOR VEHICLE IDENTIFICATION.

The Contractor shall provide all vehicles required to fulfill the requirements of this contract. The Contractor vehicles used in performance of this contract shall have the proper company identification posted on both outside front doors of the vehicle. These vehicles shall be identifiable as Contractor vehicles bearing the name of the company in letters readable from a reasonable distance. Privately owned vehicles shall not be used. All communication equipment used shall comply with JBSA San Antonio, TX, radio frequency regulations.

4.8. CONTRACT MANAGER.

4.8.1. POINT OF CONTACT INFORMATION.

The Contractor shall provide the name, telephone number, email address of the contractor's contract manager, and alternate responsible for all requirements in the PWS at the Post Contract Award Conference. The contract manager or designated alternate shall be available to conduct overall Management coordination and furnish liaison with the Government. The Contract Manager shall be the point of contact with the Government and shall have the authority to act or make decisions for the Contractor on all matters pertaining to this contract. The Contractor shall notify the Contracting Officer in writing of any changes as they occur and provide written changes not later than 5 calendar days prior to the effective date of the change.

4.8.2. CLEAN-UP.

The contractor shall ensure job sites, are kept neat and clean at all times. Storage of oily rags, lubricants, equipment, etc., on Government property will not be permitted. Contractor shall dispose of all trash, debris, oil, etc. off base in accordance with environmental laws and regulations. Upon completion of each job, the contractor shall leave the work area and premises in a clean and professional condition.

4.9. SAFETY REQUIREMENTS AND REPORTS

The Contractor shall perform work in a safe manner as required by OSHA Safety and Health Requirements and follow all Army/Air Force Safety regulations. The Contractor shall also provide a verbal notification to the COR as soon as possible of each occurrence of damage to Government property or an accident resulting in death, injury, occupational disease, or adverse environmental impact. In addition, the Contractor shall also provide a completed written copy of the required Accident Investigation Reports to the COR within 5 calendar days of each occurrence. Contractor shall have monthly safety meetings and submit reports to the COR within 7 days.

4.9.1. SAFETY.

The Contractor shall safeguard and maintain all Government property as well as provide for the safety and well-being of personnel employed in the administration of this contract. The Contractor shall comply with the provision of AFI 90-801, Environmental, Safety and Occupational Health. The Contractor shall develop and implement a company safety program for employees performing work under this contract. The Contractor shall submit the company safety plan to the COR 10 days prior to contract start date. Revisions shall be submitted 5 calendar days prior to the effective date of change. The Contractor shall comply with the Occupational Safety and Health Act (OSHA). Contractor personnel shall wear all safety items as required by the OSHA during the performance of tasks requiring protective equipment or clothing. Acids and water treatment chemicals are caustic and inherently dangerous. Personnel shall follow proper grounding procedures in accordance with the National Electrical Code (NEC). Personnel must be aware of emergency procedures to perform emergency shutdown and start-up.

4.9.2. COMMUNICATION DEVICES.

The Contractor shall provide telephone numbers (i.e. cell phone numbers, office phone numbers, home numbers) that the CO/COR and Technical representative will use to contact the contract manager and/or contractor quality control representative at any time 24/7 for direct communications.

5. INSURANCE REQUIREMENTS

5.1. WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY. Contractors are required to comply with applicable Federal and State workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with a contractor's commercial operations that it would not be practical to require this coverage. Employer's liability coverage of at least \$100,000 shall be required, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

5.2. GENERAL LIABILITY

5.2.1. The contract shall require bodily injury liability insurance coverage written on the comprehensive form of policy of at least \$500,000 per occurrence.

