STATEMENT OF WORK

DESIGN & IMPLEMENT MONITORING & CONTROL SYSTEM FOR IWCS, B62516

Project #: WWYK240146
Work Task #: 14982489

Revision: 0
Issued: 16 April 26

1. SCOPE

1.1 GENERAL

The work to be performed under the terms of this contract consists of furnishing all materials, labor, plant, tools, transportation, equipment, testing services, quality control and incidentals required to accomplish the Design & Implement Monitoring & Control System For IWCS, B62516 at Tinker Air Force Base (AFB), Oklahoma (reference the project drawings for additional location information).

The Contractor shall perform a site investigation to verify existing conditions. If necessary, additional as-built drawings are available from 72 ABW/CE - Engineering Support, located in B400.

The Contractor shall be responsible for identifying the necessary logistical, architectural, and structural work elements required to perform the work as described herein. Assemblies, framework, fixtures, or apparatus not readily identified on the project drawings, specifications, or this Statement of Work (SOW) shall be provided by the Contractor as required for a complete, fully operating, and functioning system or systems ready for use by the Government.

Information such as floor plan layouts and dimensions; structural, mechanical, and electrical data; and location of underground utilities provided by the Government for existing and new construction are based on available as-built documentation, field observation, and equipment selected as design basis by the Government. This information is to be considered approximate and shall be field verified by the Contractor.

1.2 DEFINITIONS

1.2.1 Contracting Officer (CO)

An individual with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the contracting officer acting within the limits of their authority as delegated by the CO.

The CO is the ONLY person authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

1.2.2 Contracting Officer's Representative (COR)

An individual designated by the Contracting Officer to perform specific technical or administrative functions.

The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the Order. It shall be the Contractor's responsibility to contact the CO concerning any matters where the Contractor believes that the

direction received from the COR may affect price, quality, quantity, delivery, or any other term or condition of the Order prior to performing work or purchase of material.

1.3 CONTRACTOR PERSONNEL

1.3.1 General Requirements

The Contractor shall ensure that employees and subcontractor employees have current/valid licenses and certifications necessary to perform their functions. Any cost or time associated with obtaining licenses or certifications shall be at the Contractor's expense.

Personnel shall be easily recognized as a Contractor employee or sub-contractor. This may be accomplished by wearing distinctive clothing bearing the name of the company or by wearing appropriate badges that contain the company name and employee name. The badge shall be displayed on the outer clothing, on the front of the body between the neck and waist and must be visible at all times. The badge shall clearly identify the individual as a contractor employee.

1.3.2 Key Personnel

The Contractor shall, at a minimum, provide the following key personnel. Submit resumes for personnel fulfilling each of the key positions described below within five (5) calendar days after NTP.

Exceptions or variances to experience requirements must have prior approval from the Contracting Officer (CO)/Contracting Officer's Representative (COR); exceptions/variances will be considered where the Contractor can demonstrate comparable experience and/or competency.

Forward any requests for variance to the CO; include resumes for personnel listing the qualifications to be considered (e.g. education, experience, professional certifications, etc.).

Required experience levels shall be maintained throughout the duration of the agreement. When personnel changes are required, resumes and a revised organization chart shall be submitted to the CO within five (5) business days of a vacated or filled position.

One Contractor employee may hold up to two (2) key positions; exceptions are noted below (e.g. a Project Superintendent cannot fulfill the role of the Quality Control Manager). Contractor employees holding more than one key position must meet the minimum requirements for both positions.

1.3.2.1 Project Manager (PM)

The PM will be responsible for the overall performance of this Order. The PM shall have a minimum of ten (10) years combined experience in the following positions: Project Superintendent, Quality Control Manager, Project Manager, Project Engineer, or Construction Manager with general contracting firm engaged in multi-trade commercial construction contracts. The individual must have at least two (2) years' experience as a Project/Program Manager. Provide the name of PM, in writing, to the CO upon award of the Order.

The Contractor shall designate an Alternate PM who may act on behalf of the Contractor when the PM is absent. Qualifications for the Alternate are the same as for the PM. Provide the name of the Alternate, in writing, to the CO upon award of the Order.

The PM or Alternate shall have direct oversight of all project planning, design, and construction activities. The PM shall provide overall Order management, including full authority to develop proposals, negotiate, and sign modifications to Orders; provide subcontract administration; review material submittals and shop drawings; and shall attend all status meetings, site visits and pre-final/final inspections.

The CO must be able to contact the PM or Alternate by phone at all times. Throughout the life of this agreement, the PM or Alternate shall be available to meet with the CO at Tinker AFB one (1) hour during normal duty hours.

1.3.2.2 Quality Control Manager (QCM)

The QCM is responsible for management of the Contractor Quality Control (CQC) Program. The QCM shall have the minimum qualifications set forth in specification section 01 45 00.00 10, Quality Control (for purposes of this SOW, QCM is equivalent to CQC System Manager).

The Contractor shall designate an Alternate QCM who may act on behalf of the Contractor when the QCM is absent. Qualifications for the Alternate(s) are the same as for the QCM.

Contractor may designate additional quality control (QC) staff as specified in 01 45 00.00 10 (e.g. Assistant QC Manager or QC specialists).

Provide the names of QC staff to the CO upon award of the Order, as a part of the Quality Control Plan.

