



SERVICE AGREEMENT NO. 2502

Data Center Remediation

THIS **Data Center Remediation Agreement** ("Agreement") is entered into by and between the City of Corpus Christi, a Texas home-rule municipal corporation ("City") and Area Electronics Systems, Inc. dba DataON Storage ("Contractor"), effective upon execution by the City Manager or the City Manager's designee ("City Manager").

WHEREAS, Contractor has bid to provide Data Center Remediation in response to Request for Bid/Proposal No. SS-2502 ("RFB/RFP"), which RFB/RFP includes the required scope of work and all specifications and which RFB/RFP and the Contractor's bid or proposal response, as applicable, are incorporated by reference in this Agreement as Exhibits 1 and 2, respectively, as if each were fully set out here in its entirety.

NOW, THEREFORE, City and Contractor agree as follows:

- 1. Scope.** Contractor will provide Data Center Remediation ("Services") in accordance with the attached Scope of Work, as shown in Attachment A, the content of which is incorporated by reference into this Agreement as if fully set out here in its entirety, and in accordance with Exhibit 2.
- 2. Term.** This Agreement is for four months, with performance commencing upon the date of issuance of a notice to proceed from the Contract Administrator or the Contracts and Procurement Department. The parties may mutually extend the term of this Agreement for up to zero additional zero-year periods ("Option Period(s)"), provided, the parties do so by written amendment prior to the expiration of the original term or the then-current Option Period. The City's extension authorization must be executed by the City Manager or designee.
- 3. Compensation and Payment.** This Agreement is for an amount not to exceed \$782,734, subject to approved extensions and changes. Payment will be made for Services completed and accepted by the City within 30 days of acceptance, subject to receipt of an acceptable invoice. Contractor shall invoice no more frequently than once per month. All pricing must be in accordance with the attached Bid/Pricing Schedule, as shown in Attachment B, the content of which is incorporated by reference into this Agreement as if fully set out here in its entirety. Any amount not expended during the initial term or any option period may, at the City's discretion, be allocated for use in the next option period. Invoices will be mailed to the following address with a copy provided to the Contract Administrator:

City of Corpus Christi
Attn: Accounts Payable
P.O. Box 9277
Corpus Christi, Texas 78469-9277

4. **Contract Administrator.** The Contract Administrator designated by the City is responsible for approval of all phases of performance and operations under this Agreement, including deductions for non-performance and authorizations for payment. The City's Contract Administrator for this Agreement is as follows:

Dan Shelton
Information Technology Department
Phone: 361-826-3705
Email: DanS@cctexas.com

5. **Insurance; Bonds.**

(A) Before performance can begin under this Agreement, the Contractor must deliver a certificate of insurance ("COI"), as proof of the required insurance coverages, to the City's Risk Manager and the Contract Administrator. Additionally, the COI must state that the City will be given at least 30 days' advance written notice of cancellation, material change in coverage, or intent not to renew any of the policies. The City must be named as an additional insured. The City Attorney must be given copies of all insurance policies within 10 days of the City Manager's written request. Insurance requirements are as stated in Attachment C, the content of which is incorporated by reference into this Agreement as if fully set out here in its entirety.

(B) In the event that a payment bond, a performance bond, or both, are required of the Contractor to be provided to the City under this Agreement before performance can commence, the terms, conditions, and amounts required in the bonds and appropriate surety information are as included in the RFB/RFP or as may be added to Attachment C, and such content is incorporated here in this Agreement by reference as if each bond's terms, conditions, and amounts were fully set out here in its entirety.

6. **Purchase Release Order.** For multiple-release purchases of Services to be provided by the Contractor over a period of time, the City will exercise its right to specify time, place and quantity of Services to be delivered in the following manner: any City department or division may send to Contractor a purchase release order signed by an authorized agent of the department or division. The purchase release order must refer to this Agreement, and Services will not be rendered until the Contractor receives the signed purchase release order.

7. **Inspection and Acceptance.** City may inspect all Services and products supplied before acceptance. Any Services or products that are provided but not

accepted by the City must be corrected or re-worked immediately at no charge to the City. If immediate correction or re-working at no charge cannot be made by the Contractor, a replacement service may be procured by the City on the open market and any costs incurred, including additional costs over the item's bid/proposal price, must be paid by the Contractor within 30 days of receipt of City's invoice.

8. Warranty.

(A) The Contractor warrants that all products supplied under this Agreement are new, quality items that are free from defects, fit for their intended purpose, and of good material and workmanship. The Contractor warrants that it has clear title to the products and that the products are free of liens or encumbrances.

(B) In addition, the products purchased under this Agreement shall be warranted by the Contractor or, if indicated in Attachment D by the manufacturer, for the period stated in Attachment D. Attachment D is attached to this Agreement and is incorporated by reference into this Agreement as if fully set out here in its entirety.

