Mission Support Alliance

Statement of Work

Title: Engineering Managed Task Services Blanket Master Agreement
Revision Number: 0
Date: February 1, 2016

CONTENTS

1.0 INTRODUCTION / BACKGROUND

As a prime contractor to the U.S. Department of Energy, Mission Support Alliance, LLC (MSA) is responsible for providing infrastructure-related services to support operations at the Hanford Site. This work includes operations and maintenance of existing systems and new projects to increase the reliability of existing systems and other new initiatives as requested by the client. To support projects and studies, MSA requires engineering services such as design, systems planning, studies, options analyses, and systems master planning.

All MSA facilities and systems in which engineering design services may be requested are non-nuclear and non-radiological facilities or systems classified as General Service. As such, nuclear facility experience or qualifications are not required to perform this work.

2.0 OBJECTIVE

MSA requires a subcontractor to provide architect and engineering (A/E) services for specified managed tasks in support of MSA's mission scope supporting infrastructure of the Hanford Site. Services will be provided on an as needed basis through issuance of Subcontract tasks (Releases).

MSA intends to secure the services of A/E firms that are licensed in the State of Washington or have reciprocity to provide General Engineering services to MSA maintenance and operations organizations and projects. A/E areas addressed by this Blanket Master Agreement (BMA) include: design and support engineering of Electrical/Instrumentation &Controls, Mechanical, Structural, Civil, Architectural, Chemical, Fire Protection, and HVAC systems. Additional support to new and in-process infrastructure projects such as water supply systems, roadways, and sanitary sewer systems may be requested through this BMA. Other areas of support may be tasked on an as-needed basis for technical document development and reviews, work planning and construction support related to contractor design efforts, inspections and inspection reports (such as roof inspections), and systems planning initiatives.

3.0 DESCRIPTION OF WORK – SPECIFIC

The Subcontractor shall provide A/E services on a managed or assigned task basis as required by MSA. The Subcontractor shall provide all aspects of the engineering services including management and oversight of the work to ensure assignments are accomplished in accordance with the requirements herein and within the subsequent Releases. The Subcontractor shall assign qualified personnel to individual Releases such that the technical and administrative requirements of the SOW and subsequent Releases are met.

The majority of the work activities are expected to be performed in the Subcontractor's facilities. However, the Subcontractor will be required to access the Hanford site for certain activities such as status/planning meetings with MSA and task or project related walk-down(s) of equipment, systems, infrastructure, and other affected job sites.

Work will be authorized by MSA through the issuance of individual Releases to the Subcontractor. Each Release will contain a Statement of Work (SOW) with specified requirements related to the services to be performed by the Subcontractor.

The Subcontractor will have access to MSA information via MSA's Document Management Control System (DMCS) as a source to research and retrieve documents referenced within this BMA SOW, or from those cited within future the Releases. MSA will typically identify or specify Site-specific documents, drawings, data, or other information that is to be included in the Subcontractor's overall design. The Subcontractor shall use DMCS to assist with additional document research, obtain document, drawing, and equipment numbers, to create and revise/update documents, drawings, and equipment, and to submit documents and drawings for review and electronic approval. The Subcontractor shall notify MSA immediately upon discovery should instances arise when the information is inadequately specified or unavailable (depending on the specific task Release).

4.0 SUBMITTALS

Releases will specify the documents to be delivered during the execution of the work activity. These may include drawings, technical reports, calculations, presentation materials, data files, and other items typical to performance of tasks of the nature discussed herein. Unless otherwise directed, documents shall be provided with an electronic file submitted in the current Site standards. Clean originals of all figures, tables, or other graphics not contained in the text file shall also be provided and separate files submitted.

In support of the work scope established in Section 3.0 above, all subsequent Release submittals will be listed on a Master Submittal Register (MSR).

Submittals shall be provided to the Buyer's Technical Representative identified in the individual task Release. All transmittal subject headings shall contain, at a minimum, the subcontract number, task Release number, submittal number, and submittal description.

