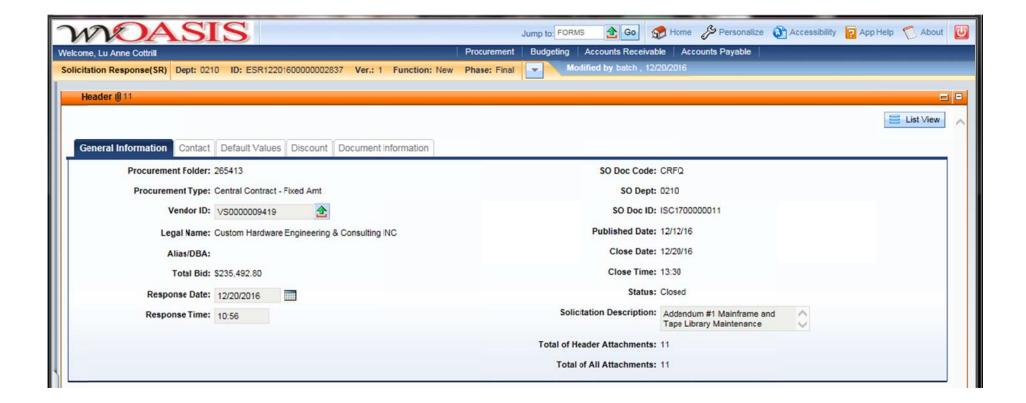


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





# State of West Virginia Solicitation Response

Proc Folder: 265413

Solicitation Description: Addendum #1 Mainframe and Tape Library Maintenance

Proc Type : Central Contract - Fixed Amt

Date issued	Solicitation Closes	Solicitation Response	Version
	2016-12-20 13:30:00	SR 0210 ESR12201600000002837	1

VENDOR

VS0000009419

Custom Hardware Engineering & Consulting INC

Solicitation Number: CRFQ 0210 ISC1700000011

**Total Bid:** \$235,492.80 **Response Date:** 2016-12-20 **Response Time:** 10:56:24

Comments:

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale (304) 558-8801 stephanie.l.gale@wv.gov

Signature on File FEIN # DATE

All offers subject to all terms and conditions contained in this solicitation

Page: 1 FORM ID: WV-PRC-SR-001

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Enterprise Mainframe Server Maintenance - s/n 68D77	12.00000	MO	\$1,889.000000	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Virtualization Engine Server Maintenance - s/n 78H4077	12.00000	МО	\$1,414.600000	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Virtualization Engine Server Maintenance - s/n 78H4070	12.00000	МО	\$1,235.000000	\$14,820.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Tape Library Maintenance - s/n 78A4126	12.00000	MO	\$367.500000	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Optional Renewal per 4.1.1 (year "2") - s/n 68D77	12.00000	МО	\$1,889.000000	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	Optional Renewal per 4.1.1 (year "2") - s/n 78H4077	12.00000	МО	\$1,414.600000	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
7	Optional Renewal per 4.1.1 (year "2") - s/n 78H4070	12.00000	МО	\$1,235.000000	\$14,820.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
8	Optional Renewal per 4.1.1 (year "2") - s/n 78A4126	12.00000	MO	\$367.500000	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
9	Optional Renewal per 4.1.1 (year "3") - s/n 68D77	12.00000	МО	\$1,889.000000	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
10	Optional Renewal per 4.1.1 (year "3") - s/n 78H4077	12.00000	МО	\$1,414.600000	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
11	Optional Renewal per 4.1.1 (year "3") - s/n 78H4070	12.00000	МО	\$1,235.000000	\$14,820.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
12	Optional Renewal per 4.1.1 (year "3") - s/n 78A4126	12.00000	МО	\$367.500000	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
13	Optional Renewal per 4.1.1 (year "4") - s/n 68D77	12.00000	МО	\$1,889.000000	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
14	Optional Renewal per 4.1.1 (year "4") - s/n 78H4077	12.00000	МО	\$1,414.600000	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
15	Optional Renewal per 4.1.1 (year "4") - s/n 78H4070	12.00000	MO	\$1,235.000000	\$14,820.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
16	Optional Renewal per 4.1.1 (year "4") - s/n 78A4126	12.00000	MO	\$367.500000	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

**Extended Description:** 



#### December 12, 2016

# **West Virginia Office of Technology**

**RESPONSE TO Request for Quote ISC1700000011** 

For

**Mainframe and Tape Library Maintenance** 

**Custom Hardware Engineering & Consulting** 

**DBA: CHE Consulting, Inc.** 

1576 Fencorp Drive

Fenton, MO, 63026

Point of Contact: Dewey Garrett – Business Development Executive

dgarrett@cheservice.com

Office: 479.365.2782 Cell: 479.899.5003

DUNS: 176686574 TIN: 364128326

**Business size: Small Business** 

CCR: Yes



CHE is pleased to respond to West Virginia Office of Technology (WVOT) Request for Quote for IBM Mainframe and Tape Library Maintenance. WVOT's stated objective is to enter into a contract with a qualified Small Business firm to provide hardware maintenance and repair service for IBM Mainframe and Tape Library Equipment.

At CHE, we are capable of providing a wide range of service delivery capabilities to meet your objectives. Our key to achieving this is having a Single Point of Contact (SPOC) that can provide problem management and resolution based on our knowledge and experience of the equipment. CHE is committed to understanding your needs, meeting or exceeding your requirements and expectations, delivering Total Customer Satisfaction, and creating value for WVOT.

In an increasingly competitive and complex world, businesses must concentrate their resources on maintaining a competitive advantage and strategic direction within their core competence rather than on day-to-day support operations. CHE has the qualifications and expertise to develop a business proposition that will provide WVOT with significant total cost of ownership reductions, driven by superior Customer Support and Maintenance Services.

Extremely important is CHE's support solution that includes:

- Single Point of Contact (SPOC)
- Fixed pricing for the entire contract term
- Program Management and administration to provide total interface with WVOT on all issues
- Extensive in-depth knowledge of all hardware in your environment
- Industry recognized tools, technology, and processes to sustain a competitive advantage for WVOT
- Demonstrated experience in support services in a multi-vendor environment
- Ability to integrate additional post-warranty requirements for WVOT business into the model
- Customer Support Engineers that will meet or exceed your response time objectives
- Compliance to regulatory and industry standards
- Simplified invoice statements that are easy to review and reconcile

CHE Consulting, Inc		Simply Better Maintenance Services
	Page 1	

A corporate executive team dedicated to the major goal of improving TCO to our customers and thereby creating value for WVOT

At CHE we have demonstrated our ability to work closely with our customers to provide the best service and price possible. Every aspect of our organization...the skills of our people, the quality of our processes and the capability of our technology is built around one common goal...to deliver exceptional service quality. Having such a tight focus on service also gives us keen insight into the impact that it has on customer satisfaction, brand preference and loyalty, customer retention, total-cost-of-ownership, and margin growth.

CHE has developed an extremely successful track record in meeting our customers' requirements and in satisfying needs for support. We will continue to leverage this cumulative experience to provide WVOT with responsive, high quality technical support while delivering quality services and meeting or exceeding Service Level Requirements.

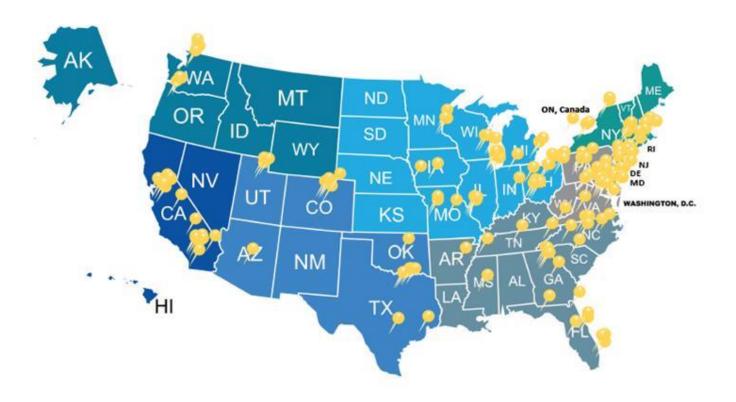
Our reputation as a leading independent provider of maintenance and support services was established due to our ability to work with our customers to deliver the service required. What CHE does better than any other maintenance vendor is providing our customers with customized solutions that offer flexibility, guaranteed service results and bottom line cost savings over that which customers pay the OEM.

# First to Respond



# Simply Better Maintenance Services

# Where We Are



## **Objective**

Since 1997, CHE has provided enterprise systems maintenance support services. Our company understands the objective of WVOT to achieve cost savings, without degradation of service, and administrative convenience by contracting with a full service, professional, systems support maintenance services provider.

## Scope of Work

CHE provides all labor, materials, supervision, parts, management, scheduling, tools, transportation, and diagnostic equipment necessary in order to support the systems repair services requirements for the equipment listed in this RFP. All local Customer Service Engineers are W-2 employees of our company, and CHE will **NOT** utilize subcontractors to deliver services that we are proposing.

#### **Minimum Qualifications:**

- 1. Nineteen (+) years in the business of providing computer hardware maintenance support services.
- 2. Financial Stability, proven track record, and growth required to remain a long term viable service provider to WVOT and fulfill the commitments of this contract. Please refer to Dun & Bradstreet for an in depth review of our financial strength.
- 3. CHE is an independent systems services integrator and is able to service the equipment listed within this RFP's equipment listing.

# **Company Background**

CHE is one of the nation's largest independent maintenance support services providers, specializing in multi-platform, enterprise systems. We provide services in thirty-seven (37) states and are trusted by federal, state and local governments, Fortune 100, 500 and 1000 Companies, and more! CHE is able to provide a consolidated approach to systems maintenance as an alternative to the OEM's extended warranty programs. CHE is able to directly support the following equipment platforms; IBM, HP, EMC, Oracle/SUN/ STK, Compaq, McData, Brocade, Dell, and many others. With our unique on site parts stocking philosophy, and internally developed diagnostic tools, CHE is able to provide the most responsive and comprehensive level of maintenance service in the industry.

## **CHE - "Four Corners" Support Model**

CHE provides a support and delivery model that is not only extremely unique but is also unmatched in the third party maintenance industry. We provide a four corners support model that includes access to:

- ❖ System Helpdesk Engineers They are the first to respond to our customers, tracking the call from inception through resolution. These engineers have access to all internally- developed diagnostic tools, equipment knowledge databases, equipment quick fixes, and national parts inventories. Each engineer has field "hands on" experience. In many instances they contact customers before customers even know they have a problem, and most important, they know the problem resolution. The helpdesk is available to our customers 24 hours a day, 7 days a week, via a toll free number.
- ❖ On-Site Customer Engineers The "heart and soul" as well as the face of our company. These systems services experts' performance is measured on how many systems outages they "prevent", not just what they "react" to. They have access to all internally- developed and machine- resident diagnostic tools, equipment knowledge databases, equipment quick fixes, and locally on-site pre-certified and tested spare parts. They are restricted from parts swapping or scavenging parts from other whole systems (a.k.a. "hot spares").
- ❖ Systems Platform Experts To ensure the highest level of systems availability, alleviate "finger pointing", and provide backup to our on-site support teams are highly skilled systems platform experts. Each member has a superior knowledge base for every systems platform we maintain. These experts focus on problem prevention through continuous research of manufacturer's systems updates and engineering changes. Each team member provides information to our customer engineers that assist in guiding our customers to prevent outages by informing them of known microcode and firmware updates that provide systems resolutions to problems before they occur.
- Corporate Equipment Laboratory CHE has a state-of-the-art equipment lab located at our corporate headquarters. Installed in the lab are full running systems for every critical platform maintained by CHE. Our lab based engineers are dedicated to certifying every systems part before being issued to a customer. No part issued by our company will be dead on arrival, no matter what supplier we purchased it from, to include the manufacturer. Our Systems Programmers utilize these systems to refine and continue to develop our own systems diagnostic remote support tools. Our Systems Trainers utilize the systems to accommodate our Customer Service Engineers' hands on hardware repair training program. Finally, these systems are utilized to emulate service incidents that go beyond just hardware repair, and aid in faster problem identification and resolution. CHE is singly accountable to our customers' systems and we never stop until systems operation is restored.

CHE	Con	sultir	าσ	Inc
CITL	COII	Suitii	ıĸ,	$\cdots$

By integrating these four corners of service, CHE meets all of the key requirements to be your single point of contact for datacenter maintenance support.

- ✓ First to Respond
- ✓ Expert Systems Predictive Troubleshooting
- ✓ Certified Parts, Full-Time Employed Engineers, (No Parts Swapping or Scavenging)
- ✓ R&D Laboratory staffed with Engineers & Systems Programmer Support
- ✓ Systems Remote Monitoring for Preventive/Proactive Services

## System Availability Is Our Focus

CHE customers enjoy unparalleled systems availability. It is our 100% focus and belief that customers pay us to prevent systems failures versus reacting to them. We only provide quotes for the services we can actually provide. Our focus remains on core systems platforms; they are enterprise servers (mainframes), midrange servers, servers, tape storage, and disk storage. This focus on succinct systems platform support has allowed us to become experts in the industry and allows us to provide a consistent service delivery model for all customers. Our company is committed to using all W-2 support personnel in systems support; we do not rely upon "subcontractors" or "business partners" to handle any of the services we provide. We take great pride in delivering services that others in this industry cannot deliver, and it allows our customers to develop complete trust, confidence, and respect for our company and their locally assigned Customer Service Engineers.

# **Service Requirements**

- a) CHE will provide maintenance services for the IBM mainframe and tape library equipment presently owned by WVOT as identified within the equipment list during the contract term.
- b) Cost of CHE Services Include:
  - i. All maintenance fees for the services to be provided include all costs, including but not limited to labor, travel time, and expenses.
  - ii. CHE Customer Service Engineers have been fully trained and certified on each system platform they service. Each Customer Service Engineer has received certification training from the OEM during their employment with the OEM, in addition to internal training classes for product platforms that are no longer taught by the OEM.
  - iii. CHE follows the prescribed recommendations, procedures, and best practices recommended by the OEM within the folds of their technical documentation when

CHE	Con	sulti	nø.	Inc
	~~	Juici	1150	

providing corrective equipment services. CHE exceeds the recommendations of the OEM when providing preventative maintenance service (PM). CHE will provide the Government POC the recommended preventive maintenance schedule for the equipment under contract our schedule will meet or exceed the OEM preventive maintenance recommendations. CHE utilizes recommended OEM parts that are either new, equivalent to new, or certified as new for parts replacement.

- iv. CHE has a team of systems platform expert engineers (a.k.a. Product Specialists) that is responsible for tracking and monitoring microcode, firmware, engineering changes, or product recalls issued by the manufacturer of the systems. This information is subscribed to by our company and is held within the systems of our National Support Center (NSC) via our equipment Knowledge Database. We advise our customers of any required actions needed to enhance the functionality, performance, or reliability of their systems during our Monthly Reports and during regularly scheduled customer meetings.
- Customer Service Help Desk hours of operation and escalation procedures: CHE owns ٧. and operates our own Help Desk, based in Fenton, Missouri. Our Help Desk is available to customers 24 hours a day, 7 days a week. System Help Desk Engineers are staffed to manage, track, and triage service incidents. These engineers are employees of CHE (not outsourced). Our Help Desk is your "single point" of contact for all service incident information. These engineers have "field hands on" systems experience and have access to all internally- developed diagnostic tools, equipment knowledge databases, equipment quick fixes, and national parts inventories. Calls are received either through equipment that are eligible and connected to our remote monitoring tools, or from you our customer. No matter which manner the Help Desk is contacted a service incident is opened and recorded in our internal systems. If the service incident is initiated by our remote monitoring tool, the engineer contacts the customer. If the customer calls directly, the engineer will assist in further triaging the call, systems repair/recovery procedures, and will issue a service incident number to the caller for future tracking/documentation. Within 10 minutes of the placed call, the local Customer Service Engineer is required to pick up the call, contact the customer, and provide the customer with an estimated time of arrival. Our Help Desk takes care of problems on the front end for a seamless service experience; we do not require our customers to jump through hoops to get a Customer Service Engineer on site.

From this point, because of our Help Desk engineer, your local Customer Service Engineer already knows what the problem is, how they are going to repair the problem, and what part is going to be used out of your on-site parts inventory. Since CHE invests in full running systems for every critical equipment platform we maintain, our customers are assured that every part we have purchased, no matter where it was purchased from, to include the manufacturer, has been certified as operational prior to

CHE Consulting, Inc.

Simply Better Maintenance Services

placing that part on site. This alleviates "dead on arrival" parts situations as experienced by not only the manufacturer but especially other third party maintainers.

#### **SCOPE**

CHE will maintain all equipment per the prescribed standards as stated within the folds of the OEM's technical documentation; this maintenance service includes scheduled preventive maintenance based on the specific needs of the individual machines and on-call remedial maintenance. Replacement parts will be OEM authorized revision-controlled replacement parts. These particular parts, when utilized, either meet or exceed the acceptance test standards as outlined in the OEM's technical documentation.

CHE will provide all necessary maintenance, labor, repair parts, maintenance supplies, tools, test equipment, materials, supervision, documentation, training, diagnostics and micro-code (please see Microcode section below) required to perform in accordance with the contract specifications and keep the equipment in good operating condition. Transportation required to provide the above supplies and materials will be provided by CHE. Maintenance service will be provided by fully trained and competent maintenance personnel.

#### **REQUIREMENTS**

As illustrated above CHE provides fully trained maintenance personnel to perform all necessary maintenance, labor, repair parts, maintenance supplies, tools, test equipment, materials, supervision, documentation, training, diagnostics, and micro-code (please see Micro-code section below) required to perform in accordance with the contract specifications and keep the equipment in good operating condition. Transportation required to provide the above supplies and materials will be provided by CHE. Maintenance service will be provided by fully trained and competent maintenance personnel.

CHE provides support for large IBM (or compatible mainframe processors running IBM OS/390 operating systems, virtual memory systems, IBM and OEM disk and tape subsystems, Hierarchical Storage Management (HSM), standard installation maintenance practices and installation administrative details such as the creation and maintenance of an Account Maintenance Guide.

#### **Maintenance**

CHE will respond to WVOT's requests for repair services with qualified repair personnel. CHE will commence equipment repair services for your IBM mainframe Tape Library systems, 7 days a week, 24 hours a day, 365 days a year. When onsite support is required, CHE will dispatch a Customer Service Engineer to arrive onsite within 4 hours.

CHE Consulting,	Inc
-----------------	-----

#### **Preventive Maintenance**

CHE enforces vigorous preventive maintenance (PM) policies in support of our customers to ensure our success as a maintenance service provider. PM shall include review of machine error logs, running diagnostic programs to screen for potential errors on the schedule recommended by the equipment manufacturers, lubrication, necessary adjustments and replacement of parts required to keep the equipment in good working order.

CHE will perform on-site preventive maintenance for the equipment listed in the schedule according to the current practices recommended by IBM in the supplied maintenance documentation including such notices as service newsletters and maintenance bulletins.

CHE will perform PM at a time other than the Government's prime period of maintenance in accordance with current practices recommended by IBM technical documentation. The PM schedule will be established during hours that are mutually agreeable between WVOT and CHE.

## Microcode/Firmware Upgrade Services

CHE will provide WVOT field modification systems upgrade services to correct systems defects that have been identified by the OEM. There is no additional charge for these services so long as the systems are at current supported levels when our systems responsibility begins. Systems upgrades that increase memory, storage, or channel capacity are available for an additional fee. The services will be provided at a time that will not interfere with your operational mission. These services are made possible through our IBM Agreement dated 26 Nov 1999, the customers license agreements with the OEM, reseller relationships, and internal research provided by our Systems Platform Experts. WVOT will be notified of the availability of the systems upgrades. CHE will provide our internal release notes for the systems upgrades upon request by the customer. While CHE strongly recommends that our customers install systems upgrades identified by the OEM that correct systems defects, we do understand that sometimes due to Operating Systems issues a customer may not be able to have the upgrade installed; we do not force our customers to install the upgrade when this is the case. When this is the case CHE will instead work with you to determine the benefits or tradeoffs, if at a later date you would like the upgrade installed.

