



Commonwealth of Virginia
Virginia Information Technologies Agency

DIGITAL ORTHOIMAGERY AND DIGITAL TERRAIN MODEL PRODUCTION SERVICES

Date: August 13, 2014

Contract #: VA-121207-SANB

Authorized Users: All public bodies, including VITA, as defined by §2.2-4301 and referenced by §2.2-4304 of the *Code of Virginia*

Contractor: Sanborn Map Company
1935 Jamboree Drive
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Colorado Springs, CO 80920
Phone: 1-866-726-2676 (sanborn)
719-502-1296

Contact: Shawn Benham, Project Manager
Phone: 719-502-1296
Email: sbenham@sanborn.com

FIN: 13-3980333

Term: December 7, 2012 – December 6, 2016

Payment: Net 30 days

For Additional Information, Please Contact:

Virginia Information Technologies Agency
Supply Chain Management

Jimmy MacKenzie
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Fax: 804-416-6361
E-Mail: james.mackenzie@vita.virginia.gov

NOTES: Individual Commonwealth of Virginia employees are not authorized to purchase products or services for their personal use from this Contract.

For updates, please visit our Website at <http://www.vita.virginia.gov/procurement/contracts.cfm>

VIRGINIA INFORMATION TECHNOLOGIES AGENCY (VITA): Prior review and approval by VITA for purchases in excess of \$100,000.00 is required for State Agencies and Institutions only.

**MODIFICATION NO. 1
TO
CONTRACT NUMBER VA-121207-SANB
BETWEEN THE
COMMONWEALTH OF VIRGINIA
AND
THE SANBORN MAP COMPANY, INC.**

This MODIFICATION No. 1 is hereby incorporated into and made an integral part of Contract VA-121207-SANB.

The purpose of this Modification is to add the clause(s) and clarifications listed below:

1. Add to the definition of "Authorized User" in Section 2 Subsection C on Contract Page 4.
"Authorized Users also include private institutions of higher education chartered in Virginia and granted tax-exempt status under §501(c)(3) of the Internal Revenue Code. A list of the private institutions eligible to use this contract can be found at <http://www.cicv.org/our-Colleges/Profiles.aspx>
2. Add to the definition of "RIGHTS TO WORK PRODUCT" in Section 7 on Contract Page 9.
"If Authorized User is a private institution of higher education chartered in Virginia and granted tax-exempt status under §501(c)(3) of the Internal Revenue Code, any license to pre-existing work shall be held by, and all rights in, title to, and ownership of Work Product shall vest with that private institution of higher education."
3. Add to the definition of "Statement of Work (SOW)" in Section 11 Subsection B on Contract Page 13.
"If the authorized User is a private institution of higher education chartered in Virginia and granted tax-exempt status under §501(c)(3) of the Internal Revenue Code, such private institution of higher education may have its own per diem amounts applicable to Supplier's pre-approved travel expenses."
4. Add to the definition of "Indemnification" in Section 15 Subsection A on Contract Pages 18-19.
"In the event of settlement between Supplier and private institution of higher education who is an Authorized User of this contract, the settlement shall be satisfactory to such institution."
5. Add to the definition of "Dispute Resolution" in Section 23 Subsection E on Contract Page 22.
"In the event of any breach by a public body or a private institution of higher education, Supplier's remedies shall be limited to claims for damages and Prompt Payment Act interest and, if available and warranted, equitable relief, all such claims to be processed pursuant to this Section. In no event shall Supplier's remedies include to the right to terminate any license or support services hereunder."

The foregoing is the complete and final expression of the parties' agreement to modify Contract VA-121207-SANB by this Modification No. 1.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

PERSONS SIGNING THIS CONTRACT ARE AUTHORIZED REPRESENTATIVES OF EACH PARTY TO THIS CONTRACT AND ACKNOWLEDGE THAT EACH PARTY AGREES TO BE BOUND BY THE TERMS AND CONDITIONS OF THE CONTRACT.

NAME OF SUPPLIER

BY: _____

NAME: _____

TITLE: _____

DATE: _____

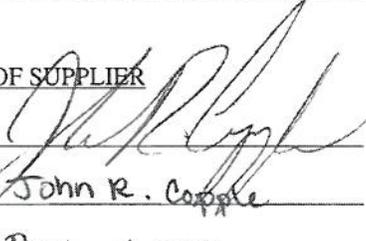
COMMONWEALTH OF VIRGINIA

BY: _____

NAME: _____

TITLE: _____

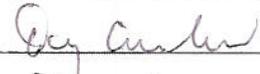
DATE: _____



John R. Capps

President / CEO

8/4/2014



Day Crenshaw

VITA Source mgr

8/11/14



Information Technology Services Contract

between

The Virginia Information Technologies Agency

on behalf of

The Commonwealth of Virginia

and

The Sanborn Map Company, Inc.

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INFORMATION TECHNOLOGY SERVICES CONTRACT

THIS INFORMATION TECHNOLOGY SERVICES CONTRACT ("Contract") is entered into by and between the Virginia Information Technologies Agency (VITA) pursuant to §2.2-2012 of the Code of Virginia and on behalf of the Commonwealth of Virginia (hereinafter referred to as "VITA"), and The Sanborn Map Company, Inc. ("Supplier"), a corporation headquartered at 1935 Jamboree Drive, Suite 100, Colorado Springs, CO 80920 to be effective as of December 7, 2012 ("Effective Date").

1. PURPOSE AND SCOPE

This Contract sets forth the terms and conditions under which Supplier shall provide consistent statewide digital orthoimagery and a digital terrain model production services ("Services") to the Authorized Users.

Any Supplier-hosted Licensed Services and Application(s) that Supplier is obligated to provide in performance of this Contract require compliance with additional terms and conditions which are included in Exhibit D of this Contract and are hereby incorporated.

2. DEFINITIONS

A. Acceptance

Successful performance of the Services and of the Licensed Services, at the location designated in the applicable Statement of Work, or completed and successful Acceptance testing in conformance with the Requirements as determined by the Authorized User in the applicable Statement of Work.

B. Agent

Any third party independent agent of any Authorized User.

C. Authorized Users

All public bodies, including VITA, as defined by §2.2-4301 and referenced by §2.2-4304 of the Code of Virginia.

D. Confidential Information

Any confidential or proprietary information of a Party that is disclosed in any manner, including oral or written, graphic, machine readable or other tangible form, to any other Party in connection with or as a result of discussions related to this Contract or any order or SOW issued hereunder, and which at the time of disclosure either (i) is marked as being "Confidential" or "Proprietary", (ii) is otherwise reasonably identifiable as the confidential or proprietary information of the disclosing Party, or (iii) under the circumstances of disclosure should reasonably be considered as confidential or proprietary information of the disclosing Party; (iv) for Application and Licensed Services Supplier performance under this Contract, any information or Content provided by VITA or an Application User, which type of information is designated by VITA or the Application User as "Confidential" or "Proprietary" or which information is otherwise reasonably identifiable as the confidential or proprietary information of VITA or the Application User providing such information.

E. Deliverable

The tangible embodiment of the Services, including the development or creation of Work Product, performed by Supplier as identified in the applicable Statement of Work.

F. Party

Supplier, VITA, VGIN or any Authorized User.

G. Primary Product

Product derived directly from raw data that is captured as a result of the flights. Primary products would include orthophotos and digital terrain models.

H. Requirements

The functional, performance, operational, compatibility, Acceptance testing criteria and other parameters and characteristics of the Services and Deliverables, and Licensed Services and Application Supplier is authorized to provide such under the Contract, as set forth in Exhibit A and the applicable Statement of Work and such other parameters, characteristics, or performance standards that may be agreed upon in writing by the Parties.

I. Secondary Product

Product that is derived from a primary product. Secondary products would include, but are not limited to, contours and planimetrics.

J. Service(s)

Any work performed or service provided, including provision to the Authorized User of any Deliverable, by Supplier under this Contract. Services include the discovery, creation, or development of Work Product, if any.

K. Statement of Work (SOW)

Any document in substantially the form of Exhibit E describing the deliverables, due dates, assignment duration and payment obligations for a specific project, engagement, or assignment for which Supplier shall be providing Services or providing Licensed Services to an Authorized User and its designated Application Users, which, upon signing by both Parties, shall be deemed a part of this Contract.

L. Supplier

Means the Supplier and any of its Affiliates (i.e., an entity that controls, is controlled by, or is under common control with Supplier).

M. Work Product

Inventions, combinations, machines, methods, formulae, techniques, processes, improvements, software designs, computer programs, strategies, specific computer-related know-how, data, photos and original works of authorship (collectively, the "Work Product") discovered, created, or developed by Supplier, or jointly by Supplier and an Authorized User(s) in performance of this contract.

3. TERM AND TERMINATION**A. Contract Term**

This Contract is effective and legally binding as of the Effective Date and, unless terminated as provided for in this section, shall continue to be effective and legally binding for the duration of the Project as detailed in the RFP and Exhibit A to this Contract. VITA may, at its sole discretion, extend this Contract for up to three (3) additional one-year periods after the completion and Acceptance of the original project. VITA will issue a written notification to the Supplier stating the proposed extension period, thirty (30) days prior to the expiration of any current term. Performance of an order or SOW issued during the term of this Contract may survive the expiration of the term of this Contract, in which case all terms and conditions required for the operation of such order or SOW shall remain in full force and effect until Services pursuant to such order or SOW have met the final Acceptance criteria of the applicable Authorized User.

B. Termination for Convenience

VITA may terminate this Contract, in whole or in part, or any order or SOW issued hereunder, in whole or in part, or an Authorized User may terminate an order or SOW, in whole or in part, upon not less than thirty (30) days prior written notice at any time for any reason.

C. Termination for Breach or Default

VITA shall have the right to terminate this Contract, in whole or in part, or any order or SOW issued hereunder, in whole or in part, or an Authorized User may terminate an order or SOW, in whole or in part, for breach and/or default of Supplier. Supplier shall be deemed in breach and/or default in the event that Supplier fails to meet any material obligation set forth in this Contract or in any order or SOW issued hereunder.

If VITA deems the Supplier to be in breach and/or default, VITA shall provide Supplier with notice of breach and/or default and allow Supplier fifteen (15) days to cure the breach and/or default. If Supplier fails to cure the breach as noted, VITA may immediately terminate this Contract or any order or SOW issued hereunder, in whole or in part. If an Authorized User deems the Supplier to be in breach and/or default of an order or SOW, such Authorized User shall provide Supplier with notice of breach and/or default and allow Supplier fifteen (15) days to cure the breach and/or default. If Supplier fails to cure the breach and/or default as noted, such Authorized User may immediately terminate its order or SOW, in whole or in part. Any such termination shall be deemed a Termination for Breach or a Termination for Default. In addition, if Supplier is found by

a court of competent jurisdiction to be in violation of or to have violated 31 USC 1352 or if Supplier becomes a party excluded from Federal Procurement and Nonprocurement Programs, VITA may immediately terminate this Contract, in whole or in part, for breach. VITA shall provide written notice to Supplier of such termination and Supplier shall provide written notice to VITA if Supplier is charged with violation of 31 USC 1352 or if federal debarment proceedings are instituted against Supplier.

D. Termination for Non-Appropriation of Funds

All payment obligations under this Contract are subject to the availability of legislative appropriations at the federal, state, or local level, for this purpose. In the event of non-appropriation of funds, irrespective of the source of funds, for the items under this Contract, VITA may terminate any order or SOW, in whole or in part, or an Authorized User may terminate its order or SOW, in whole or in part, for those goods or services for which funds have not been appropriated. Written notice will be provided to the Supplier as soon as possible after legislative action is completed.

Termination by Supplier will not be considered.

E. Effect of Termination

Upon termination, neither the Commonwealth, nor VITA, nor any Authorized User shall have any future liability except for Deliverables accepted or Services rendered and accepted by the Authorized User or for Licensed Services rendered and accepted by the Authorized User and Application components delivered by Supplier prior to the termination date.

In the event of a Termination for Breach or Termination for Default, the affected Authorized User(s) shall not be liable for any cost related to the terminated Contract, order, SOW, or portion thereof. Supplier shall accept return of any Deliverable not accepted by the Authorized User(s) and any products or software provided to the affected Authorized Users of Licensed Services, and Supplier shall refund any monies paid by any affected Authorized User for such returns, including all costs of de-installation, and all such costs shall be borne by Supplier.

F. Transition of Services

Prior to or upon expiration or termination of this Contract and at the request of VITA, Supplier shall provide all assistance as VITA or an Authorized User may reasonably require to transition Services to any other supplier with whom VITA or such Authorized User contracts for provision of services identical or similar to the Services provided by Supplier pursuant to this Contract. This obligation may extend beyond expiration or termination of the Contract for a period not to exceed six (6) months. In the event of a termination for breach and/or default of Supplier, Supplier shall provide such assistance at no charge or fee to VITA or any Authorized User; otherwise, Supplier shall provide such assistance at the hourly rate or a charge agreed upon by Supplier and VITA or an Authorized User.

G. Contract Kick-Off Meeting

Within 30 days of Contract award, Supplier may be required to attend a contract orientation meeting, along with the VITA contract manager/administrator, the VITA and/or other CoVa Agency project manager(s) or authorized representative(s), technical leads, VITA representatives for SWaM and Sales/IFA reporting, as applicable, and any other significant stakeholders who have a part in the successful performance of this Contract. The purpose of this meeting will be to review all contractual obligations for both parties, all administrative and reporting requirements, and to discuss any other relationship, responsibility, communication and performance criteria set forth in the Contract. The Supplier may be required to have its assigned account manager as specified in Section 6.0 and a representative from its contracts department in attendance. The time and location of this meeting will be coordinated with Supplier and other meeting participants by the VITA contract manager.

H. Contract Closeout

Prior to the contract's expiration date, Supplier may be provided contract close out documentation and shall complete, sign and return to VITA Supply Chain Management within 30 days of receipt. This documentation may include, but not be limited to: Patent/Royalty Certificate, Tangible Property/Asset Certificate, SWaM Reports Completion Certificate, Sales Reports/IFA Payments Completion Certificate, and Final Payment Certificate. Supplier is required to process these as

requested to ensure completion of close-out administration and to maintain a positive performance reputation with the Commonwealth of Virginia. Any closeout documentation not received within 30 days of Supplier's receipt of our request will be documented in the contract file as Supplier non-compliance. Supplier's non-compliance may affect any pending payments due the Supplier, including final payment, until the documentation is returned.

4. AUTHORIZED WORK BY SUPPLIER

This Contract is optional use and non-exclusive and all Authorized Users may, at their sole discretion, receive benefits from third party suppliers of the products and services similar to, or in competition with, products and services provided by Supplier.

By operation of this Contract, any SOW resulting in a commitment of any individual employee or contractor of Supplier, whether employed by Supplier or a contractor or subcontractor of Supplier, for more than one thousand (1,000) hours of work during any six (6) month period or of any such individual employee or contractor for more than eight (8) months in any twelve (12) month period shall be voidable by VITA, in its sole discretion. If an SOW is voided by VITA, such SOW shall no longer be binding on either Party and all obligations with respect to such SOW shall expire.

5. ACCEPTANCE

A. Acceptance

Services shall be deemed accepted when the Authorized User determines that such Service(s) meets the Requirements set forth in the applicable SOW. If applicable, Supplier shall be responsible for ensuring that any individual Deliverable functions properly with any other Deliverable provided pursuant to the SOW. Should a previously Accepted Deliverable require further modification in order to work properly with any other Deliverable, Supplier shall be responsible for all costs associated with such modification.

Authorized User shall commence Acceptance testing within thirty (30) days, or within such other period as set forth in the applicable SOW, after receipt of the Services. Acceptance testing will be no longer than thirty (30) days, or such longer period as may be agreed in writing between Authorized User and Supplier, for each Deliverable or for the first instance of each Service type set forth in Exhibit B. Supplier agrees to provide to the Authorized User such assistance and advice as the Authorized User may reasonably require, at no additional cost, during such Acceptance testing. Authorized User shall provide to Supplier written notice of Acceptance upon completion successful Acceptance testing. Should Authorized User fail to provide Supplier written notice of successful or unsuccessful Acceptance testing within five (5) days following the Acceptance testing period, the Services shall be deemed Accepted.

B. Cure Period

Supplier shall correct any non-conformities identified during Acceptance testing and re-submit such non-conforming Services for re-testing within thirty (30) days of the appropriate Authorized User's written notice of non-conformance, or as otherwise agreed between such Authorized User and Supplier in the applicable SOW. Should Supplier fail to cure the non-conformity or deliver a Service which meets the Requirements, the Authorized User may, in its sole discretion: (i) reject the Service in its entirety, and any Services rendered unusable due to the non-conforming Service, and recover amounts previously paid hereunder for all such Services; (ii) issue a "partial Acceptance" of the Service with an equitable adjustment in the price to account for such deficiency; or (iii) conditionally accept the applicable Service while reserving its right to revoke Acceptance if timely correction is not forthcoming. Failure of a Service to meet, in all material respects, the Requirements after the second set of acceptance tests may constitute a default by Supplier. In the event of such default, the Authorized User may, at its sole discretion, terminate its order or SOW, in whole or in part, for the Services to be provided thereunder by Supplier.

C. Re-Flight

For any re-flights necessary for FY13, the areas shall be re-flown, processed and delivered to VITA within six (6) months of the re-flight. For any re-flights necessary for FY15, the areas will be re-flown, processed and delivered to VITA within six (6) months of the re-flight. Re-flights will be done at no charge to the Authorized Users.

D. Aviation Laws, Regulations, and Procedures

Supplier shall comply with all federal, state, and local aviation laws, regulations and ordinances, including those issued by the Federal Aviation Administration (FAA). If Supplier's performance of Services requires it to fly aircraft in international airspace, Supplier shall comply with all relevant international laws, regulations, and protocol. Supplier shall ensure that, in performing the Services, it does not violate Department of Defense (DoD) rules restricting flights over Military Operations Areas (MOAs). Supplier shall review and perform all Services in accordance with all current Notices to Airmen (NOTAMs).

Prior to each flyover, Supplier shall file a flight plan with the relevant Air Traffic Controller(s) and shall secure all necessary permissions.

Supplier shall ensure that aircraft used to perform Services under this Contract are airworthy and properly maintained and overhauled by licensed and qualified agents or personnel. All replacement parts shall be properly tagged or certified. Supplier shall perform all applicable maintenance directives from relevant regulatory authorities and manufacturers.

6. REMEDIES

Tables 1 and 2 set forth the milestone schedule by which Supplier shall deliver to VITA the final Primary Product. Individual orders by Authorized Users are not subject to this clause; however, Authorized Users may develop and include their own remedies per their individual orders/statements of work, if applicable.

Table 1 Eastern Project Area

Milestone Number	Date	Number of Complete Blocks	Cumulative Number of Complete Blocks
1	July 31, 2013	5	6
2	August 31, 2013	6	11
3	September 30, 2013	6	17
4	October 31, 2013	7	24

Table 2 Western Project Area

Milestone Number	Date	Number of Complete Blocks	Cumulative Number of Complete Blocks
5	July 31, 2015	5	6
6	August 31, 2015	6	11
7	September 30, 2015	7	17
8	October 31, 2015	7	24

Supplier understands and agrees that it is critical to VITA that data be provided on or before the dates specified in Table 1. Should Supplier fail to deliver the cumulative percentages of acceptable data by the milestone dates 3, 4, 7 and 8 as specified in Table 1, VITA shall deduct, not as a penalty but as remedies, a charge of \$3,000 for each and every calendar day of delay beyond the date specified until Supplier has delivered the required cumulative percentage.

Data that is not accepted by VITA shall be returned to Supplier for correction. Supplier shall correct the data in accordance with the Cure Period. If Supplier fails to correct the non-conformity in accordance with the Cure Period, in addition to the remedies provided in the Cure Period section of delivered and shall adjust the percentage of data delivered accordingly. If such adjustment causes the cumulative percentage of data delivered to fall below the percentage required by milestone dates 3, 4, 7 and 8 in Table 1, remedies shall be immediately applied.

In no event shall remedies exceed ten percent (10%) of the value of the total price of all Deliverables subject to remedies.

An extension may be available only if Supplier has notified VITA in writing via phone or email within forty eight (48) hours after any occurrence justifying the extension. Supplier's notification shall include a description of the solution it plans to implement to resolve or mitigate the circumstances resulting in its request for an extension. Upon receipt of such notification and justification from the Supplier, a reasonable extension of time for provision of Deliverables specified herein may be granted. By signing this Contract, Supplier certifies it concurrence that the remedy amount specified is reasonable in light of the harm that is anticipated from late performance or delivery and the difficulty of proof of loss, and the Supplier hereby waives any claim that such remedies are void as penalties or not reasonably related to actual damages.

The remedies apply only to delivery of required products for areas that are covered by imagery data captured by the Supplier in the Spring of 2013, Spring 2015 or succeeding years, meeting project acquisition specifications.

Remedies will not be assessed if:

the total cumulative delivery of products to VITA by September 30 (year of acquisition) equals sixty-five percent (65%) or greater of the totals products subject to remedies, and while not exceeding delivery of more than thirty percent (30%) of the total product in September (year of acquisition).

all products subject to remedies are delivered on or before October 31 (six months immediately following end of imagery capture).

Notwithstanding the foregoing, remedies shall be assessed if: (i) submitted product has been rejected by VITA reviews, (ii) Supplier or its agent have been provided thirty (30) days (from the notification of non-acceptance) to correct the non-conformities, and/or (iii) Supplier fails to correct the problem during the Cure Period. In such circumstances, Supplier shall be assessed remedies for every day over the thirty (30) day Cure Period in which product is not corrected.

7. RIGHTS TO WORK PRODUCT

If Authorized User is a state agency, board, commission, or other quasi-political entity of the Commonwealth of Virginia or other body referenced in Title 2.2 of the Code of Virginia, any license to pre-existing work shall be held by, and all rights in, title to, and ownership of Work Product shall vest with the Commonwealth. If Authorized User is a locality, municipality, school, school system, college, university, local board, local commission, or local quasi-political entity, any license to pre-existing work shall be held by, and all rights in, title to, and ownership of Work Product shall vest with that public body.

A. Work Product

VITA and Supplier each acknowledge that performance of this Contract may result in Work Product. The Parties shall document all Work Product specifications and such specifications shall be made an incorporated exhibit to this Contract. Supplier agrees that it shall promptly and fully disclose to the Commonwealth or the Authorized User any and all Work Product generated, conceived, reduced to practice or learned by Supplier or any of its employees, either solely or

jointly with others, during the term or performance of this Contract, which in any way relates to the business of the Commonwealth, VITA, or any Authorized User. Supplier further agrees that neither Supplier nor any of Supplier's employees, contractors, agents or subcontractors, nor any party claiming through Supplier or Supplier's employees, shall, other than in the performance of this Contract, make use of or disclose to others any proprietary information relating to the Work Product. All Services performed hereunder shall include delivery of all Work Product and documentation. Supplier shall at no time deny access to the Work Product, regardless of form, by the Commonwealth or the Authorized User.

B. Ownership

Supplier agrees that, whether or not the Services are considered "works made for hire" or an employment to invent, all Work Product discovered, created or developed under this Contract shall be and shall remain the sole and exclusive property of the Commonwealth of Virginia and its assigns or the Authorized User and its assigns. Except as specifically set forth in writing and signed by both VITA and Supplier, or Authorized User and Supplier, Supplier agrees that the Commonwealth or the Authorized User shall have all rights with respect to any Work Product discovered, created or developed under this Contract without regard to the origin of the Work Product.

If and to the extent that Supplier may, under applicable law, be entitled to claim any ownership interest in the Work Product, Supplier hereby irrevocably transfers, grants, conveys, assigns and relinquishes exclusively to the Commonwealth or the Authorized User any and all right, title and interest it now has or may hereafter acquire in and to the Work Product under patent, copyright, trade secret and trademark law in perpetuity or for the longest period otherwise permitted by law. If any moral rights are created, Supplier waives such rights in the Work Product. Supplier further agrees as to the Work Product to assist the Commonwealth or the Authorized User in every reasonable way to obtain and, from time to time, enforce patents, copyrights, and other rights and protection, and in protecting trade secrets, with respect to such Work Product, and to that end, Supplier and its employees shall execute all documents for use in applying for and obtaining such patents, copyrights, and other rights and protection with respect to such Work Product, as the Commonwealth or the Authorized User may reasonably request, together with any assignments thereof to the Commonwealth or the Authorized User or entities designated by the Commonwealth or the Authorized User.

C. Pre-existing Rights

If and to the extent that any pre-existing rights are embodied or reflected in the Work Product or Service Deliverables, Supplier hereby grants to the Commonwealth or the Authorized User an irrevocable, perpetual, non-exclusive, worldwide, royalty-free right and license to (i) use, modify, transmit, execute, reproduce, display, perform, distribute copies of and prepare derivative works based upon such pre-existing rights and any derivative works thereof, and (ii) authorize others to do any or all of the foregoing. It is expressly understood that "perpetual" license rights shall commence upon delivery of the Work Product or Service Deliverables and shall exist in perpetuity unless otherwise terminated in accordance with the applicable provisions of the Contract.

D. Provision of VITA/VGIN Material

It is anticipated that all files, data and photos provided to the Supplier are property of VITA/VGIN and are not to be used or disclosed for any other use outside of this contract.

Failure to comply with this may result in breach of contract by the Supplier.

E. Return of Materials

It is anticipated that all files, data and photos provided to the Supplier are property of VITA/VGIN and are not to be used or disclosed for any other use outside of this contract.

Failure to comply with this may result in breach of contract by the Supplier.

Upon termination of this Contract, Supplier shall immediately return to VITA or the appropriate Authorized User all copies, in whatever form, of any and all Confidential Information, Work Product and other properties provided by VITA or such Authorized User, which are in Supplier's possession, custody or control.

8. SUPPLIER PERSONNEL

A. Selection and Management of Supplier Personnel

Supplier shall take such steps as may be necessary to ensure that all Supplier personnel performing Services under this Contract are competent and knowledgeable of the contractual arrangements and the applicable SOW between Authorized User and Supplier. Supplier shall be solely responsible for the conduct of its employees, agents, and subcontractors, including all acts and omissions of such employees, agents, and subcontractors, and shall ensure that such employees and subcontractors comply with the appropriate Authorized User's site security, information security and personnel conduct rules, as well as applicable federal, state and local laws, including export regulations. Authorized User reserves the right to require the immediate removal from such Authorized User's premises of any employee, subcontractor or agent of Supplier whom such Authorized User believes has failed to comply or whose conduct or behavior is unacceptable or unprofessional or results in a security or safety breach.

B. Supplier Personnel Supervision

Supplier acknowledges that Supplier, or any of its agents, contractors, or subcontractors, is and shall be the employer of Supplier personnel, and shall have sole responsibility to supervise, counsel, discipline, review, evaluate, set the pay rates of and terminate the employment of Supplier personnel.

C. Key Personnel

An SOW may designate certain of Supplier's personnel as Key Personnel or Project Managers. Supplier's obligations with respect to Key Personnel and Project Managers shall be described in the applicable SOW. Failure of Supplier to perform in accordance with such obligations may be deemed a default of this Contract or of the applicable SOW.

D. Subcontractors

Supplier shall not use subcontractors to perform any work under this Contract unless specifically authorized in writing to do so by the Authorized User. If an order or SOW issued pursuant to this Contract is supported in whole or in part with federal funds, Supplier shall not subcontract any work pursuant to such order or SOW to any subcontractor that is a party excluded from Federal Procurement and Nonprocurement Programs. In no event shall Supplier subcontract any work to any subcontractor which is debarred by the Commonwealth of Virginia or which owes back taxes to the Commonwealth and has not made arrangements with the Commonwealth for payment of such back taxes.

It is understood that Supplier may utilize subcontractors to provide integral components of the Licensed Services and Application; however, except for those so named at time of Contract award, Supplier shall not use new or replacement subcontractors to perform or provide integral components of the Licensed Services or Application during performance of this Contract without advance written notification to and approval by VITA.

Supplier is responsible for the performance of its subcontractors used in providing any portion of the Licensed Services or Application. Additionally, Supplier is responsible for its subcontractors' compliance with the terms and conditions of this Contract.

9. GENERAL WARRANTY

With respect to the Services provided by Supplier, Supplier represents and warrants the following:

A. Ownership

Supplier has the right to provide the Services, including Deliverables, without violating or infringing any law, rule, regulation, copyright, patent, trade secret or other proprietary right of any third party.

B. Supplier's Viability

Supplier warrants that it has the financial capacity to perform and continue to perform its obligations under this Contract; that Supplier has no constructive or actual knowledge of an actual or potential legal proceeding being brought against Supplier that could materially adversely affect

performance of this Contract; and that entering into this Contract is not prohibited by any contract, or order by any court of competent jurisdiction.

C. Supplier's Past Experience

Supplier warrants that the Services have been successfully performed for a non-related third-party without significant problems due to the Services or Supplier.

D. Performance

- i). All Services shall be performed with care, skill and diligence, consistent with or above applicable professional standards currently recognized in its profession, and Supplier shall be responsible for the professional quality, technical accuracy, completeness and coordination of all plans, information, specifications, Deliverables and Services furnished under this Contract;
- ii). Services pursuant to a particular Request for Proposal ("RFP"), quote, or Request for Quote (RFQ), and any associated Deliverables shall be fit for the particular purposes specified by VITA in the RFP and in this Contract and, if applicable, by the Authorized User requesting such quote or issuing such RFQ, and Supplier is possessed of superior knowledge with respect to the Services and Deliverables and is aware that all Authorized Users are relying on Supplier's skill and judgment in providing the Services and Deliverables;
- iii). The documentation which Supplier is required to provide under this Contract shall be sufficient in detail and content to allow a user/programmer to understand and fully utilize the Deliverables without reference to any other materials or information.

E. Malicious Code

Supplier has used its best efforts through quality assurance procedures to ensure that there are no computer viruses or undocumented features in any of the media or means used to deliver the Services. Supplier has used the best available means to scan any media on which Deliverables are provided to the Authorized User.

F. Limited Warranty Period and Remedy

After acceptance by Authorized User, the warranty period will be one (1) year, or as specified in the applicable SOW, Supplier warrants that the Services shall meet or exceed the Requirements. Supplier shall correct, at no additional cost to any Authorized User, all errors identified during the warranty period that result in a failure of the Services to meet the Requirements. If Supplier is unable to make the Service/Deliverable conform, in all material respects, to the Requirements within ten (10) days following written notification by an Authorized User, Supplier shall, at such Authorized User's request, accept return of such Deliverable and any other related Deliverable(s) rendered unusable, and return all monies paid by such Authorized User for the non-conforming Services and Deliverable and such other related Deliverable(s) rendered unusable.

THE OBLIGATIONS OF SUPPLIER UNDER THIS GENERAL WARRANTY SECTION ARE MATERIAL. SUPPLIER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY CONCERNING MERCHANTABILITY OR FITNESS FOR ANY OTHER PARTICULAR PURPOSE.

10. TRAINING AND DOCUMENTATION

Any training or documentation necessary for an Authorized User to have full benefit of the Services shall be deemed included in the scope of the applicable SOW unless expressly excluded.