5.3. AUTOMOBILE LIABILITY.

The contractor shall require automobile liability insurance written on the comprehensive form of policy. The policy shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performing the contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

6. APPENDICES

- A. ESTIMATED WORKLOAD DATA
- B. GOVERNMENT FURNISHED PROPERTY/SERVICES/EQUIPMENT
- C. REPORT TEMPLATES
- D. MAPS AND/OR SITE PLANS
- E. MONTHLY CHEMICAL DELIVERY REPORT TEMPLATE (SAMPLE)

APPENDIX – A

WORKLOAD DATA

Attached as a separate document

APPENDIX – B

GOVERNMENT FURNISHED PROPERTY/SERVICES/EQUIPMENT

BENCH STOCK PARTS			
	Description	Part or Model Number	Quantity
1	Sensor	P/N: 191646-03	2
2	Sensor	P/N: 191652-03	2
3	WalChem Controller Model #	M/N: WCT600PSSNN	1
4	Pump-Pulsafeeder Series A+	LB03SA-PTC1-XXX	2

APPENDIX – C

REPORT TEMPLATES (SAMPLE)

JOINT BASE SAN ANTONIO (JBSA) COOLING & BOILER WATER SERVICE REPORT					DATE: _____ ACCT NAME/NUMBER: _____ LOCATION: _____ CUSTOMER SIGNATURE: _____				
WATER SAMPLE	CONTROL RANGE	SYSTEM TESTED							
		CONDENSER WATER	CHILL WATER	HOT WATER	STEAM BOILER	FEED WATER	CONDENSATE RETURN	M/U WATER	OTHER
UNIT #									
CONDUCTIVITY	3500-4500uS								
HARDNESS									
Ca HARDNESS									
ALKALINITY as CaCO ₃									
P	300-600ppm								
M									
OH									
SULFITE	30-60ppm								
COND. Ph	7.5-8.5								
CONDUCTIVITY	RECORD								
pH	7.8-8.4								
MO+6	0.5-1.0ppm								
CYCLES	4-5								
FREE CL ₂	RECORD								
BIO-DIP SLIDE	< 10 ⁴								
CONDUCTIVITY	RECORD								
pH	8.5 +								
NITRITE C/W	500-800ppm								
NITRITE H/W	800-1200ppm								
COMMENTS									
VENDOR REPRESENTATIVE PRINTED NAME					VENDOR REPRESENTATIVE SIGNATURE				

