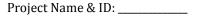
A Statement of Work (SOW) is typically used when the task is well-known and can be described in specific terms. Statement of Objective (SOO) and Performance Work Statement (PWS) emphasize performance-based concepts such as desired service outcomes and performance standards. Whereas PWS/SOO's establish high-level outcomes and objectives for performance and PWS's emphasize outcomes, desired results and objectives at a more detailed and measurable level, SOW's provide explicit statements of work direction for the contractor to follow. However, SOW's can also be found to contain references to desired performance outcomes, performance standards, and metrics, which is a preferred approach.

The Table of Content below is informational only and is provided to you for purposes of outlining the PWS/SOO/SOW. This sample is not all inclusive, therefore the reader is cautioned to use professional judgment and include agency specific references to their own PWS/SOO/SOW.

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# STATEMENT OF WORK



May 1, 2011

#### SECTION B – SUPPLIES OR SERVICES AND PRICES

NOTE: The section numbers in this Task Order Request (TOR) and resulting Task Order (TO) correspond to the section numbers in the Alliant Contract. Section B of the Alliant Contract is applicable to this Task Order Request and resulting Task Order and is hereby incorporated by reference. In addition, the following applies:

#### B.1 GENERAL DESCRIPTION

The Contractor shall furnish a comprehensive solution to include all materials, tools, equipment, expertise, and labor to perform the work required by this solicitation and the awarded task order on a Firm Fixed Price basis.

The work shall be performed in accordance with all sections of this Task Order Request and the contractor's Alliant Contract, under which the resulting task order will be placed. The Contract Line Item Numbers (CLINs) in the pricing table below directly relate to tasks in Section C.

A Glossary of Acronyms and Terms to support this TOR is included in Section J, Attachment A.

NOTE: The contractor's Alliant contract price schedule (i.e., Section B) is applicable to this Task Order Request and resulting Task Order. All prices must be based on products/services contained in the contractor's Alliant contract.

NOTE: The contractor must propose labor categories and hourly rates that are contained within its Alliant contract, at fully burdened rates that do not exceed the contract rates established for each particular labor category. In addition, for purposes of this task order, the contractor's Benchmark Prices are the maximum amount that may be charged.

#### B.2 CONTRACT ACCESS FEE

GSA operating costs associated with the management and administration of the Alliant contract are recovered through a Contract Access Fee (CAF). The amount of the CAF is ¾ %, i.e. (.0075) of the total price/cost of contractor performance. (The CAF on task orders in excess of \$13.3 million a year is capped at \$100,000 per year.) A Contract Line Item Number (CLIN) is included in order to recoup this access fee, and this CAF shall be obligated at task order award.

## B.3 ORDER TYPE

The contractor shall perform the effort required by this task order on a Firm Fixed Price (FFP) basis and a Not to Exceed (NTE) basis as set forth herein.

## B.4 SERVICES AND PRICES

The following abbreviations are used in this price schedule:

• NTE: Not To Exceed

• CLIN: Contract Line Item Number

• FFP: Firm Fixed Price

# B.4.1 PERIOD OF PERFORMANCE

Base Period: May 4, 2012 through May 3, 2014

CLIN	Description	Quantity	Unit	Unit Price	Total
0001	Building Site Readiness Assessment	1	FFP		
				\$	\$
0002	Data Capture and Collection Plan	1	FFP		
				\$	\$
0003	IT Infrastructure and Implementation	1	FFP		
				\$	\$
0004	Building Analytics and Fault Detection and Diagnostics	1	FFP		
				\$	\$
0005	Stakeholder Tools		FFP	\$	\$
0006	Role-Based-Operator-Interface	1	FFP		
				\$	\$
0007	Systems Interface/Integration Plan	1	FFP		
				\$	\$
0008	Data Conversion Plan	1	FFP	\$	\$
0009	Performance Tracking and Measurement Plan	1	FFP		
				\$	\$
0010	Sustainability Support Center	1	FFP	\$	\$
0011	Facility Educational Signage	1	FFP	\$	\$
0012	Program Management	1	FFP	\$	\$
0013	Training	1	FFP	\$	\$
0014	Operations and Maintenance Support	1	FFP		
				\$	\$
0015	Travel Including Indirect Handling Rate% (First 56 Buildings)		CR	NTE	
	5			\$417,000	
					\$
0016	Contract Access Fee	1	FFP	\$	\$

Option Period 1 (CLINs 1001 thru 1014): 365 Days from Option Exercise

CLIN	Description	Quantity	Unit	Unit Price	Total
1001	Building Site Readiness Assessment	1	FFP		
				\$	\$
1002	Data Capture and Collection Plan	1	FFP		
				\$	\$
1003	IT Infrastructure and Implementation	1	FFP		
				\$	\$
1004	Building Analytics and Fault Detection and Diagnostics	1	FFP		
				\$	\$
1005	Stakeholder Tools	1	FFP	\$	\$
1006	Role-Based-Operator-Interface	1	FFP		
				\$	\$
1007	Systems Interface/Integration Plan	1	FFP		
				\$	\$
1008	Data Conversion Plan	1	FFP	\$	\$
1009	Performance Tracking and Measurement Plan	1	FFP		
				\$	\$
1010	Sustainability Support Center	1	FFP	\$	\$
1011	Facility Educational Signage	1	FFP	\$	\$
1012	Program Management	1	FFP	\$	\$
1013	Training	1	FFP	\$	\$

1014	Operations and Maintenance Support	1	FFP	\$	\$
1016	Optional Task 1: Add 50 Buildings to the Scope of Work	1	FFP	\$	\$
1017	Optional Travel Including Indirect Handling Rate% (Additional 50 Buildings)	1	CR	NTE \$XXX	\$
1018	Contract Access Fee	1	FFP	\$	\$

2001	Optional Task 2:	1	FFP	\$	
	Provide/Coordinate Managed Service Provider			(solution setup)	\$
				\$	
	(# of buildings will be defined at the time the option			(setup fee per bldg)	
	is exercised)			\$	
				(monthly	
				service/support fee	
				per bldg)	

THE NTE CEILING AMOUNT REPRESENTS THE MAXIMUM AMOUNT OF THE GOVERNMENT'S LIABILITY.
THE CONTRACTOR EXCEEDS THE CEILING AT ITS OWN RISK.

#### B.5 TRAVEL

#### B.5.1 INDIRECT/MATERIAL HANDLING RATE

Travel costs incurred may be burdened with the contractor's indirect/material handling rate if one is entered in the contractor's basic contract (contractor to enter amount, but not to exceed the ceiling rate of the basic contract) and such indirect/material handling rate is not included in the fully burdened labor rate. If no indirect/material handling rate is specified in the basic contract, or if such rate is already included in the fully burdened labor rate, no indirect/material handling rate shall be applied to or reimbursed on such costs in this task order.

### B.5.2 TRAVEL REQUIREMENTS

Travel within CONUS is anticipated. The contractor shall use only the minimum number of travelers and rental cars to accomplish the task(s). Travel shall be scheduled during normal duty hours whenever possible.

# B.5.3 TRAVEL AUTHORITY

- B.5.3.1 The contractor shall be reimbursed for incurred costs in accordance with the FTR over the life of the task order, not to exceed the amount shown in the pricing table.
- B.5.3.2 Travel will be reimbursed to the extent allowable pursuant to the Federal Travel Regulations (FTR). Airfare will be reimbursed for actual common carrier fares, which are obtained by the most reasonable and economical means. Airfare shall be the prevailing rates for commercial airlines at tourist class. When required, the most economic and dependable means of ground transportation (i.e., taxi, bus, train, car rental) shall be used. The estimated amount/NTE shall not be exceeded.

## B.5.4 REQUIRED APPROVALS

All requests for Travel and ODCs must be approved by the GSA Contracting Officer's Representative (COR) **prior** to incurring costs. Travel will be reimbursed to the extent allowable.