# **Remote System Monitoring**

CHE offers IBM equipment Remote Support Facility (RSF) support to our customers via our Blue Bayou Error Data Reporting System. CHE remote systems monitoring support via Blue Bayou includes equipment presently installed at WVOT that supports such off-site notification. Each element of remote support as it pertains to the units that are capable of such support is completely server and web base driven. Each device, when a critical error is encountered, will call home to the CHE National Support Center; which is monitored 24 hours per day. CHE's customer service representatives can dial into the unit experiencing the error and perform, via the diagnostic code resident on the device, tests to localize

CHE Consulting, Inc

Page

10

Simply Better Maintenance Services

the failure as well as advise the customer of actions to take during the failure.

Comparing and contrasting CHE's diagnostic capability via Blue Bayou to what IBM offers shows that the CHE and IBM solutions are exactly the same. The only differentiating factor is the telephone number that the device telephones when a malfunction occurs. The only difference in the CHE's Blue Bayou call-home solution to that of IBM's is the national support center where system error data is off loaded. In other words, the telephone number within the HMC is changed for the off-loading of error data to the CHE utilized support center instead of the system dialing the telephone number for the IBM support center. IBM system predefined critical error data information is dialed out and off loaded to CHE via encryption and sent via secure protocols, and an automatic service call is initiated to the responsible CHE technician via our Customer Service Help Desk and Dispatch Center.

In addition CHE, just like IBM, configures auto paging alerts to the technicians, product specialists, and regional managers responsible for the accounts and systems. CHE can also configure auto alerts via email for designated WVOT staff to receive the same notifications we do at the same time we are receiving them.

# **Parts Availability**

CHE prefers to store critical spare parts onsite or in a local storage facility in close proximity to ensure maintenance parts are available on a round-the-clock basis. CHE critical spare parts include all items contained in the OEM's commercially available spares kit for the devices under contract. Repair parts will be onsite in sufficient time to comply with the Government's repair time requirements.

CHE maintenance service will include parts and the use of tools and test equipment necessary for the maintenance of the equipment being serviced. CHE provides all tools and test equipment necessary for the maintenance of the equipment including, but not limited to, specialized Maintenance Diagnostic and Test devices required to diagnose problems and to see that equipment is operating correctly. Only new, or parts equivalent to new in performance which have been factory or Depot-tested and refurbished, are used in effecting repairs. CHE tests and certifies all replacement parts in our Parts and Certification Facility prior to shipment to customers' accounts for repair of equipment (please see Parts Inventory Management Section below).

Repair parts will be replaced at the best available Field Replaceable unit level as defined by the equipment manufacturer's published maintenance documentation. CHE Customer Service Engineers will not attempt to repair faulty modules on site if the equipment was designed for the replacement of modules.

The level of replacement of worn or defective parts shall be consistent with the OEM's design of the equipment. CHE will repair or replace all faulty parts or components maintained under this solicitation. This responsibility includes furnishing all needed cables, cabinets, housings, power supplies, fans, circuit boards, assemblies, and any other item necessary to restore the equipment to proper operating condition, at no additional cost to WVOT.

CHE Consulting, Inc

Simply Better Maintenance Services

Only new, or parts equivalent to new in performance which have been factory or Depot-tested and refurbished, are used in effecting repairs. CHE will not use replacement parts which would result in the OEM refusing to support the equipment in question.

Maintenance parts shall be furnished on an exchange basis with the replaced parts becoming the property of CHE once equipment in which parts have been replaced is restored to normal operation and accepted by the Government as being operational.

## **Parts Inventory Management**

- A. CHE has methodical disciplined processes and procedures to provide our customers with high quality and high availability of parts to support systems platforms placed under contract with our company. We provide parts that are new, equivalent to new, or certified as new for every systems platform we maintain. Parts' swapping between systems platforms is strictly prohibited, as is scavenging parts from whole systems platforms (hot spares). This section will describe the CHE approach to parts inventory management.
- B. CHE does not apply surcharges of any type for the delivery or shipping of parts and supplies for our firm fixed price maintenance customers.

CHE has a unique approach in providing parts for systems platforms we support. We place the parts inventory on site for each customer we have under contract. This approach increases equipment restore time in the event of an outage, as well as assists in preventing outages before they occur. In an industry where companies continue to outsource and pool inventory resources to strategic geographies, CHE remains committed to providing on site spare parts for all of our firm fixed price maintenance customers. This commitment eliminates the risk of having no parts available, or having to wait for a part to be shipped in when needed. Identifying the parts a customer requires to support their system platforms is the key to being successful. We accomplish parts identification through a thorough comprehensive on site systems platform audit. Please find below the information we gather prior to commencement of the services contract:

- ✓ System Platform Serial Number
- ✓ System Configuration
- ✓ System Part Numbers
- ✓ System Engineering Level
- ✓ System Firmware Level

- ✓ System Microcode Level
- ✓ System Location and Point of Contact

CHE has invested in complete systems platforms that mirror our customers systems. By having a complete system on hand, this allows us to test and certify every component part that is being issued to our customers no matter where we have purchased the part from. Our company does not assume that just because we purchased a part from the manufacturer that the part is good. Through this approach our customers are assured that there will be no "dead on arrival" parts for their systems. By having complete systems, it also allows us to pre-install the necessary firmware or microcode required for any part for any system we maintain. Another advantage in our investment in complete systems platforms is that it allows us to bench repair defective parts for reuse. This aids our customers in being able to extend the useful life of systems platforms they have installed.

Parts inventory management would not be complete without having a proper software program to manage it all. CHE conducted an analysis of software programs in the industry available to manage our customer's inventory and found none of them suitable based on our unique parts inventory program. That is why we had our Systems Programmers develop our own software product that fit precisely in what we provide to our customers. The product is very robust; web based, and provides access to every team member responsible for providing service to our customers. When a Customer Service Engineer utilizes a part for our customer's systems platform, an automated replenishment order is generated. This ensures that the one to one relationship between parts required and parts on hand remains at consistent levels. The program automatically notifies the Customer Service Engineer and Logistics supply team of those parts that are eligible for bench repair and issues the return material authorization document necessary for the part to be received back and repaired timely.

Parts supply chain management is one of the primary focus areas of CHE. This focus area assures our customers that we will meet our onsite parts stocking level guarantees as well as our systems restore time guarantees. We accomplish this through dedicated parts inventory staff whose sole responsibility is to ensure that parts are where they are supposed to be, when they are supposed to be there. Through this approach we ensure solid working relationships with our OEM, brokers, and parts channel suppliers. Many of our competitors attempt to place this critical piece of the systems maintenance service requirement with their technicians, local, or regional managers. This is absolutely the reason our competitors fail and CHE succeeds, because we have parts industry experts managing our supply chain. CHE has negotiated agreements with carriers who can deliver emergency parts order that same day on the next flight out. This key service delivery differentiator is what separates CHE from the rest within this industry and is why we provide "Simply Better Maintenance Services".

#### **Escalation Process**

Escalations customarily occur in one of two ways. First, an escalation can be requested at any point in

CHE Consulting, Inc

**Simply Better Maintenance Services** 

the service process by any member of the support team, including our customer. When this occurs multiple personnel within CHE are immediately notified.

Second, an escalation can occur due to time lapsed on a service incident. This simply means that CHE follows a strict service incident process that has time allowances for each step of the service delivery process. If any of these situations are not met, listed below, and we run the risk of exceeding a time stamp allowance, then the Help Desk MUST escalate.

- 1. Customer opens a service request with our Customer Service Help Desk
- 2. CHE Customer Service Engineer must pick up the call from the Help Desk within 10 minutes of being paged; contact customer with estimated time of arrival
- 3. CHE Customer Service Engineer must contact help desk immediately upon arrival at the site meeting response time SLA
- 4. CHE Customer Service Engineer must report to help desk after an hour of being on site with status of repair work
- 5. If repair has not been accomplished by the Customer Service Engineer after being on site for two hours, then the service incident must be escalated to the Regional Manager (RM). The RM will assess the overall progress being made by the Customer Service Engineer and is empowered to engage Help Desk Engineers and Systems Platform Experts, if necessary.
- 6. If repair has not been accomplished by the Customer Service Engineer after being on site for four hours, then the service incident must be escalated to the Director of Operations. The Director of Operations is empowered and responsible to insure that the RM, Systems Platform Experts, Help Desk Engineers, and the full breadth of all company resources are available to resolve the incident with a clear cut action plan to resolve the incident. The Director of Operations must brief the customer of all actions being taken by the company to resolve the service incident.
- 7. If repair has not been accomplished by the Customer Service Engineer after six hours, it is required that the Director of Operations escalate the service incident to the President. The President will review the action plan and actions taken by the support team and will direct further actions to resolve the incident, up to and including machine replacement. The President will contact the customer personally to provide an update as to how the service incident will be resolved.

Escalations primarily take place in order to ensure engagement of the proper resources in order to meet our contractual guarantees and the level of services expected by our customers. Communications between the support team at every level, and most of all, the customer, is paramount to keep the

CHE Consulting, Inc

service incident in focus and on a path for quick resolution. In order to accomplish successful communications during a service incident escalation, our Customer Service Help Desk opens a continuous bridge call for support team and customer interaction, until resolution of the service incident has been accomplished.

CHE will provide continuous communications to WVOT in the event of any service incident escalation during the contract term. This will be accomplished via bridge calls and e-mail. At the conclusion of any escalated service event, we will issue a written Root Cause Analysis (RCA) report to the customer followed by a meeting to discuss areas where improvement can be made to insure that a similar occurrence on a service incident will not happen again.

Based upon the solid support infrastructure we put in place and strict adherence to proper support procedures, we very rarely have a customer requested escalation since escalations are enforced internally within our support delivery model.

## **Subcontracting**

CHE will not be using subcontractors to deliver maintenance services to WVOT.

## **Invoicing**

CHE provides detailed invoices per your format and requirements on either a monthly, quarterly or annual basis.

# **Managing Your Account**

CHE assigns a dedicated professional team to service our customers. WVOT will enjoy the focused no nonsense approach in working with CHE for all key aspects of the services we provide.

- ➤ Business Manager totally responsible for contract management and general customer requests. This individual is available to you Monday-Friday, 8 A.M. to 5 P.M. to support our customers' requests for contract changes, pricing questions, or general information requests.
- ➤ Platform Experts Manager totally responsible for setting up systems review sessions to ensure microcode, firmware, engineering changes, and frequent failure trends are addressed. This person acts as your technical advocate to ensure solid systems performance.
- Sales Executive Team Leader a representative that is available to ensure we deliver what we committed to, ensure that a strong business partnership is developed, and can also offer strategic ideas and programs to our customers.
- Regional Manager responsible to supervise and oversee the service delivery of the customer

CHE Consulting, Inc

**Simply Better Maintenance Services** 

- service engineers. Additionally monitors all service call activity and ensures CHE meets our SLA guarantees for our customers.
- ➤ Director of Operations responsible for Quality Assurance, customer satisfaction, and customer retention. This individual is also fiscally responsible for the management of our customers across the U.S.

#### **Conclusion**

CHE believes that we have provided the West Virginia Office of Technology with a technically superior, flexible, and fairly priced offering for the services required on your systems. We also believe that it is plain to see why CHE provides "Simply Better Maintenance Services" and others within this industry segment fail. We thank you for your consideration of our offering and look forward to continuing our strong partnership with your organization.

# **Schedule of Services**







Quote Number: Date: 14 Dec 2016 Contract Start Date: TBD Customer: State of West Virginia

Cust Tech Contact: TBD
Term: 12 month base and 3 one year options

Quote Expiration: 15 Jan 2017 CHE and End-User Customer Confidential for Internal Use

OEM	Type/Model	Serial #	Legend (A-D)	Detailed Description	Qty.	Unit Maint Charge	Monthly Maint Charge	Location
<u> </u>	. ypo/mouoi	001141 #	(/1 )	Charleston Site	α.γ.	mant ona go	mant onargo	200411011
				onanesion one				
2828-H06	IBM	68D77	7x24x4	IBM zNext BC -zBC12 Model 2828-H06 - server capacity setting is	1	\$0.00	20.00	Charleston WV
.020-1100	IDIVI	00077	7 82484	Model 2828-U02 downgraded to Model 2828-S02- contains 2 IFLs and	'	φ0.00	φ0.00	Chanesion w v
				1 zIIP engine				
0092			+	HMC	1	\$0.00	\$0.00	
0165			+		2		\$0.00	
0169			+	fanout Airflow PCle Fanout	2		\$0.00	
0400			+	PCIe interconnect	4	\$0.00	\$0.00	
0400				FICON Express8S 10KM IX 2 ports	8		\$0.00	
0409			+	OSA-ExpressSS GbE SX 2 ports	1	\$0.00	\$0.00	
0414					4		\$0.00	
0417				OSA-ExpressSS 10 GbE SR 1port OSA ExpressSS IOOOBASE T 2 ports	2	\$0.00	\$0.00	
0865			+	Crypto Express4S	2		\$0.00	
1147			+	Model H06	1	\$0.00	\$0.00	
1609			+	32 GB Mem OIMM (10/feature)	1	\$0.00	\$0.00	
1903			+	8 GB Memory Capacity Iner	1	\$0.00	\$0.00	
3008			+	BPD Pair Air Model	1	\$0.00	\$0.00	
3628	1			144 GB Memory	1	\$0.00	\$0.00	
3759	<b> </b>		+	Universal Uft Tool/Ladder	1	\$0.00	\$0.00	
3863	<b> </b>		+		1	\$0.00	\$0.00	
4009	<del> </del>		+	CPACF Enablement Pae 1/0 Drawer-A	1	\$0.00	\$0.00	
5784			+	CP-S	2		\$0.00	
5794			+		2		\$662.00	
5798			+	IFL zII P	1	\$331.00	\$331.00	
5951					1	\$896.00	\$896.00	
				2-Way Processor S02 873 MIPS / 109 MSU's				
6096				Flat Panel Display	1		\$0.00	
7921				Side Covers	1		\$0.00	
8987				14ft 200V 30A 3 Ph Cord U02 C.padtv Marker - 1097 MIPS / 137 MSU's	1	\$0.00 \$0.00	\$0.00 \$0.00	
9117								
9896				On/Off COO authorization	1		\$0.00	
9898				Perm upgr authorization	1		\$0.00	
9900				On-Line Coo Buying (Flag)	1		\$0.00	
9969				Site Tool Kit	1	\$0.00	\$0.00	
					ļ.,	****	****	
IBM	3957-VEA	78H4077	7x24x4	3957-VEA TS7720 Virtualization Engine Server	1 2		\$634.75 \$0.00	Charleston WV
				201 9 Micron LC/LC 31 Meter 1033 1Gb Grid Dual Port Optical SW Connection	2		\$0.00	
			+	2715 Console Attachment	1	\$0.00	\$0.00	
				3442 FICON LW Attachment	2		\$74.96	
				4015 Grid Enablement	1	\$362.70	\$362.70	
				5268 100 MB/sec Increment	1		\$0.00	
				9000 Mainframe Attachment	1	\$0.00	\$0.00	
				9268 100 MB/sec Throughput	1		\$0.00	
			1	9461 8GB Memory Upgrade	1	\$0.00	\$0.00	
			1	3956-CS8 TS7720 SATA Cache Controller	1		\$156.00	
	<del> </del>		+	7114 32 TB SATA Storage 3956-XS7 TS7720 SATA Cache Module	1 2		\$0.00 \$181.36	
				7114 32 TB SATA Storage	2		\$0.00	
	1		+	3952-F05 Tape Frame	1	\$4.83	\$4.83	
				1903 Dual AC Power	1	\$0.00	\$0.00	
				11303 Dual AC FOWEI				
				1904 Redundant AC Power	1	\$0.00	\$0.00	
					1		\$0.00 \$0.00	
				1904 Redundant AC Power 2732 TS3000 System Console 2733 Internal Modem	1	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00	
				1904 Redundant AC Power 2732 TS3000 System Console 2733 Internal Modem 5759 Integrated Control Path	1 1	\$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	
				1904 Redundant AC Power 2732 TS3000 System Console 2733 Internal Modem 5759 Integrated Control Path 7322 TS7720 Base Frame	1 1 1	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	
				1904 Redundant AC Power 2732 TS3000 System Console 2733 Internal Modem 5759 Integrated Control Path	1 1	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00	
				1904 Redundant AC Power 2732 TS3000 System Console 2733 Internal Modem 5759 Integrated Control Path 7322 TS7720 Base Frame 9954 NEMA L6-30 Power Cord	1 1 1	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00	
				1904 Redundant AC Power 2732 TS3000 System Console 2733 Internal Modem 5759 Integrated Control Path 7322 TS7720 Base Frame 9954 NEMA L6-30 Power Cord  Flatwoods Site	1 1 1 1	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	
IBM	3957-V06	78H4070	7x24x4	1904 Redundant AC Power 2732 TS3000 System Console 2733 Internal Modem 5759 Integrated Control Path 7322 TS7720 Base Frame 9954 NEMA L6-30 Power Cord  Flatwoods Site 3957-V06 TS7740 Virtualization Engine Server	1 1 1 1 1 1 1 1	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	Sutton WV
IBM	3957-V06	78H4070	7x24x4	1904 Redundant AC Power 2732 TS3000 System Console 2733 Internal Modem 5759 Integrated Control Path 7322 TS7720 Base Frame 9954 NEMA L6-30 Power Cord  Flatwoods Site	1 1 1 1	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00 \$0.00 \$0.00	Sutton WV

	1			3442 FICON LW Attachment	2	\$37.48	\$74.96	
				4015 Grid Enablement	1	\$362.70	\$362.70	
	1			5240 Dual Port FC HBA	1	\$37.48	\$37.48	
				5267 1 TB Cache Enablement	1	\$0.00	\$0.00	
				5268 100 MB/sec Increment	1	\$0.00	\$0.00	
				9000 Mainframe Attachment	1	\$0.00	\$0.00	
				9219 TS3500 Attach	1	\$0.00	\$0.00	
				9461 8GB Memory Upgrade	1	\$0.00	\$0.00	
				9900 Encryption Configuration	1	\$0.00	\$0.00	
	1			3956-CC8 TS7740 Cache Controller	1	\$211.58	\$211.58	
	1			7123 9.6 TB Fibre Storage	1	\$0.00	\$0.00	
	+			3952-F05 Tape Frame	1	\$4.83	\$4.83	
	+			1903 Dual AC Power	1	\$0.00	\$0.00	
				1904 Redundant AC Power	1	\$0.00	\$0.00	
				2732 TS3000 System Console	1	\$0.00	\$0.00	
				2733 Internal Modem	1	\$0.00	\$0.00	
	+			5759 Integrated Control Path	1	\$0.00	\$0.00	
	+			7312 TS7700 Base Frame	1	\$0.00	\$0.00	
				9954 NEMA L6-30 Power Cord	1	\$0.00	\$0.00	
	+			9994 NEIWA E0-30 FOWER COID	-	ψ0.00	ψ0.00	
IBM	3584-L23	78A4126	7x24x4	3584-L23 TS3500 Tape Library	1	\$81.00	\$81.00	
IDIVI	0007-L20	1004120	, ALTAT	1515 3592 Fibre Drive Mounting Kit	6		\$0.00	
	+		1	1659 16 Additional 3592 Slots	1	\$0.00	\$0.00	
	<del>                                     </del>			1692 Entry ALMS	1	\$0.00	\$0.00	
	<del> </del>				1	\$0.00	\$0.00	
	+			1693 Intermediate ALMS	1			
	<del> </del>			1694 Full ALMS	1	\$0.00 \$0.00	\$0.00 \$0.00	
				1950 Power Distribution Unit				
	ļ			2710 Remote Support Facility	1	\$0.00	\$0.00	
	<del>                                     </del>			2732 TS3000 System Console		\$0.00	\$0.00	
				2733 Internal Modem	1	\$0.00	\$0.00	
	ļ			4871 TS7700 BE SW Mounting Hardware	1	\$0.00	\$0.00	
				4872 TS7700 BE 4Gb Switch	1	\$0.00	\$0.00	
	<u> </u>			9217 Attach to 3953 LM/TS7700	1	\$0.00	\$0.00	
	<u> </u>			9700 No Host Cables from Plant	1	\$0.00	\$0.00	
	<u> </u>			9954 Nema I6-30 Power Cord	1	\$0.00	\$0.00	
	ļ			9900 Encryption Configuration	1	\$0.00	\$0.00	
	ļ			3592-E05 IBM TS1120 Tape Drive	6		\$286.50	
	ļ			6013 13 Meter LC/LC Fibre Channel Cable	12	\$0.00	\$0.00	
				9000 zSeries ESCON/FICON Attachment	6		\$0.00	
				9216 zSeries Linux Attachment	6	\$0.00	\$0.00	
				9592 Encryption Capable	6	\$0.00	\$0.00	
	<b></b>							
	<b></b>							
	<b></b>			Monthly Maintenance Charge (MMC) Total:			\$4,906.65	
	<u> </u>			Base Year Annual Maintenance Charge:			\$58,879.80	
		I		Optional Renewal Year 2 Annual Maintenance Charge:			\$58,879.80	
							\$58,879.80	
				Optional Renewal Year 3 Annual Maintenance Charge:				
				Optional Renewal Year 3 Annual Maintenance Charge: Optional Renewal Year 4 Annual Maintenance Charge:			\$58,879.80 \$58,879.80	
	-							
	-							
EGEND:	-							
TYPE OF R	REPAIR SERVICE:			Optional Renewal Year 4 Annual Maintenance Charge:				
TYPE OF R			by certified CHE					
YPE OF R	Support: Two hour o	nsite response l		Optional Renewal Year 4 Annual Maintenance Charge:				
YPE OF R a) Global So b) Galaxy S	Support: Two hour o	onsite response to	by certified CHI	Optional Renewal Year 4 Annual Maintenance Charge:  customer engineer, 7x24x365				

PLEASE NOTE: This proposal contains system configuration, pricing, and other business information that has been developed by CHE Consulting Inc. using proprietary methodologies designed to provide optimal solutions to your firm's business needs as you have expressed them to us. The information contained herein is therefore confidential in nature and is to be treated as your firm would treat it's own confidential information and not disclosed to any employee of your firm not having a need to know or anyone who is not an employee of your firm without our express written permission.