The QCM and their staff shall coordinate and review all material and shop drawing submittals, including those of subcontractors, offsite fabricators, and suppliers; prepare quality control (QC) reports; schedule and coordinate testing procedures; and attend all status meetings, site visits, and pre-final/final inspections.

The Contractor's QC staff shall maintain a presence at the site at all times when work is being performed to ensure that the materials and workmanship are in accordance with the project drawings and technical specifications, as well as approved shop drawings and material submittals. The QCM or Alternate shall visit the project site daily.

For additional information regarding the requirements for Contractor’s Quality Control Program, refer to specification section 01 45 00.00 10.

The QCM can serve as the Site Safety and Health Officer.

1.3.2.3 Site Safety and Health Officer (SSHO)

The SSHO is responsible for management of the Contractor Health and Safety Program (for purposes of this SOW, the Health and Safety Program is equivalent to Safety and Occupational Health Program in EM 385-1-1, U.S. Army Corps of Engineers Safety and Health Requirements Manual). The SSHO shall have the minimum qualifications set forth in EM 385-1-1.

The Contractor shall designate an Alternate SSHO who may act on behalf of the Contractor when the SSHO is absent. Qualifications for the Alternate(s) are the same as for the SSHO.

Provide the names of the SSHO and Alternate to the CO upon award of the Order as a part of the Health and Safety Plan.

The SSHO or Alternate shall visit the construction site daily to ensure full compliance with all health and safety requirements.

When the SSHO or Alternate is not on site, a Designated Representative (DR) may be used (reference EM 385-1-1). The SSHO, an Alternate, or a DR shall be on the construction site at all times when work is being performed.

1.3.2.4 Project Superintendent

The Superintendent must have a minimum of five (5) years' experience in construction with at least two (2) of those years as a superintendent on commercial projects similar in size and complexity to the requirements of this Order. The individual must be familiar with the requirements of EM 385-1-1 and have experience in the areas of hazard identification and safety compliance.

The Contractor may designate an Alternate Superintendent, who may act on behalf of the Contractor when the Superintendent is absent. Qualifications for the Alternate are the same as for the Superintendent, except previous experience as a superintendent is not required; subcontractors will not be used as Alternates.

Provide the names of the Superintendent and the Alternate to the CO upon award of the Order.

The Superintendent is primarily responsible for managing and coordinating day-to-day production and schedule adherence for the Order. Superintendents shall provide on-site supervision, submit progress reports; schedule and coordinate subcontractors and material suppliers; and attend all status meetings, site visits and pre-final/final inspections.

An individual Superintendent may be assigned to more than one Order; however, the Superintendent shall not be assigned to more than 5 active Orders at Tinker AFB unless approved by the CO. Alternates may only be assigned to a single Order/job site.

The Superintendent shall visit each respective Order/job site daily. Either the Superintendent or the Alternate shall be at the job site at all times when work is being performed. The Superintendent must arrive at the job site within 30 minutes of telephone direction from the CO, Contract Specialist, or Construction Quality Assurance (QA) Inspector.

The Superintendent or Alternate(s) cannot be a member of the QC staff.

The Superintendent or Alternate(s) can be the Designated Representative (reference section SITE SAFETY AND HEALTH OFFICER elsewhere in this document).

1.3.3 Subcontractors

Subcontractor firms performing 'delegated' design shall be authorized to offer engineering or architectural services in a US State or Territory. An Oklahoma license will not be required for individuals responsible for signing/sealing documents.

All subcontractor firms shall be licensed in their specialty where required; Contractor will provide a copy of these licenses as part of the QC Plan.

1.4 BADGE(S)

AFMC Form 387, *Air Force Material Command Identification Cards* (i.e. contractor badges) are required for Contractor personnel to access/work on Tinker AFB. The Contractor must have all personnel badged prior to commencing work.

Contractor shall designate an employee to act as Certifying Official for all personnel requiring badges. The designated Certifying Official shall complete *Appointment of Security Representative* letter and submit to the COR upon award of the Order; a copy of this letter (Attachment 1) is included on the attached CD.

Upon approval, Contractor's Certifying Official will be responsible for completing an AFMC Form 496, *Application for AFMC Identification Card*, for all personnel requiring a contractor badge. Badges are issued at Bldg. 6611, Pass and ID.

Badges shall be displayed on the outer clothing, on the front of the body between the neck and waist and must be visible at all times.

1.5 QUALITY CONTROL

It is the Contractor's responsibility to provide, inspect, and document the level of quality that has been established by the minimum standards of the project drawings, specifications, and this SOW. The QCM shall direct the execution of the Contractor's QC Plan.

Quality control shall be executed in accordance with specification section 01 45 00.00 10. The QC program shall include, but is not limited to the following:

1.5.1 Inspection System

The Contractor shall establish an inspection system which monitors the execution of any task completed under this contract. The Contractor must specify the areas to be inspected on a scheduled or unscheduled basis, how often inspections will be accomplished, and titles of the individuals who will perform the inspections.

1.5.2 Deficiency Prevention

The Contractor shall establish a method for identifying, correcting, and preventing future recurrence of quality deficiencies.

1.5.3 Inspection Files

In accordance with specification section 01 45 00.00 10, the Contractor shall maintain records of all required inspections conducted by the QCM and the necessary corrective actions taken. This documentation shall be submitted to the Government weekly with the progress reports (reference section PROGRESS REPORTS elsewhere in this document) throughout the life of the contract.