(C) Contractor warrants that all Services will be performed in accordance with the standard of care used by similarly situated contractors performing similar services.

9. Quality/Quantity Adjustments. Any Service quantities indicated on the Bid/Pricing Schedule are estimates only and do not obligate the City to order or accept more than the City's actual requirements nor do the estimates restrict the City from ordering less than its actual needs during the term of the Agreement and including any Option Period. Substitutions and deviations from the City's product requirements or specifications are prohibited without the prior written approval of the Contract Administrator.

10. Non-Appropriation. The continuation of this Agreement after the close of any fiscal year of the City, which fiscal year ends on September 30th annually, is subject to appropriations and budget approval specifically covering this Agreement as an expenditure in said budget, and it is within the sole discretion of the City's City Council to determine whether or not to fund this Agreement. The City does not represent that this budget item will be adopted, as said determination is within the City Council's sole discretion when adopting each budget.

11. Independent Contractor. Contractor will perform the work required by this Agreement as an independent contractor and will furnish such Services in its own manner and method, and under no circumstances or conditions will any agent, servant or employee of the Contractor be considered an employee of the City.

12. **Subcontractors.** Contractor may use subcontractors in connection with the work performed under this Agreement. When using subcontractors, however, the Contractor must obtain prior written approval from the Contract Administrator unless the subcontractors were named in the bid or proposal or in an Attachment to this Agreement, as applicable. In using subcontractors, the Contractor is responsible for all their acts and omissions to the same extent as if the subcontractor and its employees were employees of the Contractor. All requirements set forth as part of this Agreement, including the necessity of providing a COI in advance to the City, are applicable to all subcontractors and their employees to the same extent as if the Contractor and its employees had performed the work. The City may, at the City's sole discretion, choose not to accept Services performed by a subcontractor that was not approved in accordance with this paragraph.
13. **Amendments.** This Agreement may be amended or modified only in writing executed by authorized representatives of both parties.
14. **Waiver.** No waiver by either party of any breach of any term or condition of this Agreement waives any subsequent breach of the same.
15. **Taxes.** The Contractor covenants to pay payroll taxes, Medicare taxes, FICA taxes, unemployment taxes and all other applicable taxes. Upon request, the City Manager shall be provided proof of payment of these taxes within 15 days of such request.
16. **Notice.** Any notice required under this Agreement must be given by fax, hand delivery, or certified mail, postage prepaid, and is deemed received on the day faxed or hand-delivered or on the third day after postmark if sent by certified mail. Notice must be sent as follows:

IF TO CITY:

City of Corpus Christi
Attn: Dan Shelton
IT Network Supervisor
1201 Leopard St., Corpus Christi, TX 78401
Phone: 361-826-3705
Fax: N/A

IF TO CONTRACTOR:

Area Electronics Systems, Inc. dba DataON Storage
Attn: Howard Lo
Title: Vice President, Sales and Marketing
1247 N. Lakeview Ave. Suite C Anaheim, CA 92807
Phone: 714-993-0300
Fax: 714-386-6125

17. CONTRACTOR SHALL FULLY INDEMNIFY, HOLD HARMLESS AND DEFEND THE CITY OF CORPUS CHRISTI AND ITS OFFICERS, EMPLOYEES AND AGENTS ("INDEMNITEES") FROM AND AGAINST ANY AND ALL LIABILITY, LOSS, CLAIMS, DEMANDS, SUITS, AND CAUSES OF ACTION OF WHATEVER NATURE, CHARACTER, OR DESCRIPTION ON ACCOUNT OF PERSONAL INJURIES, PROPERTY LOSS, OR DAMAGE, OR ANY OTHER KIND OF INJURY, LOSS, OR DAMAGE, INCLUDING ALL EXPENSES OF LITIGATION, COURT COSTS, ATTORNEYS' FEES AND EXPERT WITNESS FEES, WHICH ARISE OR ARE CLAIMED TO ARISE OUT OF OR IN CONNECTION WITH A BREACH OF THIS AGREEMENT OR THE PERFORMANCE OF THIS AGREEMENT BY THE CONTRACTOR OR RESULTS FROM THE NEGLIGENT ACT, OMISSION, MISCONDUCT, OR FAULT OF THE CONTRACTOR OR ITS EMPLOYEES OR AGENTS. CONTRACTOR MUST, AT ITS OWN EXPENSE, INVESTIGATE ALL CLAIMS AND DEMANDS, ATTEND TO THEIR SETTLEMENT OR OTHER DISPOSITION, DEFEND ALL ACTIONS BASED THEREON WITH COUNSEL SATISFACTORY TO THE CITY ATTORNEY, AND PAY ALL CHARGES OF ATTORNEYS AND ALL OTHER COSTS AND EXPENSES OF ANY KIND ARISING OR RESULTING FROM ANY SAID LIABILITY, DAMAGE, LOSS, CLAIMS, DEMANDS, SUITS, OR ACTIONS. THE INDEMNIFICATION OBLIGATIONS OF CONTRACTOR UNDER THIS SECTION SHALL SURVIVE THE EXPIRATION OR EARLIER TERMINATION OF THIS AGREEMENT.