#### SECTION C- DESCRIPTION/ SPECIFICATIONS/STATEMENT OF WORK

NOTE: The section numbers in this Task Order Request (TOR) and resulting Task Order (TO) correspond to the section numbers in the Alliant Contract. Section C of the Alliant Contract is applicable to this Task Order Request and resulting Task Order and is hereby incorporated by reference. In addition, the following applies:

#### C.1 BACKGROUND

The General Services Administration (GSA) has established an initiative to reduce GSA's impact on the natural environment, improve energy consumption and performance of its portfolio, and use its government-wide influence to reduce the environmental impact of the Federal government. The key drivers of this initiative are Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance"; Executive Order 13423, "Strengthening Federal Environmental, Energy and Transportation Management"; the Energy Independence and Security Act of 2007 (EISA – Public Law 110, Title 4); and the Energy Policy Act of 2005 (EPAct 2005). The Facility Management and Service Program (FMSP), has developed a plan to reduce the environmental impact of its real estate portfolio by implementing an enterprise-wide solution to support the diverse building data points, tagging strategy, automated analytics, fault detection & diagnostics (FDD), and role-based operator interface needs of PBS's internal personnel (building, Service Centers, Regional Offices, and Headquarters) and tenant agencies throughout the nation.

## C.2 OBJECTIVE

The objective of this Task Order is to acquire the services of a single contractor to design and implement an enterprise-class software solution to extract the diverse building data points, apply a software tagging strategy, install an automated analytics, fault detection & diagnostics (FDD) software package with a role-based operator interface for use by the Government building operators and property managers to monitor and track building systems performance on 106 GSA owned facilities. The program will be named the Automated Building Analytics and Measurement System (ABAMS) (see Attachment A – Glossary of Acronyms and Terms). In addition, the selected vendor will be required to purchase and maintain non Government Furnished Equipment (GFE) components which may include, but is not limited to the building software/hardware used to extract data points and software used in the tagging, automated analytics, and operator interface. GSA CIO will maintain GFE components.

The proposed solutions must be flexible, scalable, and configurable.

## C.3 SCOPE

The period of performance for this task order shall include a base period of 2 years and an option of 1 year. The Contractor shall develop and implement an enterprise-wide solution. In addition, the solution shall be capable of supporting a separate, stand-alone, secure environment for a special independently operated GSA service center made up of 6 buildings with building automation systems (BAS) on a separate isolated network for security purposes. All contract employees working greater than 180 days, or requiring logical access to the GSA network will require the successful completion of a National Agency Check with Written Inquiries (NACI).

The Contractor shall provide a complete solution (all necessary hardware, software, middleware, and technical support) to collect data from or relating to the existing BAS in the 106 facilities. If any requirements are found deficient, the vendor will work with the GSA to bring the building up to acceptable standards. The Contractor shall design, plan and deploy an interactive digital signage system in each building. The GSA, in its sole discretion, may choose to remove designated buildings from this acquisition at any time during the procurement process (e.g. pre and post procurement) and substitute such buildings with other buildings in its portfolio.

## C.4 TECHNICAL REQUIREMENTS

The Contractor shall provide a flexible, scalable, and configurable solution, including all necessary hardware, software, middleware, and technical support, to collect data from, or relating to, existing facilities including the Building Automation System (BAS) in each facility. The solution shall analyze the data for operational and energy efficiency performance and shall provide tools to describe operational deficiencies and recommend corrective

measures. ABAMS shall be an enterprise-wide solution that shall support the diverse building data points, tagging strategy, automated analytics, fault detection & diagnostics (FDD), and role-based operator interface needs of internal personnel and tenant agencies throughout the nation. The Contractor's digital signage solution shall drive awareness (including measurement) of various forms of sustainability, including but not limited to energy usage. The signage should be designed to specifically drive behavioral change of building occupants to support best practices.

The ABAMS solution shall include the capability to analyze the data for operational and energy efficiency performance and shall provide tools to help describe operational deficiencies and recommend corrective measures.

#### ABAMS shall include:

- All facility software, middleware, and hardware components necessary to capture, store, analyze and transmit:
  - Existing building points data.
  - Initial installation and configuration data of the system that shall interface with the facility Building Automated Systems (BAS) on the Building Systems network (part of overall physical network with segmentation via Virtual LANs).
- All related licenses.
- All software upgrades which may become available, including new modules that include features previously unavailable in base product or which affect known GSA operations, patches and firmware
- All support services provided during the period of performance (Base Plus Option) which includes non-GSA government furnished equipment (GFE) components such as, but not limited to facility specific software/hardware used to extract data points and software for tagging, automated analytics, and operator interface. GSA CIO will provide and maintain GFE components as well as the operating systems provided on any GFE servers and workstations. Details on GSA GFE can be found in Attachment C- Building Technologies Technical Requirements.
- All deliverables pertaining to analytics Fault Detection and Diagnostics (FDD) platform.
- A comprehensive warranty for the hardware/software solution.

The Contractor shall provide all related licenses needed to support the ABAMS solution so GSA can freely move, modify, and expand the licensed system after installation and turnover by the Contractor. GSA shall have an unrestricted license (i.e., no limit to number of points, number of concurrent users, number of database connections, as long as all users are either Federal employees or Contractors working on behalf of the Federal government). GSA will have unrestricted ownership rights to graphics and programming developed under this Task Order (as opposed to the COTS product that is initially licensed). All components must be owned and licensed to GSA for use in GSA owned and managed facilities.

The buildings currently have (or will have prior to the site visit) the following technology:

- Meters integrated through intermediate regional software applications to a unified national Schneider ION
  Enterprise Energy Management EEM application. ABAMS will be given access to and shall use data
  points either directly from the Advanced Meter system in the building, via Advanced Meter points data
  integrated to the BAS, or directly from the regional ION Enterprise database (MS SQL Server).
- Government-furnished GSA compliant data network circuit installed for purposes of transmitting building data over the internal GSA Systems network housed within the GSA firewall. These circuits currently vary in capacity from 56kb 1.5mb.
- Building Automation System that will generate data for use by ABAMS.

GSA will provide the Contractor all available system products and installation data for each building. Typical documents will include network diagrams, points lists, sequences of operations, and BAS software and controller product literature. Any gaps in the documentation shall be determined by Contractor during Site Readiness Assessment.

Section 508 of the Rehabilitation Act requires Federal agencies to make their electronic and information technology accessible to people with disabilities. This applies to all Federal agencies when they develop, procure, maintain, or use electronic and information technology.

All electronic and information technology (EIT) procured through this task order must meet the applicable accessibility standards specified in 36CFR1194.2, unless an agency exception to this requirement exists. Any agency exceptions applicable to this task order are listed below.

The standards define Electronic and Information Technology, in part, as "any equipment or interconnected system or subsystem of equipment that is used in the creation, conversion, or duplication of data or information. The standards define the type of technology covered and set forth provisions that establish a minimum level of accessibility. The application section of the standards (1194.2) outlines the scope and coverage of the standards. The standards cover the full range of electronic and information technologies in the Federal sector, including those used for communication, duplication, computing, storage, presentation, control, transport and production. This includes computers, software, networks, peripherals and other types of electronic office equipment.

Applicable Standards	which and	alw to this	acquisition
Applicable Stalldards	, winch app	ny to uns	acquisition

2: Web-based Internet Information and Applications
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## C.4.1 BUILDING SITE READINESS ASSESSMENT

C.4.1.2 The Contractor shall develop and submit a Building Site Readiness Assessment after visiting each site that includes, at a minimum, all of the following:

- Detailed listing of all BAS components, available circuits, and general "readiness" of site in regards to making sure it can connect to the ABAMS platform.
- Template for the readiness assessment and approved by the GSA project executive.
- Contractor shall include a member of the GSA smart buildings team in each visit.
- Completed template and notes from assessment shall be reviewed with GSA designated Smart Building's person prior to proceeding to do any specific work in regards to the specific building.
- Contractor shall include an architecture drawing with regards to any digital signage in the buildings.

## C.4.2 DATA CAPTURE AND COLLECTION PLAN

**C.4.2.1** The Contractor shall develop and submit a Data Capture and Collection Plan (DCCP) in conformance with this section. The DCCP shall include a minimum of 1,000 data points per building on a 5 minute polling frequency. Each building will have a different set and quantity of existing points available to the ABAMS platform. The Contractor shall audit the points available during the Site Readiness Assessment at each facility to determine which points represent the largest potential and return for FDD and analytics. An example would be to apply the 80/20 rule to the points available, knowing that 80% of the energy is consumed by 20% of the building's equipment. The task order period should focus on this 20% of equipment typically represented by (AHU's, Chillers, Boilers, Pumps, Lighting, VAV Operation, Cooling Towers, etc.).

