

CRFP OOT2000000001 Data Center 2.0 RFP

Cost Proposal

Contact:

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Matt.Athey@ThinkAHEAD.com

Mart of

April 10th, 2020

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RFP Response Contact Information

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Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Request for Proposal 21 - Info Technology

Proc Folder: 655755

Doc Description: Addendum 9-Data Center 2.0 RFP (OT20023)

Proc Type: Central Master Agreement

Date Issued Solicitation Closes Solicitation No Version 2020-03-16 2020-04-03 CRFP 0231 OOT2000000001 10 13:30:00

BID RECEIVING LOGATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV

25305

US

VENDOR

Vendor Name, Address and Telephone Number:

Ahead

401 N Michigan Avenue, 34th floor

Chicago, IL 60611

(312) 924-4492

FOR INFORMATION CONTACT THE BUYER

Jessica S Chambers (304) 558-0246

jessica.s.chambers@wv.gov

Signature X

FEIN# 20-8476250

DATE 10 April 2020

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

Page: 1

FORM ID: WV-PRC-CRFP-001

ADDITIONAL INFORMATION:

Addendum No.09

The purpose of this Addendum is to extend the Bid Opening Date to 4/03/2020, bid opening time remains at 1:30 PM (EDT)per the request of the vendor community.

*** Please note electronic responses to this solicitation via wvOasis have been prohibited. You must submit your proposal via hard copy prior to the bid opening date and time.

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMI		WV OFFICE OF TECHNOL BLDG 5, 10TH FLOOR	OGY
1900 KANAWHA BLVD E	BLDG 5 10TH FLOOR	1900 KANAWHA BLVD E	
CHARLESTON	WV25305	CHARLESTON	WV 25305
us		US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Data Center 2.0	1.00000	LS		
`	Data Octrici 2.0				

Comm Code	Manufacturer	Specification	Model #	
81110000			·	

Extended Description:

Data Center 2.0 pricing per Exhibit A pricing page total.

SCHEDULE OF EVENTS

Line	Event Date
1	Mandatory PreBid Conference at 1:00 PM (EST) 9-12-06
2	Technical Question Deadline at 12:00 PM (ES70)19-12-13
3	2nd Technical Question Deadline at 9:00 AM 2820-02-04
4	Please see revised specifications and Pricing 2020e02-26

SOLICITATION NUMBER: CRFP 00T2000000001 Addendum Number: No.09

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:

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

Description of Modification to Solicitation:

Addendum issued to publish and distribute the attached documentation to the vendor community.

1. The purpose of this addendum is to extend the bid opening date to 4/03/2020 at 1:30 PM (EDT).

No additional changes.

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.

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

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.

(Check the bo	ox next to each addendum	n received)	
[]	Addendum No. 1	[√]	Addendum No. 6
[]	Addendum No. 2	[\sqrt]	Addendum No. 7
[√]	Addendum No. 3	[√]	Addendum No. 8
[[]	Addendum No. 4	[\(\)]	Addendum No. 9
[√]	Addendum No. 5	[]	Addendum No. 10

Addendum Numbers Received:

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

AHEAD	
(N	Company
7	Authorized Signature
10 April 2020	
	Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012



Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Request for Proposal 21 — Info Technology

Proc Folder: 655755

Doc Description: Addendum 10-Data Center 2.0 RFP (OT20023)

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2020-03-20	2020-04-10 13:30:00	CRFP 0231 OOT200000001	11

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:

Ahead 401 N Michigan Avenue, 34th floor Chicago, IL 60611 (312) 924-4492

FOR INFORMATION CONTACT THE BUYER

Jessica S Chambers (304) 558-0246

jessica.s.chambers@wv.gov

Signature X

FEIN # 20-8476250

DATE 10 April 2020

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

Page: 1

FORM ID: WV-PRC-CRFP-001

ADDITIONAL INFORMATION:

ddendum No.10

The purpose of this Addendum is to extend the Bid Opening Date to 4/10/2020, bid opening time remains at 1:30 PM (EDT)per the request of the render community.

** Please note electronic responses to this solicitation via wvOasis have been prohibited. You must submit your proposal via hard copy prior to he bid opening date and time.

NVOICE TO		SHIP TO	SHIP TO		
DEPARTMENT OF ADMIN		WV OFFICE OF TECHNOLO BLDG 5, 10TH FLOOR	OGY		
1900 KANAWHA BLVD E,	BLDG 5 10TH FLOOR	1900 KANAWHA BLVD E			
CHARLESTON WV25305		CHARLESTON	WV 25305		
US		US			

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Data Center 2.0	1.00000	LS		

Comm Code	Manufacturer	Specification	Model #	
31110000				

Extended Description:

Data Center 2.0 pricing per Exhibit A pricing page total.

SCHEDULE OF EVENTS

Line	Event Date
1	Mandatory PreBid Conference at 1:00 PM (E প্রত) 19-12-06
2	Technical Question Deadline at 12:00 PM (EST0)19-12-13
3	2nd Technical Question Deadline at 9:00 AM 2E30-02-04
4	Please see revised specifications and Pricing 27200002-26

	Document Phase	Document Description	Page 3
OOT200000001	Final	Addendum 10-Data Center 2.0 RFP	of 3
		(OT20023)	

ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions



Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Request for Proposal 21 - Info Technology

Proc Folder: 655755

Doc Description: Addendum 8-Data Center 2.0 RFP (OT20023)

Proc Type: Central Master Agreement

Date Issued Solicitation Closes Solicitation No Version 2020-02-25 2020-03-20 CRFP 0231 OOT2000000001 9 13:30:00

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:

Ahead

401 N Michigan Avenue, 34th floor

Chicago, IL 60611

(312) 924-4492

FOR INFORMATION CONTACT THE BUYER

Jessica S Chambers (304) 558-0246

jessica.s.chambers@wv.gov

Signature X

20-8476250

DATE 10 April 2020

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

Page: 1

FORM ID: WV-PRC-CRFP-001

ADDITIONAL INFORMATION:

Addendum No.08

The purpose of this Addendum is to extend the Bid Opening Date to 3/20/2020, bid opening time remains at 1:30 PM (EST), to address all technical questions received during the 2nd question and answer period, and revise specifications (revisions are highlighted in yellow).

No other changes.

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the Purchasing Division) is issuing this solicitation as a request for proposal (RFP), as authorized by W. Va. Code 5A-3-10b, for the West Virginia Office of Technology (hereinafter referred to as the Agency) to establish an Infrastructure-as-a-Service (laaS) implementation.

The State of West Virginia requires an Infrastructure-as-a-Service contract to provide enterprise-class hardware to support existing and future application environments at all current and future data center locations throughout the duration of this contract per the terms and conditions and support existing and future specifications as attached.

*** Please note electronic responses to this solicitation via wvOasis have been prohibited. You must submit your proposal via hard copy prior to the bid opening date and time.

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMINISTRATION OFFICE OF TECHNOLOGY		WV OFFICE OF TECHNOL BLDG 5, 10TH FLOOR	LOGY
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR			
		1900 KANAWHA BLVD E	
CHARLESTON WV25305		CHARLESTON	WV 25305
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	7.4.1.7.1
1	Data Center 2.0	1.00000	LS	Omt Price	Total Price

Comm Code	Manufacturer	Specification		
81110000		Specification	Model #	

Extended Description:

Data Center 2.0 pricing per Exhibit A pricing page total.

SCHEDULE OF EVENTS

Line	Event	Event Date
1	Mandatory PreBid Conference at 1:00 PM (I	2019-12-06
2	Technical Question Deadline at 12:00 PM (E	STINO_12_13
3	2nd Technical Question Deadline at 9:00 AM	19E9TT12-13
4	Please see revised specifications and Pricin	g270209e02-26

SOLICITATION NUMBER: CRFP 00T2000000001 Addendum Number No.08

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:
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L	/1	Modify bid opening date and time
[/] Modify specifications of product or ser		Modify specifications of product or service being sought
[v	/	Attachment of vendor questions and responses
[1	Attachment of pre-bid sign-in sheet
[Correction of error
[J	Other

Description of Modification to Solicitation:

Addendum issued to publish and distribute the attached documentation to the vendor community.

- 1. The purpose of this addendum is to extend the bid opening date until 3/20/2020 at 1:30 PM (EST);
- 2. To address all technical questions received; and
- 3. Revise specifications (revisions are highlighted in yellow).

No additional changes.

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.

ATTACHMENT A

Question Number	RFP Section	Question	WVOT Answer
1		Please provide a complete list of Operating Systems and Applications (including initial versions and release) required to be supported in this RFP. Please identify those that require hosting of the workload or simply requiring backup/recovery support.	Background information on the existing environment is provided under 4.1. As ar open-end contract, decisions about which information systems (applications) may be migrated, the privacy and security requirements of those systems (applications), the backup and infrastructure monitoring support for those systems will be made after contract has been established and on a case-by-case evaluation.
2		Is there a requirement that all hardware be provided as New, Openbox, Certified Used, or Used provided they meet the required specifications?	There is a not mandatory specification regarding hardware being new or used, however, reference specific 4.2.4.2.7 relating to EOL and EOS.
3		Please validate the Tier naming structure. Tier 0 is of lowest identified service level and Tier 2 is the highest identified service level. Industry practice (not a standard) uses the opposite naming convention (Tier 0 is highest service level, followed by Tier 1 and Tier 2 respectively).	Confirming Tier 0 represents a lowest service tier and tier 2 represents the highest service tier.
4	4.2.1.1.1.4	objectives." The accompanying sections 4.2.1.1.1.5/6 specifically call out the requirements.	The vendor's proposal should outline the capabilities of each tier based upon the primary drivers of the associated tier leveraging the experience of the vendor is providing like services for public sector.
5	4.2.1.1.2	provide badged employees perform the managed services or can the manufacturer/OEM provide the ongoing managed services?	The vendor is free to include third party support services in their proposal, as long as the services adheres to mandatory specifications, specifically 4.2.4.2 (Cybersecurity Requirements).

		Under section 4.2.1.1.3, are there minimum required performance	The vendor provided environment must be
6	4.2.1.1.3	aspects of the network infrastructure? I.e., 10Gb Ethernet, 100Gb Ethernet, etc.	minimally capable of 100Gbps ethernet connection to the State network.
7	4.2.1.1.3	Under section 4.2.1.1.3, Is there a specific connection speed/port type required to connect to the boundary edge service not part of this RFP? Port type/count at each location?	It is the State's expectation that the handoff between the vendor's network and the State's boundary edge be a minimum of two 100Gb Ethernet connections.
8	4.2.1.1.5		United States East Coast shall be located no further than 500 miles from the customer's site, which is located at 1900 Kanawha Boulevard East, Charleston, WV 25305. The Agency deems 500 miles to be the maximum distance.
9	4.2.1.1.7	"one-off" power requirements? At this point, this isn't anticipated,	4.2.1.1.7 is a desirable specification. The state will work with vendors to determine a mutually agreed upon solution to 'one-off" power requirements in the future.
10		resource/process responsible for the management and maintenance of the key distribution/availability for support engineers or should that be offered as part of the managed	4.2.1.1.8 is a desirable specification whereas the State seeks solution proposals. Physical, site level, security controls outside of the cabinet protection are outside of the scope of the RFP.
11	4.2.1.2.1	AIX 5.3 is listed as an OS existing within the WVOT this OS version	Services under 4.2.1.2 can be scoped to "best effort" when being leveraged to backup unsupported systems/software.

12	4.2.1.2.3	Under section 4.2.1.2.3, please specify the accepted policy for dealing with/recovering from ransomware cyber-attacks within the WVOT. Is this the same level of recovery listed in section 4.2.1.1.1.4/5/6?	4.2.1.2.3 is a desirable specification, whereas, the State seeks solution proposito explain any included capability specific to ransomware protection or recovery. Yes, 4.2.1.1.1.4/5/6 outline the State's desirable specifications relating to recovery capability. Execution of recovery as a managed-service is not a mandatory specification. Reference 4.2.1.2.7 for desirable specifications relating to the managed services of Enterprise Data Backup.
13	4.2.1.2.5	recovery solution for the subset of the workload included in the	The intent here is that the vendor will have a backup solution in place and ready to accept backups within the 60 day period.
14	4.2.1.2.7	Regarding section 4.2.1.2.7, please provide a detailed list of all hypervisors, operating systems, applications, including versions/releases to be supported.	Background information on the existing environment is provided under 4.1.
15	4.2.1.3	Regarding section 4.2.1.3, Are any of these sites "dark" sites? Will a cloud based monitoring solution be supported for this effort or does the solution require an on-premises deployment to support the monitoring functionality?	The State does not establish a mandatory specification regarding the hosting of the solution. The solution is not intended for air-gapped networks. Reference 4.2.4.5 for the specific mandatory specifications relating to infrastructure operations monitoring.

16	4.2.1.3.x	Regarding section 4.2.1.3.x, please provide a detailed list of ALL components to be monitored/managed as part of this contract. Please include, manufacturer, make, model, and detailed firmware/software level.	Background information on the existing environment is provided under 4.1. Under 4.2.1.3. the State seeks solution proposals designed to enable the provided State objectives. The State seeks vendor's to scope their proposal leveraging their experience in providing like services to the public sector.
17	4.2.1.3.6	Under section 4.2.1.3.6, please provide a detailed list of all components to be monitored and managed, including manufacturer, make, model, and detailed firmware/software level.	See answer to question 16.
18	4.2.1.4	Under section 4.2.1.4, many of the roles defined can be provided through staffing and contractors. Is it a requirement that all resources identified be employed and badged employees of the bidding vendor/partner?	The vendor is free to include third party support services in their proposal, as long as the services adheres to mandatory specifications, specifically 4.2.4.2 (Cybersecurity Requirements).
19	4.2.4.3.5	Under section 4.2.4.3.5, are the processors and solution required to be intel/x86 type solutions?	Yes, x86.
20	4.2.4.4.1.2.1	Under section 4.2.4.4.1.2.1, is the capacity listed a "Front End" capacity (the capacity for a single full backup of the environment) or is this a "Back End" capacity (the target capacity for backup and recovery support)?	The capacity indicated represents the minimum level for the Data Backup Base line item on, with an ability to expand the environment utilizing the expansion line item.
21	4.2.4.4.1.2.2	Under section 4.2.4.4.1.2.2, is it a requirement to continue to backup and protect workloads in a disaster recovery state? I.e., if a failover occurs to a remote location, is it still a requirement to meet the backup/recovery requirements stipulated in section 4.2.1.1.1.4/5/6?	It is not a mandatory requirement to continue to backup and protect workloads in a disaster recovery state.
22		Since the scope of the RFP changed from Infrastructure as a Service to on-Premise Infrastructure will the State schedule another Mandatory Pre-Bid Conference? Or will the State permit vendors that were not at the Mandatory Pre-Bid Conference to bid? The fair process would be to have another Mandatory Pre-Bid Conference.	No, there will not be another Mandatory Pre-bid Conference.