18. Termination.

(A) The City Manager may terminate this Agreement for Contractor's failure to comply with any of the terms of this Agreement. The Contract Administrator must give the Contractor written notice of the breach and set out a reasonable opportunity to cure. If the Contractor has not cured within the cure period, the City Manager may terminate this Agreement immediately thereafter.

(B) Alternatively, the City Manager may terminate this Agreement for convenience upon 30 days advance written notice to the Contractor. The City Manager may also terminate this Agreement upon 24 hours written notice to the Contractor for failure to pay or provide proof of payment of taxes as set out in this Agreement.

19. Owner's Manual and Preventative Maintenance. Contractor agrees to provide a copy of the owner's manual and/or preventative maintenance guidelines or instructions if available for any equipment purchased by the City pursuant to this Agreement. Contractor must provide such documentation upon delivery of such equipment and prior to receipt of the final payment by the City.

20. **Assignment.** No assignment of this Agreement by the Contractor, or of any right or interest contained herein, is effective unless the City Manager first gives written consent to such assignment. The performance of this Agreement by the Contractor is of the essence of this Agreement, and the City Manager's right to withhold consent to such assignment is within the sole discretion of the City Manager on any ground whatsoever.
21. **Severability.** Each provision of this Agreement is considered to be severable and, if, for any reason, any provision or part of this Agreement is determined to be invalid and contrary to applicable law, such invalidity shall not impair the operation of nor affect those portions of this Agreement that are valid, but this Agreement shall be construed and enforced in all respects as if the invalid or unenforceable provision or part had been omitted.
22. **Order of Precedence.** In the event of any conflicts or inconsistencies between this Agreement, its attachments, and exhibits, such conflicts and inconsistencies will be resolved by reference to the documents in the following order of priority:
- A. this Agreement (excluding attachments and exhibits);
 - B. its attachments;
 - C. the bid solicitation document including any addenda (Exhibit 1); then,
 - D. the Contractor's bid response (Exhibit 2).
23. **Certificate of Interested Parties.** Contractor agrees to comply with Texas Government Code Section 2252.908, as it may be amended, and to complete Form 1295 "Certificate of Interested Parties" as part of this Agreement if required by said statute.
24. **Governing Law.** Contractor agrees to comply with all federal, Texas, and City laws in the performance of this Agreement. The applicable law for any legal disputes arising out of this Agreement is the law of the State of Texas, and such form and venue for such disputes is the appropriate district, county, or justice court in and for Nueces County, Texas.
25. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties concerning the subject matter of this Agreement and supersedes all prior negotiations, arrangements, agreements and understandings, either oral or written, between the parties.

CONTRACTOR

Signature: William Hwang

Printed Name: William Hwang

Title: PRESIDENT

Date: 8-27-2019

CITY OF CORPUS CHRISTI

Kim Baker
Director of Contracts and Procurement

Date: _____

Attached and Incorporated by Reference:

- Attachment A: Scope of Work
- Attachment B: Bid/Pricing Schedule
- Attachment C: Insurance and Bond Requirements
- Attachment D: Warranty Requirements

Incorporated by Reference Only:

- Exhibit 1: RFB/RFP No. SS-2502
- Exhibit 2: Contractor's Bid/Proposal Response

ATTACHMENT A: SCOPE OF WORK

Project Name: Data Center Remediation

Project Address:

1201 Leopard Street, Corpus Christi Texas 78401

I. Scope of Work Summary

- A. The Contractor will provide support for both the primary and the co-location datacenter. The "Data Center Remediation Project" will be deployed with the proposed Microsoft Hyper-V virtualization platform, the Microsoft Software-Defined storage Azure Stack Hyper-Converged Infrastructure platform and the Veeam backup and disaster recovery platform.
- B. The Contractor will support the design, setup, configuration, testing, integration and deployment of the DataON Hardware based on the estimated time using proposed Microsoft Hyper-V virtualization platform, the Microsoft Software-Defined storage Azure Stack Hyper-Converged Infrastructure platform and the Veeam backup and disaster recovery platform to support both primary and Co-location datacenter.
- C. The City will be responsible for managing the primary datacenter and co-location upon the completion of the project including backup and DR processes.