Quoted prices are exclusive of applicable taxes. Buyer is responsible for any taxes associated with this transaction as required by the applicable tax jurisdiction for this transaction. If Buyer is exempt from tax, then Buyer agrees to provide a valid sales tax exemption certificate prior to Seller ordering the equipment

NOTE: CHE will conduct an audit of the equipment, at no additional charge, to confirm all hardware is operational and at acceptable microcode levels. If there are any operational issues, latent defects or unacceptable microcode levels you will be advised via a detailed site audit report (includes any cost to remedy, if required) of any Time and Material labor/parts that would have to be funded to remedy the problem.

Equipment configurations will be reviewed during the audit if additional billable features are discovered the monthly maintenance charge will be revised and detailed in the site audit report.

# SOLICITATION NUMBER: CRFQ ISC1700000011 Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

#### Applicable Addendum Category:

1	[	Modify bid opening date and time
]	Ī	Modify specifications of product or service being sought
[4	/	Attachment of vendor questions and responses
[	l	Attachment of pre-bid sign-in sheet
[	1	Correction of error
Ī	I	Other

#### **Description of Modification to Solicitation:**

Addendum #1 issued to:

- 1. Provide answers to technical questions.
- 2. Move bid opening date and time to 12/20/2016 @ 1:30pm.

End of Addendum #1.

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

#### **Terms and Conditions:**

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- 2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

# CRFQ 0210 ISC17\*11 Mainframe and Tape Library Maintenance Vendor Questions and WVOT Responses 12/12/16

#### 1) Vendor Question/Inquiry:

"In order to provide a quote for maintenance on this hardware", this vendor "would need the zSeries VPD File."

#### **WVOT Response 1:**

West Virginia Office of Technology Technical Personnel provided two files in response to the vendor question/inquiry (actvpda.docx and actvhmca.docx). These file are included with this response.

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
 <actvhmca timestamp="20161208194920" version="V01">
 <!-- @@BEGIN COPYRIGHT@@ -->
<!-- Licensed Internal Code Source Materials
                                                         -->
<!-- 2827,2458,2828 Licensed Internal Code
                                                         -->
<!-- (C) Copyright IBM Corp. 2000, 2013
<!-- The source code for this program is not published -->
<!-- or otherwise divested of its trade secrets,
<!-- irrespective of what has been deposited with the -->
<!-- U.S. Copyright Office.
                                                        -->
<!-- @@END COPYRIGHT@@ -->
<!-- Any _ found at beginning of a fru record name should be
consideres as a ? -->
<!-- Any : found anywhere in a fru record name should be considered as
a ? -->
<!-- Any .-. found anywhere in a fru record name should be considered
as a * -->
<vpd date time="20161204135035" version="V01"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="file:data/iqyvpd.xsd">
  <system mach_model="H06" mach_serial="000020068D77"</pre>
mach type="2828">
    <fru>
      <A00MAA01 ccin="NONE" part_number="00W2268"/>
      <A00M_COMM_ADAPTER_ccin="NONE" part_number="00W2668"/>
      <A00M ETHERNET ADAPTER ccin="NONE" part_number="00W2268"/>
      <A00M_ETHERNET_CABLE ccin="NONE" part_number="ETHRCBL"/>
      <A00M FIXED DISK CTRL ccin="NONE" part_number="00W2668"/>
      <a00M FIXED_DISK CABLE ccin="NONE" part_number="49Y8444"/>
      <A00M_FIXED_DISK ccin="NONE" part_number="81Y9803"/>
      <A00M_DVD_RW_DRIVE ccin="NONE" part_number="43W8467"/>
      <A00M_DVD_RW_DISK ccin="NONE" part_number="19P0484"/>
      <A00M_BATTERY ccin="NONE" part number="33F8354"/>
      <A00M KEYBOARD ccin="NONE" part number="KEYBORD"/>
      <A00M_LIC ccin="PCLC" ec_number="H49574" part_number="41T8451"</pre>
serial number="129.114"/>
      <A00M LIC ENABLE2 ccin="ECLV" ec number="H49570"
part number="41T8447" serial number="000.000"/>
      <A00M_LIC_ENABLE1 ccin="ECLV" ec number="H49571"</pre>
part_number="41T8448" serial number="000.000"/>
      <A00M LIC PUBS ccin="ECLV" ec number="H49572"
part_number="41T8449" serial number="000.000"/>
      <A00M_LIC MALERT ccin="ECLV" ec number="H49573"
part_number="41T8450" serial number="048.037"/>
      <A00M LIC OS ccin="ECLV" ec number="H49575"
part_number="41T8452" serial number="057.038"/>
      <A00M LIC AROM ccin="ECLV"
part number="DEFAULT">0001</A00M LIC AROM>
     <A00M_7382_PAJ_PLANAR ccin="NONE" part_number="00W2668"/>
     <anom_vpd_pctm ccin="vptm" part_number="7382PBC"/>
      <A00M VPD PCBIOS ccin="VPBS" part number="YAE128CUS"/>
```

```
<?xml version="1.0" encoding="UTF-8" standalone="no" ?>
 <actvpdhmc_cpc timestamp="20161208190603" version="V01">
<actvpda flag="F" mach model="H06" mach serial="000020068D77"</pre>
mach_type="2828" timestamp="20161208190543" version="V01" xmlns=""
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
   <vpd date_time="20161208100003" version="V01"</pre>
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="file:data/iqyvpd.xsd">
     <system mach_model="H06" mach_serial="000020068D77"</pre>
mach_type="2828">
      <frame ccin="FSFF" location="A" part number="DEFAULT">
           <ACECCECSN ccin="LIAD" part_number="DEFAULT"</pre>
serial number="000020068D77"/>
           <ACECCAGE ccin="2D26" part_number="DEFAULT"/>
           <ACECP101 ccin="58DB" part_number="74Y0091"/>
          <ACECB101 ccin="2C27" part_number="41V2577"/>
          <ACECB201 ccin="2C27" part_number="41V2577"/>
          <ACECP101J.01-ACECD301J.03 ccin="P540"</pre>
part_number="74Y0860"/>
          <ACECP101J.02-ACECD401J.03 ccin="P541"
part number="74Y0861"/>
          <ACEC_CRYPTO_ASSIST_FEAT ccin="CRAF" part number="DEFAULT"/>
          <A31BBPEAJ.01-CUSTOM-POWER ccin="CA71"
part_number="DEFAULT"/>
          <A31BBPEBJ.01-CUSTOM-POWER ccin="CA72"
part_number="DEFAULT"/>
          <ACECD101J.01-A02BLG34J.01 ccin="C004"
part_number="46K3727"/>
          <ACECD801J.02-A02BLG24J.01 ccin="C004"
part_number="46K3727"/>
          <ACECD101J.02-A02BLG15J.01 ccin="C002"
part number="46K3725"/>
          <a>ACECD801J.01-A02BLG05J.01 ccin="C002"</a>
part number="46K3725"/>
          <A02BAA01 ccin="78C1" part_number="41U8011"
serial number="YH10UN33T018"/>
          <A02BLP01 ccin="58DC" part_number="45D7200"/>
          <A02BLP02 ccin="58DD" part_number="45D7199"/>
          <A02BPTF1 ccin="58E6" part_number="45D7197"/>
          <A02BPTR1 ccin="58E6" part number="45D7197"/>
          <A31BPS06J.07-A02BPS01J.01 ccin="P53C"
part_number="74Y0968"/>
          <A31BPS06J.08-A02BPS02J.01 ccin="P53D"
part_number="74Y0970"/>
          <A31BPS26J.07-A02BPS01J.02 ccin="P53E"
part number="74Y0969"/>
          <A31BPS26J.08-A02BPS02J.02 ccin="P53F"
part_number="74Y0971"/>
          <A31BPS08J.23-A02BLG10J.01 ccin="P56E"
part_number="74Y0941"/>
```

```
<A31BPS08J.24-A02BLG29J.01 ccin="P56F"
 part number="74Y0943"/>
           <A31BPS28J.23-A02BLG10J.02 ccin="P570"
 part number="74Y0942"/>
           <A31BPS28J.24-A02BLG29J.02 ccin="P571"
 part_number="74Y0944"/>
           <A31BBPEA ccin="58DA" part number="45D8544"/>
           <A31BBPEB ccin="58DA" part_number="45D8544"/>
           <a31BPS09 ccin="2C53" part number="41V2374"/>
           <A31BPS29 ccin="2C53" part_number="41V2374"/>
           <A31BPS05J.04-A25AEPOSJ.01 ccin="P544"
part number="74Y0827"/>
           <a31BPS25J.04-A25AEPOSJ.02 ccin="P545"
part number="74Y0828"/>
          <A31BPS05J.01-A31BPS25J.01 ccin="P546"
part_number="74Y0829"/>
          <A31BPS05J.07-A31BPS25J.07 ccin="P547"
part number="74Y0830"/>
          <A31BPS08J.09-A31BPS05J.03 ccin="P548"
part_number="74Y0839"/>
          <A31BPS28J.09-A31BPS05J.02 ccin="P549"
part_number="74Y0840"/>
          <A31BPS08J.10-A31BPS25J.03 ccin="P54B"
part_number="74Y0842"/>
          <A31BPS28J.10-A31BPS25J.02 ccin="P54A"
part number="74Y0841"/>
          <A31BPS08J.03-A31BPS28J.03 ccin="P54C"
part number="74Y0832"/>
          <A31BPS08J.04-A31BPS28J.04 ccin="P54D"
part_number="74Y0833"/>
          <support elements>
              <A99B_LAPTOP ccin="PCLT" part_number="2394T53"/>
              <A99B_IC_DRAM_CARD ccin="PCDR" part_number="03X6562"/>
              <A99B RW_RESTORE_MEDIA ccin="RDSK"
part number="RSTDISK"/>
              <A99B_FIXED_DISK ccin="FDSK" part_number="41T9416"/>
              <A99B_CD_ROM_DRIVE ccin="CDRV" part_number="75Y5115"/>
              <A99BAA01 ccin="PCBD" part number="73Y9525"
serial number="00000R9Z9ZZ4"/>
              <A99B_BATTERY ccin="PCBT" part_number="02K7078"/>
              <A99B_PWR_ON_CONN ccin="PCPO" part_number="41U8243"/>
              <A99B-NET_ADAPT ccin="PCMB" part_number="46K2671"/>
              <A99S_LAPTOP ccin="PCLT" part_number="2394T53"/>
              <A99S_RW_RESTORE MEDIA ccin="RDSK"
part number="RSTDISK"/>
              <A99S_CD_ROM_DRIVE ccin="CDRV" part_number="75Y5115"/>
              <A99SAA01 ccin="PCBD" part_number="73Y9525"
serial number="00000R9Z6NK8"/>
              <A99S_BATTERY ccin="PCBT" part_number="02K7078"/>
              <A99S_PWR_ON_CONN ccin="PCPO" part_number="41U8243"/>
              <A99S_VPD_PCTM ccin="VPTM" part_number="2394BF7"/>
```

```
<A99S_VPD_PCBIOS ccin="VPBS" part_number="G4ET90WW</pre>
 (2."/>
               <A99S_VPD_PCSN ccin="VPSN" part number="R900Z6NK8"/>
               <A99S_VPD_PCMS ccin="VPMS" part_number="15832608"/>
               <a998_IC_DRAM_CARD ccin="PCDR" part_number="03X6562"/>
               <A99S_VPD_PCFD ccin="VPFD" part_number="41T9416"/>
               <A99S_FIXED_DISK ccin="FDSK" part_number="41T9416"/>
               <A99S_VPD_PCEM ccin="VPEM" part_number="46K2671"/>
               <A99S-NET_ADAPT ccin="PCMS" part_number="46K2671"/>
               <A99B_VPD_PCTM ccin="VPTM" part_number="2394BF7"/>
               <A99B_VPD_PCSN ccin="VPSN" part_number="R900Z9ZZ4"/>
               <A99B_VPD_PCMS ccin="VPMS" part_number="15832608"/>
               <A99B_VPD_PCFD ccin="VPFD" part_number="41T9416"/>
               <A99B_VPD_PCBIOS ccin="VPBS" part number="G4ET90WW
 (2."/>
              <A99B_VPD_PCEM ccin="VPEM" part_number="46K2671"/>
            </fru>
          </support elements>
          <A31BPS05J.11-ACECLG01J.02 ccin="P524"
part number="74Y0855"/>
          <A31BPS25J.11-ACECLG01J.03 ccin="P525"
part number="74Y0856"/>
          <A31BPS05J.10-ACECA101J.00 ccin="P520"
part number="74Y0848"/>
          <A31BPS05J.10-ACECA201J.00 ccin="P520"
part_number="74Y0848"/>
          <A31BPS25J.10-ACECA101J.01 ccin="P521"
part number="74Y0849"/>
          <A31BPS25J.10-ACECA201J.01 ccin="P521"
part_number="74Y0849"/>
          <A31BPS08J.15-ACECD501J.01 ccin="P552"
part_number="74Y0843"/>
          <A31BPS08J.16-ACECD601J.01 ccin="P553"
part number="74Y0845"/>
          <A31BPS28J.15-ACECD501J.02 ccin="P554"
part_number="74Y0844"/>
          <A31BPS28J.16-ACECD601J.02 ccin="P555"
part number="74Y0846"/>
          <A02BLG29 card_type="0x10B30007" ccin="2BD2"
part_number="73Y4512" serial_number="YH10UN37Y03V"/>
          <A02BLG10 card_type="0x10B30007" ccin="2BD2"
part_number="73Y4512" serial_number="YH10UN37Y04R"/>
          <A02BBD01 card_type="0x10F20002" ccin="58A5"
part_number="46K3920" serial_number="YH10UN32M03L"/>
          <A02BD237 card_type="0x50D90015" ccin="E005"
part_number="78P1518" serial_number="YH10UC378C3H"/>
          <A02BD220 card type="0x50D90015" ccin="E005"
part_number="78P1518" serial_number="YH10UC378C3K"/>
          <A02BD219 card type="0x50D90013" ccin="E003"
part_number="78P1517" serial_number="YH10RU34K013"/>
          <A02BD137 card_type="0x50D90015" ccin="E005"
part_number="78P1518" serial_number="YH10UC378C3J"/>
```

```
<A02BD120 card_type="0x50D90015" ccin="E005"
 part_number="78P1518" serial_number="YH10UC378C3L"/>
           <A02BD119 card_type="0x50D90013" ccin="E003"
 part_number="78P1517" serial_number="YH10RU34K01N"/>
           <A02BD231 card type="0x50C90014" ccin="57E0"
 part_number="78P1718" serial_number="YH10RVD7204X"/>
           <A02BD230 card_type="0x50C90014" ccin="57E0"
 part_number="78P1718" serial_number="YH10RVD72081"/>
           <A02BD228 card_type="0x50C90014" ccin="57E0"
 part_number="78P1718" serial_number="YH10RVD730HN"/>
           <A02BD227 card_type="0x50C90014" ccin="57E0"
 part_number="78P1718" serial number="YH10RVD720LG"/>
           <A02BD212 card_type="0x50C90014" ccin="57E0"
 part_number="78P1718" serial_number="YH10RVD7203Z"/>
           <A02BD211 card_type="0x50C90014" ccin="57E0"
 part_number="78P1718" serial_number="YH10RVD7207C"/>
           <A02BD209 card_type="0x50C90014" ccin="57E0"
 part_number="78P1718" serial_number="YH10RVD74078"/>
           <A02BD208 card_type="0x50C90014" ccin="57E0"
 part_number="78P1718" serial_number="YH10RVD7407X"/>
           <A02BD136 card type="0x50D90011" ccin="E001"
 part_number="78P1514" serial_number="YH10RU36S01V"/>
           <A02BD131 card_type="0x50C90014" ccin="57E0"
part_number="78P1718" serial_number="YH10RVD7204U"/>
           <A02BD130 card_type="0x50C90014" ccin="57E0"
part_number="78P1718" serial_number="YH10RVD72042"/>
           <A02BD128 card_type="0x50C90014" ccin="57E0"
part_number="78P1718" serial_number="YH10RVD7200R"/>
           <A02BD127 card_type="0x50C90014" ccin="57E0"
part_number="78P1718" serial_number="YH10RVD7205Z"/>
          <A02BD121 card_type="0x50D90011" ccin="E001"
part_number="78P1514" serial_number="YH10RU36S01U"/>
          <A02BD118 card_type="0x50D90011" ccin="E001"
part_number="78P1514" serial_number="YH10RU36S01Y"/>
          <A02BD112 card_type="0x50C90014" ccin="57E0"
part_number="78P1718" serial_number="YH10RVD730HL"/>
          <A02BD111 card_type="0x50C90014" ccin="57E0"
part_number="78P1718" serial_number="YH10RVD72026"/>
          <A02BD109 card_type="0x50C90014" ccin="57E0"
part_number="78P1718" serial_number="YH10RVD7407V"/>
          <A02BD108 card_type="0x50C90014" ccin="57E0"
part_number="78P1718" serial_number="YH10RVD7407U"/>
          <A02BD103 card_type="0x50D90011" ccin="E001"
part_number="78P1514" serial_number="YH10RU36S00G"/>
          <A02BLG38 card_type="0x10DC1001" ccin="57EA"
part_number="41U9756" serial_number="YH1016D6B306"/>
          <A02BLG37 card_type="0x10D31006" ccin="59A8"
part_number="73Y9813" serial_number="YH1NHM37D153"/>
          <A02BLG36 card_type="0x10D31006" ccin="59A8"
part_number="73Y9813" serial_number="YH1NHM36V075"/>
          <A02BLG34 card_type="0x10352001" ccin="58A6"
part_number="46K4033" serial_number="YH11UN37P02D"/>
```