Submittals shall be provided in electronic format unless the content is only available in hard copy format. Electronic submittals may be sent to Buyer's Technical Representative identified in the individual task Release or delivered via a MSA-designated File Transfer Protocol (FTP) site. Electronic formats must be non-password protected in one of the following formats:

- AutoCAD drawing files (DWG) – 2013 version (or later)
- Mathcad Prime 3.1
- Microsoft® Office Compatible
- Moving Picture Expert Group (MPEG)

- Portable Document Format (PDF)
- Extensible Markup Language (XML)
- Tagged Image File Format (TIFF)
- HyperText Markup Language (HTML)
- Graphics Interchange Format (GIF)
- Comma Separated Values (CSV)
- Joint Photographic Experts Group (JPEG)
- Text (TXT)Windows Media Video (WMV)

5.0 ACCEPTANCE CRITERIA

Subcontract work products and services shall meet applicable standards as referenced in 6.2 below. If required, design documents submitted for acceptance by MSA shall be approved/stamped by the Subcontractor's licensed Professional Engineer (PE).

6.0 CONFIGURATION MANAGEMENT AND STANDARDS

6.1 CONFIGURATION MANAGEMENT REQUIREMENTS

Configuration management requirements for all Releases will be based upon the types of engineering services being procured (see Section 6.1.4) and include the MSA standards listed in *Section 6.2 Applicable Standards* and the statements below.

The Subcontractor is responsible for performing constructability review(s) on the Subcontractor's design products, if requested in specific task Releases. The constructability review(s) shall include a check for interferences and fit-up and consider the as-installed configuration as well as interim configurations during the installation process. In the event that the Subcontractor cannot adequately perform a constructability review due to incomplete or inadequate as-built or field walk-down information, the Subcontractor shall notify the respective Buyer's Technical Representative (BTR) to determine an acceptable alternate technical approach.

6.1.1 DESIGN TEAM TASK LEAD EXPECTATIONS

For each Release, a single point of contact shall be established to fulfill the role of Task Lead (e.g., the Subcontractor's project manager).

The Task Lead (TL) is responsible for coordinating the engineering efforts of single or multi-disciplined teams in the execution of a design project or task. The TL shall work closely with the MSA Engineering Manager (or their delegate) and MSA Project Manager, as applicable, to monitor the design budget and schedule. The TL is responsible for preparation of work plans (as appropriate) or assisting in the preparation of the deliverables, when required.

The TL is the point of contact for the effort and has overall responsibility for adequacy of design inputs, for establishing technical interfaces and integration of disciplines, and for ensuring that the job is completed in accordance with the specified engineering and quality requirements, procedures, and schedule.

The TL is accountable to:

- The MSA Design Authority/Engineer(s) to ensure the design products are developed in accordance with the design requirements and criteria.
- The applicable MSA Engineering Manager and Project Manager for integration of technical work with the project or task scope, schedule, and budget and to ensure the design meets technical requirements, specifications, and quality requirements.

6.1.2 DESIGN PROCESS

The Subcontractor shall develop design content in accordance with their internal, qualified engineering process, except where noted in this SOW, or individual Releases. MSA Design Authorities/ Engineers will generally provide initial design inputs to the Subcontractor contained within individual task Releases. However, MSA Design Authorities/Engineers may request (via Releases) that the Subcontractor develop and document the design inputs, including any supporting documentation.

The design content shall be documented in accordance with Section 6.1.4.

When applicable, the Subcontractor shall establish and control design interfaces in accordance with Section 6.1.3.

The Subcontractor shall perform an internal design review of their generated designs in accordance with Section 6.1.5.

6.1.3 DESIGN INTERFACES

Design interfaces, where present, shall be identified, documented, and controlled in a specification or on an MSA drawing and be uniquely identified.

6.1.4 DOCUMENTATION

Work produced as part of this SOW and subsequent Releases shall be documented and meet the MSA standards listed in Section 6.2 Applicable Standards and the statements below. Documentation types not listed here will be identified in subsequent Releases, as appropriate. Note that all of the forms discussed below and presented in the Attachments to this SOW are available on Site Forms. The latest version shall be used for work products.

Technical Documents. New or revised Technical Documents shall be prepared in accordance with the contractor's internal procedures. Appropriate editorial and presentation standards shall be employed. Technical documents received by MSA will be reviewed, approved, and issued using the form presented in Attachment 1.