II. Scope of Work:

The Contractor shall provide Service(s) and Deliverable(s) on a Fixed Price basis as outlined in the following Scope of Work (SOW):

- A. Work shall be performed at the Corpus Christi Police Department between the hours of 8:00 a.m. to 5:00 p.m. (Central Standard Time) unless access at other hours of the day or night are mutually agreed between Contact Administrator and Contractor.
- B. Contractor will be onsite for project planning, infrastructure setup, configuration, and other tasks as required for onsite coordination and execution. A remote infrastructure connection will be established and the DataON team will perform majority of the infrastructure integration and migration work with remote access. Total estimated time ~160 hours. The scope of infrastructure implementation includes:
 - 1. Overview of the Stack
 - 2. Converged Networking / vSwitches / VLANS / vAdapters / Teams
 - 3. Guest Clustering --> Exchange / SQL / etc. / Shared VHDx

4. Virtual Machine Management - Creating a VM, Deleting a VM, File System, Moving a VM, Migrating a VM, Migrating VM Storage, Adding a VHD, Extending a VHD
5. Virtual Machine Management - Dynamic Memory, VHD Format, Online VHDX Resize, Virtual FCA, Virtual RSS, Virtual Live Cloning, Linux Support in Hyper-V, Linux Support in VMM, Virtual Machine Management - Generation 2 VM Support in Hyper-V, Generation 2 Support in VMM, Enhanced Session Mode, Automatic Virtual Machine Activation, Virtual Machine Mobility - Live Migration
6. Installation, and Base Configuration, and SQL 2019 SP 1 Install
7. Virtual Machine Mobility - Live Migration, Live Migration with Compression, Live Migration over SMB, Storage Live Migration, Shared Nothing Live Migration, Live Migration Upgrades
8. Networking, SET Switches, Virtual Adapters, Port Profiles, IP Pools for Storage Spaces Direct
9. Storage Spaces Direct - Key Benefits, Deployment Options, S2D Components, S2D Hardware Requirements, Fault Tolerance and Efficiency, S2D Cache, Caching Architecture
10. Deploying S2D - Install Core Windows Roles, Configure Data Center Bridging, Configuring the SET Switch with PowerShell, Configuring the SET Switch with SCVMM, Enable-ClusterS2D Options, Validation, Building Virtual Disks, Expanding Virtual Disks, Factor Reset of Storage Spaces Direct
11. Stress Testing Storage Spaces Direct with VMFleet
12. Building a Test lab with Big Demo PowerShell Script
13. Contractor shall supply and review Monitoring Hyper-V with Windows Admin Center
14. Migrating Virtual Machines from VMWare to Hyper-V
15. Best Practice for Patching S2D and Hyper-V
16. Educate VMM SQL Install; Configure SQL Server Service Accounts, Configure SQL Firewall Port Exceptions, Install Default Instance of SQL 2019 SP1, Download and Install SQL Server Management Studio, Configure SQL Server Memory Limits
17. Educate VMM Base Configuration; Create Run As Accounts, Configure Network Settings, Create Host Groups, Add Hyper-V Hosts
18. S2D Networking; Review S2D Node Config, Create MGMT, Cluster, Live Migration, Storage, External Networks (IP Pools and Logical Networks), Create Logical Switches, Deploy Networking Profiles to the Nodes

19. Failover Clustering; Build Failover Cluster Manually or with VMM Enable S2D
 20. Configure Storage Integration; Review Storage Providers, Arrays, Classifications, Create Virtual Disks and CSV's
 21. Configure Host Patch Management;
 22. Review Operational Management; Host Restarts, Health Checking, Get-StorageJob, Get-VirtualDisk, Maintenance Mode
 23. Documenting Storage Spaces Direct
- C.** Contractor shall Migrate Servers to Azure Stack HCI -- after business hours (Estimated time ~82 hours to convert to Microsoft Hyper-V and migrate storage to Azure Stack HCI with assistance from customer.)
 - D.** Contractor shall Migrate Servers to Azure Stack HCI -- during business hours (Estimated time ~262 hours to convert to Microsoft Hyper-V and migrate storage to Azure Stack HCI with assistance from customer.)
 - E.** Contractor shall Plan for Business Continuity / Disaster Recovery (Estimated time ~90 hours to work with Corpus Christi to determine BCDR plan, parameters of site down, external network, external entry into every application, etc.)
 - F.** Contractor shall Implement Business Continuity / Disaster Recovery Plan (Estimated time ~120 hours to setup DR subnet, plan for name resolution, determine Veeam BCDR replication technology, establish connectivity to DR site, test connectivity reliability, etc.)
 - G.** Contractor shall Recreate Firewall / DMZ / VPN structure in BCDR Site (Estimated time ~30 hours. Discovery may reveal that firewall may be required at DR site.)