11. FEES, ORDERING AND PAYMENT PROCEDURE

A. Fees and Charges

As consideration for Services and any additional related products and services, as authorized by the Contract and provided hereunder, an Authorized User shall pay Supplier the fee(s) set forth on Exhibit B. As consideration for Licensed Services, including the rights of the Authorized User and its Application Users to access and use the Application(s) and any additional related products and services, as authorized by the Contract and provided hereunder, an Authorized User shall pay Supplier the fee(s) set forth on Exhibit B.

Exhibit B lists any and all fees and charges, authorized by the Contract. The fees and any associated discounts shall be applicable throughout the term of this Contract; provided, however,

that in the event the fees or discounts apply for any period less than the entire term, Supplier agrees that it shall not increase the fees more than once during any twelve (12) month period, commencing at the end of year one (1). No such increase shall exceed the lesser of three percent (3%) or the annual increase in the Consumer Price Index for All Urban Consumers (CPI-U), U.S. City Average, All Items, Not Seasonally Adjusted, as published by the Bureau of Labor Statistics of the Department of Labor (<http://www.bls.gov/cpi/home.htm>), for the effective date of the increase compared with the same index one (1) year prior. Any such change in price shall be submitted in writing in accordance with the above and shall not become effective for sixty (60) days thereafter. Supplier agrees to offer price reductions to ensure compliance with the Competitive Pricing Section.

B. Statement of Work (SOW)

An SOW shall be required for any Services and Licensed Services, including the Application, ordered by an Authorized User pursuant to this Contract. All work Supplier is authorized to perform pursuant to this Contract shall be performed in accordance with the Requirements and service levels set forth herein or in the applicable SOW and at the times and locations set forth in the applicable SOW and at the rates set forth in Exhibit B herein. Unless VITA issues a written authorization for a time and materials type SOW, any SOW shall be of a fixed price type but may, with the written approval of the Authorized User, contain a cost-reimbursable line item(s) for pre-approved travel expenses which shall be reimbursable by the Authorized User in accordance with the then-current per diem amounts as published by the Virginia Department of Accounts at <http://www.doa.virginia.gov> or a successor URL(s). For time and materials type SOWs, Supplier personnel shall maintain daily time records of hours and tasks performed, which shall be submitted or made available for inspection by the Authorized User upon forty-eight (48) hours advance written notice. In no event shall any SOW, change orders or any modification thereto require the Supplier to perform any work beyond the scope of this Contract as such scope is defined in Exhibit A hereto.

C. Change Orders

Any change to an SOW must be described in a written change request (template provided as Exhibit F), which includes any appropriate adjustments to the SOW. Either Party to an SOW may issue a change request that will be subject to written approval of the other Party before it becomes part of this Contract.

D. Request for Quote and Supplier Quote

Should an Authorized User determine that a competitive process is required to ensure it receives the best value for Services or Application and Licensed Services, such Authorized User may, at its sole discretion, on a case-by-case basis and upon approval by VITA, use a Request for Quote (RFQ) process to obtain Services or Application and Licensed Services identical or similar to those provided by Supplier pursuant to this Contract. The RFQ process is typically used when an Authorized User requires a complete solution that may be fulfilled by products, services, solution or application and licensed services herein, but whose complexity or size may result in economies that could not be passed on to the Authorized User within the confines of the established pricing. When an RFQ is used, the project timing and requirements will be clearly outlined in the RFQ document. In some situations, the Authorized User may not identify the exact specifications required. If that is the case, the RFQ respondents will be given the opportunity to identify and propose their recommended specifications.

Supplier shall respond to the RFQ by providing a written quote, including (a) a detailed description of each proposed Service, Deliverable, or Application and Licensed Service, as applicable and as authorized by the Contract and at the Exhibit B line item level, (b) the quantity of each such line item, (d) any additional percentage discount offered, and (e) an extended price, and (f) total price, and, if requested by the Authorized User, a proposal and documentation of the qualifications of the individual(s) proposed for providing services to the Authorized User. In no event shall Supplier's quote exceed Supplier's Contract pricing. Should Supplier be unable to respond to the RFQ due, for example, to resource constraints, Supplier shall notify Authorized User in writing of its inability to perform the work requested by such Authorized User, and provide the reasons for such inability to perform, prior to the due date for the submission of quotes in

response to the RFQ. Supplier's repeated failure to provide a quote in response to an RFQ may be grounds for termination of this Contract.

E. Ordering

Supplier is required to accept any order placed by an Authorized User through the eVA electronic procurement website portal (<http://www.eva.virginia.gov/>). eVA is the Commonwealth of Virginia's e-procurement system. State agencies, as defined in §2.2-2006 of the Code of Virginia, shall order through eVA. All other Authorized Users are encouraged to order through eVA, but may order through the following means:

- i). Purchase Order (PO): An official PO form issued by an Authorized User.
- ii). Any other order/payment charge or credit card process, such as AMEX, MASTERCARD, or VISA under contract for use by an Authorized User.

This ordering authority is limited to issuing orders for the services and offerings available and authorized under this Contract. Under no circumstances shall any Authorized User have the authority to modify this Contract. An order from an Authorized User may contain additional terms and conditions; however, to the extent that the terms and conditions of the Authorized User's order are inconsistent with the terms and conditions of this Contract, the terms of this Contract shall supersede.

Notwithstanding the foregoing, Supplier shall not accept any order from an Authorized User if such order is to be funded, in whole or in part, by federal funds and if, at the time the order is placed, Supplier is not eligible to be the recipient of federal funds as may be noted on any of the Lists of Parties Excluded from Federal Procurement and Nonprocurement Programs.

ALL CONTRACTUAL OBLIGATIONS UNDER THIS CONTRACT IN CONNECTION WITH AN ORDER PLACED BY ANY AUTHORIZED USER ARE THE SOLE OBLIGATION OF SUCH AUTHORIZED USER AND NOT THE RESPONSIBILITY OF VITA UNLESS SUCH AUTHORIZED USER IS VITA.

F. Purchase Price and Price Protection

Exhibit B sets forth the fees and the appropriate Commonwealth discounts. Fees shall not increase and discounts shall not decrease for a period of not less than two (2) years from the Effective Date. No such increase shall exceed the lesser of three percent (3%) or the annual increase in the Consumer Price Index for All Urban Consumers (CPI-U), U.S. City Average, All Items, not seasonally adjusted, as published by the Bureau of Labor Statistics of the Department of Labor (<http://www.bls.gov/cpi/home.htm>), for the effective date of the increase compared with the same index one (1) year prior. Any such change in price shall be submitted in writing in accordance with the above and shall not become effective for sixty (60) days thereafter. Supplier agrees to offer price reductions to ensure compliance with the Competitive Pricing Section.

G. Invoice Procedure for Primary Product

Supplier shall submit invoices to VITA in accordance with the milestone payment schedule set forth below. Invoiced Deliverables may reflect partial completion of a Phase. Except for final Primary Product, payment will be made to Supplier by VITA within thirty (30) days of receipt of each invoice, and payment will not be subject to product review and approval by VITA. However, delivered interim product found to be unacceptable during Acceptance Testing and not corrected during the Cure Period will be credited against the next Supplier invoice, until corrected. Payment for final Primary Product shall not be made until thirty (30) days after Acceptance.

The milestone payment schedule is as follows:

Milestone	Percentage of Primary Product Price (prior to retainage)
Project planning and setup	2%
Imagery collection phase of the Contract Services. Invoices will be submitted monthly based on the percentage of area of the Commonwealth successfully collected, as evidenced by submittal of a detailed monthly data acquisition report specifying the amount of acceptable airborne data obtained and quality assured in a given month, which are certified by Supplier to be of sufficient quality and clarity to support the digital orthoimagery development for the project. The final certification and true-up will occur at the post flight meeting.	30%
Control phase. Invoices will be submitted monthly based on the percentage completion of control as evidenced by submission of the individual sub production control reports. These reports may be preliminary if adjacent network ties have not yet been performed. Final certification will be based on acceptance of the final control report.	8%
Aerial Triangulation, Invoices will be submitted based on delivery of individual aerial triangulation reports.	10%
Digital Terrain Model and Digital Orthoimage rectification phase. Invoices will be submitted monthly based on the percentage completion as evidenced by submission of digital orthoimagery tiles and accompanying Digital Terrain Model tiles. (These deliverables can be submitted and payments made in incremental stages over the term of the contract based on a negotiated delivery schedule)	30%
County Digital Orthoimagery phase. Invoices will be submitted monthly based on the percentage completion of County Digital Orthoimagery as evidenced by delivery of the individual County Digital Orthoimagery data sets of the digital orthoimagery, DTM tiles, and ancillary data, including all resolutions of digital orthoimagery involved, for an individual County or City. (The amount per tile will be based the fee per tile in accordance with Attachment B (Fees and Pricing) (These deliverables can be submitted and payments made in incremental stages over the term of the contract based on a negotiated delivery schedule.)	20%
Total	100%

Supplier's invoice shall show retainage of ten (10%) for Services and Deliverables. Following Acceptance of each jurisdiction Deliverables, Supplier shall submit a final invoice to VITA, for the total amount retained by VITA.

No invoice shall include any costs other than those identified in Exhibit B. Without limiting the foregoing, all shipping costs are the Supplier's responsibility except to the extent such charges are identified in Exhibit B. Invoices issued by the Supplier shall identify at a minimum:

- i. Service type and description
- ii. Quantity, charge and extended pricing for each Service item
- iii. This Contract number
- iv. Supplier's Federal Employer Identification Number (EIN)

H. Invoice Procedure for Secondary Product

Supplier shall remit each invoice to VITA upon delivery of Secondary Product to VITA. Payment to Supplier shall be due thirty (30) days after Acceptance of Secondary Product. Supplier's invoice shall include the same information as requested for Primary Product.

I. Invoice Procedures for Task Order

Supplier shall remit each invoice to the "bill to" address provided with the Task Order promptly after all Deliverables have been accepted, unless otherwise negotiated with the consent of both parties. No invoice shall include any costs other than those identified in Exhibit B or the executed Task Order referencing this Contract. Without limiting the foregoing, all shipping costs are the Supplier's responsibility except to the extent such charges are identified in Exhibit B, or as noted in any executed Task Order referencing this Contract. Invoices issued by the Supplier shall identify at a minimum:

- i. Service type and description
- ii. Quantity, charge and extended pricing for each Service item
- iii. Applicable Task Order date
- iv. This Contract number and the applicable order number
- v. Supplier's Federal Employer Identification Number (EIN)

Payment terms are net thirty (30) days from Acceptance and receipt of a valid invoice.

ALL CONTRACTUAL OBLIGATIONS UNDER THIS CONTRACT IN CONNECTION WITH AN ORDER PLACED BY ANY PUBLIC BODY (as that term is defined in §2.2-4301 of the Code of Virginia) OF ANY COUNTY, CITY OR TOWN LOCATED WITHIN THE COMMONWEALTH OF VIRGINIA ARE THE SOLE OBLIGATION OF THE COUNTY CITY OR TOWN PLACING THE ORDER AND NOT THE RESPONSIBILITY OF VITA.

J. Purchase Payment Terms

Supplier is responsible for the accuracy of its billing information. Supplier agrees not to issue invoices hereunder until Services have been performed or milestones have met Acceptance criteria. Charges for Services accepted more than ninety (90) days prior to receipt of a valid invoice may not be paid, except in accordance with a milestone payment schedule. Should Supplier repeatedly over bill Authorized User, Authorized User may assess a one percent (1%) charge for the amount over billed for each month that such over billing continues.

If there are any disputed items, the appropriate Authorized User shall pay all undisputed charges and promptly notify Supplier in writing of any disputed amount. Supplier shall thereupon review its records, and, if it does not concur with such Authorized User, provide such Authorized User with documentation to support the charge. If such charges remain in dispute, such dispute shall be resolved in accordance with the Dispute Resolution section of this Contract. In the absence of the Supplier's written evidence identifying the merit of the disputed amounts, Authorized User may not pay the disputed amounts and may consider the matter concerning the specific identified amounts closed. All payment terms are net 30 days after Acceptance, except as specified elsewhere in this Agreement.

K. Reimbursement of Expenses

If allowable pursuant to an Authorized User's SOW, such Authorized User shall pay, or reimburse Supplier, for all reasonable and actual travel-related expenses for greater than thirty (30) miles from portal to portal incurred by Supplier during the relevant period; provided, however, that such Authorized User shall only be liable to pay for Supplier's travel-related expenses, including transportation, meals, lodging and incidental expenses, that have been authorized by such Authorized User in advance and which will be reimbursable by such Authorized User at the then-current per diem amounts as published by the Virginia Department of Accounts (<http://www.doa.virginia.gov/>, or a successor URL(s)).

All reimbursed expenses will be billed to the Authorized User on a pass-through basis without any markup by Supplier. At Authorized User's request, Supplier shall provide copies of receipts for all travel expenses over US\$30.00.

12. REPORTING

Supplier is required to submit to VITA the following monthly reports:

- Report of Sales; and
- Small Business Subcontracting Report

These reports must be submitted using the instructions found at the following URL: <http://www.vita.virginia.gov/scm/default.aspx?id=97>

Failure to comply with all reporting requirements may result in default of the Contract.

Suppliers are encouraged to review the site periodically for updates on Supplier reporting.

13. NO BENEFIT TO SUPPLIER

In performance of this Contract, Supplier, its employees, agents, partners and subcontractors are restricted from including any web content, including advertisements, logos, endorsements or statements, on web pages or portals paid for by public funds that would promote any financial or other benefit or preference to Supplier, its employees, agents, partners and subcontractors. Written request to and approval from VITA must be obtained for any deviation from this restriction.

14. CONFIDENTIALITY

A. Treatment and Protection

Each Party shall (i) hold in strict confidence all Confidential Information of any other Party, (ii) use the Confidential Information solely to perform or to exercise its rights under this Contract, and (iii) not transfer, display, convey or otherwise disclose or make available all or any part of such Confidential Information to any third-party. However, an Authorized User may disclose the Confidential Information as delivered by Supplier to subcontractors, contractors or agents of such Authorized User that are bound by non-disclosure contracts with such Authorized User. Each Party shall take the same measures to protect against the disclosure or use of the Confidential Information as it takes to protect its own proprietary or confidential information (but in no event shall such measures be less than reasonable care).

B. Exclusions

The term "Confidential Information" shall not include information that is:

- i). in the public domain through no fault of the receiving Party or of any other person or entity that is similarly contractually or otherwise obligated;
- ii). obtained independently from a third-party without an obligation of confidentiality to the disclosing Party and without breach of this Contract;
- iii). developed independently by the receiving Party without reference to the Confidential Information of the other Party; or
- iv). required to be disclosed under The Virginia Freedom of Information Act (§§2.2-3700 et seq. of the Code of Virginia) or similar laws or pursuant to a court order.

C. Return or Destruction

Upon the termination or expiration of this Contract or upon the earlier request of the disclosing Authorized User, Supplier shall (i) at its own expense, (a) promptly return to the disclosing Authorized User all tangible Confidential Information (and all copies thereof except the record required by law) of the disclosing Authorized User, or (b) upon written request from the disclosing Authorized User, destroy such Confidential Information and provide the disclosing Authorized User with written certification of such destruction, and (ii) cease all further use of the Authorized User's Confidential Information, whether in tangible or intangible form.

VITA or the Authorized User shall retain and dispose of Supplier's Confidential Information in accordance with the Commonwealth of Virginia's records retention policies or, if Authorized User is not subject to such policies, in accordance with such Authorized User's own records retention policies.

D. Confidentiality Statement

All Supplier personnel, contractors, agents, and subcontractors performing Services or any work pursuant to this Contract shall be required to sign a confidentiality statement or non-disclosure agreement. Any violation of such statement or agreement shall be deemed a breach of this Contract and may result in termination of the Contract or any order or SOW issued hereunder.

15. INDEMNIFICATION AND LIABILITY**A. Indemnification**

Supplier agrees to indemnify, defend and hold harmless the Commonwealth, VITA, any Authorized User, their officers, directors, agents and employees (collectively, "Commonwealth's Indemnified Parties") from and against any and all losses, damages, claims, demands, proceedings, suits and actions, including any related liabilities, obligations, losses, damages, assessments, fines, penalties (whether criminal or civil), judgments, settlements, expenses (including attorneys' and accountants' fees and disbursements) and costs (each, a "Claim" and collectively, "Claims"), incurred by, borne by or asserted against any of Commonwealth's Indemnified Parties to the extent such Claims in any way relate to, arise out of or result from: (i) any intentional or willful conduct or negligence of any employee, agent, or subcontractor of Supplier, (ii) any act or omission of any employee, agent, or subcontractor of Supplier, (iii) breach of any representation, warranty or covenant of Supplier contained herein, (iv) any defect in the Deliverables or the Services, or (v) any actual or alleged infringement or misappropriation of any third party's intellectual property rights by any of the Deliverables or Services. Selection and approval of counsel and approval of any settlement shall be accomplished in accordance with all applicable laws, rules and regulations. For state agencies the applicable laws include §§ 2.2-510 and 2.2-514 of the Code of Virginia. In all cases the selection and approval of counsel and approval of any settlement shall be satisfactory to the Commonwealth.

In the event that a Claim is commenced against any of Commonwealth's Indemnified Parties alleging that use of any Deliverable or that the provision of Services under this Contract infringes any third party's intellectual property rights and Supplier is of the opinion that the allegations in such Claim in whole or in part are not covered by this indemnification provision, Supplier shall immediately notify VITA and the affected Authorized User(s) in writing, via certified mail, specifying to what extent Supplier believes it is obligated to defend and indemnify under the terms and conditions of this Contract. Supplier shall in such event protect the interests of the Commonwealth's Indemnified Parties and secure a continuance to permit VITA and the affected Authorized User(s) to appear and defend their interests in cooperation with Supplier as is appropriate, including any jurisdictional defenses VITA or the affected Authorized User(s) may have.

In the event of a Claim pursuant to any actual or alleged infringement or misappropriation of any third party's intellectual property rights by any of the Services or Deliverables, and in addition to all other obligations of Supplier in this Section, Supplier shall at its expense, either (a) procure for all Authorized Users the right to continue use of such infringing Services or Deliverables; or (b) replace or modify such infringing Services or Deliverables with non-infringing deliverables or services satisfactory to VITA. And in addition, Supplier shall provide any Authorized User with

comparable temporary replacement deliverables and services, or reimburse VITA or any Authorized User for the reasonable costs incurred by VITA or such Authorized User in obtaining alternative deliverables and services in the event such Authorized User cannot use the affected Deliverable or benefit from the affected Services. If Supplier cannot accomplish any of the foregoing within a reasonable time and at commercially reasonable rates, then Supplier shall accept the return of the infringing Services or Deliverables, along with any other Services or Deliverables rendered unusable by any Authorized User as a result of the infringing Services or Deliverables, and refund the price paid to Supplier for such Services and Deliverables.

B. Liability

Supplier shall have unlimited liability with respect to (i) any intentional or willful misconduct or negligence of any employee, agent, or subcontractor of Supplier, (ii) any act or omission of any employee, agent, or subcontractor of Supplier, (iii) claims for bodily injury, including death, and real and tangible property damage, (iv) Supplier's indemnification obligations, (v) Supplier's confidentiality obligations, and (vi) Supplier's security compliance obligations. Supplier agrees that it is fully responsible for all acts and omissions of its employees, agents, and subcontractors, including their gross negligence or willful misconduct.

For hosting, Supplier's liability to the Commonwealth under this Contract for breach of this Contract's confidentiality, security, or indemnification provisions shall be limited to two (2) times the annual value of this Contract. The same limitation on the Supplier's liability to the Commonwealth under this Contract shall apply to any other breach of this Contract by Supplier, if the breach arises from any intentional, willful, or negligent act or omission of any employee, agent, or subcontractor of Supplier or if the damages are based on bodily injury, death, or damage to real property or tangible personal property. The limitation shall apply on a per-incident basis, it being understood that multiple losses stemming from the same root cause constitute a single incident.

EXCEPT FOR CLAIMS COVERED BY THE ABOVE DOLLAR LIMITATION, NEITHER PARTY SHALL BE LIABLE TO THE OTHER PARTY FOR INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES UNDER THIS CONTRACT, INCLUDING (WITHOUT LIMITATION) LOSS OF PROFIT, INCOME OR SAVINGS, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.

16. LICENSES, REGISTRATIONS, AND CERTIFICATES

A. Corporate

At all times during the data collection period of the Contract, Supplier shall maintain a current commercial aviation license. Upon VITA's request, the Supplier shall provide a current copy of its Federal Aviation Regulation Certificate, Part 91.

B. Personnel

Upon request, Supplier shall provide to VITA copies of the following with respect to the pilots performing Services under this Contract: (i) commercial pilot certificate, (ii) FAA certification, and (iii) aircraft logs.

C. Aircraft

Upon request, Supplier shall provide to VITA the following with request to such aircraft: (i) Type Certificate Data Sheet (TCDS), (ii) FAA aircraft registration, and (iii) airworthiness certificate.

17. INTERACTION WITH COMMONWEALTH WEB PAGES

VITA, the Commonwealth of Virginia and any and all Authorized Users of this Contract shall assume no responsibility or liability for any complications, disruptions, system failures, corruptions, malicious code or software or data compromise in connection with or due to the transmission of information that may be contained on any Commonwealth of Virginia's web pages, or the third-party software, services or licensed services and/or applications that compose their operation, nor for any information accessed, downloaded, transferred, used, or otherwise taken from them, individually or in total.

Further, VITA, the Commonwealth of Virginia and any and all Authorized Users of this Contract shall not be held responsible or liable for any infringements, negligence or other direct or indirect

actions of third parties whose software, services or licensed services and applications may directly or indirectly integrate into the Services being procured from Supplier under this Contract.

18. INSURANCE

In addition to the insurance coverage required by law as specified in the URL identified in the Incorporated Contractual Provisions section of this Contract, Supplier shall carry errors and omissions insurance coverage in the amount of \$1,000,000 per occurrence.

Supplier shall maintain aviation liability insurance with a "A" rated insurance carrier covering the aircraft to be used in performing the Services with a \$10,000,000 limit liability for each event, to include coverage for passengers and third parties on the surface. The Commonwealth of Virginia must be named as an additional insured and so endorsed on the policy. Supplier shall notify VITA immediately if its insurance coverages are modified or terminated.

19. PERFORMANCE AND PAYMENT BONDS

The successful Offeror shall deliver to the VITA's Supply Chain Management Division, (or SPOC) a fully office executed Commonwealth of Virginia Standard Performance and Payment bond in the sum of the contract amount for FY13 (eastern half of the state project), with the Commonwealth of Virginia as obligee. Another Performance and Payment bond is due before work begins for FY15 (western half of the state) in the sum of the contract amount for FY11, again with the Commonwealth of Virginia as obligee. The surety shall be a surety company or companies approved by the State Corporation Commission to transact business in the Commonwealth of Virginia. No payment shall be due and payable to the contractor, even if the contract has been performed in whole or in part, until the bonds have been delivered to and approved by the purchasing office. Standard bond forms will be provided by VITA's Supply Chain Management Division prior to or at the time of award.

20. SECURITY COMPLIANCE

Supplier agrees to comply with all provisions of the then-current Commonwealth of Virginia security procedures, published by the Virginia Information Technologies Agency (VITA) and which may be found at (<http://www.vita.virginia.gov/library/default.aspx?id=537#securityPSGs>) or a successor URL(s), as are pertinent to Supplier's operation. Supplier further agrees to comply with all provisions of the relevant Authorized User's then-current security procedures as are pertinent to Supplier's operation and which have been supplied to Supplier by such Authorized User. Supplier shall also comply with all applicable federal, state and local laws and regulations. For any individual Authorized User location, security procedures may include but not be limited to: background checks, records verification, photographing, and fingerprinting of Supplier's employees or agents. Supplier may, at any time, be required to execute and complete, for each individual Supplier employee or agent, additional forms which may include non-disclosure agreements to be signed by Supplier's employees or agents acknowledging that all Authorized User information with which such employees and agents come into contact while at the Authorized User site is confidential and proprietary. Any unauthorized release of proprietary or Personal information by the Supplier or an employee or agent of Supplier shall constitute a breach of its obligations under this Section and the Contract.

Supplier shall immediately notify VITA and Authorized User, if applicable, of any Breach of Unencrypted and Unredacted Personal Information, as those terms are defined in Virginia Code 18.2-186.6, and other personal identifying information, such as insurance data or date of birth, provided by VITA or Authorized User to Supplier. Supplier shall provide VITA the opportunity to participate in the investigation of the Breach and to exercise control over reporting the unauthorized disclosure, to the extent permitted by law.

Supplier shall indemnify, defend, and hold the Commonwealth, VITA, the Authorized User, their officers, directors, employees and agents harmless from and against any and all fines, penalties (whether criminal or civil), judgments, damages and assessments, including reasonable expenses suffered by, accrued against, or charged to or recoverable from the Commonwealth, VITA, the Authorized User, their officers, directors, agents or employees, on account of the failure of Supplier to perform its obligations pursuant this Section.

VITA shall have the right to review Supplier's information security program prior to the commencement of Licensed Services and from time to time during the term of this Agreement. During the performance of the Licensed Services, on an ongoing basis from time to time, VITA, at its own expense, shall be entitled to perform, or to have performed, an on-site audit of Supplier's information security program. In lieu of an on-site audit, upon request by VITA, Supplier agrees to complete, within forty-five (45 days) of receipt, an audit questionnaire provided by VITA regarding Supplier's information security program. Supplier shall implement any reasonably required safeguards as identified by any program audit.

21. IMPORT/EXPORT

In addition to compliance by Supplier with all export laws and regulations, VITA requires that any data deemed "restricted" or "sensitive" by either federal or state authorities, must only be collected, developed, analyzed, or otherwise used or obtained by persons or entities working within the boundaries of the United States. Unless otherwise specified in an applicable SOW, the Application and Licensed Services shall be provided and all Content stored by Supplier on servers, storage or nodes physically located in the continental United States.

22. BANKRUPTCY

If Supplier becomes insolvent, takes any step leading to its cessation as a going concern, fails to pay its debts as they become due, or ceases business operations continuously for longer than fifteen (15) business days, then VITA may immediately terminate this Contract, and an Authorized User may terminate an order, on notice to Supplier unless Supplier immediately gives VITA or such Authorized User adequate assurance of the future performance of this Contract or the applicable order. If bankruptcy proceedings are commenced with respect to Supplier, and if this Contract has not otherwise terminated, then VITA may suspend all further performance of this Contract until Supplier assumes this Contract and provides adequate assurance of performance thereof or rejects this Contract pursuant to Section 365 of the Bankruptcy Code or any similar or successor provision, it being agreed by VITA and Supplier that this is an executory contract. Any such suspension of further performance by VITA or Authorized User pending Supplier's assumption or rejection shall not be a breach of this Contract, and shall not affect the rights of VITA or any Authorized User to pursue or enforce any of its rights under this Contract or otherwise.

23. GENERAL PROVISIONS

A. Relationship Between VITA and Authorized User and Supplier

Supplier has no authority to contract for VITA or any Authorized User or in any way to bind, to commit VITA or any Authorized User to any agreement of any kind, or to assume any liabilities of any nature in the name of or on behalf of VITA or any Authorized User. Under no circumstances shall Supplier, or any of its employees, hold itself out as or be considered an agent or an employee of VITA or any Authorized User, and neither VITA nor any Authorized User shall have any duty to provide or maintain any insurance or other employee benefits on behalf of Supplier or its employees. Supplier represents and warrants that it is an independent contractor for purposes of federal, state and local employment taxes and agrees that neither VITA nor any Authorized User is responsible to collect or withhold any federal, state or local employment taxes, including, but not limited to, income tax withholding and social security contributions, for Supplier. Any and all taxes, interest or penalties, including, but not limited to, any federal, state or local withholding or employment taxes, imposed, assessed or levied as a result of this Contract shall be paid or withheld by Supplier or, if assessed against and paid by VITA or any Authorized User, shall be reimbursed by Supplier upon demand by VITA or such Authorized User.

B. Incorporated Contractual Provisions

The then-current contractual provisions at the following URL are mandatory contractual provisions, required by law or by VITA, and that are hereby incorporated by reference: <http://www.vita.virginia.gov/uploadedFiles/SCM/StatutorilyMandatedTsandCs.pdf>

The contractual claims provision §2.2-4363 of the Code of Virginia and the required eVA provisions at <http://www.vita.virginia.gov/uploadedFiles/SCM/eVATsandCs.pdf> are also incorporated by reference.

The then-current contractual provisions at the following URL are required contractual provisions, required by law or by VITA, that apply to this VITA-specific Contract that is OR to all orders placed under this Contract that are partially or wholly funded by the American Recovery and Reinvestment Act of 2009 (ARRA) and are hereby incorporated by reference:

http://www.vita.virginia.gov/uploadedFiles/SCM/ARRA_Ts_Cs_Rev3.pdf

The then-current terms and conditions in documents posted to the aforereferenced URLs are subject to change pursuant to action by the legislature of the Commonwealth of Virginia, change in VITA policy, or the adoption of revised eVA business requirements. If a change is made to the terms and conditions, a new effective date will be noted in the document title. Supplier is advised to check the URLs periodically.

C. Compliance with the Federal Lobbying Act

Supplier's signed certification of compliance with 31 USC 1352 (entitled "Limitation on use of appropriated funds to influence certain Federal Contracting and financial transactions") or by the regulations issued from time to time thereunder (together, the "Lobbying Act") is incorporated as Exhibit I hereto.

D. Governing Law

This Contract shall be governed by and construed in accordance with the laws of the Commonwealth of Virginia without regard to that body of law controlling choice of law. Any and all litigation shall be brought in the circuit courts of the Commonwealth of Virginia. The English language version of this Contract prevails when interpreting this Contract. The United Nations Convention on Contracts for the International Sale of Goods and all other laws and international treaties or conventions relating to the sale of goods are expressly disclaimed. UCITA shall apply to this Contract only to the extent required by §59.1-501.15 of the Code of Virginia.

E. Dispute Resolution

In accordance with §2.2-4363 of the Code of Virginia, Contractual claims, whether for money or other relief, shall be submitted in writing to the public body from whom the relief is sought no later than sixty (60) days after final payment; however, written notice of the Supplier's intention to file such claim must be given to such public body at the time of the occurrence or beginning of the work upon which the claim is based. Pendency of claims shall not delay payment of amounts agreed due in the final payment. The relevant public body shall render a final decision in writing within thirty (30) days after its receipt of the Supplier's written claim.

The Supplier may not invoke any available administrative procedure under §2.2-4365 of the Code of Virginia nor institute legal action prior to receipt of the decision of the relevant public body on the claim, unless that public body fails to render its decision within thirty (30) days. The decision of the relevant public body shall be final and conclusive unless the Supplier, within six (6) months of the date of the final decision on the claim, invokes appropriate action under §2.2-4364, Code of Virginia or the administrative procedure authorized by §2.2-4365, Code of Virginia.