WHITE COPY: JBSA

YELLOW COPY: VENDOR FILE

PINK COPY: ACCOUNT MANAGER

APPENDIX – D

SITE PLANS/MAPS OF AREA

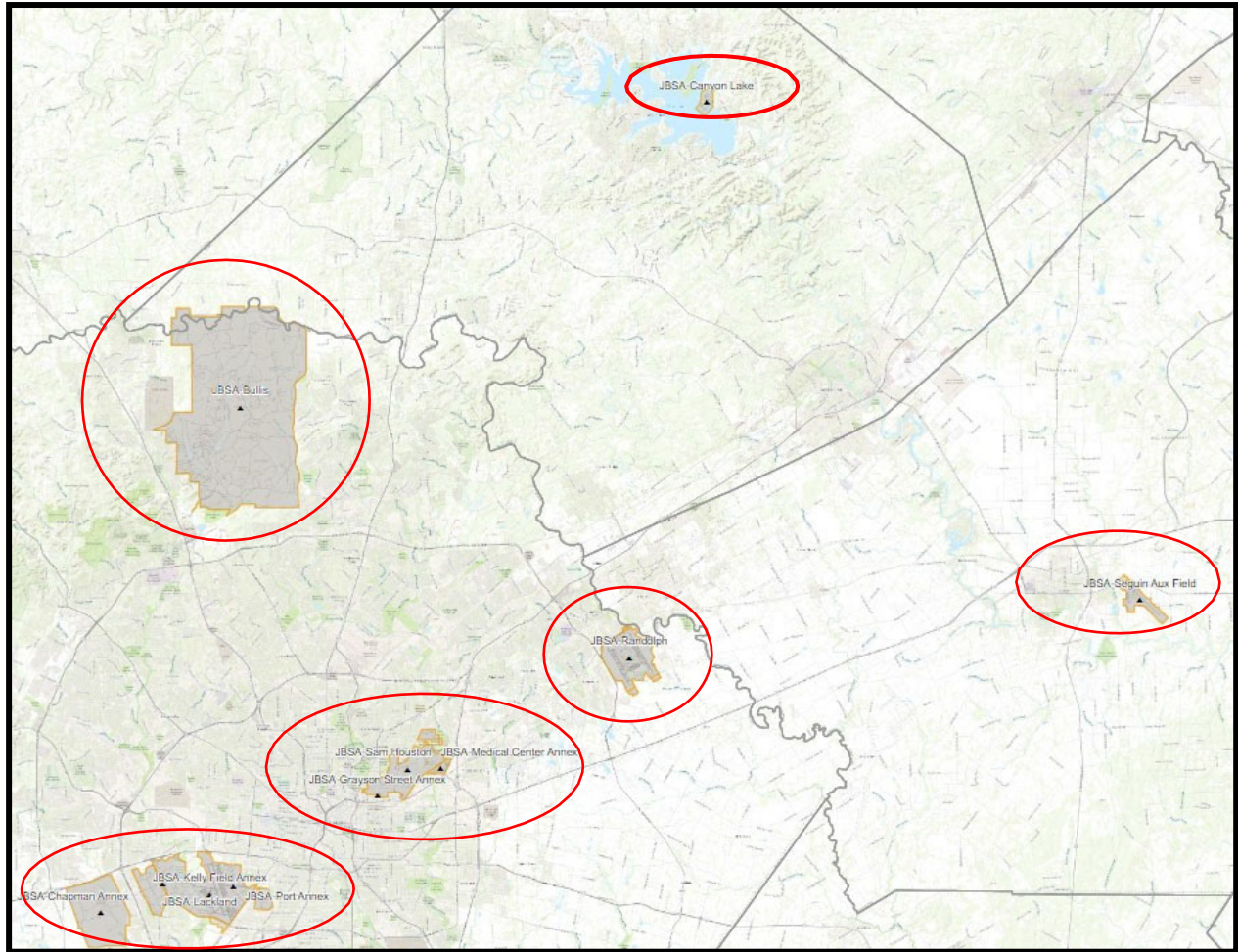