1.6 HEALTH AND SAFETY

1.6.1 Commander's Statement of Safety Intent

The safety of everyone on Tinker AFB is our top priority. All individuals must accept personal responsibility for safety and seek opportunities for improving the safety of our work environment. Everyone working on Tinker AFB is challenged to find, fix (if able) and report all hazards and near-misses. It is our shared duty to take every reasonable step and precaution to prevent accidents and preserve the health/safety of each contractor and government employee.

1.6.2 Occupational Safety and Health Administration (OSHA) Voluntary Protection Program (VPP)

The Contractor is hereby notified that TAFB has achieved or is pursuing VPP Star ratings across multiple sites across the base. Additional information regarding VPP can be found at the following link:

http://www.osha.gov/dcsp/vpp/index.html

The Voluntary Protection Plan applies to all construction and service contracts that have Contractor employees working more than 1000 hours per quarter on Tinker AFB. Refer to specification section 00 71 00, *General Safety Requirements for Construction on Tinker AFB* for additional requirements related to VPP.

1.6.3 Emergency Evacuation Procedures

Contractor employees shall follow the direction of Government employees in regard to emergency evacuation procedures, i.e. fire, tornado, or bomb threats. It is the responsibility of the Contractor to provide guidance and establish procedures for responding to an emergency for their employees. It is the Contractor's responsibility to account for their employees following an emergency evacuation. The Contractor personnel shall participate with the Government personnel in all fire and tornado drills at no additional cost to the Government.

1.6.4 Mishap Reporting

The Contractor shall notify the CO and the COR as soon as practical after any mishaps, including recordable accidents, incidents, and near misses, as defined in EM 385-1-1 Appendix Q; and any injuries, illness, or property damage which occur on the installation while performing work under this contract.

Refer to specification section 00 71 00 for additional requirements related to mishap reporting.

1.7 BIOENVIRONMENTAL REGULATIONS

(1) To assist in the evaluation of health hazards & to provide emergency medical treatment, Contractor must have Material Data Sheets (MDS) for hazardous materials reviewed and exchange of HAZCOM information accomplished prior to use. Process hazardous material in accordance with specification section 00 72 00, *Environmental Requirements for Construction on Tinker AFB*.

(2) Ventilation measurements must be in accordance with current edition of ACGIH Ventilation Manual and 29 CFR 1910.94.

(3) Welding, cutting, or brazing operations must be in accordance with 29 CFR 1910.252. The Contractor shall not operate welders near chlorinated hydrocarbons.

(4) Hazardous noise levels in the vicinity of DoD Active Duty and Civilian personnel must be in accordance with OSHA 29 CFR 1910.95 and AFI 48-127, Occupational Noise and Hearing Conservation Program.

(5) Where confined spaces may be involved, ensure confined space entry permits are acquired prior to entering a confined space. Personal Protective Equipment (PPE) must be in accordance with 29 CFR 1910.146 and AFOSH Std 91-25.

1.8 OUTAGES AND CLOSURES

Request utility outages and/or closures in accordance with TAFB Standard Operating Procedure *Planned and Emergency Outages*. Outage may be required to be performed outside of normal

duty hours. The Contractor shall provide temporary lighting and power that may be required for continued performance of User's mission during outages.

1.9 EXISTING WORK

In accordance with FAR 52.236-9, *Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements, t*he Contractor shall take necessary precautions to avoid damage to existing items to remain in place, to be reused, or to remain the property of the Government; any damaged items shall be repaired or replaced as directed by the Government.

The Contractor shall remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.

The Contractor shall repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by the CO. At the completion of operations, existing work must be in a condition equal to or better than that which existed before new work started.

2. PROJECT SPECIFIC REQUIREMENTS

2.1 GOVERNMENT OCCUPANCY OF FACILITIES

The facility will not remain occupied throughout construction.

The construction area, a reasonable buffer area, and any approved staging areas will be cleared of all Government materials and personnel prior to the start of construction.

Contractor shall consult with the Government Project Manager/Construction QA Inspector and the using agency to coordinate procedures; means of access; space for storage of materials and equipment; and use of approaches, corridors, and stairways in such a way that accommodates the continued performance of the user's mission during construction.

2.2 WORKING HOURS

In accordance specification section 00 70 00, General Requirements for Construction on Tinker Air Force Base, construction shall take place during normal duty hours (0700 – 1600 Monday-Friday); utility outages will be the exception.

The contractor has the responsibility to manage and maintain the construction schedule; the Contractor may request authorization to work weekends, holidays, and additional shifts as required to accomplish the work per their baseline schedule (reference section CONSTRUCTION SCHEDULE elsewhere in this document).

Work outside normal duty hours to meet schedule will be performed at no additional cost to the government; this is to include all testing, inspection and acceptance actions.

2.3 PHASING

There is no Government-required construction phasing for this Order.

2.4 FOD AWARENESS AND PREVENTION TRAINING

In accordance with specification section 00 71 00, all Contractor personnel working on this Order will be required to complete Foreign Object Debris (FOD) awareness and prevention training.

The work to be performed for this Order will require the Contractor to work in or travel through areas near operational and/or production aircraft or related components.

2.5 AIRFIELD OPERATIONS

The work to be performed under this contract is not located in an airfield operations area.

2.6 CONTROLLED/RESTRICTED AREA(S)

Portions of work to be performed under this contract is located in controlled and restricted areas.