Upon request from the public body from whom the relief is sought, Supplier agrees to submit any and all contractual disputes arising from this Contract to such public body's alternative dispute resolution (ADR) procedures, if any. Supplier may invoke such public body's ADR procedures at any time and concurrently with any other statutory remedies prescribed by the Code of Virginia.

In the event of any breach by a public body, Supplier's remedies shall be limited to claims for damages and Prompt Payment Act interest and, if available and warranted, equitable relief, all such claims to be processed pursuant to this Section. In no event shall Supplier's remedies include the right to terminate any license or support services hereunder.

F. Advertising and Use of Proprietary Marks

Supplier shall not use the name of VITA or any Authorized User's name or refer to VITA or any Authorized User, directly or indirectly, in any press release or formal advertisement without receiving prior written consent of VITA or such Authorized User. In no event may Supplier use a proprietary mark of VITA or an Authorized User without receiving the prior written consent of VITA or the Authorized User.

G. Notices

Any notice required or permitted to be given under this Contract shall be in writing and shall be deemed to have been sufficiently given if delivered in person, or if deposited in the U.S. mails,

postage prepaid, for mailing by registered, certified mail, or overnight courier service addressed to:

- i). To VITA and to Supplier, if Supplier is incorporated in the Commonwealth of Virginia, to the addresses shown on the signature page.
- ii). To Supplier, if Supplier is incorporated outside the Commonwealth of Virginia, to the Registered Agent registered with the Virginia State Corporation Commission.

Pursuant to Title 13.1 of the Code of Virginia, VITA or Supplier may change its address for notice purposes by giving the other notice of such change in accordance with this Section.

Administrative contract renewals, modifications or non-claim related notices are excluded from the above requirement. Such written and/or executed contract administration actions may be processed by the assigned VITA and Supplier points of contact for this Contract and may be given in person, via U.S. mail, courier service or electronically

H. No Waiver

Any failure to enforce any terms of this Contract shall not constitute a waiver.

I. Assignment

This Contract shall be binding upon and shall inure to the benefit of the permitted successors and assigns of VITA and Supplier. Supplier may not assign, subcontract, delegate or otherwise convey this Contract or any of its rights and obligations hereunder, to any entity without the prior written consent of VITA, and any such attempted assignment or subcontracting without consent shall be void. VITA may assign this Contract to any entity, so long as the assignee agrees in writing to be bound by the all the terms and conditions of this Contract.

If any law limits the right of VITA or Supplier to prohibit assignment or nonconsensual assignments, the effective date of the assignment shall be thirty (30) days after the Supplier gives VITA prompt written notice of the assignment, signed by authorized representatives of both the Supplier and the assignee. Any payments made prior to receipt of such notification shall not be covered by this assignment.

J. Captions

The captions are for convenience and in no way define, limit or enlarge the scope of this Contract or any of its Sections.

K. Severability

Invalidity of any term of this Contract, in whole or in part, shall not affect the validity of any other term. VITA and Supplier further agree that in the event such provision is an essential part of this Contract, they shall immediately begin negotiations for a suitable replacement provision.

L. Survival

The provisions of this Contract regarding License, Rights To Work Products, Warranty, Confidentiality, Content Privacy and Security, Liability and Indemnification, and the General Provisions shall survive the expiration or termination of this Contract.

M. Force Majeure

No Party shall be responsible for failure to meet its obligations under this Contract if the failure arises from causes beyond the control and without the fault or negligence of the non-performing Party. If any performance date under this Contract is postponed or extended pursuant to this section for longer than thirty (30) calendar days, VITA, by written notice given during the postponement or extension, may terminate Supplier's right to render further performance after the effective date of termination without liability for that termination, and in addition an Authorized User may terminate any order or SOW affected by such postponement or delay.

N. Remedies

The remedies set forth in this Contract are intended to be cumulative. In addition to any specific remedy, VITA and all Authorized Users reserve any and all other remedies that may be available at law or in equity.

O. Right to Audit

VITA reserves the right to audit those Supplier records that relate to the Services rendered or the amounts due Supplier for such Services under this Contract. VITA's right to audit shall be limited as follows:

- i). Three (3) years from Software delivery or Service performance date or, as applicable;
- ii). Five (5) years after termination/completion of any Licensed Services provided under the Contract;
- iii). Performed at Supplier's premises, during normal business hours at mutually agreed upon times; and
- iv). Excludes access to Supplier cost information.

The Supplier shall not have the right to audit, or require to have audited, VITA or any Authorized User.

P. Offers of Employment

During the first twelve (12) months of the Contract, should Supplier hire an employee of an Authorized User who has substantially worked on any project covered by this Contract without prior written consent, the Supplier shall be billed for fifty percent (50%) of the employee's annual salary in effect at the time of termination.

Q. Contract Administration

Supplier agrees that at all times during the term of this Contract an account executive, at Supplier's senior management level, shall be assigned and available to VITA. Supplier reserves the right to change such account executive upon reasonable advance written notice to VITA.

R. Entire Contract

The following Exhibits, including all subparts thereof, are attached to this Contract and are made a part of this Contract for all purposes:

- i). Exhibit A Services and Licensed Services Requirements
- ii). Exhibit B Fees, Service Charges and Payment Schedule
- iii). Exhibit C Reserved
- iv). Exhibit D Additional Application and Licensed Services Terms and Conditions
- v). Exhibit E Statement of Work (SOW) Template
- vi). Exhibit F Change Order Template
- vii). Exhibit G Acceptance Criteria
- viii). Exhibit H End User Licensing Agreement (for reference only)
- ix). Exhibit I Certification Regarding Lobbying
- x). Exhibit J Acceptable Use Policy (provided by Supplier if applicable)

This Contract, its Exhibits, and any prior non-disclosure agreement constitute the entire agreement between VITA and Supplier and supersede any and all previous representations, understandings, discussions or agreements between VITA and Supplier as to the subject matter hereof. Any and all terms and conditions contained in, incorporated into, or referenced by the Supplier's Proposal shall be deemed invalid. The provisions of the Virginia Department of General Services, Division of Purchases and Supply Vendor's Manual shall not apply to this Contract or any order or SOW issued hereunder. This Contract may only be amended by an instrument in writing signed by VITA and Supplier. In the event of a conflict, the following order of precedence shall apply: this Contract document, Exhibits C and D, Exhibit A, Exhibit B, any individual SOW.

Any modification to an order or SOW that extends the period of performance beyond one (1) year or increases the value of such SOW above US\$100,000 shall, absent the prior written approval of

VITA, be voidable by VITA, in its sole discretion. If an SOW is voided by VITA, such SOW shall no longer be binding on either Party and all obligations with respect to such SOW shall expire.

An Authorized User and Supplier may enter into an ordering agreement pursuant to this Contract. To the extent that such ordering agreement, or any order or SOW issued hereunder, include any terms and conditions inconsistent with the terms and conditions of this Contract, such terms and conditions shall be of no force and effect.

VITA and Supplier each acknowledge that it has had the opportunity to review this Contract and to obtain appropriate legal review if it so chose.

Executed as of the last date set forth below by the undersigned authorized representatives of VITA and Supplier.

The Sanborn Map Company, Inc.

By: 
(Signature)

Name: John R. Copple

(Print)

Title: President/CEO

Date: 12/7/12

Address for Notice:

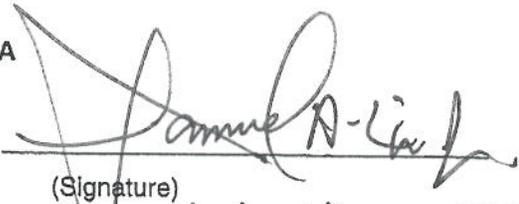
1935 Jamboree Drive

Suite 100

Colorado Springs, CO 80920

Attention: Corporate Contracts

VITA

By: 
(Signature)

Name: Samuel A. Nixon Jr.

(Print)

Title: Chief Information Officer

Date: 12/7/12

Address for Notice:

11751 Meadowville Ln

Chester, VA 23836

Attention: Contract Administrator

Exhibit A

Services and Licensed Services Requirements

5.1 General			
		A	B
5.1.1	<p>Does your Solution comply with all current COV ITRM Policies and Standards, as applicable, found at: http://www.vita.virginia.gov/library/default.aspx?id=537</p> <p>If proposed solution does not, please provide details that specify the Standard/Policy and how Supplier's solution does not comply.</p>	Yes	Sanborn requires change management and control in all aspects of IT Infrastructure. Data, in particular, is administered by a dedicated data-steward to ensure policies and guidelines are enforced.
5.1.2	<p>Does your Solution's proposed interfaces to Commonwealth systems comply with or have approved exceptions to all applicable Commonwealth Data Standards as found at: http://www.vita.virginia.gov/oversight/default.aspx?id=10344</p> <p>If not, please explain.</p>	Yes	
5.1.3	<p>Does your Solution provide effective, interactive control and use with nonvisual means and provide 508 Compliance in accordance with the following standard regarding IT Accessibility and 508 Compliance: http://www.vita.virginia.gov/uploadedFiles/Library/AccessibilityStandard_GOV103-00_Eff_11-04-05.pdf</p> <p>(Refer to www.section508.gov and www.access-board.gov for further information)</p> <p>If yes, please describe how this functionality is achieved and include a completed Voluntary Product Accessibility Template (VPAT) with your proposal: (The VPAT template is located in APPENDIX C of the Accessibility Standard (GOV103-00)).</p> <p>If no, does your Solution provide alternate accessibility functionality? Please describe.</p>	Yes	The VGIN data-hosting will be architected so that it can be accessed via ArcGIS products. "ESRI is committed to providing the information you need to evaluate the impact of Section 508 on your Geographic Information Systems (GIS) environment". Specific software information can be found http://www.esri.com/legal/section508/index.html here

5.2.18	Does your Solution's LiDAR products meet the USGS Version 13 standards? If yes, please explain.	Yes	Sanborn is highly familiar with the <u>USGS-NGP Lidar Guidelines and Base Specification v13(ILMF)</u> , and has delivered data for numerous projects in compliance with its standards. All projects under this contract will be designed to meet this specification. Sanborn possesses all of the required equipment and software needed to perform work to V.13 specifications, and our personnel are trained and experienced in the methods and procedures that need to be followed to achieve full compliance, from collection, processing of the raw point cloud, classification of the point cloud, bare earth surface creation, breakline development, hydro flattening, preparation of derivative data products such as contours and building outlines, and preparation of metadata and reports. Please see Appendices – Requirements, Section 5.7.1.5 for complete details.
5.2.19	Does your Solution' include accuracies that are reported per National Standards for Spatial Data Accuracy? If yes, please explain.	Yes	The accuracy of all data products within each state plane coordinate zone will meet the Virginia Base Mapping standards for mapping at the desired scale and reported according to the NSSDA standard at 95% confidence level.
5.2.20	Does your Solution's spatial reference and unit data include being referenced to the North American 1983 HARN horizontal datum and the North American Vertical Datum of 1988 using the latest published NGS Geoid model? If yes, please explain.	Yes	<p>All survey control that Sanborn has established for the VBMP, or will in the future, is secured in accordance with National Geodetic Survey (NGS) standards, and all coordinates are of first-order accuracy. The horizontal control adjustment is in the NAD 83/93 (HARN) reference datum. The vertical control meets, at a minimum, third-order vertical accuracy specifications, and is in the NAVD 88 reference datum.</p> <p>Sanborn will ensure that all control is adjusted to the latest NAD 83 realization, currently NAD83 (2011) Epoch 2010, and to the latest published Geoid model, currently Geoid 2012. All coordinates and derived data will be in U.S. Survey Feet.</p> <p>Please see Appendices – Requirements, Section 5.4.1.1 for complete details.</p>
5.2.21	Does your Solution include data that can be in the Virginia State Plane Coordinate System using US Survey Feet? If yes, please explain.	Yes	All data that Sanborn provides under this contract will be in the Virginia State Plane Coordinate System, North or South Zones, as appropriate, in units of U.S. Survey Feet. Please see Appendices – Requirements, Section 5.4 for complete details on ground control and project orientation.
5.2.22	Does your Solution include data that can be referenced in either the North or South State Plane Zone according to County zone assignments? If yes, please explain.	Yes	Sanborn will provide all derived data products created under this contract in conformance with County zone assignments – either North or South, as appropriate, in the Virginia State Plane Coordinate System, in units of U.S. Survey Feet. Please see Appendices – Requirements, Section 5.4 for complete details on ground control and project orientation.

5.2.13	Does your Solution include upgrade options for other planimetrics at a scale of 1"=200' (1:2400)? If yes, please explain.	Yes	Sanborn can perform full or partial planimetric feature extraction for each area of interest as tasked through the buy-up program. Sanborn will ensure that the source data – control, imagery, and orientation information, are acquired at levels sufficient to support photogrammetric extraction of planimetric features at the scale of 1"=200'. The size, type, and quantity of planimetric features extracted will be commensurate with 1"=200' mapping. Please see the "200' Mapping" tab in the attached VBMP Planimetric Capture Specification for features that will be extracted if full planimetric data extraction is chosen. Extraction of structure footprints from controlled imagery will be performed by experienced compilers using first-order softcopy workstations. Please see Appendices – Requirements, Section 5.7.1.2 for complete details on Sanborn's offerings, methods, and procedures for planimetrics.
5.2.14	Does your Solution include upgrade options for other planimetrics at a scale of 1"=100' (1:1200)? If yes, please explain.	Yes	Sanborn can perform full or partial planimetric feature extraction for each area of interest as tasked through the buy-up program. Sanborn will ensure that the source data – control, imagery, and orientation information – are acquired at levels sufficient to support photogrammetric extraction of planimetric features at the scale of 1"=100'. The size, type, and quantity of planimetric features extracted will be commensurate with 1"=100' mapping. Please see the "100' Mapping" tab in the attached VBMP Planimetric Capture Specification for features that will be extracted if full planimetric data extraction is chosen. Extraction of structure footprints from controlled imagery will be performed by experienced compilers using first-order softcopy workstations. Please see Appendices – Requirements, Section 5.7.1.2 for complete details on Sanborn's offerings, methods, and procedures for planimetrics.
5.2.15	Does your Solution include off-year flights? If yes, please explain.	Yes	Sanborn is prepared to mobilize any needed imagery or LiDAR sensor for off-year flights, to capture data for base and buy-up option products and services. Please see Appendices – Requirements, Section 5.7.1.4 for complete details.
5.2.16	Does your Solution include LiDAR data collected per the USGS Version 13 specification? If yes, please explain.	Yes	Sanborn owns three state-of-the-art airborne LiDAR sensors that are available for tasking under this contract, as well as the needed peripheral equipment, software, and personnel required to support collection and processing of the LiDAR data. Sanborn is highly familiar with the USGS Version 13 specifications, as well as the methods and procedures needed to meet them, and has a successful track record of providing these data products on numerous projects. Please see Appendices – Requirements, Section 5.7.1.5 for complete details.
5.2.17	Does your Solution's photogrammetric products meet the Virginia Model Map Accuracy Standards for the appropriate scale (based upon ASPRS Class 1 Accuracy Standards)? If yes, please explain.	Yes	Sanborn designed a solution incorporating personnel, equipment, methods, and procedures that ensure all photogrammetric data products provided under this contract are compliant with ASPRS Class I Accuracy Standards for the appropriate map scale. A targeted ground control that will meet the requirements of each deliverable at the designated map scale will be established. All horizontal GPS control positions will meet first-order accuracy specifications. Vertical control will meet, at a minimum, third-order vertical accuracy specifications. Airborne GPS and IMU will be used to augment ground control, with multiple ground reference GPS base stations logging data at one-second epochs in order to ensure accurate calculation of photo centers. Fully analytical aerotriangulation will be used to further densify control and verify the integrity of the solution. Photogrammetric extraction of feature and terrain data will be performed by experienced compilers using first-order softcopy workstations. Proven proprietary and industry-standard commercial off-the-shelf software will be used to perform orthorectification and other photogrammetric data processing. Rigorous quality assurance and quality control will be used at every step of the process, including the use of blind checkpoints in the field. More detailed information regarding Sanborn's workflow is provided under the Appendices – Requirements, Sections 5.3 to 5.7 of this response.

5.2.8	Does your Solution include upgrade options for contours developed by photogrammetry for 2-ft interval contours at a scale of 1"=100' (1:1200)? If yes, please explain.	Yes	Sanborn will create two-foot contours for each area of interest as tasked through the buy-up program. Sanborn will ensure that the source data – control, imagery, and orientation information, are acquired at levels sufficient to support creation of contours that meet the accuracy specifications for contours at the two-foot interval. A DTM will be produced, updated, or enhanced by performing photogrammetric extraction of breaklines and masspoints as needed for developing two-foot contours. Extraction of masspoint and breakline data from controlled imagery will be performed by experienced compilers using first-order softcopy workstations. Please see Appendices – Requirements, Section 5.7.1.1 for complete details.
5.2.9	Does your Solution include upgrade options for structure footprints? If yes, please explain.	Yes	Sanborn will extract structure footprints for each area of interest as tasked through the buy-up program. Sanborn will ensure that the source data – control, imagery, and orientation information – are acquired at levels sufficient to support photogrammetric extraction of structure footprints at the desired map scale. The size of structure footprints extracted will be commensurate with each map scale. Extraction of structure footprints from controlled imagery will be performed by experienced compilers using first-order softcopy workstations. Please see Appendices – Requirements, Section 5.7.1.3 for complete details.
5.2.10	Does your Solution include upgrade options for structure footprints at a scale of 1"=200' (1:2400)? If yes, please explain.	Yes	Sanborn will extract structure footprints for each area of interest so tasked through the buy-up program. Sanborn will ensure that the source data – control, imagery, and orientation information – are acquired at levels sufficient to support photogrammetric extraction of structure footprints at the scale of 1"=200'. Structures with areas greater than 200 square feet will be captured as outlines. Smaller structures will be captured as points. Structures will be attributed with the roofline elevation. Extraction of structure footprints from controlled imagery will be performed by experienced compilers using first order softcopy workstations. Please see Appendices – Requirements, Section 5.7.1.3 for complete details.
5.2.11	Does your Solution include upgrade options for structure footprints at a scale of 1"=100' (1:1200)? If yes, please explain.	Yes	Sanborn will extract structure footprints for each area of interest as tasked through the buy-up program. Sanborn will ensure that the source data – control, imagery, and orientation information – are acquired at levels sufficient to support photogrammetric extraction of structure footprints at the scale of 1"=100'. Structures with areas greater than 100 square feet will be captured as outlines. Smaller structures will be captured as points. Structures will be attributed with the roofline elevation. Extraction of structure footprints from controlled imagery will be performed by experienced compilers using first-order softcopy workstations. Please see Appendices – Requirements, Section 5.7.1.3 for complete details.
5.2.12	Does your Solution include upgrade options for other planimetrics? If yes, please explain.	Yes	Sanborn can perform full or partial planimetric feature extraction for each area of interest as tasked through the buy-up program. Sanborn will ensure that the source data – control, imagery, and orientation information – are acquired at levels sufficient to support photogrammetric extraction of planimetric features at the desired map scale. The size, type, and quantity of planimetric features extracted will be commensurate with each map scale. Please see attached <u>VBMP Planimetric Capture Specification</u> for features that will be extracted if full planimetric data extraction is chosen. Extraction of structure footprints from controlled imagery will be performed by experienced compilers using first order softcopy workstations. Please see Appendices – Requirements, Section 5.7.1.2 for complete details on Sanborn's offerings, methods, and procedures for planimetrics.

5.2 General Product		A	B
5.2.1	Does your Solution's base product include 1-ft ground sample distance (GSD) resolution orthoimagery at a scale of 1"=200' (1:2400)? If yes, please explain.	Yes	Sanborn will acquire new four-band imagery for each half of the state on a biennial schedule. Supporting control, orientation, and terrain data will be captured or created at levels of accuracy that enable production of new one-foot GSD orthoimagery commensurate with 1"=200' scale mapping in accordance with the acceptance criteria outlined in Exhibit G of the RFP. Please see Appendices – Requirements, Sections 5.3 to 5.6 for complete details on our project approach.
5.2.2	Does your Solution include GSD resolution orthoimagery upgrade options? If yes, please explain.	Yes	Sanborn is offering three-inch and six-inch GSD orthoimagery upgrade options as requested in Section 5 of the RFP. Please see Appendices – Requirements, Sections 5.3 to 5.6 for complete details on our project approach.
5.2.3	Does your Solution include upgrade options for 6-inch GSD resolution orthoimagery at a scale of 1"=100' (1:1200) ? If yes, please explain.	Yes	Sanborn will acquire new four-band imagery for each area of interest as tasked through the buy-up program. Supporting control, orientation, and terrain data will be captured or created at levels of accuracy that enable production of new six-inch GSD orthoimagery commensurate with 1"=100' scale mapping in accordance with the acceptance criteria outlined in Exhibit "G" of the RFP. Please see Appendices – Requirements, Sections 5.3 to 5.6 for complete details on our project approach.
5.2.4	Does your Solution include upgrade options for 3-inch GSD resolution orthoimagery at a scale of 1"=100' (1:1200) ? If yes, please explain.	Yes	Sanborn will acquire new four-band imagery for each area of interest as tasked through the buy-up program. Supporting control, orientation, and terrain data will be captured or created at levels of accuracy that enable production of new three-inch GSD orthoimagery commensurate with 1"=100' scale mapping in accordance with the acceptance criteria outlined in Exhibit "G" of the RFP. Please see Appendices – Requirements, Sections 5.3 to 5.6 for complete details on our project approach.
5.2.5	Does your Solution include upgrade options for 3-inch GSD resolution orthoimagery at a scale of 1"=50' (1:600) ? If yes, please explain.	Yes	Sanborn will acquire new four-band imagery for each area of interest as tasked through the buy-up program. Supporting control, orientation, and terrain data will be captured or created at levels of accuracy that enable production of new 3-inch GSD orthoimagery commensurate with 1"=50' scale mapping in accordance with the acceptance criteria outlined in Exhibit "G" of the RFP. Please see Appendices – Requirements, Section 5.7.2.3 for complete details.
5.2.6	Does your Solution include upgrade options for contours developed by photogrammetry? If yes, please explain.	Yes	Sanborn will create contours at the specified interval for each area of interest so tasked through the buy-up program. Sanborn will ensure that the source data – control, imagery, and orientation information – are acquired at levels sufficient to support creation of contours that meet the accuracy specifications for contours at the desired interval. A DTM will be produced, updated, or enhanced by performing photogrammetric extraction of breaklines and masspoints as needed for developing contours at the specified interval and accuracy. Extraction of masspoint and breakline data from controlled imagery will be performed by experienced compilers using first-order softcopy workstations. Please see Appendices – Requirements, Section 5.7.1.1 for complete details.
5.2.7	Does your Solution include upgrade options for contours developed by photogrammetry for 4-ft interval contours at a scale of 1"=200' (1:2400)? If yes, please explain.	Yes	Sanborn will create four-foot contours for each area of interest as tasked through the buy-up program. The control, imagery, orientation, and terrain information used will be that collected for creation of the base 1-foot GSD resolution orthoimagery product. A DTM will be produced, updated, or enhanced by performing photogrammetric extraction of breaklines and masspoints as needed for developing contours at the 4-foot interval. Extraction of masspoint and breakline data from controlled imagery will be performed by experienced compilers using first order softcopy workstations. Please see Appendices – Requirements, Section 5.7.1.1 for complete details.

5.3.4	Does your company possess a USGS Data Providers certification or equivalent? If yes, please explain.	No	The USGS Data Provider's Certification Program is under development, but no such certification exists at this time. Sanborn's team members on this project possess significant academic and professional credentials, including state registration as land surveyors and surveyor-photogrammetrists, as well as industry association certification through ASPRS and GISCI. Please see the key personnel resumes in Section 6 of this response.
5.3.5	Does your Solution include the use of digital sensors that can acquire three bands in the visible range (approximately 440-850 nm) and at least one band in the near infrared range (approximately 780-850 nm) simultaneously or near simultaneously (within 500 milliseconds) using a single camera? If yes, please explain.	Yes	Both the A3 and the DMC fall within this specification, or very nearly so. Please see the camera specification tables in the Appendices – Requirements, Sections 5.3.1.1.1 and 5.3.2 for complete details.
5.3.6	Does your Solution include digital sensors that are able to capture a minimum of 12-bits per color band. ? If yes, please explain.	Yes	Both the A3 and the DMC capture 12-bits per color band.
5.3.7	Does your Solution include the collection of all color bands at the required GSD? If yes, please explain.	Yes	Both the A3 and the DMC sensors will perform simultaneous collection of the RGB and NIR bands at the required GSD.
5.3.8	Does your Solution include the the submission of a report detailing the calibration of each sensor? If yes, please explain.	Yes	Sanborn will submit reports detailing the manufacturer calibration, as well as our own independent sensor calibration. Results of both calibration tests can also be seen in the Appendices – Requirements, Section 5.3.1.1.5 and 5.3.1.1.6.
5.3.9	Does your Solution include an Image Collection Survey Plan that specifies the data collection parameters to be used and contains a map of the flight lines and the project coverage area, including flying height and speed over ground, focal length, ground sample distance, side-lap and end-lap prior to data acquisition? If yes, please explain.	Yes	Please see Appendices – Requirements, Section 5.3.3 for complete details.
5.3.10	Does your Solution include all coordination and approvals required for areas of controlled or restricted airspace necessary to assure that the required clearances are achieved? If yes, please explain.	Yes	Please see Appendices – Requirements, Section 5.3.3.3 for complete details.
5.3.11	Does your Solution include temporal requirements for late Winter/Spring of 2013 and 2015 with leaf-off conditions? If yes, please explain. <i>Note: VGIN will determine when leaf-off conditions are not suitable for image collection.</i>	Yes	Please see Appendices – Requirements, Section 5.3.3.4 for complete details.
5.3.12	Does your Solution include temporal requirements with a sun angle of 30 degrees or greater? If yes, please explain.	Yes	Sanborn only conducts all imagery acquisition flights during hours of the day when the sun angle is 30 degrees or more above the horizon. Please see Appendices – Requirements, Section 5.3.3.4 for complete details.
5.3.13	Does your Solution include imagery that is taken when the ground is not obscured by haze, snow, smoke, dust, flood waters, fog, dim illumination, high overcast or other environmental factors? If yes, please explain. <i>Note: Final orthoimages with clouds or cloud shadows will not be accepted.</i>	Yes	Please see Appendices – Requirements, Section 5.3.3.3 for complete details.

5.3 Imagery Acquisition		A	B
5.3.1	Does your Solution include the use of digital sensors to acquire imagery? If yes, please explain.	Yes	Sanborn proposes an exclusive digital imagery acquisition solution for this program. Please see Appendices – Requirements, Sections 5.3.1 to 5.3.3 for complete details.
5.3.2	Does your Solution include digital sensors of the same type and manufacturer? If yes, please explain.	No	Sanborn has recently acquired the VisionMap A3 digital sensor, currently the newest and most advanced system of its type on the market. Sanborn proposes the use of the A3 system to acquire imagery for the base one-foot spatial resolution digital orthophotography product. Please see Appendices – Requirements, Section 5.3.1 for complete details. Sanborn's Z/I Imaging DMC, the system that was used on the prior contract with VGIN is better suited for collection of imagery to support the 6" and 3" orthophotography buy-up program, and Sanborn proposes its use for that purpose. Please see Appendices – Requirements, Section 5.3.2 for complete details.
5.3.3	Does your Solution include digital sensors that have a manufacturer's type certification from USGS, or equivalent? If yes, please explain.	Yes/No	<p>Sanborn's Z/I Imaging DMC has digital sensor type certification from the USGS, and we are prepared to provide this document upon your request.</p> <p>Sanborn's VisionMap A3 digital sensor does not have type certification from the USGS, because the USGS no longer provides certification for digital sensors. Please see: http://calval.cr.usgs.gov/news/usgs-announces-no-usgs-digital-camera-certification-requirement/</p> <p>The salient excerpt from this USGS announcement is as follows: "The December 2010 USGS Headquarters decision stated that the USGS is neither an advocate nor a certification governing body for digital camera technologies. A natural outcome of this revised USGS mission definition is that there will no longer be certifications for digital aerial cameras; therefore, any Government contract with the potential of using a digital aerial camera should remove the USGS certification requirement from their contractual language." However, the manufacturer has performed extensive calibration and testing of this sensor. The manufacturer's certificate of calibration is included in this response, as are the results of independent accuracy testing performed by Sanborn. Please see Appendices – Requirements, Sections 5.3.1 and 5.3.2 for complete details.</p>

5.4.18	Does your Solution have sufficient additional ground control to allow updates to the existing DTM model to meet the stated accuracy standards? If yes, please explain.	Yes	Please see 5.4.17 above. The same control has sufficient vertical accuracy to allow updates to the existing DTM model to meet VGIN's stated accuracy requirement. Please see the sections regarding ground control in the Appendices – Requirements, Section 5.4.1.1 and 5.4.1.4 for complete details.
5.4.19	Does your Solution adhere to the existing control from the National Spatial Reference System (NSRS) database, which meets the FGCC document - Geometric Geodetic Accuracy Standards Specifications For Using GPS Relative Positioning Techniques, reprinted 1989, may be used if it is of second order, class I. If yes, please explain. <i>Note: No other horizontal or vertical control which has not been adjusted and is not in the NGS NSRS data sheets should be used in the project.</i>	Yes	Please see the sections regarding ground control in the Appendices – Requirements, Section 5.4.1.2 and 5.4.1.3 for complete details.
5.4.20	Does your Solution's vertical control, at a minimum, meet the third order vertical accuracy specifications in NAVD 88 datum? If yes, please explain.	Yes	Please see the sections regarding ground control in the Appendices – Requirements, Section 5.4.1 for complete details.
5.4.21	Does your Solution's vertical control follow the National Oceanic and Atmospheric Administration (NOAA) Technical Memorandum NOS-NGS-58 Guidelines for GPS Derived Ellipsoid Heights for new vertical control? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.4.1.1 for complete details.
5.4.22	Does your Solution use GPS techniques to establish all new horizontal and vertical ground control? If yes, please explain. <i>(Ground leveling benchmarks may substitute vertical GPS control requirements where appropriate.)</i>	Yes	While it is not anticipated that new control will be needed, any new horizontal and vertical control will be established using GPS techniques, following the method and procedures outlined in the Appendices – Requirements, Section 5.4.1.
5.4.23	Does your Solution include ground control for the project that is tied to the Virginia High Accuracy Reference Network (<i>Virginia HARN</i>)? If yes, please explain.	Yes	Please see the sections regarding ground control in the Appendices – Requirements, Section 5.4.1 for complete details.
5.4.24	Does your Solution include the establishment of all new ground control to be certified by a Virginia licensed professional surveyor? If yes, please explain.	Yes	All surveying work will be performed under the direction of Mr. Douglas A. Richmond, Land Surveyor, VA License #1718, of the firm Geometrics GPS, Sanborn's partner on prior VBMP project contracts.
5.4.25	Does your Solution include all new GPS control that is secured in accordance with the National Geodetic Survey (NGS) standards and that all coordinates and data will be of acceptable quality meeting 1st Order precision? If yes, please explain.	Yes	Please see the sections regarding ground control in the Appendices – Requirements, Section 5.4.1 for complete details.
5.4.26	Does your Solution include horizontal control adjustment that is located in NAD 83/93 (HARN) reference datum? If yes, please explain.	Yes	Please see the sections regarding ground control in the Appendices – Requirements, Section 5.4.1 for complete details.
5.4.27	Does your Solution include vertical control adjustment that is located in NAVD 88 reference datum maintained by the NGS in US Survey Feet? If yes, please explain.	Yes	Please see the sections regarding ground control in the Appendices – Requirements, Section 5.4.1 for complete details.
5.4.28	Does your Solution's mapping coordinate system include the Virginia State Plane Coordinate System in U.S. Survey Feet? If yes, please explain.	Yes	Please see the sections regarding ground control in the Appendices – Requirements, Section 5.4.1 for complete details.
5.4.29	Does your Solution include the removal of all temporary targets used for ground control within 4 weeks of the final flights? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.4.1.4 for complete details.