Figure 1 JBSA - SITE MAP

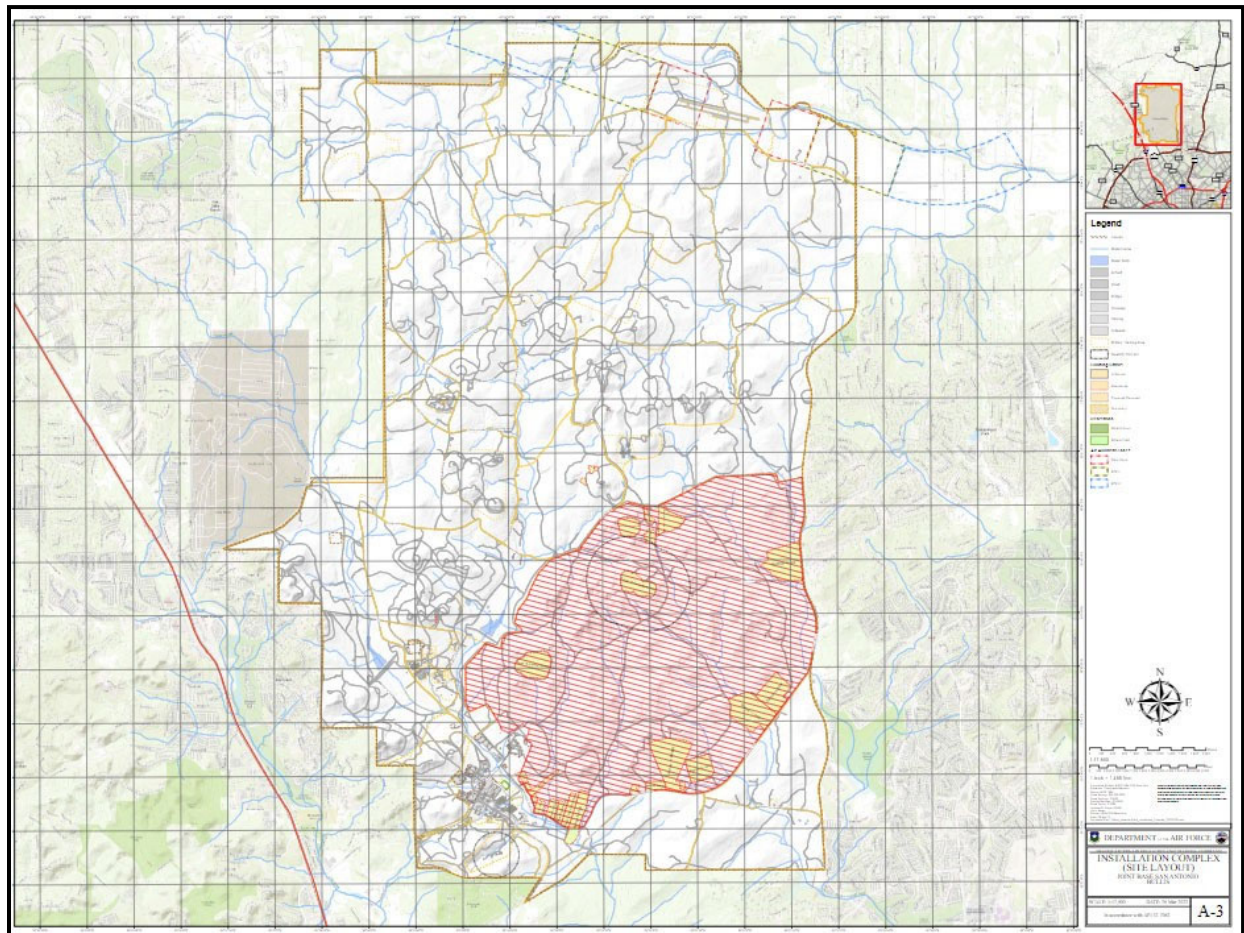


Figure 2 JBSA - CAMB BULLIS

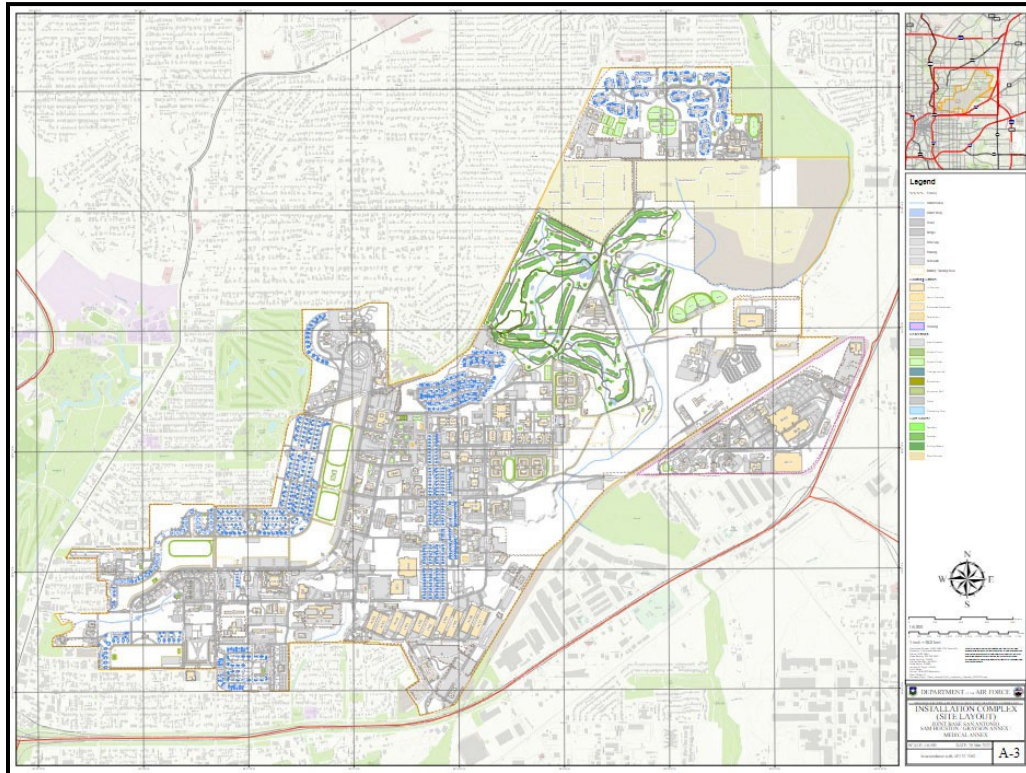


Figure 3 JBSA - FORT SAM HOUSTON