23		Will the State permit follow on questions once the answers have been published?	No.
24	6	What do the evaluation worksheets look like? Will there be a sliding scale of say 1 to 5 for each mandatory requirement?	Please see section 6.2 Evaluation Criteria and Evaluation Point Allocation.
25		Can the vendor look at the evaluation worksheets prior to the cost proposal being opened?	No.
26		Will the vendor be notified of their Technical Proposal score prior to the Cost Proposal opening?	No.
27		Can used equipment be proposed or does all equipment need to be new and not refurbished?	See answer to question 2.
28			For each order placed on this contract, the Office of Technology will issue a delivery order for the required contract items. Billing may not begin until after a letter of acceptance for the delivery order has been issued from the West Virginia Office of Technology to the awarded Vendor. The letter of acceptance dates will need to be mutually agreed upon by both the Agency and the Vendor. Prior than acceptance of the service the following criteria must be met: (1.) successful testing of all components, validating full functionality (2.) contract item specifications met.
29	4.2.1.1.6	equipment will be needed when the State has not provided in the RFP any definite sizing for the applications to be migrated?	The State desires the Vendor to be efficient with infrastructure footprint. Vendor can describe the number of rack required to implement base level solutions.
30		Can the State provide a list of the applications (and their sizes and	See answer to Question 1

31		The RFP states that operating systems in production include Microsoft Windows Servers. What releases are being migrated and are Windows 2003 and Windows 2008 R2 included?	The State does not intend, however, does not restrict the right, to migrate legacy operating systems to the environment.
32		The RFP states that operating systems in production include HP-UX 11.31. Is this the DHHR FACTS environment?	See answer to Question 1
33		If this is the FACTS environment why is this included in this RFP?	See answer to Question 1
34		DHHR, Tax, DEP, Insurance and other agencies all have their own Data Centers. Are these Data Centers included within this RFP?	See answer to Question 1
35		If they are included, when will they be moving their applications to the Building 6000?	See answer to Question 1
36	4.2.4.1.1		Excluding the initial data center infrastructure, projected to be installed in building 6000, the State will provide a minimum 180 day advance notice regarding additional, removal, or change of locations associated with the onpremise infrastructure. In the case of emergency situations, the 180 day notice may be waived at the discretion of the CTO.
37	4.2.4.2.3	What agencies will require HIPAA?	See answer to Question 1
38		Will any of these HIPPA agencies' applications be migrated to	See answer to Question 1
39	4.2.4.2.3	Can the State provide a map of the applications to be migrated with their respective security and privacy standards?	See answer to Question 1
40	4.2.4.4	What State Agencies will be included within this Backup?	At the discretion of Office of Technology and Purchasing, the potential exists for all locations of all Executive Branch agencies to be included in this system.

41		Will Tax, DHHR, DEP, Insurance and other agencies be included within the Backup requirements?	At the discretion of Office of Technology and Purchasing, the potential exists for all locations of all Executive Branch agencies to be included in this system.
42		What agencies are exempt from the WV IS&C overview?	At the discretion of Office of Technology and Purchasing, exemptions can vary depending upon the scope of the authority (technology & purchasing).
43		Is the WV State Police, WV Lottery, WV Department of Education included within this RFP?	WVOT does not intend to limit which agencies are eligible to leverage the services of this contract, however, it will be at the discretion of Office of Technology and Purchasing.
44		Is Disaster Recovery included within this RFP?	Disaster recovery is an aspect of this contract in that the State may exercise the option to implement on-premise infrastructure in a second data center to serve as a DR site.
45		What does the State have in place currently for Disaster Recovery?	See answer to Question 1
46		What agencies are included within the Disaster Recovery?	See answer to Question 1
47		Lagit of	See answer to Question 1
48		Can clarification on how The Data Center 2.0 initiative of data center consolidation and the server virtualization goal aligns between 4.2.1.1.10.1: "Enhancing the State's ability to conduct data center consolidation" & 4.2.4.1.1 General Mandatories "The State of West Virginia reserves the right to move, change, or add additional Data Center locations" be given?	See answer to Question 44
49	4.2.1.2	data will/could be targeted for implementation of the 4.2.1.2	The potential exists for all location of all Executive Branch agencies to be included in this system.

50	4.2.4.4.1.2.2	Does section 4.2.4.4.1.2.2 require this to be two (2) state managed physical locations?	Yes, unless mutually agreed upon by the Vendor and the State.
51	4.2.1.3.6	 23) How many state office physical locations will/could be targeted for implementation of the 4.2.1.3.6 Infrastructure Operations Monitoring – Managed Services Scope? a. How many devices? b. What are the types of devices? c. Does this include public WiFi devices? 	Per the RFP, the State reserves the right to distribute monitoring on a case-by-case basis. For background informational purpose, there are over 1,816 device currently being monitored, which include servers, routers, switches, firewalls, WAPs, etc.
52	4.2.4.3.5	luse of vero to ero. So that this mandatory physical hardware	The intent here is to obtain physical hardware that can be provisioned as virtual resources. It should read CPU for this spec.
53	4.2.4.3.5	only one Base Solution is described in 4.2.4.3.5 and no additional information on how to properly size the Tiers is provided. Will WVOT provide in detail the minimum compute and storage specification for each of the 3 tiers of service?	The State desires Vendors to leverage their experience in providing like solutions to public sector to propose a solution to achieve the outlined goals and objectives. The State provided minimum levels for each of the three tiers and outlined the primary business drivers. Additionally, the State left flexibility in the RFP to enable custom solution proposals.
54	4.2.4.3.5	Regarding the minimum Base Solution configuration, is WVOT describing a single compute node with 2 x 12C processors and 512GB of RAM as the compute capability for the Base Solution?	This would be minimum per node, yes.

55	4.2.4.3.6	Regarding the compute node expansion, it should be the same as the compute node installed in the Base Solution in 4.2.4.3.5, but it appears to be half of a compute node. Will WVOT please clarify the Base Solution compute node requirement and the expansion compute node requirement so that they are aligned properly? If there are 3 different Base Solutions (one per Tier), then will WVOT please describe all 3 compute expansion specifications in detail?	are minimum levels. Vendors are free to adjust the sizing in their proposal as long
56	4.2.4.4.1.2	Regarding the Data Back Up Solution, are the terabyte numbers stated in raw or usable capacity? What is the retention requirements for back up data for each tier? Do you need the ability to perform restores from back up at the DR site? We would need these answers to size the back-up solution correctly.	(1) terabyte numbers listed are usable capacity (2) Data backup retention requirements vary from case to case, reference the desirable specification 4.2.1.2.4. (3) The ability to perform restor from a DR site is not a mandatory requirement.
57	4.2.1.2.3	Is the WVOT expecting a CR (Cyber Recovery) Vault solution to provide the capability to protect against ransomware cyberattacks?	Specification 4.2.1.2.3 is a desirable specification open to solution proposal.
58		Under Managed services, would you want this person on staff at your location full time? Or would this person be there to get the center up and running?	As noted in the pricing sheet (Appendix "A"), there are prices for both on-site and remote on-demand managed services. Or demand Managed Services will be used to augment state staff and timeframes will b determined by need.
59		What applications are you using?	See answer to Question 1
60		the state? Do you have prother least coast not provided by	The REP enable the State flevibility in the

61	4.2.4.1.3	What are WVOT Policies on data destruction? Is WVOT willing to waive the data destruction requirement?	Data destruction, whether conducted by the State or the Vendor must adhere to applicable law, regulation, and/or policy. Data destruction can include data sanitization best practices. No, there is no waiver for data destruction requirements. WVOT Policies - https://technology.wv.gov/security/Pages/policies-issued-by-the-cto.aspx
62		Will WV own the equipment, or will the provider own the equipment?	See specification 4.2.1.1.9
63		Would WV be open to a consulting led engagement that would allow us to collaborate with them to discover more information around the applications that are in use so that we can ensure the optimal solution is delivered? The applications may not be able to take advantage of elasticity and may require more traditional DC resources.	Consultation to determine which applications are best suited for the onpremise infrastructure will occur after the contract has been established. Applications will be reviewed on a case-bycase basis.
64		The RFP states that any solution needs to be able to fit into the target DC. Is there capacity information available for the target DC location and if not, would WV be open to a DC assessment?	See desirable specifications 4.2.1.1.4 through 4.2.1.1.8.
65		What is/are the vendors in the network?	Background information is provided in specification 4.1. Additional information regarding networking equipment includes, but not limited to- Cisco, Extreme, Aerohive, Palo Alto, and HP.
66		How many devices are in the network to the boundary edge?	To be determined based on the vendor's proposed design.
67		Are there diagrams for the current LAN environment?	Background information is provided in specification 4.1.
68		What are the firewalls in use?	Palo Alto devices for perimeter and site protection and managed via Panorama.

. 69	Which devices and versions?	Panorama 8.19hf to manage 10 Palo Alto 820s, two PA-850s, and four PA-5060s across the enterprise.
70	How many firewall devices at the DC location?	The State desires Vendors to leverage their experience in providing like solution to public sector to propose a solution to achieve the outlined goals and objectives.
71	Is Network Proxy being used?	No
72	Which devices and versions?	See answer to question 65
73	How many proxy devices at the DC location?	None
74	Is VPN in use? Will it be needed?	Yes; Yes
75	Bandwidth needed for the environment?	Vendor will need to determine in their proposal.
76	Is SDN a possibility?	Yes
77	What are the data retention periods for backups?	Standard retention is 30 days. Extended retention is available to any agency, upon request and cost acceptance
78	There are three storage tiers defined. What is the I/O density (IOPS * block size / GB) for each tier? What are the availability requirements for each?	Vendor will need to determine in their proposal.
79	TB is defined as base10 but most storage systems report base2 (TiB). This yields a significant difference in capacity requirements. (Not sure if we should include this, but it can be a game changer.)	The definition of a terabyte, as it applies to this RFQ, is equal to 1,024 gigabytes, a gigabyte is equal to 1,024 megabytes, etc.
80	What types of applications are being used and what percentage of the environment do each of these represent?	See answer to Question 1
81	Many organizations are adopting a 0 RPO/RTO solution for their most critical applications. Is the state interested in such availability?	The State has provided desirables and minimum level mandatories and seeks solution proposals designed to meet goals and objectives.

82		If transitioning to a new backup solution, how long will the existing backups and supporting infrastructure need to be maintained? How is that cost managed?	OT maintains backups on old hardware until the retention period for the protected data exists on the new hardware or 30 days, whichever is shorter
83	4.1	Per section 4.1, regarding DR, does the State of WV currently own/lease a DR data center or do we need to make this part of the bid?	Physical data center locations are not a service component of this RFP. Any proposals containing such services would be required to include all costs in the provided pricing sheet. Additions to the pricing sheet are not authorized.
84	4.1	Per section 4.1, are there any requirements regarding minimum physical distance between production and DR data centers?	See answer to Question 83
85	4.1	Per section 4.1, is there a shareable inventory of VMs including vCPU, memory, disk, network, and OS configuration? (e.g. RVTools export)	There is no mandatory requirement associated with this question.
86	4.1	just provide as-a-service pricing for expansion/replacement over time?	The State seeks to leverage this contract as a means to replace existing infrastructure and to support new applications designed for on-premise hosting.
87	4.2.2	Per section 4.2.2, of the ~780 VMs, ~620 physical servers, and ~750TB of consumed data, how do these resources break out across the 3 tiers? (in other words, how much data is in tier 0 vs	The State estimates the tiering breakdown to be roughly 20% Tier 0, 60% Tier 1, 20% Tier 2.
88	4.2.2.4	associated tier". Unsure what this means, can be interpreted as the tier base is the cost for DR infrastructure provided as-a-service.	The latter. The State desires Vendor's to design the tier base for Tier 1 and 2 to potentially be leveraged as the base infrastructure for a DR site location.