```
<A02BLG31 card_type="0x10D11002" ccin="58AC"
part_number="41T9307" serial_number="YH10BG387044"/>
          <A02BLG30 card_type="0x10D11002" ccin="58AC"
part_number="41T9307" serial_number="YH10BG3870JM"/>
          <A02BLG28 card_type="0x10D11002" ccin="58AC"
part_number="41T9307" serial_number="YH10BG3870FH"/>
          <A02BLG27 card type="0x10D11002" ccin="58AC"
part_number="41T9307" serial_number="YH10BG38702T"/>
          <A02BLG24 card_type="0x10352001" ccin="58A6"
part_number="46K4033" serial_number="YH11UN37P01J"/>
          <A02BLG21 card type="0x10D31006" ccin="59A8"
part_number="73Y9813" serial_number="YH1NHM36V197"/>
          <A02BLG20 card_type="0x10D31006" ccin="59A8"
part_number="73Y9813" serial_number="YH1NHM375209"/>
          <A02BLG19 card_type="0x10D31006" ccin="59A8"
part_number="73Y9813" serial_number="YH1NHM367355"/>
          <A02BLG18 card_type="0x10D31006" ccin="59A8"
part number="73Y9813" serial_number="YH1NHM36V151"/>
          <A02BLG15 card_type="0x10352001" ccin="58A6"
part_number="46K4033" serial_number="YH11UN37P01T"/>
          <A02BLG12 card_type="0x10D11002" ccin="58AC"
part_number="41T9307" serial_number="YH10BG38706Z"/>
          <A02BLG11 card type="0x10D11002" ccin="58AC"
part_number="41T9307" serial_number="YH10BG38700P"/>
          <A02BLG09 card_type="0x10D11002" ccin="58AC"
part number="41T9307" serial_number="YH10BG3870P9"/>
          <A02BLG08 card_type="0x10D11002" ccin="58AC"
part_number="41T9307" serial_number="YH10BG3870GN"/>
          <A02BLG05 card_type="0x10352001" ccin="58A6"
part_number="46K4033" serial_number="YH11UN37P01M"/>
          <A02BLG03 card type="0x10D31006" ccin="59A8"
part_number="73Y9813" serial_number="YH1NHM36V065"/>
          <A02BLG02 card type="0x10DC1001" ccin="57EA"
part number="41U9756" serial number="YH1016D6V329"/>
          <ACECLG01AA01 card_type="0x20120011" ccin="2D27"</pre>
part_number="95Y5790" serial_number="YH1016394003"/>
          <ACECD401 card_type="0x20B70002" ccin="58E1"</pre>
part_number="73Y4630" serial_number="YH1CUE31M026"/>
          <ACECD301 card_type="0x20B70002" ccin="58E1"</pre>
part_number="73Y4630" serial_number="YH1CUE31M014"/>
          <ACECD601 card_type="0x20B30002" ccin="2C21"</pre>
part_number="95Y5234" serial_number="YH10CM37H11E"/>
          <ACECD501 card_type="0x20B30002" ccin="2C21"</pre>
part number="95Y5234" serial number="YH10CM37H12X"/>
          <ACECD801 card_type="0x10351006" ccin="58A0"</pre>
part_number="41T8052" serial_number="YH10UE25R245"/>
          <ACECD101 card_type="0x10351006" ccin="58A0"
part_number="41T8052" serial number="YH10UE31P132"/>
          <ACECLG01MD10 card_type="0x12214220" ccin="58CA"</pre>
part_number="41T8230" serial_number="YH10MV36J008"/>
          <ACECLG01MD09 card_type="0x12214220" ccin="58CA"</pre>
part_number="41T8230" serial_number="YH10MV36J02S"/>
```

```
<ACECLG01MD08 card type="0x12214220" ccin="58CA"</pre>
 part_number="41T8230" serial_number="YH10MV36J00A"/>
           <ACECLG01MD07 card_type="0x12214220" ccin="58CA"</pre>
 part_number="41T8230" serial_number="YH10MV36J00Y"/>
           <ACECLG01MD06 card_type="0x12214220" ccin="58CA"</pre>
 part_number="41T8230" serial_number="YH10MV36J00X"/>
           <ACECLG01MD05 card_type="0x12214220" ccin="58CA"</pre>
part_number="41T8230" serial_number="YH10MV36J00B"/>
           <ACECLG01MD04 card_type="0x12214220" ccin="58CA"</pre>
part_number="41T8230" serial_number="YH10MV36J006"/>
           <ACECLG01MD03 card_type="0x12214220" ccin="58CA"</pre>
part number="41T8230" serial number="YH10MV36J005"/>
           <ACECLG01MD02 card_type="0x12214220" ccin="58CA"</pre>
part_number="41T8230" serial_number="YH10MV36J00C"/>
           <ACECLG01MD01 card_type="0x12214220" ccin="58CA"</pre>
part_number="41T8230" serial_number="YH10MV36J007"/>
           <ACECLG01SCM3 card_type="0x10111004" ccin="2D28"
part_number="52Y9687" serial number="YH1931778038"/>
           <ACECLG01SCM2 card_type="0x10111100" ccin="2D2A"</pre>
part_number="52Y9712" serial_number="YH1931765053"/>
           <ACECLG01SCM1 card type="0x10111005" ccin="2D29"</pre>
part_number="52Y9686" serial_number="YH1931758441"/>
           <A02BMSA2 card type="0x10E60004" ccin="2C8C"
part_number="41T9377" serial_number="YH10KFD71060"/>
           <A02BMSA1 card_type="0x10E60004" ccin="2C8C"
part_number="41T9377" serial number="YH10KFD71037"/>
           <ACECA201 card_type="0x10E60001" ccin="2C74"</pre>
part_number="73Y9456" serial_number="YH10SDJ50192"/>
           <ACECA101 card type="0x10E60001" ccin="2C74"
part_number="73Y9456" serial_number="YH10SDJ50166"/>
          <A25AEPOS card_type="0x10E50001" ccin="2C79"
part_number="41T8507" serial number="YH10ADD01200"/>
          <A02BPS02 card_type="0x10E4000C" ccin="2C77"
part_number="73Y9550" serial number="YH10ADJ20785"/>
          <A02BPS01 card_type="0x10E4000C" ccin="2C77"
part_number="73Y9550" serial_number="YH10ADJ20786"/>
          <ACECLG01PS02 card_type="0x10E40004" ccin="2C8B"</pre>
part_number="00V5443" serial_number="YH10ACP11897"/>
          <ACECLG01PS01 card_type="0x10E40004" ccin="2C8B"</pre>
part_number="00V5443" serial_number="YH10ACP11876"/>
          <a31BPS28 card_type="0x10EA0003" ccin="2C8A"
part_number="45D7958" serial_number="YH10SDJ53371"/>
          <a31BPS26 card_type="0x10E30001" ccin="2C75"
part_number="73Y9592" serial_number="YH10SDJ53355"/>
          <A31BPS25 card type="0x10E10004" ccin="2C31"
part_number="73Y9591" serial_number="YH10SDH53086"/>
          <A31BPS24 card_type="0x10E20001" ccin="2C7B"</pre>
part_number="41U7721" serial_number="YH10SDH57817"/>
          <A31BPS08 card type="0x10EA0003" ccin="2C8A"
part_number="45D7958" serial_number="YH10SDJ53369"/>
          <a31BPS06 card_type="0x10E30001" ccin="2C75"
part_number="73Y9592" serial_number="YH10SDJ53329"/>
```

```
<A31BPS05 card type="0x10E10004" ccin="2C31"</pre>
 part_number="73Y9591" serial_number="YH10SDG52728"/>
           <A31BPS04 card_type="0x10E20001" ccin="2C7B"
 part_number="41U7721" serial number="YH10SDF57189"/>
           <a31BPS05J.05-A99S ccin="P550" part_number="74Y0922"/>
           <a31BPS25J.05-A99B ccin="P349" part number="45D3857"/>
           <a31BPS08J.05-A99S_SNET ccin="P54E" part_number="74Y0834"/>
           <A31BPS28J.05-A99B_SNET ccin="P54F" part_number="74Y0835"/>
         </fru>
       </frame>
       <logical>
         <record>
           <ACEC_EBOD_FEATURES ccin="EBOD"
 part_number="DEFAULT">00000000000</ACEC_EBOD_FEATURES>
           <ACEC_LPUS ccin="LPCT" part_number="DEFAULT">6</ACEC_LPUS>
           <ACEC_CPUS ccin="CPCT" part_number="DEFAULT">2</ACEC_CPUS>
           <ACEC_SAPS ccin="SACT" part_number="DEFAULT">2</ACEC_SAPS>
           <ACEC_ICFS ccin="CFCT" part_number="DEFAULT">0</ACEC_ICFS>
           <ACEC_IFLS ccin="LCCT" part_number="DEFAULT">2</ACEC_IFLS>
           <ACEC_IFAS ccin="IFCT" part_number="DEFAULT">0</ACEC_IFAS>
           <ACEC_SUPS ccin="SUCT" part_number="DEFAULT">1</ACEC_SUPS>
           <ACEC_IFPS ccin="IPCT" part_number="DEFAULT">1</ACEC_IFPS>
           <ACEC_KCID ccin="KCID"
part_number="DEFAULT">0x42</ACEC_KCID>
           <ACEC_MAX_PURCH_KCID ccin="UKID"</pre>
part_number="DEFAULT">0x44</ACEC_MAX_PURCH_KCID>
           <ACEC_MAX_PURCH_CPUS ccin="UCCT"</pre>
part_number="DEFAULT">2</ACEC_MAX_PURCH_CPUS>
           <ace_unassigned_saps ccin="usct"
part_number="DEFAULT">0</ACEC_UNASSIGNED_SAPS>
           <ACEC_UNASSIGNED ICFS ccin="UFCT"
part_number="DEFAULT">0</ACEC UNASSIGNED ICFS>
           <ACEC_UNASSIGNED IFLS ccin="ULCT"</pre>
part_number="DEFAULT">0</ACEC_UNASSIGNED_IFLS>
          <ACEC_UNASSIGNED_IFAS ccin="UACT"</pre>
part_number="DEFAULT">0</ACEC_UNASSIGNED_IFAS>
          <acec_unassigned_sups ccin="uict"
part_number="DEFAULT">0</ACEC_UNASSIGNED SUPS>
          <ACEC UNASSIGNED IFPS ccin="UPCT"
part_number="DEFAULT">0</ACEC UNASSIGNED IFPS>
          <ACEC_PHYSICAL_PUS ccin="PUCT"
part_number="DEFAULT">9</ACEC_PHYSICAL_PUS>
          <acec_faileD_PUS ccin="fPCT"
part_number="DEFAULT">0</ACEC FAILED PUS>
          <ACEC_SPARE_PUS ccin="SPCT"</pre>
part_number="DEFAULT">0</ACEC SPARE PUS>
          <ACEC_LICCC_MEMORY_ccin="CPLM"
part_number="DEFAULT">0xA0</ACEC LICCC MEMORY>
          <ACEC_PHYSICAL_MEMORY ccin="CPPM"</pre>
part_number="DEFAULT">0x0140</ACEC_PHYSICAL_MEMORY>
          <ACEC_ADDRESSABLE_MEMORY ccin="CPAM"</pre>
part_number="DEFAULT">0x0100</ACEC_ADDRESSABLE_MEMORY>
```

```
<ACEC LG01 PUS ccin="PUCT"
 part_number="DEFAULT">9</ACEC LG01 PUS>
           <ACEC_LG01_MEM ccin="CPPM"
 part number="DEFAULT">0x0100</ACEC_LG01_MEM>
           <ACEC_LG01_FAILED_PUS ccin="FPCT"</pre>
 part_number="DEFAULT">0</ACEC_LG01 FAILED PUS>
           <ACEC_NODE_0 ccin="FNOD" part_number="DEFAULT"/>
           <A99B LIC ccin="LICL" ec number="H49564"
 part number="41T8438">140.123</A99B LIC>
           <A99S_LIC ccin="LICL" ec number="H49564"
 part_number="41T8438">140.123</A99S_LIC>
           <AIOS_IO_WWPN ccin="IOSN" io_wwpn="C05076E0DA800000"
 part number="DEFAULT"/>
           <a>A99F_PLAN_AHEAD_MEMORY ccin="PAMF"</a>
 part_number="DEFAULT">0x0000</A99F_PLAN_AHEAD MEMORY>
           <A99F QUALITYOFSERVICE ccin="FQOS"
 part_number="DEFAULT">01</A99F QUALITYOFSERVICE>
           <ACECLG01 AIDLIST ccin="XAID"
part_number="DEFAULT">08090A0B</ACECLG01 AIDLIST>
           <A99F_ZBX_XASB MAXE ccin="ZBEM"
part_number="DEFAULT">0</A99F_ZBX_XASB_MAXE>
           <A99F_ZBX PASB MAXE ccin="ZBEM"
part_number="DEFAULT">0</A99F ZBX PASB MAXE>
           <A99F ZBX DPWR MAXE ccin="ZBEM"
part_number="DEFAULT">0</A99F ZBX DPWR MAXE>
           <A99F_ZBX_XASB_CURE_ccin="ZBEC"
part_number="DEFAULT">0</A99F_ZBX_XASB_CURE>
           <A99F_ZBX_PASB_CURE ccin="ZBEC"
part_number="DEFAULT">0</A99F_ZBX_PASB_CURE>
           <A99F_ZBX_DPWR_CURE ccin="ZBEC"
part_number="DEFAULT">0</A99F ZBX DPWR CURE>
           <A99S_LIC_ROCE ccin="ECLV" ec_number="H49589"</pre>
part_number="00JJ182">000.000</A99S_LIC_ROCE>
           <A99S_LIC_ZCOMP ccin="ECLV" ec number="H49590"</pre>
part_number="00JJ183">004.004</A99S_LIC_ZCOMP>
          <A99S_LIC_ZFLASH ccin="ECLV" ec_number="H49517"</pre>
part_number="41T8373">012.011</A99S_LIC_ZFLASH>
          <A99S LIC G2OSN ccin="ECLV" ec number="H49519"</pre>
part_number="41T8375">003.003</A99S LIC G2OSN>
          <A99S_LIC_FWPART ccin="ECLV" ec number="H49520"</pre>
part_number="41T8376">009.007</A99S_LIC_FWPART>
          <A99S_LIC_G24S ccin="ECLV" ec number="H49521"</pre>
part_number="41T8377">021.019</A99S LIC G24S>
          <A99S_LIC_G2ICC ccin="ECLV" ec_number="H49522"</pre>
part_number="41T8378">013.011</A99S_LIC_G2ICC>
          <A99S_LIC_G2OSM ccin="ECLV" ec number="H49523"</pre>
part_number="41T8379">014.012</A99S_LIC G2OSM>
          <A99S_LIC_G2OSX ccin="ECLV" ec number="H49524"
part_number="41T8380">016.013</A99S LIC G2OSX>
          <A99S_LIC_OE40SD ccin="ECLV" ec_number="H49525"</pre>
part_number="41T8381">016.013</A99S_LIC_OE4OSD>
```

```
<A99S_LIC_G2PFCP_ccin="ECLV"_ec_number="H49526"
part number="41T8382">002.002</A99S LIC_G2PFCP>
          <A99S LIC G2PFCS ccin="ECLV" ec_number="H49527"
part number="41T8383">007.006</A99S_LIC_G2PFCS>
          <A99S_LIC_ENABLE2 ccin="ECLV" ec_number="H49528"
part_number="41T8384">000.000</A99S_LIC_ENABLE2>
          <A99S LIC OE3IED ccin="ECLV" ec_number="H49530"</pre>
part_number="41T8386">011.009</A99S_LIC_OE3IED>
          <A99S LIC OE3IEM ccin="ECLV" ec_number="H49531"</pre>
part_number="41T8389">007.007</A99S_LIC_OE3IEM>
          <A99S_LIC_YCRYPTO ccin="ECLV" ec_number="H49532"
part number="41T8392">021.019</A99S_LIC_YCRYPTO>
          <A99S LIC ENABLE1 ccin="ECLV" ec number="H49543"
part_number="41T8403">000.000</A99S_LIC_ENABLE1>
          <A99S_LIC_PUBS ccin="ECLV" ec_number="H49546"
part_number="41T8406">000.000</A99S_LIC_PUBS>
          <A99S LIC FCPEX24 ccin="ECLV" ec_number="H49547"</pre>
part_number="41T8408">002.002</A99S_LIC_FCPEX24>
          <A99S_LIC_FCPEX8 ccin="ECLV" ec_number="H49548"
part number="41T8409">002.002</A99S_LIC_FCPEX8>
          <A99S LIC OE4SOSE ccin="ECLV" ec_number="H49549"</pre>
part_number="41T8410">010.007</A99S_LIC_OE4SOSE>
          <A99S LIC OE30SE ccin="ECLV" ec_number="H49550"
part_number="41T8411">003.003</A99S_LIC_OE3OSE>
          <A99S LIC LDIPL ccin="ECLV" ec number="H49551"
part_number="41T8412">001.001</A99S_LIC_LDIPL>
          <A99S LIC CHDIAG ccin="ECLV" ec_number="H49552"
part_number="41T8413">000.000</A99S_LIC_CHDIAG>
          <A99S_LIC_PCX ccin="ECLV" ec_number="H49553"</pre>
part number="41T8426">000.000</A99S_LIC_PCX>
          <A99S_LIC_OE3ICC ccin="ECLV" ec_number="H49554"
part number="41T8427">008.007</A99S_LIC_OE3ICC>
          <A99S LIC OE3OSD ccin="ECLV" ec_number="H49555"
part_number="41T8428">010.008</A99S_LIC_OE3OSD>
          <A99S LIC OE3CDLC ccin="ECLV" ec_number="H49556"
part number="41T8429">001.001</A99S_LIC_OE3CDLC>
          <A99S_LIC_FCSEX24 ccin="ECLV" ec_number="H49557"
part_number="41T8430">007.006</A99S_LIC FCSEX24>
          <A99S_LIC_FCSEX8 ccin="ECLV" ec_number="H49558"
part_number="41T8431">007.006</A99S_LIC_FCSEX8>
          <A99S_LIC_CFCC ccin="ECLV" ec_number="H49559"
part number="41T8432">013.013</A99S_LIC_CFCC>
          <A99S LIC LPAR ccin="ECLV" ec_number="H49560"
part number="41T8433">013.013</A99S LIC_LPAR>
          <A99S LIC I390ML ccin="ECLV" ec number="H49561"
part_number="41T8435">091.080</A99S_LIC_I390ML>
          <A99S LIC MALERT ccin="ECLV" ec number="H49562"
part number="41T8436">104.085</A99S_LIC_MALERT>
          <A99S_LIC_CDUMM ccin="ECLV" ec_number="H49563"
part number="41T8437">000.000</A99S_LIC_CDUMM>
          <A99S LIC SYSTEM ccin="ECLV" ec_number="H49564"
part number="41T8438">140.123</A99S_LIC_SYSTEM>
```