Figure 4 JBSA - CANYON LAKE

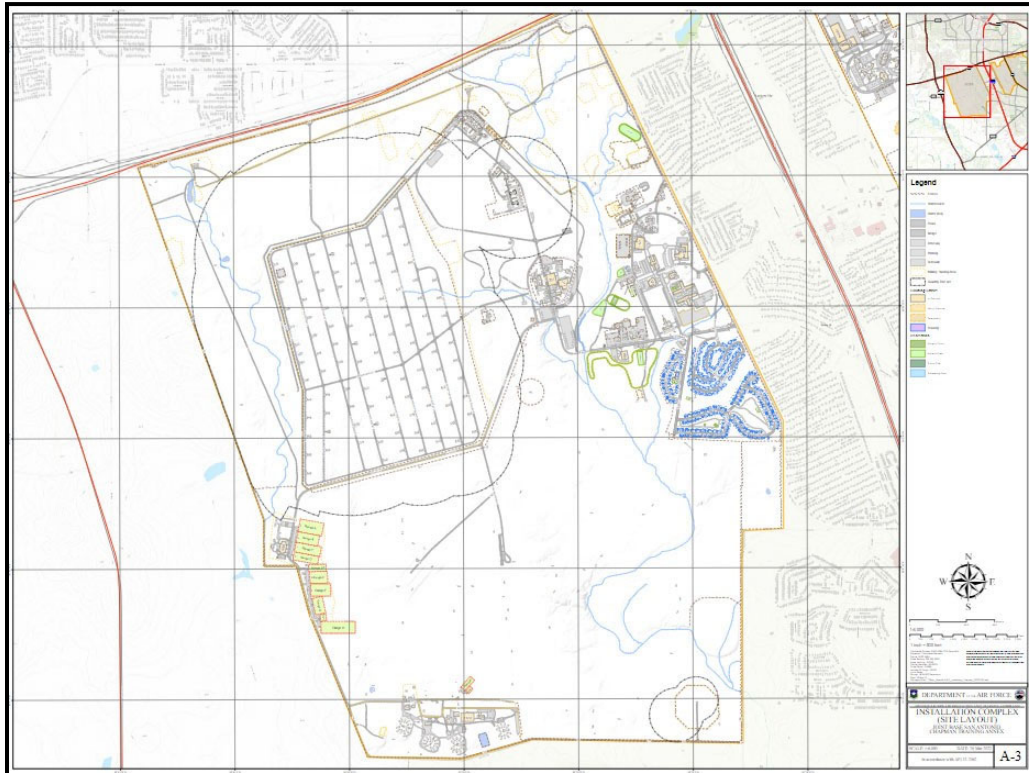


Figure 5 JBSA - CHAPMAN TRAINING ANNEX

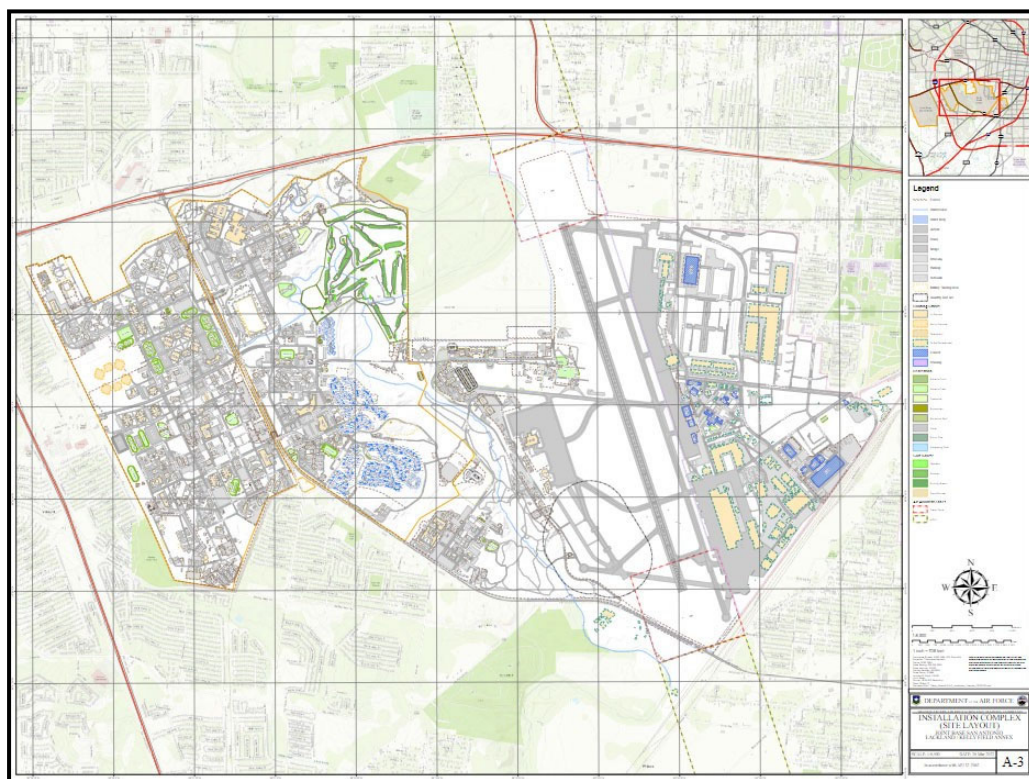