AF Form 1199C, USAF Entry Control Card (i.e. Secure Area Badge) is required for Contractor personnel to access the controlled area/work site.

Contractor shall designate an employee(s) to act as escorts for all personnel requiring access to the controlled area/work site. The designated escorts shall complete AF Form 2586, Unescorted Entry Authorization Certificate and submit to the COR a minimum of fourteen (14) days prior to when access will be required to the work site. Upon approval, Contractor's designated escorts will be issued a secure area badge. Badges are issued at Bldg. 6611, Pass and ID.

Note: the minimum requirement is one (1) escort for every ten (10) Contractor personnel; Contractor should anticipate providing at least two (2) escorts for every ten (10) personnel.

Escorts will be required for all Contractor personnel accessing the restricted area/work site.

Contractor will be required to provide their own escorts. Contractor shall designate an employee(s) to act as escorts for all personnel requiring access to the restricted area/work site and submit to the COR upon award of the contract. The designated escorts shall be required to complete an OPM background check, fingerprint check, and AF Form 2586, Unescorted Entry Authorization Certificate. Upon approval, Contractor's designated escorts will be issued an AF Form 1199C, USAF Entry Control Card (i.e. Secure Area Badge). Badges are issued at Bldg. 6611, Pass and ID.

Note: the minimum requirement is one (1) escort for every ten (10) Contractor personnel; Contractor should anticipate providing at least two (2) escorts for every ten (10) personnel.

Contractor must provide an Entry Access List (EAL) for all personnel and a Vehicle Entry Access List (VEAL) for approval prior to construction. EAL/VEAL must be submitted to the COR a minimum of fourteen (14) days prior to when access will be required to the work site. Work may not commence until the EAL/VEAL is approved.

Note that any change to contractor personnel or vehicles being brought into the controlled area will require a resubmission of the EAL/VEAL; timelines for approval will be the same as for the initial submission. New personnel or vehicles may not be brought onto the worksite until the revised EAL/VEAL is approved.

2.7 AFFIRMATIVE PROCUREMENT

The Government has determined that the following products listed in the EPA Comprehensive Procurement Guideline, USDA Biopreferred, Energy Star, or FEMP Low Standby Power programs are included in the scope of this contract:

(1) EPA-designated items

(a) Concrete containing coal fly ash or ground granulated blast furnace slag.

(2) USDA-designated biobased items

(a) Concrete and asphalt release fluids

(3) FEMP Low Standby Power products – NA

A copy of the Government's Recovered Materials Determination Form (RMDF) has been provided as an attachment to this SOW (Attachment 3). If at any time during the Order, it is determined that an applicable, designated product cannot be used due to availability, price, or not meeting required performance specification, the Contractor shall complete Page 5 of the RMDF (for each product) to provide justification for not utilizing the designated product(s). Forward the completed form to the CO and the COR for review and approval.

2.8 ENVIRONMENTAL MANAGEMENT (EM) SURVEY

An EM survey indicates there are no asbestos containing materials (ACM), heavy metals (HM) or lead based paint (LBP) concerns for area(s) where work is to be performed. If at any time the Contractor encounters suspect environmental conditions, they shall notify the CO and the COR.

If at any time the Contractor encounters suspect environmental conditions not identified above, they shall notify the CO or the COR**.**

3. PRECONSTRUCTION & CONSTRUCTION SERVICES BY CONTRACTOR

3.1 CORRESPONDENCE

All electronic correspondence related to the awarded Order shall be addressed to the CO, Contract Specialist, Government Project Manager, Construction QA Inspector, the COR, and the respective organizational workflow accounts. Hardcopy correspondence will be addressed to the CO, the Contract Specialist, and the COR.

Contact information for the above will be provided at the Post Award meeting.

All electronic correspondence from the Contractor regarding a specific Order shall follow a standardized subject line naming convention. Subject line for all electronic correspondence shall be as follows:

- WWYK###### Project Title: Subject of E-mail

3.2 DOCUMENTATION

All documents shall be submitted in accordance with specification section 01 33 00, *Submittal Requirements*. The Contractor shall submit all documents electronically via optical disk, e-mail, or a file transfer service such as DoD SAFE.

All documents submitted by the Contractor requiring a signature shall be submitted to the CO and the COR with an electronic digital signature. All documents submitted by the Contractor requiring further action and signature by the Government shall be capable of being digitally signed and saved by the Government representative(s) as required.

3.2.1 Document Format

3.2.1.1 Specifications/Reports/Material Submittals

Specifications, design analyses, reports for calculations, material submittals, warranty information, and similar documents shall be letter sized (8-1/2" x 11"), submitted in

Adobe Acrobat (.pdf) format. Black and white documents are preferred but color copies will be accepted if they are necessary to convey intent.

3.2.1.2 Drawings

All drawings produced by the Contractor shall be created utilizing Computer-Aided Design and Drafting (CADD) software. The drawing files shall be in AutoCAD (.dwg) format and adhere to the drawing standards contained in Tri-Services A/E/C CADD Standard Release 6.0.

Drawing size shall be ANSI D (22” x 34”). Drawing scale shall be at least 1"=30' for civil/site drawings and 1/8"=1' for all other plan drawings; text and other non-scale annotation elements shall be sized to produce clear and legible prints at half-size. Contractor shall use English scales and dimensions.

Drawings submitted by the Contractor shall be .pdf format; in addition, final design drawings and as-built record drawings shall be submitted in .dwg format. Hard copy submittals, when required, shall be printed at half-size (11" x 17").