**C.4.2.2** In the DCCP, the Contractor shall develop an accurate database of each building's systems equipment. This inventory shall be made available via the Contractor's Operator Interface that will be used to report and manage the inventory going forward. This may require, but is not limited to, locating and inventorying:

- Mechanical systems including HVAC (all major fixed equipment: Air Handling Units (Air Handling Units (AHU's), Roof Top Units (RTU's), Pumps, Fans, Fan Coils, Induction Units, Variable Air Volume (VAV), CV's, Heat Exchangers, Chillers, Boilers, Condensing Units/Split System Units, etc.)
- Other Systems (Elevator controls, Lighting, Physical Access Control, Renewable Energy, other Low Voltage systems)

- **C.4.2.3** In the DCCP, the Contractor shall describe its process for mapping data points that will need to be 'normalized' through a software tagging strategy and stored in a common Time Series Database (TSDB). PBS will work with the Contractor to define a standard set of data items (minimum of 1,000 data points per building on a 5 minute polling frequency) to be gathered and stored. Identification of points will be finalized following the facility survey, review of systems in place and submission of the Site Assessment Report as part of the acceptance process by the Government of the recommended solution for that facility.
- **C.4.2.4** The DCCP shall be compatible with industry leading protocols and capable of transmitting building data points to the ABAMS platform using open protocols such as web-based machine readable XML.
- **C.4.2.5** The DCCP shall contain all capture point hardware/software to GSA for device certification and risk vulnerability scanning. GSA must approve all middleware appliances and software applications for GSA LAN/WAN compatibility and supporting GSA security standards, including NIST 800-53. Scanning devices for security vulnerabilities occurs relatively quickly. However vendors should note that mitigating identified vulnerabilities of devices or software applications can take months. GSA, therefore, advises vendors to plan accordingly once specific devices and software to be installed and operate on the GSA network becomes known. Details on GSA device scanning can be found in Attachment C– Building Technologies Technical Requirements.
- **C.4.2.6** The DCCP shall contain the Contractor's proposed hardware device used to collect and transmit trend data at the facility must be capable of preserving 7 days of data at 5-minute intervals for a minimum of 1,000 building data points.
- **C.4.2.7** The DCCP shall support common industry communication drivers such as BACnet IP, LON/IP, and Metasys N1, BACnet MSTP, LonTalk FTT, Modbus RTU, Metasys N2, Siemens P1 and P2, Andover Infinity, American Auto Matrix PUP, and other proprietary BAS and Lighting control protocols. It is expected that other systems including but not limited to lighting control and advanced meters may reside on the GSA LAN but are not integrated into the BAS database. Data from these sources is also expected to be integrated into the ABAMS platform using the data selection plan proposed in the vendor's response. The Contractor shall determine whether the use of a gateway or middleware piece is required for connection to the BAS.
- **C.4.2.8** The DCCP shall be capable of accepting electronic and manual building data point inputs in the event automated loading of data points or manual inputs are needed for accuracy and commissioning of the system.
- **C.4.2.9** The DCCP shall be able to collect local weather information for normalizing utility usage and shall specify the source of that data (e.g., National Weather Service, building specific weather station, etc.).
- **C.4.2.10** The Contractor's process for collecting and transmitting data points shall conform to the Sustainability Support Center's (SSC's) point naming standards (i.e., tagging strategy). The buildings have existing points that have a variety of naming conventions with no consistent standard. After award, the vendor in conjunction with GSA shall develop and implement a common naming and tagging scheme that will be applied to the data via the data normalization phase of this project.
- **C.4.2.11** The DCCP shall identify the data capacity bandwidth required for collection approaches that their proposed solutions are based on and ensure that the proposed solution does not degrade the performance of the local BAS or the GSA network from the Buildings System Network is a part of. Attachment B –Target Buildings Listing shows the current network bandwidth capacity for most facilities.
- **C.4.2.12** The DCCP shall be capable of accepting electronic data from other GSA approved products or industry cloud services (e.g., utility bill consumption data, industry benchmark USGBC data, GSA CMMS, and GSA RETA Overtime Utilities).
- **C.4.2.13** The Contractor shall execute all aspects of the DCCP.
- C.4.3 IT INFRASTRUCTURE AND IMPLEMENTATION (ITI/I)
- **C.4.3.1** The Contractor shall develop, provide, and implement an IT Infrastructure in conformance with this section. The ITI/I shall be able to operate in a large decentralized enterprise. The Contractor shall provide a

centralized product configuration and product management capability at the Headquarters/Sustainability Support Center (SSC) level but de-centralized control and operation on a daily basis at the following levels:

- i. Regional
- ii. Field Office
- iii. Building specific
- iv. Central Office
- **C.4.3.2** The Contractor shall provide a solution reference architecture showing proposed applications, hardware, and software, where these components will reside physically and/or virtually on the network. The Contractor's work shall be compatible with GSA's Information Technology Architecture and Standards (see Attachment C, Building Technologies Technical Requirements).
- **C.4.3.3** The Contractor shall comply with the requirements in Attachment C Building Technologies Technical Requirements to ensure appropriate security measures are taken for all hardware and software used in the Contractor's proposed solution.
- **C.4.3.4** The Contractor's work shall include separate development, test, and production environments.
- **C.4.3.5** The Contractor shall use GSA IT-specified VM-Ware Application Servers, Desktop PC's, and Laptops that are supported by the GSA IT Helpdesk.
- **C.4.3.6** The Contractor shall recommend software release schedules and frequency of release upgrades, interim fixes and enhancements for all products included in their solution for approval by GSA. Software updates must be compliant with GSA standards for current versioning and include current versioning updates for underlying components that support the Contractor's application software such as firmware, JAVA version, and other supporting software component releases.
- **C.4.3.7** The Contractor's web-based operator interface shall be a Windows server based application, which will be hosted on Microsoft Windows platform on a GSA provided and managed server (physical or virtual VMW are servers), that hosts a Web enabled interface allowing complete access to all application functionality. This web based user interface must be capable of being hosted and served completely inside of the GSA private network and not require connectivity through the public Internet to a Contractor's site for hosting.
- **C.4.3.8** The Contractor shall be able limit access to the system and data using administrative privileges using role-based security by user group using Active Directory. The Contractor's solution shall be accessible through the GSA Portal using the Single Sign-on permissions based off of the Government Access Card (GAC) card certificate of the user.
- **C.4.3.9** The analytics solution shall run on a Windows server platform (current requirements as stated in Attachment C Building Technologies Technical Requirements) and use a Time-Series database (TSDB) to store building point's data. Other elements of the solution may use SQL-based relational database technologies.
- **C.4.3.10** The Contractor shall provide computer storage sizing recommendations appropriate to the proposed solution. At the building level, PBS requires 7 days store and forward of up to 1000 points of information in the event of a BSN network outage. At the ABAMS platform level, PBS intends to keep building points data indefinitely. For archival purposes, anticipated sampling intervals shall be 5 minutes, but the system shall be capable of collecting minimum of 1,000 points per building.
- **C.4.3.11** The Contractor shall provide an estimate of data storage requirements based upon 5 minute samples of minimum of 1,000 data points and 1500 building samplings stored in a Time Series Database (TSDB). Before acceptance testing in a production environment, the building data point capture frequency may be adjusted. Points shall be segregated as Advanced Metering Points (AMS) and Building Automation System (BAS) points to determine the time record interval for long term building performance profile archives. AMS points may be archived at 25 minute intervals and BAS points may be 15-30 day (adjustable) First In First Out (FIFO) in an effort to save server resources.

- **C.4.3.12** The Contractor shall develop a weekly ABAMS operational maintenance schedule for the performance period of this contract and duration of the warranty. Scheduled maintenance shall include a 14-day advance notice and approval by the COR, or his duly authorized representative.
- **C.4.3.13** The Contractor shall generate a report each month of all trouble ticket requests.
- **C.4.3.14** GSA requires 24-hour access to the data less the scheduled maintenance window. Uptime must be at least 99%. Reports should be available to the GSA on a day-behind basis. Since ABAMS shall reside in a GSA data center or an approved GSA approved cloud, maintained by the GSA, the vendor shall only support the ABAMS software platform. Government Furnished Equipment and operating systems will be maintained and supported by GSA.
- **C.4.3.15** The Contractor is responsible for GSA approving all system security, hardware certification, software certification, end user license agreement language., IT policies and procedures can be found in Attachment C Building Technologies Technical Requirements.