89	4.2.2.8	Per section 4.2.2.8, First bullet - can we get a list of applications? Difficult to explain how the solution will support a myriad of applications if we do not know what applications are in use.	See answer to Question 1
90	4.2.5.10.2.3	Per section 4.2.5.10.2.3, does WV have a list of assets by agency to use for billing purposes?	Vendor is directed to RFP addendums to ensure they are working from the latest version of the RFP. The most current version does not include a specification 4.2.5
91	4.2.5.10.2.3	Per section 4.2.5.10.2.3, how does WV envision requesting new resources? Will WV request infrastructure or will agencies request directly?	
92	4.2.5.11.2	Per section 4.2.5.11.2, does WV require a self-service portal for requests that will be orchestrated upon approval or is the goal to simply streamline service provisioning? Either way, what is the desired SLA for requests? (i.e. maximum time from request to full provisioning)	See answer to Question 90
93	4.2.5.13.1-2	Per section 4.2.5.13.1-2, application consultants require the development of computer programs. What specific development skills/technology experience is required for these roles?	See answer to Question 90
94	4.2.5.13.14	Per section 4.2.5.13.14, please describe the mainframe details specific to the mainframe SI role (e.g. OS type, hardware platform, etc.)	See answer to Question 90
95	4.2.5.14	Per section 4.2.5.14, are there any application specific monitoring requirements? (e.g. solution should be able to intelligently monitor MS SQL server)	See answer to Question 90
96	4.2.6.19	Per section 4.2.6.19, access to ticketing system - is this permanent or for transition purposes?	See answer to Question 90
97	4.2.6.8	Per section 4.2.6.8, base tier host requirement - looks like a hypervisor. What about physical servers? There seems to be no tier option or expansion option to account for physical servers. Does that mean everything will be virtual machines?	See answer to Question 90

98	4.2.6.8	Per section 4.2.6.8, performance vs volume storage - the minimum required storage per expansion node does not appear to align w/ overall storage requirements. Is the requirement for 500GB of perf and 1TB of volume storage per host refer to local storage on the hosts or a per-node expansion of storage on shared storage systems? (assuming nodes do not leverage a solution that utilizes local storage to provide a shared storage cluster)	
99	4.2.6.9	Per section 4.2.6.9, does this refer to a hypervisor node or any node (physical or hypervisor)?	See answer to Question 90
100		In regards to financial ownership of the infrastructure, will the State of WV maintain ownership or is it expected that the awarded vendor will have ownership?	See specification 4.2.1.1.9
101		Who is responsible for the insurance and payout of the infrastructure?	The infrastructure will be covered by the State's insurance provided through the state agency BRIM
102		What are the data retention periods for backups?	See answer to Question 77
103		There are three storage tiers defined. What are the IOPS requirements or what is the I/O density (IOPS * block size / GB) for each tier?	
104		What are the availability requirements for each tier?	See answer to Question 78
105		Are there known percentages, or estimates of the percentage of the environment used by various application types? Can you provide that information?	See answer to Question 87
106		If transitioning to a new backup solution, how long will the existing backups and supporting infrastructure need to be maintained? (IE backups that need to be maintained for 3 years) How is that cost managed?	See answer to Question 82
107		Under Managed service, would you want this person on staff at your location full time? Or would this person be there to get the center up and running?	See answer to Question 58
108		What applications are you using? (This came up earlier this week, not sure if it still matters) (Howard what are your thoughts?)	See answer to Question 1
109		Are you set on the Data Center location at the location you provided? Can it be at a location on the east coast not provided by the state?	See answer to Question 60

110	4.2.4.3.5	Do you intend the Performance (500GB) and Volume (1TB) storage to be inside the server itself, or accessible via the Ethernet or Fibre Channel network(s)?	Vendor will need to determine in their proposal.
111	4.2.4.3.7	Storage requirements are stated in GB. Did you mean TB?	Yes, please see revised specification 4.2.4.3.7
112	4.1	What is the total CPU utilization of existing compute?	Physical - total cores 2377 / total proc-581 Virtual - total Mhz - 1.13 THz in use - 142.41
113	4.1	What is the total RAM utilization of existing compute?	Physical - total RAM 9.98TB Virtual - total 9.03 TB / in use 4.98 TB
114	4.1	What vCPU:pCPU ratio do you feel comfortable with? For example, some customers feel comfortable oversubscribing a physical core 3:1 (3 vCPU per physical core) and some feel comfortable with a 6:1 ratio.	Vendor will need to determine in their proposal.
115	4.1	remain bare metal (that is, operating systems not to be virtualized)?	The goal of consolidation for cost efficiencies will drive for virtualization of bare metal servers where the business case supports virtualization. In some situations a bare metal server may be the best solution. The State estimates 60% of the bare metal servers will be virtualized.

116	4.1	Of those servers that will remain bare metal, do you intend the workloads to run on servers providing specifications in section 4.2.4.3.5 (that is, 24 vCPU and 512 GB RAM)? If not, do you have a list of required specifications for each physical server?	Physical, bare-metal, servers are outside of the scope of the intended services of this procurement.
117	4.1	Is it expected that respondents are to recommend the number of virtual machines per physical host? Or do you have a standard for the number of VMs per server?	This can vary depending upon the information system/application in question. Such determinations will be made on a case-by-case basis during the use of the contract.
118	4.2.1.1.1.6	Please clarify the RPO and RTO objectives. In particular, in the bullet points under Tier Level 2, on "critical data backup requirements" do you need RPO = 1 hour and RTO = 15 minutes, and on "critical disaster recovery objectives" do you need RPO = 4 hours and RTO = 2 hours?	The items in questions are included as desirable specifications, not mandatory. The State seeks proposals designed to achieve the goals and objectives outlined.
119	4.2.1.1.1.4-6	How many workloads will be running at each of the tiers (Tier Levels 0-2)?	See answer to Question 87.
120		Concerning your total terabytes of primary application data, how much front-end data needs to be backed up?	All data that cannot be recovered easily (operating systems, COTS applications) will be protected. This includes, but is not limited to, application data, user data, configurations, and any other information unique to a workload.
121		Concerning your total terabytes of primary application data, what type of retention schedule do you require for on-premise versus cloud/tape backups?	Standard retention is 30 days. Extended retention is available to any agency, upon request and cost acceptance
122		Concerning the total terabytes of backup data, how much backup data do you currently store on your existing EMC storage infrastructure?	The current combined deduplicated, compressed backup footprint on our backup platforms is approximately 169TB
123		What is your total terabyte of NAS data for both backup and/or Direct NAS access?	Only the NAS in the Data Center is in scope at this time. There is currently 65 TB allocated to it.

124	Regarding the total terabyte capacity of your database dumps (if backing up via DB dumps), what retention schedule is required for DB backups?	Standard retention is 30 days. Extended retention is available to any agency, upor request and cost acceptance
125	What is the breakdown of data per site (i.e. what is the site breakdown of multiple data centers contributing to the 1.3 PB of total storage)?	Background information is provided in specification 4.1
126	Will all backup and NAS data be replicated to multiple media (e.g. a second physical site, public cloud, or a service provider's network)?	WVOT seeks to provide secondary data backup location services to agencies whose data protection requirements justify the investment.
127	What are the specific data retention policies as to data type?	Standard retention is 30 days. Extended retention is available to any agency, upon request and cost acceptance
128	Other than the operating systems listed, are there any specific backup features requested?	The possibility of bare metal, point-in- time, virtual machine level and NDMP should be available, as need arises.
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REQUEST FOR PROPOSAL

WV Office of Technology On-Premise Infrastructure

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REQUEST FOR PROPOSAL

WV Office of Technology

On-Premise Infrastructure

SECTION 1: GENERAL INFORMATION

1.1 Introduction

The West Virginia Department of Administration, Purchasing Division (hereinafter referred to as the "Purchasing Division") is issuing this solicitation as a request for proposal ("RFP"), as authorized by W. Va. Code §5A-3-10b, for the West Virginia Office of Technology (hereinafter referred to as the "Agency") to establish an on-premise infrastructure, enterprise data backup, and infrastructure monitoring contract.

The State of West Virginia requires an on-premise infrastructure contract to provide enterprise-class hardware, enterprise data backup capability, infrastructure operations monitoring capability, and on-demand professional services.

The RFP is a procurement method in which Vendor's submit proposals in response to the request for proposal published by the Purchasing Division. It requires an award to the highest scoring vendor, rather than the lowest cost vendor, based upon a technical evaluation of the Vendor's technical proposal and a cost evaluation. This is referred to as a best value procurement. Through their proposals, Vendor's offer a solution to the objectives, problem, or need specified in the RFP, and define how they intend to meet (or exceed) the RFP requirements.

RFP Schedule of Events:

RFP Released to Public	11/19/2019
Mandatory Pre-bid Conference	12/06/2019
1st Vendor's Written Questions Submission Deadline	12/13/2019
Addendum No. 01 Issued	11/26/2019
Addendum No. 02 Issued	12/05/2019
Addendum No. 03 Issued	12/06/2019
Addendum No. 04 Issued	12/17/2019
Addendum No.05 Issued.	12/26/2019
Addendum No. 06 Issued	01/21/2020
2 nd Technical Question Deadline	02/04/2020
Bid Opening Date	03/20/2020
Technical Evaluation Begins	TRD
Oral Presentation (Agency Option)	TRD
Cost Bid Opening	TBD
Cost Evaluation Begins	TBD
Contract Award Made	TBD

REQUEST FOR PROPOSAL

WV Office of Technology

On-Premise Infrastructure

SECTION 2: INSTRUCTIONS TO VENDOR'S SUBMITTING BIDS

Instructions begin on next page.

INSTRUCTIONS TO VENDORS SUBMITTING BIDS

- 1. REVIEW DOCUMENTS THOROUGHLY: The attached documents contain a solicitation for bids. Please read these instructions and all documents attached in their entirety. These instructions provide critical information about requirements that if overlooked could lead to disqualification of a Vendor's bid. All bids must be submitted in accordance with the provisions contained in these instructions and the Solicitation. Failure to do so may result in disqualification of Vendor's bid.
- 2. MANDATORY TERMS: The Solicitation may contain mandatory provisions identified by the use of the words "must," "will," and "shall." Failure to comply with a mandatory term in the Solicitation will result in bid disqualification.
- 3. PREBID MEETING: The item identified below shall apply to this Solicitation.
 A pre-bid meeting will not be held prior to bid opening
 A MANDATORY PRE-BID meeting will be held at the following place and time:
 December 6, 2019
 1:00 pm to 3:00 pm EST

WV State Capitol Complex

Building 3, Conference Room 124 Charleston, WV

All Vendors submitting a bid must attend the mandatory pre-bid meeting. Failure to attend the mandatory pre-bid meeting shall result in disqualification of the Vendor's bid. No one individual is permitted to represent more than one vendor at the pre-bid meeting. Any individual that does attempt to represent two or more vendors will be required to select one vendor to which the individual's attendance will be attributed. The vendors not selected will be deemed to have not attended the pre-bid meeting unless another individual attended on their behalf.

An attendance sheet provided at the pre-bid meeting shall serve as the official document verifying attendance. Any person attending the pre-bid meeting on behalf of a Vendor must list on the attendance sheet his or her name and the name of the Vendor he or she is representing.

Additionally, the person attending the pre-bid meeting should include the Vendor's E-Mail address, phone number, and Fax number on the attendance sheet. It is the Vendor's responsibility to locate the attendance sheet and provide the required information. Failure to complete the attendance sheet as required may result in disqualification of Vendor's bid.

All Vendors should arrive prior to the starting time for the pre-bid. Vendors who arrive after the starting time but prior to the end of the pre-bid will be permitted to sign in, but are charged with knowing all matters discussed at the pre-bid.

Questions submitted at least five business days prior to a scheduled pre-bid will be discussed at the pre-bid meeting if possible. Any discussions or answers to questions at the pre-bid meeting Revised 11/14/2019

are preliminary in nature and are non-binding. Official and binding answers to questions will be published in a written addendum to the Solicitation prior to bid opening.

4. VENDOR QUESTION DEADLINE: Vendors may submit questions relating to this Solicitation to the Purchasing Division. Questions must be submitted in writing. All questions must be submitted on or before the date listed below and to the address listed below in order to be considered. A written response will be published in a Solicitation addendum if a response is possible and appropriate. Non-written discussions, conversations, or questions and answers regarding this Solicitation are preliminary in nature and are nonbinding.

Submitted e-mails should have solicitation number in the subject line.

Question Submission Deadline: February 4, 2020 at 9:00 AM (EST)

Submit Questions to: Jessica Chambers 2019 Washington Street, East Charleston, WV 25305

Fax: (304) 558-4115 (Vendors should not use this fax number for bid submission)

Email: Jessica.S.Chambers@wv.gov

- **5. VERBAL COMMUNICATION:** Any verbal communication between the Vendor and any State personnel is not binding, including verbal communication at the mandatory pre-bid conference. Only information issued in writing and added to the Solicitation by an official written addendum by the Purchasing Division is binding.
- 6. BID SUBMISSION: All bids must be submitted electronically through wvOASIS or signed and delivered by the Vendor to the Purchasing Division at the address listed below on or before the date and time of the bid opening. Any bid received by the Purchasing Division staff is considered to be in the possession of the Purchasing Division and will not be returned for any reason. The Purchasing Division will not accept bids, modification of bids, or addendum acknowledgment forms via e-mail. Acceptable delivery methods include electronic submission via wvOASIS, hand delivery, delivery by courier, or facsimile.

The bid delivery address is:
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

A bid that is not submitted electronically through wvOASIS should contain the information listed below on the face of the envelope or the bid may be rejected by the Purchasing Division.:

SEALED BID:

BUYER: Jessica Chambers

SOLICITATION NO.: CRFP OOT2000000001

BID OPENING DATE: 02/26/2020 BID OPENING TIME: 1:30 PM (EST) FAX NUMBER: (304)558-3970

Revised 11/14/2019

The Purchasing Division may prohibit the submission of bids electronically through wvOASIS at its sole discretion. Such a prohibition will be contained and communicated in the wvOASIS system resulting in the Vendor's inability to submit bids through wvOASIS. Submission of a response to an Expression or Interest or Request for Proposal is not permitted in wvOASIS.

For Request For Proposal ("RFP") Responses Only: In the event that Vendor is responding to a request for proposal, the Vendor shall submit one original technical and one original cost proposal plusconvenience copies of each to the Purchasing Division at the address shown above. Additionally, the Vendor should identify the bid type as either a technical or cost proposal on the face of each bid envelope submitted in response to a request for proposal as follows:
BID TYPE: (This only applies to CRFP) ☐ Technical ☐ Cost

7. BID OPENING: Bids submitted in response to this Solicitation will be opened at the location identified below on the date and time listed below. Delivery of a bid after the bid opening date and time will result in bid disqualification. For purposes of this Solicitation, a bid is considered delivered when confirmation of delivery is provided by wvOASIS (in the case of electronic submission) or when the bid is time stamped by the official Purchasing Division time clock (in the case of hand delivery).

Bid Opening Date and Time: February 26, 2020 at 1:30 PM (EST)

Bid Opening Location: Department of Administration, Purchasing Division 2019 Washington Street East Charleston, WV 25305-0130

- 8. ADDENDUM ACKNOWLEDGEMENT: Changes or revisions to this Solicitation will be made by an official written addendum issued by the Purchasing Division. Vendor should acknowledge receipt of all addenda issued with this Solicitation by completing an Addendum Acknowledgment Form, 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.
- 9. BID FORMATTING: Vendor should type or electronically enter the information onto its bid to prevent errors in the evaluation. Failure to type or electronically enter the information may result in bid disqualification.
- 10. ALTERNATE MODEL OR BRAND: Unless the box below is checked, any model, brand, or specification listed in this Solicitation establishes the acceptable level of quality only and is not intended to reflect a preference for, or in any way favor, a particular brand or vendor. Vendors may bid alternates to a listed model or brand provided that the alternate is at least equal to the model or brand and complies with the required specifications. The equality of any alternate being bid shall be determined by the State at its sole discretion. Any Vendor bidding an alternate model or brand should clearly identify the alternate items in its bid and should include manufacturer's specifications, industry literature, and/or any other relevant documentation demonstrating the

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equality of the alternate items. Failure to provide information for alternate items may be grounds for rejection of a Vendor's bid.