Design Analyses: The Subcontractor shall develop design analyses in accordance with their own internal processes. Design analysis documentation shall include:

(1) Definition of the objective of the analysis;

(2) Definition of analysis inputs and their sources;

(3) Results of literature searches or other applicable background data;

(4) Identification of assumptions and indication of those that must be verified as the design proceeds;

(5) Identification of any computer calculation including computer type, computer program (e.g., name), revision identification, inputs, outputs, evidence of or reference to computer program verification and validation and the bases (or reference thereto) supporting application of the computer program to the specific physical problem;

(6) Review and approval.

Native files are submitted via DMCS for each analyses and subsequent revision.

Standalone design analyses received by MSA (i.e., those not incorporated into a Facility Modification Package or Design Change Notice) will be reviewed, approved, and issued using the form presented in Attachment 2. Design analyses incorporated into a Facility Modification Package shall use the form presented in Attachment 3.

Engineering Drawings: New or revised Engineering Drawings to be released into the MSA document control system shall be prepared in accordance with HNF-14660, *Offsite Vendor Instructions for Preparation and Control of Engineering Drawings*. Drawings submitted as vendor information are exempt from this requirement.

Facility Modification Packages: New or revised Facility Modification Packages shall be prepared and submitted in accordance with the form presented in Attachment 4. Only the following sections of the form are expected to be completed as part of individual task Releases: Blocks 1, 12, 14 through 25. The information for the remaining sections will be supplied or provided by MSA Engineering staff. Attachment 4 also includes instructions for the form.

Design Change Notices: New or revised Design Change Notices shall be prepared and submitted in accordance with the form presented in Attachment 5. Attachment 5 also includes instructions for the form along with copies of the forms used for sketches supporting the Design Change Notice (both portrait and landscape).

Design Verification: In the event that a Design Verification Record is requested as part of a task Release, the form for documenting that review is presented in Attachment 6.

Functional Requirements Documents: New or revised Functional Requirements Documents shall be prepared and submitted in accordance with the format and content requirements specified in Attachment 7.

Functional Design Criteria: New or revised Functional Design Criteria documents shall be prepared and submitted in accordance with the format and content requirements specified in Attachment 8.

6.1.5 DESIGN REVIEWS

The preparation, checking, verification, review, approval and release of all design media needed for the design is included in this scope of work. MSA may conduct design reviews on design packages developed under subsequent Releases to this BMA in accordance with internal MSA procedures and guides. MSA engineering may conduct informal/formal interim design reviews (e.g., 30% and 60%) as determined by the applicable MSA Design Authority/Engineer or Project Manager. The purpose of these MSA-conducted formal and/or informal design reviews, if performed, is to monitor design progress and should not be construed as design verification approval.

Each design product shall be checked, reviewed and approved internally by the Subcontractor prior to providing the design package to MSA for review, comment, and subsequent approval. For design products at interim stages of design (e.g., 30% and 60%), accuracy of the content and checking for technical adequacy should be appropriate for the stage of design unless otherwise requested by the MSA Design Authority/engineer. Design products submitted at interim stages shall be so noted by watermark or stamp that clearly reflects the stage of design completion (e.g., "30% preliminary," etc.). In all cases, the deliverable package shall include an index of the information provided, placeholders for "planned" additions, and be a complete, accurate and quality conscious representation of the design effort conducted to date.

The Subcontractor shall fully check and verify final design stage (90%) products in accordance with their approved Quality Assurance Program and internal implementing procedures. MSA considers 90% design products to be ready for final issue and/or construction. In addition to technical adequacy, checking shall address drafting standard compliance (where applicable as defined in Section 6.1.4), editorial errors, and overall workmanship.

The Subcontractor shall submit an engineering work plan that includes a design verification plan for all designs and submit to MSA for review and approval. The design verification plan shall describe the method of implementing and documenting reviews to the extent possible, understanding that the design has not yet been developed and refinement of the plan may be required as the design progresses.

The Subcontractor shall submit, for each subsequent Release, evidence of final design verification for each design documenting the design verification method(s) used (e.g., peer review, alternate calculations, etc.), completed checklists, requirements verification matrices, etc.

6.1.6 AS-BUILT PROCESS

The subcontractor shall have a document as-built process as part of their engineering program procedures that will ensure that as-building activities will depict the post-installation physical facility conditions.