Contractor will invoice:

1. When shipment of hardware to Client for hardware ordered has occurred.
2. Services provided will be billed upon completion of tasks to be performed as described in the section titled Deliverable Materials.

Point of Contact: Dan Shelton @ 361.826.3705

ATTACHMENT B: BID/PRICING SCHEDULE

Qty	System Description	Unit Price	Extended
	HCI-224 All-NVMe Platform for Mission-Critical Workloads		
4	DataON™ S2D-5224P9 HCI Ready Node		
	Form factor: 2U Rack, 16.93" (W) x 27.95" (D) x 3.44" (H)		
	Supports Dual Intel® Xeon Scalable™ Processor Series & (24) DDR4 DIMM		
	(24) NVMe U.2 hot-swappable 2.5" Drive Bay		
	PCIe Slot: (7) PCIe 3.0 x8		
	Ethernet Port: (2) built-in 10GbE RJ45 port; (1) Management Port		
	I/O Controller: Intel® PCIe NVMe Switches Included		
	* TPM 2.0 Kit included		
	* 1300W (1+1) Dual hot-swappable redundant power supplies		
	* Intel® Remote Management Module 4 Lite		
	* Intel 2U Premium Rail Kit & Cable Management Arm		
	Node Configuration		
8	Intel® Xeon® Scalable Gen.2 Gold 6248 2.5 GHz, 20-Core, 28MB Cache; Two CPU per Node		
48	Samsung® 64GB DDR4 2933MHz ECC-Register LRDIMM; 768GB per Node		
8	Mellanox® ConnectX-4 EN Dual Port QSFP28 40/56 GbE RDMA Card; Two Per Node		
8	Mellanox® LinkX™ Passive Copper cable, ETH 40GbE, 40Gb/s, QSFP, 3M		
8	Intel® S4510 480GB SATA M.2 2280 Boot SSD - Mirrored, Two Per Node		
	DataON® MUST™ (Management Utility Software Tools) Included		
	(Note: Microsoft Windows Server Datacenter License Not Included)		
	All-Flash Storage Configuration - Flat-NVMe SSDs		
32	Intel® DC P4510™ NVMe 4TB 2.5" SSD; Storage Tier		
	Part# SSDPE2KX040T801; (8) Per Node; (1) Per Node Reserved for Fast-Rebuild Three-Way Mirror; 30%		
	Efficiency; Total Usable Capacity ~33.6TB (After Format)		
	64 Slots (16 Per Node) Available For Expansion		

Qty	System Description	Unit Price	Extended
	SMB3 RDMA/RoCEv2 Network Fabric		
2	Mellanox® Spectrum™ based 40GbE, 1U Open Ethernet Switch with MLNX-OS, 32 QSFP28 ports, 2 Power Supplies (AC), standard depth, x86 CPU, Part # MSN2700-BS2F; P2C Airflow, Rail Kit, RoHS6		
2	Mellanox® 5 Year Silver Support & Warranty Included Part # SUP-SN2000-5S		
2	Mellanox® Passive Copper cable, 40Gb/s, QSFP+, 1M Part # MC2210130-001		
		Subtotal	\$192,847.50
	HCI-212 Hybrid Platform for General-Purpose Workloads		
5	DataON™ S2D-5212i HCI Ready Node		
	Form factor: 2U Rack, 16.93" (W) x 27.95" (D) x 3.44" (H)		
	Supports Dual Intel® Xeon Scalable™ Processor Series & (24) DDR4 DIMM		
	(2) NVMe U.2 & (10) SAS/SATA hot-swappable 3.5" Drive Bay		
	PCIe Slot: (7) PCIe 3.0 x8		
	Ethernet Port: (2) built-in 10GbE RJ45 port; (1) Management Port		
	I/O Controller: Intel® SAS/SATA Storage Expander Included		
	* TPM 2.0 Kit included		
	* 1300W (1+1) Dual hot-swappable redundant power supplies		
	* Intel® Remote Management Module 4 Lite		
	* Intel 2U Premium Rail Kit & Cable Management Arm		
	Node Configuration		
10	Intel® Xeon® Scalable Gen.2 Gold 5218 2.3 GHz, 16-Core, 22MB Cache; Two CPU per Node		
50	Samsung® 64GB DDR4 2933MHz ECC-Register LRDIMM; 640GB per Node		
10	Mellanox® ConnectX-4 EN Dual Port QSFP28 40/56 GbE RDMA Card; Two Per Node		
10	Mellanox® LinkX™ Passive Copper cable, ETH 40GbE, 40Gb/s, QSFP, 3M		
10	Intel® S4510 480GB SATA M.2 2280 Boot SSD - Mirrored, Two Per Node		
	DataON® MUST™ (Management Utility Software Tools) Included		
	(Note: Microsoft Windows Server Datacenter License Not Included)		