- This Solicitation is based upon a standardized commodity established under W. Va. Code § 5A-3-61. Vendors are expected to bid the standardized commodity identified. Failure to bid the standardized commodity will result in your firm's bid being rejected.
- 11. EXCEPTIONS AND CLARIFICATIONS: The Solicitation contains the specifications that shall form the basis of a contractual agreement. Vendor shall clearly mark any exceptions, clarifications, or other proposed modifications in its bid. Exceptions to, clarifications of, or modifications of a requirement or term and condition of the Solicitation may result in bid disqualification.
- 12. COMMUNICATION LIMITATIONS: In accordance with West Virginia Code of State Rules §148-1-6.6, communication with the State of West Virginia or any of its employees regarding this Solicitation during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited without prior Purchasing Division approval. Purchasing Division approval for such communication is implied for all agency delegated and exempt purchases.
- **13. REGISTRATION:** Prior to Contract award, the apparent successful Vendor must be properly registered with the West Virginia Purchasing Division and must have paid the \$125 fee, if applicable.
- 14. UNIT PRICE: Unit prices shall prevail in cases of a discrepancy in the Vendor's bid.
- 15. PREFERENCE: Vendor Preference may be requested in purchases of motor vehicles or construction and maintenance equipment and machinery used in highway and other infrastructure projects. Any request for preference must be submitted in writing with the bid, must specifically identify the preference requested with reference to the applicable subsection of West Virginia Code § 5A-3-37, and should include with the bid any information necessary to evaluate and confirm the applicability of the requested preference. A request form to help facilitate the request can be found at:

http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf.

- 15A. RECIPROCAL PREFERENCE: The State of West Virginia applies a reciprocal preference to all solicitations for commodities and printing in accordance with W. Va. Code § 5A-3-37(b). In effect, non-resident vendors receiving a preference in their home states, will see that same preference granted to West Virginia resident vendors bidding against them in West Virginia. A request form to help facilitate the request can be found at: http://www.state.wv.us/admin/purchase/vrc/Venpref.pdf.
- 16. SMALL, WOMEN-OWNED, OR MINORITY-OWNED BUSINESSES: For any solicitations publicly advertised for bid, in accordance with West Virginia Code §5A-3-37(a)(7) and W. Va. CSR § 148-22-9, any non-resident vendor certified as a small, womenowned, or minority-owned business under W. Va. CSR § 148-22-9 shall be provided the same preference made available to any resident vendor. Any non-resident small, women-owned, or minority-owned business must identify itself as such in writing, must submit that writing to the

Purchasing Division with its bid, and must be properly certified under W. Va. CSR § 148-22-9 prior to contract award to receive the preferences made available to resident vendors. Preference for a non-resident small, women-owned, or minority owned business shall be applied in accordance with W. Va. CSR § 148-22-9.

- 17. WAIVER OF MINOR IRREGULARITIES: The Director reserves the right to waive minor irregularities in bids or specifications in accordance with West Virginia Code of State Rules § 148-1-4.6.
- 18. ELECTRONIC FILE ACCESS RESTRICTIONS: Vendor must ensure that its submission in wvOASIS can be accessed and viewed by the Purchasing Division staff immediately upon bid opening. The Purchasing Division will consider any file that cannot be immediately accessed and viewed at the time of the bid opening (such as, encrypted files, password protected files, or incompatible files) to be blank or incomplete as context requires, and are therefore unacceptable. A vendor will not be permitted to unencrypt files, remove password protections, or resubmit documents after bid opening to make a file viewable if those documents are required with the bid. A Vendor may be required to provide document passwords or remove access restrictions to allow the Purchasing Division to print or electronically save documents provided that those documents are viewable by the Purchasing Division prior to obtaining the password or removing the access restriction.
- 19. NON-RESPONSIBLE: The Purchasing Division Director reserves the right to reject the bid of any vendor as Non-Responsible in accordance with W. Va. Code of State Rules § 148-1-5.3, when the Director determines that the vendor submitting the bid does not have the capability to fully perform, or lacks the integrity and reliability to assure good-faith performance."
- 20. ACCEPTANCE/REJECTION: The State may accept or reject any bid in whole, or in part in accordance with W. Va. Code of State Rules § 148-1-4.5. and § 148-1-6.4.b."
- 21. 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.

- 22. INTERESTED PARTY DISCLOSURE: West Virginia Code § 6D-1-2 requires that the vendor submit to the Purchasing Division a disclosure of interested parties to the contract for all contracts with an actual or estimated value of at least \$1 Million. That disclosure must occur on the form prescribed and approved by the WV Ethics Commission prior to contract award. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.
- 23. WITH THE BID REQUIREMENTS: In instances where these specifications require documentation or other information with the bid, and a vendor fails to provide it with the bid, the Director of the Purchasing Division reserves the right to request those items after bid opening and prior to contract award pursuant to the authority to waive minor irregularities in bids or specifications under W. Va. CSR § 148-1-4.6. This authority does not apply to instances where state law mandates receipt with the bid.

WV Office of Technology On-Premise Infrastructure

SECTION 3: General Terms and Conditions

Terms and conditions begin on next page.

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.

determined in accordance with the category that has been identified as applicable to this Contract below:
✓ Term Contract
Initial Contract Term: Initial Contract Term: This Contract becomes effective on Award and extends for a period of Four (4) 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 delivered to the Agency and then 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. Unless otherwise specified below, 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 the total number of months available in all renewal years combined. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)
Alternate Renewal Term – This contract may be renewed for successive year periods or shorter periods provided that they do not exceed the total number of months contained in all available renewals. Automatic renewal of this Contract is prohibited. Renewals must be approved by the Vendor, Agency, Purchasing Division and Attorney General's office (Attorney General approval is as to form only)
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
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.
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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 100% of the contract. The performance bond must be received by the Purchasing Division prior to Contract award.

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. Notwithstanding the foregoing, West Virginia Code § 5-22-1 (d) mandates that a vendor provide a performance and labor/material payment bond for construction projects. Accordingly, substitutions for the performance and labor/material payment bonds for construction projects is not permitted.
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.
LICENSE(S) / CERTIFICATIONS / PERMITS: In addition to anything required under the Section of the General Terms and Conditions entitled Licensing, the apparent successful Vendor shall furnish proof of the following licenses, certifications, and/or permits upon request and in a form acceptable to the State. The request may be prior to or after contract award at the State's sole discretion.
П
The apparent successful Vendor shall also furnish proof of any additional licenses or certifications contained in the specifications regardless of whether or not that requirement is listed above.

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8. INSURANCE: The apparent successful Vendor shall furnish proof of the insurance identified by a checkmark below and must include the State as an additional insured on each policy prior to Contract award. The insurance coverages identified below must be maintained throughout the life of this contract. Thirty (30) days prior to the expiration of the insurance policies, Vendor shall provide the Agency with proof that the insurance mandated herein has been continued. Vendor must also provide Agency with immediate notice of any changes in its insurance policies, including but not limited to, policy cancelation, policy reduction, or change in insurers. 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 in this section.

Vendor must maintain:			
✓ Commercial General Liability Insurance in at least an amount of: 1,000,000.00 per occurrence.			
Automobile Liability Insurance in at least an amount of: 1,000,000.00 per occurrence.			
Professional/Malpractice/Errors and Omission Insurance in at least an amount of: per occurrence. Notwithstanding the forgoing, Vendor's are not required to list the State as an additional insured for this type of policy.			
Commercial Crime and Third Party Fidelity Insurance in an amount of:			
✓ Cyber Liability Insurance in an amount of: 5,000,000.00 per occurrence.			
Builders Risk Insurance in an amount equal to 100% of the amount of the Contract.			
Pollution Insurance in an amount of: per occurrence.			
Aircraft Liability in an amount of: per occurrence.			

Notwithstanding anything contained in this section to the contrary, the Director of the Purchasing Division reserves the right to waive the requirement that the State be named as an additional insured on one or more of the Vendor's insurance policies if the Director finds that doing so is in the State's best interest.

9. 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.

10. [Reserved]

of limit the State or Age	AGES: This clause shall in no way be considered exclusive and shey's right to pursue any other available remedy. Vendor shall pay mount specified below or as described in the specifications:	ıall
	for	
Liquidated Dama	es Contained in the Specifications	

- 12. 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.
- 13. 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. Notwithstanding the foregoing, Vendor must extend any publicly advertised sale price to the State and invoice at the lower of the contract price or the publicly advertised sale price.
- 14. PAYMENT IN ARREARS: 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.
- 15. PAYMENT METHODS: Vendor must accept payment by electronic funds transfer and P-Card. (The State of West Virginia's Purchasing Card program, administered under contract by a banking institution, processes payment for goods and services through state designated credit cards.)

- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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 § 148-1-5.2.b.
- 20. TIME: Time is of the essence with regard to all matters of time and performance in this Contract.
- 21. 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.
- **22. COMPLIANCE WITH LAWS:** 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.
 - SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to comply with all applicable laws, regulations, and ordinances. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.
- 23. 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.

- 24. 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.
- 25. 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.
- 26. 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.
- 27. 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.
- 28. 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.
- 29. 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.
- 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 http://www.state.wv.us/admin/purchase/privacy/default.html.

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. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. 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.

SUBCONTRACTOR COMPLIANCE: Vendor shall notify all subcontractors providing commodities or services related to this Contract that as subcontractors, they too are required to be licensed, in good standing, and up-to-date on all state and local obligations as described in this section. Obligations related to political subdivisions may include, but are not limited to, business licensing, business and occupation taxes, inspection compliance, permitting, etc. Notification under this provision must occur prior to the performance of any work under the contract by the subcontractor.

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 and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State, Vendors are required to sign, notarize, and submit the Purchasing Affidavit to the Purchasing Division affirming under oath that it is not in default on any monetary obligation owed to the state or a political subdivision of the state.
- 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"), provided that both the Other Government Entity and the Vendor agree. 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. 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 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.

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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

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"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.

- 44. INTERESTED PARTY SUPPLEMENTAL DISCLOSURE: W. Va. Code § 6D-1-2 requires that for contracts with an actual or estimated value of at least \$1 million, the vendor must submit to the Agency a supplemental disclosure of interested parties reflecting any new or differing interested parties to the contract, which were not included in the original preaward interested party disclosure, within 30 days following the completion or termination of the contract. A copy of that form is included with this solicitation or can be obtained from the WV Ethics Commission. This requirement does not apply to publicly traded companies listed on a national or international stock exchange. A more detailed definition of interested parties can be obtained from the form referenced above.
- 45. PROHIBITION AGAINST USED OR REFURBISHED: Unless expressly permitted in the solicitation published by the State, Vendor must provide new, unused commodities, and is prohibited from supplying used or refurbished commodities, in fulfilling its responsibilities under this Contract.

Contract Administrator and the initial point of contact for matters relating to this Contract.
(Name, Title) Mike, Armbrust, Managing Director
(Printed Name and Title) 5181 Natorp Blvd, Suite 110, Mason, OH 45040
(Address) 330-338-5216
(Phone Number) / (Fax Number) mike.armbrust@thinkahead.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.
Ahead
(Company)
(Authorized Signature) (Representative Name, Title)

April 10, 2020

330-338-5216

(Phone Number) (Fax Number)

(Date)

Mike, Armbrust, Managing Director

(Printed Name and Title of Authorized Representative)

WV Office of Technology

On-Premise Infrastructure

Section 3A: Additional Definitions: (Supplement to Item 2 of the General Terms and Conditions) The terms listed below shall have the meanings assigned to them as defined below.

- 3.1 "Co-location" means any physical data center either owned, operated or leased by the State of West Virginia for the express use of housing computer equipment (including servers, networking equipment, etc.) used for providing computing services to various West Virginia state agencies
- **3.2** "Converged Infrastructure" sometimes known as converged architecture, is an approach to data center management that packages compute, networking, servers, storage and virtualization tools on a prequalified turnkey appliance. Converged systems include a toolkit of management software.
- **3.3 "Device"** means any component virtual or physical providing an infrastructure related service to include but not limited to servers, routers, switches, firewalls.
- **3.4** "Enterprise" means the collective departments, agencies and boards within state government that provide services to citizens and other state entities.
- **3.5** "Enterprise-class" includes telecommunications systems such as large-scale network equipment, telephone systems, and SIP devices. It also includes server farms and infrastructure used for cloud computing.
- 3.6 "GB" means "Gigabyte", a unit of measurement that is equal to 1000 Megabytes
- 3.7 "Hybrid data center" means combining your existing data center (private cloud) resources, over which you have complete control, with ready-made IT infrastructure resources (e.g., compute, networking, storage, applications and services) that provide bursting and scaling capabilities as needed to accomplish the goals of the organization
- 3.8 "Hyper-Converged Infrastructure (HCI)" is a software-defined IT infrastructure that virtualizes all of the elements of conventional "hardware-defined" systems. HCI includes, at a minimum, virtualized computing (a hypervisor), a virtual SAN (vSAN) (software-defined storage) and virtualized networking (software-defined networking). HCI typically runs on commercial off-the-shelf (COTS) servers.
- **3.9 "Information custodian"** means a department, agency or person who owns accountability for a set of data assets.
- **3.10 "LAN"** means Local Area Network, a network that is limited to a specific area, such as a home, office, or campus.
- 3.11 "PB" means "Petabyte", a unit of measurement that is equal to 1000 Terabytes

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- 3.12 "Performance Storage" means storage that is designed to address the business and technical requirements when data retrieval is the primary driver
- 3.13 "Physical Server" means a server that is not part of the virtualization server and can stand alone in the data center with no outside needs (SAN fabric, etc.).
- 3.14 "Plan of action and milestones" means a remedial plan, or the process of accepting or resolving risk, which helps the information custodian to identify and assess information system security and privacy weaknesses, set priorities and monitor progress toward mitigating the weaknesses.
- 3.15 "RPO" means Recovery Point Objective. It is the maximum targeted period in which data (transactions) might be lost from an IT service due to a major incident.
- 3.16 "RTO" means Recovery time objective (RTO) and is the maximum desired length of time allowed between an unexpected failure or disaster and the resumption of normal operations and service levels. The RTO defines the point in time after a failure or disaster at which the consequences of the interruption become unacceptable. This is limited to the scope and services within this contract. The State will be responsible for all building infrastructure associated with the scope of this contract.
- 3.17 "Security controls" means safeguards or countermeasures to avoid, detect, counteract or minimize security risks to physical property, information, computer systems or other assets.
- 3.18 "Server" means a computer that provides data to other computers. It may serve data to systems on a local area network (LAN) or a wide area network (WAN) over the Internet.
- 3.19 "TB" means "Terabyte", a unit of measurement that is equal to 1000 Gigabytes.
- **3.20 "vCPU"** stands for virtual central processing unit. One or more vCPUs are assigned to every Virtual Machine (VM) within an environment.
- 3.21 "Virtual Server/Machine" means an emulated computer system (commonly called a "VM") created using software. It uses physical system resources, such as the CPU, RAM, and disk storage, but is isolated from other software on the computer. It can easily be created, modified, or destroyed without affecting the host computer.
- **3.22 "Virtualization Server"** is a virtualization technique that involves partitioning a physical server into several small, virtual servers with the help of virtualization software. In server virtualization, each virtual server runs multiple operating system instances at the same time.
- 3.23 "Volume Storage" means storage that is designed to address the business and technical requirements when data volume is the primary driver.

