PROJECT NUMBER 43377 AMENDMENT # 1 TO ASTER CO-LOCATION DATA CENTER SERVICE

MASTER CO-LOCATION DATA CENTER SERVICES AGREEMENT BETWEEN

C SPIRE GOVERNMENTAL DATA SOLUTIONS, LLC AND

MISSISSIPPI DEPARTMENT OF INFORMATION TECHNOLOGY SERVICES AS CONTRACTING AGENT FOR THE AGENCIES AND INSTITUTIONS OF THE STATE OF MISSISSIPPI (ORIGINAL PROJECT NUMBER 42227)

This document (hereinafter referred to as "Amendment Number 1") shall serve to amend the original Master Co-Location Data Center Services Agreement executed on November 2, 2016 (hereinafter referred to as "Master Agreement"), between C Spire Governmental Data Solutions, LLC, a Mississippi limited liability company having its principal place of business at 1018 Highland Colony Parkway, Suite 330, Ridgeland, Mississippi 39157 (hereinafter referred to as "Contractor"), and the Mississippi Department of Information Technology Services having its principal place of business at 3771 Eastwood Drive, Jackson, Mississippi 39211 (hereinafter referred to as "ITS"), as contracting agent for the governmental agencies and educational institutions of the State of Mississippi (hereinafter referred to as "Customer"). ITS and Customer are sometimes collectively referred to herein as "State."

NOW THEREFORE, ITS, Customer, and Contractor, by entering into this Amendment Number 1, mutually agree that the following provisions shall modify the aforementioned Master Agreement:

Contractor shall perform the additional telecommunications services for Customer as set forth in the attached Exhibit A-1. It is understood that Exhibit A in the Master Agreement shall be and hereby is augmented by the new Exhibit A-1, which is attached to this Amendment Number 1 and incorporated herein by reference. All references in the Master Agreement to "Exhibit A" shall be and hereby are revised to be "Exhibit A and Exhibit A-1."

All other terms and conditions of the Master Agreement executed on November 2, 2016, shall remain unchanged and in full force and effect.

Information Technology Services, on	C Spire Governmental Data Solutions, LLC
behalf of the agencies and institutions of the State of Mississippi	A-0
By: Authorized Signature	Authorized Signature
Printed Name: Craig P. Orgeron, Ph.D.	Printed Name: J. BRIAN CARAWAY
Title: Executive Director	Title: SUP ENTERPRISE MARKETS
Date:5/27/17	Date: 5/19/2017

EXHIBIT A-1

Bio Reader:		
Part Number	Description	Unit Cost
SUP-BC-BENWIOC	SUPPREMA BIOENTRY @ICLASS	\$4,341.25

Veeam Cloud Connect Backup:

This allows the C Spire cloud to become a secondary or tertiary backup repository for a customer's server backups. Use cases include an existing Veeam user who needs a secondary or tertiary target for their Veeam backups. This is not a DR/failover solution, and should not be viewed as replication. There are two (2) components to this solution: The per-VM fee and the storage fee. Both must be quoted. See the table below.

Item	Description	Price
VM Charge	Per VM fee. Charged for each VM backed up	\$10.00 per VM.month
Storage	Storage fee. Charged per GB stored in the repository	\$0.08 per GB/month

CSpire Network:

nthly Recurring Cost (MRC)
\$1,180.00
\$1,960.00
\$13,380.00
\$19,850.00

Location	Bandwidth	Monthly Recurring Cost (MRC)
3771 Eastwood Dr.	1G	\$1,180.00
3771 Eastwood Dr.	10G	\$1,960.00
3771 Eastwood Dr.	40G	\$13,380.00
3771 Eastwood Dr.	100G	\$19,850.00

SERVICE DESCRIPTION AND SERVICE LEVEL AGREEMENT <u>ETHERNET/WAVE SERVICES</u>

I. Service Description

C Spire will provide telecommunications services to Customer for the transport of telecommunications data via Ethernet or Wave services (each a "Service" and collectively the "Services") pursuant to Amendment #1 to Master Co-Location Data Center Services. C Spire will use best efforts to deliver and maintain the Services to

Customer as specified herein. Neither Party shall have any obligations for any Service unless and until a Service Order details the Service to be provided and establishes fees for the Service, and is accepted by C Spire and fully executed, for each Service.