Reference specification sections 01 33 00; 01 33 16.00 10, *Design Data (Design After Award)*; and 01 78 00, *Closeout Submittals*, for additional requirements regarding developing and submitting design, shop, and as-built drawings.

3.2.2 File Naming Conventions

All documents submitted by the Contractor shall follow a standardized file naming convention as indicated below. File naming conventions shall be strictly adhered to and may only be modified by the Contracting Officer and/or the COR. File names shall have no spaces.

The following items in the below naming conventions are defined as followed:

- WWYK###### = Project number as defined by Civil Engineering
  Example: WWYK201234
- YYYYMMDD = Effective date of document or report
- ZZZ = Contractor’s Company Initials
- 001 = Submittal Number or Serial Report Number

(1) Proposals:
WWYK######_Proposal#_ZZZ_Document Description
Example: WWYK201234_Proposal1_ACS_Cost Proposal

(2) RFIs:
WWYK######_RFI_001

(3) Submittals:
WWYK######_FORM#_001 (Brief Description of Submittal)
Example: WWYK201234_AF3000_004 CeramicTile

(4) Daily Reports:
WWYK######_Daily Report_001_YYYYMMDD

(5) Progress Reports:
WWYK######_PR_001_YYYYMMDD

(6) Other Miscellaneous Documents/Reports:

3.3 CONSTRUCTION SCHEDULE

In accordance with FAR 52.236-15, *Schedules for Construction Contracts*, the Contractor shall submit a baseline construction schedule to the COR for approval within ten (10) calendar days after the NTP is issued. An approved schedule will be required prior to commencement of work.

Contractor's schedule must demonstrate a reasonable and realistic sequence of activities which represent all work through the Order performance period. The schedule shall consider the major work elements, as well as submittal reviews, mobilization, material delivery times, anticipated weather delays, and final inspection/closeout.

3.3.1 Schedule Format

The schedule shall be developed in accordance with specification section 01 32 16.00 20, *Small Project Construction Progress Schedules*, utilizing the Network Analysis Schedule (NAS)/Critical Path Method format.

The schedule shall generally match the schedule submitted with the Contractor's accepted proposal, with the following additional information included:

(1) Order start (NTP) and end dates

(2) Additional detail/breakdown of major work elements, as necessary

(3) Cost Loading data entered for all work items. Cost loading must total to 100 percent of the value of the Order

Any partial progress payments for materials, as approved by the CO, shall be entered separately on the schedule.

The schedule will reserve, as a minimum, the final 10% of an Order for final acceptance. <u>No progress payments will be made against this final 10% of the Order until all closeout items have been submitted, all punch list items have been resolved, and final inspection/acceptance has been completed</u>.

3.3.2 Schedule Updates

Contractor shall keep the schedule current, reflecting actual start and end dates for work elements, activity progress, and plan for completing the remaining work. The Contractor shall submit the updated schedule at monthly intervals, with the first progress report of the month. Reference specification section 01 32 16.00 20 for additional information.

In addition, the Contractor shall submit updated baseline schedules when directed by the CO or the COR. Examples of when a new baseline schedule may be required include instances where the period of performance has been revised through modification to the Order; or as part of a 'get well plan' for construction that is significantly behind schedule.

3.3.3 Coordination with Government Activities

In developing the schedule, the Contractor shall account for the following milestones and Government review times in addition to construction activities:

DELIVERY SCHEDULE & SUBMITTALS		
Item of Work & Deliverables	**Government Review Time (calendar days)**	**Remarks**
Post-Award Conference / Pre-construction Conference/ Notice to Proceed (NTP)	1 day	At Tinker AFB
Baseline Schedule and Schedule of Values/Draft Progress Report	14 days	Provide within 10 days of NTP
SD-01 Preconstruction Submittals (except as noted below)	14 days	Provide all preconstruction submittals within 15 days of NTP
Health and Safety Plan	21 days	
Internal Combustion Engines Plan	21 days	
Entry Access List / Vehicle Entry Access List	14 days	Must be approved prior to obtaining access to controlled/restricted areas
Airfield Construction Waiver	60 days	Must be provided by 1st business day of month
Notice of Proposed Construction (FAA Form 7460-1)	60 days	Must be provided by 1st business day of month
Request for Contractor Staging Area	30 days	Must be approved prior to mobilization
Storm Water Pollution Prevention Plan (SWPPP)	21 days	Must be approved prior to submitting Tinker Excavation Permit Request
Water System Construction Permits	30 days	
Chemical/Hazardous Material Request/Authorization	21 days	
Spray Painting Plan	21 days	
Abatement Submittals (asbestos, lead based paint)	21 days	
Material Submittals (SD-03, SD-04, SD-07, SD-08)	14 days	Provide within 30 days of NTP

DELIVERY SCHEDULE & SUBMITTALS		
Item of Work & Deliverables	**Government Review Time (calendar days)**	**Remarks**
Outages	21 days	
Closures (roadway, parking aisles, etc.)	45 days	
Tinker Excavation Permit Request	14 days	SWPPP must be approved prior to submittal
Construction Submittals (SD-06, SD-09)	14 days	
Final/Closeout Submittals (SD-10, SD-11)	14 days	Must be approved prior to final inspection.
Pre-final Inspection	7-day Minimum Notice	Contractor must have completed internal pre-final and resolved all punch list items from this inspection
Final Inspection	7-day Minimum Notice	All final/closeout submittals must be approved. Contractor must have resolved all punch list items from pre-final inspection

Note: Information provided in this table is provided to assist the Contractor in developing the construction schedule. Review times may vary depending on the complexity of the submittal.