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- **3.24 "x86 Computer"** means a computer, (either physical or virtual), running with an Intel Corporation 80X86 microprocessor. This term does not include any mainframe equipment that may or may not be a part of this RFP.
- 3.25 "SMS" means Short Message Service, also known as text messaging. SMS is used to send text messages to mobile phones. The messages can typically be up to 160 characters in length. SMS can also notify employees of sales inquiries, service stops, and other information pertinent to their business
- 3.26 "WVOT" means the West Virginia Office of Technology

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SECTION 4: PROJECT SPECIFICATIONS

4.1 Background and Current Operating Environment: The West Virginia Office of Technology, under the West Virginia Department of Administration, and its Chief Technology Officer (CTO), sets goals to develop an organized approach to information resource management for the State, while providing technical assistance to State entities in the design and management of information systems.

The State of West Virginia's strategic technology goals (digital government, technology optimization & value, enterprise services, and cybersecurity) interrelate to the strategic initiative known as Data Center 2.0. The Data Center 2.0 initiative strives to accomplish the following:

- Establish a centralized on-premise infrastructure contract enabling the WVOT to support a myriad of applications in a multitenant environment.
- Leverage a co-location model to ensure the cybersecurity, privacy, redundancy, and resiliency standards of the State data center locations adhere to acceptable levels;
- Drive data center consolidation and the server virtualization;
- Improve the cybersecurity and privacy posture of the State infrastructure leveraging a risk and compliance-based model;
- Through a centralized, managed enterprise contract, the on-premise infrastructure can be expanded or contracted (technology infrastructure acquisitions, allocation, and provisioning), greatly improving the time to deploy or retract resources, in support of technology projects and initiatives;
- Reduce financial overhead expense and cyber risk in the maintenance and management of
 multiple on-premise infrastructures with aged and in some cases unsupported infrastructure;
 and
- Set the stage for a hybrid data center architecture, ensuring proper design and implementation to support leveraging cloud resources for the greatest return on investment for cloudappropriate workloads.

WVOT provides highly reliable, protected, and cost-effective technology services to approximately 25,000 computers and 20,000 network users. Services are delivered by approximately 200 full-time and temporary employees and supplemented by specialized contract services and staff on an as-needed basis. There are approximately 210 entities total within the executive branch where services are provided. Funding for the Office of Technology is derived from a fee for services model.

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<u>Current Data Center Infrastructure Summary:</u> WVOT's current server and storage environment consists of approximately 1400 servers with 1.3PB of total storage, of which approximately 750TB is in use. This storage feeds approximately 780 virtualized servers with the rest being physical servers. We currently use the VMware vSphere 6.7 platform for our virtualization environment.

The operating systems in production include Microsoft Windows Servers, HP-UX 11.31, AIX 5.3 through 6.1, and Red Hat Enterprise Linux (RHEL) 5 through 6.

The current storage environment consists predominantly of EMC and NetApp storage arrays including VNX 5400, VNX 5200, VNXe 3150, VMAX, etc.

Most of the equipment in the current data center is reaching capacity or end of life status (or both). The current data center space is also limited in terms of physical space, power, and cooling. WVOT is looking to replace these disparate units/services with a single enterprise-class, fully integrated infrastructure. We are expecting to grow approximately 5% - 7% in capacity and/or services year over year during the lifetime of this contract

<u>Current Enterprise Backup Service Summary: WVOT provides an enterprise backup service to supported executive branch agencies.</u>

- EMC IDPA with Data Domain
- DDBoost and Avamar
- EMC Avamar (handles 70% of the total backup load)
- IBM Tivoli

<u>Current Infrastructure Operations Monitoring Summary: WVOT maintains a limited infrastructure operation monitoring capability.</u>

- Capability is stretched across various tools, across the different IT support functions providing a limited operational monitoring capability.
- Tools: Solarwinds & What's Up Gold

Note the State's strategy is to continually seek cost optimization and modernization in technology management, which could include leveraging a multi-source integrator model (MSI).

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4.2 Project Goals and Mandatory Requirements: The purpose of this RFP is to establish a contract for on-premise data center infrastructure capable of scalability, flexibility, and elasticity. The RFP defines the service expectations and services scope. Vendor's are highly encouraged to review the entire RFP to ensure proper scoping in their proposal. Vendor should provide its approach and methodology to providing the solution or solving the problem described by meeting the goals/objectives identified below. Vendor's response should include any information about how the proposed approach is superior or inferior to other possible approaches, outline project deliverables, and provide supporting documentation.

NOTE: If, as part of its proposal, the Vendor submits appendices or other supplemental materials, the Vendor should denote specifically in those materials where the relevant information is located.

4.2.1 Goals and Objectives – On-Premise Infrastructure – The primary goal of this solicitation is to establish on-premise infrastructure contract to enable WVOT to provide virtualized x86 computer and storage resources to executive branch agencies who fall under the purview of the West Virginia Office of Technology (WVOT). The solution should be designed with the capability to expand and shrink the physical infrastructure and associated operational expense, under a scalable infrastructure architecture. There are four (4) components to this RFP; On-Premise Infrastructure, Enterprise Data Backup, Infrastructure Operations Monitoring and On-Demand Professional Services. The overarching goals for each component are outlined below.

4.2.1.1 On-Premise Infrastructure:

4.2.1.1.1 Tiered Solution. The State seeks a tiered pricing model for the proposed infrastructure solution. The tiering delineation is established by business objectives.

Each solution tier should be designed to leverage a three (3) line item structure as outlined below. Please also see mandatory minimum specifications for below tiers and expansions in sections 4.2.4.3.5, 4.2.4.3.6, and 4.2.4.3.7.

4.2.1.1.1.1 Tier Base

The base line item is intended to provide the complete solution of the associated tier solutions at one (1) data center location.

The base line item can also be leveraged by the state to implement an offsite data backup and/or disaster recovery capability of the associated tier.

The base line item should include all required components (hardware, software, middleware, equipment, networking, licensing, support, implementation & firmware management services) to successfully operate the associated tiers.

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4.2.1.1.1.2 Tier Node Expansion

The tier node expansion line item provides the ability to expand or contract the processing capability (cores & volatile memory) of an existing base solution of the same tier.

4.2.1.1.1.3 Tier Storage Expansion

The tier storage expansion line item provides the ability to expand or contract the storage capability of an existing base solution of the same tier. Multiple storage types can be provided as options but should be scoped/sized to align to the single, per tier, line item pricing.

4.2.1.1.1.4 Tier Level: 0

Tier Type: Limited Performance Tier

Primary Business Driver: Cost

Tier Goals: Tier 0 is the intended service:

- When lowest cost operational expense is the primary business driver.
- For hosting non-critical (deferrable services) applications with reduced performance requirements.
- For applications with limited backup requirements.
- For applications with limited to no disaster recovery objectives.
- When best-effort hardware service support levels are acceptable.

4.2.1.1.1.5 Tier Level: 1

Tier Type: Balanced Performance Tier

Primary Business Driver: Balanced combination between cost and

performance

Tier Goals: Tier 1 is the intended service:

- For hosting both deferrable and important applications with standard performance capabilities requirements.
- For applications with standard data backup requirements.
 - o Deferrable services: twelve (12) hours RPO
 - o Important services: one (1) hour RPO
- For applications with standard disaster recovery objectives.
 - o Deferrable services: twelve (12) hours RTO

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- o Important services: four (4) hours RTO
- When standard hardware service support levels are acceptable.

4.2.1.1.1.6 Tier Level: 2

Tier Type: High Performance Tier

Primary Business Driver: High performance/Disaster Recovery

Tier Goals: Tier 2 is the intended service:

- For hosting both important and critical applications with high performance capabilities requirements.
- For applications with critical data backup requirements.
 - o Important services RPO of approximately one (1) hour
 - Critical services RPO of less than 15 minutes
- For applications with critical disaster recovery objectives.
 - o Important services RTO less than four (4) hours
 - o Critical services RTO of less than two (2) hours
- When premium hardware service support levels are required.
- **4.2.1.1.2 Managed Services Scope.** The managed-services scope of the onpremise infrastructure is specifically limited to the infrastructure provided under this contract. The State's existing infrastructure is not included within the scope of the managed services scoping goals described below:
 - **4.2.1.1.2.1** Physical Layer: services and support of the physical layer of the provided infrastructure.
 - **4.2.1.1.2.2** Firmware Layer: services and support of the firmware layer of the provided infrastructure.
 - **4.2.1.1.2.3** Licensing & Hardware Support: licensing relating to the support of the physical infrastructure, ensuring equipment is properly supported by the provider.
 - **4.2.1.1.2.4** The following aspects of services are NOT included in the scope: operating system, virtualization, software, and applications serviced and supported by WVOT.

4.2.1.1.3 Network Infrastructure.

4.2.1.1.3.1 Vendor should provide all components necessary to physically interconnect and enable logical interconnection of the infrastructure to the boundary edge of the provided infrastructure.

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- **4.2.1.1.3.2** WVOT has a separate contract with other providers to procure hardware, software and services to provide network infrastructure connectivity from the edge of the on-premise infrastructure solution(s) to the internal state network, and therefore are **NOT** included within the scope of this contract.
- **4.2.1.1.3.3** Data transport services, as it pertains to MPLS, site-to-site, and cloud interconnect connections are **NOT** included in the scope of the solution.
- **4.2.1.1.4** Architecture and Design. Vendor's solution architecture should be designed to have accommodate future growth without requiring a major redesign during the contract.
- **4.2.1.1.5** Physical Data Center Locations. The scope of the contract is to provide the on-premise infrastructure for on-premise data center location(s) within the State of West Virginia or any location on the United States East Coast. The data center locations are outside the scope of this contract and will be managed by the State or through a separate contract. The initial location for physical equipment provided through this contract is intended to be West Virginia Regional Technology Park, 2020 Union Carbide Drive, Building 6000, South Charleston, Kanawha County, West Virginia, USA
- **4.2.1.1.6 Data Center Footprint**. Any solution proposed by the Vendor should make use of the smallest footprint (e.g. rack space) possible. WVOT has a finite number of racks in the initial lease of our data center space and making efficient use of the racks is going to be a factor in our award decision. Vendor should include the total number of racks needed for their solution in the response to this RFP. WVOT's co-located lease defines the rack size requirements to be a standard 42U (either 2-post or 4-post) rack.
- 4.2.1.1.7 Rack Specifications. Vendor's racks used for their solution should have dual power distribution feeds that are connected to separate US standard 220V 30A twist-lock receptacles (L630P plugs should be needed to mate to L630R receptacles) at the data center location. All equipment should have redundant power supplies that can absorb the entire electrical load for that piece of equipment should one fail. Vendor should install power and network connectivity from the bottom of the rack to the top of the rack using standard methods for ensuring the wiring within the rack is kept neat and organized.
- **4.2.1.1.8 Physical Cabinets Access Control.** Vendor's solution should address physical security controls as it relates to cabinets. Vendor should provide documentation on how their proposed physical cabinet solution is auditable with respect to security controls.

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- **4.2.1.1.9 Infrastructure Ownership.** The State does not stipulate the solution model as it pertains to the ownership of the on-premise infrastructure provided by the vendor. The vendor should describe the concept of ownership within their proposal and explain how the model supports the goals and objectives of this solicitation.
- **4.2.1.1.10 On-Premise Infrastructure Proposal.** Vendor should provide documentation outlining how their solution helps the State achieve the goals and objectives outlined in this RFP for on-premise infrastructure. In addition, the documentation should specifically seek to address the following:
 - **4.2.1.1.10.1** Enhancing the State's ability to conduct data center consolidation.
 - **4.2.1.1.10.2** Enabling opportunity to address the various business drivers, while seeking cost efficiencies and optimization.
 - **4.2.1.1.10.3** Enabling agility and flexibility in data center resources.
 - **4.2.1.1.10.4** For each tier, provide a comprehensive outline of the technical specifications of their solution.
 - **4.2.1.1.10.5** Explain how the performance storage is designed to address data retrieval as the primary driver.
 - **4.2.1.1.10.6** Explain how volume storage is designed to address data volume as the primary driver.
 - **4.2.1.1.10.7** Explain how your storage offerings are specifically designed to balance performance and cost efficiencies.
- **4.2.1.2 Enterprise Data Backup.** The State seeks an enterprise data backup solution for this contract. The following specifications provide the goals and services included in this solicitation:
 - **4.2.1.2.1** Vendor's proposed solution should include applicable, supported hardware, software, middleware, technical dependencies and managed services (as scoped) to enable an enterprise data backup capability.
 - **4.2.1.2.2** The solution should be capable of providing industry best practices in enterprise data backup capabilities.
 - **4.2.1.2.3** The solution should include capabilities designed to provide enhanced cybersecurity protection, such as protection against ransomware cyber-attacks.

