

August 6, 2018

Annette Walton & Jennifer Elgoe
State Purchasing Bureau
1526 K Street, Suite 130
Lincoln, NE 68508

RE: PROPOSAL FOR NEBRASKA QA/QC FOR GIS DATASETS

Dear Ms. Walton and Ms. Elgoe:

Michael Baker International, Inc. (Michael Baker) has more than 30 years of public safety GIS experience in application development and technical services to improve centerline and addressing workflows. The DATAMARK® team of public safety GIS experts (with backgrounds in fire, police, and 9-1-1 applications) developed a suite of public safety GIS products and services to assist the public safety community with their GIS data needs, to support E9-1-1, and to aid the transition to NG9-1-1. Our team is dedicated to assisting local communities in improving their public safety workflows, determining best practices, and finding long-term, cost-effective methods to maintaining data.

The DATAMARK team will be led by Project Manager Jason Isherwood, GISP, who has more than 10 years of experience developing and implementing GIS and public safety solutions, and Principal-in-Charge Sandi Stroud, who brings more than 15 years of experience managing and facilitation of public safety GIS solutions. Our team is available and eager to meet the challenges of this contract by applying our expertise, innovative thinking, and commitment to exceed Nebraska State's expectations.

The DATAMARK team offers:

- ✓ Verifiable experience and in-depth knowledge of GIS for public safety, including NG9-1-1
- ✓ Quality personnel with local, state, and national GIS support services expertise, with additional access to Michael Baker's network of more than 200 GIS professionals
- ✓ Public safety GIS subject matter experts, specifically in 9-1-1
- ✓ Industry leading Software as a Service (SaaS) products in DATAMARK VEP (Validate-Edit-Provision) that support address point, centerline, MSAG and ALI quality control and validation
- ✓ Increased speed and performance when executing feature intensive data quality validations with integration of the 1Spatial 1Integrate solution in VEP

The pages that follow outline our technical approach and proposal for Nebraska QA/QC for GIS Datasets. Please contact Leigh TeWinkle at (949) 472-3437 or Leigh.TeWinkle@mbakerintl.com, or Jason Isherwood at (720) 514-1124, if you have any questions regarding our proposal or experience.

Sincerely,

Jason Isherwood, GISP
Project Manager



Sandi Stroud
Principal-in-Charge

165 S. Union Blvd, Suite 1000, Lakewood, CO 80228
(720) 514-1100 | www.datamarkgis.com

EMERGENCY

DATAMARK

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REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM

BIDDER MUST COMPLETE THE FOLLOWING

By signing this Request for Proposal for Contractual Services form, the bidder guarantees compliance with the procedures stated in this Request for Proposal, and agrees to the terms and conditions unless otherwise indicated in writing and certifies that bidder maintains a drug free work place.

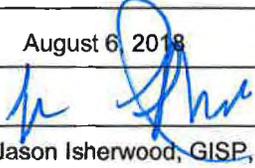
Per Nebraska's Transparency in Government Procurement Act, Neb. Rev Stat § 73-603 DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

_____ NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this RFP.

_____ I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

_____ I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. §71-8611 and wish to have preference considered in the award of this contract.

FORM MUST BE SIGNED USING AN INDELIBLE METHOD (NOT ELECTRONICALLY)

FIRM:	Michael Baker International Inc.
COMPLETE ADDRESS:	165 S. Union Blvd., Suite 1000, Lakewood, CO 80228
TELEPHONE NUMBER:	720-514-1124
FAX NUMBER:	720-479-3180
DATE:	August 6, 2018
SIGNATURE:	
TYPED NAME & TITLE OF SIGNER:	Jason Isherwood, GISP, Project Manager



CORPORATE OVERVIEW

A. BIDDER IDENTIFICATION AND INFORMATION

Full Company Name & Address	Michael Baker International, Inc. 165 S. Union Blvd., Suite 1000 Lakewood, CO 80228
Company Headquarters	500 Grant Street, Suite 5400 Pittsburgh, PA 15219
Organization's Entity	Corporation
State of Incorporation	Pennsylvania
Year of Incorporation	1972
Name Changes	2015 - Michael Baker Corporation changed to Michael Baker International Holdco Corporation and Michael Baker Jr., Inc. changed to Michael Baker International, Inc.

B. FINANCIAL STATEMENTS

Financial statement applicable to Michael Baker International Inc. (Michael Baker) is provided in a separate sealed envelope.