5.4.10	Does your Solution's plan show the extent of each Aerial Triangulation Block? If yes, please explain.	Yes	Sanborn's plan will be provided in digital format and will illustrate the extents of each AT block, exposure stations, ground control locations, and the location of ground reference stations within the block.
5.4.11	Does your Solution's plan show the locations of stations to be observed and the baselines to be observed during each session in the context of Aerial Triangulation Blocks? If yes, please explain.	Yes	Please see 5.4.10 above. The locations of stations to be observed and the baselines to be observed during each session will be shown.
5.4.12	Does your Solution's ground control include being signaled prior to acquisition missions? If yes, please explain.	Yes	Targets will be placed in preparation for imagery acquisition flights. Please see Appendices – Requirements, Sections 5.4.1.1 and 5.4.1.4 for complete details.
5.4.13	Does your Solution provide the necessary minimum ground control used for the combined AGPS DAT solution? If yes, please explain.	Yes	Please see Appendices – Requirements, Sections 5.4.1.1 and 5.4.1.4 for complete details.
5.4.14	Does your Solution provide, at a minimum, a pair of controls located at the corners of the AT photo block solution? If yes, please explain.	Yes	While not the only ground control to be marked, control points at the corners of AT blocks will be targeted. Please see Appendices – Requirements, Sections 5.4.1.1 and 5.4.1.4 for complete details.
5.4.15	Does your Solution provide additional control located along the shoreline, where large bodies of water define the block boundaries, to stabilize the block geometry? If yes, please explain.	Yes	Supplemental targeted control will be placed in needed locations alongside the ocean and other large bodies of water to ensure a flat AT solution in those areas. Please see Appendices – Requirements, Section 5.4.1.4 for complete details.
5.4.16	Does your Solution recommend, in the case of very large blocks, the use of some control to account for changes in the Geoid slope? If yes, please explain.	Yes	Please see Appendices – Requirements, Section 5.4.1.4 for complete details.
5.4.17	Does your Solution's ground control consist of homogenous density and accuracy to support development of the product at the scales indicated? If yes, please explain.	Yes	Sanborn has access to more than 2,000 well-distributed, surveyed ground control points of first-order horizontal and third-order or better vertical accuracy that were established and utilized under previous VBMP contracts. Sanborn will use as many of these points as necessary in each project area to complete the Digital Aerial Triangulation solution (DAT) to the specifications required for the development of products at each required scale and corresponding level of accuracy. Additional control can be established if needed, if a buy-up area of interest were such that existing control did not fall within the required locations of an AT block and the block could not be reasonably modified to take advantage of the existing control. Please see the sections regarding ground control in the Appendices – Requirements, Section 5.4.1.1 and 5.4.1.4 for complete details.

5.4 Project Ground Control and Orientation		A	B
5.4.1	Does your Solution determine camera exposure station coordinates from AGPS techniques? If yes, please describe.	Yes	Sanborn will use a combination of conventional ground control augmented by airborne GPS (AGPS) and IMU data in the aerial triangulation (AT) adjustment.
5.4.2	Does your Solution include the use of dual frequency GPS receivers that can be used to collect P-code pseudo range and L1/L2 carrier phase signals at the minimum sampling rate of 1 per second? If yes, please explain.	Yes	Sanborn's aircraft will utilize Novatel GPS Receivers -Millennium DL, DL4 + L1/L2, 600 for ABGPS data collection, which can collect P-code pseudo range and L1/L2 carrier phase signals at the minimum sampling rate of 1 per second. Land surveying operations will utilize Trimble R8 receivers, which meets the requirement as well.
5.4.3	Does your Solution require the use of fixed height tripods at the ground reference stations? If yes, please describe.	Yes	Sanborn's survey partners will be required to use fixed-height tripods for all GPS ground reference base stations.
5.4.4	Does your Solution include two GPS ground reference stations with at least one of these stations being in the project DAT block with distance limits based upon technology used? If yes, please explain.	Yes	During the flight missions, multiple (up to 15) NGS CORS stations will be logging one-second data 55 to 200 kilometers from an acquisition area. At a minimum, one ground reference station and potentially up to seven reference ground stations will be within a DAT block. No less than two ground reference stations will be used at any time.
5.4.5	Does your Solution include the use of GPS or GPS+GLONASS systems? If yes, please explain.	Yes	Trimble R8 receivers will be used for survey operations. These units interrogate both the GPS and GLONASS signals.
5.4.6	Does your Solution include an approach for the AGPS solution? If yes, please explain.	Yes	Please see Appendices – Requirements, Section 5.4.2 for complete details.
5.4.7	Does your Solution's ground reference stations used for Airborne GPS data acquisition consist of B order accuracy or better as defined in the FGDC-STD 007.2-1998, Geospatial Positioning Accuracy Standards Part 2: Standards for Geodetic Networks? If yes, please explain.	Yes	Sanborn's solution is based upon the use of NGS CORS stations, which are of Special Order Accuracy (Horizontal and Ellipsoidal), for ground reference stations supporting ABGPS operations. In the unlikely event that independent base stations are needed, Sanborn will ensure that they are of B-order accuracy or better.
5.4.8	Does your Solution's Root Mean Square Error (RMSE) of GPS coordinates at the exposure stations be less than 10cm? If yes, please explain.	Yes	Please see Appendices – Requirements, Section 5.4.2.3 for complete details.
5.4.9	Does your Solution include the submission of a detailed Ground Control and Digital Aerial Triangulation (DAT) Plan? If yes, please explain. <i>Note: Prior approval of the plan by VGIN is required.</i>	Yes	Sanborn will provide detailed final ground control, flight mission, and DAAT plans to VGIN for approval prior to mobilizing any field or airborne resources. Small diagrams showing our draft flight and control plans can be found in the Appendices – Requirements, Sections 5.3.3.2 and 5.4.1.4.

	<i>*Flight lines and control plans</i> <i>*Photo indexes</i> <i>*The DTM data used for rectification</i> <i>*Flight plan, control report and Aerial Triangulation Reports</i> If yes, please explain.		
5.5.54	Does your Solution include the delivery of all geospatial data products with FGDC-compliant metadata? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.10 for complete details.

	<p><i>*Adjusted control points, pass points, photo centers and residuals in the NAD83/93 SPCS coordinate system with NAVD88 elevations</i></p> <p><i>*Standard deviation of the adjusted control point and pass point measurements</i></p> <p><i>*Photo orientation parameters (X, Y, Z, omega, phi, kappa) for each photo image</i></p>		
5.5.51	<p>Does your Solution provide a project control report including, at a minimum:</p> <p><i>*All recoverable ground control for the project document in the NGS Blue Book format</i></p> <p><i>*A network diagram showing all points and indicating which independent vectors were observed</i></p> <p><i>*A schedule (in table form) showing the dates, occupation times and sessions for each station in the survey</i></p> <p><i>*An observation form for each temporary ground control station</i></p> <p>If yes, please explain.</p>	Yes	All of the metrics and information at a minimum will be included, as provided by Sanborn under previous VBMP contracts. Please see the Appendices – Requirements, Section 5.5.1.11.
5.5.52	<p>Does your Solution include an observation form for each temporary ground control station including at least the following information:</p> <p>1. Project Name</p> <p>2. Operator's Name</p> <p>3. Date</p> <p>4. Julian Day</p> <p>5. Receiver Serial #</p> <p>6. Antenna Serial #</p> <p>7. Brand and name of receiver/antenna</p> <p>8. Station Name</p> <p>9. Session #</p> <p>10. Antenna H.I. and indication for type of measurement</p> <p>11. File Name</p> <p>12. Actual start time and actual end time for the occupation</p> <p>13. Visibility skyplots for each station observed in the network</p> <p>14. Printed graphical plot indicating the number of satellites above 15 degrees and the PDOP for each session of field observation</p> <p>15. Data showing the quality of processed vectors</p> <p>16. Results of a minimally constrained least squares network adjustment report including (@ 95% confidence region):</p> <p>17. Statistical results clearly showing which control point is held fixed, and clearly indicating standard errors applied and weighting scheme used</p> <p>18. Station coordinate standard deviations (x, y, z)</p> <p>19. Station coordinate error ellipses (semi-major axis, semi-minor axis, azimuth of semi-major axis, height)</p> <p>20. Results of the fully constrained adjustment, clearly showing all values held fixed and clearly indicating standard errors applied and weighting scheme used.</p> <p>21. Tie diagrams and "to reach" descriptions for each new station</p> <p>22. An ASCII file with minimally constrained coordinate adjustments.</p> <p>If yes, please explain.</p>	Yes	Please see the Appendices – Requirements, Section 5.4.1.4.2 for complete details.
5.5.53	<p>Does your Solution include all horizontal and vertical control points used for orienting the captured imagery submitted in ESRI ArcView point feature shape files? Note: A separate set of shape files should be submitted for the State Plane Coordinate System (SPCS) North and South Zone versions of the horizontal control points, with each point attributed according to this section.</p>	Yes	Please see the Appendices – Requirements, Section 5.5.1.11 for complete details.

5.5.47	Does your Solution's horizontal accuracy meet the following absolute accuracy? If yes, please explain. <i>Note: The NSSDA accuracy such that 95% of well-defined points would be less than 1.73* RMSE_r</i>	Yes	As previously indicated, Sanborn performs exhaustive source data checks during the AT process. We typically withhold 25% of the ground control to analyze the AT. We also perform control review during Ortho Quality Control (QC) to ensure accuracy. The final orthos are also checked against orthos from previous VBMP flights that were proven accurate by independent QC consultants, and against available marked or photo-identified ground control from the current year flight.
	*For 1"=200' scale. $1.73 * RMSE_r = 1.73 * 1.412 * 2 = 4.89$ ft		
	*For 1"=100' scale. $1.73 * RMSE_r = 1.73 * 1.412 * 1 = 2.45$ ft		
	*For 1"=50' scale. $1.73 * RMSE_r = 1.73 * 1.412 * 0.5 = 1.22$ ft		
5.5.48	Does your Solution include an accuracy report? If yes, please explain. <i>Note: The Supplier should report horizontal accuracy according to the National Standard for Spatial Data Accuracy (NSSDA), depending upon whether or not an independent test according to NSSDA is performed, the accuracy report should be in the form of one of the statements below:</i>	Yes	Sanborn will provide an accuracy report that reports horizontal accuracy in accordance with the National Standard for Spatial Data Accuracy (NSSDA), as indicated in the Appendices – Requirements, Section 5.5.1.11.
	*Tested ____ feet horizontal accuracy at 95% confidence level	Yes	While available targeted or field-identified control may be used to check final deliverables, the quantity may not be sufficient to satisfy NSSDA standards. Sanborn is willing to certify to accuracy based upon the use of field control if it is important to VGIN and funding is available. It is also understood that an independent QC vendor working for VGIN may be field-checking the orthoimagery and other data products.
	*Compiled to meet ____ feet horizontal accuracy at 95% confidence level	Yes	Sanborn will certify that the orthoimagery and other data products are compiled to meet horizontal accuracy at the 95% confidence level in accordance with NSSDA guidelines for deliverables at each map scale.
5.5.49	Does your Solution provide project data and documentation? If yes, please explain. <i>Note: In addition to the orthoimagery, all data products produced in the orthoimagery development process required to facilitate the efficient development of planimetric or contours products by a third-party Supplier should be delivered, including but not limited to:</i>	Yes	Sanborn will provide RAW files and intermediate products, as well as the final deliverable. Please see the Appendices – Requirements, Section 5.5.1.11.
	*Raw digital imagery files (in GeoTIFF or JPEG2000 format)		
5.5.50	Does your Solution include aerial triangulation? If yes, please explain. <i>Note: All information related to the image orientation required to facilitate the efficient use of the imagery for additional data development by a third party is required for delivery. The exact attribute content and format for the DTM files will be determined by VGIN prior to development. Deliverables from aerial triangulation should include at a minimum but not be limited to the following:</i>	Yes	Format and content of deliverables and documentation will be verified in the project initiation meeting with VGIN, but all of the below metrics and information at a minimum will be included, as provided by Sanborn under previous VBMP contracts. Please see the Appendices – Requirements, Sections 5.4.3 and 5.5.1.11.
	*Raw measured fiducial coordinates for each photo image in the photo coordinate system		
	*Raw measured control points and pass points in the photo coordinate system		

5.5.42	Does your Solution include radiometric review? If yes, please explain. <i>Note: Before final image production the Supplier should supply sample imagery to a Radiometric Review Panel, selected by VGIN, to approve radiometric target images. The target images should include, at a minimum, the following: Coastal Plain Rural, Coastal Plan Urban, Piedmont Rural, Piedmont Urban, Mountain Rural, Mountain Urban.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.9 for complete details.
5.5.43	Does your Solution correct image blemishes and artifacts? If yes, please explain. <i>Note: Imagery should be free of blemishes, scratches and artifacts that obscure ground feature detail. If important ground features are not obscured, limited blemishes, scratches and artifacts may be accepted within the following limits:</i> <i>*If 1 pixel wide, 100 pixels in length</i> <i>*If 2 pixel wide, 60 pixels in length</i> <i>*If 3 pixel wide, 20 pixels in length</i> <i>*If 4-12 pixels wide, 12 pixels in length</i> <i>*Artifacts exceeding these limits may be acceptable if ground feature detail is not obscured, or if the brightness values of the pixels in the artifact is under 170.</i> <i>*Clusters of artifacts that are individually acceptable may be considered unacceptable if 5 or more occur within a 200 pixel area.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.9 for complete details.
5.5.44	Does your Solution correct smears? If yes, please explain. <i>Note: Image smears resulting from orthorectification should generally be treated the same as other artifacts. Where possible, corrections should be made to the DTM to correct smears. However, if such corrections will result in reduced horizontal accuracy, or misrepresentation of the location or appearance of important features, corrections are not to be made and the smear may not be grounds for rejection.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.5 for complete details.
5.5.45	Does your Solution contain wavy ground features? If yes, please explain. <i>Note: 95% of distinct linear ground features should be positionally correct and should not deviate from their apparent path by more than 5 pixels measured perpendicular to the feature within any 100 pixel distance measured along the feature length. Wavy non-ground features (e.g. buildings) are acceptable but should be avoided wherever practical.</i>	Yes	Please see the Appendices – Requirements, Sections 5.5.1.6 and 5.5.1.4 for complete details.
5.5.46	Does your Solution's horizontal accuracy meet the following RMSE Values? If yes, please explain. The Root Mean Square Error (RMSE) in the easting and northings of well-defined points should be less than or equal to 2 pixels ($RMSE_x = RMSE_y = 2$ pixels). Circular error $RMSE_c = 1.4142 * RMSE_x = 1.4142 * RMSE_y$	Yes	As previously indicated, Sanborn performs exhaustive source data checks during the AT process. We typically withhold 25% of the ground control to analyze the AT. We also perform control review during Ortho Quality Control (QC) to ensure accuracy. The final orthos are also checked against orthos from previous VBMP flights that were proven accurate by independent QC consultants, and against available marked or photo-identified ground control from the current year flight.

5.5.33	Does your Solution include image mosaicking? If yes, please explain. <i>Note; Imagery may be created using multiple image segments from the same acquisition collection to product the final product.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.3 for complete details.
5.5.34	Does your Solution include edge matching? If yes, please explain. <i>Note: Horizontal displacement along an apparent seamline or along a tile boundary should be equal to or less than 2 pixels in a single direction on well-defined ground features, e.g. roads, sidewalks, and curbs.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.3 for complete details.
5.5.35	Does your Solution include mosaic seamlines? If yes, please explain. <i>Note: Mosaic seamlines through buildings and above ground transportation structures should be avoided to the greatest extent practical. Mosaic line placement should not result in artificial clipping of features along tile boundaries or missing photo areas anywhere within the project area. Seamlines should not be visible at the viewing scale for which the imagery is produced. Visible seamlines are acceptable over large water bodies.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.3 for complete details.
5.5.36	Does your Solution include radiometric balance? If yes, please explain. <i>Note; When a mosaic is made from two or more image segments, the brightness and color values between the image segments will be adjusted to match that of neighboring image segments. The join lines between the overlapping image segments will be chosen to minimize tonal variations. Localized adjustment of the brightness and color values will be done to reduce radiometric differences between join areas.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.7 for complete details.
5.5.37	Does your Solution include seamline shapefile? If yes, please explain. <i>Note: The Supplier should provide a project-based, seamline shapefile index. The index should be topologically correct (containing no gaps, overlaps or multi-part features) and contain a polygon for each exposure chip used in the mosaicked image. The shapefile should be attributed with an exposure identification, image acquisition date and time (if available).</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.3.1 for complete details.
5.5.38	Does your Solution include radiometric balancing? If yes, please explain. <i>Note; Tonal balance should be achieved across delivery blocks and as well as between deliverables with different resolutions. As much as possible, tonal balance should also be achieved across project years. VGIN will provide previous years examples upon request.</i>	Yes	Please see the Appendices – Requirements, Sections 5.5.1.7 and 5.5.1.9 for complete details.
5.5.39	Does your Solution include color balance? If yes, please explain. <i>Note; Imagery should have a neutral tonal range without the dominance of any one color.</i>	Yes	Please see the Appendices – Requirements, Sections 5.5.1.7 and 5.5.1.9 for complete details.
5.5.40	Does your Solution include brightness? If yes, please explain. <i>Note; Imagery should have a brightness which gives a mean pixel value near the middle of the DN range (for 8-bit depth the minimum mean value is 102 and the maximum mean values is 153).</i>	Yes	Please see the Appendices – Requirements, Sections 5.5.1.7 and 5.5.1.9 for complete details.
5.5.41	Does your Solution include contrast? If yes, please explain. <i>Note; Imagery should have proper contrast to allow highlight and shadow detail. Less than 2% of brightness values should be found at the minimum and maximum DN (0 and 255 for 8-bit images).</i>	Yes	Please see the Appendices – Requirements, Sections 5.5.1.7 and 5.5.1.9 for complete details.

5.5.20	Does your Solution's tiles align with the Virginia State Plane Coordinate System grid, using either the North or South zone depending on the county in the area of coverage by each orthoimage? If yes, please explain. <i>Note: Each 5,000 ft x 5,000 ft tile should contain four nested 2,500 ft x 2,500 ft tiles and each 2,500 ft x 2,500 ft tile should contain four nested 1,250 ft x 1,250 ft tiles (if required). The grid tiles to be used were developed using the Virginia State Plane Coordinate System, NAD83, using the origin point for the Virginia State Plane Coordinate system (0,0).</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.21	Does your Solution deliver 1-ft GSD imagery in 5,000 ft x 5,000 ft tiles? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.22	Does your Solution deliver 6-in GSD imagery in 2,500 ft x 2,500 ft tiles? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.23	Does your Solution deliver 3-in GSD imagery in 1,250 ft x 1,250 ft tiles? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.24	Does your Solution allow a tile naming convention to be established by VGIN?	Yes	Sanborn will conform to any tile-naming convention desired by VGIN. Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.25	Does your Solution allow for imagery to extend to the exact tile boundary with no gaps or overlaps? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.26	Does your Solution deliver tiles in a GeoTIFF 6.0 compliant file format? If yes, please explain. <i>Note: GeoTIFF reference should be in the upper left corner of the upper left-most pixel.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.27	Does your Solution include a world file delivered with the GeoTIFF file? If yes, please explain. <i>Note: World file reference should be the center of the pixel of the upper left-most pixel. The world file should have correct coordinates expressed to at least 2 decimal points, and with correct pixel size and pixel count.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.28	Does your Solution's GeoTIFF and associated world files read correctly in ESRI software? If yes, please explain.	Yes	The GeoTIFF and associated world file, which must be placed in the same subdirectory as the corresponding image file, are conventional, industry-standard format files that will read correctly in ESRI software without the need for any special handling or translation. Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.29	Does your Solution include the delivery of tiles in a JPEG2000 compliant file format? If yes, please explain. <i>Note: JPEG2000 reference should be in the upper left corner of the upper left-most pixel.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.30	Does your Solution include JPEG2000 imagery that can be compressed and saved with an unsigned, 8-bit depth? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.31	Does your Solution provide a target JPEG2000 compression ratio of 20:1? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.
5.5.32	Does your Solution include a world file delivered with the JPEG2000 file? If yes, please explain. <i>Note: World file reference should be the center of the pixel of the upper left-most pixel and should have correct coordinates expressed to at least 2 decimal points, and with correct pixel size and pixel count.</i>	Yes	Please see the Appendices – Requirements, Section 5.5.1.8 for complete details.

5.5 Image Processing		A	B
5.5.1	Does your Solution include processing performed in the softcopy environment? If yes, please explain.	Yes	Sanborn uses a full digital workflow, from capture to delivery, including all photogrammetric processes being performed on first-order softcopy workstations.
5.5.2	Does your Solution, at a minimum, combine AGPS supported Automatic DAT with all sensor data carried out for photo control point densification using Least Square Matching (LSM) techniques? If yes, please explain. <i>Note; The DAT solution may be performed with black and white image. Large blocks should be formed as far as possible. Main consideration for block size should be the efficiency of data processing and management.</i>	Yes	Please see the Appendices – Requirements, Section 5.4.3.1 for complete details.
5.5.3	Does your Solution provide an Aerial Triangulation Report? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.4.3.4 for complete details.
5.5.4	Does your Solution's Aerial Triangulation Report and AT solution meet the Precision of image observations criteria: Sigma less than or equal to 5 microns? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.4.3.3 for complete details.
5.5.5	Does your Solution's Aerial Triangulation Report and AT solution meet the Precision of image observations criteria: <u>Horizontal</u> accuracy against ground control check points tested in accordance with 10+ points at NSSDA criteria and Horizontal RMSE is 1/10,000th of the flying height? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.4.3.3 for complete details.
5.5.6	For 1-ft GSD: RMSE less than or equal to 0.92 ft?	Yes	
5.5.7	For 6-inch GSD: RMSE less than or equal to 0.49 ft?	Yes	
5.5.8	For 3-inch GSD: RMSE less than or equal to 0.375 ft?	Yes	
5.5.9	Does your Solution's Aerial Triangulation Report and AT solution meet the Precision of image observations criteria: <u>Vertical</u> accuracy against ground control check points tested in accordance with 10+ points at NSSDA criteria? Vertical RMSE is 1/9,000 th of the flying height. If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.4.3.3 for complete details.
5.5.10	For 1-ft GSD: RMSE less than or equal to 1.02 ft?	Yes	
5.5.11	For 6-inch GSD: RMSE less than or equal to 0.54 ft?	Yes	
5.5.12	For 3-inch GSD: RMSE less than or equal to 0.42 ft?	Yes	
5.5.13	Does your Solution's Aerial Triangulation Report and AT solution meet the Precision of image observations criteria: Accuracy against image coordinates: RMSE less than or equal to 5 microns? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.4.3.3 for complete details.
5.5.14	Does your Solution's Aerial Triangulation Report and AT solution meet the Precision of image observations criteria: Maximum offsets [E,N] to any one blind QA point: 3*RMSE for that scale? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.4.3.3 for complete details.
5.5.15	For 1-ft GSD: Max _{xy} should be 2.76 ft and Max _z should be 3.07 ft?	Yes	
5.5.16	For 6-inch GSD: Max _{xy} should be 1.47 ft and Max _z should be 1.63ft?	Yes	
5.5.17	For 3-inch GSD: Max _{xy} should be 1.13 ft and Max _z should be 1.25 ft?	Yes	
5.5.18	Does your Solution's Aerial Triangulation Report and AT solution meet the Precision of image observations criteria: Accuracy against image coordinates: RMSE at GPS residuals generally less than 10 cm? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.4.2.3 for complete details.
5.5.19	Does your Solution provide ortho-rectified imagery in tiles? If yes, please explain.	Yes	Sanborn will format orthophoto tiles for delivery in the precise configuration desired by VGIN.

5.6 Digital Terrain Model		A	B
5.6.1	Does your Solution include an update of the existing VBMP digital terrain model (DTM) using stereo photogrammetric techniques, or other methods providing equivalent or higher accuracy? If yes, please explain. <i>Note: The existing DTM data was developed in 2006 and 2007, and updated either in 2009 or 2011. The Supplier will be provided the existing DTM data and will be encouraged to use this data where the data is of sufficient quality. LiDAR data which has been collected for several areas in Virginia can also be provided. The Supplier is encouraged to use the most suitable data available.</i>	Yes	Please see the Appendices – Requirements, Section 5.6 for complete details.
5.6.2	Does your Solution include the updated DTM data with sufficient breaklines and mass points necessary to develop orthoimagery of the required geometric and radiometric quality? If yes, please explain. <i>Note: The RMSE_z values of the DTM should be no more than 1.5 ft and 0.75 ft for aerial photography scales 1"=200' and 1"=100', respectively.</i>	Yes	Please see the Appendices – Requirements, Section 5.6 for complete details.
5.6.3	In order to avoid unnatural visual appearance of bridge decks in the digital orthoimagery, does your Solution include edge of pavements as break lines with the elevation values associated with the bridge decks and included with DTM dataset? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.6 for complete details.
5.6.4	Does your Solution include a separate Bridge DTM file containing all important bridges and flyovers? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.6 for complete details.
5.6.5	Does your Solution's flyovers include spot heights at the beginning and end points of bridge decks and a maximum bridge elevation points? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.5.1.6 for complete details.
5.6.6	Does your Solution's DTM data deliverables include, at a minimum, digital files of the data that comprise the DTM used for orthorectification? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.6.1.4 for complete details.
5.6.7	Does your Solution's DTM data deliverables include, at a minimum, one DTM data file for each digital ortho tile? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.6.1.4 for complete details.
5.6.8	Does your Solution's DTM data deliverables include, at a minimum, a ESRI geodatabase terrain dataset or datasets containing all mass points and breaklines used in the DTM? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.6.1.4 for complete details.

5.7.12	Does your Solution include pricing and minimum project sizes for off-year flights meeting the same specifications of project year flights? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.7.1.4 for complete details.
5.7.13	Does your Solution include pricing for LiDAR data collection that conforms to the USGS NGP Base LiDAR Specification Version 13 – ILMF 2010? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.7.1.5 for complete details.
5.7.14	Does your Solution include the delivery of all geospatial data products with FGDC-compliant metadata? If yes, please explain.	Yes	All primary and optional deliverables will include accompanying FGDC-compliant metadata. Please see the Appendices – Requirements, Section 5.5.1.10.

5.7 Other Products and Services		A	B
5.7.1	Does your Solution include services to photogrammetrically compile elevation contours. ? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.7.1.1 for complete details.
5.7.2	Does your Solution include a contour interval of 4 feet in areas of 1"=200' scale imagery? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.7.1.1 for complete details.
5.7.3	Does your Solution include a contour interval of 2 feet in areas of 1"=100' scale imagery? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.7.1.1 for complete details.
5.7.4	Does your Solution's contour products conform to the Model Virginia Map Accuracy Standards? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.7.1.1 for complete details.
5.7.5	Does your Solution include 4 foot interval contours: RMSEz <= 1.33 ft for well-defined points? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.7.1.1 for complete details.
5.7.6	Does your Solution include 2 foot interval contours: RMSEz <= 0.67 ft for well-defined points? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.7.1.1 for complete details.
5.7.7	Does your Solution update the DTM and provide additional ground control to meet stated accuracy standards? If yes, please explain.	Yes	Please see the Appendices – Requirements, Sections 5.6 and 5.7.1.1 for complete details.
5.7.8	Does your Solution include a statement of accuracy certified by a Surveyor Photogrammetrist licensed with the Commonwealth of Virginia according to NSSDA procedures? If yes, please explain. <i>Note: VGIN may provide example accuracy statements upon request.</i>	Yes	The statement of accuracy will be certified by Mr. Luiz Cortes, Virginia Licensed Surveyor Photogrammetrist, of the Sanborn Map Company. Sanborn will work with VGIN to create a mutually acceptable statement of accuracy in accordance with NSSDA standards and specifications. Mr. Cortes' Surveyor Photogrammetrist license is included in Section 6 - Supplier Profile with his resume.
5.7.9	Does your Solution include building footprint services to photogrammetrically compile building outlines of a certain size (100 square feet for 1"=100' map scale, and 200 square feet for 1"=200 map scale)? If yes, please explain. <i>Note:</i> <i>*Buildings smaller than the minimum square size should be collected as points</i> <i>*Buildings should be attributed with the elevation of the building's roofline</i> <i>*The final deliverable shall be in an agreed upon format approved by VGIN</i>	Yes	Please see the Appendices – Requirements, Section 5.7.1.3 for complete details.
5.7.10	Does your Solution include other services to photogrammetrically compile other planimetrics features? If yes, please explain.	Yes	Please see the Appendices – Requirements, Section 5.7.1.2 for complete details.
5.7.11	Does your Solution specify which classes of features that can be captured and the expected rates of capture. If yes, please explain. <i>*The final deliverable shall be in an agreed upon format approved by VGIN</i>	Yes	Please see the attached document entitled "VBMP Planimetric Capture Specification."