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- **4.2.1.2.4** The solution should include capabilities designed to enable cost efficiencies in data storage requirements.
- **4.2.1.2.5 Transition Timeline:** The vendor should be capable of implementing a transition from the existing enterprise data backup to the Vendor's solutions within sixty (60) days of the contract award.
- **4.2.1.2.6 Transition Plan:** A transition plan should be provided to the State for approval that outlines the transition from the existing enterprise backup to the Vendor's solution. This should be accomplished within thirty (30) days of contract award.
- **4.2.1.2.7 Managed Services Scope:** The enterprise data backup scope is **NOT** limited to the data located on infrastructure provided under this contract. The State seeks to leverage this component of the contract to backup data in both the provided infrastructure and existing, state-owned, on-premise infrastructure requiring data backup. The solution should include the following:
 - Physical Layer: Services and support of the physical layer of the Enterprise Data Backup & Protection Service.
 - Firmware Layer: Services and support of the firmware layer of the Enterprise Data Backup & Protection Service.
 - Application Layer: License(s), services, and support for installation, configuration, documentation, training, and operational hand-off to the State of an enterprise-class data backup capability.
- **4.2.1.2.8 Enterprise Data Backup Proposal.** Vendor should provide documentation outlining how their solution helps the State achieve the goals and objectives outlined in this RFP for enterprise data backup. In addition, the documentation should specifically seek to address the following:
 - **4.2.1.2.8.1** The Vendor's ability to quickly transition from the existing solution to their proposed solution.
 - **4.2.1.2.8.2** How the Vendor's solution provides industry best practices in data protection.
 - **4.2.1.2.8.3** How the Vendor's solution provides cost-effective data backup enabling an adherence to compliance requirements.

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- **4.2.1.2.8.4** How the Vendor's solution provides flexible capability enabling cost optimization.
- **4.2.1.3 Infrastructure Operations Monitoring.** The State seeks an infrastructure operation monitoring solution for this contract. The following specifications outline the goals and services for infrastructure operations monitoring:
 - **4.2.1.3.1** Vendor's proposed solution should provide supported hardware, software, middleware, technical dependencies and/or managed services (where applicable) to enable network and system monitoring that is accessible to both the State and the Vendor.
 - **4.2.1.3.2** Vendor's system should have the ability to monitor any system (including but not limited to physical servers, virtual servers, storage arrays, databases) and/or any network equipment (including but not limited to switches, routers, etc.).
 - **4.2.1.3.3** The monitoring system should be able to create and respond to alerts by notification of appropriate persons via Email, SMS, or other such means when set thresholds are exceeded. The system should also be able to do basic remediation (e.g. restart services based on triggers).
 - **4.2.1.3.4** System should also be able to produce automated reports on a set schedule or on demand about all nodes that are under monitoring. These reports should indicate the health of the system(s).
 - **4.2.1.3.5** Vendor should explain how their proposed monitoring service is both cost effective and uses the least amount of system resources to provide monitoring and supporting the infrastructure.
 - **4.2.1.3.6 Managed Services Scope:** The infrastructure operations monitoring scope is NOT limited to the infrastructure provided under the contract. The State seeks to leverage this component of the contract operationally monitoring both the provided infrastructure as part of this contract and for existing, stateowned, on-premise infrastructure, where needed. The solution should include the following:
 - Physical Layer: services and support of the physical layer of the infrastructure operations monitoring.
 - Firmware Layer: services and support of the firmware layer of the Infrastructure Monitoring & Management Service.

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- Application Layer: license(s), services, and support to install, configure, document, training, and operational hand-off to the State of an enterprise-class infrastructure monitoring tool.
- **4.2.1.3.7 Infrastructure Operations Monitoring:** Vendor should provide documentation outlining how their solution helps the State achieve the goals and objectives outlined in this RFP for infrastructure operations monitoring. In addition, the documentation should specifically seek to address the following:
 - **4.2.1.3.7.1** How the Vendor's solution provides industry best practices in infrastructure management.
 - **4.2.1.3.7.2** How the Vendor's solution has been scoped and balanced to provide critical capabilities of infrastructure management, while considering cost control.
 - **4.2.1.3.7.3** How the Vendor's solution provides flexibility in its implementation, enabling the State to maintain visibility on critical resources, but not requiring the capability for resources where the primary business driver is cost.
- **4.2.1.4 On-Demand Professional Services.** Vendor should be capable of providing technical professional services, on an as needed basis.
 - **4.2.1.4.1** The State seeks to leverage a statement of work model in utilizing the on-demand professional services.
 - **4.2.1.4.2** The State may leverage these on-demand professional services to perform various technology support functions related to this contract. Those functions could include, but are not limited to, staff augmentation, project work requiring specialization, server provisioning, and application migration.

4.2.1.4.3 Professional Services Definitions.

- **4.2.1.4.3.1** Application Migration Specialist. Ability to conduct application and system analysis for the evaluation of application migration. Ability to provide application dependency mapping and documented migration proposal plans. At least seven (7) years of experience. Bachelor's Degree or equivalent work experience.
- **4.2.1.4.3.2** Data Backup and Disaster Recovery Specialist. Ability to design, maintain and audit backup solutions including achievement of RPO and RTO requirements. Ability to design, maintain and test of disaster recovery capabilities of data center infrastructure. Ability to maintain

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documentation and processes related to DR and building test plans for DR test scenarios. At least seven (7) years of experience. Bachelor's Degree or equivalent work experience.

- 4.2.1.4.3.3 Data Migration Specialist. Ability to conduct system, data, and operations analysis, requirements and systems development analysis and design. Able to apply formal, established engineering and management principles to specifications and documentation of systems developed, with an emphasis on business process identification, mapping, and analysis. Can formulates, defines, validates, and documents system scope and objectives, user requirements or stories, system use cases, business process workflows, enterprise architectures, system specifications and design based on user needs and specifications, research, and fact-finding. At least seven (7) years of experience. Bachelor's Degree or equivalent work experience.
- **4.2.1.4.3.4** Database Specialist. Ability to plan and coordinate the development of data structures and access strategies in alignment with business and mission requirements. Knowledge of and ability to monitor databases and to analyze and organize data and apply new technology designs and programs. At least seven (7) years of experience. Bachelor's Degree or equivalent work experience.
- **4.2.1.4.3.5** Project Manager. Ability to manage all aspects of a technology project while applying best practice PM processes. At least five (5) years of experience. Bachelor's Degree or equivalent work experience.
- **4.2.1.4.3.6** Storage Specialist. Ability to provide system engineering & systems architecture support for enterprise class storage systems. Knowledge of Storage array, SAN network and Infrastructure systems trouble shooting experience. At least seven (7) years of experience. Bachelor's Degree or equivalent work experience.
- **4.2.1.4.3.7** System Administrator Specialist. Ability to design, configure, maintain, and test application servers. At least seven (7) years of experience. Bachelor's Degree or equivalent work experience.
- **4.2.1.4.3.8** Technical Writer. Ability in writing technical documentation to include framework documents, operating instructions, how-to manuals, and assembly instructions to help technical support staff, consumers, and other users understand complex technical systems. At least four (4) years of experience. Bachelor's degree or equivalent work experience.
- 4.2.1.4.4 On-Demand Professional Services Proposal. Vendor should provide documentation outlining how their solution helps the State achieve the goals

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and objectives outlined in this RFP for on-demand professional services. In addition, the documentation should specifically seek to address the following:

- **4.2.1.4.1** How the Vendor's solution enables the Statement of Work (SOW) model to identify, scope and define deliverables in the drafting of the SOW.
- **4.2.2 Solution Support Documentation** Vendor should agree to create planning documents outlining all necessary elements of solution management that should be updated continuously during the lifetime of the contract.
 - **4.2.2.1** Vendor's proposal should provide an example of a similar government-owned or managed implementation plan outlining key objectives, dependencies, and timeline for the initial design and implementation of the service. Vendor should, no later than 30 days post-award, submit to WVOT an implementation plan for approval.
 - **4.2.2.2** Vendor's proposal should provide an example of a guide for on-going operations outlining key objectives, dependencies, and timeline for the on-going management and maintenance of the solution. Vendor should, no later than 30 days post-award, submit to WVOT an on-going operations guide for approval.
 - **4.2.2.3** Vendor's proposal should provide an example of a solution transition and contract exit plan for another entity of similar size and scope as part of their bid response. The plan should outline key objectives, dependencies, and tasks necessary to disentangle the Vendor from the agency. An official solution transition and contract exit plan should be provided to WVOT by the end of year one (1) of the contract.
 - **4.2.2.4** Vendor's proposal should explain how they would support the State relating to cybersecurity and privacy audits when components of the contract fall within the scope of audits. The State leverages NIST 800-53 to map all controls to a common framework.
 - **4.2.2.5** Lifecycle Model: Vendor's proposal should submit an example of an on-premise infrastructure lifecycle management plan explaining how the Vendor's proposal will address the lifecycle stages of the on-premise infrastructure. This plan should be updated and submitted to WVOT for review and approval at least every twelve (12) months.
 - **4.2.2.6** The State desires regularly scheduled meetings and/or calls to discuss the following areas:
 - Architecture and Design
 - Implementation

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- Ordering and Billing
- Service and Support
- Project Management

Please describe your company's ability to hold monthly meetings on each of these topics, as well as your company's implementation plans for starting these discussions.

Vendor should provide an example of a maintenance plan outlining the roles and responsibilities of the vendor as it relates to the scoped managed services outlined. The maintenance plan should outline maintenance requests and the approval process.

4.2.2.7 If the Vendor's work requires them to be at a State site, the Vendor should provide the Agency at least seventy-two (72) hours notice before arriving at the site. Vendor should comply with all Agency policies, State laws, and background checks for contractors, Vendor's, and visitors. Vendor should describe their approach to this requirement.

4.2.3 Contract Management

- **4.2.3.1 Contract Management:** Vendor's proposed solution should provide applicable, supported hardware, software, middleware and technical dependencies that enables contract management from the business management perspective of centralized ordering, billing, financial auditing, and reporting.
- **4.2.3.2 Included Professional Services:** Vendor should provide professional services for configuration and management of the solutions, as well as training for no less than ten (10) persons. Vendor should also produce documentation (either vendor or manufacturer created) showing how the systems work and how changes can be made if needed.
- 4.2.3.3 Billing: Vendor's proposed solution should provide billing capabilities designed to simplify the procedures of a chargeback model, as well as, provide a holistic view of service. The state desires the billing detail to include but not be limited to billing by agency, consumption usage by agency, inventory, and disaster recovery services. Vendor should provide an example of billing capabilities designed to simplify the procedures of a chargeback model, as well as, provide a holistic view of service. (Example: Department of Transportation charges broken down as specified above)
- **4.2.3.4 Financial Reporting**: Vendor's proposed solution should develop and provide financial reporting to meet the State's reporting obligations and the State's goals of transparency and technology optimization.

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- 4.2.3.5 Third Party Terms and Conditions: Vendor should limit pass-through of third-party terms and conditions; Vendor should describe how their proposal meets this goal.
- 4.2.4 Mandatory Project Requirements The following mandatory requirements relate to the goals and objectives and must be met by the Vendor as a part of its submitted proposal. Vendor should describe how it will comply with the mandatory requirements and include any areas where its proposed solution exceeds the mandatory requirement. Failure to comply with mandatory requirements will lead to disqualification, but the approach/methodology that the vendor uses to comply, and areas where the mandatory requirements are exceeded, will be included in technical scores where appropriate. The mandatory project requirements are listed below.

4.2.4.1 General Mandatories

- **4.2.4.1.1** The State of West Virginia reserves the right to move, change or add additional Data Center locations.
- **4.2.4.1.2** WVOT will not accept penalties for scaling down any tier solution, expansion node, expansion storage or infrastructure monitoring node(s).
- 4.2.4.1.3 The Vendor must agree that the State owns all data gathered under the scope of this contract. The Vendor must produce and/or return the data upon the State's request in an editable format mutually agreeable to both parties. If any component (e.g. disk drive) fails, the Vendor must ensure any data on said component is destroyed in accordance with WVOT policies and certify, either in writing or some other mutually agreeable format, that any data on said component was destroyed.
- **4.2.4.1.4** Vendor shall provide the State full access to any and all encryption keys the Vendor may generate in support of this contract.
- **4.2.4.1.5** Vendor shall ensure all solution expenses associated with this contract are captured within the pricing sheet.

4.2.4.2 Cybersecurity Mandatory Requirements

- **4.2.4.2.1** Vendor proposed solution must be capable of adherence to federal and state law.
- **4.2.4.2.2** Vendor's proposed solution must adhere to the State of West Virginia's Cyber Security & Privacy policies, procedures, and standards; these can be viewed at the following link:

https://technology.wv.gov/security/Pages/policies-issued-by-the-cto.aspx

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- **4.2.4.2.3** Vendor proposed solution must be capable of adherence to all applicable security and privacy standards that are subject to the following:
 - Health Insurance Portability and Accountability Act (HIPAA)
 requirements as outlined in the attached Business Associate Addendum
 (BAA);
 - Federal Information Security Management Act (FISMA), National Institute of Standards Technology's Special Publication (NIST SP) 800-53, NIST SP 800-17 which serve as the baseline;
 - Family Education Rights and Privacy Act (FERPA) requirements;
 - Criminal Justice Information System (CJIS) requirements;
 - Payment Card Industry Data Security Standards (PCI-DSS) requirements;
 - Federal tax Information (FTI) and Internal Revenue Service publication 1075 (IRS 1075) requirements;
 - Centers for Medicare & Medicaid (CMS) Services Information Security Policy requirements.
- **4.2.4.2.4** The Vendor must adhere to personnel security requirements for background checks in accordance with state law. The vendor is liable for all costs associated with ensuring their staff meets all requirements.
- **4.2.4.2.5** The Vendor must implement and strictly adhere to physical equipment inventory policy and procedures that are designed to ensure data protection.
- **4.2.4.2.6** The Vendor must adhere to industry-standard data destruction measures and provide the state with written attestation of data destruction. This includes failed hardware where State data may reside.
- **4.2.4.2.7** All Vendor's must ensure that any equipment or software used is not at manufacturer's specified "end of life" (EOL) or "end of support" (EOS) dates and will be supported by the original manufacturer. Maintenance and Support contracts shall be maintained by the vendor on all equipment and software for the life of this contract. Copies of such contracts should be provided to the State with Vendor's response.
- **4.2.4.3 On-Premise Infrastructure Mandatory Requirements:** Pricing for Vendor's proposed solution must provide supported hardware, software, middleware, technical dependencies and/or managed services (where applicable) to ensure that all the goals/objectives of this RFP are met. The price for each solution, node expansion and storage expansion must be entered on the pricing sheet (Attachment "A").
 - **4.2.4.3.1** Virtualization. The on-premise infrastructure solution must be compatible with industry-standard virtualization software. The State currently

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leverages VMWare. The Operating System (OS) and virtualization licensing are outside the scope of the on-premise infrastructure component.