Qty	System Description	Unit Price	Extended
	Hybrid Storage Configuration - NVMe + SSD + HDD		
10	Intel® DC P4610™ NVMe U.2 3.2TB 2.5" 3D NAND TLC SSD, Read/Write Cache Tier		
	Part# SSDPE2KE032T801; (2) Per Node		
10	Intel® D3-S4510™ 6G SATA 3.8TB 2.5" 3D NAND TLC SSD; Performance Tier Part#		
	SSDSC2KB038T801; (2) Per Node		
40	HGST Ultrastar® He12 12TB 3.5" 7200RPM 12G SAS Enterprise Nearline HDD; Capacity Tier		
	Part# 0F29560; (8) Per Node, (1) Per Node for up to 4-Nodes Reserved for Fast-Rebuild		
	Mirror-Accelerated Parity; 48% Efficiency; Total Usable Capacity ~226.7TB		
	Fully-Populated; No Slots Available For Expansion	Subtotal	\$144,547.50
	HCI-212 Hybrid Platform for BCDR/Failover Workloads		
4	DataON™ S2D-5212i HCI Ready Node		
	Form factor: 2U Rack, 16.93" (W) x 27.95" (D) x 3.44" (H)		
	Supports Dual Intel® Xeon Scalable™ Processor Series & (24) DDR4 DIMM		
	(2) NVMe U.2 & (10) SAS/SATA hot-swappable 3.5" Drive Bay		
	PCIe Slot: (7) PCIe 3.0 x8		
	Ethernet Port: (2) built-in 10GbE RJ45 port; (1) Management Port		
	I/O Controller: Intel® SAS/SATA Storage Expander Included		
	* TPM 2.0 Kit included		
	* 1300W (1+1) Dual hot-swappable redundant power supplies		
	* Intel® Remote Management Module 4 Lite		
	* Intel 2U Premium Rail Kit & Cable Management Arm		
	Node Configuration		
8	Intel® Xeon® Scalable Gen.2 Gold 5218 2.3 GHz, 16-Core, 22MB Cache; Two CPU per Node		
48	Samsung® 32GB DDR4 2933MHz ECC-Register RDIMM; 384GB per Node		
8	Mellanox® ConnectX-4 EN Dual Port QSFP28 40/56 GbE RDMA Card; Two Per Node		
8	Mellanox® LinkX™ Passive Copper cable, ETH 40GbE, 40Gb/s, QSFP, 3M		
8	Intel® S4510 480GB SATA M.2 2280 Boot SSD - Mirrored, Two Per Node		
	DataON® MUST™ (Management Utility Software Tools) Included		
	(Note: Microsoft Windows Server Datacenter License Not Included)		

Qty	System Description	Unit Price	Extended
	Hybrid Storage Configuration - NVMe + HDD		
8	Intel® DC P4610™ NVMe U.2 3.2TB 2.5" 3D NAND TLC SSD, Read/Write Cache Tier		
	Part# SSDPE2KE032T801; (2) Per Node		
40	HGST Ultrastar® He12 12TB 3.5" 7200RPM 12G SAS Enterprise Nearline HDD; Capacity Tier		
	Part# 0F29560; (10) Per Node, (1) Per Node Reserved for Fast-Rebuild Mirror-Accelerated Parity; 48%		
	Efficiency; Total Usable Capacity ~205.7TB		
	Fully-Populated; No Slots Available For Expansion		
	SMB3 RDMA/RoCEv2 Network Fabric		
2	Mellanox® Spectrum™ based 40GbE, 1U Open Ethernet Switch with MLNX-OS,		
	16 QSFP28 ports, 2 Power Supplies (AC), short depth, Rangeley CPU,		
	Part # MSN2100-BB2F; P2C Airflow		
2	Mellanox® 5 Year Silver Support & Warranty Included Part # SUP-SN2100-5S		
1	Rack installation kit for SN2100 series short depth 1U switches Part # MTEF-KIT-D		
2	Mellanox® Passive Copper cable, 40Gb/s, QSFP+, 1M	Subtotal	\$131,092.50
	Part # MC2210130-001		
	DCS-668 Backup Appliance for On-Premise/Colo Backups		
2	DataON™ DCS-5208i Backup Appliance		
	Form factor: 2U Rack, 16.93" (W) x 27.95" (D) x 3.44" (H)		
	Supports Dual Intel® Xeon Scalable™ Processor Series & (24) DDR4 DIMM		
	(8) NVMe U.2 hot-swappable 2.5" Drive Bay		
	PCIe Slot: (7) PCIe 3.0 x8		
	Ethernet Port: (2) built-in 10GbE RJ45 port		
	I/O Controller: Intel® PCIe NVMe Switches Included		
	* TPM 2.0 Kit included		
	* 1300W (1+1) Dual hot-swappable redundant power supplies		
	* Intel® Remote Management Module 4 Lite		
	* Intel 2U Premium Rail Kit & Cable Management Arm		