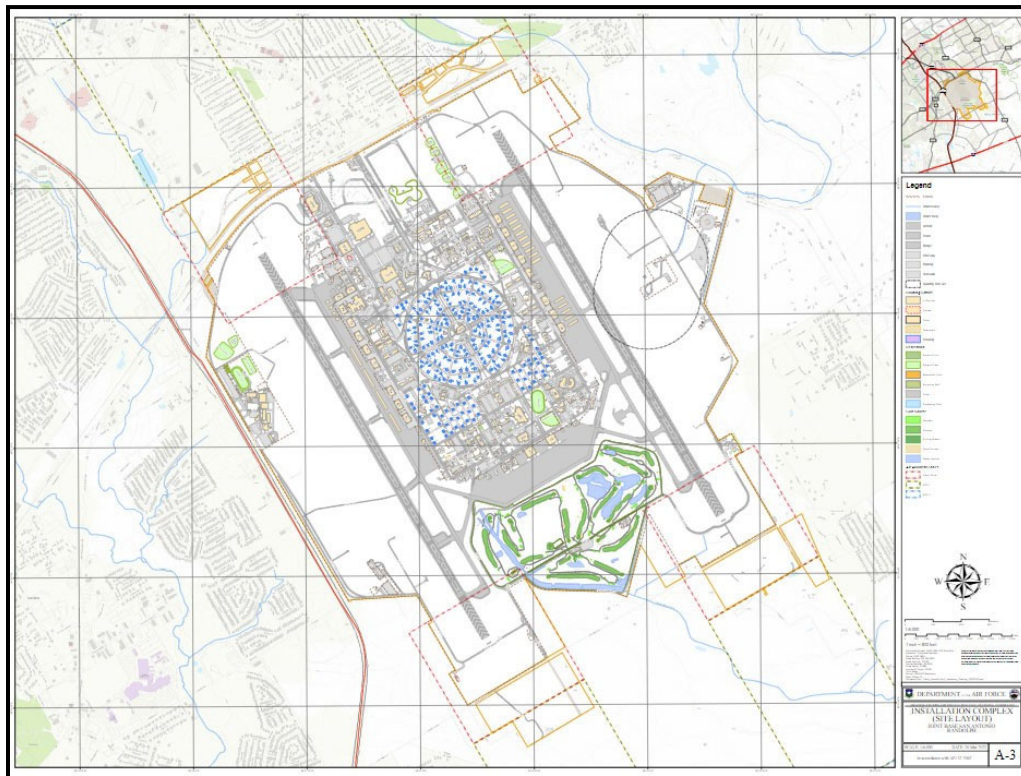


Figure 6 JBSA - LACKLAND



APPENDIX – E

MONTHLY CHEMICAL DELIVERY REPORT TEMPLATE (SAMPLE)

[illegible]