```
<A99S LIC G24SEP ccin="ECLV" ec_number="H49515"
part_number="41T9399">009.008</A99S_LIC_G24SEP>
          <A99S_LIC_PCIDIAG ccin="ECLV" ec_number="H49516"
part_number="73Y9866">022.018</A99S_LIC_PCIDIAG>
          <A99S_LIC_PSCNSE ccin="ECLV" ec number="N49681"
part_number="95Y5638">037.027</A99S_LIC_PSCNSE>
          <A99S LIC SOS ccin="ECLV" ec_number="N49682"
part_number="95Y5639">062.057</A99S_LIC_SOS>
          <A99S LIC_HSTD ccin="ECLV" ec_number="N49683"
part_number="95Y5640">000.000</A99S_LIC_HSTD>
          <A99S_LIC_PSCNCC ccin="ECLV" ec_number="N49684"
part_number="95Y5641">037.027</A99S_LIC_PSCNCC>
          <A99S_LIC_POWERC ccin="ECLV" ec_number="N49685"
part_number="95Y5642">004.002</A99S_LIC_POWERC>
          <A99S_LIC_ENGDATA ccin="ECLV" ec_number="N49686"
part number="95Y5643">004.004</A99S_LIC_ENGDATA>
          <A99S_LIC_OS ccin="ECLV" ec_number="H49565"
part number="41T8439">056.037</A99S_LIC_OS>
          <A99S LIC AROM ccin="ECLV"
part_number="DEFAULT">0001</A99S_LIC_AROM>
          <A99B_LIC_ROCE ccin="ECLV" ec_number="H49589"
part_number="00JJ182">000.000</A99B_LIC_ROCE>
          <A99B_LIC_ZCOMP ccin="ECLV" ec_number="H49590"
part_number="00JJ183">004.004</A99B_LIC_ZCOMP>
          <A99B LIC ZFLASH ccin="ECLV" ec_number="H49517"
part_number="41T8373">012.011</A99B_LIC_ZFLASH>
          <A99B_LIC_G2OSN ccin="ECLV" ec_number="H49519"
part_number="41T8375">003.003</A99B_LIC_G2OSN>
          <A99B_LIC_FWPART ccin="ECLV" ec_number="H49520"
part_number="41T8376">009.007</A99B_LIC_FWPART>
          <A99B LIC G24S ccin="ECLV" ec_number="H49521"
part_number="41T8377">021.019</A99B_LIC_G24S>
          <A99B_LIC_G2ICC ccin="ECLV" ec_number="H49522"
part_number="41T8378">013.011</A99B_LIC_G2ICC>
          <A99B_LIC_G2OSM ccin="ECLV" ec_number="H49523"
part_number="41T8379">014.012</A99B_LIC_G2OSM>
          <A99B LIC G2OSX ccin="ECLV" ec_number="H49524"</pre>
part_number="41T8380">016.013</A99B_LIC_G2OSX>
          <A99B_LIC_OE4OSD ccin="ECLV" ec_number="H49525"
part_number="41T8381">016.013</A99B_LIC_OE4OSD>
          <A99B_LIC_G2PFCP ccin="ECLV" ec_number="H49526"
part number="41T8382">002.002</A99B_LIC_G2PFCP>
          <A99B_LIC_G2PFCS ccin="ECLV" ec_number="H49527"
part_number="41T8383">007.006</A99B_LIC_G2PFCS>
          <A99B_LIC_ENABLE2 ccin="ECLV" ec_number="H49528"
part_number="41T8384">000.000</A99B_LIC_ENABLE2>
          <A99B_LIC_OE3IED ccin="ECLV" ec_number="H49530"
part number="41T8386">011.009</A99B_LIC_OE3IED>
          <A99B_LIC_OE3IEM ccin="ECLV" ec_number="H49531"
part number="41T8389">007.007</A99B_LIC_OE3IEM>
          <A99B_LIC_YCRYPTO ccin="ECLV" ec_number="H49532"
part number="41T8392">021.019</A99B_LIC_YCRYPTO>
```

```
<A99B LIC ENABLE1 ccin="ECLV" ec_number="H49543"</pre>
part number="41T8403">000.000</A99B_LIC_ENABLE1>
          <A99B LIC PUBS ccin="ECLV" ec_number="H49546"
part number="41T8406">000.000</A99B_LIC_PUBS>
          <A99B_LIC_FCPEX24 ccin="ECLV" ec_number="H49547"</pre>
part_number="41T8408">002.002</A99B_LIC_FCPEX24>
          <A99B LIC FCPEX8 ccin="ECLV" ec_number="H49548"
part number="41T8409">002.002</A99B_LIC_FCPEX8>
          <A99B LIC OE4SOSE ccin="ECLV" ec_number="H49549"
part number="41T8410">010.007</A99B_LIC_OE4SOSE>
          <A99B LIC OE3OSE ccin="ECLV" ec_number="H49550"</pre>
part_number="41T8411">003.003</A99B_LIC_OE3OSE>
          <A99B LIC LDIPL ccin="ECLV" ec number="H49551"
part_number="41T8412">001.001</A99B_LIC_LDIPL>
          <A99B_LIC_CHDIAG ccin="ECLV" ec_number="H49552"
part number="41T8413">000.000</A99B LIC CHDIAG>
          <A99B LIC PCX ccin="ECLV" ec_number="H49553"</pre>
part_number="41T8426">000.000</A99B_LIC_PCX>
          <A99B LIC OE3ICC ccin="ECLV" ec_number="H49554"
part_number="41T8427">008.007</A99B_LIC_OE3ICC>
          <A99B_LIC_OE3OSD ccin="ECLV" ec_number="H49555"</pre>
part_number="41T8428">010.008</A99B_LIC_OE3OSD>
          <A99B LIC_OE3CDLC ccin="ECLV" ec_number="H49556"
part_number="41T8429">001.001</A99B_LIC_OE3CDLC>
          <A99B LIC FCSEX24 ccin="ECLV" ec number="H49557"
part_number="41T8430">007.006</A99B_LIC_FCSEX24>
          <A99B LIC FCSEX8 ccin="ECLV" ec_number="H49558"
part_number="41T8431">007.006</A99B_LIC_FCSEX8>
          <A99B LIC CFCC ccin="ECLV" ec number="H49559"
part_number="41T8432">013.013</A99B_LIC_CFCC>
          <A99B LIC LPAR ccin="ECLV" ec_number="H49560"
part_number="41T8433">013.013</A99B LIC_LPAR>
          <A99B LIC I390ML ccin="ECLV" ec_number="H49561"</pre>
part_number="41T8435">091.080</A99B_LIC_I390ML>
          <A99B LIC MALERT ccin="ECLV" ec number="H49562"
part number="41T8436">104.085</A99B LIC MALERT>
          <A99B LIC CDUMM ccin="ECLV" ec number="H49563"
part_number="41T8437">000.000</A99B_LIC_CDUMM>
          <A99B LIC SYSTEM ccin="ECLV" ec_number="H49564"</pre>
part number="41T8438">140.123</A99B_LIC_SYSTEM>
          <A99B LIC G24SEP ccin="ECLV" ec_number="H49515"</pre>
part_number="41T9399">009.008</A99B_LIC_G24SEP>
          <A99B LIC PCIDIAG ccin="ECLV" ec number="H49516"
part_number="73Y9866">022.018</A99B_LIC_PCIDIAG>
          <A99B LIC PSCNSE ccin="ECLV" ec number="N49681"
part_number="95Y5638">037.027</A99B_LIC_PSCNSE>
          <A99B_LIC_SOS ccin="ECLV" ec_number="N49682"
part_number="95Y5639">062.057</A99B LIC SOS>
          <A99B LIC HSTD ccin="ECLV" ec_number="N49683"
part_number="95Y5640">000.000</A99B_LIC_HSTD>
          <A99B LIC PSCNCC ccin="ECLV" ec number="N49684"
part number="95Y5641">037.027</A99B LIC PSCNCC>
```

```
<A99B LIC POWERC ccin="ECLV" ec_number="N49685"
part number="95Y5642">004.002</A99B LIC POWERC>
          <A99B LIC ENGDATA ccin="ECLV" ec_number="N49686"
part number="95Y5643">004.004</A99B LIC ENGDATA>
          <A99B LIC OS ccin="ECLV" ec_number="H49565"
part number="41T8439">056.037</A99B_LIC_OS>
          <A99B LIC AROM ccin="ECLV"
part number="DEFAULT">0001</A99B_LIC_AROM>
        </record>
      </logical>
      <features>
        <feature>
          <A99F BVP0 ENABLED ccin="BVP0" exp_date="20170319235959"</p>
part number="DEFAULT"/>
        </feature>
      </features>
    </system>
  </vpd>
  <CHPID_DATA mach_model="H06" mach_serial="000020068D77"
mach type="2828" timestamp="20161204134042"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
    <record ccin="57E0" chpid_map="0165NONENONENONENONENONENONENONE"</pre>
location="A02BD231 PCHIDS PORTS_0-7" serial_number="YH10RVD7204X"/>
    <record ccin="57E0" chpid_map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD231_PCHIDS_PORTS_8-F" serial number="YH10RVD7204X"/>
    <record ccin="57E0" chpid map="0161NONENONENONENONENONENONENONE"</pre>
location="A02BD230_PCHIDS_PORTS_0-7" serial_number="YH10RVD72081"/>
    <record ccin="57E0" chpid_map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD230 PCHIDS PORTS 8-F" serial number="YH10RVD72081"/>
    <record ccin="57E0" chpid map="015DNONENONENONENONENONENONENONE"</pre>
location="A02BD228_PCHIDS_PORTS_0-7" serial number="YH10RVD730HN"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD228 PCHIDS PORTS 8-F" serial number="YH10RVD730HN"/>
    <record ccin="57E0" chpid map="0159NONENONENONENONENONENONENONE"</pre>
location="A02BD227 PCHIDS PORTS 0-7" serial number="YH10RVD720LG"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD227_PCHIDS_PORTS_8-F" serial_number="YH10RVD720LG"/>
    <record ccin="57E0" chpid map="0125NONENONENONENONENONENONENONE"</pre>
location="A02BD212 PCHIDS PORTS 0-7" serial number="YH10RVD7203Z"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD212 PCHIDS PORTS 8-F" serial_number="YH10RVD7203Z"/>
    <record ccin="57E0" chpid map="0121NONENONENONENONENONENONENONE"</pre>
location="A02BD211_PCHIDS_PORTS_0-7" serial_number="YH10RVD7207C"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD211 PCHIDS PORTS 8-F" serial number="YH10RVD7207C"/>
    <record ccin="57E0" chpid map="011DNONENONENONENONENONENONENONE"</pre>
location="A02BD209 PCHIDS PORTS 0-7" serial number="YH10RVD74078"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD209 PCHIDS_PORTS 8-F" serial number="YH10RVD74078"/>
    <record ccin="57E0" chpid map="0119NONENONENONENONENONENONENONE"</pre>
location="A02BD208 PCHIDS_PORTS 0-7" serial number="YH10RVD7407X"/>
```

```
<record ccin="57E0" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD208 PCHIDS PORTS 8-F" serial number="YH10RVD7407X"/>
    <record ccin="E005" chpid map="0178NONENONENONENONENONENONENONE"</pre>
location="A02BD137 PCHIDS PORTS 0-7" serial number="YH10UC378C3J"/>
    <record ccin="E005" chpid map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD137 PCHIDS PORTS 8-F" serial number="YH10UC378C3J"/>
    <record ccin="E001" chpid map="0174NONENONENONENONENONENONENONE"</pre>
location="A02BD136 PCHIDS PORTS 0-7" serial number="YH10RU36S01V"/>
    <record ccin="E001" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD136_PCHIDS_PORTS_8-F" serial number="YH10RU36S01V"/>
    <record ccin="57E0" chpid map="0164NONENONENONENONENONENONENONE"</pre>
location="A02BD131 PCHIDS PORTS 0-7" serial number="YH10RVD7204U"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD131_PCHIDS_PORTS_8-F" serial number="YH10RVD7204U"/>
    <record ccin="57E0" chpid map="0160NONENONENONENONENONENONENONE"</pre>
location="A02BD130_PCHIDS_PORTS_0-7" serial_number="YH10RVD72042"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD130 PCHIDS PORTS 8-F" serial number="YH10RVD72042"/>
    <record ccin="57E0" chpid map="015CNONENONENONENONENONENONENONE"</pre>
location="A02BD128 PCHIDS PORTS 0-7" serial number="YH10RVD7200R"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD128 PCHIDS PORTS 8-F" serial number="YH10RVD7200R"/>
    <record ccin="57E0" chpid map="0158NONENONENONENONENONENONENONE"</pre>
location="A02BD127 PCHIDS PORTS 0-7" serial number="YH10RVD7205Z"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD127 PCHIDS PORTS 8-F" serial number="YH10RVD7205Z"/>
    <record ccin="E001" chpid map="0144NONENONENONENONENONENONENONE"</pre>
location="A02BD121 PCHIDS PORTS 0-7" serial number="YH10RU36S01U"/>
    <record ccin="E001" chpid map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD121 PCHIDS PORTS 8-F" serial number="YH10RU36S01U"/>
    <record ccin="E005" chpid map="0140NONENONENONENONENONENONENONE"</pre>
location="A02BD120 PCHIDS PORTS 0-7" serial number="YH10UC378C3L"/>
    <record ccin="E005" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD120 PCHIDS PORTS 8-F" serial number="YH10UC378C3L"/>
    <record ccin="E003" chpid map="013CNONENONENONENONENONENONENONE"</pre>
location="A02BD119 PCHIDS PORTS 0-7" serial number="YH10RU34K01N"/>
    <record ccin="E003" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD119_PCHIDS_PORTS_8-F" serial_number="YH10RU34K01N"/>
    <record ccin="E001" chpid map="0138NONENONENONENONENONENONENONE"</pre>
location="A02BD118 PCHIDS PORTS 0-7" serial number="YH10RU36S01Y"/>
    <record ccin="E001" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD118_PCHIDS_PORTS_8-F" serial_number="YH10RU36S01Y"/>
    <record ccin="57E0" chpid map="0124NONENONENONENONENONENONENONE"</pre>
location="A02BD112 PCHIDS PORTS 0-7" serial number="YH10RVD730HL"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD112 PCHIDS PORTS 8-F" serial number="YH10RVD730HL"/>
    <record ccin="57E0" chpid map="0120NONENONENONENONENONENONENONE"</pre>
location="A02BD111 PCHIDS PORTS 0-7" serial number="YH10RVD72026"/>
    <record ccin="57E0" chpid map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD111_PCHIDS_PORTS_8-F" serial_number="YH10RVD72026"/>
    <record ccin="57E0" chpid map="011CNONENONENONENONENONENONENONE"</pre>
location="A02BD109 PCHIDS PORTS 0-7" serial number="YH10RVD7407V"/>
```

```
<record ccin="57E0" chpid_map="NONENONENONENONENONENONENONENONE"</pre>
location="A02BD109 PCHIDS PORTS 8-F" serial number="YH10RVD7407V"/>
   <record ccin="57E0" chpid map="0118NONENONENONENONENONENONENONE"</pre>
location="A02BD108 PCHIDS PORTS 0-7" serial number="YH10RVD7407U"/>
   <record ccin="57E0" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD108 PCHIDS PORTS 8-F" serial number="YH10RVD7407U"/>
   <record ccin="E001" chpid map="0108NONENONENONENONENONENONENONE"</pre>
location="A02BD103 PCHIDS PORTS 0-7" serial number="YH10RU36S00G"/>
   <record ccin="E001" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BD103 PCHIDS PORTS 8-F" serial number="YH10RU36S00G"/>
   <record ccin="57EA" chpid map="017CNONENONENONENONENONENONENONE"</pre>
location="A02BLG38 PCHIDS PORTS 0-7" serial number="YH1016D6B306"/>
   <record ccin="57EA" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BLG38 PCHIDS PORTS 8-F" serial number="YH1016D6B306"/>
   <record ccin="57EA" chpid map="0104NONENONENONENONENONENONE"</pre>
location="A02BLG02 PCHIDS PORTS 0-7" serial number="YH1016D6V329"/>
   <record ccin="57EA" chpid map="NONENONENONENONENONENONENONE"</pre>
location="A02BLG02 PCHIDS PORTS 8-F" serial number="YH1016D6V329"/>
 </CHPID DATA>
 <eBOD DATA>
   <SystemInfo>
    <model>H06</model>
    <serialNumber>000020068D77</serialNumber>
    <timestamp>20161208190543</timestamp>
    <type>2828</type>
   </SystemInfo>
   <BillingInfo>
    <lastsequence>17</lastsequence>
    <recordInfo>
     <sequence>1</sequence>
     <blocktimestamp>1379670912921/blocktimestamp>
     <version>1</version>
00000000000086F74E2FBC9CDC7F</data>
    </recordInfo>
    <recordInfo>
     <sequence>2</sequence>
     <blocktimestamp>1379671343232</plocktimestamp>
     <version>1</version>
```

0000000000003CB18CE5E42C95B2</data> </recordInfo> <recordInfo> <sequence>3</sequence> <blocktimestamp>1379673481263</plocktimestamp> <version>1</version> 0000000000009498B9DE6D65E246</data> </recordInfo> <recordInfo> <sequence>4</sequence> <blocktimestamp>1379686878231</blocktimestamp> <version>1</version> 000000000000CD9A8CAF88D37E97</data> </recordInfo> <recordInfo> <sequence>5</sequence> <blocktimestamp>1379689784527</blocktimestamp> <version>1</version> 000000000000401511FCEEC1E4F1</data> </recordInfo> <recordInfo> <sequence>6</sequence>

<blocktimestamp>1380214814782</blocktimestamp>

<version>1</version>

</recordInfo>
<recordInfo>
 <sequence>7</sequence>
 <blocktimestamp>1380225465605</blocktimestamp>
 <version>1</version>

</recordInfo>
<recordInfo>
 <sequence>8</sequence>
 <blocktimestamp>1380409255325</blocktimestamp>
 <version>1</version>

</recordInfo>
<recordInfo>
 <sequence>9</sequence>
 <blocktimestamp>1380406441943</blocktimestamp>
 <version>1</version>

</recordInfo>

```
<recordInfo>
    <sequence>10</sequence>
    <blocktimestamp>1389531184439</blocktimestamp>
    <version>1</version>
```

```
</recordInfo>
<recordInfo>
  <sequence>11</sequence>
  <blocktimestamp>1411907482004</blocktimestamp>
  <version>1</version>
```

```
</recordInfo>
<recordInfo>
  <sequence>13</sequence>
   <blocktimestamp>1424443004400</blocktimestamp>
   <version>1</version>
```

```
000000000000580CB57EC3B5881F</data>
 </recordInfo>
 <recordInfo>
  <sequence>14</sequence>
  <blocktimestamp>1430868832958</blocktimestamp>
  <version>1</version>
0000000000005F6BD40DEF5078E5</data>
 </recordInfo>
 <recordInfo>
  <sequence>15</sequence>
  <blocktimestamp>1446381696768</plocktimestamp>
  <version>1</version>
000000000000BEFC2AF5F8682C39</data>
 </recordInfo>
 <recordInfo>
  <sequence>16</sequence>
  <blocktimestamp>1456058808992</blocktimestamp>
  <version>1</version>
000000000000628A02F8BDBB56D6</data>
 </recordInfo>
 <recordInfo>
  <sequence>17</sequence>
  <blocktimestamp>1480859919945</plocktimestamp>
```

<version>1</version>