5.8.5	<p>Does your Solution include the notification of which portions of the services that may be performed by subcontractors, and identify all subcontractors known at the time of the project plan submission? If yes, please explain.</p> <p><i>Note: Supplier shall not use subcontractors to perform services unless specifically authorized in writing to do so by VGIN.</i></p>	Yes	<p>With the exception of the survey/ground control tasks (which will be performed by our Geometrics GPS team member), Sanborn has sufficient capacity to perform A3/DMC acquisition, image processing, DTM, ortho, and add-on products without the assistance of subcontractors. Subcontractors included in the Sanborn team to provide excess capacity have been listed in the organizational chart and/or small business plan. Subcontractors will not be used to perform services unless specifically authorized in writing to do so by VGIN.</p>
5.8.6	<p>Does your Solution include procedures for work done within areas designated as "Restricted"? If yes, please explain.</p> <p><i>Note: Information designated as "Restricted" by VITA/VGIN shall not be sent outside of the United States. These areas will be provided to the Supplier in shapefile format and are comprised of military installations and other sensitive facilities.</i></p>	Yes	<p>All work done within the restricted areas will be performed within the United States and within a secure, controlled data environment.</p>
5.8.7	<p>Does your Solution deliver all final accepted products to VGIN from successfully collected aerial photography within 6 months of the end of flights (not including re-flights)? If yes, please explain.</p> <p><i>Note: In order to facilitate efficient delivery and independent quality review VGIN has designated delivery blocks to guide the production and delivery of data. A shapefile of the delivery blocks will be provided. The Supplier may propose changes to the delivery blocks if such changes would facilitate production.</i></p> <p><i>Note: Independent quality review of image tiles should normally be completed within 10 working days of delivery to the independent reviewer. Corrections to image tiles and redelivery should be made by the Supplier within 10 working days of receipt of the quality reviews.</i></p>	Yes	<p>All final products shall be delivered and accepted by VGIN within six (6) months of successful acquisition. Sanborn has already begun significant planning to ensure success of the schedule. Sanborn will begin expending program resources and finalize planning upon notice to proceed. Sanborn has illustrated the 2013 Eastern half and 2015 Western half in two separate schedules to illustrate general project flow for the multi-year project. We have included a pilot project which will test all methodologies and include samples of all deliverables. The detailed schedules for 2013 and 2015 are included in Section 4 Appendices - Schedule.</p>
5.8.8	<p>Does your Solution provide a block delivery schedule to VGIN with specified milestones at the end of July, August, September and October in each project year (2013 and 2015)? If yes, please explain.</p> <p><i>Note: The milestones will be based upon complete, accepted deliveries of every tile within one or more blocks. For example, the proposed schedule for 2013 has 24 delivery blocks and expected delivery milestones are shown in the attached table located in the Delivery Block Tab.</i></p> <p><i>Note: The VITA contract may specify monetary remedies for failure to meet the delivery schedule milestone.</i></p>	Yes	<p>Sanborn has already begun significant planning to ensure the success of the schedule. Sanborn understands the need for blocks to be delivered and accepted in full, with the end deliverable dates as defined in this RFP. The detailed schedules for 2013 and 2015 are included in Section 4 Appendices - Schedule.</p>
5.8.9	<p>Does your Solution allow for upgrades, off-year flights or other services provided under this contract, which are not part of the base program? If yes, please explain.</p> <p><i>Note: VGIN and the Supplier may agree upon specifications, costs, and schedule. After agreement, VGIN may issue a written task specifying the services to be provided, costs of the services, and the schedule for delivery. Acceptance of a task order shall commit the Supplier to the specifications, costs, and performance detailed in the task order.</i></p>	Yes	<p>Please see Appendices - Requirements, Ref. Section 5.7 for additional details on Sanborn's upgrade options.</p>

5.8 Project Management		A	B
5.8.1	Does your Solution include the necessary project management, coordination, and supervision to conduct project planning, flight planning and acquisition, image processing, product delivery, and related technical and progress reports as required.? If yes, please explain.	Yes	Sanborn's detailed response to Appendix E demonstrates the experience, coordination, planning, and supervision required to successfully execute the Commonwealth's program. See Appendices - Requirements, Ref. Section 5.8. for details on Sanborn's project management approach.
5.8.2	Does your Solution include photogrammetric services supervised or reviewed by a Surveyor Photogrammetrist licensed with the Commonwealth of Virginia? If yes, please explain. <i>Note: Information on Virginia licensing of Surveyor Photogrammetrists can be found at</i> http://www.dpor.virginia.gov/dporweb/pho_form.cfm	Yes	Mr. Luiz Cortes, a licensed Photogrammetrist with the Commonwealth of VA, will supervise and perform an independent review the results of all photogrammetric services performed. Mr. Cortes has been involved with the VGIN orthoimagery program since 2006. Raquel Charrois, also a licensed Photogrammetrist with the Commonwealth of VA, will act as the project principal for the program.
5.8.3	Does your Solution include a detailed project plan addressing all of the following : *Project schedule *Ground Control *Aerial Imagery Acquisition Plan, including but not limited to *Sensors proposed to be used *Number of aircraft available *Plans for revisits necessitated by image rejections or in the event weather or ground conditions preclude collection. *Orientation of Imagery to Ground Control *Generate (or update) Digital Terrain Model (DTM) *Orthorectification of Imagery *Radiometrically balance, edge-match and smooth orthoimages *Tile and compress orthoimagery *Conduct internal Quality Assurance/Quality Control (QA/QC) *Process and deliver final products If yes, please explain.	Yes	Sanborn's technical responses in Appendix E, as well as Section 3 of Sanborn's response, provide details of our project approach, which addresses each of the production steps and product specifications.
5.8.4	Does your Solution include the submittal of progress reports on a daily basis during the acquisition period and weekly during the production and delivery process? If yes, please explain. <i>Note: During acquisition period daily progress reports should report image acquisitions and to identify no-progress days due to weather or other conditions. The report should also indicate those areas where the Supplier determined the acquired imagery to be unusable which will result in a re-flight.</i> <i>During production period weekly progress reports should be provided summarizing all work progress over the previous week and progress planned for coming week and beyond.</i>	Yes	See Appendices - Requirements, Ref. Section 5.8.1.4.3 through 5.8.1.4.8 for details related to Sanborn's status reporting.

	<i>Note: Supplier is to include the service definition</i>		available through the service		be provided to VGIN staff as requested.
5.9.12	Does your Solution include a plan to host all, or portions, of the VBMP datasets as an ESRI image service in addition to the cache data services above? If yes, please explain.	Yes	The Valtus Imagery service currently supports ArcIMS, WMS, and ArcGIS services for all datasets once they are loaded to the archive.	Yes	Sanborn can provide this service using the same architecture described in Appendices - Requirements, Section 5.9. This would require strategic and technical meeting with VGIN staff to capture the full requirements of what would be needed.
5.9.13	Does your Solution include a plan to host a end user fee based ecommerce download service of the VBMP datasets (2013-2016)? If yes, please explain.	Yes	The Valtus system is a full e-commerce system that currently sells any imagery loaded into to the arhive. It can be set up as a free service or on a user-fee basis with a pricing model as agreed from time to time.	No	

5.9.4	Does your Solution include the creation and hosting of an ESRI image cache map service from VBMP 2011 data only in the WGS 84 Web Mercator Auxillary Sphere projection and will follow the Google Bing map tiling from 1:4,622,324 down to 1:1128 scale? If yes, please explain.	Yes, Future	If we get access to the 2011 VBMP data, we will be able to load the data into the archive and expose it with the other layers.	Yes	The current version 2011 imagery will be available in WGS84 Web Mercator Auxillary Sphere projection and will follow the Google Bing map tiling from 1:4,622,324 down to 1:1,128 scale. A second service will also be deployed that provides the tile grid detailing the location and date of image acquisition. This will be accomplished using open source tools in combination with an ArcGIS delievery solution and will be intergrated into Services.Sanborn. See Appendices - Requirements, Section 5.9 for additional information.
5.9.5	Does your Solution provide VGIN a copy of any cache of map services upon completion of caching activity? If yes, please explain.	No	We use highly scalable, distrubuted caching backends that will not be easily transferred to a location that does not have the same infrastruicture as we do However, if absolutely required we can develop a tool to export/import the dynamic cache's content for offline access.	Yes	This can be accomplished by providing a hard-drive that contains the cached images
5.9.6	Does your Solution provide for the available most recent imagery caches to be updated with new data, and for new single year caches to be developed with the same schema as described above, as new orthoimagery is acquired and processed? Does your solution provide that updates will occur within 60 days of availability of the vintage of imagery to the contractor? If yes, please explain.	Yes	Adding new data to get into the distributed cache is a matter of configuration for the grid parameters and letting the renderes populate the cache on the fly or preseeding them to the required level for the expected user experaiance.	Yes	This would be accomplished by scaling the backend to support caching multiple data vintages at the same time.
5.9.7	Does your Solution provide for the color balance and contrast of all produced image caches to be approved by VGIN prior to publication? If Yes, please explain.	No	Each source layer could be color balanced before it goes to the cache, but it is not possible to color balance the mosiacked layer across layers.	Yes	A small cache can be generated for VGIN staff viewing. Once approved, the entire data set will be processed.
5.9.8	Does your Solution include existing cache services as detailed in 5.9.1, 5.9.2, 5.9.3, and 5.9.4, within 60 days of receipt of data from VGIN? If yes, please explain. <i>Note: VGIN should provide the necessary source data for cache creation.</i> <i>Note: VGIN should supply the final orthoimagery within 15 days of final acceptance of the contract.</i> <i>Note: At VGIN's discretion it may provide previously generated image cache datasets to speed service development.</i>	Yes	Once the underlying data is loaded into the archive, we have the computation resources to preseed the cache or do on-the-fly seeding.	Yes	This would be accomplished by scaling the backend to support caching multiple data vintages at the same time.
5.9.9	Does your Solution provide access via the Internet to the public for the hosted map services? If yes, please explain. <i>Note: Timely access is represented by test measurements of access from VITA's CESC office, where imagery tiles should be retrievable within 2 seconds as measured by the Fiddler web debugging application.</i>	Yes	Based on the authorization service required by VGIN, the data could be made available to the public on a user, AOI, or wide open usage.	Yes	Testing of access via the Internet to the public for Services.Sanborn hosted services have been observed to be within two seconds of the request. Sanborn can not gaurantee the speed at which a recipient can receive the imagery tiles, as the recipients bandwidth is not within our control.
5.9.10	Does your Solution include image cache services that are available 24 X 7 except for scheduled maintenance? If yes, please explain. <i>Note: The supplier should provide a plan for maintenance and outage response</i>	Yes	The Valtus service runs 24 x7 with 9999 availability.	Yes	Maintenance is generally performed on Services.Sanborn at night or on weekends. A maintenance schedule will be fully developed and provided if this option is chosen.
5.9.11	Does your Solution provide metadata for the web services to VGIN? If yes, please explain.	Yes	The acquisition date for each layer is available through the service	Yes	All of the metadata for the WMS or REST. This will be provided to VGIN staff as requested

		Primary Solution		Secondary Solution	
5.9 Data Services		A	B	A	B
5.9.1	<p>Does your Solution include the creation and hosting of a most recent imagery ESRI image cache map service combining data from the 2009 flight year and the 2011 flight year in WGS84 Web Mercator Auxillary Sphere projection and will follow the Google Bing map tiling from 1:4,622,324 down to 1:1128 scale? If yes, please explain.</p> <p><i>Note: A second service will also be deployed with the associated tile grid detailing the location and date of image acquisition for the service.</i></p>	"Yes, Future"	<p>Currently the VALTUS image service exposes the image archive through WMS, WMSC, WMTS, ArcIms and ArcGIS SOAP. We are working towards having the ability to expose our OGC conforming WMTS service through the ArcGIS image cache map service.</p>	Yes	<p>The current version 2009/2011 imagery will be available in WGS84 Web Mercator Auxillary Sphere projection and will follow the Google Bing map tiling from 1:4,622,324 down to 1:1,128 scale. A second service will also be deployed that provides the tile grid detailing the location and date of image acquisition. This will be accomplished using open source tools in combination with an ArcGIS delivery solution and will be intergrated into Services.Sanborn.</p> <p>See Appendices - Requirements, Section 5.9 for additional information.</p>
5.9.2	<p>Does your Solution include the creation and hosting of the most recent imagery ESRI image cache map service combining data from the 2009 and 2011 flight years in the Virginia Statewide Lambert projection? If yes, please explain.</p> <p><i>Note: The cache in this Virginia Statewide Lambert projection should have tiling scale as follows:</i></p> <p>1:1,200 (1 pixel = 0.317501 m) 1:2,400 (1 pixel = 0.635001 m) 1:4,800 (1 pixel = 1.270003 m) 1:8,000 (1 pixel = 2.116671 m) 1:12,000 (1 pixel = 3.175006 m) 1:24,000 (1 pixel = 6.350013 m) 1:48,000 (1 pixel = 12.700025 m) 1:100,000 (1 pixel = 26.458386 m) 1:200,000 (1 pixel = 52.916773 m) 1:400,000 (1 pixel = 105.833545 m) 1:800,000 (1 pixel = 211.667090 m) 1:1,600,000 (1 pixel = 423.334180 m) 1:4,000,000 (1 pixel = 1058.335450 m)</p> <p><i>A second service may also be deployed with the associated tile grid detailing the location and date of image acquisition for the service.</i></p>	"Yes, Future"	<p>If we get access to the 2009 VBMP data, we will be able to expose it using any of the projections required using our distributed dynamic cache.</p>	Yes	<p>The current version 2009/2011 imagery will be available in Virginia Statewide Lambert and will follow the map tiling scale as defined 1:4,000,000 down to 1:1,200 scale. A second service will also be deployed that provides the tile grid detailing the location and date of image acquisition. This will be accomplished using open source tools in combination with an ArcGIS delivery solution and will be intergrated into Services.Sanborn.</p> <p>See Appendices - Requirements, Section 5.9 for additional information.</p>
5.9.3	<p>Does your Solution include the creation and hosting of an ESRI image cache map service from VBMP 2009 data only in the WGS 84 Web Mercator Auxillary Sphere projection and will follow the Google Bing map tiling from 1:4,622,324 down to 1:1128 scale? If yes, please explain.</p>	"Yes, Future"	<p>If we get access to the 2009 VBMP data, we will be able to load the data into the archive and expose it with the other layers.</p>	Yes	<p>The current version 2009 imagery will be available in WGS84 Web Mercator Auxillary Sphere projection and will follow the Google Bing map tiling from 1:4,622,324 down to 1:1,128 scale. A second service will also be deployed that provides the tile grid detailing the location and date of image acquisition. This will be accomplished using open source tools in combination with an ArcGIS delivery solution and will be intergrated into Services.Sanborn.</p> <p>See Appendices - Requirements, Section 5.9 for additional information.</p>

Exhibit B

Fees, Service Charges and Payment Schedule

The Invoicing and Payment terms as set forth in this Exhibit B - Fees, Service Charges and Payment Schedule shall supersede Invoicing and Payment terms as contained in the: Information Technology Services Contract Sections 11.G., H. & I., EXHIBIT E STATEMENT OF WORK (SOW) TEMPLATE Sections 8. & 10., and other references to same as may be otherwise contained within the Contract and its Exhibits.

Payment Schedule

- Monthly fixed Invoicing amount: this will be the Base Product cost (1 foot tiles, estimated, for RFP planning purposes only, to total 46,150 tiles per the counts provided in RFP 2012-13) to VITA divided by 48 months, to begin in January 2013 and end December 2016. These counts are estimates, and actual base tile counts will be determined upon selection of upgrade products by VITA.
 - The monthly invoicing will NOT include upgrade product costs
- Upgrade payments: If our cash flow allows, we will use a standard milestone schedule for all upgrades, with final payment to be made after acceptance. Milestones will be two-fold:
 - (1) 50% After Acquisition is complete, and
 - (2) 50% after final acceptance by the locality (or other upgrading entity). This will be initiated by two weeks of acceptance to the upgrading entity.

Fees

Statewide Acquisition

1 ft resolution, statewide, with six- and three-inch resolution upgrade options for local areas.

Cost per tile – Statewide 1 foot

		Cost per 5,000' x 5,000' tile
1.	1 foot resolution tile	\$20.59

Cost per tile – Upgrade Option - 6 inch resolution (0.5 Foot GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 2,500' x 2,500' tile
1.	1000+	\$44.00
2.	500-999	\$50.00
3.	250-499	\$53.00
4.	100-249	\$90.00

5.	50-99	Custom quote, not to exceed \$100.00
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Cost per tile – **Upgrade Option** - 3 inch resolution (0.25 Foot GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 1,250' x 1,250' tile
1.	450+	\$44.00
2.	300-449	\$45.00
3.	150-299	\$65.00
4.	70-149	\$96.00
5.		

* Supplier is to list the range of tiles (by number) to which the costs in each row apply (e.g. 1-500, 500-5000, 5000 or greater).

** If a range is not listed pricing is by custom quote.

*** Pricing is for Contiguous Areas only

Note:

As discussed in the short list, Sanborn will provide an **unedited auto-correlated** DSM along with the 12" orthos for the \$20.59 price

Cost Decrease Factors

Supplier is to submit cost increase and cost decrease factors for the 2013-2016 orthophotography project as described below. These factors should be expressed as a percentage of overall project cost.

Cost Decrease Factors

Decrease Factor 1: No Delivery of Compressed Imagery Product

Supplier is to submit a cost decrease factor for delivery of GeoTiff files only. It is expected that removing the delivery of MrSID or JPG2000 files would result in some cost savings for the Commonwealth.

% Cost Decrease

1%

Decrease Factor 2: Use of Existing Ground Control Information

Supplier is to submit a cost decrease factor for using documented ground control information from the 2009/2011 project. Existing ground control information will be provided to each contractor as requested.

% Cost Decrease

0%

Additional Upgrade Options

Additional Option 1: 4 Foot Contours

(Source: 1 foot resolution orthophotos with hydro-enforced DTMs)

	Tile Range - Number of tiles per price/cost*	Cost per 5,000' x 5,000' tile	Alternative unit of measure
1.	Setup charge per request		\$3,340.00
2.	Per tile price (any sized area)	\$19.50	
3.			
4.			
5.			

* Supplier is to list the range of tiles (by number) to which the costs in each row apply (e.g. 1-500, 500-5000, 5000 or greater).

Additional Option 2: 2 Foot Contours

(Source: 6 inch resolution orthophotos with hydro-enforced DTMs)

	Tile Range - Number of tiles per price/cost*	Cost per 2,500' x 2,500' tile	Alternative unit of measure
1.	Setup charge per request		\$1,208.00
2.	Per tile price (any sized area) – with DTM update	\$27.27	
3.	Per tile price (any sized area) – with new DTM	\$96.59	
4.	NSSDA Checkpoints and reporting		\$9,653.00
5.			

* Supplier is to list the range of tiles (by number) to which the costs in each row apply (e.g. 1-500, 500-5000, 5000 or greater).

Additional Option 3: Structure Planimetrics

Derived from 1 foot resolution orthophotos to include structures with roofs having an aerial coverage of 200 square feet or greater

	Option - range	Cost / Unit
1.	Setup charge per request	\$408.00
2.	Per Structure Price	\$0.21
3.		\$
4.		\$

Derived from 6 inch resolution orthophotos to include structures with roofs having an aerial coverage of 100 square feet or greater

	Option - range	Cost / Unit
1.	Setup charge per request	\$408.00
2.	Per Structure Price	\$0.21
3.		\$
4.		\$

Additional Option 4: Other Planimetrics

Supplier is to submit pricing information on any other planimetric datasets that could be included as part of this contract. Pricing for these options is to be listed in a format that is similar to the pricing for the structure planimetrics.

	Tile Range - Number of tiles per price/cost	Cost per 2,500' x 2,500' tile	Alternative unit of measure
1.	Setup charge per request		\$2,807
2.	New 100 Scale Plan per tile price (any sized area)	\$422.00	
	Tile Range - Number of tiles per price/cost	Cost per 5,000' x 5,000' tile	Alternative unit of measure
3.	Setup charge per request		\$2,807
4.	New 200 Scale Plan per tile price (any sized area) - Urban	\$495.00	
5.	New 200 Scale Plan per tile price (any sized area) - Rural	\$276.00	

Note that New 50 Scale plan will be a custom quote
Note that Update Plan will be a custom quote

Additional Option 5: USGS Version 13 Compliant LiDAR

Additionally, a mobilization cost of \$6,000 per aircraft will be added to the prices below.

Cost per tile – **Upgrade Option – Quality Level 3** LiDAR 1-2m NPS 18.5 cm RMSE

	Tile Range - Number of tiles per price/cost*	Cost per 5,000' x 5,000' tile
1.	10,000+	\$106.62
2.	5,000-9,999	\$107.87
3.	1,000-4,999	\$120.21
4.	500-999	\$126.67
5.	200-499	\$162.29
6.	100-199	\$254.06
7.	50-99	\$414.70

* Supplier is to list the range of tiles (by number) to which the costs in each row apply (e.g. 1-500, 500-5000, 5000 or greater).

Cost per tile – **Upgrade Option – Quality Level 2** LiDAR 0.7 NPS 9.5 cm RMSE

	Tile Range - Number of tiles per price/cost*	Cost per 2,500' x 2,500' tile
1.	40,000+	\$52.31
2.	20,000-39,999	\$52.65
3.	4,000-19,999	\$58.29
4.	2,000-3,999	\$62.24
5.	800-1,999	\$86.31
6.	400-799	\$105.41
7.	200-399	\$128.48

* Supplier is to list the range of tiles (by number) to which the costs in each row apply (e.g. 1-500, 500-5000, 5000 or greater).

Optional contours from LiDAR data

	Tile Range - Number of tiles per price/cost	Cost per 5,000' x 5,000' tile	Alternative unit of measure
1.	Setup charge per request		\$675.00
2.	4' Contours	\$4.89	
3.	2' Contours	\$9.78	
	Tile Range - Number of tiles per price/cost	Cost per 2,500' x 2,500' tile	Alternative unit of measure
4.	Setup charge per request		\$675.00
5.	1' Contours (must come from 0.7 NPS LiDAR)	\$4.89	

Additional Option 6: Off Year Flights

Supplier is to submit whether they will agree to give each VGIN Partner the option to have specified areas flown during “off years”. The VITA/VGIN core flights will take place in designated localities in the eastern portion of Virginia during 2013 and the western portion of Virginia during 2015. Partners will be given the option to have specified areas flown in any year during the 2013-2016 cycle other than the designated VGIN core flight year.

While it is the preference of VITA/VGIN that prices for tiles during off years should be the same as core years, it is recognized that this may not be a possibility. Please indicate whether or not the prices will be the same, and if not, list alternative tile pricing for off year flights.

Off year tile cost will be the same as the core flight years - Yes No

A minimum total order value of \$25,000 for the base ortho product applies for the 2014 and 2016 off flights. The tiles need to be contiguous.

Cost per tile – Off Year Flights - 1 foot resolution (1 Foot GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 5,000' x 5,000' tile
1.		\$
2.		\$
3.		\$
4.		\$
5.		\$

Cost per tile – Off Year Flights - 6 inch resolution (.5 Foot GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 2,500' x 2,500' tile
1.		\$
2.		\$
3.		\$
4.		\$
5.		\$

Cost per tile – Off Year Flights – 3 inch resolution (0.25 Foot GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 1,250' x 1,250' tile
1.		\$
2.		\$
3.		\$
4.		\$
5.		\$

* Supplier is to list the range of tiles (by number) to which the costs in each row apply (e.g. 1-500, 500-5000, 5000 or greater).

Additional Option 7: Data as a Service (Daas)

Not Used.

Other Additional Options

VITA/VGIN recognizes that these upgrades do not represent all options that may be made available from each Supplier. With that in mind, Suppliers are encouraged to submit any other options deemed appropriate that could be offered through this contract in their proposal.

Pricing for these options is to be listed in a similar format as the specific upgrades listed above.

In addition, during contract negotiations VITA/VGIN may solicit input and ideas from suppliers that may allow for a recurring, monthly and/or quarterly billing plan during the term of the contract. This alternative would allow VITA/VGIN to evenly spread out the costs to a monthly/quarterly basis versus the traditional deliverable-based payment schedules. Ideas from Suppliers are to include ways to incentivize timely and quality deliverables while providing for a predictable and routine billing process.

Additional Option 8: Rapid Response (Ortho Imagery and LiDAR)

Ortho Imagery

	Tile Range - Number of tiles per price/cost	Cost per 5,000' x 5,000' tile	Alternative unit of measure
1.	Expedition Fee per request		\$20,000.00
2.	1 foot resolution tile	\$27.00	
	Tile Range - Number of tiles per price/cost	Cost per 2,500' x 2,500' tile	Alternative unit of measure
3.	Expedition Fee per request		\$20,000.00
4.	6 inch resolution 1000+	\$45.00	

5.	6 inch resolution 500-999	\$51.00	
6.	6 inch resolution 250-499	\$63.00	
7.	6 inch resolution 50-249	\$100.00	

LiDAR

	Tile Range - Number of tiles per price/cost	Cost per 5,000' x 5,000' tile	Alternative unit of measure
1.	Expedition Fee per request		\$20,000
2.	1-2m NPS 10,000+	\$106.62	
3.	1-2m NPS 5,000-9,999	\$107.87	
4.	1-2m NPS 1,000-4,999	\$120.21	
5.	1-2m NPS 500-999	\$126.67	
6.	1-2m NPS 200-499	\$162.29	
7.	1-2m NPS 100-199	\$254.06	
8.	1-2m NPS 50-99	\$414.70	
	Tile Range - Number of tiles per price/cost	Cost per 2,500' x 2,500' tile	Alternative unit of measure
9.	Expedition Fee per request		\$20,000
10.	0.7 NPS 40,000+	\$52.31	
11.	0.7 NPS 20,000-39,999	\$52.65	
12.	0.7 NPS 4,000-19,999	\$58.29	
13.	0.7 NPS 2,000-3,999	\$62.24	
14.	0.7 NPS 800-1,999	\$86.31	
15.	0.7 NPS 400-799	\$105.41	
16.	0.7 NPS 200-399	\$128.48	

Additional Option 9: True Orthophotography

	Tile Range - Number of tiles per price/cost	Cost per 5,000' x 5,000' tile	Alternative unit of measure
1.	1 foot resolution tile	\$1,500.00	
	Tile Range - Number of tiles per price/cost	Cost per 2,500' x 2,500' tile	Alternative unit of measure
2.	6 inch resolution tile	\$876.00	

Additional Option 10: 3 inch resolution (1"=50' to support potential 1' contours)

Cost per tile – **Upgrade Option** - 3 inch resolution (0.25 Foot GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 1,250' x 1,250' tile
1.	450+	\$61.03
2.	300-499	\$67.65
3.	150-299	\$100.34
4.	70-149	\$172.73
5.		

Additional Option 11: Oblique imagery

Cost per tile – 6 inch resolution (0.5 Foot GSD)

	Tile Range - Number of tiles per price/cost*	Cost per 2,500' x 2,500' tile
1.	10,000+	\$23.72
2.	4,000-9,999	\$29.47
3.	2,000-3,999	\$34.24
4.	800-1,999	\$46.42
5.	200-799	\$90.79

Additional Option 12: Structure Planimetrics by Jurisdiction

Derived from *1 foot* resolution orthophotos to include structures with roofs having an aerial coverage of *200* square feet or greater

Or

Derived from *6 inch* resolution orthophotos to include structures with roofs having an aerial coverage of *100* square feet or greater

Accomack County	\$ 5,701.00
Albemarle County	\$ 11,023.00
Alleghany County	\$ 2,443.00
Amelia County	\$ 1,759.00
Amherst County	\$ 3,930.00
Appomattox County	\$ 2,152.00
Arlington County	\$ 26,970.00
Augusta County	\$ 8,269.00
Bath County	\$ 1,232.00
Bedford County	\$ 8,456.00
Bland County	\$ 1,231.00
Botetourt County	\$ 4,078.00
Brunswick County	\$ 2,466.00
Buchanan County	\$ 3,325.00
Buckingham County	\$ 2,234.00
Campbell County	\$ 6,650.00
Caroline County	\$ 3,364.00
Carroll County	\$ 4,584.00
Charles City County	\$ 1,222.00
Charlotte County	\$ 1,989.00
Chesterfield County	\$ 31,292.00
Clarke County	\$ 1,979.00
Craig County	\$ 1,116.00
Culpeper County	\$ 4,858.00

Cumberland County	\$ 515.00
Dickenson County	\$ 2,318.00
Dinwiddie County	\$ 3,286.00
Essex County	\$ 1,859.00
Fairfax County	\$103,224.00
Fauquier County	\$ 6,859.00
Floyd County	\$ 2,371.00
Fluvanna County	\$ 3,025.00
Franklin County	\$ 7,796.00
Frederick County	\$ 8,307.00
Giles County	\$ 2,505.00
Gloucester County	\$ 4,403.00
Goochland County	\$ 2,580.00
Grayson County	\$ 2,715.00
Greene County	\$ 2,300.00
Greensville County	\$ 1,439.00
Halifax County	\$ 4,945.00
Hanover County	\$ 10,075.00
Henrico County	\$ 33,868.00
Henry County	\$ 7,028.00
Highland County	\$ 871.00
Isle of Wight County	\$ 4,096.00
James City County	\$ 7,917.00
King and Queen County	\$ 1,268.00
King George County	\$ 2,796.00
King William County	\$ 2,052.00
Lancaster County	\$ 2,273.00
Lee County	\$ 3,368.00
Loudoun County	\$ 27,988.00
Louisa County	\$ 4,521.00
Lunenburg County	\$ 1,904.00
Madison County	\$ 1,903.00
Mathews County	\$ 1,837.00
Mecklenburg County	\$ 5,093.00
Middlesex County	\$ 2,206.00
Montgomery County	\$ 10,128.00
Nelson County	\$ 2,911.00
New Kent County	\$ 2,246.00
Northampton County	\$ 2,248.00
Northumberland County	\$ 2,675.00

Nottoway County	\$ 2,084.00
Orange County	\$ 4,091.00
Page County	\$ 3,331.00
Patrick County	\$ 2,949.00
Pittsylvania County	\$ 8,298.00
Powhatan County	\$ 2,939.00
Prince Edward County	\$ 2,714.00
Prince George County	\$ 3,446.00
Prince William County	\$ 34,961.00
Pulaski County	\$ 4,751.00
Rappahannock County	\$ 1,376.00
Richmond County	\$ 1,378.00
Roanoke County	\$ 10,492.00
Rockbridge County	\$ 3,218.00
Rockingham County	\$ 8,890.00
Russell County	\$ 3,806.00
Scott County	\$ 3,411.00
Shenandoah County	\$ 5,669.00
Smyth County	\$ 4,296.00
Southampton County	\$ 2,291.00
Spotsylvania County	\$ 11,795.00
Stafford County	\$ 11,491.00
Surry County	\$ 1,276.00
Sussex County	\$ 1,592.00
Tazewell County	\$ 5,656.00
Warren County	\$ 4,449.00
Washington County	\$ 6,860.00
Westmoreland County	\$ 3,084.00
Wise County	\$ 4,929.00
Wythe County	\$ 3,956.00
York County	\$ 7,174.00
Alexandria city	\$ 18,647.00
Bedford city	\$ 1,144.00
Bristol city	\$ 2,634.00
Buena Vista city	\$ 1,148.00
Charlottesville city	\$ 5,244.00
Chesapeake city	\$ 21,374.00
Charles City	\$ 1,031.00
Colonial Heights city	\$ 2,382.00

Covington city	\$ 1,181.00
Danville city	\$ 6,063.00
Emporia city	\$ 1,055.00
Fairfax city	\$ 2,596.00
Falls Church city	\$ 1,791.00
Franklin city	\$ 1,391.00
Fredericksburg city	\$ 3,046.00
Galax city	\$ 1,228.00
Hampton city	\$ 15,419.00
Harrisonburg city	\$ 4,804.00
Hopewell city	\$ 2,959.00
Lexington city	\$ 1,050.00
Lynchburg city	\$ 8,470.00
Manassas city	\$ 3,715.00
Manassas Park city	\$ 1,644.00
Martinsville city	\$ 2,224.00
Newport News city	\$ 19,610.00
Norfolk city	\$ 24,353.00
Norton city	\$ 898.00
Petersburg city	\$ 4,522.00
Poquoson city	\$ 1,599.00
Portsmouth city	\$ 10,691.00
Radford city	\$ 2,028.00
Richmond city	\$ 25,192.00
Roanoke city	\$ 12,366.00
Salem city	\$ 3,138.00
Staunton city	\$ 3,366.00
Suffolk city	\$ 8,733.00
Virginia Beach city	\$ 45,234.00
Waynesboro city	\$ 2,857.00
Williamsburg city	\$ 1,712.00
Winchester city	\$ 3,400.00

Additional Option 13: 3D Buildings

3D block buildings are a base (footprint) and a height point. This pricing replaces the pricing in Additional Option 3. It is not in addition to the pricing in Additional Option 3.