- **4.2.4.3.2 Networking.** The on-premise solution must include all components to enable the internal networking of the on-premise infrastructure. The State will provide boundary networking capability enabling the network connection of the infrastructure to the state's internal network and to the Internet.
- **4.2.4.3.3 Active Directory Domain.** The on-premise solution must be capable of integrating with the WVOT's Active Directory (AD) domain.
- **4.2.4.3.4 Domain Name Service (DNS).** The on-premise solution must be capable of integrating with WVOT's DNS.
- **4.2.4.3.5** The Base Solution for all tier levels must have the ability, to be provisioned by the State, with the following minimum specifications:
 - 24 vCPU cores at a minimum of 2.6GHz processing speed
 - 512 GB RAM
 - 500 GB Performance Storage
 - 1 TB of Volume Storage
- **4.2.4.3.6** The Node Expansion for all tier levels must have the ability, to be provisioned by the State, with the following minimum specifications:
 - 12 vCPU core expansion
 - 256GB RAM
- **4.2.4.3.7** The Storage Expansion for all tier levels must have the ability, to be provisioned by the State, with the following minimum specifications:
 - Performance Storage of 10TB
 - Volume Storage of 25TB
- **4.2.4.4 Enterprise Data Backup Mandatory Requirements** Pricing for Vendor's proposed solution must provide supported hardware, software, middleware, technical dependencies and/or managed services (where applicable) to ensure that all the goals/objectives of this RFP are met. The price for the solution must be entered on the pricing sheet (Attachment "A").
 - **4.2.4.4.1 Pricing Structure.** The pricing structure will account for the following components.

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- **4.2.4.4.1.1 Data Backup Initial Installation.** The initial installation line item is designed to include all aspects to scope, design, architecture, implement, configure, test, train, and operational hand-off the capability to the State.
- **4.2.4.4.1.2 Data Backup Solution.** The data backup solution provides the monthly cost for base level solution. The data backup solution must include:
 - 4.2.4.4.1.2.1 Data backup for one-hundred fifty (150) TB.
 - **4.2.4.4.1.2.2** Data backup capability at two (2), physically separate locations for redundancy.
- **4.2.4.4.1.3 Data Backup Expansion.** The data backup expansion line item is designed to include costs associated with the storage expansion of the solution. The data backup expansion must include:
 - 4.2.4.4.1.3.1 Minimal backup storage expansion of fifty (50) TB.
- **4.2.4.4.2 Physical Infrastructure Location.** Any physical infrastructure should be installed at a State-owned or State-leased data center location. Any change of location for the physical infrastructure is a decision held solely by the State.
- 4.2.4.5 Infrastructure Operational Monitoring Mandatory Requirements Pricing for Vendor's proposed solution must provide supported hardware, software, middleware, technical dependencies and/or managed services (where applicable) to ensure that all the goals/objectives of this RFP are met. The price for each monitored system (or group of monitored systems) must be entered on the pricing sheet (Attachment "A").

4.2.4.5.1 Pricing Structure:

- **4.2.4.5.1.1 Infrastructure Monitoring Initial Installation.** The initial installation line item is designed to include all aspects to scope, design, architecture, implement, configure, test, train, and operational hand-off the capability to the State.
- **4.2.4.5.1.2 Infrastructure Monitoring Solution.** The solution line item provides the monthly cost for base level solution. The infrastructure monitoring solution must, minimally, include the ability to operationally monitor two-hundred fifty (250) components. A component consists of a physical device or a software instance.

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- **4.2.4.5.1.3 Infrastructure Monitoring Expansion.** The expansion line item is designed to include costs associated with component expansion of the solution. The expansion must, minimally, include a component volume expansion of fifty (50) components.
- 4.2.4.6 On-Demand Professional Services Mandatory Requirements Pricing for any professional services must be fully "loaded" to capture all direct and overhead expenses, travel, per diem, and any other travel-related expenses. Prices for all positions included in this RFP must be entered on the pricing sheet (Attachment "A").
 - **4.2.4.6.1** Vendor must agree to an open-end contract method, where prior to each potential engagement of professional services, a Statement of Work will be drafted and mutually agreed upon by both parties. After a SOW is finalized, each engagement will be initiated by the State via Delivery Order that incorporates the SOW. This applies to all professional service positions listed in Specification 4.2.1.4. No statement of work will be permitted to include work unrelated to Data Center 2.0.

4.2.4.7 Contract Management Mandatory Requirements

- 4.2.4.7.1 The successful Vendor must assign an experienced and skilled Project Manager who will provide a high-level project management plan including key components such as a project charter, issue tracking, statements of work (SOW), work breakdown structures (WBS), implementation schedules, etc. in accordance with the Project Management Body of Knowledge (PMBOK) or other industry standard project management methodology stated in West Virginia State Code (§5A-6-4b). The link can be found at: http://www.legis.state.wv.us/WVCODE/Code.cfm?chap=05A&art=6#06. The project management plan must be submitted to and approved by the State prior to implementation.
- **4.2.4.7.2** The successful Vendor's Project Manager must track and report (via written status reports) the following: schedule, scope, budget, issues, risks, specified performance indicators, and other metrics determined appropriate throughout the project and each site implementation.
- **4.2.4.7.3** Vendor billing errors must be credited back to the State from the effective date of the error. The State reserves the right to withhold payment until credit is received.
- **4.2.4.7.4** For auditing, billing, and support purposes, the State requires any service with an associated rate to be identified on its monthly bill. As such, the State must be provided, at a minimum, the following:

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- Billing Period
- Billed Entity Name
- Customer Name/Account (if different from billed entity)
- Itemized Cost for Individual Billing Components
- Total Cost

The cost identified in the bill must match the contract rates for the specified services.

- **4.2.4.7.5** The Vendor must invoice on a consistent monthly billing cycle across all services. Increases or decreases for a partial month must be prorated based on the date of the service increase or decrease.
- **4.2.4.7.6** All tier Base Solution(s), Expansion Node(s), Expansion Storage, Enterprise Data Backup, and Infrastructure Operations Monitoring pricing must include the cost of delivery, physical installation, and initial physical configuration by the Vendor. The Vendor's unit price should be inclusive of all hardware maintenance and support costs.
- 4.2.4.7.7 Vendor must input pricing for each tier Base Solution(s), Expansion Node(s), Expansion Storage, Enterprise Data Backup, and Infrastructure Operations Monitoring in the pricing page. These costs will be a per month charge and include all costs for providing that service as indicated elsewhere in this RFP. Vendor must also input a per hour charge for those professional services positions listed on the pricing page.
- **4.2.4.7.8** Vendor must input percent discount to the corresponding Asset in Service year periods on the pricing page. (Cells G4 through M4). Enter a whole number (e.g. 4) or fraction of a number (e.g. 7.5) corresponding to the percentage discount. The spreadsheet will automatically treat the number as a percentage.
- 4.2.4.7.9 The Vendor's price in Asset in Service will be used by the State to calculate the cost of all orders. Orders placed in billing status in Year 1 will be billed at the subsequent Year's monthly unit price beginning in subsequent year. For example, a tier 0 solution ordered in month 1 of Year 1, will be invoiced at the Year 2 unit price beginning in Month 1 of Year 2.
- 4.2.4.7.10 The State expects full, complete, and timely cooperation in disentangling the relationship if the Agreement expires or terminates for any reason. In the event of expiration or termination, the State expects that the Vendor shall, among other things: return all State data and documentation to the State, including but not limited to configuration information and allow the State or the replacement provider(s) continued view (read-only) access to all

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billing, previously placed orders, and previously opened trouble ticket system, and document processes that have been employed in servicing the State and provide the state a copy, in accordance with methods and procedures to be agreed upon and established in the Agreement. Please acknowledge your acceptance of this.

- 4.3 Qualifications and Experience: Vendor should provide information and documentation regarding its qualifications and experience in providing services or solving problems like those requested in this RFP. Information and documentation should include, but is not limited to, copies of any staff certifications or degrees applicable to this project, proposed staffing plans, descriptions of past projects completed (descriptions should include the location of the project, project manager name and contact information, type of project, and what the project goals and objectives where and how they were met.), references for prior projects, and any other information that vendor deems relevant to the items identified as desirable or mandatory below.
 - **4.3.1 Qualification and Experience Information**: Vendor should describe in its proposal how it meets the desirable qualification and experience requirements listed below.
 - **4.3.1.1** Vendor should specify previous experience in providing an on-premise infrastructure, preferably with government organizations. Vendor should include the scope of programs implemented. Vendor should also include any contacts at the specified entity who can be contacted for verification.
 - **4.3.1.2** Vendor should describe its experience and process for supporting cybersecurity requirements associated with the components of this RFP.
 - **4.3.1.3** Vendor should describe its experience and capabilities in supporting their customers during compliance audits when the vendor-supplied solution is within the scope of audit.
 - **4.3.1.4** Vendor should describe its policies and procedures for conducting sub-contractor assurance, validating both the capability of the vendor to fulfill contracted responsibilities and adhere to all applicable security & privacy policies.
 - **4.3.1.5** Vendor should list all references and/or examples for previous experiences in providing on-premise infrastructure services. Vendor should include any applicable documentation pertaining to the services outlined within this solicitation.
 - **4.3.1.6** Vendor's should hire staff that have the appropriate background, education, and experience to address all tiers and services of the contract.
 - 4.3.1.7 The State desires an Account Team (including Account Support Representative, Technical Support Representative, Solution Implementation Support Representative, Contract Manager, Billing Support Representative, Security/Compliance Specialist, and Project Manager) for the winning solution and life of the contract. Vendor should

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describe in detail the responsibilities of key roles and staff's experience in working in these roles.

- 4.3.2 Mandatory Qualification/Experience Requirements The following mandatory qualification/experience requirements must be met by the Vendor as a part of its submitted proposal. Vendor should describe how it meets the mandatory requirements and include any areas where it exceeds the mandatory requirements. Failure to comply with mandatory requirements will lead to disqualification, but areas where the mandatory requirements are exceeded will be included in technical scores where appropriate. The mandatory qualifications/experience requirements are listed below.
 - **4.3.2.1** Vendor must have provided on-premise infrastructure hardware and/or services within an organization of similar size and complexity or larger.
 - **4.3.2.2** Vendor must provide at least two (2) on-premise infrastructure hardware and/or service contract summaries for in-progress or completed contracts within the past five (5) years that are similar in size and scope to this solicitation.

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4.4 Oral Presentations. The Agency has the option of requiring oral presentations of all Vendor's participating in the RFP process. If this option is exercised, it would be listed in the Schedule of Events (Section 1.3) of this RFP. During oral presentations, Vendor's may not alter or add to their submitted proposal, but only clarify information. A description of the materials and information to be presented is provided below:

Materials and Information Requested at Oral Presentation:

- **4.4.1** A Summary of the Vendor's solution, including product and support offerings, ability to deliver the solution in the specified timeframes, and experience in providing managed and hosted Infrastructures.
- **4.4.2** The vendor will discuss each phase or major milestone listed in sections 4.2.1 and 4.2.2 of this document.
- 4.4.3 The State will ask clarifying questions regarding the Vendor's submitted technical response.
- **4.4.4** Oral Presentations will be conducted at the Agency's facility provided by the Agency. Vendor's should plan to provide their own media and demonstration hardware and, if preparing handouts, should prepare a number equal to the number of convenience copies of their proposals supplied on the Bid Opening Date, unless specifically advised by the Agency otherwise.

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SECTION 5: VENDOR PROPOSAL

- **5.1.** Economy of Preparation: Proposals should be prepared simply and economically providing a concise description of the items requested in Section 4. Emphasis should be placed on completeness and clarity of the content.
- **5.2.** Incurring Cost: Neither the State nor any of its employees or officers shall be held liable for any expenses incurred by any Vendor responding to this RFP, including but not limited to preparation, delivery, or travel.
- 5.3. Proposal Format: Vendor's should provide responses in the format listed below:
 - **5.3.1. Two-Part Submission:** Vendor's must submit proposals in two distinct parts: technical and cost. Technical proposals must not contain any cost information relating to the project. Cost proposal must contain all cost information and must be sealed in a separate envelope from the technical proposal to facilitate a secondary cost proposal opening.
 - **5.3.2.** Title Page: State the RFP subject, number, Vendor's name, business address, telephone number, fax number, name of contact person, e-mail address, and Vendor signature and date.
 - 5.3.3. Table of Contents: Clearly identify the material by section and page number.
 - **5.3.4.** Response Reference: Vendor's response should clearly reference how the information provided applies to the RFP request. For example, listing the RFP number and restating the RFP request as a header in the proposal would be considered a clear reference.
 - **5.3.5. Proposal Submission:** All proposals must be submitted to the Purchasing Division **prior** to the date and time stipulated in the RFP as the opening date. All submissions must be in accordance with the provisions listed in Section 2: Instructions to Bidders Submitting Bids.

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SECTION 6: EVALUATION AND AWARD

- **6.1. Evaluation Process**: Proposals will be evaluated in two parts by a committee of three (3) or more individuals. The first evaluation will be of the technical proposal and the second is an evaluation of the cost proposal. The Vendor who demonstrates that it meets all of the mandatory specifications required, attains the minimum acceptable score and attains the highest overall point score of all Vendor's shall be awarded the contract.
- **6.2. Evaluation Criteria:** Proposals will be evaluated based on criteria set forth in the solicitation and information contained in the proposals submitted in response to the solicitation. The technical evaluation will be based upon the point allocations designated below for a total of 70 of the 100 points. Cost represents 30 of the 100 total points.