```
</recordInfo>
</BillingInfo>
</eBOD_DATA>
```

</actvpda> </actvpdhmc cpc>

# ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CRFQ ISC1700000011

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

			Jumbers Received: x next to each addendum	receive	d)	
		<b>K</b> ]	Addendum No. 1	[	]	Addendum No. 6
	[	]	Addendum No. 2	E	]	Addendum No. 7
	[	]	Addendum No. 3	[	],	Addendum No. 8
	[	]	Addendum No. 4	[	]	Addendum No. 9
	[	]	Addendum No. 5	[	]	Addendum No. 10
further discus	un sion	ders hel	tand that any verbal repre d between Vendor's repre	sentatio esentative to the s	n m es a pec	Idenda may be cause for rejection of this bid. I ade or assumed to be made during any oral and any state personnel is not binding. Only the ifications by an official addendum is binding.  Tom Hardware Engineering & Consulting Inc.  Company
					). )a	uso S. Vash
						Authorized Signature
						December 13, 2016
						Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012

## **Exhibit A - Server and Tape Library Maintenance**

Pricing Sheet

Line Item Number	Item Name	Description	Alternative Item SKU	Alternative Item Name and Description	Unit of Measure	Quantity	Unit Price - Price per month	Extended Unit Price
4.1		Mandatory Contract Item Requirments						
4.1.1	Enterprise Mainframe Server Per Appendix "B" (Model 2828-S02, s/n 68D77)	All items listed under 4.1.1 which apply to Model 2828-S02 for a (12) month period.			Month	12	1,889.00	22,668.00
	Charleston Site - Virtualization Engine Server Per Appendix "A" (s/n 78H4077)	All items listed under 4.1.1 which apply to 3957-VEA TS7720 for a (12) month period.			Month	12	1,414.60	16,975.20
	Flatwoods Site - Virtualization Engine Server Per Appendix "A" (s/n 78H4070)	All items listed under 4.1.1 which apply to 3957-V06 TS7740 (Virtualization Engine Server) for a (12) month period.			Month	12	1,235.55	14,826.60
	Flatwoods Site - Tape Library Equipment List Per Appendix "A" (s/n 78A4126)	All items listed under 4.1.1 which apply to 3584-L23 TS3500 (Tape Library) for a (12) month period.			Month	12	367.50	4,410.00
4.1.2.1	Enterprise Mainframe Server Per Appendix "B" (Model 2828-S02, s/n 68D77)	Optional Renewal (per 4.1.1): Year "2"			Month	12	1,889.00	22,668.00
4.1.2.1	Charleston Site - Virtualization Engine Server Per Appendix "A" (s/n 78H4077)	Optional Renewal (per 4.1.1): Year "2"			Month	12	1,414.60	16,975.20
4.1.2.1	Flatwoods Site - Virtualization Engine Server Per Appendix "A" (s/n 78H4070)	Optional Renewal (per 4.1.1): Year "2"			Month	12	1,235.55	14,826.60
4.1.2.1	Flatwoods Site - Tape Library Equipment List Per Appendix "A" (s/n 78A4126)	Optional Renewal (per 4.1.1): Year "2"			Month	12	367.50	4,410.00
4.1.2.2	Enterprise Mainframe Server Per Appendix "B" (Model 2828-S02, s/n 68D77)	Optional Renewal (per 4.1.1): Year "3"			Month	12	1,889.00	22,668.00
4.1.2.2	Charleston Site - Virtualization Engine Server Per Appendix "A" (s/n 78H4077)	Optional Renewal (per 4.1.1): Year "3"			Month	12	1,414.60	16,975.20
4.1.2.2	Flatwoods Site - Virtualization Engine Server Per Appendix "A" (s/n 78H4070)	Optional Renewal (per 4.1.1): Year "3"			Month	12	1,235.55	14,826.60
	Flatwoods Site - Tape Library Equipment List Per Appendix "A" (s/n 78A4126)	Optional Renewal (per 4.1.1): Year "3"			Month	12	367.50	4,410.00
4.1.2.3	Enterprise Mainframe Server Per Appendix "B" (Model 2828-S02, s/n 68D77)	Optional Renewal (per 4.1.1): Year "4"			Month	12	1,889.00	22,668.00
4.1.2.3	Charleston Site - Virtualization Engine Server Per Appendix "A" (s/n 78H4077)	Optional Renewal (per 4.1.1): Year "4"			Month	12	1,414.60	16,975.20
4.1.2.3	Flatwoods Site - Virtualization Engine Server Per Appendix "A" (s/n 78H4070)	Optional Renewal (per 4.1.1): Year "4"			Month	12	1,235.55	14,826.60
4.1.2.3	Flatwoods Site - Tape Library Equipment List Per Appendix "A" (s/n 78A4126)	Optional Renewal (per 4.1.1): Year "4"			Month	12	367.50	4,410.00
						Total Bid P	rice (Total Cost)	235,519.20

# STATE OF WEST VIRGINIA Purchasing Division

## PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

#### **DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

## WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Custom Ha	urdware Engineering & Consulting, Inc.	dba: CHE Consulting,	Inc.
Authorized Signature:	id & Yarb	Date:	December 12, 2016
State of Missouri			
County of St. Louis	, to-wit:		
Taken, subscribed, and sworn to	before me this 2 day of	December	, 20 🔑
My Commission expires	28 17 20	17 [	TERESA D. JEHLING Notary Public - Notary Seal
AFFIX SEAL HERE	NOTARY	FUBLIC   My	State of Missouri mmissioned for St. Charles County Commission Expires: July 28, 2017
			Ommission Number: 13514238

Firesal Jaken

### **SPECIFICATIONS**

1. PURPOSE AND SCOPE: The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Office of Technology (WVOT) for the maintenance of one (1) IBM zEnterprise mainframe server, two (2) IBM virtual tape libraries (VTLs), and one (1) IBM physical tape library. The tape libraries are peripheral subsystems of the mainframe server. Tape library maintenance will commence upon expiration of original warranty, i.e. October 18, 2016, or as soon as possible thereafter. Mainframe server maintenance will commence upon expiration of original warranty, i.e. October 28, 2016, or as soon as possible thereafter.

### AGENCY'S MAINFRAME SERVER ENVIRONMENT

Agency owns and operates one (1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server's capacity setting is Model 2828-U02, downgraded to **Model 2828-S02**. The server contains two IFLs and one zIIP engine.

### AGENCY'S TAPE LIBRARY ENVIRONMENT:

Agency owns and operates two (2) IBM VTLs. One is located at the Agency's data center in Building 6 of the Capitol Complex, Charleston, WV. The other is located in a State data backup facility at 68 Richard D. Minnich Drive, Sutton WV. (Agency refers to the backup facility as the Flatwoods site.) The Agency also owns an IBM physical tape library, which is located at the Flatwoods site. The driving distance between the two locations is approximately 68 miles. The primary tape library components at the respective sites are:

### Charleston

IBM 3957-VEA TS7720 Virtualization Engine Server. Serial number 78H4077.

### Flatwoods

IBM 3957-V06 TS7740 Virtualization Engine Server. Serial number 78H4070.

IBM 3584-L23 TS3500 Tape Library. Serial number 78A4126.

**2. DEFINITIONS:** The terms listed below shall have the meanings assigned to them below. Additional definitions can be found in section 2 of the General Terms and Conditions.

- **2.1 "Contract Services"** means the mandatory requirements identified in Section 4, below, and its subsections.
- **2.2 "Pricing Page"** means the pages upon which Vendor should list its proposed price for the Contract Services. The Pricing Page is either included on the last page of this RFQ or attached hereto as Exhibit A.
- **2.3 "RFQ"** means the official request for quotation published by the Purchasing Division.
- 2.4 "Agency" means the customer, i.e. the West Virginia Office of Technology.
- 2.5 "IFL" means Integrated Facility for Linux, a processor dedicated to Linux workloads on IBM z systems.
- **2.6** "zIIP" means System z Integrated Information Processor, a special purpose processor designed to relieve DB2 processing workloads.
- 2.7 "VTL" means Virtual Tape Library, a data storage virtualization technology used typically for backup and recovery purposes. A VTL presents a storage component (usually hard disk storage) as tape libraries or tape drives for use with existing backup software.
- **2.8** "OEM" means Original Equipment Manufacturer of the equipment to be maintained under this solicitation, i.e. IBM Corporation.
- 3. QUALIFICATIONS: Vendor shall have the following minimum qualifications:
  - 3.1. Service technicians shall be trained by IBM Corporation, the manufacturer of the equipment to be maintained under this solicitation.
  - 3.2. Service technicians shall be experienced in maintaining the specific equipment (make and model number) to be maintained under this solicitation.

### 4. MANDATORY REQUIREMENTS:

**4.1 Mandatory Contract Services Requirements and Deliverables:** Contract Services must meet or exceed the mandatory requirements listed below.

- **4.1.1** Vendor shall maintain all equipment listed on Appendix "A" and Appendix "B". Pricing for all items listed in each appendix is to be included in bid price submittal (as distributed in the pricing sheet Exhibit "A").
  - **4.1.1.1** Maintenance shall be provided 24 x 7 x 365.
  - **4.1.1.2** Service technicians shall be on site within four hours of problem notification during the prime period of maintenance. The prime period of maintenance will be Monday through Friday, 8:00 a.m. to 5:00 p.m.
  - **4.1.1.3** Service technicians shall be on site within four hours of problem notification during intervals outside of the prime period of maintenance.
  - **4.1.1.4** Preventative maintenance must be performed outside of the prime period of maintenance, during hours that are mutually agreeable to Vendor and Agency.
  - **4.1.1.5** Vendor shall install at no additional cost to Agency field modifications and engineering changes as recommended by IBM.
  - 4.1.1.6 Vendor shall provide IBM Call Home functionality, or equal. The service shall constantly monitor the health and performance of the systems covered under this solicitation. Should an event occur which requires service, the function will notify both the Agency and the Vendor, automatically open a service request, and transfer preliminary critical diagnostic data to the assigned service technicians. All data transmitted to and from the Vendor's diagnostic facility shall be encrypted and sent via secure protocols.
  - **4.1.1.7** Vendor shall establish and maintain a local spare parts inventory, including all items contained in the OEM's commercially available spares kits for the devices under contract.
  - **4.1.1.8** Repair or replacement of worn or defective parts shall be consistent with the OEM's design of the equipment. Field maintenance technicians shall not attempt to repair faulty modules on site if the equipment was designed for the replacement of modules.

- **4.1.1.9** The level of replacement of worn or defective parts shall be consistent with the OEM's design of the equipment. Vendor shall repair or replace all faulty parts or components maintained under this solicitation. This responsibility includes furnishing all needed cables, cabinets, housings, power supplies, fans, circuit boards, assemblies, and any other item necessary to restore the equipment to proper operating condition, at no additional cost to the Agency.
- **4.1.1.10** Vendor shall use only new OEM parts. Vendor shall not use replacement parts which would result in the OEM refusing to support the equipment in question.

### 4.1.2 Renewal of Maintenance:

- **4.1.2.1** Optional Renewal (One Year) per Mandatory Contract Requirements (4.1.1) Year "2". All referenced equipment to be renewed: s/n 68D77, s/n 78H4077, s/n 78H4070, and, s/n 78A4126.
- **4.1.2.2** Optional Renewal (One Year) per Mandatory Contract Requirements (4.1.1) Year "3". All referenced equipment to be renewed: s/n 68D77, s/n 78H4077, s/n 78H4070, and, s/n 78A4126.
- **4.1.2.3** Optional Renewal (One Year) per Mandatory Contract Requirements (4.1.1) Year "4". All referenced equipment to be renewed: s/n 68D77, s/n 78H4077, s/n 78H4070, and, s/n 78A4126.

## 5. CONTRACT AWARD:

- **5.1 Contract Award:** The Contract is intended to provide Agency with a purchase price for the Contract Services. The Contract shall be awarded to the Vendor that provides the Contract Services meeting the required specifications for the lowest overall total cost as shown on the Pricing Pages.
- 5.2 **Pricing Page:** Vendor should complete the Pricing Page by filling in the "unit price" on Exhibit "A". Vendor should complete the Pricing Page in full as failure to complete the Pricing Page in its entirety may result in Vendor's bid being disqualified.

Vendor should type or electronically enter the information into the Pricing Pages through wvOASIS, if available, or as an electronic document. In most cases, the Vendor can request an electronic copy of the Pricing Pages for bid purposes by sending an email request to the following address: [insert buyer's contact info.]

- **6. PERFORMANCE:** Vendor and Agency shall agree upon a schedule for performance of Contract Services and Contract Services Deliverables, unless such a schedule is already included herein by Agency. In the event that this Contract is designated as an open-end contract, Vendor shall perform in accordance with the release orders that may be issued against this Contract.
- 7. PAYMENT: Agency shall pay a monthly rate, as shown on the Pricing Pages, for all Contract Services performed and accepted under this Contract. Vendor shall accept payment in accordance with the payment procedures of the State of West Virginia.
- **8. TRAVEL:** Vendor shall be responsible for all mileage and travel costs, including travel time, associated with performance of this Contract. Any anticipated mileage or travel costs may be included in the flat fee or hourly rate listed on Vendor's bid, but such costs will not be paid by the Agency separately.
- 9. FACILITIES ACCESS: Access cards and/or keys will not be issued to Vendor personnel. In order to gain entrance to Agency's facilities, Vendor personnel will report to a designated individual(s) at the site in question. They will be accompanied by Agency personnel at all times during performance of Contract Services.

## 10. VENDOR DEFAULT:

- 10.1. The following shall be considered a vendor default under this Contract.
  - **10.1.1.** Failure to perform Contract Services in accordance with the requirements contained herein.
  - **10.1.2.** Failure to comply with other specifications and requirements contained herein.
  - **10.1.3.** Failure to comply with any laws, rules, and ordinances applicable to the Contract Services provided under this Contract.

- 10.1.4. Failure to remedy deficient performance upon request.
- 10.2. The following remedies shall be available to Agency upon default.
  - 10.2.1. Cancellation of the Contract.
  - 10.2.2. Cancellation of one or more release orders issued under this Contract.
  - 10.2.3. Any other remedies available in law or equity.

### 11. MISCELLANEOUS:

11.1. Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: Jonathan Koebbe

**Telephone Number:** 636-305-9669 ext 10

Fax Number: 636-305-1441

Email Address: jkoebbe@checonsulting.com

### Appendix A

## TAPE LIBRARY EQUIPMENT LIST

# Charleston Site

- 1 3957-VEA TS7720 Virtualization Engine Server
- 2 201 9 Micron LC/LC 31 Meter
- 2 1033 1Gb Grid Dual Port Optical SW Connection
- 1 2715 Console Attachment
- 2 3442 FICON LW Attachment
- 1 4015 Grid Enablement
- 1 5268 100 MB/sec Increment
- 1 9000 Mainframe Attachment
- 1 9268 100 MB/sec Throughput
- 1 9461 8GB Memory Upgrade
- 1 3956-CS8 TS7720 SATA Cache Controller
- 1 7114 32 TB SATA Storage
- 2 3956-XS7 TS7720 SATA Cache Module

2	7114 32 TB SATA Storage
1 1 1 1	3952-F05 Tape Frame 1903 Dual AC Power 1904 Redundant AC Power 2732 TS3000 System Console 2733 Internal Modem
1	5759 Integrated Control Path
1	7322 TS7720 Base Frame
1	9954 NEMA L6-30 Power Cord
ľ	3304 NEIWA EO GO F GWGI GOIG
Flatwoods Site	
1	3957-V06 TS7740 Virtualization Engine Server
2	201 9 Micron LC/LC 31 Meter
2	1033 1Gb Grid Dual Port Optical SW Connection
1	2715 Console Attachment
2	3442 FICON LW Attachment
1	4015 Grid Enablement
1	5240 Dual Port FC HBA
1	5267 1 TB Cache Enablement
1	5268 100 MB/sec Increment
1	9000 Mainframe Attachment
1	9219 TS3500 Attach
1	9461 8GB Memory Upgrade
1	9900 Encryption Configuration
1 1	3956-CC8 TS7740 Cache Controller 7123 9.6 TB Fibre Storage
1	3952-F05 Tape Frame
1	1903 Dual AC Power
1	1904 Redundant AC Power
1	2732 TS3000 System Console
1	2733 Internal Modem
1	5759 Integrated Control Path
1	7312 TS7700 Base Frame
1	9954 NEMA L6-30 Power Cord
1	3584-L23 TS3500 Tape Library
6	1515 3592 Fibre Drive Mounting Kit
1	1659 16 Additional 3592 Slots
1	1692 Entry ALMS
1	1693 Intermediate ALMS

1694 Full ALMS
1950 Power Distribution Unit
2710 Remote Support Facility
2732 TS3000 System Console
2733 Internal Modem
4871 TS7700 BE SW Mounting Hardware
4872 TS7700 BE 4Gb Switch
9217 Attach to 3953 LM/TS7700
9700 No Host Cables from Plant
9954 Nema l6-30 Power Cord
9900 Encryption Configuration
3592-E05 IBM TS1120 Tape Drive
6013 13 Meter LC/LC Fibre Channel Cable
9000 zSeries ESCON/FICON Attachment
9216 zSeries Linux Attachment
9592 Encryption Capable

Appendix B

MAINFRAME SERVER EQUIPMENT LIST

2828-H06	IBM zNext BC	1
0092	HMC	1
0165	Fanout Airflow	2
0169	PCIe Fanout	2
0400	PCIe interconnect	4
0409	FICON Express8S 10KM LX 2 ports	8
0414	OSA-Express5S GbE SX 2 ports	1
0416	OSA-Express5S 10 GbE SR 1 port	4
0417	OSA-Express5S 1000BASE-T 2 ports	2
0865	Crypto Express4S	2
1147	Model H06	1
1609	32 GB Mem DIMM (10/feature)	1
1903	8 GB Memory Capacity Incr	17
3008	BPD Pair Air Model	1
3628	144 GB Memory	1
3759	Universal Lift Tool/Ladder	1
3863	CPACF Enablement	1
4009	PCIe I/O Drawer-A	1
5784	CP-S	2
5794	IFL	2
5798	zIIP	1
5951	2-Way Processor S02 - 873 MIPS / 109 MSU's	1
6096	Flat Panel Display	1
7921	Side Covers	1
8987	14ft 200V 30A 3 Ph Cord	1
9117	U02 Capacity Marker - 1097 MIPS / 137 MSU's	1
9896	On/Off COD authorization	1
9898	Perm upgr authorization	1
9900	On-Une CoD Buying (Flag)	1
9969	Site Tool Kit	1



State of West Virginia Request for Quotation 21 — Info Technology

Proc Folder: 265413

Doc Description: Mainframe and Tape Library Maintenance

Proc Type: Central Contract - Fixed Amt

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION 2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

### VENDOR

Vendor Name, Address and Telephone Number:

Custom Hardware Engineering & Consulting, Inc. dba: CHE Consulting, Inc.

1576 Fencorp Drive Fenton, MO 63026 636-305-9669

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale (304) 558-8801

stephanie.l.gale@wv.gov

Signature X Device S. Vonb

FEIN # 36-4128326

DATE December 12, 2016

### ADDITIONAL INFORMATION:

The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Office of Technology (WVOT) for the maintenance of one (1) IBM zEnterprise mainframe server, two (2) IBM virtual tape libraries (VTLs), and one (1) IBM physical tape library.

INVOICETO		SHIP TO	
DEPARTMENT OF ADM		STATE OF WEST V	VIRGINIA ONS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E	E, BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
us		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Enterprise Mainframe Server Maintenance - s/n 68D77	12.00000	MO	\$1889.00	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

### **Extended Description:**

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

INVOICETO		SHIP TO	
DEPARTMENT OF ADMINI		STATE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, E	BLDG 5 10TH FLOOR	•	
CHARLESTON	WV25305	No City	WV 99999
us		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Virtualization Engine Server Maintenance - s/n 78H4077	12.00000	МО	\$1414.60	\$16,975.20

### **Extended Description:**

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

INVOICETO		SHIPTO	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
3	Virtualization Engine Server	12.00000	MO	\$1235.55	\$14,826.60

Comm Code	Manufacturer	Specification	Model #	
81111812				

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

INVOIGETO			
DEPARTMENT OF ADM OFFICE OF TECHNOLO		STATE OF WEST VIF	RGINIA IS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E	E, BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
us		UŞ	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
4	Tape Library Maintenance - s/n 78A4126	12.00000	МО	\$367.50	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

### **Extended Description:**

Flatwoods Site Maintenance - Tape Library Equipment List Per RFQ and Appendix "A" (s/n 78A4126)

NVOICETO		SHIР ТО	
DEPARTMENT OF ADMII		STATE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E	, BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
5	Optional Renewal per 4.1.1 (year "2") - s/n 68D77	12.00000	МО	\$1889.00	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

### Extended Description:

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

NVOICE TO		SHIP TO	
DEPARTMENT OF ADMINISTR	RATION	STATE OF WEST VIR	GINIA
OFFICE OF TECHNOLOGY		<del>*</del>	S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, BLD	G 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
6	Optional Renewal per 4.1.1 (year "2") - s/n 78H4077	12.00000	MO	\$1414.60	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812				

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMIN		STATE OF WEST V	IRGINIA ONS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
7	Optional Renewal per 4.1.1 (year "2") - s/n 78H4070	12.00000	МО	\$1235.00	\$14,826.60

Comm Code	Manufacturer	Specification	Model #	
81111812				

### Extended Description :

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	RGINIA IS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
us		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
8	Optional Renewal per 4.1.1 (year "2") - s/n 78A4126	12.00000	МО	\$367.50	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812		,		

Flatwoods Site Maintenance - Tape Library Equipment List Per RFQ and Appendix "A" (s/n 78A4126)

INVOICE TO		SHIPTO	
DEPARTMENT OF ADMII		STATE OF WEST VII SEE SPECIFICATION	RGINIA NS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E	, BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
9	Optional Renewal per 4.1.1 (year "3") - s/n 68D77	12.00000	, MO	\$1889.00	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

#### **Extended Description:**

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
10	Optional Renewal per 4.1.1 (year "3") - s/n 78H4077	12.00000	МО	\$1414.60	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812				

### **Extended Description:**

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

NVOICE TO		SHIP TO	A TRANSPORTER TO THE PROPERTY OF THE PROPERTY
DEPARTMENT OF ADMIN		STATE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
us		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
11	Optional Renewal per 4.1.1 (year "3") - s/n 78H4070	12.00000	МО	\$1235.55	\$14,826.60

Comm Code	Manufacturer	Specification	Model #	
81111812				

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

INVOICE TO		SAIP 10	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FŁOOR		
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	 Unit Issue	Unit Price	Total Price
12	Optional Renewal per 4.1.1 (year "3") - s/n 78A4126	12.00000	МО	\$367.50	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

## Extended Description :

Flatwoods Site Maintenance - Tape Library Equipment List Per RFQ and Appendix "A" (s/n 78A4126)

INVOICETO		SHIP TO	
DEPARTMENT OF ADMIN	Y	STATE OF WEST VIRO SEE SPECIFICATIONS	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, I	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
us		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
13	Optional Renewal per 4.1.1 (year "4") - s/n 68D77	12.00000	МО	\$1889.00	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812		_		

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	RGINIA IS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty		Unit Issue	Unit Price	Total Price
14	Optional Renewal per 4.1.1 (year "4") - s/n 78H4077	12.00000	-	МО	\$1414.60	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812				

### **Extended Description:**

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMINIS	STRATION	STATE OF WEST VIEWS SEE SPECIFICATION	RGINIA NS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR			
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
15	Optional Renewal per 4.1.1 (year "4") - s/n 78H4070	12.00000	МО	\$1235.55	\$14,826.60

Comm Code	Manufacturer	Specification	Model #	
81111812				·····

### **Extended Description:**

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR			
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
16	Optional Renewal per 4.1.1 (year "4") - s/n 78A4126	12.00000	МО	\$367.50	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