	Option - range	Cost / Unit
1.	Setup charge per request	\$816.00
2.	Per Structure Price	\$0.50

Additional Option 14: Hydro Breaklines from LiDAR Data

For hydro between 10' and 99' wide

	Tile Range - Number of tiles per price/cost*	Cost per 2,500' x 2,500' tile	Alternative unit of measure
1.	Setup charge per request		\$408.00
2.	Per tile price (any sized area)	\$35.24	

Additional Option 15: Change Detection

		Cost per Square Mile	Alternative unit of measure
1.	Setup charge per request		\$5,000.00
2.	Per sq mile (any sized area)	\$14.00	

Additional Option 16: Enhanced Impervious and Enhanced Land Cover Costs

Community Name	Estimated Area (square miles)	Enhanced Impervious Cost	Enhanced Land Cover Cost
Manassas Park	2.50	\$5,465.00	\$8,561.00
Franklin City	8.31	\$5,465.00	\$8,561.00
Emporia	6.96	\$5,465.00	\$8,561.00
Falls Church	1.99	\$5,465.00	\$8,561.00
Williamsburg	9.17	\$5,465.00	\$8,561.00
Buena Vista	6.82	\$5,465.00	\$8,561.00
Lexington	2.49	\$5,465.00	\$8,561.00
Norton	7.53	\$5,465.00	\$8,561.00
Bristol	13.22	\$5,465.00	\$8,561.00
Bedford City	6.89	\$5,465.00	\$8,561.00
Radford	10.18	\$5,465.00	\$8,561.00
Colonial Heights	7.96	\$5,465.00	\$8,561.00
Fredericksburg	10.51	\$5,465.00	\$8,561.00
Galax	8.22	\$5,465.00	\$8,561.00
Covington	5.51	\$5,465.00	\$8,561.00
Hopewell	10.86	\$5,465.00	\$8,561.00
Martinsville	11.00	\$5,465.00	\$8,561.00
Waynesboro	14.77	\$5,465.00	\$8,561.00
Fairfax City	6.27	\$5,465.00	\$8,561.00
Manassas	9.99	\$5,465.00	\$8,561.00
Salem	14.50	\$5,465.00	\$8,561.00
Winchester	9.34	\$5,465.00	\$8,561.00
Harrisonburg	17.59	\$5,465.00	\$8,561.00
Staunton	19.75	\$5,465.00	\$8,561.00
Charlottesville	10.18	\$5,465.00	\$8,561.00
Poquoson	15.26	\$5,465.00	\$8,561.00
Alexandria	15.35	\$5,465.00	\$8,561.00

Petersburg	23.16	\$5,465.00	\$8,561.00
Arlington	26.14	\$5,465.00	\$8,561.00
Portsmouth	28.36	\$5,465.00	\$8,561.00
Roanoke City	42.90	\$5,465.00	\$8,561.00
Danville	43.92	\$5,465.00	\$8,561.00
Hampton	53.16	\$5,465.00	\$10,203.00
Norfolk	56.15	\$5,465.00	\$10,239.00
Lynchburg	49.74	\$5,465.00	\$10,418.00
Mathews	88.78	\$5,465.00	\$10,832.00
Richmond City	62.58	\$6,539.00	\$13,935.00
Newport News	69.58	\$6,351.00	\$14,757.00
York	108.13	\$5,880.00	\$18,698.00
Middlesex	134.18	\$5,891.00	\$21,239.00
Lancaster	135.87	\$6,278.00	\$22,708.00
James City	149.96	\$8,052.00	\$26,552.00
Greene	156.95	\$7,622.00	\$26,604.00
Northampton	164.28	\$7,975.00	\$28,565.00
King George	185.28	\$8,412.00	\$30,018.00
Clarke	178.06	\$8,458.00	\$30,105.00
Richmond	200.66	\$8,682.00	\$31,571.00
Charles City	190.62	\$9,150.00	\$33,575.00
Northumberland	211.16	\$9,216.00	\$33,575.00
Gloucester	222.38	\$9,933.00	\$35,867.00
Warren	216.31	\$10,754.00	\$36,603.00
New Kent	220.04	\$10,334.00	\$37,475.00
Westmoreland	237.32	\$11,504.00	\$41,855.00
Henrico	244.50	\$15,687.00	\$43,455.00
Powhatan	262.43	\$12,401.00	\$45,120.00
Rappahannock	266.87	\$12,438.00	\$45,247.00
Essex	272.11	\$12,533.00	\$45,472.00
Roanoke	251.16	\$15,960.00	\$46,764.00
Prince George	269.71	\$13,372.00	\$47,204.00
Stafford	278.67	\$14,199.00	\$47,706.00
Greensville	296.81	\$13,356.00	\$48,081.00
King William	285.36	\$13,194.00	\$48,111.00
Fluvanna	290.20	\$13,386.00	\$48,385.00
Surry	281.54	\$13,216.00	\$48,447.00
Goochland	290.01	\$13,575.00	\$48,800.00
Cumberland	299.73	\$13,420.00	\$48,810.00
Virginia Beach	257.90	\$18,395.00	\$49,260.00
Nottoway	316.10	\$14,429.00	\$50,793.00
Page	314.09	\$15,330.00	\$53,126.00
Isle of Wight	320.63	\$15,068.00	\$54,197.00
Madison	321.80	\$15,221.00	\$54,719.00
Craig	330.67	\$15,167.00	\$55,035.00
King and Queen	320.79	\$15,115.00	\$55,369.00
Dickenson	333.66	\$16,024.00	\$55,634.00
Pulaski	329.59	\$16,522.00	\$56,809.00
Appomattox	334.73	\$15,799.00	\$56,912.00
Orange	343.51	\$16,263.00	\$58,184.00

Prince Edward	353.84	\$16,325.00	\$58,615.00
Chesapeake	350.06	\$18,898.00	\$59,272.00
Prince William	348.56	\$19,810.00	\$59,410.00
Giles	360.34	\$16,767.00	\$59,658.00
Bland	358.73	\$16,814.00	\$60,993.00
Amelia	358.36	\$16,999.00	\$61,765.00
Henry	384.39	\$18,508.00	\$63,139.00
Culpeper	382.27	\$18,113.00	\$64,367.00
Floyd	381.22	\$17,754.00	\$64,490.00
Montgomery	389.42	\$21,014.00	\$67,190.00
Suffolk	410.97	\$19,552.00	\$68,258.00
Wise	405.18	\$20,275.00	\$69,082.00
Frederick	415.77	\$20,497.00	\$69,663.00
Accomack	421.49	\$19,438.00	\$69,975.00
Highland	415.85	\$19,086.00	\$70,193.00
Spotsylvania	412.30	\$20,432.00	\$71,043.00
Lunenburg	432.37	\$19,748.00	\$71,630.00
Grayson	445.88	\$20,535.00	\$74,513.00
Lee	437.31	\$21,591.00	\$75,461.00
Fairfax	406.55	\$30,818.00	\$75,521.00
Alleghany	448.91	\$21,509.00	\$76,079.00
Chesterfield	437.28	\$24,495.00	\$76,280.00
Smyth	452.30	\$21,396.00	\$76,428.00
Nelson	474.39	\$21,862.00	\$78,160.00
Charlotte	477.44	\$21,875.00	\$79,341.00
Wythe	464.61	\$22,603.00	\$79,885.00
Amherst	478.78	\$22,861.00	\$80,298.00
Carroll	477.65	\$22,603.00	\$81,105.00
Patrick	485.86	\$22,327.00	\$81,250.00
Hanover	473.99	\$23,524.00	\$81,759.00
Russell	476.76	\$23,233.00	\$81,875.00
Buchanan	503.88	\$23,624.00	\$82,701.00
Sussex	492.83	\$22,811.00	\$82,904.00
Campbell	507.16	\$24,182.00	\$84,670.00
Dinwiddie	507.06	\$23,802.00	\$85,259.00
Louisa	510.69	\$23,501.00	\$85,333.00
Shenandoah	512.52	\$24,425.00	\$85,438.00
Tazewell	519.89	\$25,817.00	\$88,199.00
Bath	534.56	\$24,204.00	\$88,403.00
Caroline	538.67	\$24,874.00	\$90,257.00
Scott	538.62	\$25,471.00	\$91,750.00
Loudoun	521.24	\$28,606.00	\$91,878.00
Botetourt	545.93	\$26,550.00	\$92,557.00
Brunswick	569.37	\$27,155.00	\$96,345.00
Washington	565.91	\$27,606.00	\$97,757.00
Buckingham	583.56	\$27,081.00	\$98,598.00
Southampton	602.43	\$27,501.00	\$100,327.00
Rockbridge	600.98	\$28,895.00	\$101,886.00
Fauquier	651.88	\$30,645.00	\$109,457.00
Mecklenburg	679.28	\$31,691.00	\$113,588.00

Franklin	711.48	\$33,713.00	\$120,892.00
Albemarle	726.26	\$35,153.00	\$122,157.00
Bedford	769.35	\$37,840.00	\$130,799.00
Halifax	829.56	\$39,248.00	\$140,862.00
Rockingham	853.29	\$42,775.00	\$147,209.00
Pittsylvania	978.24	\$45,888.00	\$162,526.00
Augusta	971.40	\$48,421.00	\$166,454.00
Totals:	39976.23	\$2,110,582.00	\$6,975,890.00



Exhibit D

Application Service Provider Additional Terms and Conditions

For
Contract No. VA-121207-SANB

between

The Virginia Information Technologies Agency
on behalf of
The Commonwealth of Virginia

and

Supplier

**VIRGINIA BASE MAPPING PROJECT
APPLICATION SERVICE PROVIDER
ADDITIONAL TERMS AND CONDITIONS
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EXHIBIT D
APPLICATION SERVICE PROVIDER SOLUTION
ADDITIONAL TERMS AND CONDITIONS

These additional terms and conditions for provision of Application Service Provider are incorporated herewith under Contract No. VA-XXXXXX-XXXX between Virginia Information Technologies Agency (VITA) and **Supplier Name**.

1. PURPOSE

Any Application Service Provider provided by the Supplier are for the purpose of application hosting in support of Contract No. VA-XXXXXX-XXXX. This Exhibit ("Exhibit") sets forth additional terms and conditions under which Supplier shall provide such Application and Licensed Services ("Licensed Services") to VITA and Authorized Users.

2. DEFINITIONS

A. Application

The software programs in object code and other related data, including intellectual data, proprietary information and Documentation contained and applicable to the Licensed Services hosted and supported by Supplier under this Contract, as described in Exhibit A, including any updates, enhancements, and replacements to the Application.

B. Application Users

Application Users shall include, as specified in the applicable order, employees of an Authorized User, independent contractors engaged by an Authorized User, or entities contracting with an Authorized User for services, as well as customers, suppliers, members of the general public, and other entities with whom an Authorized User may find it necessary or desirable to process or communicate electronically in pursuit of its business and has provided written authorization of such Application Users to the Supplier.

C. Business Day/Hour

Normal operating hours for the Commonwealth of Virginia: Monday-Friday, 8 a.m.-5 p.m. Eastern Standard/Daylight Time, unless otherwise specified on the applicable Statement of Work, excluding Commonwealth-designated holidays.

D. Content

Any data, including the selection, arrangement and organization of such data, entered, uploaded to the Application, or otherwise provided to Supplier by Authorized User or by any Application User, and any software and related documentation, from whatever source, provided by Authorized User to Supplier in connection with this Contract.

E. Contract, the, this

Contract No. VA-XXXXXX-XXXX

F. Documentation

The Supplier's user manuals, training materials, guides, product descriptions, technical manuals, product specifications, supporting materials and Updates describing the Application, Licensed Services and Supplier Product provided to Authorized User, in printed and/or electronic form.

G. Electronic Self-Help

Any use of electronic means to exercise Supplier's license or service termination rights, if allowable pursuant to the Contract, upon breach or cancellation, termination or expiration of this Contract or any order placed hereunder.

H. Licensed Services

The operation of the Application and the necessary operating system software, hardware and utilities on Supplier's host computer system, furnishing Supplier Product to Application Users, storing Content and making the Application, Content, and Supplier Product available to Application User(s) via the Web Site, as more fully described in Exhibit A.

I. Supplier Product

Supplier's proprietary reports, information and data made available to VITA and its Application Users as part of the Licensed Services.

J. Update

As applicable, any update, modification or new release of the Application, Documentation or Supplier Product that Supplier makes generally available to its customers at no additional cost.

K. Web Site

The Internet site operated by Supplier to provide access to the Application, with the Uniform Resource Locator (URL) specified in Exhibit A or the applicable order or SOW (or any successor URL(s)).

3. DESCRIPTION OF LICENSED SERVICES

During the term of the Contract, or any order or SOW issued pursuant to this Contract, Supplier hereby agrees to host the Application(s) listed and described in Exhibit A and specified by the ordering Authorized User on servers owned, operated, housed, and maintained by Supplier and shall make such Application(s) available to Authorized User's designated Application Users through the Internet.

Supplier has acquired any and all license rights in the Application(s) necessary and appropriate for Supplier to provide the Licensed Services as listed and described in Exhibit A for all Authorized Users. Supplier hereby grants each ordering Authorized User and its Application Users a non-exclusive, transferable, worldwide license to access and use by any method the Application during the term of the Contract or the applicable order or SOW issued pursuant to the Contract. The license fee for the rights shall be as set forth in Exhibit B, and shall apply regardless of access mode.

If Authorized User is a state agency, board, commission, or other quasi-political entity of the Commonwealth of Virginia or other body referenced in Title 2.2 of the Code of Virginia, the license shall be held by the Commonwealth. If Authorized User is a locality, municipality, school, school system, college, university, local board, local commission, or local quasi-political entity, the license shall be held by that public body.

Notwithstanding any other provision or other unilateral license terms which may be issued by Supplier after the Effective Date of this Contract, or any order or SOW issued hereunder, and irrespective of whether any such provisions have been proposed prior to or after the issuance of the Contract or any order or SOW issued hereunder, for Licensed Services, including access to the Application(s), or the fact that such other agreement may be presented to an Authorized User or its Application Users at the time of accessing the Application(s) ("click wrap"), the terms and conditions set forth herein shall supersede and govern licensing and use of all products and services hereunder.

4. SUPPLIER RESPONSIBILITIES

A. Standard Application Responsibilities

Unless otherwise indicated in Exhibit A, Supplier shall acquire and maintain, at no charge to Authorized User, the hardware and software required to host the Application(s). The hardware and software on which the Application(s) is hosted will be maintained in good operating condition, consistent with or exceeding generally accepted industry practices and procedures. In addition:

- i). Supplier shall maintain sufficient hardware capacity to satisfy the technical requirements and the bandwidth and required storage capacity indicated in Exhibit A.

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- ii). Supplier shall be responsible for all telecommunication connections from the server hosting the Application to the Internet.
 - iii). Supplier may collect user-specific data only as necessary to provide the Licensed Services ordered by an Authorized User. No information regarding any Authorized User or any Application User shall be disclosed, provided, rented or sold to any third party for any reason unless required by law or regulation or by an order of a court of competent jurisdiction. This obligation shall extend beyond the term of the Contract.
 - iv). The Application will be made available to Authorized User and designated Application Users, as specified in Exhibit A or any applicable order or SOW, twenty-four (24) hours a day, seven (7) days a week ("Uptime") less Excusable Downtime. For the purposes of this Contract, "Excusable Downtime" is defined as that period of time when the Licensed Services are not available to Authorized User or its Application Users due to scheduled network, hardware or service maintenance and/or upgrades. Except in cases of emergency, Authorized User shall be provided a two (2) business day advance notification of such maintenance and/or upgrade. In cases of emergency, Supplier will use its best efforts to notify Authorized User of a planned Downtime as soon as practicable. Maintenance or upgrades are not to exceed thirty-six (36) hours in duration in a single month and cannot occur Monday through Friday, between the hours of 6:00 a.m. and 8:00 p.m. Eastern Time.
 - v). Excusable Downtime shall not include (i) an electronic hardware failure, (ii) a failure in the Supplier's Application, (iii) an electric utility failure at Supplier's facility where the Application is hosted, or (iv) a network failure up to, but not including, the interconnection point of Supplier's network to the public switched telephone network.
 - vi). Supplier guarantees the Application will be available for use at least ninety-nine percent (99%) of the total time during each month, excluding Excusable Downtime.
 - vii). If non-Excusable Downtime exceeds the parameters listed above, Supplier will credit to Authorized User the total recurring fees that would otherwise be owed by Authorized User under this Contract during the month of such failure. Such credit will be issued in the month immediately following the failure.
 - viii). Supplier shall be required to back up Content on a daily basis and shall retain the backed-up Content on a separate and dedicated secure server located in the United States. Only Content supplied by or to an Authorized User may reside on such server. Authorized User reserves the right to request a copy of such back-up Content at any time.
 - ix). Supplier shall be required to notify VITA in writing at least sixty (60) days prior to of any planned change(s) or Update(s) to the Application; its functionality; Content storage/ backup/disaster recovery, including physical location; security architecture, features or settings; terminations and/or replacement of any Supplier subcontractor. The planned changes or Updates include any change(s) that would potentially impact the secure and efficient use of the Application, as understood and agreed to between Supplier and VITA at Contract award. The purpose of this notice is to allow sufficient time for Supplier and VITA to discuss any technical/functional considerations and/or changes that would require action by the Commonwealth.
 - x). Supplier is responsible for documenting and maintaining any customizations made for operational use of the Application and/or for interoperability use with other systems or applications used by an Authorized User and paid for solely by Authorized User. The associated technical data, code, documentation and other necessary information about such customizations shall be provided by Supplier to Authorized User within ten (10) business days of the customizations' operational use. Supplier shall be required to routinely transfer knowledge regarding the Application and Licensed Services, including Updates and all material changes, to Authorized users in a reasonable manner to ensure proper and efficient use of Application and Licensed Services without degrading performance thereof.
 - xi). Add any additional, project specific Supplier Standard Application responsibilities;

In addition, and at no additional cost to Authorized Users, Supplier shall provide access to additional Updates, features, and functionalities of the Application as are provided by Supplier to other customers of Supplier who require functionality similar to that of the Application provided to Authorized Users. All such additional features and functionality, where reasonably necessary, shall be accompanied by updated Documentation, whether in hard copy format or distributed electronically via email or the Supplier website. Notwithstanding the provisions of this Section and except as agreed to in writing by VITA and Supplier, nothing in the Contract shall oblige Supplier to undertake any modifications to the Application, and all such modifications are at Supplier's sole discretion whether or not suggested by an Authorized User or another party.

B. Ancillary Responsibilities

Supplier shall, throughout the term of this Contract, make available such resources, including Supplier personnel, as are reasonably required to: (i) train designated Authorized User personnel in the use of the Application; (ii) develop modifications to the Application as agreed by VITA and Supplier in any Contract exhibit hereto or as agreed in any order or SOW issued hereunder; and (iii) otherwise support the Application as provided under this Contract and any exhibits thereto or as agreed in any order or SOW issued hereunder.

5. AUTHORIZED USER RESPONSIBILITIES

Unless otherwise agreed and as applicable, Authorized User or its Agent, or an Application User, will be responsible for input of Content into Supplier's Application and Authorized User or its Agent will be responsible for keeping said Content current and accurate. Supplier will have no responsibility for assisting Authorized User in creating, modifying or inputting the Content, unless specified in Exhibit A.

If Supplier issues unique USERID's and passwords to an Application User:

- i). Authorized User is responsible for protecting said passwords and for any authorized and unauthorized use made of the passwords. Authorized User will fully cooperate with law enforcement authorities in the detection and prosecution of illegal activity related to unauthorized use of the Licensed Services.
- ii). Authorized User shall have the right to add, change access for, or delete USERID's at its sole discretion.
- iii). Upon notification by Authorized User of an Application User's deletion, Supplier shall remove said Application User from its server within one (1) hour of receipt of such notification. If Supplier fails to make such a deletion, Authorized User shall not be held liable for any charges or damages incurred due to use of the unauthorized USERID.

6. CONTENT PRIVACY AND SECURITY

Supplier shall provide a secure environment for Content and any hardware and software, including servers, network and data components, to be provided by Supplier as part of its performance under this Contract in accordance with Commonwealth of Virginia security policies, standards and guidelines found at: <http://www.vita.virginia.gov/library/default.aspx?id=537#securityPSGs> in order to prevent unauthorized access to and use or modification of, and to otherwise protect, the Application and Content. Supplier shall, at a minimum, implement the following procedures designed to protect the security of Content:

- i). User identification and access controls designed to limit access to Content to Application Users;
- ii). External connections to the World Wide Web which will have appropriate security controls including industry standard intrusion detection and countermeasures that will detect and terminate any unauthorized activity prior to entering the firewall maintained by Supplier;

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- iii). Industry standard firewalls regulating all data entering Supplier's internal data network from any external source which will enforce secure connections between internal and external systems and will permit only specific types of data to pass through;
 - iv). Industry standard encryption techniques which will be used when Content is transmitted by Supplier on behalf of Authorized User;
 - v). Physical security measures, including securing all Content on a secure server, in locked data cabinets within a secure facility located within the United States. Access to facilities housing the Application and Content restricted to only allow access to personnel and agents of Supplier who have a need to know in connection with operation and support of the Application;
 - vi). A backup of Content, for an orderly and timely recovery of such data in the event that the Licensed Services may be interrupted. Unless otherwise described in a Statement of Work, Service Provider shall maintain a backup of Content that can be recovered within two (2) hours at any point in time. Additionally, Service Provider shall store a backup of Customer Data in an off-site "hardened" facility, located within the United States no less than daily, maintaining the security of Customer Data, the security requirements of which are further described herein.
 - vii). Supplier agrees to maintain all metadata associated with any original Content submitted into the Application by Authorized User for easy retrieval and access within two (2) hours at any point in time;
 - viii). Supplier agrees to partition, in aggregate for this Contract, all Content submitted into the Application by an Authorized User in such a manner that it will not be impacted or forfeited due to E-discovery, search and seizure or other actions by third parties obtaining or attempting to obtain records, information or Content for reasons or activities that are not directly related to the business of the Authorized User.
 - ix). Supplier agrees to maintain and follow a disaster recovery plan designed to maintain Application User access to the Application and Licensed Services, and to prevent the unintended destruction or loss of Content; and which plan, unless otherwise specified herein, shall provide for daily back-up of Content and archival of such Content at a secure facility located within the United States. The disaster recovery plan shall provide for and be followed by Supplier such that in no event shall the Application, Licensed Services, Supplier Product and/or Content be unavailable to any Application User for a period in excess of twenty-four (24) hours;
 - x). Supplier agrees that during the term of this Contract, Supplier will retain Authorized Users' Content for the full term of the Contract.
 - xi). Supplier, and through Supplier, its employees, agents and subcontractors, shall immediately notify VITA, of any degradation, potential breach or breach of Content and Application privacy or security in any systems supporting the Licensed Services. Supplier shall provide VITA the opportunity to participate in the investigation of the reported situation and to exercise control over reporting the unauthorized disclosure, to the extent permitted by law.
 - xii). Supplier shall be required to notify Authorized User in writing thirty (30) days prior to its intention to replace or add any third-party that will be provided access to Content whether that access is provided by Supplier or Supplier's subcontractors. Authorized User may reject any additional or new third parties who may be provided access to Content.
 - xiii). Supplier shall, at all times, remain compliant with the privacy and security requirements mandated by federal, state and local laws and regulations.
 - xiv). Supplier shall ensure performance of a SAS70 Type II audit* at least once annually of Supplier's environment. Upon request from VITA (not more than once annually), Supplier shall provide VITA with a copy of Supplier's final SAS70 Type II audit* report. Supplier shall also assist VITA in obtaining the current SAS70 Type II audit* report from any third-party

providing services to Supplier, if said third-party services involve the processing or storage of Authorized Users' Content.

- xv). Supplier's failure to comply with the provisions in items (i) through (xiv) shall constitute a breach of this Contract.
- xvi). Within fifteen (15) business days after the expiration or termination of this Contract, Supplier shall confirm in writing to Authorized User that all Content has been removed from all systems where the Content resided during performance of this Contract in a manner that complies with and/or exceeds the Commonwealth Data Removal standard located at the following .URL:
http://www.vita.virginia.gov/uploadedFiles/Library/PSGs/Data_Removal_Standard.pdf. The written confirmation shall include (i) sufficient detail describing the processes and procedures used in removing the Content, (ii) information about the locations of where it was removed from within the Application and storage and other locations, and (ii) the date the removals were performed. All metadata, in its original form, shall be returned to Authorized User(s).
- xvii). Authorized Users of the Contract agree to notify Supplier of any degradation, potential breach, or breach of the Content and Application privacy or security as soon as possible after discovery. Authorized Users further agree to provide Supplier the opportunity to participate in the investigation of the reported situation.
- xviii). Regular training for Supplier personnel regarding the security and data recovery programs referenced in this Section;
- xix). Regular testing of the systems and procedures outlined in this Section; and
- xx). Audit controls that record and monitor Application and Licensed Services activity continuously.

Failure by Supplier to fulfill these security obligations shall eliminate any limitation of Supplier's liability to VITA, Authorized Users, or third parties, including the limitation on lost profits and consequential damages.

7. PROPRIETARY RIGHTS

A. Supplier's Proprietary Rights

Except as otherwise stated herein, the Licensed Services (including without limitation, the Application and Updates, and Supplier Product, except to the extent that Supplier Product contains Content) and Documentation are and shall remain the sole and exclusive property of Supplier and its licensors. All modifications, enhancements, Updates, and translations of the Licensed Services shall be deemed a part thereof.

B. Authorized User Requirements and License Restrictions

Except as otherwise provided in this Contract or as provided by law:

- i). Authorized User will use commercially reasonable efforts to ensure that Application Users comply with all of the terms and conditions hereof.
- ii). Authorized User shall not reverse engineer, decompile, disassemble, or otherwise attempt to derive source code or other trade secrets from any of the software comprising or in any way making up a part of the Application.
- iii). Authorized User shall not directly or indirectly copy or reproduce all or any part of the Application, whether electronically, mechanically or otherwise, in any form including, but not limited to, the copying of presentation, style or organization, without prior written permission from Supplier; provided, however, an Authorized User may reproduce and distribute any Application output generated from the relevant Authorized User Content, and an Application User may reproduce and distribute any Application output generated pursuant to the

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- permissions set forth in Exhibit J or the applicable Authorized User's order or SOW issued hereunder.
- iv). Authorized User shall not rent, lease, sublicense, resell for profit, loan, distribute, network or modify the Application or Supplier Product or any component thereof, provided as part of the Licensed Services, except as otherwise authorized by Supplier; however, an Authorized User may reproduce and distribute any Application output (e.g., reports) generated by Authorized User using the Application, and an Application User may reproduce and distribute any Application output generated by the Application User using the Application and pursuant to the permissions set forth in Exhibit J or the applicable Authorized User's order or SOW issued hereunder.
 - v). Authorized User shall only use the Application and Supplier Product in the normal course of business, in connection with, and as part of, the Licensed Services.
 - vi). Authorized User shall not attempt to gain unauthorized access to the Application or Licensed Services, other user accounts, computer systems or networks connected to the Licensed Services;
 - vii). Authorized User shall not remove, obscure or alter Supplier's proprietary notices, disclaimers, trademarks, or other proprietary rights notices of any kind affixed or contained in the Application or Licensed Services or any written or electronic report, output or result generated in connection with the Licensed Services;
 - viii). Authorized User shall take reasonable care not to, and shall not intentionally or knowingly, use the Application to post, transmit, distribute, store or destroy any information: (i) in violation of any applicable law, statute, ordinance or regulation; (ii) in a manner that shall infringe the intellectual property rights of others; (iii) that is defamatory or trade libelous, or (iv) that contains any Computer Viruses.
 - ix). Authorized User shall not use the Application or Licensed Services for any illegal, obscene, offensive or immoral purpose.

C. Authorized User Proprietary Rights

Except as otherwise stated herein and with the exception of any applicable third-party rights, Content and any customizations made for Authorized User's operation of the Application or for interoperability with other Authorized Users' systems or applications paid for solely by Authorized User, are and shall remain the sole and exclusive property of Authorized User, including all applicable rights to patents, copyrights, trademarks, trade secrets or other proprietary property rights thereto. Additionally, all right, title and interest in and to any Content or customizations relating to Authorized User's business shall remain the property of Authorized User, whether or not supplied to Supplier or uploaded into the Application. Nothing in this Contract shall be construed as conveying any rights or interest in Content or customizations to Supplier. Upon termination of the Contract, or any order or SOW issued hereunder, Supplier agrees to either provide the Content and customizations to the applicable Authorized User, or, at such Authorized User's request, certify in writing that said Content and customizations in all formats, have been destroyed.

8. SCALABILITY

VITA may make a written request to increase or decrease the scope (e.g., number of USERIDs) of Licensed Services ("revised usage") under a Statement of Work. The revised usage shall be effective not more than one (1) business hour following the request. Pricing for the revised usage of Licensed Services shall be calculated as provided in Exhibit B and shall be prorated on a daily basis for remaining portion of the current monthly billing period. For purposes of this provision, a written notice may include an e-mail or the use of a Supplier-provided provisioning website by VITA's designated administrator.

9. TRANSITION ASSISTANCE

Upon execution of an order or SOW for Licensed Services and Application pursuant to this Contract, Supplier and Authorized User will develop a transition plan ("Transition Plan") detailing each Party's respective tasks in connection with the orderly transition and migration of (i) all Content stored by Supplier pursuant to such order to Authorized User's archive and/or to a system or application maintained by Authorized User or a third party application service provider and, if applicable and agreed in writing by Authorized User and Supplier, (ii) the Application and Licensed Services to Authorized User or a third party service provider, such transition and migration to occur upon termination or expiration of the Contract or the applicable order or SOW.

At a minimum, the Transition Plan shall provide that upon expiration or termination of this Contract or the applicable order or SOW for any reason, Supplier will return all Content in its possession to the Authorized User in a format accessible without the use of Supplier's Application and, at Authorized User's option, continue to provide Licensed Services for up to six (6) months after the date of expiration or termination in order to facilitate Authorized User's transition to a new service provider and Supplier shall provide such reasonable assistance as may be requested by Authorized User to effectuate such transition.