## C.4.4 BUILDINGS ANALYTICS AND FAULT DETECTION AND DIAGNOSTICS (BA/FDD)

- **C.4.4.1** The Contractor shall develop and provide BA/FDD in conformance with this section. The BA/FDD shall have the ability to mine vast amounts of data quickly and apply software-based algorithms to identify and define trends so that more proactive management of building systems can occur. The BA/FDD shall identify patterns that traditional BAS/BMS systems often overlook, draw conclusions, notify stakeholders, and correct issues in building mechanical and control systems automatically or via proactive automated CMMS maintenance requests before they manifest themselves in ways that cause downtime or prolonged periods of inefficient operation.
- **C.4.4.2** The BA/FDD shall provide the ability to allow building managers to optimize on-going operations through a series of processes including, but not limited to, fault based analysis, continuous evaluation of zones, set points, schedules, competing air handlers, unbalanced airflows, control component degradation, sensor failures, valve leakage, loose fan belts.
- **C.4.4.3** The BA/FDD shall provide advanced continuous commissioning strategies capable of taking into account defect detection prior to seasonal weather changes (proactive building maintenance based on geographical and seasonal variables).
- **C.4.4.4** The BA/FDD shall address each Region's commissioning program. The BA/FDD shall describe the process by which building engineers and commissioning agents, who are already in the building and understand the building best, will be able to provide feedback and recommendations to the SSC ABAMS platform for building specific analytics. The BA/FDD shall indicate how building engineers and commissioning agents will use the Contractor's solution to develop advanced level of analytics which can then be added to the national SSC platform for that particular building.
- **C.4.4.5** The BA/FDD shall provide local engineers the ability to see what analytics rules are affecting alerts specific to their buildings and provide a mechanism to override, adjust, and manage rules that affect site specific scenarios related to a building's unique mechanical, electrical and plumbing (MEP) characteristics and site specific sequences of operation.
- **C.4.4.6** The Contractor's BA/FDD shall employ features that analyze roof top units (RTU) load and schedule, correlate related equipment performance (including, but not limited to, fan operation and compressor run times), humidity monitoring, and perceived occupant comfort.
- **C.4.4.7** The BA/FDD shall be able to accept alarm events from remote systems and trigger a response or notification (e.g., email, pager, work order) from the ABAMS\_platform. Examples of current alarms in place at some GSA facilities include, but are not limited to:
  - Chiller and/or boiler operation/enabled longer than 12 hours
  - Chiller and/or boiler weekend/holiday operation
  - Simultaneous heating and cooling
  - Building KWH upper limit alarm

Notification when system is up/down

The BA/FDD must apply multi level algorithms and rules based features. This shall include at a minimum:

- Level One Analytics: General rules and algorithms that can be applied to the masses with little or no modification.
- Level Two Analytics: Custom rules and algorithms that have been configured for the MEP systems and sequences of a particular building.
- **C.4.4.8** The BA/FDD shall be capable of generating a management report of exceptions, trigger alarms, or notifications and automated work orders to CMMS and function across the entire GSA portfolio.
- **C.4.4.9** The ABAMS platform and Operator Interface (OI) shall be able to generate a hierarchy of alarms and recorded distribution of notifications to Property Managers, Senior Property Managers, O&M Contractors, metering Contractors, specialized subject area engineers and commissioning agents.

## C.4.5 STAKEHOLDER TOOLS

- **C.4.5.1** The Contractor shall develop and provide the Stakeholder Tools (the "Tools") in conformance with this section. The Tools shall be able to track energy usage data points and summarized consumption metrics regardless of sub-metering strategy deployed in a specific building. Usage data shall be compiled and reported by device, electrical circuit, panel, floor, building, Service Center, Region or GSA portfolio and compared to respective benchmark data, including the ability to draw comparisons to other buildings within the GSA portfolio.
- **C.4.5.2** The Tools shall include built-in features to input assumptions and calculate anticipated energy costs based on water, gas, steam, electricity consumption and factoring the use of all on-site generation by building and square foot, operational guidelines, and various deployed strategies such as Fault Detection and Diagnostics (FDD), and controls.
- **C.4.5.3** The Tools shall be able to generate summarized Return on Investment (ROI) statistics in the form of Net Present Value (NPV) which includes Net Savings, Savings to Investment Ratio, Break Even Point, Internal Rate of Return and Payback Period consistent with Life-Cycle Cost Analysis (LCCA) measures being performed by the National Institute of Standards and Technology (NIST) and required by the Office of Management and Budget (OMB).
- **C.4.5.4** The Tools shall be flexible enough to generate multiple types of reports with ranges of variables and reports with building efficiency rankings, greenhouse gas emissions, U.S. Green Buildings Council (USGBC) criteria, and on-site renewable sources.
- **C.4.5.5** The Tools shall have a quantity of pre-designed reports capable of generating customized queries and reports, such as Fault Rate Frequency over a broad range of dates, or more detailed set point comparisons of specific types of equipment or set points buildings, Service Centers, or Regions.
- **C.4.5.6** The Tools shall have the ability to normalize data with actual seasonal data versus typical year using available on-line weather data; occupancy, usage type and operating hours with EPA Energy Star as reference.
- **C.4.5.7** The Tools shall be capable of tracking the type of tenants occupying space (e.g., GSA-only tenant, multitenant Federal Office Buildings, combination multi tenant Federal Office Building/Courthouses with the Judiciary occupying less than 75 percent of the space, ns, multi-, Courthouses with an occupancy rate of 75 percent or greater, Land Ports of Entry, buildings delegated to other agencies (in their entirety or a specified area of operation), Child Care Centers, Data Centers, etc.).

## C.4.6 ROLE-BASED OPERATOR INTERFACE (OI)

- **C.4.6.1** The Contractor shall provide a secure Web based Operator Interface (OI) in conformance with this section with no client software required on Government Furnished Equipment (GFE) workstations. The following web browser version (minimum) will be required:
  - Google Chrome Version 10, Internet Explorer Version .8, Firefox Version 3.6

- **C.4.6.2** The OI shall be able to display building information simultaneously in multiple formats (i.e. AHU graphic, temperatures, trends).
- **C.4.6.3** The OI shall be able to collect data points from any building and create trends for analysis at the building, Service Center, Regional, or GSA portfolio level.
- **C.4.6.4** The OI shall have tools that shall allow building engineers and stakeholders to create, analyze, view, and understand building system equipment trends.
- **C.4.6.5** The OI shall have non-proprietary communication protocol (open points)
- **C.4.6.6** GSA requires 24-hour access to the OI less the scheduled maintenance window. Uptime must be at least 99%.
- **C.4.6.7** The OI shall include a tool for building and facilities engineers to update mechanical and building systems inventory captured in the initial site survey. This tool shall be graphical in nature and in 3D rendering to enhance intuitiveness and less end user training with the intent of improving adoption rates for the tool in the field.
- **C.4.6.8** The OI shall have the ability to drill down to the building, floor, and device level and graphically show the location of prioritized alarms, alerts, notifications based on event triggers coming from the ABAMS platform.
- **C.4.6.9** The OI shall have Administrative and User privileges using Active Directory that include the ability to restrict access to individual users to specific functions.
- **C.4.6.10** The OI shall have the ability to create user defined alerts and notifications (e.g. email, pager, work orders) to building managers engineers and O&M Contractors to reinforce analysis discovered at the ABAMS platform level. These defined alerts shall be recorded and tracked for future troubleshooting and historical analysis.
- **C.4.6.11** The OI shall have an audit trail of changes featured under a System Administrators workbench or System Administrator only OI.