Qty	System Description	Unit Price	Extended
	Node Configuration		
4	Intel® Xeon® Scalable Gen.2 Silver 4208 2.1 GHz, 8-Core, 11MB Cache; Two CPU per Server		
8	Samsung® 32GB DDR4 2933MHz ECC-Register RDIMM; 128GB per Server		
2	Mellanox® ConnectX-4 Lx EN Dual Port SFP+ 25GbE RDMA Card; One Per Server		
2	LSI® MegaRAID 9380-8e PCI-e 3.0 External 12G SAS Raid Controller		
2	LSICVM02 CacheVault Kit For MegaRAID		
4	2M 8644-to-8644 Mini-SAS HD Cable; 2 Per Server		
4	Intel® S4510 480GB SATA M.2 2280 Boot SSD - Mirrored, Two Per Node		
2	DataON DNS-4760 4U 60 x 3.5" 12G SAS JBOD Enclosure		
	Platform: 4U 60-bay, 3.5" Rack-mount - 17.61"(W) x 6.89"(H) x 28.03"(D)		
	(60) 3.5" SAS/SATA drive tray, Hot-swappable by Drop-down Installation Dual Hot-pluggable 12G SAS		
	I/O Controller Module		
	SAS Connector: (6) 12Gb/s Mini-SAS HD 8644 Connector Per Module		
	Dual 1600W (1+1) 200-240V Redundant Power Supply, C13-C14 Power Cords Rackmount Slide Shelf Rail		
	Kit		
	Storage Configuration - Capacity Tier		
84	HGST Ultrastar® He12 12TB 3.5" 7200RPM 12G SAS Enterprise Nearline HDD Part# OF29560;		
	(42) Per JBOD, (41) Engaged 1 Reserved for Hot Spare RAID6+0; Usable Capacity ~403.8TB Per Server		
	36 Slots (18 Per JBOD) Available For Expansion		
		Subtotal	\$84,866.50
		Hardware Total	\$553,354.00
	DataON Deployment Services		
Hrs Est.	Deployment Service Summary		
40	Phase 1 - Just in Time Training	\$252.00	\$10,080.00
80	Phase 2 - Networking & Production Build of S2D, Failover Clustering	\$252.00	\$20,160.00
40	Phase 3 - Post Project Support	\$252.00	\$10,080.00
		Subtotal	\$40,320.00

Qty	System Description	Unit Price	Extended
	DataON Professional Services		
Hrs Est.	Migration/Implementation Services		
82	Migrate Servers to Azure Stack HCI -- after business hours	\$265.00	\$21,730.00
262	Migrate Servers to Azure Stack HCI -- during business hours	\$215.00	\$56,330.00
90	Plan DR	\$215.00	\$19,350.00
120	Implement DR plan	\$215.00	\$25,800.00
30	Recreate Firewall/DMZ/VPN structure in DR site	\$215.00	\$6,450.00
		Subtotal	\$129,660.00
	DataON Colocation for Business Continuity		
	On-Premise Backup/DR for Gold, Silver & Bronze VMs		
33	Veeam Availability Suite -- 1 year subscription for 330 VM's for DR	\$1,800.00	\$59,400.00
	AVAIL STE ENT+ 1YR SUB UPFRONT BILL 24/7 -- Perpetual license available		
	but more expensive for 3 year agreement. Deal Reg in progress	Subtotal	\$59,400.00
		Grand Total	\$782,734.00

ATTACHMENT C: INSURANCE AND BOND REQUIREMENTS

I. CONTRACTOR'S LIABILITY INSURANCE

- A. Contractor must not commence work under this contract until all insurance required has been obtained and such insurance has been approved by the City. Contractor must not allow any subcontractor, to commence work until all similar insurance required of any subcontractor has been obtained.
- B. Contractor must furnish to the City's Risk Manager and Contract Administer one (1) copy of Certificates of Insurance with applicable policy endorsements showing the following minimum coverage by an insurance company(s) acceptable to the City's Risk Manager. The City must be listed as an additional insured on the General liability and Auto Liability policies **by endorsement**, and a waiver of subrogation **endorsement** is required on all applicable policies. **Endorsements** must be provided with Certificate of Insurance. Project name and/or number must be listed in Description Box of Certificate of Insurance.