6.1.7 APPLICABLE STANDARDS

MSA-specific Engineering Standards applicable to the work conducted under this BMA are listed here:

- MSC-STD-ENG-097, *MSC Engineering Design Codes, Standards and Site Specific Design Parameters*; and

- HNF-14660, *Offsite Vendor Instructions for Preparation and Control of Engineering Drawings*.

Each Release issued under this BMA may specify additional Codes, Standards, Regulations, DOE Orders, and MSA Standards that must be complied with in the performance of work in accordance with this BMA. This may be in the form of reference to an existing specification or specified explicitly in the Release.

The collection codes, standards, regulations, etc. are commonly referred to as the Code of Record (COR) for the design and, once established, shall be under configuration control.

7.0 ESH& QA REQUIREMENTS

General

For any work performed on the Hanford Site or any MSA controlled facility, the provisions of the On Site Services Special Provisions, will apply to Subcontractor personnel.

7.1.1 ENVIRONMENT, SAFETY, & HEALTH (ES&H) REQUIREMENTS

The Subcontractor shall exercise a degree of care commensurate with the work and the associated hazards. The Subcontractor shall ensure that management of ES&H functions and activities is an integral and visible part of the Subcontractor's work planning and execution processes. The Subcontractor shall flow down applicable ES&H requirements to the lowest tier Subcontractor performing work on the Hanford site commensurate with the risk, complexity, and specific activity of the work.

Subcontractor and its lower-tier subcontractors shall be responsible to complete an Employee Job Task Analysis (EJTA) in accordance with MSC-PRO-11058, *Occupational Medical Qualification and Monitoring Using EJTA*, for any of the following situations:

- For any subcontractor employee who will be on the Hanford Site for more than 30 days in a year.
- For any subcontractor employee who may potentially be exposed to hazards (e.g. radiological, beryllium, hazardous wastes, noise) while performing in accordance with the subcontract statement of work.
- For any subcontractor employee enrolled in a medical or exposure monitoring program required by 10 CFR 851, and/or any other applicable federal, state or local regulation or other obligation.

If any of the above conditions are met, the subcontractor and its lower-tier subcontractor employee is to have a current approved EJTA prior to that employee beginning work on the Hanford Site.

Buyer's Safety and Health Procedures are available on the internet at http://www.hanford.gov/pmm/page.cfm/Construction. The documents on this site are kept current and are available for Subcontractors and lower-tier Subcontractor use.

APPLICABLE ES&H REQUIREMENTS

	Number	Title
1.	MSC-MP-003	Integrated Environment, Safety, and Health Management System Description

7.1.2 QUALITY ASSURANCE (QA) REQUIREMENTS

The Subcontractor shall have a Quality Assurance Program (QAP) and implementing procedures that utilizes a national or international voluntary consensus standard such as the American Society of Mechanical Engineers, NQA-1-2008, *Quality Assurance Requirements for Nuclear Facility Applications,* or Equivalent, as identified from the list below.

The QAP document and implementing procedures are required to be reviewed, evaluated, and approved by MSA, prior to award of subcontract.

NQA-1 Criteria	Title	All Sections	Specific Sections
Part I, Req. 1	Organization		100, 300
Part I, Req. 2	Quality Assurance Program	X (Except 301, 302)	
Part I, Req. 3	Design Control		100, 200, 300, 400, 500, 600a, 700, 900
Part I, Req. 4	Procurement Document Control		100, 205, 400
Part I, Req. 5	Instructions, Procedures, and Drawings		100
Part I, Req. 6	Document Control		100
Part I, Req. 7	Control of Purchased Items and Services		100
Part I, Req. 16	Corrective Action		100
Part I, Req. 17	Quality Assurance Records		100, 200, 300, 601, 603
Part I, Req. 18	Audits		100

7.1.3 SUBCONTRACTOR QUALITY ASSURANCE PROGRAM

The Subcontractor's Quality Assurance Program shall be subject to review by MSA at all times. When subcontracting any portion of this Subcontract, the Subcontractor is required to flowdown the applicable engineering and quality assurance program requirements to the subcontractor.

The Buyer reserves the right to verify the quality of work at the Subcontractor's facility, including any subcontractor's facility. Access to a subcontractor's facility shall be requested through the Subcontractor and may be performed jointly with the Subcontractor. All requests for site visits will be requested through the Buyer's Contracting Officer.