II. Definitions.

- A. <u>C Spire's Network</u>. Means the telecommunications network constructed, owned, or operated by C Spire.
- B. <u>Circuit</u>. An Ethernet connection, or other Service specified in an executed Service Order.
- C. <u>Emergency Maintenance</u>. Emergency Maintenance is maintenance that is required, as determined by C Spire and at the sole discretion of C Spire, in order to maintain the integrity and operation of C Spire's Network. By the very nature of Emergency Maintenance, notifications can only be sent as early as the determination that Emergency Maintenance is required.
- D. <u>Off-Net Service</u>. Service where one or both locations to be connected, or any portion of the Circuit located between the locations to be connected, is (are) not served solely by C Spire's Network.
- E. <u>On-Net Service</u>. When both locations to be connected and all Circuits between the locations are served solely by C Spire's Network.
- F. <u>Planned Interruption</u>. An Interruption caused by scheduled maintenance or planned enhancements or upgrades to C Spire's Network.
- G. <u>Points of Presence or POP</u>. A specific location where Customer or C Spire originates or terminates Service.
- H. <u>Service</u>. Transmission service provided between two or more Points of Presence.

III. Network Availability and Performance Service Metrics and Credits.

- A. <u>Service Unavailability or Outage</u>. Service Unavailability or Service Outage shall be used interchangeably herein. It means the measure of time in which Customer loses a signal or receives a degraded signal so poor that it renders the service unavailable or unfit for the purpose intended, or fails to meet the service performance levels as outlined herein.
- B. <u>Service Outage Initiation</u>. A Service Outage shall be deemed to have begun from the earlier of:

- When the Customer notifies C Spire via C Spire's Network Operations Center ("NOC") that a Service Outage is occurring;
- 2. When C Spire otherwise becomes aware of the Service Outage.
- C. <u>Service Outage Restoration</u>. The Service is deemed to have been restored when
 C Spire notifies Customer, and Customer has successfully performed the appropriate network test.

D. <u>Service Outage Credits</u>.

- Measurement. Customer credits shall be based on the cumulative time of the Service Outage/s that occurred to a Service or Services of the Customer over the course of a month. The length of time shall be measured in hours and fractional portions thereof.
- 2. <u>Credits.</u> C Spire will provide credits for Service Outages.
- Calculation. In the event of a Service Outage, with the exception of Excused Outages as defined in Section III (H) and Service Outages for Off-Net Services as provided in Sections II (D) and III (I), Customer shall be entitled to a credit as follows:

Service Outage Credits

Cumulative Duration of Outage Event (Hours, Minutes, Seconds)	Single Circuit Service Credit applied to the MRC	Multiple Circuit Service Credit applied to the MRC
0:00:01 - 4:00:00	5% of MRC	15% of MRC
4:00:01 - 6:00:00	10% of MRC	25% of MRC
6:00:01 - 8:00:00	20% of MRC	50% of MRC
8:00:01 - 12:00:0	50% of MRC	75% of MRC
12:00:01– or more	100% of MRC*	100% of MRC*

^{*}Outage credits shall be capped at one hundred percent (100%) of the MRC for any particular month. It is understood that the service outage and credit language set forth in this Section only applies to the new services being offered in this Amendment #1 and in no way

does it supersede the language of Article 41 in the Master Agreement.-

E. Requests and Issuance of Credits

- 1. To receive credit, Customer must make a written request within sixty (60) days of the end of the month for which the cumulative Service Outage(s) occurred.
- C Spire shall issue credits within a maximum of sixty (60) days from receipt of Customer's written request for credit at the end of the month for which the credit allowance is computed.
- F. <u>Chronic Trouble</u>. Chronic Trouble exists when any service (per circuit) provided pursuant to such Service Order is Unavailable:
 - 1. In three (3) or more separate periods of two (2) hours or more each within the same calendar month; or
 - 2. More than twenty-four (24) hours (measured in the aggregate) at any time within any sixty (60) day period; or
 - 3. In such that the quality of Service fails to meet any applicable Service Levels, as defined herein, for six (6) or more times in any ninety (90) day period.

<u>Chronic Trouble Remedies</u>. In the event Customer experiences Chronic Trouble, Customer shall be entitled, in addition to any applicable credits, to request reprovisioning of the affected circuit without any charges, penalty, or liability. After Customer has requested re-provisioning, and in the event the remedy is unacceptable to Customer, Customer may terminate the affected Service without charges, penalty, liability or termination charges.