## C.4.7 SYSTEM INTERFACE/INTEGRATION PLAN (SIIP)

- **C.4.7.1** The Contractor shall develop and provide a SIIP in conformance with this section. The SIIP shall set forth a strategic approach and plan for interfacing to and from ABAMS platform including recommended open architecture, toolset, interface coding language, and any other key elements to support an open, non-proprietary, extensible, and scalable interface plan for the ABAMS platform. Open, non-proprietary means all building control systems (Mechanical, HVAC, Lighting, Advanced Meters, BAS, etc.) use commonly accepted standard communications protocols including native versions of BACNet IP, LONTalk IP, or Modbus IP and the use of such protocols does not lock the GSA into long term support contracts that prevent support from multiple industry providers or cause additional licensing fees due to proprietary adoption of the open protocols.
- **C.4.7.2** The SIIP shall offer connectivity to industry standard building automation systems using open protocols.
- **C.4.7.3** The SIIP shall use pre-packaged, Commercial-Off-the-Shelf (COTS), XML-based application programming interfaces (APIs) for purposes of interfacing to 3rd party industry products. The solution API's should be configurable to minimize the need for any customization.
- **C.4.7.4** The SIIP shall interface into the GSA Oracle database search for R-Type RWA (Overtime Work Authorization) for overtime operation of chillers. If RWA or Estimate is not on file, the algorithm shall include notification to any of the ABAMS stakeholder groups which includes, but is not limited to, building operators and property managers.
- **C.4.7.5** The SIIP shall be able to retrieve information from the BAS and ABAMS software and transmit it in machine readable XML format to Computerized Maintenance Management System (CMMS) systems to generate work orders, trouble tickets, pro-active maintenance requests, etc.

- **C.4.7.6** The CMMS platform will remain the master database of record for work orders, corrective measures, work order close-out, and work order reporting. ABAMS shall transmit proactive maintenance notifications to CMMS so CMMS can prioritize and bundle work orders in a cost effective manner.
- **C.4.7.7** The SIIP shall be able to access CMMS work order and repair histories via standard API (machine readable XML) for purposes of ABAMS analytical processing. ABAMS shall be capable of receiving standard, machine readable XML formatted requests from CMMS systems.
- **C.4.7.8** The SIIP shall give a user OI the ability to pass ABAMS alarm and notification information to CMMS so work orders, notification, e-mails, can be generated and dispatched from agency CMMS to O&M Contractor systems.
- **C.4.7.9** The SIIP shall have the ability to import and export data to/from DOE's Energy Star program.
- **C.4.7.10** The Contractor's proposed ABAMS analytics software will distinguish between generated events as being 'Critical' and Non-Critical.' Generated events designated as 'critical' shall be triggered and delivered immediately to CMMS for dispatch to building managers and designated O&M Contractors. Non-critical events or alarms shall be programmed to be delivered on operator request or automatically, on a scheduled timer. All ABAMS event conditions shall be assigned an urgency priority. Urgent events may be programmed as text messages to devices and/or to email individual workstations, cell phones, or via Personal Digital Assistant (PDA) smart phone applications.

# C.4.8 DATA CONVERSION PLAN (DCP)

- **C.4.8.1** The Contractor shall, in conformance with this section, partner with GSA staff to develop a DCP regarding the conversion and migration of data. The Contractor shall define the vehicle for system loading and the required data format. The Contractor shall be responsible for the extraction of the building data and the translation function of the conversion process. The Contractor shall be responsible for the overall successful execution of the DCP.
- **C.4.8.2** The DCP shall be capable of converting and storing a minimum of 3 years of historical building points and energy usage data on-line for research and analysis where these data are available (not all buildings have historical data). At the ABAMS platform level, GSA intends to keep building points data indefinitely.
- **C.4.8.3** The Contractor shall analyze the accuracy of the current PBS building and usage data for conversion to their platform and make recommendations on how they will assist PBS in ensuring the accuracy and integrity of the content of the converted data.

## C.4.9 PERFORMANCE TRACKING AND MEASUREMENT PLAN (PTMP)

- **C.4.9.1** The Contractor shall develop and submit a Performance Tracking and Measurement Plan (PTMP) in conformance with this section. The PTMP that shall include the capability to monitor, track, and report operational and financial performance criteria. An example might be tracking the financial impact of faults that do not get fixed in a timely fashion once discovered like loose fan belts, motors that run excessively, or mal-functioning dampers which restrict air flow. In order to report monthly to GSA leadership, reports shall show operational efficiencies or inefficiencies resulting from ABAMS events, triggers, and alarms so Return on Investment (ROI) analysis and statistics can be tracked and monitored, allowing GSA leadership to focus on high return ABAMS analytics events. Contractor shall recommend criteria to be used in measuring performance of the platform.
- **C.4.9.2** The PTMP shall establish a baseline energy consumption and cost for purposes of eventually comparing actual vs. past performance.
- **C.4.9.3** The PTMP shall include an analytics Fault Detection and Diagnostics (FDD) solution that automatically monitors, predicts, tracks, and reports excess energy usage due to faults. ABAMS shall detect and track fault impact on energy consumption.
- **C.4.9.4** The PTMP shall apply common FDD rules on all building data points prioritizing 80% of energy waste on 20% of heavy use equipment.

**C.4.9.5** The PTMP shall allow the building engineer or the MEP engineer to customize rules for actual building conditions and systems providing a flexible way to tailor ABAMS platform to specific building situations.

**C.4.9.6** The PTMP shall track and report building system operational costs (OPEX) on a daily, monthly, quarterly, annual cost per square foot basis and per person occupancy (following established EPA Portfolio Manager Energy Star qualifications). These OPEX costs shall be trended over time in user-definable time periods for purposes of tracking and reporting ROI metrics.

**C.4.9.7** The Contractor shall be responsible for executing the PTMP plan for the term of this agreement.

#### C.5 OPERATION AND MAINTENANCE

Contractor shall be responsible for the operation and maintenance of the proposed solution and non-Government Furnished Equipment. Examples of this are, but not limited to; Workstations, servers, controllers, software, services, warranty, labor, staff, materials, manuals, reporting requirements, data normalization, data definitions, analytics, training of owner staff, etc.

The Contractor shall develop and execute a weekly ABAMS operational maintenance schedule for the performance period of this contract and duration of the warranty. Scheduled maintenance shall include a 14-day advance notice and approval.

The Contractor shall be first level of support for all issues regarding the ABAMS system and the Digital Signage solution. The Contractor shall be responsible for tracking the issue from beginning to end to ensure timely solutions. Contractor shall work with PBS CIO if the Contractor determines the issues lies in an area that GSA controls.

The Contractor shall provide ABAMS operational support services for the SSC, including a minimum of 2 full-time analytics specialists for the duration of the task order. These resources will provide support to the regions and buildings using the ABAMS platform as well as auditing the use of the system to ensure GSA is realizing the maximum benefits of the system. At least one of the analytics specialists shall be physically onsite at the SSC at 1800 F Street from 8am-5pm Monday thru Friday. The 2 full-time specialists shall supply a written summary of results and recommended actions to each building on a monthly basis (once that building is live on the system). The specialist shall review the report with an individual at the building.

The Contractor shall support the digital signage media architecture for the term of the contract. The Contractor will be the first level of support and they will be responsible for tracking the issue from beginning to end to ensure timely solutions.

The Contractor shall support the content on the digital display and is responsible for keeping it "fresh" for the term of this contract. It should follow best practices in regards to ensuring that the content engages the occupants of the buildings.

### C.6 TRANSITION OUT

The Contractor shall also prepare and execute a Transition-Out Plan that details the contractor's transition-out strategy at the end of the task order's period-of performance (PoP). The Transition-Out Plan shall be delivered to the Government no later than (NLT) thirty (30) days prior to the end of the PoP. The contractor shall include in the Transition-Out Plan an approach that provides for a seamless transition. The Plan shall identify the roles and responsibilities of the contractor including proposed schedule(s) and milestones to ensure no disruption of service. The Transition-Out Plan shall be updated as required at the end of the task order PoP.

## C.7 DETAILED PROJECT PLAN

The Contractor shall prepare a Detailed Project Plan for the execution of all work required under the Task Order. The Contractor shall submit the Detailed Project Plan for approval no later than thirty (30) days

after award of the Task Order. The Contractor shall submit updates to the Detailed Project Plan no later than the fifth (5th) calendar day of the beginning of each month.

# C.8 SERVICE LEVEL AGREEMENTS (SLAs)

The Contractor shall submit for approval an approach for identifying, measuring, and documenting Contractor-identified SLAs and metrics.

## SECTION D - PACKAGING AND MARKING

NOTE: Sections D.2 and D.3 of the Alliant GWAC are applicable to this Task Order Request and resulting Task Order and are hereby incorporated by reference. In addition, the following applies.