C. CHANGE OF OWNERSHIP

No change in ownership or control of Michael Baker is anticipated during the 12 months following this proposal due date.

D. OFFICE LOCATION

Several Michael Baker staff to work on this project are in Lakewood, Colorado with other staff in various offices around the country. DATAMARK®'s team, who support our public safety clients, work cooperatively using sophisticated connectivity tools to seamlessly communicate with each other and concurrently work on multi-user edited Microsoft Office documents to ensure no impact from having a geographically distributed workforce. A primary workshare environment we utilize is Microsoft Teams, a platform that combines workplace chat, meetings, notes, and attachments. The service integrates with Michael Baker's Office 365 productivity suite, including Microsoft Office, and takes advantage of extensions that integrate with non-Microsoft products.

Locations of our key staff are listed below:

- ❖ Jason Isherwood, GISP, Project Manager; Beth Christenson, Quality Control Lead; and Jennifer Dvorsky, GISP, Customer Services Lead and Training Lead
 - 165 S. Union Blvd., Suite 1000, Lakewood, CO 80228
- ❖ Michael Skowronek, GISP, AICP, Contract Manager
 - One Kaiser Plaza, Suite 1150, Oakland, CA 94612
- ❖ Keri Brennan, GISP, Technical Lead
 - 272 Bendix Road, Suite 400, Virginia Beach, VA 23452

E. RELATIONSHIP WITH THE STATE

Michael Baker is initiating a contract with the Nebraska Department of Natural Resources (NeDNR) which should have been signed by the end of July. Michael Baker will perform countywide flood risk assessments for Boone and Custer Counties, under contract to the NeDNR. More than 2,500 miles of rivers will be analyzed using hydrologic and hydraulic computer modeling and GIS mapping. Customized modeling and mapping routines will be utilized to automate the modeling and mapping processes, bringing efficiencies and cost savings to the NeDNR. Michael Baker will then update Federal Emergency Management Agency's (FEMA's) flood hazard maps using this information. This proposal was submitted to Katie Ringland with the NeDNR. Prior to this NeDNR project, Michael Baker has not had other dealings with State over the past five years.

F. MICHAEL BAKER'S EMPLOYEE RELATIONS TO STATE

No Michael Baker staff on the project team have been employed by the State in the past 18 months.

G. CONTRACT PERFORMANCE

Michael Baker has been in existence for more than 70 years, and with our 90+ offices kept both nationally and internationally, does not maintain information related to the performance of its contracts in a centralized location. After reasonable investigation, the preparers of this proposal are not aware of any material instances in which a client has ever terminated a contract for breach. Furthermore, as a provider of services to national clients such as the U.S. Federal Government and various branches of the military, our performance on contracts must be above reproach or we risk losing these and our other valuable public agency clientele. We will be able to successfully complete this project for the State of Nebraska.

H. SUMMARY OF EXPERIENCE

Michael Baker and DATAMARK Overview

Michael Baker has been at the forefront of GIS technologies, successfully delivering mapping services and solutions to our clients for more than three decades. Michael Baker is a full-service consulting firm that has been providing professional services for more than 75 years. Michael Baker has more than 6,000 employees in more than 90 offices across the United States who perform the full spectrum of engineering, planning, and related services.

Michael Baker was established in 1940 and has a legacy of expertise, experience, innovation and integrity in solving our clients' most complex challenges.

DATAMARK®, the public safety GIS team of Michael Baker, is the go-to authority on GIS data for NG9-1-1. Its data-forward, full-service but configurable NG9-1-1 solutions provide the highest levels of public safety GIS data completeness and accuracy. Michael Baker and the DATAMARK team's depth of knowledge, coupled with our involvement in deploying web applications and holding workshops for NG9-1-1 GIS, helped us create the DATAMARK services and solutions suite (Figure 1).

DATAMARK® SERVICES AND SOLUTIONS			
STRATEGIC PLANNING	GIS ADDRESS DEVELOPMENT	DATA READINESS CHECK	DATAMARK® VEP (VALIDATE-EDIT-PROVISION)
<ul style="list-style-type: none"> • NG 9-1-1 Consulting and Systems Integration • NG 9-1-1 Systems Design • Technology Assessment • DATAMARK® QAP (Quality Assurance Plan) 	<ul style="list-style-type: none"> • Existing Workflow Evaluation and Support • Address Database Evaluation • Action Plan for Optimization and Sustainment 	<ul style="list-style-type: none"> • Complete GIS Address and Database Analysis • DATAMARK® ACE (Address Comparison & Evaluation) • Centerline Anomalies • Address Point Anomalies 	<ul style="list-style-type: none"> • Web-based, SaaS Application for Convenience • Modular, thus Configurable to Specific Client Needs and Budget • Iterative Validations Allow You to "Flag" and Reduce Anomalies • Validation and Editing Environment • Ensures Data Meets NENA NG9-1-1 Requirements

Figure 1: Examples of existing DATAMARK services and solutions.