Supplier shall, within thirty (30) days of expiration, completion, or termination of this Contract or any order or SOW issued hereunder, provide to all affected Authorized Users a complete set of all Content provided to Supplier by the relevant Authorized User and/or its Application Users and stored by the Application on behalf of such Authorized User. Supplier's failure to do so shall constitute a material breach of this Contract and, in addition to the remedies set forth in this Contract, VITA or the affected Authorized User may exercise all available rights and remedies under law and equity.

The obligations set forth in this section and in any Transition Plan developed pursuant to this Contract or any order or SOW issued pursuant to this Contract may extend beyond expiration or termination of the Contract for a period not to exceed six (6) months. In the event of a termination for breach and/or default of Supplier, Supplier shall perform such obligations at no charge or fee to VITA or any Authorized User; otherwise, Supplier shall perform such obligations at the hourly rate or a charge agreed upon by Supplier and VITA or an Authorized User.

10. COMMENCEMENT AND ACCEPTANCE OF LICENSED SERVICES

A. Licensed Services Commencement Date

The Supplier shall begin delivery of Licensed Services on the date requested by the Authorized User and agreed to by the Supplier in the Contract or, as applicable, any order or SOW issued pursuant to the Contract. An Authorized User may delay the Licensed Services commencement date by notifying the Supplier at least ten (10) days before the scheduled Licensed Services commencement date.

B. Acceptance

The Application shall be deemed accepted when the Authorized User reasonably determines that such Authorized User and its Application Users can successfully access and use all functionalities of the Application which Supplier is required to provide to such Authorized User and its Application Users. Such Authorized User agrees to complete Acceptance testing within thirty (30) days after receiving written notice from Supplier of the ability of such Authorized User and its Application Users to access the Application, or within such other period as set forth in the applicable order or SOW issued hereunder. After such period, unless Authorized User notifies Supplier to the contrary, the Application shall be deemed accepted. Supplier agrees to provide to such Authorized User such assistance and advice as such Authorized User may reasonably require, at no additional cost, during such Acceptance testing, other than pre-approved travel expenses incurred which will be reimbursable by such Authorized User at the then current per diem amounts set forth by the Virginia Department of Accounts and published at: <http://www.doa.virginia.gov> or a successor URL(s). Authorized User shall provide to Supplier written notice of Acceptance upon completion of successful Acceptance testing. Should Authorized User fail to provide Supplier

written notice of successful or unsuccessful Acceptance testing within five (5) days following the Acceptance testing period, the Service shall be deemed Accepted.

C. Cure Period

If during the Acceptance test period, Authorized User is unable to access the licensed functionalities of the Application, Supplier shall provide Authorized User with such access, and such Authorized User's Application Users with their required access, within seven (7) days of written notice of inability to access, or as otherwise agreed between the Authorized User and Supplier in the applicable order or SOW. Should Supplier fail to provide access to the licensed functionalities of the Application, such Authorized User may, in its sole discretion: (i) reject the Application in its entirety and recover amounts previously paid hereunder; (ii) issue a "partial Acceptance" of the Application access with an equitable adjustment in the price to account for such deficiency; or (iii) conditionally accept the applicable Application access while reserving its right to revoke Acceptance if timely correction is not forthcoming.

If the Authorized User and its Application Users are unable to access the licensed functionalities of the Application after a second set of acceptance tests, Supplier shall be deemed in default of the order. In the event of such default, the Authorized User may, at its sole discretion, terminate the Contract or the applicable order or SOW, in whole or in part, for the Licensed Services to be provided thereunder by Supplier.

11. RECORDS AND AUDIT

Supplier shall maintain accurate records and other evidence pertaining to the costs and expenses for all Licensed Services performed/delivered under this Contract, or under any order or SOW issued pursuant to the Contract, in support of its charges invoiced to Authorized User. The records will be to the extent and in such detail as will properly reflect all direct and indirect costs associated with the Contract or with any such order or SOW. In addition, Supplier shall maintain accurate records of the Licensed Services, including but not limited to, the "Uptime" and "Downtime" as set forth in the Supplier Responsibilities Section. Authorized User shall have the right, at any reasonable time during regular business hours after giving reasonable advance notice, to inspect and audit the records applicable to its order(s). Supplier shall preserve such records for five (5) years after termination/completion of the Licensed Services agreed to under this Contract or any order or SOW issued hereunder.

12. APPLICATION AND LICENSED SERVICES SUPPORT

At any time during the term of any order issued pursuant to this Contract, Supplier shall provide the following Application Services (including unlimited telephonic support and all necessary travel and labor) without additional charge to any Authorized User in order to ensue such Authorized User and its Application Users are able to access and use the Application in accordance with the Requirements.

A. Coverage

Twenty-four (24) hours per day, seven (7) days a week, Supplier shall provide to any Authorized User all reasonably necessary telephone or written consultation requested by such Authorized User in connection with use, problems and operation of the Application.

B. Service Levels

Within one (1) hour after a request from an Authorized User, Supplier will respond to such request for support of Licensed Services regarding the Application and Licensed Services, including Application, Supplier Product and Documentation in accordance with the procedures identified below. In each case, Authorized User may describe the problem by telephone, facsimile or electronic mail or via a web site provided by Supplier. Supplier shall use its best efforts/commercially reasonable efforts to meet Response Time and Resolution Time and other obligations under this Contract.

Severity (Sample Problem)	Response Time	Resolution Time (Fix/work-around within)	Internal Escalation Procedure
1 (Application down)		six (6) hours	
2 (certain processing interrupted or malfunctioning but Application is able to process)		twenty-four (24) hours	
3 (minor intermittent malfunctioning, Application able to process data)		three (3) days	

The level of severity (e.g., 1, 2, 3), shall be defined by such Authorized Users.

C. Application Evolution

Should Supplier merge or splinter the Application previously provided to any Authorized User, such action on the part of Supplier shall not in any way result in any Authorized User being charged additional license or support fees in order to access the Application, to enable its Application Users to access the Application, or to receive enhancements, releases, upgrades or support for the Application.

13. SERVICE LEVELS AND REMEDIES

Supplier's failure to make the Application and Licensed Services Available to Authorized User and its Application Users at least 99% of the time in any given month during the term of such Authorized User's the Contract, or as applicable, any order or SOW issued hereunder, excluding scheduled maintenance, shall be deemed a service level default ("Service Level Default") and Authorized User may obtain the non-exclusive remedies set forth below. For purposes of this Contract, "Available" means that Authorized User and its Application Users are able to access all features and functions of the Application and Licensed Services required by Authorized User, including but not limited to the Application and Supplier Product.

Service Level (Monthly)	Service Level Credit (Prorated Fees – Monthly)
Above 99%	0
98.99 – 97%	10%
96.99 – 95%	25%
94.99 – 93%	50%
Below 93%	100% and, at Authorized User's sole discretion, termination of such Authorized User's the Application and Licensed Services provided under the Contract, or as applicable, any order or SOW issued thereunder.

In the event Authorized User is eligible for a 100% Service Level Credit under this Section during any given month of the term of such Authorized User's order Authorized User may terminate such order without penalty upon written notice to Supplier and, in addition to the remedies available under this Section, receive any additional remedies set forth in the Contract.

Credits shall be applied against the next invoice. In the event a Service Level Default occurs after VITA or an Authorized User has given notice of termination pursuant to the Term and Termination section of this Contract or due to non-appropriation of funds, or Authorized User has made final

payment to Supplier for the Application and Licensed Services and no further invoices shall issue as a result, Supplier shall refund to Authorized User the amount of the appropriate Service Level Credit due for the period of default.

A. Reporting

Once each calendar month during the term of an order or SOW issued pursuant to the Contract, Supplier shall provide Authorized User with a written report that shall contain information with respect to the performance of the Application and Licensed Services, unless otherwise agreed upon by the Parties, and in conformity with the reporting Supplier provides to its other customers utilizing an application and licensed services identical or similar to the Application and Licensed Services provided to the Authorized User. Representatives of Supplier and Authorized User shall meet as often as may be reasonably requested by either Party, but no less often than once each calendar quarter, to review Supplier's performance of Licensed Services and the performance of the Application and to discuss technical plans, financial matters, system performance, service levels and for any other matters related to this Contract or such Authorized User's order that may be reasonably requested by either Supplier or Authorized User. Authorized User may independently audit the report at its expense no more than two (2) times annually.

B. Failure to Meet Service Level Commitments

In the event that such Application fails to meet the Service Levels specified herein, Supplier will: (i) promptly replace the Application with an Application that conforms to this Contract and such specifications; (ii) repair the Application, at Supplier's expense, so that it conforms to this Contract and such specifications; or (iii) refund to Authorized User all fees paid for the Application and the Licensed Services after the failure of the Application to meet the Service Levels. In the event Supplier fails to comply with these remedies, Authorized User may exercise all available rights and remedies under law and equity.

C. Escalation Procedures

[To be provided by Supplier]

14. ESCROW AGREEMENT

NOTE: SUPPLIER MUST PROVIDE AN EXECUTED COPY OF THE ESCROW AGREEMENT PRIOR TO EXECUTION OF THIS CONTRACT.] Supplier shall maintain copies of all Application source code and related technical and user Documentation, in English, in an escrow account, and shall maintain with escrow agent the executed agreement attached hereto as Exhibit D-1 (Application Escrow Agreement). Supplier shall maintain in a separate escrow account for each Authorized User copies of all Content provided by or to such Authorized User in a format accessible without use of Supplier's Application (Content Escrow Account(s)). A template for the escrow agreement providing for any such Content Escrow Account is attached hereto as Exhibit D-2. VITA acknowledges that, prior to the Effective Date of this Contract, Supplier delivered to VITA and VITA received a copy of the executed Application Escrow Agreement naming the Commonwealth of Virginia as a third party beneficiary. VITA has reviewed Application Escrow Agreement to ensure that such Application Escrow Agreement does not impose upon the Commonwealth any requirements other than administrative responsibilities necessary for the operation of the Application Escrow Agreement. If events give rise to a need for the escrow agent to release escrowed materials to the Commonwealth, the Commonwealth's sole responsibility shall be to request the release of such materials from the escrow agent. Supplier agrees to notify VITA in writing not less than thirty (30) calendar days prior to termination or any modification of the Application Escrow Agreement. Any Content Escrow Agreement shall name as a third party beneficiary the Authorized User whose Content is kept in escrow pursuant to such Content Escrow Agreement.

Supplier warrants that the information and materials to be kept in escrow in a media safe environment for the benefit of the Commonwealth pursuant to the Application Escrow Agreement are specifically

identified and listed in Attachment A to the Application Escrow Agreement and include the most current version used by all Authorized Users of:

- i). the source code for the Application software,
- ii). all Documentation related thereto as well as all necessary and available information, proprietary information in English, and
- iii). technical Documentation in English which shall enable VITA, any Authorized User, or an Agent of VITA or any Authorized User to create, maintain and/or enhance the Application without the aid of Supplier or any other person or reference to any other materials, maintenance tools (test programs and program specifications), or proprietary or third party system utilities (compiler and assembler descriptions); descriptions of the system/program generation; and descriptions of any Supplier tools required to enable VITA and all Authorized Users and their Application Users to continue to use the Application.

Supplier warrants that the information and materials to be kept in escrow in a media safe environment for the benefit of an Authorized User pursuant to a Content Escrow Agreement shall be specifically identified and listed in Attachment A to such Content Escrow Agreement and include a monthly back up of the Content repository for such Authorized User.

Supplier warrants that the Escrow Agreements provide or shall provide for, among other items, the release of the list of items on Attachment A of each Escrow Agreement upon the happening of certain events, including, but not limited to, Supplier's failure to carry out its support and maintenance obligations imposed by this Contract for a period of sixty (60) days, Supplier's breach or default under this Contract, Supplier's bankruptcy, Supplier's failure to continue to do business in the ordinary course. Any Content Escrow Agreement shall also provide for the release of the escrowed items in the event the Authorized User's Content is destroyed, lost, or damaged or following the termination or expiration of Authorized User's order or SOW for Licensed Services, issued pursuant to the Contract. Supplier agrees to pay all expenses associated with establishing and maintaining the escrow accounts and the contents mentioned above.

Subject to the information and materials listed on Attachment A of the Application Escrow Agreement being released to the Commonwealth pursuant to the terms of the Application Escrow Agreement, which is an agreement supplementary hereto, Supplier hereby grants to the Commonwealth a royalty-free, perpetual, irrevocable license, that permits disclosure to a third party support-vendor of a complete and accurate copy of then-current source code for the Application licensed hereunder, along with all related documentation.

Any Authorized User which is not a state agency, board, commission, or other quasi-political entity of the Commonwealth of Virginia or other body referenced in Title 2.2 of the Code of Virginia may require Supplier to execute an additional Application escrow agreement subject to the same requirements and binding Supplier to the same obligations as described above but naming such Authorized User as the beneficiary of the Application escrow agreement. Subject to the information and materials listed in such Application escrow agreement being released to such Authorized User, Supplier hereby grants to such Authorized User a royalty-free, perpetual, irrevocable license, that permits disclosure to a third party support-vendor of a complete and accurate copy of then-current source code for the Application licensed to such Authorized User, along with all related documentation.

15. GENERAL WARRANTY

Supplier warrants and represents to VITA the Licensed Services and the Application described in Exhibit A as follows:

A. Ownership

Supplier has the right to provide the Licensed Services, including access by any Authorized User and its Application Users to the Application, without violating or infringing any law, rule, regulation, copyright, patent, trade secret or other proprietary right of any third party.

B. Licensed Services, Application, and Documentation

Supplier warrants the following with respect to the Licensed Services and the Application:

- i). The Application is pursuant to a particular Request for Proposal (“RFP”), and therefore such Application shall be fit for the particular purposes specified by VITA in the RFP and in this Contract, and Supplier is possessed of superior knowledge with respect to the Application and is aware that all Authorized Users are relying on Supplier's skill and judgment in providing the Licensed Services, including the Application, and Supplier is possessed of superior knowledge with respect to the Application and is aware that all Authorized Users are relying on Supplier's skill and judgment in providing the Licensed Services, including the Application;
- ii). Supplier represents and warrants (i) that it shall perform the Licensed Services in conformity to the specifications set forth in Exhibit A in a professional and workmanlike manner and (ii) that the Licensed Services shall not infringe any third party proprietary rights including (without limitation) any trademark, trade name, trade secret, copyright, moral rights, patents or similar intellectual property rights.
- iii). Supplier warrants that the Application and Licensed Services will conform in all material respects to the Requirements set forth in this Contract and any order or SOW issued hereunder, and the applicable specifications and Documentation, not including any post-Acceptance modifications or alterations to the Documentation which represent a material diminishment of the functionality of the Application, Licensed Services or Supplier Product; and that such Application and Licensed Services are compatible with and will operate successfully when used on the equipment in accordance with the Documentation and all of the terms and conditions hereof.
- iv). The Application provided hereunder is at the current release level unless an Authorized User specifies an older version in its order or SOW;
- v). No corrections, work arounds or future Application releases provided by Supplier shall degrade the Application, cause any other warranty to be breached, or require an Authorized User to acquire additional hardware equipment or software;
- vi). Supplier warrants that all post-Acceptance Updates, changes, alterations or modifications to the Application, Licensed Services and Documentation by Supplier will be compatible with, and will not materially diminish the features or functionality of the Application, Licensed Services and/or Supplier Product when used on the equipment in accordance with the Documentation and all of the terms and conditions hereof.
- vii). Supplier warrants that the Documentation and all modifications or amendments thereto which Supplier is required to provide under this Contract shall be sufficient in detail and content to allow a user to understand and utilize fully the Application without reference to any other materials or information.

C. Malicious Code

Supplier has used its best efforts through quality assurance procedures to ensure that there are no Computer Viruses or undocumented features in the Application accessed by an Authorized User or its Application Users; and the Application does not contain any embedded device or code (e.g., time bomb) that is intended to obstruct or prevent any use of or access to the Application by any Authorized User or its Application Users. Notwithstanding any rights granted under this Contract or at law, Supplier hereby waives under any and all circumstances any right it may have or may hereafter have to exercise Electronic Self-Help. Supplier agrees that an Authorized User may pursue all remedies provided under law in the event of a breach or threatened breach of this Section, including injunctive or other equitable relief.

D. Privacy and Security

Supplier warrants that Supplier and its employees, subcontractors, partners and third party providers have taken all necessary and reasonable measures to ensure that the Application, Licensed Services, Supplier Product, and any related deliverables do not include any degradation,

known security vulnerabilities, or breach of privacy or security. Supplier agrees to notify VITA of any occurrence of such as soon as possible after discovery and provide VITA with fixes or upgrades for security vulnerabilities within 90 days of discovery.

E. Operating System and Software Supportability

Supplier warrants that Supplier and its employees, subcontractors, partners and third party providers have taken all necessary and reasonable measures to ensure that the Application, Licensed Services, Supplier Product, and any deliverables do not have dependencies on other operating systems or software that are no longer supported by Supplier, or its Subcontractors, partners and third-party providers.

F. Access to Product and Passwords

Supplier warrants that the Application and Licensed Services do not contain disabling code (defined as computer code designed to interfere with the normal operation of the Licensed Services or hardware or software of any Authorized User or its Application Users) or any program routine, device or other undisclosed feature, including but not limited to, viruses, worms, trojan horses, or other malicious code which is specifically designed to permit unauthorized access, delete, disable, deactivate, interfere with or otherwise harm the Application, Licensed Services or the hardware or software of any Authorized User or its Application Users. In addition, Supplier warrants that Authorized User and its Application Users will be provided commercially reasonable uninterrupted access to the Application and that Supplier will not cancel or otherwise terminate access to the Application by disabling passwords, keys or tokens that enable continuous use of the Application by the Authorized User and its Application Users during the term of this Contract or any order or SOW issued hereunder. Supplier further warrants that the Application and Licensed Services are compatible with and will operate successfully on the equipment.

G. Open Source

Supplier will notify all Authorized Users if the Application contains any Open Source code and identify the specific Open Source License that applies to any embedded code dependent on Open Source code, provided by Supplier under this Contract.

H. Supplier's Past Experience

Supplier warrants that Supplier has provided the Licensed Services to a non-related third party customer of Supplier without significant problems due to the Licensed Services, the Application, or Supplier.

THE OBLIGATIONS OF SUPPLIER UNDER THIS GENERAL WARRANTY SECTION ARE MATERIAL. SUPPLIER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY CONCERNING MERCHANTABILITY OR FITNESS FOR ANY OTHER PARTICULAR PURPOSE.

16. TRAINING AND DOCUMENTATION

The Licensed Service fee includes all costs for the training of one (1) Authorized User trainer per the Contract and, as applicable, per any order or SOW issued hereunder, at an Authorized User's designated location on the use and operation of the Application, including instruction in any necessary conversion of such Authorized User's Content and data for such use. Pursuant to a mutually agreed upon schedule, Supplier shall provide sufficient personnel experienced and qualified to conduct such training. Available optional training, and applicable pricing and discounts, are described in Exhibit B.

Supplier shall deliver to any Authorized User, three (3) complete hard copies or electronic media of Documentation, as requested by such Authorized User. Any Authorized User shall have the right, as part of the license granted herein, to make as many additional copies of the Documentation, in whole or in part, for its own use as required. This Documentation shall include, but not be limited to, overview descriptions of all major functions, detailed step-by-step operating procedures for each screen and activity, and technical reference manuals. Such Documentation shall be revised to reflect any modifications made by Supplier to the Application. Any Authorized User shall have the right, as part of the license granted herein, at its own discretion, to take all or portions of the Documentation, modify or

completely customize it in support of the authorized use of the Application and may duplicate such Documentation and include it in such Authorized User's document or platform. All Authorized Users shall continue to include Supplier's copyright notice.

17. APPLICATION DEMONSTRATION

At the request of any Authorized User, Supplier shall perform a demonstration of its Application and the Licensed Services at such Authorized User's location and at no charge.

18. ACCEPTABLE USE POLICY (IF APPLICABLE)

VITA and Authorized Users agree to abide by Supplier's Acceptable Use Policy (AUP), as amended by the parties hereby and incorporated as Exhibit J. Because certain standard clauses that may appear in, or be incorporated by reference into, Supplier's standard AUP cannot be accepted by VITA, and in consideration of the convenience of using that form, and this form, without the necessity of specifically negotiating a separate contract document, the parties hereto specifically agree that:

- i. In the event of a conflict between this Contract and the AUP, the Contract shall control
- ii. In the event of a material, unilateral revision to the AUP by Supplier that substantially impairs the ability of VITA or any other public body from its lawful use of the Service, VITA shall have the option to:
 - a. request that the revision be rescinded;
 - b. request that the revision be waived as to VITA or other public bodies receiving Services under this Agreement;

If Supplier fails to grant a request by VITA per a. or b. above, within 30 days of receiving the request, then VITA may, at its option, terminate this Contract, in whole or in part, or any order, in whole or in part, without termination liability.

- iii. [Other provisions here based on VITA's review of Supplier AUP]

19. INDEMNIFICATION AND LIABILITY

A. Indemnification

Supplier agrees to indemnify, defend and hold harmless the Commonwealth, VITA, any Authorized User, their officers, directors, agents and employees (collectively, "Commonwealth's Indemnified Parties") from and against any and all losses, damages, claims, demands, proceedings, suits and actions, including any related liabilities, obligations, losses, damages, assessments, fines, penalties (whether criminal or civil), judgments, settlements, expenses (including attorneys' and accountants' fees and disbursements) and costs (each, a "Claim" and collectively, "Claims"), incurred by, borne by or asserted against any of Commonwealth's Indemnified Parties to the extent such Claims in any way relate to, arise out of or result from: (i) any intentional or willful misconduct or negligence of any employee, agent, or subcontractor of Supplier, (ii) any act or omission of any employee, agent, or subcontractor of Supplier, (iii) breach of any representation, warranty or covenant of Supplier contained herein, (iv) any defect in the Application or the Licensed Services, (v) any actual or alleged infringement or misappropriation of any third party's intellectual property rights by the Application or any of the Licensed Services, or (vi) loss of Content provided to Supplier due to Supplier's failure to back up Content in accordance with the Contract. Selection and approval of counsel and approval of any settlement shall be accomplished in accordance with all applicable laws, rules and regulations. For state agencies the applicable laws include §§ 2.2-510 and 2.2-514 of the Code of Virginia. In all cases the selection and approval of counsel and approval of any settlement shall be satisfactory to the Commonwealth.

In the event that a Claim is commenced against any of Commonwealth's Indemnified Parties alleging that use of the Application or that the provision of Licensed Services under this Contract infringes any third party's intellectual property rights and Supplier is of the opinion that the allegations in such Claim in whole or in part are not covered by this indemnification provision,

Supplier shall immediately notify VITA and the affected Authorized User(s) in writing, via certified mail, specifying to what extent Supplier believes it is obligated to defend and indemnify under the terms and conditions of this Contract. Supplier shall in such event protect the interests of the Commonwealth's Indemnified Parties and secure a continuance to permit VITA and the affected Authorized User(s) to appear and defend their interests in cooperation with Supplier as is appropriate, including any jurisdictional defenses VITA or the affected Authorized User(s) may have.

In the event of a Claim pursuant to any actual or alleged infringement or misappropriation of any third party's intellectual property rights by the Application or any of the Licensed Services, and in addition to all other obligations of Supplier in this Section, Supplier shall at its expense, either (a) procure for all Authorized Users and their Application Users the right to continue use of such infringing Application or Licensed Services, or any component thereof; or (b) replace or modify such infringing Application or Licensed Services, or any component thereof, with non-infringing products or services satisfactory to VITA. And in addition, Supplier shall provide any Authorized User with a comparable temporary replacement Application or reimburse VITA or any Authorized User for the reasonable costs incurred by VITA or such Authorized User in obtaining an alternative product or service in the event such Authorized User cannot use the affected Application. If Supplier cannot accomplish any of the foregoing within a reasonable time and at commercially reasonable rates, then Supplier shall accept the return of the infringing component of the Application or Licensed Services, along with any other components of any products rendered unusable by any Authorized User as a result of the infringing component, and refund the price paid to Supplier for such components.

B. Liability

Except for liability with respect to (i) any intentional or willful misconduct or negligence of any employee, agent, or subcontractor of Supplier, (ii) any act or omission of any employee, agent, or subcontractor of Supplier, (iii) claims for bodily injury, including death, and real and tangible property damage, (iv) Supplier's indemnification obligations, (v) Supplier's confidentiality obligations, and (vi) Supplier's privacy and security obligations, and (vii) Supplier's security compliance obligations, Supplier's liability shall be limited to twice the aggregate value of the Application and Licensed Services provided under this Contract. Supplier agrees that it is fully responsible for all acts and omissions of its employees, agents, and subcontractors, including their gross negligence or willful misconduct.

FOR ALL OTHER CONTRACTUAL CLAIMS, IN NO EVENT WILL ANY PARTY BE LIABLE TO ANY OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING (WITHOUT LIMITATION) LOSS OF PROFIT, INCOME OR SAVINGS, EVEN IF ADVISED OF THE POSSIBILITY THEREOF, EXCEPT WHEN SUCH DAMAGES ARE CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE PARTY, ITS EMPLOYEES, AGENTS OR SUBCONTRACTORS.

EXHIBIT E
STATEMENT OF WORK (SOW) TEMPLATE
BETWEEN (NAME OF AUTHORIZED USER) AND (SUPPLIER NAME)

ISSUED UNDER

CONTRACT NUMBER VA-121207-SANB
BETWEEN
VIRGINIA INFORMATION TECHNOLOGIES AGENCY
AND
THE SANBORN MAP COMPANY, INC

Exhibit E, between (Name of Agency/Institution) and (Supplier Name) (“Supplier”) is hereby incorporated into and made an integral part of Contract Number VA-120416-STVN (“Contract”) between the Virginia Information Technologies Agency (“VITA”) on behalf of the Commonwealth of Virginia (and [Supplier. In the event of any discrepancy between this Exhibit D and the Contract, the provisions of the Contract shall control.

*[Note to Template Users: Instructions for using this template to draft a Statement of Work are in gray highlight and **italics**. These instructions should be deleted after the appropriate text has been added to the Statement of Work. Contractual language is **not italicized** and should remain in the document. Text that is highlighted in **blue** is variable based on the nature of the project.]*

STATEMENT OF WORK

This Statement of Work (SOW) is issued by the (Name of Agency/Institution), hereinafter referred to as “Authorized User” under the provisions of the Contract. The objective of the project described in this SOW is for the Supplier to provide the Authorized User with a Solution (“Solution”) or Services (“Services”) or Software (“Software”) or Hardware and Maintenance or Licensed Application Services” for Authorized User Project Name. *(Customize the last sentence to state what you are getting from the Supplier, based on the VITA Contract language, and with your project name.)*

1. PERIOD OF PERFORMANCE

The work authorized in this SOW will occur within XX (XX) months of execution of this Statement of Work. This includes delivery, installation, implementation, integration, testing and acceptance all of products and services necessary to implement the Authorized User’s Solution, training, and any support, other than on-going maintenance services. The period of performance for maintenance services shall be one (1) year after implementation or end of Warranty Period and may be extended for additional one (1) year periods, pursuant to and unless otherwise specified in the Contract. *(Customize this section to match what you are getting from the Supplier, based on the allowable scope of the VITA Contract and your project’s specific needs within that allowable scope.)*

2. PLACE OF PERFORMANCE

(Assign performance locations to major milestones or any other project granularity, depending on your transparency and governance needs, if needed.)

Tasks associated with this project will be performed at the Authorized User’s location(s) in City/State, at Supplier’s location(s) in City/State, or other locations as required by the effort.

3. PROJECT DEFINITIONS

Provide project unique definitions so that all stakeholders have the same understanding. Ensure these do not conflict with the Contract definition.)

All definitions of the Contract shall apply to and take precedence over this SOW. Authorized User’s specific project definitions are listed below:

4. PROJECT SCOPE

(Provide a description of the scope of your project and carve out what is NOT in the scope of your project. Remember that it must fit within the VITA Contract scope.)

A. General Description of the Project Scope

B. Project Boundaries

5. AUTHORIZED USER'S SPECIFIC REQUIREMENTS

(Provide information about your project's and your agency's specific requirements for this particular project including, but not limited to the following subsections):

A. Authorized User-Specific Requirements

B. Special Considerations for Implementing Technology at Authorized User's Location(s)

C. Other Project Characteristics to Insure Success

6. CURRENT SITUATION

(Provide enough background information to clearly state the current situation to Supplier so that Supplier cannot come back during performance claiming any unknowns or surprises. Some example subsections are provided below. You may collapse/expand as you feel is necessary to provide adequate information and detail.)

A. Background of Authorized User's Business Situation

B. Current Architecture and Operating System

C. Current Work Flow/Business Flow and Processes

D. Current Legacy Systems

E. Current System Dependencies

F. Current Infrastructure (Limitations, Restrictions)

G. Usage/Audience Information

7. PRODUCTS AND SERVICES TO SUPPORT THE PROJECT REQUIREMENTS (AND/OR SOLUTION)

A. Required Products (or Solution Components)

(List the products, or if your project is for a Solution, the Solution components, (hardware, software, etc.) provided by Supplier that will be used to support your project requirements. Identify any special configuration requirements, and describe the system infrastructure to be provided by the Authorized User. Provide an overview that reflects how the system will be deployed within the Authorized User's environment. You are urged to refer to the VITA Contract for allowable scope and other guidance in drafting language for this section.)

B. Required Services

(List the services (e.g., requirements development, Solution design, configuration, interface design, data conversion, installation, implementation, testing, training, risk assessment, performance assessment, support and maintenance) that will be provided by Supplier in the performance of your project. You are urged to refer to the VITA Contract for the definition of Services and for the allowable scope in drafting language for this section. You will notice subsections "C" and "D" below offer areas for expanded detail on training, support and maintenance services. You may add other subsections in which you wish to expand the information/details/requirements for other service areas as well. It is likely some of this detail will be a combination of your known needs and the Supplier's proposal. In all cases the provisions should include all negotiated commitments by both parties, even if you reference by incorporation the Supplier's proposal in any subsection.)

C. Training Requirements and/or Authorized User Self-Sufficiency/Knowledge Transfer

(Provide an overview and details of training services to be provided for your project and any special requirements for specific knowledge transfer to support successful implementation of the Solution. If the intent is for the Authorized User to become self-sufficient in operating or maintaining the Solution, determine the type of training necessary, and develop a training plan, for such user self-sufficiency. Describe how the Supplier will complete knowledge transfer in the event this Statement of Work is not completed due to actions of Supplier or the non-appropriation of funds for completion affecting the Authorized User. You may refer to the VITA Contract for guidance on the allowable scope for this.)

D. Support and Maintenance Requirements

(Document the level of support, as available under the Contract, required by your project to operate and maintain the Solution. This may include conversion support, legacy system integration, transition assistance, Solution maintenance (including maintenance level), or other specialized consulting to facilitate delivery or use of the Solution.)