3.4 PROGRESS REPORTING

Progress reports are used for computing payments, and for monitoring the progress against the Contractor's baseline schedule.

The Contractor shall develop a progress report utilizing the 'Reports' feature of their scheduling software. Contractor developed reports shall provide the same information as AF Form 3065, *Contract Progress Report*. The progress report shall utilize the same work elements and schedule of values/cost loading data developed for the construction schedule.

Contractor shall submit a draft version of the progress report to the CO and the COR for approval within ten (10) calendar days after the NTP is issued (with the Baseline Schedule).

After approval, the Contractor shall submit progress reports weekly, or as directed by the CO, throughout the life of the Order. For each progress report, the Contractor shall include the following:

(1) Percentage of work completed for each work element during the reporting period.

(2) Cumulative percentage of work completed for each work element to date.

(3) Cumulative percentage of work completed for all work elements (percent of Order completion).

(4) Scheduled cumulative percentage of work completed for all work elements, based on the baseline Order schedule (scheduled percent of Order completion).

Progress report's will be reviewed by the Construction QA Inspector and/or the Project Manager, who will in turn provide a recommendation to the COR to approve/disapprove the progress report; approval of the Contractor's progress report does not constitute acceptance of the work as being 100% in compliance with the Order requirements (i.e. project specifications, drawings, and this SOW).

In the event that the Contractor's reported progress deviates from the baseline schedule, the CO may elect to hold progress meetings.

3.5 SUBMITTAL REGISTER

Contractor has been provided with an editable version of the Government's submittal register as a part of the RFP.

Within ten (10) calendar days after issue of the NTP, or as otherwise directed by the CO, the Contractor shall review the submittal register, revise as necessary, and submit for approval. Contractor is to remove items from the submittal register they do not believe are applicable to the project and add submittals for additional equipment or materials that they believe should be reviewed and approved by the Government.

For any items that the Contractor believes should be removed, provide an explanation as to why that submittal should not be included.

3.6 DESIGN/ENGINEERING

The Government has provided a 100% design. The Contractor's design efforts are limited to production of 'delegated design' products as required by the project specifications, drawings, and this SOW. These include but are not limited to: plans (such as for pre-engineered metal structures), engineering studies and analyses, shop drawings, and equipment installation drawings.

3.7 CONSTRUCTION

The Contractor shall execute the work as indicated in the attached specifications and drawings (reference section GOVERNMENT FURNISHED DRAWINGS, SPECIFICATIONS, & REFERENCES located elsewhere in this document). Codes/standards/regulations referenced by the project documents (SOW, Drawings, and specifications) are included as a part of this SOW to the extent referenced.

The term 'most current' is to be understood to mean, "Most current as of date the solicitation is issued."

In case of conflict between the contract documents (specifications and drawings) and the governing codes/standards, Contractor shall submit a request for information (RFI) to the Government for resolution.

3.8 ORDER OF PRECEDENCE

In the event of a conflict or inconsistency between any of the provisions of this Order, precedence shall be applied in the following order:

(1) Those portions of the accepted proposal which both conform to and exceed the provisions of the solicitation.

(2) The provisions of the solicitation, including:

  (a) The Solicitation, Offer and Award
  (b) Specifications
  (c) Drawings
  (d) Order SOW

(3) All other provisions of the accepted proposal.

(4) Any contractor generated delegated design products.

3.9 RECORD DRAWINGS

3.9.1 Working As-Built Drawings ('Redline' Set)

Working as-built drawings shall be maintained at the job site, and clearly indicate authorized field changes, updates based on existing conditions, and corrections to the drawings. Reference specification section 01 78 00 for additional information related to markups to be included in working as-built drawings.

Within five (5) days of substantial completion (i.e. completion of Contractor's punch-out inspection) and prior to pre-final inspection, the Contractor shall submit working as-built drawings for Government use during the inspection. At the conclusion of the pre-final inspection, the Government and Contractor will identify any additional changes or corrections required for final approval.

3.9.2 Record Drawings

Within ten (10) days after the pre-final inspection and approval of the working as-built drawings, the Contractor shall incorporate the redlines into the CAD files and submit this final set as the Record Drawings. These drawings shall be labeled 'RECORD DRAWING AS-BUILTS' and submitted for Government approval. Reference specification section 01 78 00 for additional information.

Shop drawings shall be in accordance with the 'additional record drawings' requirements of specification section 01 78 00.

3.10 OPERATIONS & MAINTENANCE (O&M) MANUALS AND TRAINING

The Contractor shall provide O&M manuals for Government approval a minimum of 30 calendar days prior to the final inspection. specification sections 01 78 00 and 01 78 23, Operation and Maintenance Data, for additional information.

The Contractor shall provide training for Government operations and maintenance personnel. Provide a training plan for Government approval a minimum of 30 calendar days prior to the final inspection. Reference specification sections 01 78 00 and 01 78 23 for additional information.

3.11 DD FORM 1354 REQUIREMENT

The Contractor shall submit a DD Form 1354, Transfer and Acceptance of Military Real Property, for Government approval a minimum of 14 calendar days prior to the final inspection. Reference specification section 01 78 00 for additional information.