TYPE OF INSURANCE	MINIMUM INSURANCE COVERAGE
30-day advance written notice of cancellation, non-renewal, material change or termination required on all certificates and policies.	Bodily Injury and Property Damage Per occurrence - aggregate
ERRORS & OMISSIONS	\$1,000,000 Per Occurrence \$1,000,000 Aggregate
CYBER LIABILITY	\$1,000,000 Per Occurrence \$1,000,000 Aggregate
COMMERCIAL GENERAL LIABILITY including: 1. Commercial Broad Form 2. Premises – Operations 3. Products/ Completed Operations 4. Contractual Liability 5. Independent Contractors 6. Personal Injury- Advertising Injury	\$1,000,000 Per Occurrence \$1,000,000 Aggregate
WORKERS'S COMPENSATION (All States Endorsement if Company is not domiciled in Texas) Employers Liability	Statutory and complies with Part II of this Exhibit. \$500,000/\$500,000/\$500,000

- C. In the event of accidents of any kind related to this contract, Contractor must furnish the Risk Manager with copies of all reports of any accidents within 10 days of the accident.

II. ADDITIONAL REQUIREMENTS

- A. Applicable for paid employees, Contractor must obtain workers' compensation coverage through a licensed insurance company. The coverage must be written on a policy and endorsements approved by the Texas Department of Insurance. The workers' compensation coverage provided must be in statutory amounts according to the Texas Department of Insurance, Division of Workers' Compensation. An All States Endorsement shall be required if Contractor is not domiciled in the State of Texas.
- B. Contractor shall obtain and maintain in full force and effect for the duration of this Contract, and any extension hereof, at Contractor's sole expense, insurance coverage written on an occurrence basis by companies authorized and admitted to do business in the State of Texas and with an A.M. Best's rating of no less than A- VII.
- C. Contractor shall be required to submit renewal certificates of insurance throughout the term of this contract and any extensions within 10 days of the policy expiration dates. All notices under this Exhibit shall be given to City at the following address:

City of Corpus Christi
Attn: Risk Manager
P.O. Box 9277
Corpus Christi, TX 78469-9277

- D. **Contractor agrees that, with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following required provisions:**
- List the City and its officers, officials, employees, and volunteers, as additional insureds by endorsement with regard to operations, completed operations, and activities of or on behalf of the named insured performed under contract with the City, with the exception of the workers' compensation policy;
 - Provide for an endorsement that the "other insurance" clause shall not apply to the City of Corpus Christi where the City is an additional insured shown on the policy;
 - Workers' compensation and employers' liability policies will provide a waiver of subrogation in favor of the City; and

- Provide thirty (30) calendar days advance written notice directly to City of any, cancellation, non-renewal, material change or termination in coverage and not less than ten (10) calendar days advance written notice for nonpayment of premium.
- E. Within five (5) calendar days of a cancellation, non-renewal, material change or termination of coverage, Contractor shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Contractor's performance should there be a lapse in coverage at any time during this contract. Failure to provide and to maintain the required insurance shall constitute a material breach of this contract.
- F. In addition to any other remedies the City may have upon Contractor's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Contractor to stop work hereunder, and/or withhold any payment(s) which become due to Contractor hereunder until Contractor demonstrates compliance with the requirements hereof.
- G. Nothing herein contained shall be construed as limiting in any way the extent to which Contractor may be held responsible for payments of damages to persons or property resulting from Contractor's or its subcontractor's performance of the work covered under this contract.
- H. It is agreed that Contractor's insurance shall be deemed primary and non-contributory with respect to any insurance or self insurance carried by the City of Corpus Christi for liability arising out of operations under this contract.
- I. It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this contract.

2019 Insurance Requirements

Ins. Req. Exhibit **7- I** - IT Contracts – Software Support, Configuration, Implementation and Maintenance - Hardware Installation

05/01/2019 Risk Management – Legal Dept.

Bond Requirements: No bond requirements necessary for this Service Agreement; therefore, Section 5(B) is null for this Service Agreement.

ATTACHMENT D: WARRANTY REQUIREMENTS

The Contractor shall provide a Five Year Warranty on all hardware and services. The software warranty will be covered exclusively by the manufacturers' warranties as follows:

Warranty on Microsoft Windows Server software will be covered by State of Texas' Enterprise Agreement with Microsoft.

https://www.microsoft.com/en-us/UseTerms/Retail/WindowsServer2016/DatacenterAndStandard/UseTerms_Retail_WindowsServer2016_DatacenterAndStandard_English.htm

Warranty on Veeam is part of the 1 year subscription of Veeam software, The City of Corpus Christi will receive Veeam's maintenance and support coterminous with the subscription. <https://www.veeam.com/eula.html>