#### D.1 PRESERVATION, PACKAGING, PACKING, AND MARKING

The contractor shall deliver all electronic versions by email and CD-ROM. Identified below are the required electronic formats, whose versions must be compatible with the latest, commonly available version on the market.

1.	Text	Microsoft Word
2.	Spreadsheets	Microsoft Excel
3.	Briefings	Microsoft PowerPoint
4.	Drawings	Microsoft Visio
5.	Schedules	Microsoft Project

#### SECTION E – INSPECTION AND ACCEPTANCE

NOTE: Paragraph E.1 of the Alliant contract is applicable to this task order request and resulting task order and is hereby incorporated by reference. In addition, the following applies:

#### E.2 PLACE OF INSPECTION AND ACCEPTANCE

Inspection and acceptance of all work performance, reports and other deliverables under this Task Order shall be performed by the following individuals:

- GSA
- ATTN: TBD, Contracting Officer's Representative (COR)

## E.3 SCOPE OF INSPECTION

- **E.3.1** All services performed and deliverables submitted will be inspected for content, completeness, accuracy and conformance to Task Order requirements by the AAS COR in coordination with the PBS TPOC. Inspection may include validation of information or software through the use of automated tools and/or testing of the deliverables, as specified in the Task Order. The scope and nature of this testing will be sufficiently comprehensive to ensure the completeness, quality and adequacy of all deliverables.
- **E.3.2** The Government requires a period not to exceed fifteen (15) workdays after receipt of final deliverable items for inspection, testing, acceptance or rejection.

#### E.4 BASIS OF ACCEPTANCE

The basis for inspection/acceptance shall be compliance with the requirements set forth in the Task Order and other terms and conditions of the task order. Deliverable items rejected shall be corrected in accordance with the applicable clauses.

**E.4.1** NTE items such as Travel will be accepted upon receipt of proper documentation as specified in this Task Order under sections G.10.4 and G.10.5 respectively.

- **E.4.2** Reports, documents, and narrative type deliverables will be accepted when all discrepancies, errors or other deficiencies identified in writing by the Government have been corrected.
- **E.4.2.1** If the draft deliverable is adequate, the Government may accept the draft and provide comments for incorporation into the final version.
- **E.4.2.2** All of the Government's comments to deliverables must either be incorporated in the succeeding version of the deliverable or the Contractor must demonstrate to the Government's satisfaction why such comments should not be incorporated.
- **E.4.2.3** If the Government finds that a draft or final deliverable contains spelling errors, grammatical errors, improper format, or otherwise does not conform to the requirements stated within this Task Order, the document may be immediately rejected without further review and returned to the Contractor for correction and resubmission. If the Contractor requires additional Government guidance to produce an acceptable draft, the Contractor shall arrange a meeting with the COR in coordination with the PBS TPOC.

NOTE: Inspection and acceptance documentation must be received and included in the task order file prior to payment of invoices.

## E.5 INITIAL DELIVERABLES

- **E.5.1** The Government will provide written acceptance, comments and/or change requests, if any, within fifteen (15) work days from receipt by the Government of the initial deliverable.
- **E.5.2** Upon receipt of the Government comments, the Contractor shall have ten (10) work days to incorporate the Government's comments and/or change requests and to resubmit the deliverable in its final form.

#### E.6 WRITTEN ACCEPTANCE/REJECTION BY THE GOVERNMENT

The Government shall provide written notification of acceptance or rejection of all final deliverables within fifteen (15) work days. All notifications of rejection will be accompanied with an explanation of the specific deficiencies causing the rejection.

## E.7 NON-CONFORMING PRODUCTS OR SERVICES

Non-conforming products or services will be rejected. Deficiencies will be corrected, by the Contractor, within ten (10) work days of the rejection notice. If the deficiencies cannot be corrected within ten (10) work days, the Contractor will immediately notify the COR of the reason for the delay and provide a proposed corrective action plan within ten (10) work days.

### SECTION F - DELIVERABLES OR PERFORMANCE

NOTE: Paragraphs F.1 through F.5 of the Alliant contract are applicable to this task order request and the resulting task order and are hereby incorporated by reference. In addition, the following applies:

#### F.3 PERIOD OF PERFORMANCE

The period of performance for this task order begins on date of award through two (2) years. The transition-in period begins immediately after task order award and continues for 30 days. The period of performance for this task order does not extend beyond the current Alliant master contract period of performance.

### F.4 PLACE OF PERFORMANCE

The contractor shall perform the work at various GSA locations throughout the Washington, DC metropolitan area. Primary performance shall occur at the GSA Buildings identified in Attachment B at the throughout the United States. Services shall be performed at the following locations. In some cases, there will be multiple buildings in a city:

•	Aberdeen, SD
•	Albuquerque, NM
•	Atlanta, GA
•	Baltimore, MD
•	Battle Creek, MI
•	Boise, ID
•	Boston, MA
•	Camden, NJ
•	Cheyenne, WY
•	Chicago, IL
•	Cincinnati, OH
•	Cleveland, OH
•	Columbia, SC
•	Concord, NH
•	Dallas, TX
•	Denver, CO
•	Des Moines, IA
•	Detroit, MI
•	El Paso, TX
•	Eugene, OR
•	Fargo, ND
•	Farmers Branch, TX
•	Fort Worth, TX
•	Hammond, IN
•	Hartford, CT
•	Houston, TX
•	Indianapolis, IN
•	Islip, NY
•	Jacksonville, FL
•	Kansas City, MO
•	Knoxville, TN
•	Laguna Niguel, CA
•	Lakewood, CO
•	Las Cruces, NM
•	Las Vegas, NV
•	Louisville, KY
•	Memphis, TN
•	Miami, FL
•	Minneapolis, MN
•	Mobile, AL
•	New York-Kings, NY
•	New York-Manhattan, NY
•	Newark, NJ
•	Oakland, CA
•	Omaha, NE
•	Philadelphia, PA
•	Pittsburgh, PA
•	Portland, OR
•	Raleigh, NC

• Richland, WA
Salt Lake City, UT
San Antonio, TX
San Francisco, CA
• Seattle, WA
• Silver Spring, MD
• St Louis, MO
• St Paul, MN
• Trenton, NJ
• Washington, DC
• Wichita, KS

For more detailed information on additional locations and building specifications, see Attachment B (Target Building Listing).

The Contractor shall provide any workspace and facilities at no direct cost to the Government.

## F.5 TASK ORDER SCHEDULE AND MILESTONE DATES

The following schedule of milestones will be used by the Government to monitor timely progress under this task order. In this schedule, TOA designates "Task Order Award", NLT designates "No Later Than", "NTP" designates "Notice to Proceed", WD designates "Work Days", and PS designates "Project Start". This schedule is required to meet mission objectives. Variances to this schedule must be agreed to by both parties.

MILESTONE/DELIVERABLE	DELIVERIES OR PERFORMANCE RESPONSIBILITY	PLANNED COMPLETION DATE	
Project Start (PS)	Contractor/GSA	At TOA	
Post-Award Kickoff Meeting (POA)	Contractor/GSA	NLT 5 WD after TOA	
Post-Award Orientation	Contractor/GSA	On-going during the first 30 days after TOA	
Service Level Agreements (SRA)	Contractor/GSA	NLT 30 days from NTP	
Assessments	Fast 50 Site Assessments – first 10	NLT 75 days from NTP	
Assessments	Fast 50 Site Assessments – segments of 10	Every 30 days after first segment	
ABAMS	ABAMS Technical Architecture approved by PBS CIO	NLT 90 days from NTP	
ABAMS	Data Capture Plan	NLT 120 days from NTP	
ABAMS	ABAMS Environment Test Plan	NLT 150 days from NTP	
ABAMS	ABAMS Application Test Plan	NLT 150 days from NTP	
ABAMS	ABAMS application complete	NLT 210 days from NTP	
ABAMS	1st building sending data to ABAMS	NLT 210 days from NTP	
ABAMS	ABAMS training manual complete	NLT 210 days from NTP	
ABAMS	15 buildings live on ABAMS	NLT 365 days from NTP	
Digital Signage	Digital Display Architecture approved by PBS CIO	NLT 180 days from NTP	
Digital Signage	Content Design for Digital Display complete	NLT 210 days from NTP	
Digital Signage	Digital Signage Test Plan	NLT 210 days from NTP	
Digital Signage	Training Materials	NLT 240 days from NTP	
Digital Signage	Kiosk Design complete with prototype	NLT 240 days from NTP	
Digital Signage	1st Kiosk installed in building	NLT 365 days from NTP	

Digital Signage	Digital Content management manual complete	NLT 300 days from NTP
SSC	SSC design complete	NLT 150 days from NTP
SSC	SSC build out complete	NLT 210 days from NTP

#### F.6 PLACE OF DELIVERY

Originals and copies of all correspondence that require Government certification and signature, such as invoices for payment, shall be delivered to the GSA Contracting Officer's Representative (COR) at the below address:

Copies of all correspondence shall be delivered to the PBS TPOC at the address below:

Electronic submission of all other deliverables shall be delivered via email. Copies of monthly status reports and invoices shall be submitted to the Contracting Officer at the following address:

#### F.7 NOTICE REGARDING LATE DELIVERY

The Contractor shall notify the COR, as soon as it becomes apparent to the Contractor, that a scheduled delivery will be late. The Contractor shall include in the notification the rationale for late delivery, the expected date for the delivery, and the project impact of the late delivery. The COR will review the new schedule and provide guidance to the Contractor. Such notification in no way limits the Government's right to any and all rights and remedies up to and including termination.