Evaluation Point Allocation:

Project Goals and Proposed Approach (§ 4.2)

Approach & Methodology to Goals/Objectives (§ 4.2.1) (25) Points Possible

- Approach & Methodology to Compliance with Mandatory Project Requirements (§ 4.2.2) (15) Points Possible

Qualifications and experience (§ 4.3)

- Qualifications and Experience Generally (§ 4.3.1) (15) Points Possible

- Exceeding Mandatory Qualification/Experience Requirements (§ 4.3.2) (10) Points Possible

Oral interview (§ 4.4) (5) Points Possible

<u>Total Technical Score:</u> 70 Points Possible

Total Cost Score: 30 Points Possible

Total Proposal Score: 100 Points Possible

6.3. Technical Bid Opening: At the technical bid opening, the Purchasing Division will open and announce the technical proposals received prior to the bid opening deadline. Once opened, the technical proposals will be provided to the Agency evaluation committee for technical evaluation.

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- **6.4. Technical Evaluation:** The Agency evaluation committee will review the technical proposals, assign points where appropriate, and make a final written recommendation to the Purchasing Division.
- **6.5.** Proposal Disqualification: The proposal will be disqualified if the following standards are not met.
 - 6.5.1. Minimum Acceptable Score ("MAS"): Vendor's must score a minimum of 70% (49 points) of the total technical points possible in order to move past the technical evaluation and have their cost proposal evaluated. All vendor proposals not attaining the MAS will be disqualified.
 - 6.5.2. Failure to Meet Mandatory Requirement: Vendor's must meet or exceed all mandatory requirements in order to move past the technical evaluation and have their cost proposals evaluated. Proposals failing to meet one or more mandatory requirements of the RFP will be disqualified.
- 6.6. Cost Bid Opening: The Purchasing Division will schedule a date and time to publicly open and announce cost proposals after technical evaluation has been completed and the Purchasing Division has approved the technical recommendation of the evaluation committee. All cost bids received will be opened. Cost bids for disqualified proposals will be opened for record keeping purposes only and will not be evaluated or considered. Once opened, the cost proposals will be provided to the Agency evaluation committee for cost evaluation.
 - The Purchasing Division reserves the right to disqualify a proposal based upon deficiencies in the technical proposal even after the cost evaluation.
- **6.7. Cost Evaluation:** The Agency evaluation committee will review the cost proposals, assign points in accordance with the cost evaluation formula contained herein and make a final recommendation to the Purchasing Division.
 - Cost Evaluation Formula: Each cost proposal will have points assigned using the following formula for all Vendor's not disqualified during the technical evaluation. The lowest cost of all proposals is divided by the cost of the proposal being evaluated to generate a cost score percentage. That percentage is then multiplied by the points attributable to the cost proposal to determine the number of points allocated to the cost proposal being evaluated.
 - **Step 1:** Lowest Cost of All Proposals / Cost of Proposal Being Evaluated = Cost Score Percentage
 - Step 2: Cost Score Percentage X Points Allocated to Cost Proposal = Total Cost Score

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Example:

Proposal 1 Cost is \$1,000,000 Proposal 2 Cost is \$1,100,000 Points Allocated to Cost Proposal is 30

Proposal 1: Step 1 - \$1,000,000 / \$1,000,000 = Cost Score Percentage of 1 (100%)

Step $2 - 1 \times 30 = \text{Total Cost Score of } 30$

Proposal 2: Step 1–\$1,000,000 / \$1,100,000 = Cost Score Percentage of 0.909091 (90.9091%)

Step $2 - 0.909091 \times 30 = \text{Total Cost Score of } 27.27273$

6.8. Availability of Information: Proposal submissions become public and are available for review immediately after opening pursuant to West Virginia Code §5A-3-11(h). All other information associated with the RFP, including but not limited to, technical scores and reasons for disqualification, will not be available until after the contract has been awarded pursuant to West Virginia Code of State Rules §148-1-6.3.d.

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Alleau	
(Company)	
(Representative Name, Title)	
330-338-5216	
(Contact Phone/Fax Number)	*********
April 10, 2020	
(Date)	

Aboad

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.:

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.

(Check the bo	ox next to each addendu	m received)	
[]	Addendum No. 1	[]	Addendum No. 6
[]	Addendum No. 2	[\sqrt]	Addendum No. 7
[]	Addendum No. 3	[\sqrt]	Addendum No. 8
[[]]	Addendum No. 4	[/]	Addendum No. 9
[\sqrt]	Addendum No. 5	[]	Addendum No. 10

Addendum Numbers Received:

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Ahead	Company
Mathelan	Company
	Authorized Signature
April 10, 2020	

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

Note 1	4.2.4.7.7	Vendor must input pricing for each tier Base Solution(s), Expans Expansion Storage, Enterprise Data Backup, and Infrastructure Monitoring in the pricing page. These costs will be a per month include all costs for providing that service as indicated elsewhere Vendor must also input a per hour charge for on-demand professi positions listed on the pricing page.	Operations charge and in this RFP.										
Note 2	4.2.4.7.8	Vendor must input percent discount to the corresponding Asse year periods. (Cells G4 through M4). Enter a whole number into the sheet will automatically display as a percentage		Assets in Service (Years) Contract Option Years					Years	Totals			
Note 3	4.2.4.7.9	The Vendor's price in Asset in Service will be used by the State the cost of all orders. Orders placed in billing status in Year I v at the subsequent Year's monthly unit price beginning in subseque example, a tier 0 solution ordered in month 1 of Year 1, will be the Year 2 unit price beginning in Month 1 of Year 2	vill be billed ent year. For invoiced at	3		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	
Line Item Number	Contract Item	Description	Unit of Measure	Unit Price	Estimated Quantity	0.00%	0.00%	0.00%	0.00%	60.00%	60.00%	60.00%	
001	See Desc.	Tier 0 Solution (4.2.1.1.1.1, 4.2.1.1.1.4, 4.2.4.3.5)	Per Month	\$ 14,512.94	1	\$ 174,155.28	\$ 174,155.28	\$ 174,155.28	\$ 174,155.28	\$ 69,662.11	\$ 69,662.11	\$ 69.662.11	\$ 905,607.46
002	See Desc.	Tier 0 Additional Node (4.2.1.1.1.2, 4.2.1.1.1.4, 4.2.4.3.6)	Per Month	\$ 1,129.27	4	\$ 54,204.96		\$ 54,204.96	\$ 54,204.96	\$ 21,681.98		\$ 21,681.98	\$ 281,865.79
003	See Desc.	Tier 0 Perf. Storage Exp. (4.2.1.1.1.3, 4.2.1.1.1.4, 4.2.4.3.7)	Per Month	\$ 2,161.81	4	\$ 103,766.88	\$ 103,766.88	\$ 103,766.88	\$ 103,766.88	\$ 41,506.75		\$ 41,506.75	\$ 539,587.78
004	See Desc.	Tier 0 Volume Storage Exp. (4.2.1.1.1.3, 4.2.1.1.1.4, 4.2.4.3.7)	Per Month	\$ 482.27	6	\$ 34,723.44	\$ 34,723.44	\$ 34,723.44	\$ 34,723.44	\$ 13,889.38	\$ 13,889.38	\$ 13,889.38	\$ 180,561.89
005	See Desc.	Tier 1 Solution (4.2.1.1.1.1, 4.2.1.1.1.5, 4.2.4.3.5)	Per Month	\$ 51,248.63	2	\$ 1,229,967.12	\$1,229,967.12	\$1,229,967.12	\$ 1,229,967.12	\$ 491,986.85	\$ 491,986.85	\$ 491,986.85	\$ 6,395,829.02
006	See Desc.	Tier 1 Additional Node (4.2.1.1.1.2, 4.2.1.1.1.5, 4.2.4.3.6)	Per Month	\$ 1,129.27	8	\$ 108,409.92	\$ 108,409.92	\$ 108,409.92	\$ 108,409.92	\$ 43,363.97	\$ 43,363.97	\$ 43,363.97	\$ 563,731.58
007	See Desc.	Tier 1 Perf. Storage Exp. (4.2.1.1.1.3, 4.2.1.1.1.5, 4.2.4.3.7)	Per Month	\$ 2,550.03	6	\$ 183,602.16	\$ 183,602.16	\$ 183,602.16	\$ 183,602.16	\$ 73,440.86	\$ 73,440.86	\$ 73,440.86	\$ 954,731.23
008	See Desc.	Tier 1 Volume Storage Exp. (4.2.1.1.1.3, 4.2.1.1.1.5, 4.2.4.3.7)	Per Month	\$ 1,034.30	10	\$ 124,116.00	\$ 124,116.00	\$ 124,116.00	\$ 124,116.00	\$ 49,646.40	\$ 49,646.40	\$ 49,646.40	\$ 645,403.20
009	See Desc.	Tier 2 Solution (4.2.1.1.1.1, 4.2.1.1.1.6, 4.2.4.3.5)	Per Month	\$ 15,779.67	2	\$ 378,712.08	\$ 378,712.08	\$ 378,712.08	\$ 378,712.08	\$ 151,484.83	\$ 151,484.83	\$ 151,484.83	\$ 1,969,302.82
010	See Desc.	Tier 2 Additional Node (4.2.1.1.1.2, 4.2.1.1.1.6, 4.2.4.3.6)	Per Month	\$ 1,129.27	4	\$ 54,204.96	\$ 54,204.96	\$ 54,204.96	\$ 54,204.96	\$ 21,681.98	\$ 21,681.98	\$ 21,681.98	\$ 281,865.79
011	See Desc.	Tier 2 Perf. Storage Exp. (4.2.1.1.1.3, 4.2.1.1.1.6, 4.2.4.3.7)	Per Month	\$ 2,550.03	4	\$ 122,401.44	\$ 122,401.44	\$ 122,401.44	\$ 122,401.44	\$ 48,960.58	\$ 48,960.58	\$ 48,960.58	\$ 636,487.49
012	See Desc.	Tier 2 Volume Storage Exp. (4.2.1.1.1.3, 4.2.1.1.1.6, 4.2.4.3.7)	Per Month	\$ 1,034.30	6	\$ 74,469.60	\$ 74,469.60	\$ 74,469,60	\$ 74,469.60	\$ 29,787.84	\$ 29,787.84	\$ 29,787.84	\$ 387,241.92

Total On-Premise Infrastructure Evaluated Price

\$ 13,742,215.97

Enter	prise	Data	Bac	kup
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Line Item Number	Contract Item	Description	Unit of Measure	Unit Price	Estimated Quantity	Total
013	4.2.4.4.1.1	Enterprise Databackup Initial Implementation	LumpSum	\$ 101,400.00	1	\$ 101,400.00
014	4.2.4.4.1.2	Enterprise Data Backup Base (150 TB)	Per Month	\$ 18,521.57	2	\$ 37,043.14
015	4.2.4.4.1.3	Enterprise Data Backup Expansion (50 TB)	Per Month	\$ 3,609.03	10	\$ 36,090.30

Total Enterprise Data Backup Cost

\$ 174,533.44

Infrastructure Operational Monitoring

Line Item Number	Contract Item	Description	Unit of Measure	Ü	nit Price	Estimated Quantity	Total
016	4.2.4.5.1.1	Infrastructure Operational Monitoring Implementation	LumpSum	\$	5,000.00	1	\$ 5,000.00
017	4.2.4.5.1.2	Infrastructure Monitoring Base (250 Components)	Per Month	\$	312.50	1	\$ 312:50
018	4.2.4.5.1.3	Infrastructure Monitoring Expasion (50 Components)	Per Month	\$	250.00	20	\$ 5,000.00

Total Infrastructure Operational Monitoring Cost

\$ 5,312.50

On-Demand Professional Services

Line Item Number	Contract Item	Description	Unit of Measure	Unit Price	Estimated Quantity	Total
019	4.2.1.4.3.1	Application Migration Specialist - Remote	Per Hour	\$ 217.00	500	\$ 108,500.00
020	4.2.1.4.3.1	Application Migration Specialist - On-site	Per Hour	\$ 287.00	500	\$ 143,500.00
021	4.2.1.4.3.2	Data Backup & Disaster Recovery Specialist - Remote	Per Hour	\$ 217.00	500	\$ 108,500.00
022	4.2.1.4.3.2	Data Backup & Disaster Recovery Specialist - On-site	Per Hour	\$ 287.00	500	\$ 143,500.00
023	4.2.1.4.3.3	Data Migration Specialist - Remote	Per Hour	\$ 217.00	2000	\$ 434,000.00
024	4.2.1.4.3.3	Data Migration Specialist - On-site	Per Hour	\$ 287.00	2000	\$ 574,000.00
025	4.2.1.4.3.4	Database Specialist - Remote	Per Hour	\$ 150.00	500	\$ 75,000.00
026	4.2.1.4.3.4	Database Specialist - On-site	Per Hour	\$ 220.00	500	\$ 110,000.00
027	4.2.1.4.3.5	Project Manager - Remote	Per Hour	\$ 200.00	500	\$ 100,000.00
028	4.2.1.4.3.5	Project Manager - On-site	Per Hour	\$ 270.00	500	\$ 135,000.00
029	4.2.1.4.3.6	Storage Specialist - Remote	Per Hour	\$ 217.00	500	\$ 108,500.00
030	4.2.1.4.3.6	Storage Specialist - On-site	Per Hour	\$ 287.00	500	\$ 143,500.00
031		System Administrator Specialist - Remote	Per Hour	\$ 175.00	500	\$ 87,500.00
032	4.2.1.4.3.7	System Administrator Specialist - On-site	Per Hour	\$ 245.00	500	\$ 122,500.00
033		Technical Writer - Remote	Per Hour	\$ 125.00	500	\$ 62,500.00
034	4.2.1.4.3.8	Technical Writer - On-site	Per Hour	\$ 195.00	500	\$ 97,500.00

Total On-Demand Professional Services Cost

\$ 2,554,000.00

Total On-Premise Infrastructure Evaluated Cost (Cell N18)	\$	13,742,215.97
Total Enterprise Data Backup Cost (Cell G25)	\$	174,533.44
Total Infrastracture Operational Monitoring Cost (Cell G33)	\$	5,312.50
Total Estimated On-Demand Professional Services Cost (Cell G54)	\$	2,554,000.00
Total Cost	\$	16,476,061.91

Vendor must input a percentage of discount in the blue columns identified above Per Note 2 (4.2.4.7.8)

Vendor must input a unit cost in the yellow columns identified above.

^{***}Quantities Listed are estimates only. Actual Quantities may vary.

^{****} Any product or service not on the Agency provided Cost Sheet will not be allowed. The state cannot accept alternate pricing pages, failure to use Exhibit A Cost Sheet could lead to disqualification of vendors bid.