The DATAMARK team brings more than 30 years of experience working with state and local GIS, addressing, and 9-1-1 customers to update local government addressing workflows, maintenance of GIS enterprise data architecture, and the data requirements for public safety systems (including E9-1-1 and NG9-1-1). DATAMARK's subject matter experts help their customers ensure easy and consistently dependable access to mission-critical information in life-critical situations, simplifying the transition to NG9-1-1 for addressing authorities, GIS data providers, and 9-1-1 authorities. Because its solutions work with existing public safety systems, they require no additional investment in hardware or software.

NG9-1-1 elevates GIS to a mission-critical status. We offer expertise, software, and services to ensure every community is ready for NG9-1-1.

Our team’s philosophy regarding GIS for 9-1-1 embraces the need to effectively manage the transition from E9-1-1 to NG9-1-1. During the transition, GIS data will replace the functionality of the Master Street Address Guide (MSAG), will require a 100% synchronized ALI, and data will play a mission-critical role in the workflow of directing the 9-1-1 caller to the correct public safety awareness point (PSAP). We recognize that it’s not just a complex technology overhaul, but that NG9-1-1 is a catalyst that expands the network of public safety stakeholders (Figure 2).

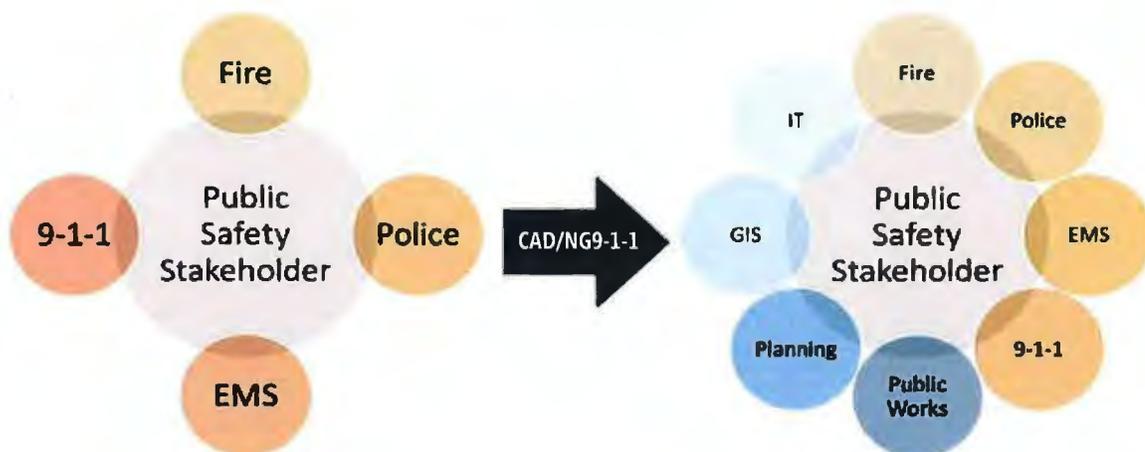


Figure 2: NG9-1-1 is a catalyst that adds additional public safety stakeholders. It also positions 9-1-1, Fire, Police and EMS into data steward roles, as they must support decisions on Emergency Service Boundary (ESB) and PSAP boundary placement.

1Spatial Partnership

The DATAMARK software update leverages the power of the 1Spatial’s 1Integrate solution for data validation and audit trail, both necessary capabilities for the outlined synchronization solution. Spatial Data Infrastructure (SDI) or the integration of data from multiple state and local agencies for use by both public and private entities are more and more prevalent today.