The Subcontractor shall, during the performance of this Contract, submit proposed changes to the quality assurance program to the Buyer for review prior to implementation.

7.1.4 COMMERCIAL OFF THE SHELF SOFTWARE

The Subcontractor shall submit the following documentation for all engineering analysis/design, data analysis/reduction, and engineering/environmental modeling commercial-off-the-shelf (COTS) software[1] (application) used in the performance of work activities. Note: If same COTS product is utilized for a range of calculations this documentation only needs to be submitted once, but documents/calculations shall be traceable back to No. 1 specified below and is subject to oversight activities.

1. Description of the COTS software, including:
    a. Manufacturer's name and address,
    b. COTS application's title and version identifier
    c. Operating system and hardware platform that will be used,
    d. Manufacturer's Technical Specifications or other published description of the COTS
2. Standard data set(s) used to verify operation of the COTS application.
    a. Data sets shall cover each function or mode of operation which will be used during the performance of the work activities.
    b. When the COTS application's range of operation cannot be verified by a single data set, the subcontractor shall submit, as a minimum, data sets covering the upper and lower thirds of its range.
3. Subcontractor shall notify MSA of any software errors relative to COTS deliverables.

7.1.5 QUALITY ASSURANCE AND ENGINEERING OVERSIGHT

Subcontractor activities are subject to QA and Engineering oversight by the Buyer's quality assurance or engineering representative at the Subcontractor's' facility or the Subcontractor lower-tier's service provider(s). The Buyer shall be allowed access to these facilities for oversight

[1] COTS software refers to an existing application which will be implemented on a standard operating system without the need for modification of its executable/object code.

activities with a reasonable notification to the Subcontractor. These oversight activities shall be coordinated through the Subcontractor's and Buyer's Contract representatives.

8.0 PERSONNEL REQUIREMENTS

8.1.1 TRAINING

Hanford site-specific general training requirements to safely perform this work will be designated by the Buyer's Technical Representative (BTR).

Table 1 includes the types of potential training requirements may be anticipated.

Table 1. POTENTIAL TRAINING REQUIREMENTS

Hours	Course Number	Description
4	000001	HGET – Computer-Based Training (CBT)
12	110001	MSA General Employee Training (MGET) - CBT
3	020193	Heat Stress Prevention & First Aid - CBT
2	020194	Hearing Conservation - CBT
1	044371	Users Scaffold Safety - CBT
4	044391	Portable Ladder Safety - CBT
3	020147	Fall Hazard Recognition & Prevention
9	020440	Fall Protection PFAS Users
4	00312I	Hanford Site Lockout/Tagout Training Overview - Initial
1	0031G0	Briefing on DOE-0336, Revision 2A, changes
2	N/A	Document Management Control System Overview

The Subcontractor shall be responsible for all wages of their employees while attending any required training courses. MSA will schedule and furnish Hanford Site-specific training courses at no cost to the Subcontractor.

8.1.2 QUALIFICATIONS

Subcontractor personnel performing engineering services shall have, appropriate training, experience, qualification and/or certification(s) to perform the work required by each Release. Documentation/certification of personnel qualifications shall be maintained by the Subcontractor and provided to MSA upon request. Subcontractor personnel qualifications/certifications will be verified by MSA prior to performing work in order to provide reasonable assurance that the Subcontractor has assigned personnel with sufficient documented training, education, and experience to satisfy the specified requirements. Subcontractor to provide personnel resume and evidence of qualification prior to being allowed on subsequent Releases. Experience levels and qualifications for labor categories used under the BMA are defined in Table 2.

Table 2. Managed Task Engineering Services Staff Qualifications.