E. Personnel Requirements

(Provide any supplier personnel qualifications, requirements, licenses, certifications or restrictions including project manager, key personnel, subcontractors, etc., but ensure they do not conflict with the VITA Contract terms.)

F. Transition Phase-In/Phase-Out Requirements

(Describe any specific requirements for orientation or phasing in and/or phasing out of the project with the Supplier. Be specific on what the project needs and expected results are, the duration and other pertinent detail, but ensure they do not conflict with the VITA Contract provision(s) regarding Transition of Services or with any other training requirements in the SOW.)

8. TOTAL PROJECT PRICE

The total Fixed Price for this Project shall not exceed \$US XXX.

Supplier's invoices shall show retainage of ten percent (10%). Following completion of Solution implementation, Supplier shall submit a final invoice to the Authorized User, for the final milestone payment amount shown in the table in section 9 below, plus the total amount retained by the Authorized User. If travel expenses are not included in the fixed price of the Solution, such expenses shall be reimbursed in accordance with Commonwealth of Virginia travel policies as published by the Virginia Department of Accounts (<http://www.doa.virginia.gov>). In order to be reimbursed for travel expenses, Supplier must submit an estimate of such expenses to Authorized User for approval prior to incurring such expenses.

(Sections 9 through 11 should be used or deleted depending on the project's complexity, risk and need for governance. For a simple project you may only need the section 10 table, but for a more complex project, or a major IT project, you may need a combination of or all of the tables for check and balance and redundancy.)

9. PROJECT DELIVERABLES

(Provide a list of Supplier's deliverable expectations. The table is to be customized for the Authorized User's project. You may want to categorize deliverables for each phase or major milestone of the project and then categorize other interim deliverables and/or performance and status reports under one of them or under an Administrative or Project Management section.)

The following deliverables are to be provided by Supplier under this SOW. Subsequent sections may include further detail on the content requirements for some deliverables.

No.	Title	Due Date	Format Required (i.e., electronic/hard)	Distribution Recipients	Review Complete	Final Due Date
-----	-------	----------	---	-------------------------	-----------------	----------------

			copy/CD/DVD		Due Date	
	Project Plan					
	Design Plan					
	Implementation Plan					
	Data Conversion Plan					
	Risk Assessment Plan					
	Test Plan					
	Training Plan					
	Performance Plan					
	Contingency Plan					
	Disaster Recovery Plan					
	Cutover Plan					
	Change Management Plan					
	Transition Plan					
	Monthly Status Reports					
	Quarterly Performance /SLA Reports					
	Training Manual					
	Final Solution Submission Letter					
	Final Acceptance Letter					

10. MILESTONES, DELIVERABLES, PAYMENT SCHEDULE, AND HOLDBACKS

(This table should include the project's milestone events, associated deliverables, when due, milestone payments, any retainage amount to be held until final acceptance and the net payment you promise to pay for each completed and accepted milestone event. This table includes sample data only and must be customized for your project needs.)

The following table identifies milestone events and deliverables, the associated schedule, any associated payments, any retainage amounts, and net payments.

Milestone Event	Associated Milestone Deliverable(s)	Schedule	Payment	Retainage	Net Payment
Project kick-off meeting	---	Execution + 5 days	---	---	---
Site survey	Site survey report	Execution + 10 days	---	---	---
Requirements Analysis & Development	Design Plan	Execution+45 days	\$30,000	\$15,000	\$15,000
	Project Plan	Execution+45 days			
	Implementation	Execution + 45			

	Plan	days			
Begin Implementation		Execution + 60 days			
Data Conversion & Mapping		Execution + 90 days	\$10,000	\$3,000	\$7,000
Installation of software	---	Execution + 90 days	\$10,000	\$1,000	\$9,000
Installation of hardware	---	Execution + 90 days	\$10,000	\$1,000	\$9,000
Configuration and testing	---	Execution + 120 days	---	---	---
Training	Training manual	Execution + 130 days	\$10,000	\$1,000	\$9,000
30-Day User Acceptance Testing	---	Execution + 160 days	\$20,000	\$2,000	\$18,000
Implementation complete	Solution	Execution + 160 days	\$10,000	--	\$10,000
Final Acceptance		Execution + 210 days	--	--	\$23,000

11. EVENTS AND TASKS FOR EACH MILESTONE

(If needed, provide a table of detailed project events and tasks to be accomplished to deliver the required milestones and deliverables for the complete Solution. Reference each with the relevant milestone. A Work Breakdown Structure can be used as shown in the table below or at the very least a Project Plan should have this granularity. The Supplier's proposal should be tailored to the level of detail desired by the Authorized User's business owner/project manager for project governance.)

The following table identifies project milestone events and deliverables in a Work Breakdown Structure format.

WBS No.	Milestone	Milestone Event	Milestone Task	Interim Task Deliverables	Duration
1.0	Site survey				
1.1		Conduct interviews			
1.1.1			Schedule interviews	None	20 days after contract start
1.1.2			Complete interviews	Interview Results Report	25 days after contract start
1.2		Receive AU information			

12. ACCEPTANCE CRITERIA

(This section should reflect the mutually agreed upon UAT and Acceptance Criteria specific to this engagement. Please read the VITA contract definitions for the definitions or Requirements and Acceptance. Ensure the language in this section does not conflict with the VITA Contract language.)

Acceptance Criteria for this Solution will be based on a User Acceptance Test (UAT) designed by Supplier and accepted by the Authorized User. The UAT will ensure that all of the requirements and functionality required for the Solution have been successfully delivered. Supplier will provide the Authorized User with a detailed test plan and acceptance check list based on the mutually agreed upon UAT Plan. This UAT Plan check-list is incorporated into this SOW in Exhibit B-X.

Each deliverable created under this Statement of Work will be delivered to the Authorized User with a Deliverable Acceptance Receipt. This receipt will describe the deliverable and provide the Authorized User's Project Manager with space to indicate if the deliverable is accepted, rejected, or conditionally accepted. Conditionally Accepted deliverables will contain a list of deficiencies that need to be corrected in order for the deliverable to be accepted by the Project Manager. The Project Manager will have **ten (10)** days from receipt of the deliverable to provide Supplier with the signed Acceptance Receipt unless an alternative schedule is mutually agreed to between Supplier and the Authorized User in advance.

13. PROJECT ASSUMPTIONS AND PROJECT ROLES AND RESPONSIBILITIES

(This section contains areas to address project assumptions by both the Supplier and the Authorized User and to assign project-specific roles and responsibilities between the parties. Make sure that all assumptions are included to alleviate surprises during the project. Ensure that all primary and secondary (as needed) roles and responsibilities are included. You will tailor the Responsibility Matrix table below to fit your project's needs.)

A. Project Assumptions

The following assumptions are specific to this project:

B. Project Roles and Responsibilities

The following roles and responsibilities have been defined for this project:

(Sample Responsibility Matrix)

Responsibility Matrix	Supplier	Authorized User
Infrastructure – Preparing the system infrastructure that meets the recommended configuration defined in Section 2B herein		√
Server Hardware		√
Server Operating		√
Server Network Connectivity		√
Relational Database Management Software (Installation and Implementation)		√
Server Modules – Installation and Implementation	√	
PC Workstations – Hardware, Operating System, Network Connectivity		√
PC Workstations – Client Software		√
Application Installation on PC Workstations	√	
Wireless Network Access Points	√	
Cabling, Electric and User Network Connectivity from Access Points		√
Wireless Mobile Computing Products – Scanners, printers	√	
Project Planning and Management	√	√
Requirements Analysis	√	√
Application Design and Implementation	√	
Product Installation, Implementation and Testing	√	
Conversion Support	√	
Conversion Support -- Subject Matter Expertise		√
Documentation	√	
Training	√	
Product Maintenance and Support	√	

Problem Tracking	√	√
Troubleshooting – IT Infrastructure		√
Troubleshooting – Solution	√	

14. COMMONWEALTH AND SUPPLIER-FURNISHED MATERIALS, EQUIPMENT, FACILITIES AND PROPERTY

(In this section, provide details of any materials, equipment, facilities and property to be provided by your Agency or the Supplier in performance of this project. If none, so state so that the requirements are clear. If delivery of any of these is critical to the schedule, you may want to identify such delivery with hard due dates tied to “business days after project start” or “days after event/milestone.” Be sure to specify the delivery and point of contact information.)

A. PROVIDED BY THE COMMONWEALTH

B. PROVIDED BY THE SUPPLIER

15. SECURITY REQUIREMENTS

(Provide (or reference as an Attachment) Authorized User’s security requirements.)

For any individual Authorized User location, security procedures may include but not be limited to: background checks, records verification, photographing, and fingerprinting of Supplier’s employees or agents. Supplier may, at any time, be required to execute and complete, for each individual Supplier employee or agent, additional forms which may include non-disclosure agreements to be signed by Supplier’s employees or agents acknowledging that all Authorized User information with which such employees and agents come into contact while at the Authorized User site is confidential and proprietary. Any unauthorized release of proprietary information by the Supplier or an employee or agent of Supplier shall constitute a breach of the Contract.

Supplier shall comply with all requirements in the Security Compliance section of the Contract

16. REQUIRED STANDARDS, CERTIFICATIONS AND SPECIFICATIONS

In addition to any standards and specifications included in the Contract, Supplier shall follow the standards and specifications listed below during performance of this effort.

(List any specific Commonwealth, VITA, Federal, engineering, trade/industry or professional standards, certifications and specifications that Supplier is required to follow or possess in performing this work. The first bullet includes a link to COVA-required standards for all Commonwealth technology projects. The rest are examples only and highlighted to reflect this. If you need an exception of any COVA-required standard, please follow the process located at this link: <http://www.vita.virginia.gov/oversight/default.aspx?id=10344> and select the Data Standards Guidance bulleted link. Your AITR can assist you.

- COV ITRM Policies and Standards: <http://www.vita.virginia.gov/library/default.aspx?id=537>
- IEEE 802®
- HIPAA
- SAS 70 Type II

17. U.S. ENVIRONMENTAL PROTECTION AGENCY’S AND DEPARTMENT OF ENERGY’S ENERGY STAR GUIDELINES RISK MANAGEMENT

(Risk is a function of the probability of an event occurring and the impact of the negative effects if it does occur. Negative effects include schedule delay, increased costs, failure of dependent legacy system interoperability, other project dependencies that don’t align with this project’s schedule, and poor quality of deliverables. Depending on the level of risk of this project, as assessed by your Project

Manager and/or Steering Committee, this section may contain any or all of the following components, at a level of detail commensurate with the level of risk. Remember to add them to the Deliverables table.)

C. Initial Risk Assessment

Authorized User and Supplier shall each provide an initial assessment from their point of view.

D. Risk Management Strategy

(The list below is taken from VITA PMD template discussing what should go into a Risk Management Strategy. Don't forget to consider and plan for any budget contingencies to accommodate potential risks that are identified.)

- 1. Risk Identification Process:** The processes for risk identification.
- 2. Risk Evaluation and Prioritization:** How risks are evaluated and prioritized.
- 3. Risk Mitigation Options:** Describe the risk mitigation options. They must be realistic and available to the project team.
- 4. Risk Plan Maintenance:** Describe how the risk plan is maintained during the project lifecycle.
- 5. Risk Management Responsibilities:** Identify all project team members with specific risk management responsibilities. (e.g., an individual responsible for updating the plan or an individual assigned as a manager).

E. Risk Management Plan

(Include a description of frequency and form of reviews, project team responsibilities, steering and oversight committee responsibilities and documentation. Be sure to add all deliverables associated with risk strategizing and planning to the list of Deliverables.)

18. DISASTER RECOVERY

Planning for disaster recovery for your project is paramount to ensure continuity of service. The criticalness and complexity of your project, including its workflow into other dependent systems of the Commonwealth or federal systems, will help you determine if you require a simple contingency plan or a full-blow contingency plan that follows the Commonwealth's ITRM Guideline SEC508-00 found at this link:

http://www.vita.virginia.gov/uploadedFiles/Library/ContingencyPlanningGuideline04_18_2007.pdf

It is advisable that you visit the link before making your decision on how you need to address contingency planning and related deliverables in this SOW; as well as, how this will impact your planned budget. A likely deliverable for this section would be a Continuity of Operations Plan. You may choose to include the above link in your final SOW to describe what the Plan will entail. The same link includes the following processes, which you may choose to list in your final requirements for this section, to be performed by your team, the Supplier or both and/or a steering committee if your project warrants such oversight and approval:

- Development of the IT components of the Continuity of Operations Plan (COOP)
- Development and exercise of the IT Disaster Recovery Plan (IT DRP) within the COOP
- Development and exercise of the IT System Backup and Restoration Plan

19. PERFORMANCE BOND

(If your project is sizeable, complex and/or critical, and the VITA Contract does not already provide for a performance bond, you may want the Supplier to provide one. The VITA Contract may include an Errors and Omissions insurance requirement, which would cover the Supplier's liability for any breach of the Contract or this SOW. Be sure to read the Contract for this information. However, if you feel that this project warrants further performance incentive due to the project or the Supplier's viability, you may include the following language in this section.)

The Supplier shall post performance bond in an amount equal to one hundred percent (100%) of the total contract value and provide a copy of the bond to Authorized user within (10) days of execution of this SOW Agreement. In the event that the Supplier or any subcontractor or any officer, director, employee or agent of the Supplier or any subcontractor or any parent or subsidiary corporation of the Supplier or any subcontractor fails to fully and faithfully perform each material requirement of this SOW Agreement, including without limitation the Supplier's obligation to indemnify the Authorized User, the performance bond shall be forfeited to Authorized User. The bond shall be in a form customarily used in the technology industry and shall be written by a surety authorized to do business in Virginia and that is acceptable to Authorized User.

20. OTHER TECHNICAL/FUNCTIONAL REQUIREMENTS

(Provide any other unique project technical and functional requirements and expectations in sufficient detail in this section. Ensure they do not conflict with existing requirements in the VITA Contract. Several examples are listed.)

A. Service Level Requirements

B. Mean-Time-Between-Failure Requirements

C. Data Access/Retrieval Requirements

D. Additional Warranties

21. REPORTING

(The following are examples of reporting requirements which may be included in your SOW depending on the project's need for governance. In an effort to help VITA monitor Supplier performance, it is strongly recommended that the SOW include "Supplier Performance Assessments". These assessments may be performed at the Project Manager's discretion and are not mandated by VITA.)

A. Weekly/Bi-weekly Status Update.

The weekly/bi-weekly status report, to be submitted by Supplier to the Authorized User, should include: accomplishments to date as compared to the project plan; any changes in tasks, resources or schedule with new target dates, if necessary; all open issues or questions regarding the project; action plan for addressing open issues or questions and potential impacts on the project; risk management reporting.

B. Supplier Performance Self-Assessment.

Within thirty (30) days of execution of the project start, the Supplier and the Authorized User will agree on Supplier performance self-assessment criteria. Supplier shall prepare a monthly self-assessment to report on such criteria. Supplier shall submit its self-assessment to the Authorized User who will have five (5) days to respond to Supplier with any comments. If the Authorized User agrees with Supplier's self-assessment, such Authorized User will sign the self-assessment and submit a copy to the VITA Supplier Relationship Manager.

C. Performance Auditing

(If you have included service level requirements in the above section entitled, Other Technical/Functional Requirements, you will want to include a requirement here for your ability to audit the results of the Supplier's fulfillment of all requirements, Likewise, you may want to include your validation audit of the Supplier's performance reporting under this Reporting section. It is important, however, that you read the VITA contract prior to developing this section's content so that conflicts are avoided. Suggested language is provided below, but must be customized for your project.)

Authorized User (or name of IV&V contractor, if there is one), will audit the results of Supplier's service level obligations and performance requirements on a monthly/quarterly basis, within ten (10) days of receipt of Supplier's self-assessments and service report(s). Any discrepancies will be discussed between the Authorized User and Supplier and any necessary invoice/payment adjustments will be made. If agreement cannot be reached, the Authorized User and Supplier will

escalate the matter in accordance with the Escalation provision of the Contract. (If none, you may add your escalation procedure in this section.)

D. Supplier Performance Assessments

(You may want to develop assessments of the Supplier's performance and disseminate such assessments to other Authorized Users of the VITA Contract. Prior to dissemination of such assessments, Supplier will have an opportunity to respond to the assessments, and independent verification of the assessment may be utilized in the case of disagreement.)

22. CHANGE MANAGEMENT

(Changes to the baseline SOW must be documented for proper project oversight. Depending on your project, you may need to manage and capture changes to configuration, incidents, deliverables, schedule, price or other factors your team designates as critical. Any price changes must be done in compliance with the Code of Virginia, § 2.2-4309. Modification of the contract, found at this link: <http://leg1.state.va.us/cgi-bin/legp504.exe?000+coh+2.2-4309+500825>. Changes to the scope of this SOW must stay within the boundaries of the scope of the VITA Contract.

For complex and/or major projects, it is recommended that you use the VITA PMD processes and templates located at: <http://www.vita.virginia.gov/oversight/projects/default.aspx?id=567>.

Administrative or non-technical/functional changes (deliverables, schedule, point of contact, reporting, etc.) should extrapolate the affected sections of this SOW in a "from/to" format and be placed in a numbered modification letter referencing this SOW and date, with a new effective date. The VITA Contract may include a template for your use or you may obtain one from the VITA Contract's Point of Contact. It is very important that changes do not conflict with, but do comply with, the VITA Contract, which takes precedence. The following language may be included in this section, but additional language is needed to list any technical/functional change management areas specific to this SOW; i.e., configuration, incident, work flow, or any others of a technical/functional nature.)

All changes to this SOW must comply with the Contract. Price changes must comply with the Code of Virginia, § 2.2-4309. Modification of the contract, found at this link: <http://leg1.state.va.us/cgi-bin/legp504.exe?000+coh+2.2-4309+500825>

All changes to this SOW shall be in written form and fully executed between the Authorized User's and the Supplier's authorized representatives. For administrative changes, the parties agree to use the change template, attached to this SOW. For technical/functional change management requirements, listed below, the parties agree to follow the processes and use the templates provided at this link: <http://www.vita.virginia.gov/oversight/projects/default.aspx?id=567>

23. POINT OF CONTACT

For the duration of this project, the following project managers shall serve as the points of contact for day-to-day communication:

Authorized User: [REDACTED]

Supplier: [REDACTED]

By signing below, both parties agree to the terms of this Exhibit.

Supplier:

Authorized User:

(Name of Supplier)

(Name of Agency/Institution)

By: _____
(Signature)

By: _____
(Signature)

Name: _____
(Print)

Name: _____
(Print)

Title: _____

Title: _____

Date: _____

Date: _____

Template
EXHIBIT F to Contract VA-XXXXXX-XXXX

Change Order No. XX for Statement of Work XX
Between (NAME OF AGENCY/INSTITUTION) and Supplier

Issued Under
CONTRACT NUMBER VA- XXXXXX-XXXX
BETWEEN
VIRGINIA INFORMATION TECHNOLOGIES AGENCY
AND
(SUPPLIER NAME)

This Change Order No. XX hereby modifies and is made an integral part of Statement of Work XX (“SOW”), between NAME OF AGENCY/INSTITUTION (“Authorized User”) and, (“Supplier”), which was issued under Contract Number VA-XXXX-XXXX (“Contract”) between the Virginia Information Technologies Agency (“VITA”) and Supplier, on behalf of the Commonwealth of Virginia and its Authorized Users.

CHANGE ORDER

This is Change Order No. XX to a SOW issued by Authorized User to Supplier under which Supplier is to provide the Authorized User with a Authorized User Project Name Solution (“Solution”).

The following item(s) is/are hereby modified as follows: *[Note: Include only the sections of the SOW that are being changed. Do not include sections not being modified. Changes should be clearly identified as “From” (copy/paste from current SOW section) and “To” (fully describe the change(s) to the referenced section). Here is an example, using SOW section 1.]*

1. PERIOD OF PERFORMANCE

The following change is made to the Period of Performance:

[The duration of the Period of Performance is increased by four (4) months.]

The following is changed with respect to the Period of Performance:

From: twelve (12) months of execution of this Statement of Work

To: sixteen (16) months of execution of this Statement of Work

This Change Order No. XX is issued pursuant to and, upon execution, shall become incorporated in the SOW, which is incorporated in the Contract. In the event of conflict, the following order of precedence shall apply:

- i). The Contract, including Exhibit F
- ii). Statement of Work XX, as amended by this and previous Change Orders, with the more current Change Orders superseding older Change Orders.

The foregoing is the complete and final expression of the agreement between the parties to modify the SOW and cannot be modified, except by a writing signed by duly authorized representatives of both parties hereto.

ALL OTHER TERMS AND CONDITIONS OF THE REFERENCED SOW REMAIN UNCHANGED.

By signing below, the authorized parties agree to the terms of this Change Order No.XX, effective (INSERT EFFECTIVE DATE).

Supplier

By: _____

(Signature)

Name: _____

(Print)

Title: _____

Date: _____

Authorized User

By: _____

(Signature)

Name: _____

(Print)

Title: _____

Date: _____

Exhibit G – Acceptance Criteria

VBMP 2012 Orthophotography Project Acceptance Criteria for Associated Services and Products

The final products for the Virginia Base Mapping Program (VBMP) 2013-2016 Orthophotography Project may be tested by VGIN to insure that they meet all or some of the following criteria prior to the final acceptance by VGIN. Quality assurance shall be performed at map scale except as necessary to make measurements or inspect anomalies. Products not passing the measure of acceptability will be returned to Supplier for review and/or correction or replacement. Results of all tests will be documented and shared with Supplier. These criteria represent guidelines and it is understood that variances and/or exceptions may be required. Exceptions shall be made by mutual consent and must be documented in writing.

NOTE:

1. Each tested characteristic has been numbered sequentially to aid in communication between Supplier and VGIN. Refer to the numeric ID when discussing a specific tested characteristic.
2. Rapid response projects are not covered by this document for the specific nature of the rapid response delivery.

Digital Orthophotography Acceptance Criteria

1.	2. Tested Characteristic	3. Measure of Acceptability
All Scales (100 and 200)		
1.	Media: DVD 2.0, 4.7 GB single sided (4.3 GB usable) USB External Drive	Media is readable, all files accessible, no files corrupted
2.	Media label	Conforms to VGIN specifications. VGIN will work with Contractor to ensure that the layout and design is compatible with Contractor's media writing tools.
3.	File organization	Files written in tile sheet order
4.	File name	All digital file naming conforms to required client convention
5.	GeoTiff & .tfw format	GeoTiff 6.0 compliant; reads in ESRI
6.	Pixel definition	GeoTiff reference will be the upper left corner of the upper left-most pixel World file reference will be the center of the pixel of the upper left-most pixel
7.	Georeferencing	World file has correct coordinates expressed to at least 2 significant digits, and correct pixel size and pixel count
8.	Projection	Virginia State Plane Coordinate System
9.	Datum	NAD83/93 HARN (North and South Zones)
10.	Units	US Survey Feet
11.	24 bit natural color	256 levels of value for each band, 0=black,

		255=white
12	Tonal quality	Less than 2% of values at 0 or 255 Conforms to the color balance, contrast and brightness of the radiometric target images specified by the Radiometric Review Panel.
13.	24 bit natural CIR with digital capture only not available in 2006	256 levels of value for each band, 0=black, 255=white
14.	Image blemishes and artifacts	Generally acceptable within these limits: If 1 pixel wide, 100 pixels in length. If 2 pixels wide, 60 pixels in length. If 3 pixels wide, 20 pixels in length. If 4 - 12 pixels wide, 12 pixels in length. Artifacts exceeding these limits may be acceptable if ground feature detail is not obscured, or if the brightness value of the pixels in the artifact is under 170. Artifacts within these limits may be rejected if critical ground features are significantly impacted. Critical features shall be defined as features having County, State or National significance (i.e. Courthouses, Capitol Buildings, etc.). Clusters of artifacts that do not individually meet these criteria may be considered unacceptable if more than 12 are visible within a viewing screen at 1:1 zoom. (5 or more artifacts within a 200 pixel area preferred).
15.	Conformance of sheet to index grid	Sheet will match the client provided grid. There will be no gap or overlap between tiles.
16.	Mosaic lines	Mosaic lines through buildings and above ground transportation structures shall be avoided to the greatest extent practical.
17.	Metadata	Complies with FGDC standards and runs through the MP parser without returning any errors.
18.	Scratches	Orthoimagery appearance shall be scratch and dust free; sharp uniform balanced color contrast.
19.	Smears	See Image Blemishes and Artifacts Corrected by adding mass points or break lines to DEM as necessary to reflect actual terrain or by image processing where appropriate. Where DTM corrections or image processing will result in reduced horizontal accuracy or misrepresentation of the location or appearance of important features (buildings, roads, etc.), the smear will remain untreated.
20.	Wavy features	See Image Blemishes and Artifacts. 95% of distinct linear ground features (such as road markings, and curbs) shall be positionally correct and should not deviate from their apparent path by more than 5 pixels measured perpendicular to

		the feature within any 100 pixel distance measured along the feature length. On roads, measurements should be taken from centerline of road instead of road edges, shoulder and railings.
1"=200'-scale only		
21.	Ground Resolution	1.0 US Survey Feet
22.	RMSE of known ground points measured on the image <i>See ASPRS Class I Standards Page 8, Table 16, and NSSDA Part 3, Appendices 3-A and 3-D for explanation of formulas.</i>	RMSE _x = RMSE _y = 2' (2 pixels) and RMSE _r = 1.4142 *RMSE _x = 1.4142*RMSE _y
23.	Absolute accuracy	NSSDA accuracy (20+ points) such that 95% of the points tested shall meet the criteria of 1.73*RMSE _r <4.9'
24.	Mismatch of features along mosaic lines and production block boundaries of equal scale	Equal to or less than 2 pixels at 95 % on well defined features (roads, sidewalk curbs) for mosaic lines
25.	Mismatch of features between 200 & 100 scale	Equal to or less than 3 feet as RMSE on well defined ground features (roads, sidewalks, curbs).
26	Sheet size	5000 feet (5000 pixels) East-West by 5000 feet (5000 pixels) North-South
1"=100'-scale only		
27.	Ground resolution	0.5 US Survey Feet
28.	RMSE of known ground points measured on the image <i>See ASPRS Class I Standards Page 8, Table 16, and NSSDA Part 3, Appendices 3-A and 3-D for explanation of formulas.</i>	RMSE _x = RMSE _y = 1' (2 pixels) and RMSE _r = 1.4142 *RMSE _x = 1.4142*RMSE _y
29.	Absolute accuracy	NSSDA accuracy (20+ points) such that 95% of the points tested shall meet the criteria of 1.73*RMSE _r 2.5'
30.	Mismatch of features along mosaic lines and production block boundaries of equal scale	Equal to or less than 2 pixels at 95 % on well defined features (roads, sidewalk curbs) for mosaic lines
31.	Sheet Size	2500 feet (5000 pixels) East-West by 2500 feet (5000 pixels) North-South

Aerotriangulation Acceptance Criteria

	Tested Characteristic All Scales	Measure of Acceptability
32.	Report Format	Conforms to required convention (to be determined with VGIN in pilot phase). Each block of triangulation shall have a separate report. The contents shall include a narrative and analysis, list of control used and rejected, all statistics stated in RFP sections 3.a. and 6.c in tabular form, number of control used, graphical output of residuals,
33.	Report Completeness	All information complete and readable
34.	Precision of Image Observations	Sigma (0) less than or equal to 5 microns is acceptable.
35.	Horizontal accuracy against ground control control check	The ranges from 0.47' to 0.59' and 0.23' to 0.29'.

	points tested in accordance with 10+ points at NSSDA criteria	for 1' and 6" GSD photography, respectively (equivalent to higher and lower flying photography as specified in the RFP)
36.	Vertical accuracy against ground control check points tested in accordance with 10+ points at NSSDA criteria	RMSE values for 1' and 6" GSD photography shall be within 0.72' and 0.36', respectively, (equivalent to higher and lower flying photography as specified in the RFP)
37.	Accuracy against image coordinates	RMSE less than or equal to 5 microns is acceptable.
38.	Max. offsets [E, N] to any one blind QA point	3 * RMSE for that scale
39.	RMSE at GPS residuals and other RFP specified AT statistical data	RMSE at GPS residuals generally less than 10 cm. Provide theoretical accuracy data

Ground Control Acceptance Criteria

	Tested Characteristic All Scales	Measure of Acceptability
40.	Report Format	Conforms to required convention
41.	Report Completeness	All information complete and readable
42.	Horizontal accuracy against HARN control	Will achieve 1 st Order accuracy (10 ppm +100,000) as per <i>Geometric Geodetic Accuracy Standards and Specifications for Using GPS Relative Positioning techniques</i> , by Federal Geodetic Control Committee, August 1989. Generally, standard deviation to existing HARN control within 5-7 cm.
43.	Vertical accuracy against HARN control	Will achieve 3 rd Order Class 1 (100 ppm + 1:10,000) as per <i>Geometric Geodetic Accuracy Standards and Specifications for Using GPS Relative Positioning techniques</i> , by Federal Geodetic Control Committee, August 1989. Generally, standard deviation to existing HARN control within 7-9 cm
44.	Offsets [E, N] to any one blind QA point	2 * Standard deviation
45.	NSSDA analysis [E, N] of 10+ QA points	95% within 1/10,000 th of the flying height. 1.73 * RMSE _r , or 2.447 * RMSE _x for that scale for that scale
46.	GPS BASE Station Accuracy	A minimum of 2 base stations will operating during collection – all data will be submitted for OPUS processing with final results overall RMS <3cm – http://www.ngs.noaa.gov/OPUS/Using_OPUS.htm

Digital Terrain Model QA Acceptance Criteria

	Tested Characteristic All Scales	Measure of Acceptability
52	Media DVD 2.0, 4.7 GB single sided (4.3 GB usable) USB External Drive, 300 GB	Media is readable, all files accessible, no files corrupted
53.	File organization	Files written will be of a useable file size not to exceed 2 Gb per file.
54	File name	Conforms to required convention
55	Format	In Microstation DGN format Version 8, all features will have x, y, z values
56	Georeferencing	Locates in proper tile grid cell
57.	Contours DTM break lines & mass point density	Sufficient to accurately build terrain to support contour production.
58	Base Topo DTM points density	Sufficient to accurately build terrain to support ortho production. Sufficient to support accurate orthorectification, but not suitable for generating contours.
59	Continuity	No spikes or holes, no gaps of sufficient size to affect orthorectification, regardless of perspective center.
60	Attributes	Conform to DTM standard

Ancillary Data Acceptance Criteria

	Ancillary Data	Measure of Acceptability
61	Ancillary Data	All items will be written to media and verified that they are readable (not corrupt)

EXHIBIT I: CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- i). No Federal appropriated funds have been paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee or an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal Contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal Contract, grant, loan, or cooperative agreement.
- ii). If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- iii). The undersigned shall require that the language of this certification be included in the award documents for all sub awards at all tiers (including subcontracts, sub grants, and Contracts under grants, loans and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Signature: _____

Printed Name: _____

Organization: _____

Date: _____

Jamie A. Curtin

The Sanborn Map Company, Inc.

August 15, 2012