## F.8 WRITTEN DELIVERABLES

The Contractor's Project Manager shall review, approve, and sign all draft and final documents before being delivered to GSA. All draft and final documents shall be delivered electronically by a designated corporate official of the Contractor to the COR and the PBS TPOC as specified in paragraph F.6. Delivery in this way shall certify that the document is complete, concise, accurate, and has been thoroughly reviewed by the Contractor management in accordance with the proposed quality assurance and project management plans for compliance with this task order.

## F.9 DELIVERABLES MEDIA

All deliverables, including technical products, shall be delivered in electronic format using Microsoft Office 97-2003 or higher (Word, Excel, PowerPoint, Access, or Project as appropriate) to the AAS COR with a copy furnished to the PBS TPOC. The Contractor shall utilize Microsoft Project for all project plans. The Contractor shall ensure all data is transmitted virus free.

### F.10 PROJECT REVIEW CONFERENCES

The contractor shall participate on project review conferences.

## F.11 TRAVEL AUTHORIZATION

Prior to any long-distance travel, the contractor shall prepare a Travel Authorization Request (example provided at award) for Government review and approval. The contractor shall prepare a Trip Report within 10 days of completing the trip. The contractor shall keep a web-accessible summary of all long-distance travel including, at a minimum, the name of the employee, location of travel, duration of trip, and TPOC at travel location. As required by the governing Travel Authorization Request, Trip Reports shall be delivered in accordance with Sections D, E, and F of this task order.

#### SECTION G - CONTRACT ADMINISTRATION

NOTE: Paragraphs G.1 through G.9 of the Alliant contract are applicable to this Task Order Request and resulting Task Order and are hereby incorporated by reference. In addition, the following applies:

For all invoices, the contractor shall provide invoice backup data, including labor categories, rates and quantity of labor hours. Invoices shall be sent to:

- portal.fsa.gov
- www.finance.gsa.gov

NOTE: In order to be considered for award, all vendors must be registered in the IT Solutions System. Any contractor that is not registered at time of award shall not be considered for award. Contractor's can register at:

https://web.itss.gsa.gov/itss/v41\_helpdocs.nsf/HomeTellMeRegAbout/About+Contractor+Registration?OpenDocument

NOTE: FAILURE TO SUBMIT THE INVOICE IN ITSS WILL RESULT IN REJECTION OF THE INVOICE.

#### G.1 INVOICE SUBMISSION

The Contractor shall submit Requests for Payments in accordance with the format contained in GSAM 552.232-70, INVOICE REQUIREMENTS (SEPT 1999), to be considered proper for payment. In addition, the data elements indicated below shall be included on each invoice:

Task Order Number: (from GSA Form 300, Block 2)

Paying Number: (ACT/DAC NO.) (From GSA Form 300, Block 4)

NCR Project No.:

Project Title: PBS Smart Buildings/Facility Management and Services

The Contractor shall provide invoice backup data, including labor categories, rates, and quantities of labor hours.

## G.1.1 INVOICE INSTRUCTIONS

A proper invoice for each task order shall be submitted monthly and not later than 5 work days after acceptance by the Government of the product, service, and/or cost item. A separate invoice for each task order shall be submitted on official company letterhead with detailed costs for each of the following categories:

- 1. Total labor charges
- 2. Travel and per diem charges
- 3. Total other direct charges (ODC)
- 4. Total invoice amount
- 5. Prompt payment discount offered (if applicable)

For other direct costs such as equipment, travel, per diem, subcontractor labor, etc., invoices shall reflect the contractor's actual expense for the item, plus General and Administrative charges (G&A) These charges shall not exceed limits specified in the task order. No charges will be paid by the Government that are not specifically detailed in the individual task order and specifically approved in the underlying contract. Copies of contractor paid invoices, receipts, and travel vouchers completed in accordance with Federal Travel Regulations (FTR) shall be maintained by the contractor and made available to the Government upon request.

In addition to the above information, the invoice shall include the following minimum task identification:

- 6. GSA Task Order Number
- 7. Accounting Control Transaction (ACT) number (assigned by GSA on the Delivery Order, GSA Form 300, Block 4)
- 8. Period of Performance (month services performed for work request task orders, month deliverable completed for fixed price task orders).

- 9. Invoice Number
- 10. Client name and address

When the paying office is GSA, the original of each invoice, with supporting documentation, shall be submitted to the GSA Paying Office designated in Block 24 of the GSA Form 300.

In those cases where the paying office is other than GSA, the invoice/paying office will be as specified in the order. One additional copy of each invoice, with supporting documentation, shall be submitted to the address as designated in the order. Invoices for final payment must be so identified and submitted when tasks have been completed and no further charges are to be incurred. These close-out invoices, or a written notification that final invoicing has been completed, must be submitted to the ordering agency within 30 days of task order completion. A copy of the written acceptance of task completion must be attached to final invoices. If the contractor requires an extension of the 30-day period, a request with supporting rationale must be received prior to the end of the 30-day period.

Labor hours of subcontractors shall not be billed at a rate other than the fully burdened hourly rates agreed to in the task order or at a rate specifically authorized for the task order as ODC's.

## G.1.2 FIRM FIXED PRICE (FFP) CLINs

The contractor may invoice as stated in Section B for the FFP CLINs. The invoice shall include the period of performance/deliverable covered by the invoice and the CLIN number and title. All costs shall be reported by CLIN element (as shown in Section B) and shall be provided for the current invoice and in total from project inception to date. The contractor shall provide the invoice data in spreadsheet form with the following detailed information. The listing shall include separate columns and totals for the current invoice period and the project to date.

- Firm Fixed Price (period of performance/deliverable— as stated in Section B)
- Cost incurred not billed

# G.1.3 TRAVEL

The Contractor may invoice monthly on the basis of cost incurred for the travel CLIN. The invoice shall include the period of performance covered by the invoice, the CLIN number and name and the Task Order number. In addition, the Contractor shall provide the following detailed information for each invoice submitted, as applicable. Spreadsheets shall be submitted for travel with separate columns for the following:

<u>Project Total Travel</u>: This will identify all current and past travel on the project and the total project costs billed. The listing shall include separate columns and totals for the following information concerning the current invoice period and the project to date:

- Current invoice period
- Names of persons traveling
- Number of travel days
- Dates of travel
- Number of days per diem charged
- Per diem rate used
- Total per diem charged
- Transportation costs
- Other charges
- Total charges

CLIN/Task Total Travel: This will identify all current and past travel on the project and their total CLIN/Task costs billed. The listing shall include separate columns and totals for the current invoice period and the project to date:

- Current invoice period
- Names of persons traveling
- Number of travel days
- Dates of travel
- Number of days per diem charged

- Per diem rate used
- Total per diem charged
- Transportation costs
- Total charges

All cost presentations provided by the Contractor shall also include Overhead Charges and General and Administrative Charges.

#### G.1.4 ORDER OF PRECEDENCE CLAUSE

In the event of a conflict or ambiguity between the awarded Task Order and the Technical Proposal, the terms and conditions of this Task Order shall govern.