Flatwoods Site Maintenance - Tape Library Equipment List Per RFQ and Appendix "A" (s/n 78A4126)

# Line Event Date 1 Technical Questions Due @ 5pm 2016-12-08

	Document Phase	Document Description	Page 9
ISC1700000011	Final	Mainframe and Tape Library Maintenance	of 9

## ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

## State of West Virginia

# **VENDOR PREFERENCE CERTIFICATE**

Certification and application\* is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

Divisio	n will make the determination of the vendor Preference, if applicable.
1.	Application is made for 2.5% vendor preference for the reason checked:  Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
	Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents
	years immediately preceding the date of this certification; or,
2.	Application is made for 2.5% vendor preference for the reason checked:  Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
3.	Application is made for 2.5% vendor preference for the reason checked:  Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
4.	Application is made for 5% vendor preference for the reason checked:  Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
5. ——	Application is made for 3.5% vendor preference who is a veteran for the reason checked:  Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
6.	Application is made for 3.5% vendor preference who is a veteran for the reason checked:  Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
7.	Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules.  Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.
against or deduc	inderstands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the nents for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency attended to the contraction or purchase order.
the requ	nission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and es the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid ired business taxes, provided that such information does not contain the amounts of taxes paid nor any other information by the Tax Commissioner to be confidential.

Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: Custom Hardware Engineering & Consulting, Inc.	Signed: Nous S. Jub
Date: December 12, 2016	Title: President/CEO

# GENERAL TERMS AND CONDITIONS:

- 1. CONTRACTUAL AGREEMENT: Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.
- 2. **DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.
- 2.1. "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.
- 2.2. "Bid" or "Proposal" means the vendors submitted response to this solicitation.
- 2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.
- **2.4.** "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.
- 2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.
- 2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.
- 2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
- 2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.
- 2.9. "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:
☑ Term Contract
Initial Contract Term: This Contract becomes effective on  Upon Award  and extends for a period of  One (1)  Near(s).  Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to  Three (3)  successive one (1) year periods or multiple renewal periods of less than one year, provided that the multiple renewal periods do not exceed  Thirty Six (36)  months in total. Automatic renewal of this Contract is prohibited. Notwithstanding the foregoing, Purchasing Division approval is not required on agency delegated or exempt purchases. Attorney General approval may be required for vendor terms and conditions.
Delivery Order Limitations: In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.
Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed withindays.
Fixed Period Contract with Renewals: This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within days.
Upon completion, the vendor agrees that maintenance, monitoring, or warranty services will be provided for one year thereafter with an additional successive one year renewal periods or multiple renewal periods of less than one year provided that the multiple renewal periods do not exceed months in total. Automatic renewal of this Contract is prohibited.
One Time Purchase: The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.
Other: See attached.

4. NOTICE TO PROCEED: Vendor shall begin performance of this Contract immediately upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.
5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.
Open End Contract: Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.
Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.
Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.
One Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.
6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.
7. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.
BID BOND (Construction Only): Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.
PERFORMANCE BOND: The apparent successful Vendor shall provide a performance bond in the amount of The performance bond must be received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

LABOR/MATERIAL PAYMENT BOND: The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award. In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable.
MAINTENANCE BOND: The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.
INSURANCE: The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:
Commercial General Liability Insurance: In the amount of or more.
Builders Risk Insurance: In an amount equal to 100% of the amount of the Contract.
The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

Revised 11/30/2016

LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.
□
The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.
8. WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.
9. LITIGATION BOND: The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.
10. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount of
for
This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

- 11. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.
- 12. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.
- 13. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.
- 14. PURCHASING CARD ACCEPTANCE: The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.
- Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.
- 15. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 16. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.
- 17. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.
- 18. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-6.1.e.

- 19. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.
- 20. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.
- 21. COMPLIANCE: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.
- 22. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.
- 23. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.
- 24. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
- 25. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
- 26. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

- 27. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.
- **28. STATE EMPLOYEES:** State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
- 29. BANKRUPTCY: In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.
- 30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <a href="http://www.state.wv.us/admin/purchase/privacy/default.html">http://www.state.wv.us/admin/purchase/privacy/default.html</a>.
- 31. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential." "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

- 33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.
- 34. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

- 36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services, materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.
- 37. PURCHASING AFFIDAVIT: In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.
- 38. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE: This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- 39. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- following reports identified by a checked box below:

  Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

  Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division

40. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the

via email at purchasing requisitions@wv.gov.

41. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

- 42. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS: Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:
- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
- c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

43. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Jonathan Koebbe Business Manager
(Name, Title)
Jonathan Koebbe Business Manager
(Printed Name and Title)
1576 Fencorp Drive Fenton, MO 63026
(Address)
636-305-9669 ext 20 Fax: 636-305-1441
(Phone Number) / (Fax Number)
jkoebbe@checonsulting.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Custom Hardware Engineering & Consulting, Inc. (dba: CHE Consulting, Inc.)

(Company)

David L. York President/CEO

(Authorized Signature) (Representative Name, Title)

David L. York President/CEO

(Printed Name and Title of Authorized Representative)

December 12, 2016

(Date)

636-305-9669 ext 10 Fax: 636-305-1441

(Phone Number) (Fax Number)

# GENERAL TERMS AND CONDITIONS:

- 1. CONTRACTUAL AGREEMENT: Issuance of a Award Document signed by the Purchasing Division Director, or his designee, and approved as to form by the Attorney General's office constitutes acceptance of this Contract made by and between the State of West Virginia and the Vendor. Vendor's signature on its bid signifies Vendor's agreement to be bound by and accept the terms and conditions contained in this Contract.
- 2. **DEFINITIONS:** As used in this Solicitation/Contract, the following terms shall have the meanings attributed to them below. Additional definitions may be found in the specifications included with this Solicitation/Contract.
- 2.1. "Agency" or "Agencies" means the agency, board, commission, or other entity of the State of West Virginia that is identified on the first page of the Solicitation or any other public entity seeking to procure goods or services under this Contract.
- 2.2. "Bid" or "Proposal" means the vendors submitted response to this solicitation.
- 2.3. "Contract" means the binding agreement that is entered into between the State and the Vendor to provide the goods or services requested in the Solicitation.
- **2.4.** "Director" means the Director of the West Virginia Department of Administration, Purchasing Division.
- 2.5. "Purchasing Division" means the West Virginia Department of Administration, Purchasing Division.
- 2.6. "Award Document" means the document signed by the Agency and the Purchasing Division, and approved as to form by the Attorney General, that identifies the Vendor as the contract holder.
- 2.7. "Solicitation" means the official notice of an opportunity to supply the State with goods or services that is published by the Purchasing Division.
- 2.8. "State" means the State of West Virginia and/or any of its agencies, commissions, boards, etc. as context requires.
- 2.9. "Vendor" or "Vendors" means any entity submitting a bid in response to the Solicitation, the entity that has been selected as the lowest responsible bidder, or the entity that has been awarded the Contract as context requires.

3. CONTRACT TERM; RENEWAL; EXTENSION: The term of this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below:
✓ Term Contract
Initial Contract Term: This Contract becomes effective on  Upon Award and extends for a period of One (1) year(s).
Renewal Term: This Contract may be renewed upon the mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any request for renewal should be submitted to the Purchasing Division thirty (30) days prior to the expiration date of the initial contract term or appropriate renewal term. A Contract renewal shall be in accordance with the terms and conditions of the original contract. Renewal of this Contract is limited to
<b>Delivery Order Limitations:</b> In the event that this contract permits delivery orders, a delivery order may only be issued during the time this Contract is in effect. Any delivery order issued within one year of the expiration of this Contract shall be effective for one year from the date the delivery order is issued. No delivery order may be extended beyond one year after this Contract has expired.
Fixed Period Contract: This Contract becomes effective upon Vendor's receipt of the notice to proceed and must be completed withindays.
Fixed Period Contract with Renewals: This Contract becomes effective upon Vendor's receipt of the notice to proceed and part of the Contract more fully described in the attached specifications must be completed within days.
Upon completion, the vendor agrees that maintenance, monitoring, or warranty services will be provided for one year thereafter with an additional successive one year renewal periods or multiple renewal periods of less than one year provided that the multiple renewal periods do not exceed months in total. Automatic renewal of this Contract is prohibited.
One Time Purchase: The term of this Contract shall run from the issuance of the Award Document until all of the goods contracted for have been delivered, but in no event will this Contract extend for more than one fiscal year.
Other: See attached.

upon receiving notice to proceed unless otherwise instructed by the Agency. Unless otherwise specified, the fully executed Award Document will be considered notice to proceed.
5. QUANTITIES: The quantities required under this Contract shall be determined in accordance with the category that has been identified as applicable to this Contract below.
Open End Contract: Quantities listed in this Solicitation are approximations only, based on estimates supplied by the Agency. It is understood and agreed that the Contract shall cover the quantities actually ordered for delivery during the term of the Contract, whether more or less than the quantities shown.
Service: The scope of the service to be provided will be more clearly defined in the specifications included herewith.
Combined Service and Goods: The scope of the service and deliverable goods to be provided will be more clearly defined in the specifications included herewith.
One Time Purchase: This Contract is for the purchase of a set quantity of goods that are identified in the specifications included herewith. Once those items have been delivered, no additional goods may be procured under this Contract without an appropriate change order approved by the Vendor, Agency, Purchasing Division, and Attorney General's office.
6. EMERGENCY PURCHASES: The Purchasing Division Director may authorize the Agency to purchase goods or services in the open market that Vendor would otherwise provide under this Contract if those goods or services are for immediate or expedited delivery in an emergency. Emergencies shall include, but are not limited to, delays in transportation or an unanticipated increase in the volume of work. An emergency purchase in the open market, approved by the Purchasing Division Director, shall not constitute of breach of this Contract and shall not entitle the Vendor to any form of compensation or damages. This provision does not excuse the State from fulfilling its obligations under a One Time Purchase contract.
7. REQUIRED DOCUMENTS: All of the items checked below must be provided to the Purchasing Division by the Vendor as specified below.
BID BOND (Construction Only): Pursuant to the requirements contained in W. Va. Code § 5-22-1(c), All Vendors submitting a bid on a construction project shall furnish a valid bid bond in the amount of five percent (5%) of the total amount of the bid protecting the State of West Virginia. The bid bond must be submitted with the bid.
PERFORMANCE BOND: The apparent successful Vendor shall provide a performance bond in the amount of The performance bond must be received by the Purchasing Division prior to Contract award. On construction contracts, the performance bond must be 100% of the Contract value.

LABOR/MATERIAL PAYMENT BOND: The apparent successful Vendor shall provide a labor/material payment bond in the amount of 100% of the Contract value. The labor/material payment bond must be delivered to the Purchasing Division prior to Contract award. In lieu of the Bid Bond, Performance Bond, and Labor/Material Payment Bond, the Vendor may provide certified checks, cashier's checks, or irrevocable letters of credit. Any certified check, cashier's check, or irrevocable letter of credit provided in lieu of a bond must be of the same amount and delivered on the same schedule as the bond it replaces. A letter of credit submitted in lieu of a performance and labor/material payment bond will only be allowed for projects under \$100,000. Personal or business checks are not acceptable.
MAINTENANCE BOND: The apparent successful Vendor shall provide a two (2) year maintenance bond covering the roofing system. The maintenance bond must be issued and delivered to the Purchasing Division prior to Contract award.
INSURANCE: The apparent successful Vendor shall furnish proof of the following insurance prior to Contract award and shall list the state as a certificate holder:
Commercial General Liability Insurance: In the amount of or more.
Builders Risk Insurance: In an amount equal to 100% of the amount of the Contract.

The apparent successful Vendor shall also furnish proof of any additional insurance requirements contained in the specifications prior to Contract award regardless of whether or not that insurance requirement is listed above.

LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section entitled Licensing, of the General Terms and Conditions, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits prior to Contract award, in a form acceptable to the Purchasing Division.
The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications prior to Contract award regardless of whether or not that requirement is listed above.
8. WORKERS' COMPENSATION INSURANCE: The apparent successful Vendor shall comply with laws relating to workers compensation, shall maintain workers' compensation insurance when required, and shall furnish proof of workers' compensation insurance upon request.
9. LITIGATION BOND: The Director reserves the right to require any Vendor that files a protest of an award to submit a litigation bond in the amount equal to one percent of the lowest bid submitted or \$5,000, whichever is greater. The entire amount of the bond shall be forfeited if the hearing officer determines that the protest was filed for frivolous or improper purpose, including but not limited to, the purpose of harassing, causing unnecessary delay, or needless expense for the Agency. All litigation bonds shall be made payable to the Purchasing Division. In lieu of a bond, the protester may submit a cashier's check or certified check payable to the Purchasing Division. Cashier's or certified checks will be deposited with and held by the State Treasurer's office. If it is determined that the protest has not been filed for frivolous or improper purpose, the bond or deposit shall be returned in its entirety.
10. LIQUIDATED DAMAGES: Vendor shall pay liquidated damages in the amount of
for
This clause shall in no way be considered exclusive and shall not limit the State or Agency's right to pursue any other available remedy.

- 11. ACCEPTANCE: Vendor's signature on its bid, or on the certification and signature page, constitutes an offer to the State that cannot be unilaterally withdrawn, signifies that the product or service proposed by vendor meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise indicated, and signifies acceptance of the terms and conditions contained in the Solicitation unless otherwise indicated.
- 12. PRICING: The pricing set forth herein is firm for the life of the Contract, unless specified elsewhere within this Solicitation/Contract by the State. A Vendor's inclusion of price adjustment provisions in its bid, without an express authorization from the State in the Solicitation to do so, may result in bid disqualification.
- 13. PAYMENT: Payment in advance is prohibited under this Contract. Payment may only be made after the delivery and acceptance of goods or services. The Vendor shall submit invoices, in arrears.
- 14. PURCHASING CARD ACCEPTANCE: The State of West Virginia currently utilizes a Purchasing Card program, administered under contract by a banking institution, to process payment for goods and services. The Vendor must accept the State of West Virginia's Purchasing Card for payment of all orders under this Contract unless the box below is checked.
- Vendor is not required to accept the State of West Virginia's Purchasing Card as payment for all goods and services.
- 15. TAXES: The Vendor shall pay any applicable sales, use, personal property or any other taxes arising out of this Contract and the transactions contemplated thereby. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 16. ADDITIONAL FEES: Vendor is not permitted to charge additional fees or assess additional charges that were not either expressly provided for in the solicitation published by the State of West Virginia or included in the unit price or lump sum bid amount that Vendor is required by the solicitation to provide. Including such fees or charges as notes to the solicitation may result in rejection of vendor's bid. Requesting such fees or charges be paid after the contract has been awarded may result in cancellation of the contract.
- 17. FUNDING: This Contract shall continue for the term stated herein, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise made available, this Contract becomes void and of no effect beginning on July 1 of the fiscal year for which funding has not been appropriated or otherwise made available.
- 18. CANCELLATION: The Purchasing Division Director reserves the right to cancel this Contract immediately upon written notice to the vendor if the materials or workmanship supplied do not conform to the specifications contained in the Contract. The Purchasing Division Director may also cancel any purchase or Contract upon 30 days written notice to the Vendor in accordance with West Virginia Code of State Rules § 148-1-6.1.e.

- 19. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.
- 20. APPLICABLE LAW: This Contract is governed by and interpreted under West Virginia law without giving effect to its choice of law principles. Any information provided in specification manuals, or any other source, verbal or written, which contradicts or violates the West Virginia Constitution, West Virginia Code or West Virginia Code of State Rules is void and of no effect.
- 21. COMPLIANCE: Vendor shall comply with all applicable federal, state, and local laws, regulations and ordinances. By submitting a bid, Vendor acknowledges that it has reviewed, understands, and will comply with all applicable laws, regulations, and ordinances.
- 22. ARBITRATION: Any references made to arbitration contained in this Contract, Vendor's bid, or in any American Institute of Architects documents pertaining to this Contract are hereby deleted, void, and of no effect.
- 23. MODIFICATIONS: This writing is the parties' final expression of intent. Notwithstanding anything contained in this Contract to the contrary no modification of this Contract shall be binding without mutual written consent of the Agency, and the Vendor, with approval of the Purchasing Division and the Attorney General's office (Attorney General approval is as to form only). Any change to existing contracts that adds work or changes contract cost, and were not included in the original contract, must be approved by the Purchasing Division and the Attorney General's Office (as to form) prior to the implementation of the change or commencement of work affected by the change.