4. GOVERNMENT FURNISHED DRAWINGS, SPECIFICATIONS, & REFERENCES

4.1 DRAWINGS

Refer to Appendix A, DRAWING INDEX. Drawing files, in PDF format, are included on the attached CD.

4.2 SPECIFICATIONS

Refer to Appendix B, SPECIFICATIONS. Specification files, in PDF format, are included on the attached CD.

4.3 BASE STANDARDS / REFERENCE DOCUMENTS / FORMS

Refer to Appendix C, TINKER AFB FACILITY STANDARDS AND REFERENCE DOCUMENTS.
Tinker AFB facility standards and reference files, in PDF format, are included on the attached CD.

5. GOVERNMENT FURNISHED PROPERTY:

There is no Government Furnished Property included in this contract.

6. STAGING/STORAGE AREA(S):

Contractor shall limit storage of materials, equipment, and incidentals to the immediate construction site while work is being performed. If the Contractor requires additional storage area(s) other than the project site, a request shall be submitted in accordance with specification section 01 50 00, *Contractor Facilities*.

It is recommended that the Contractor arrange for storage of equipment between its delivery and its installation, as availability of space and security during non-working hours cannot be guaranteed.

7. 'OR EQUAL' CLAUSE:

Where reference is made in the specification or on the drawings to specific manufacturers and/or model numbers of equipment or materials, the information is provided to indicate design intent and to establish the minimum quality standards, physical attributes, and performance characteristics which are required for the referenced item. The use of specific names and/or model number is not intended to limit selection of other manufacturers; equipment or materials meeting these criteria may be submitted to the COR for consideration and shall be clearly identified, in writing, as a substitution.

The burden of proving equality for proposed substitutions shall be the responsibility of the Contractor and submittals for said substitutions shall include detailed manufacturer's specifications, dimensioned drawings, performance data and any other information necessary to clearly indicate that the proposed item meets or exceeds the quality standards, physical characteristics, and performance criteria established by the specifications and drawings. Submittals, which do not provide proof of equality, will be rejected.

Approval of a substitute by the COR shall not result in a change to Order price or schedule; such changes can only be approved by the CO.

8. ATTACHMENTS

The following project specific attachments referenced within this SOW are included on the attached CD.

- Attachment 1 – Appointment of Security Representative Letter
- Attachment 2a – Controlled Area Training
- Attachment 2b – Controlled Area Entrance Procedures
- Attachment 2c – Controlled Area Training Certificate
- Attachment 3 – Recovered Materials Determination Form

End of SOW

APPENDIX A

Drawing Index

General

G-001	GENERAL NOTES & VICINITY MAP
G-002	GENERAL SYMBOLS, LEGENDS & ABBREVIATIONS
G-101	LIFT STATION LOCATIONS
G-102	NETWORK OVERVIEW

Civil

C-001	CIVIL GENERAL NOTES AND LEGEND
C-100	CIVIL OVERALL SITE PLAN
C-101	CIVIL SITE PLAN IW-LS-3
C-102	CIVIL SITE PLAN IW-LS-10
C-103	CIVIL SITE PLAN IW-LS-2280
C-104	CIVIL SITE PLAN IW-LS-6
C-501	CIVIL DETAILS
C-502	CIVIL CONCRETE VAULT DETAILS

Structural

S-001	GENERAL NOTES

CONTROLS

YD101	INSTRUMENTATION DEMO DETAILS IW-LS-3
YD102	INSTRUMENTATION DEMO DETAILS IW-LS-10
YD103	INSTRUMENTATION DEMO DETAILS IW-LS-2280
YD104	INSTRUMENTATION DEMO DETAILS IW-LS-6
Y-101	INSTRUMENTATION SITE PLAN IW-LS-3
Y-102	INSTRUMENTATION SITE PLAN IW-LS-10
Y-103	INSTRUMENTATION SITE PLAN IW-LS-2280
Y-104	INSTRUMENTATION SITE PLAN IW-LS-6
Y-201	INSTRUMENTATION INTERIOR ROUTING PLAN IW-LS-3
Y-202	INSTRUMENTATION INTERIOR ROUTING PLAN IW-LS-10
Y-203	INSTRUMENTATION INTERIOR ROUTING PLAN IW-LS-2280
Y-204	INSTRUMENTATION INTERIOR ROUTING PLAN IW-LS-6
Y-301	INSTRUMENTATION SUMP PUMP DETAIL IW-LS-3
Y-302	INSTRUMENTATION SUMP PUMP DETAIL IW-LS-10
Y-303	INSTRUMENTATION SUMP PUMP DETAIL IW-LS-2280
Y-304N	INSTRUMENTATION NORTH SUMP PUMP DETAIL IW-LS-6
Y-304S	INSTRUMENTATION SUMP PUMP DETAIL IW-LS-2280

Electrical

E-100	ELECTRICAL OVERALL SITE PLAN

APPENDIX B
Specifications

Division 00 – Procurement and Contracting Requirements

00 70 00	General Requirements for Construction on Tinker AFB
00 71 00	General Safety Requirements for Construction on Tinker AFB
00 72 00	Environmental Requirements for Construction on Tinker AFB
00 80 00	Special Provisions for Working on Tinker AFB
00 80 05	Special Provisions for Working on or Near the Airfield on Tinker AFB