# SECTION H – SPECIAL ORDER REQUIREMENTS

## H.1 GOVERNMENT FURNISHED PROPERTY (GFP)

With the exception of the space provided at 1800 F Street, the Government will not provide office space or equipment as Government Furnished Property for contractor personnel at the building locations. The contractor shall be responsible for safeguarding all government equipment, information and property provided for contractor use. At the close of each work period, government facilities, equipment, and materials shall be secured.

## H.1.1 GOVERNMENT FURNISHED INFORMATION (GFI)

The government will provide information on site leases, construction plans, drawings, specifications, and construction schedules.

All Government furnished information shall remain the property of the Government and shall be returned to the Government prior to the end of this task order. In addition, sharing of Government furnished information shall only be done after obtaining written approval from the GSA Contracting Officer, in advance of sharing Government furnished information. Any contractor changes to Government furnished information under this task order shall become the property of the Government.

# H.2 SECURITY REQUIREMENTS

The offeror will be responsible for complying with HSPD-12 requirements. All contract employees working greater than 180 days, or requiring logical access to the GSA network will require the successful completion of a National Agency Check with Written Inquiries (NACI).

All contract employees designated as 'Key Personnel will require a NACI, at a minimum.

### H.3 ORGANIZATIONAL CONFLICT OF INTEREST AND NON-DISCLOSURE REQUIREMENTS

## H.3.1 ORGANIZATIONAL CONFLICT OF INTEREST

If the Contractor is currently providing support or anticipates providing support to the GSA that creates or represents an actual or potential organizational conflict of interest (OCI) as defined in FAR Subpart 9.5, the Contractor shall immediately disclose this actual or potential OCI in accordance with FAR Part 9.5. The contractor is also required to complete and sign an Organizational Conflict of Interest Statement in which the Contractor (and any Subcontractors, consultants or teaming partners) provide information concerning the actual or potential conflict with any response for any solicitation relating to any work in the TO. All actual or potential OCI situations shall be handled in accordance with FAR Subpart 9.5.

## H.3.2 NON-DISCLOSURE REQUIREMENTS

All Contractor personnel (to include Subcontractors, teaming partners, and consultants) who will be personally and substantially involved in the performance of the TO issued which requires the Contractor to act on behalf of, or provide advice with respect to any phase of an agency procurement, as defined in FAR 3.104-4, shall execute and

submit a "Certificate of Non-Disclosure Agreement for Contractor Employees" Form (See Attachments J and K respectively, provided at time of award). This is required prior to the commencement of any work on such TO and whenever replacement personnel are proposed under an ongoing TO. Any information obtained or provided in the performance of this TO is only to be used in the performance of the TO. All contractor employees assigned to work under this task order shall complete Attachment K. Additionally, the contractor (and any Subcontractors, consultants or teaming partners) is required to complete and sign Attachment J, Organizational Conflict of Interest (OCI). This is required prior to the commencement of any work under the task order.

The contractor is responsible for protecting all information used, gathered, or developed as a result of work performed on this task order. In addition, the contractor will protect all unclassified government information and materials as sensitive business, confidential information, controlling and limiting access to the information, and ensuring the data and equipment are secured.

#### H.4 KEY PERSONNEL

#### H.4.1 SUBSTITUTION OF PERSONNEL

The contractor shall not remove or replace any management, personnel, consultants, or subcontractors listed or described in the Contractor's Staffing Plan (see Section L) without notifying and obtaining the written concurrence of the GSA Contracting Officer (CO). The Contractor's notification shall be no later than ten (10) calendar days in advance of any proposed substitution and shall include justification (including resume(s) and labor category of proposed substitution(s) in sufficient detail to permit evaluation of the impact on TO performance.

Substitute qualifications shall be equal to, or greater than, the qualifications of the personnel being substituted. If the Government CO determines that the proposed substitute is unacceptable, or that the reduction of effort would be so substantial as to impair the successful performance of the work under the TO, the contractor may be subject to default action as prescribed by FAR 52.249-6.

#### H.4.2 KEY PERSONNEL QUALIFICATIONS

#### H.4.2.1 Program Manager

The contractor shall identify a Program Manager to serve as the Government's single-point-of-contact and to provide overall leadership and guidance for all contractor personnel assigned to the task order. The PM is ultimately responsible for the quality and efficiency of the task order to include both technical issues and business processes. The PM shall be an employee of the prime Alliant contractor. The PM shall assign tasking to contractor personnel, supervise on-going technical efforts, and manage overall task order performance. This individual shall have the ultimate authority to commit the contractor's organization and make decisions for the contractor's organization in response to Government issues, concerns, or problems. This person shall be readily available to respond to Government questions, concerns, and comments, as well as be proactive in alerting the Government to potential contractual or programmatic issues.

The PM shall have some or all of the following demonstrated experience, skills, and qualifications:

- a. Experience in planning, directing, and managing complex IT projects/operations of a nature similar in size and scope as referenced in this TOR, in particular those performing Intelligent Building Systems Support;
- b. Knowledge and experience in systems/infrastructure implementation in a construction environment consisting of primarily existing occupied buildings; up-to-date knowledge of current and emerging Building Automation technologies;
- c. Experience with the management and supervision of a significant number of staff (25 persons or more) of various labor categories and skills dispersed over a wide geographical area in projects similar in size and scope as proposed for this TOR;
- d. Demonstrated written and oral communication skills, including experience in presenting material to senior Government officials;
- e. Experience with performance-based contracts;
- f. PMP Certified; and
- g. ITIL Certified.

# H.5 TRANSFER OF HARDWARE/SOFTWARE MAINTENANCE AGREEMENTS TO GOVERNMENT/CONTRACTOR

At the conclusion of this task order, the contractor shall ensure that all hardware/software agreements entered into under this task order are transferable to the Government and/or to other contractors at the discretion of the Government.

#### H.6 CONTRACTING OFFICER'S REPRESENTATIVE (COR)

- (a) A contracting Officer Representative (COR) may be appointed to assist the CO in administration of this task order.
- (b) When the appointment of a COR is deemed necessary, the CO will issue the formal Letter of Appointment defining the scope and limitations of the authority of the designated COR. A copy of the COR appointment letter will be maintained in the contract file.
- (c) In no event is the COR authorized to direct any action which:
  - Exceeds the scope or limitations specified in the Letter of Appointment; or
  - Constitutes a change to the Statement of Work (SOW) or any other term or condition of the contract/task order. Such changes may be authorized only upon written notification by the contracting officer.

#### H.7 DATA RIGHTS

The Contractor will adhere to the contract clauses within the Alliant Contract. In addition, the following applies:

The Government has unlimited rights to all documents/material produced under this task order. All documents and materials, to include the source codes of any software, produced under this contract shall be Government owned and are the property of the Government with all rights and privileges of the ownership/copyright belonging exclusively to the Government. These documents and materials may not be used or sold by the contractor without written permission from the Contracting Officer. All materials supplied to the Government shall be the sole property of the Government and may not be used for any other purpose. The right does not abrogate any other Government rights under the applicable Data Rights clause(s).

All data collected by the Contractor or provided to the Contractor in the performance of this contract are the property of the Government. The Government retains all rights to the data used and all derivative works developed by the Contractor. The Contractor agrees that during performance of the contract and for a period of six (6) years after the completion of performance of this contract, the Contractor, including all divisions thereof, and any affiliate of the Contractor, any joint venture involving the Contractor, any entity into or with which it may subsequently merge or affiliate, or any other successor or assign of the Contractor, shall not:

Supply information or material received from this contract, to the public or to any firm participating in or having a known prospective interest in the subject matter areas for which the sensitive information such as the name or mission of the government agency/department that provided the data was initially submitted.

# SECTION I – CONTRACT CLAUSES

# I.15 FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1) SOLICITATION CLAUSES (http://www.arnet.gov/far/)

<b>CLAUSE NO</b>	<u>CLAUSE TITLE</u>	<b>DATE</b>
52.217-8	OPTION TO EXTEND SERVICES	(NOV 1999)
52.227-14	RIGHTS IN DATA – GENERAL ALTERNATE V	(JUN 1987)
52.227-17	RIGHTS IN DATA – SPECIAL WORKS	(DEC 2007)
52.245.19	GOVERNMENT FURNISHED PROPERTY "AS IS"	(APR 1984)
52.232-16	PROGRESS PAYMENTS	(AUG 2010)