Discipline Progression	Experience Level/Qualifications[2]
Principal Engineer	Applies advanced engineering techniques and analyses for Problems and methods. Has extensive experience in general engineering. Minimum Qualifications: Bachelors of Science (BS) degree in Engineering discipline PLUS 15 or more years engineering experience or equivalent combination of education and experience.
Senior Engineer	Performs conventional design engineering and analysis. Plans and conducts independent evaluation, selection, and adaptation of engineering techniques, procedures, and criteria. When assigned, may provide managerial and/or technical direction to other engineers. Minimum Qualifications: BS degree in Engineering discipline PLUS 10 to 14 years engineering experience or equivalent combination of education and experience.
Advanced	Under general supervision, evaluates, selects, and applies standard engineering techniques, procedures, and criteria. Minimum Qualifications: BS degree in Engineering discipline PLUS 4 to 9 years engineering experience or equivalent combination of education and experience.
Entry-Level Engineer	Under supervision, performs standardized assignments using standard engineering techniques, procedures, and criteria. Minimum Qualifications: BS Degree in an Engineering Discipline PLUS 0 to 3 years engineering experience or equivalent combination of education and experience.
Sr. Designer/ CAD Technician	Experienced and proficient in providing direction to designers producing AutoCAD drawings, performing drawing revisions, engineering change documents and performing field walk-downs to obtain and layout dimensions for equipment. Responsible for site, facility, system, equipment and product research to produce design drawings under the direction of design engineers. Minimum Qualifications: Associates (AA) degree, minimum of 12 years progressive responsible experience, and/or equivalent technical/trade school degree plus additional years of progressive experience as a designer in an infrastructure and/or utility service environment
Designer/ CAD Technician	Experienced and proficient in producing AutoCAD drawings, drawing revisions, engineering change documents and performing field walk-downs to obtain dimensions and equipment layout. Responsible for limited site, facility, system, equipment and product research to produce design drawings under the direction of design engineers. Minimum Qualifications: AA degree, minimum of 5 to 11 years of experience or equivalent technical/trade school degree or additional progressive experience.
Project Manager	Responsible for management and execution of assigned project(s) in accordance with the requirements of the contract between the contractor, the Buyer and the contractor's operating policies and principles. Responsible for execution of the work in accordance with the quality standards and requirements specified for the project. Minimum Qualifications: Bachelor's Degree and 15 or more years related experience.

Table 2. Managed Task Engineering Services Staff Qualifications.

Discipline Progression	Experience Level/Qualifications
Technical Writer/Editor	Researches, writes, edits and proofreads technical data for use in documents or sections of documents such as manuals, procedures and specification. Ensures technical documentation is accurate, complete, meets editorial and government specification and adheres to standards for quality, graphics, coverage, format and style. Minimum Qualifications: Associate's degree in an applicable technical field and 2 years related experience or an equivalent combination of education and experience.
Clerk/Administrative Assistant	Handles with minimum supervision and technical assistance standard clerical work related directly to the assigned subcontract release. Activities typically performed include typing, report preparation, and record-keeping. Minimum Qualifications: Graduation from high school and 2 years clerical experience.
Project Controls/ Scheduler	Prepares or assists in preparation of estimating, scheduling or cost engineering requirements for a project or assignment. Reviews work for completeness as required by project specifications and scope definition. Applies standard cost and/or scheduling data to departmental programs or systems. Minimum Qualifications: Bachelor's Degree in Business or related field and 5 or more years related experience or a combination of education and experience.
Cost Estimator	Prepares estimates (i.e. fair cost, conceptual, definitive design). Reviews specifications and drawings/sketches for the preparation of the cost estimates. Performs detailed quantity takeoff of drawings or sketches. Applies appropriate cost elements (e.g. overhead, escalation, contingency, profit) as applicable to contract type. Minimum Qualifications: Bachelor's Degree in Business, Engineering or related field and 5 or more years related experience or a combination of education and experience.
QA Engineer	Defines and develops quality standards for receiving, in-process and final inspection in accordance with company and contractual requirements. Reviews and evaluates complex in-process rejections and implements corrective action as needed. Interfaces with customers, vendors and company departments to resolve quality problems and provide information. Participates in and may lead audits. Provides technical support to inspection personnel and feedback to management on inspection and test trends, returns and vendor performance. Minimum Qualifications: Bachelor's Degree in Engineering or related field and 5 or more years related experience.

[2] Education and experience equivalencies are expected to meet the requirements of DOE O 426.2, *Personnel Selection, Training, Qualification, and Certification Requirements for DOE Nuclear Facilities*. It is the responsibility of the Subcontractor to develop and submit these equivalencies.

It is expected that the Subcontractor will identify and apply an appropriate mix of resources and experience to each task to ensure that MSA is receiving the best value possible for the engineering services being requested.

In subsequent Releases (due to task complexity, licensing requirements, or other factors) it should be expected that MSA may specify specific skill levels or required qualifications expected to be provided by the Subcontractor to accomplish the task(s).