Division 01 - General Requirements

01 45 35	SPECIAL INSPECTIONS

Division 02 - Existing Conditions

02 41 00	DEMOLITION

Division 03 - CONCRETE

03 30 53	MISCELLANEOUS CAST-IN-PLACE CONCRETE

Division 05 - METALS

05 05 20	POST-INSTALLED CONCRETE AND MASONRY ANCHORS

Division 25 - INTEGRATED AUTOMATION

25 05 11	CYBERSECURITY FOR SCADA CONTROL SYSTEMS – LOW IMPACT

Division 26 - ELECTRICAL

26 20 00	INTERIOR DISTRIBUTION SYSTEM

Division 31 - EARTHWORK

31 00 00	EARTHWORK

Division 32 - EXTERIOR IMPROVEMENTS

32 11 20	BASE COURSE FOR RIGID AND SUBBASE FOR FLEXIBLE PAVING
32 12 16.16	ROAD-MIX ASPHALT PAVING
32 13 13.06	PORTLAND CEMENT CONCRETE PAVEMENT FOR ROADS AND SITE FACILITIES
32 16 19	CONCRETE CURBS, GUTTERS AND SIDEWALKS
32 92 23	SODDING

Division 40 - PROCESS INTERCONNECTIONS

40 60 00	PROCESS CONTROL

APPENDIX C
Tinker AFB Facility Standards and Reference Documents

Base Facility Standards

Tinker Air Force Base Facility Standard

Tinker Air Force Base Mechanical Standard

Tinker Air Force Base Electrical Standard

Tinker Air Force Base Fire Protection Standard

Tinker AFB General Specifications (Div 00 and Div 01) Reference Documents

Sections 00 7x 00

DoDOP-2000.16V1 AFI 10-245-0	Antiterrorism (AT) Program Implementation
DAFI 13-213	Airfield Driving
DAFI 13-213 TINKERAFBSUP	Airfield Driving (Tinker AFB Supplement to AFI 13-213)
DAFI 21-101	Aircraft and Equipment Maintenance Management
DAFI 21-101 AFMCSUP	Aircraft and Equipment Maintenance Management (AFMC Supplement to AFI 21-101)
AFI 48-104	Tobacco Free Living
DAFI 91-202	The US Air Force Mishap Prevention Program
AFI 91-202 AFMCSUP	The US Air Force Mishap Prevention Program (AFMC Supplement to AFI 91-202)
AFMAN 32-7003	Environmental Conservation
AFMAN 40-201	Radioactive Material (RAM) Management
AFMAN 48-148	Ionizing Radiation Protection
DAFMAN 91-203	Air Force Occupational Safety, Fire, and Health Standards
AFMAN 91-203 OC-ALCSUP	Air Force Occupational Safety, Fire, and Health Standards (OC-ALC Supplement to AFMAN 91-203)
TINKERAFBI 13-204	Airfield Operations
TINKERAFBI 21-100	Foreign Object Damage (FOD) and Dropped Object Prevention (DOP) Programs
TINKERAFB_SOP_Outages	Planned and Emergency Outages Standard Operating Procedures
TINKERAFB HWMP	Tinker AFB Hazardous Waste Management Plan
TINKERAFB INRMP	Tinker AFB Integrated Natural Resources Management Plan
TINKERAFB INRMP_APP E	Tinker AFB Integrated Natural Resources Management Plan – Appendix E, Native Landscaping Plant Materials
TINKERAFB INRMP_APP G	Tinker AFB Integrated Natural Resources Management Plan – Appendix G, Urban Forestry Management Procedures
EM 385-1-1	Safety -- Safety and Health Requirements Manual
UFC 3-260-01	Airfield and Heliport Planning and Design
UFC 3-260-04	Airfield and Heliport Marking

Appendix C (Continued)

UFC 3-535-01	Visual Air Navigation Facilities UFC 3-600-01 Fire Protection Engineering for Facilities
UFC 3-601-02	Fire Protection Systems Inspection, Testing, and Maintenance
Section 00 78 00	
ERDC/ITL TR-12-1	A/E/C Graphics Standard
ERDC/ITL TR-12-6	A/E/C CAD Standard
URML	Unified Master Reference List

Tinker AFB General Requirements Specifications Attachments/Forms

00 70 00, Attachment 1	Tinker AFB Outage Request Form
00 71 00, Attachment 1	Airfield Construction Waiver
00 71 00, Attachment 2	EAL Template
00 71 00, Attachment 3	VEAL Template
00 72 00, Attachment 7a	AF3952, Chemical/Hazardous Material Request Authorization Form
00 72 00, Attachment 7b	Monthly Hazardous Material Usage Report
00 72 00, Attachment 8	Recovered Materials Determination Form
00 72 00, Attachment 9	EMS Awareness Training
00 72 00, Attachment 13	AF487, Generator Operating Log
00 72 00, Attachment 14	Information for New Boilers
01 33 00, Attachment 1	TAFB Form 3000, Material Approval Submittal
00 15 00, Attachment 1	Staging Request Form
01 78 00, Attachment 1	DD1354, Transfer and Acceptance of Military Real Property
01 78 00, Attachment 2	DD1354 Checklist
SOW, Section Badges	Appointment of Security Representative

Tinker AFB General Requirements Specifications Required Training Materials

EMS General Awareness Training for Contractors
AFMC FOD/DOP Program
Controlled Area Training (B3001)