- 24. WAIVER: The failure of either party to insist upon a strict performance of any of the terms or provision of this Contract, or to exercise any option, right, or remedy herein contained, shall not be construed as a waiver or a relinquishment for the future of such term, provision, option, right, or remedy, but the same shall continue in full force and effect. Any waiver must be expressly stated in writing and signed by the waiving party.
- 25. SUBSEQUENT FORMS: The terms and conditions contained in this Contract shall supersede any and all subsequent terms and conditions which may appear on any form documents submitted by Vendor to the Agency or Purchasing Division such as price lists, order forms, invoices, sales agreements, or maintenance agreements, and includes internet websites or other electronic documents. Acceptance or use of Vendor's forms does not constitute acceptance of the terms and conditions contained thereon.
- 26. ASSIGNMENT: Neither this Contract nor any monies due, or to become due hereunder, may be assigned by the Vendor without the express written consent of the Agency, the Purchasing Division, the Attorney General's office (as to form only), and any other government agency or office that may be required to approve such assignments. Notwithstanding the foregoing, Purchasing Division approval may or may not be required on certain agency delegated or exempt purchases.

- 27. WARRANTY: The Vendor expressly warrants that the goods and/or services covered by this Contract will: (a) conform to the specifications, drawings, samples, or other description furnished or specified by the Agency; (b) be merchantable and fit for the purpose intended; and (c) be free from defect in material and workmanship.
- 28. STATE EMPLOYEES: State employees are not permitted to utilize this Contract for personal use and the Vendor is prohibited from permitting or facilitating the same.
- 29. BANKRUPTCY: In the event the Vendor files for bankruptcy protection, the State of West Virginia may deem this Contract null and void, and terminate this Contract without notice.
- 30. PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in <a href="http://www.state.wv.us/admin/purchase/privacy/default.html">http://www.state.wv.us/admin/purchase/privacy/default.html</a>.
- 31. YOUR SUBMISSION IS A PUBLIC DOCUMENT: Vendor's entire response to the Solicitation and the resulting Contract are public documents. As public documents, they will be disclosed to the public following the bid/proposal opening or award of the contract, as required by the competitive bidding laws of West Virginia Code §§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code §§ 29B-1-1 et seq.

DO NOT SUBMIT MATERIAL YOU CONSIDER TO BE CONFIDENTIAL, A TRADE SECRET, OR OTHERWISE NOT SUBJECT TO PUBLIC DISCLOSURE.

Submission of any bid, proposal, or other document to the Purchasing Division constitutes your explicit consent to the subsequent public disclosure of the bid, proposal, or document. The Purchasing Division will disclose any document labeled "confidential." "proprietary," "trade secret," "private," or labeled with any other claim against public disclosure of the documents, to include any "trade secrets" as defined by West Virginia Code § 47-22-1 et seq. All submissions are subject to public disclosure without notice.

32. LICENSING: In accordance with West Virginia Code of State Rules § 148-1-6.1.e, Vendor must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agency or political subdivision. Upon request, the Vendor must provide all necessary releases to obtain information to enable the Purchasing Division Director or the Agency to verify that the Vendor is licensed and in good standing with the above entities.

- 33. ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.
- 34. VENDOR CERTIFICATIONS: By signing its bid or entering into this Contract, Vendor certifies (1) that its bid or offer was made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, person or entity submitting a bid or offer for the same material, supplies, equipment or services; (2) that its bid or offer is in all respects fair and without collusion or fraud; (3) that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; and (4) that it has reviewed this Solicitation in its entirety; understands the requirements, terms and conditions, and other information contained herein.

Vendor's signature on its bid or offer also affirms that neither it nor its representatives have any interest, nor shall acquire any interest, direct or indirect, which would compromise the performance of its services hereunder. Any such interests shall be promptly presented in detail to the Agency. The individual signing this bid or offer on behalf of Vendor certifies that he or she is authorized by the Vendor to execute this bid or offer or any documents related thereto on Vendor's behalf; that he or she is authorized to bind the Vendor in a contractual relationship; and that, to the best of his or her knowledge, the Vendor has properly registered with any State agency that may require registration.

35. VENDOR RELATIONSHIP: The relationship of the Vendor to the State shall be that of an independent contractor and no principal-agent relationship or employer-employee relationship is contemplated or created by this Contract. The Vendor as an independent contractor is solely liable for the acts and omissions of its employees and agents. Vendor shall be responsible for selecting, supervising, and compensating any and all individuals employed pursuant to the terms of this Solicitation and resulting contract. Neither the Vendor, nor any employees or subcontractors of the Vendor, shall be deemed to be employees of the State for any purpose whatsoever. Vendor shall be exclusively responsible for payment of employees and contractors for all wages and salaries, taxes, withholding payments, penalties, fees, fringe benefits, professional liability insurance premiums, contributions to insurance and pension, or other deferred compensation plans, including but not limited to, Workers' Compensation and Social Security obligations, licensing fees, etc. and the filing of all necessary documents, forms, and returns pertinent to all of the foregoing.

Vendor shall hold harmless the State, and shall provide the State and Agency with a defense against any and all claims including, but not limited to, the foregoing payments, withholdings, contributions, taxes, Social Security taxes, and employer income tax returns.

- 36. INDEMNIFICATION: The Vendor agrees to indemnify, defend, and hold harmless the State and the Agency, their officers, and employees from and against: (1) Any claims or losses for services rendered by any subcontractor, person, or firm performing or supplying services. materials, or supplies in connection with the performance of the Contract; (2) Any claims or losses resulting to any person or entity injured or damaged by the Vendor, its officers, employees, or subcontractors by the publication, translation, reproduction, delivery, performance, use, or disposition of any data used under the Contract in a manner not authorized by the Contract, or by Federal or State statutes or regulations; and (3) Any failure of the Vendor, its officers, employees, or subcontractors to observe State and Federal laws including, but not limited to, labor and wage and hour laws.
- 37. PURCHASING AFFIDAVIT: In accordance with West Virginia Code § 5A-3-10a, all Vendors are required to sign, notarize, and submit the Purchasing Affidavit stating that neither the Vendor nor a related party owe a debt to the State in excess of \$1,000. The affidavit must be submitted prior to award, but should be submitted with the Vendor's bid. A copy of the Purchasing Affidavit is included herewith.
- 38. ADDITIONAL AGENCY AND LOCAL GOVERNMENT USE: This Contract may be utilized by other agencies, spending units, and political subdivisions of the State of West Virginia; county, municipal, and other local government bodies; and school districts ("Other Government Entities"). Any extension of this Contract to the aforementioned Other Government Entities must be on the same prices, terms, and conditions as those offered and agreed to in this Contract, provided that such extension is in compliance with the applicable laws, rules, and ordinances of the Other Government Entity. If the Vendor does not wish to extend the prices, terms, and conditions of its bid and subsequent contract to the Other Government Entities, the Vendor must clearly indicate such refusal in its bid. A refusal to extend this Contract to the Other Government Entities shall not impact or influence the award of this Contract in any manner.
- 39. CONFLICT OF INTEREST: Vendor, its officers or members or employees, shall not presently have or acquire an interest, direct or indirect, which would conflict with or compromise the performance of its obligations hereunder. Vendor shall periodically inquire of its officers, members and employees to ensure that a conflict of interest does not arise. Any conflict of interest discovered shall be promptly presented in detail to the Agency.
- 40. REPORTS: Vendor shall provide the Agency and/or the Purchasing Division with the following reports identified by a checked box below:

  Such reports as the Agency and/or the Purchasing Division may request. Requested reports may include, but are not limited to, quantities purchased, agencies utilizing the contract, total contract expenditures by agency, etc.

  Quarterly reports detailing the total quantity of purchases in units and dollars, along with a listing of purchases by agency. Quarterly reports should be delivered to the Purchasing Division via email at <a href="mailto:purchasing.requisitions@wv.gov">purchasing.requisitions@wv.gov</a>.

41. BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the Director of the Division of Protective Services shall require any service provider whose employees are regularly employed on the grounds or in the buildings of the Capitol complex or who have access to sensitive or critical information to submit to a fingerprint-based state and federal background inquiry through the state repository. The service provider is responsible for any costs associated with the fingerprint-based state and federal background inquiry.

After the contract for such services has been approved, but before any such employees are permitted to be on the grounds or in the buildings of the Capitol complex or have access to sensitive or critical information, the service provider shall submit a list of all persons who will be physically present and working at the Capitol complex to the Director of the Division of Protective Services for purposes of verifying compliance with this provision. The State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check.

Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

- **42. PREFERENCE FOR USE OF DOMESTIC STEEL PRODUCTS:** Except when authorized by the Director of the Purchasing Division pursuant to W. Va. Code § 5A-3-56, no contractor may use or supply steel products for a State Contract Project other than those steel products made in the United States. A contractor who uses steel products in violation of this section may be subject to civil penalties pursuant to W. Va. Code § 5A-3-56. As used in this section:
- a. "State Contract Project" means any erection or construction of, or any addition to, alteration of or other improvement to any building or structure, including, but not limited to, roads or highways, or the installation of any heating or cooling or ventilating plants or other equipment, or the supply of and materials for such projects, pursuant to a contract with the State of West Virginia for which bids were solicited on or after June 6, 2001.
- b. "Steel Products" means products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more or such operations, from steel made by the open heath, basic oxygen, electric furnace, Bessemer or other steel making process. The Purchasing Division Director may, in writing, authorize the use of foreign steel products if:
- c. The cost for each contract item used does not exceed one tenth of one percent (.1%) of the total contract cost or two thousand five hundred dollars (\$2,500.00), whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project; or d. The Director of the Purchasing Division determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

43. PREFERENCE FOR USE OF DOMESTIC ALUMINUM, GLASS, AND STEEL: In Accordance with W. Va. Code § 5-19-1 et seq., and W. Va. CSR § 148-10-1 et seq., for every contract or subcontract, subject to the limitations contained herein, for the construction, reconstruction, alteration, repair, improvement or maintenance of public works or for the purchase of any item of machinery or equipment to be used at sites of public works, only domestic aluminum, glass or steel products shall be supplied unless the spending officer determines, in writing, after the receipt of offers or bids, (1) that the cost of domestic aluminum, glass or steel products is unreasonable or inconsistent with the public interest of the State of West Virginia, (2) that domestic aluminum, glass or steel products are not produced in sufficient quantities to meet the contract requirements, or (3) the available domestic aluminum, glass, or steel do not meet the contract specifications. This provision only applies to public works contracts awarded in an amount more than fifty thousand dollars (\$50,000) or public works contracts that require more than ten thousand pounds of steel products.

The cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than twenty percent (20%) of the bid or offered price for foreign made aluminum, glass, or steel products. If the domestic aluminum, glass or steel products to be supplied or produced in a "substantial labor surplus area", as defined by the United States Department of Labor, the cost of domestic aluminum, glass, or steel products may be unreasonable if the cost is more than thirty percent (30%) of the bid or offered price for foreign made aluminum, glass, or steel products. This preference shall be applied to an item of machinery or equipment, as indicated above, when the item is a single unit of equipment or machinery manufactured primarily of aluminum, glass or steel, is part of a public works contract and has the sole purpose or of being a permanent part of a single public works project. This provision does not apply to equipment or machinery purchased by a spending unit for use by that spending unit and not as part of a single public works project.

All bids and offers including domestic aluminum, glass or steel products that exceed bid or offer prices including foreign aluminum, glass or steel products after application of the preferences provided in this provision may be reduced to a price equal to or lower than the lowest bid or offer price for foreign aluminum, glass or steel products plus the applicable preference. If the reduced bid or offer prices are made in writing and supersede the prior bid or offer prices, all bids or offers, including the reduced bid or offer prices, will be reevaluated in accordance with this rule.

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Jonathan Koebbe Business Manager
(Name, Title)
Jonathan Koebbe Business Manager
(Printed Name and Title)
1576 Fencorp Drive Fenton, MO 63026
(Address)
636-305-9669 ext 20 Fax: 636-305-1441
(Phone Number) / (Fax Number)
jkoebbe@checonsulting.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Custom Hardware Engineering & Consulting, Inc. (dba: CHE Consulting, Inc.)

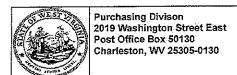
(Company)

David L. York President/CEO
(Authorized Signature) (Representative Name, Title)

David L. York President/CEO
(Printed Name and Title of Authorized Representative)

December 12, 2016
(Date)

636-305-9669 ext 10 Fax: 636-305-1441
(Phone Number) (Fax Number)



### State of West Virginia Request for Quotation 21 — Info Technology

BID RECEIVING LOCATION

**BID CLERK** 

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION 2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

VENDOR

Vendor Name, Address and Telephone Number:

Custom Hardware Engineering & Consulting, Inc. dba: CHE Consulting , Inc. 1576 Fencorp Drive Fenton, MO 63026 636-305-9669

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale (304) 558-8801 stephanie.l.gale@wv.gov

Signature x David S. Vank

FEIN# 36-4128326

DATE December 13, 2016

All offers subject to all terms and conditions contained in this solicitation

Page: 1

FORM ID: WV-PRC-CRFQ-001

### ADDITIONAL INFORMATION:

#### Addendum #1 issued to:

- 1. Provide answers to technical questions.
- 2. Move bid opening date and time to 12/20/2016 @ 1:30pm.

End of Addendum #1.

INVOICE TO		SHIPTO			
DEPARTMENT OF ADMINISTRATION OFFICE OF TECHNOLOGY		*	STATE OF WEST VIRGINIA SEE SPECIFICATIONS FOR DELIVERY REQUIREMENTS		
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR					
CHARLESTON	WV25305	No City	WV 99999		
us		us			

Line	Comm Ln Desc	Qty		Unit Issue	Unit Price	Total Price
1	Enterprise Mainframe Server Maintenance - s/n 68D77	12.00000	•	МО	\$1889.00	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

#### **Extended Description:**

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

INVOICE TO		SHIPTO	
DEPARTMENT OF ADMIN	Y	STATE OF WEST VIRO SEE SPECIFICATIONS	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR			
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Virtualization Engine Server Maintenance - s/n 78H4077	12.00000	MO	\$1414.60	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812			,	

#### **Extended Description:**

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

INVOICE TO THE STATE OF THE STA		SHIP TO	
DEPARTMENT OF ADMI		STATE OF WEST VIEWS SEE SPECIFICATION	RGINIA NS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR			
CHARLESTON	WV25305	No City	WV 99999
us		US	}

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
3	Virtualization Engine Server Maintenance - s/n 78H4070	12.00000	МО	\$1235.00	\$14,826.60

Comm Code	Manufacturer	Specification	Model #	
81111812		,		

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

INVOIGETO.		SHIPTO	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	RGINIA IS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
4	Tape Library Maintenance - s/n 78A4126	12.00000	МО	\$367.50	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812				

#### Extended Description:

Flatwoods Site Maintenance - Tape Library Equipment List Per RFQ and Appendix "A" (s/n 78A4126)

INVOICE TO		SHIPT(O	
DEPARTMENT OF ADMIN		STATE OF WEST VIRO	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR			
CHARLESTON	WV25305	No City	WV 99999
us ·		บร	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
5	Optional Renewal per 4.1.1 (year "2") - s/n 68D77	12.00000	 MO	\$1889.00	\$22,668.00

Comm Code	Manufacturer	Specification Sp	Model #	
81111812				
		<u></u>		

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

invoice to		SHPTO	
DEPARTMENT OF ADMIN	· · · · · · · · · · · · · · · · · · ·	STATE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR	,	
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
6	Optional Renewal per 4.1.1 (year "2") - s/n 78H4077	12.00000	МО	\$1414.60	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812		· · · · · · · · · · · · · · · · · · ·		

### **Extended Description:**

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

INVOICE TO		SHIPTO	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	RGINIA IS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR			
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
	Optional Renewal per 4.1.1 (year "2") - s/n 78H4070	12.00000	MO	\$1235.00	\$14,826.60

Comm Code	Manufacturer	Specification		
81111812		<u> эреспісації</u>	Model #	
				1

### **Extended Description:**

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

INVOICETO		SHP TO ME AND A SECOND	
DEPARTMENT OF ADMIN		STATE OF WEST VIRO	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BEVD E, BLDG 5 10TH FLOOR			, and the state of
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
8	Optional Renewal per 4.1.1 (year "2") - s/n 78A4126	12.00000	МО	\$367.50	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	·····
81111812		•		

Flatwoods Site Maintenance - Tape Library Equipment List Per RFQ and Appendix "A" (s/n 78A4126)

INVOICE TO		OT THE	
DEPARTMENT OF ADMINIST OFFICE OF TECHNOLOGY	RATION	STATE OF WEST VIR	RGINIA IS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, BLI	OG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
us		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
9	Optional Renewal per 4.1.1 (year "3") - s/n 68D77	12.00000	МО	\$1889.00	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				
				Į

### Extended Description :

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

INVOICETO		SHPTO	
DEPARTMENT OF ADMINIST OFFICE OF TECHNOLOGY	FRATION	STATE OF WEST VIR	RGINIA IS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR			
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
10	Optional Renewal per 4.1.1 (year "3") - s/n 78H4077	12.00000	МО	\$1414.60	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812				

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

INVOIGETO		SHPTO	
DEPARTMENT OF ADMIN		STATE OF WEST VIP	RGINIA NS FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV.25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
11	Optional Renewal per 4.1.1 (year "3") - s/n 78H4070	12.00000	MO	\$1235.00	\$14,826.60

Comm Code	Manufacturer	Specification	Model #	, , , , , , , , , , , , , , , , , , , ,
81111812				

#### **Extended Description:**

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

INVOICE TO THE		SHIPTO	
DEPARTMENT OF ADMIN		STATE OF WEST VIRE	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
12	Optional Renewal per 4.1.1 (year "3") - s/n 78A4126		, MO	\$367.50	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	1
81111812				
<u></u>				

## Extended Description :

Flatwoods Site Maintenance - Tape Library Equipment List Per RFQ and Appendix "A" (s/n 78A4126)

INVOICETO		SHIPITO	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	GINIA S'FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
13	Optional Renewal per 4.1.1 (year "4") - s/n 68D77	12.00000	МО	\$1889.00	\$22,668.00

Comm Code	Manufacturer	Specification	Model #	
81111812				
		•		

(1) IBM zBC12 Model 2828-H06 zEnterprise mainframe server. Serial number 68D77. The server capacity setting is Model 2828-U02, downgraded to Model 2828-S02. The server contains two IFLs and one zIIP engine. Per RFQ and Appendix "B".

INVOICETE		SHETO	
DEPARTMENT OF ADMIN		STATE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR	·	
CHARLESTON	WV25305	No City	WV 99999
us		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
14	Optional Renewal per 4.1.1 (year "4") - s/n 78H4077	12.00000	МО	\$1414.60	\$16,975.20

Comm Code	Manufacturer	Specification	Model #	
81111812				

## Extended Description:

Charleston Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4077)

INVOICENC		PSHIPTO	
DEPARTMENT OF ADMINIS		STÂTE OF WEST VIR	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E, B	LDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	, Unit Issue	Unit Price	Total Price
15	Optional Renewal per 4.1.1 (year "4") - s/n 78H4070	12.00000	MO	\$1235.00	\$14,826.60

Comm Code	Manufacturer	Specification	Model #	
81111812				

Flatwoods Site Maintenance - Virtualization Engine Server Per RFQ and Appendix "A" (s/n 78H4070)

INVOICE TO		SHIRTO	
DEPARTMENT OF ADMIN		STATE OF WEST VIRG	GINIA S FOR DELIVERY REQUIREMENTS
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR		
CHARLESTON	WV25305	No City	WV 99999
us		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
16	Optional Renewal per 4.1.1 (year "4") - s/n 78A4126	12.00000	MO	\$367.50	\$4,410.00

Comm Code	Manufacturer	Specification	Model #	
81111812				
İ				

### Extended Description:

Flatwoods Site Maintenance - Tape Library Equipment List Per RFQ and Appendix "A" (s/n 78A4126)

SOMEDUL	EOFEVENTS	
<u>Line</u> 1	Event Technical Questions Due @ 5pm	<u>Event Date</u> 2016-12-08