- G. <u>Excused Outage</u>. A Service Outage will be deemed an Excused Outage, in the event it arises from or relates to any of the following:
 - acts or omissions of Customer, its affiliates, or the employees or contractors of either of them;
 - 2. for any failures of structures, facilities or equipment on Customer's side of demarcation:
 - 3. if Customer fails to assist C Spire in fault isolation and problem resolution:
 - 4. that occurs or continues due to Customer's failure to authorize replacement of any element or special construction;
 - 5. for Planned Interruptions or scheduled maintenance, provided Customer receives at least five (5) days prior notice;
 - 6. for Emergency Maintenance (critical maintenance condition, not part of scheduled maintenance); and/or
 - 7. due to a Force Majeure Event (includes acts of God e.g., hurricane, flood, tornado, earthquake, volcanic eruption, etc.), war, strike, riot, crime, and other such events beyond C Spire's reasonable control.
- H. <u>Network Performance Parameters (NPP)</u>.

- The Network Performance Parameters (NPP) for C Spire's On-Net Service performance shall be a Latency of < 25ms, Jitter of < 0.5ms and Packet Loss < 0.1% for each port.
- 2. Latency, Jitter and Packet Loss are measured by averaging sample measurements taken during a calendar month between the Network Termination Equipment (NTE) between which the Customer ports are attached (i.e., end to end) when the Service is available for use by the Customer. The NPPs are based on the C Spire network-wide average of the Customer's traffic traversing between the NTE and the C Spire network.
- These NPPs apply only to the C Spire core network and C Spire local access network.
- Latency may vary on ports with Real Time CIR of 10 Mbps or below and Real Time EVCs on such ports are excluded from calculations that determine whether the Latency NPP is met.

Off-Net Services.

Off-Net Services are offered subject to the initial availability of facilities from C Spire's preferred underlying supplier on terms acceptable to C Spire and subject to the continued availability of such Services without any material changes to such initial terms. If there are material changes to the terms of Services due to the underlying supplier, C Spire will provide Customer with written notice of such change. Such written notice shall be given promptly after C Spire receives notice of a material change from its underlying supplier.

C Spire will not provide credits for any Service Outage of Off-Net Services. C Spire will make reasonable commercial efforts to obtain third party service provider SLAs that substantially adhere to the service level commitments of this Agreement, and pass through to Customer any Service Outage credits it receives from third party suppliers of Off-Net Services.

IV. Maintenance.

<u>Planned Interruptions</u>. Planned Interruptions will only be performed during the hours of 12:00 a.m. to 5:00 a.m. central time unless otherwise agreed by the Parties. C Spire will notify Customer no less than ten (10) Days prior to any Planned Interruption.

V. Re-Route.

In the event that C Spire elects or is required by any regulatory, state, county, city or federal agency or authority ("Governing Body") to re-route, relocate, replace or rebuild (together "Re-Route") any of C Spire's circuits that will affect a route, C Spire shall give as much notice as is practical, with a target of at least ninety (90) days notice unless a shorter period is reasonably required or C Spire does not receive such notice from the Governing Body, prior to commencing any such Re-

Route change work. After notifying Customer of the Re-Route C Spire and Customer shall coordinate any such work. C Spire and Customer shall cooperate in performing such Re-Route or modifications so as to minimize any interference with the use of the Service transmission by Customer to the extent reasonably possible. Any such Re-Route shall be accomplished so that after completion of the work the Service transmission is in compliance with the acceptance procedures and standard specification agreed upon by the Parties. C Spire shall bear the cost of all such Re-Route work and no costs will be passed on to the Customer. If such Re-Route materially changes the geographical diversity of Customer's network by moving the Service more than five hundred (500') feet outside of the existing fiber route, then Customer may cancel the affected Service in whole or in part without penalty or early termination charges. Customer must exercise this termination right by providing written notice of such termination to C Spire within ninety (90) days from notice of the Re-Route change from C Spire.

VI. Network Monitoring and Trouble Reporting.

- A. System Monitoring and Trouble Reporting. C Spire will monitor the Services provided to Customer 24 hours a day, 7 days a week, 365 days a year. C Spire will establish a process for Customer to accept reports relating to repair or maintenance associated with the Services provided by C Spire to Customer. C Spire will maintain a 24 hours a day, 7 days a week point-of-contact for Customer to report Service troubles. The telephone number for C Spire's Customer Point of Contact (855-277-4732) AKA 855 CSPIRE2. Customer will maintain a 24 hours a day, 7 days a week point-of-contact for C Spire to report Service troubles. The telephone number for Customer is Roger Graves and the email address is roger.graves@its.ms.gov.
- B. Response to Service Calls. C Spire will respond to Service calls initiated by Customer.