8.2 SECURITY AND BADGING REQUIREMENTS

For any on site work, see Special Provisions – On Site Services for details.

Subcontractor employees will be required to submit to vehicle searches and not personally carry or transport certain prohibited articles.

8.3 WORK LOCATION / POTENTIAL ACCESS REQUIREMENTS

A majority of the work activities will be performed at the Subcontractor's facilities. Subcontractor may be required to make periodic visits to Hanford Site locations (i.e., 2490 Garlick Blvd, HAMMER, 200 East/West Area, 600 Area, etc.). MSA anticipates the Subcontractor will not access any radiological controlled areas for which additional radiological training is required.

Work schedules and facility operations are not consistent on the Hanford Site. MSA may require Subcontractor to perform services to support MSA alternate work schedules including shift work other than a standard 8x9 (with alternate Friday closures) or 4x10 work week. MSA will not be subject to any additional costs which result from Subcontractor's assignment or support of an alternate work schedule.

MSA will provide the Subcontractor with Hanford Local Area Network (HLAN) access for the purposes of retrieving/accessing MSA documents and engineering-related information (e.g., via DMCS).

9.0 MEETINGS

Subcontractor shall participate in all meetings as requested by the Buyer's Technical Representative (BTR). The general purpose of meetings is for the coordination, control, and direction of the Work. In addition to meetings addressed by this Section, Subcontractor may be required by other Sections and other Subcontract documents to conduct special-purpose meetings and various safety meetings and briefings.

9.1 BMA ADMINISTRATION

As part of MSA administering this BMA, the following activities will be conducted:

- KICKOFF MEETING: Before start of the Work, MSA will conduct a conference at a time and Hanford Site location agreed to by Subcontractor and MSA. Invited attendees will include MSA, Subcontractor, key lower tier subcontractors and others having an interest in the Work. Purpose of the conference is the coordination of Work start up and familiarization of project participants with the Work and worksite.

- RELEASE TRACKING: The subcontractor shall track (via EXCEL spreadsheet, Primavera schedule, or other means) the status of individual Releases and will report the status of these efforts at the scheduled progress meetings (see next item). Reporting will include a comparison and reconciliation between initially forecasted delivery dates and actual dates, as applicable. Also, the report will similarly address, as applicable, proposed labor hours/cost and actual labor hours/cost for each Release still in progress. Earned Value Management System techniques should be employed as detailed in individual Releases.

- PROGRESS MEETINGS: On a routine basis (e.g., weekly), MSA will conduct a progress meeting at time and Hanford Site location determined by MSA. Invited attendees will include MSA, Subcontractor and any key subcontractors. At the progress meeting, Subcontractor shall discuss and submit results of Release Tracking (described above).

10.0 DELIVERABLES AND PERFORMANCE SCHEDULE REQUIREMENTS

Individual Releases will provide specific expected deliverables and performance schedule reporting requirements. Subcontractor shall maintain a project schedule to ensure completion of design deliverables. On a weekly basis, Subcontractor shall be prepared to report progress on the MSA Project Schedule maintained by the MSA project team. Status report is expected to include completion date and percentage complete for each deliverable within the scope of the individual Release.

The period of performance for this BMA is established as:

Start Date: April 1, 2016

End Date: March 31, 2017

Two additional one year option periods shall also be proposed.

11.0 SPECIAL REQUIREMENTS

11.1 PERSONAL PROTECTIVE EQUIPMENT (PPE)

When required by MSA to perform work duties such as facility walk downs, etc., MSA will provide Subcontractor personnel with the appropriate PPE such as hard hats and non-prescription safety glasses/goggles.

The Subcontractor shall be responsible for providing any personal-wear items such as prescription safety glasses, inclement weather clothing, and footwear appropriate for work locations(s) (e.g. ankle top leather/steel-toed boots) required for meeting MSA safety requirements.

11.2 USE OF GOVERNMENT VEHICLES

There is no anticipated need for any Subcontractor employees to use a Government-furnished vehicle in the performance of this SOW. The Subcontractor's employees, therefore, are specifically prohibited from driving any Government-furnished vehicles under the performance of this SOW.

11.3 GOVERNMENT PROPERTY

MSA will not be providing any Government-owned property.