1Spatial’s 1Integrate is an enterprise product that enables automated, rules-based validation and integration of data from multiple sources for multiple needs. Rules can be applied to ensure data validity for NG9-1-1 purposes and/or for other purposes such as managing Linear Referenced System (LRS) data, Highway Performance Monitoring System (HPMS) submittal data, statewide boundaries validation and integration, statewide hydrography data integration and conflation for the National Hydrography Database program (NHDPlus) and many, many more. Further, when data is submitted for validation and integration into the repository, the resulting data statistics are stored, and a dashboard is available to the administrator showing the data quality. This allows administrators to see how the quality of data from a source contributor is progressing over time. Configurable charts which have filters by provider and restricted to a specific time period are available. The layout of the dashboard is easily configurable by dragging and dropping the controls to allow the administrator to define which charts to display and where. The dashboard configuration can be saved and loaded, and charts can be configured to show the following:

- ❖ **Project performance** – Total number of valid or invalid features overall (bar chart)
- ❖ **Performance trend for each project** – Percentage of non-conformances over time (linear graph)
- ❖ **Submissions over time** – How much data and what was the quality of each submission? Valid and invalid feature count per submission over time (bar chart)
- ❖ **How many times is each rule checked and how often is the rule failed?** – Total valid and invalid feature count per rule (bar chart)
- ❖ **Which rules cause the most problems?** – Percentage of all failures caused by each rule (pie chart)

1Spatial is a software solutions provider and global leader with more than 45 years of managing geospatial data. 1Spatial works with clients to deliver real value by making data current, complete and consistent through use of automated processes - ensuring that decisions are always based on the highest quality information available.

1Spatial's unique, rules-based approach delivers enterprise-scale, cross-platform, automation to all stages of the data lifecycle. It builds confidence in the data while reducing the time and cost of stewardship. 1Spatial's global clients include utility and telecommunications businesses, national mapping and land management agencies, government departments, emergency services, defense, census bureaus and transportation organizations. A leader in our field, 1Spatial has a wealth of experience and a record of continual innovation and development. 1Spatial partners with some of the leading technology vendors including, Esri, Oracle, and SAP.

Integrating the 1Spatial solution with DATAMARK VEP provides customers increased speed and performance when executing data quality validations. The DATAMARK VEP solution features unlimited access to the technology supported in DATAMARK's secure, cloud-based hosting environment.

By powering DATAMARK VEP with 1Spatial, the solution is well positioned to support the data quality needs for GIS data providers and addressing authorities across the United States who provision data for first responders including, 9-1-1, police, fire, and EMS.



To streamline the maintenance and aggregation of digital road and parcel data throughout the state, the Nebraska Office of the Chief Information Officer leverages the Integerate solution developed by 1Spatial. This platform enables enterprise data maintenance by performing validation of local contribution data, allowing for change detection, and data updates.

Matrix of Previous Projects

Below is a summary matrix listing DATAMARK's previous projects similar to this RFP in size, scope, and complexity.

PROJECT NAME, LOCATION (CLIENT)	KEY PROJECT FEATURES								
	GIS Client	9-1-1 Client	GIS Strategic Planning	Data Gap Analysis	GIS Data Development and Maintenance	MSAG and ALI to GIS Synchronization	GIS Database Design	Stakeholder Coordination	DATAMARK Solution Customer
Master Address Database & Management Application <i>San José, CA (City of San José)</i>	✓		✓	✓	✓		✓	✓	✓
NG9-1-1 DATAMARK® Address Assessment & Action Plan <i>Caroline County, MD (Caroline County Emergency Services)</i>	✓	✓		✓	✓	✓	✓	✓	✓
Orleans Parish Communications District <i>New Orleans, LA (Orleans Parish Communications District)</i>	✓	✓				✓			✓
DATAMARK® Implementation and Quality Assurance Plan <i>San Mateo County, CA (San Mateo County)</i>	✓	✓	✓	✓				✓	
Geographic Information System Strategic Plan Update <i>Statewide, VA (VA Geographic Information Network)</i>	✓		✓	✓				✓	
Address Database and Maintenance <i>Manatee County, FL (Manatee County)</i>	✓	✓		✓	✓	✓			✓
E9-1-1 and Parcel Data GIS Services <i>Beaver, PA (Beaver County)</i>	✓	✓			✓	✓	✓		
E9-1-1/GIS/LBRS Data Development <i>Youngstown, OH (Mahoning County)</i>	✓	✓			✓	✓	✓		
NG9-1-1 GIS Data Prep Support <i>Washington, D.C. (Office of Unified Communications)</i>		✓		✓	✓	✓		✓	

Narrative Project Descriptions

As requested in the RFP, below are three narrative project descriptions for the following clients:

- City of San José, California
- Caroline County, Maryland
- Orleans Parish Communications District, Louisiana

Master Address Database Development

CITY OF SAN JOSÉ, CALIFORNIA

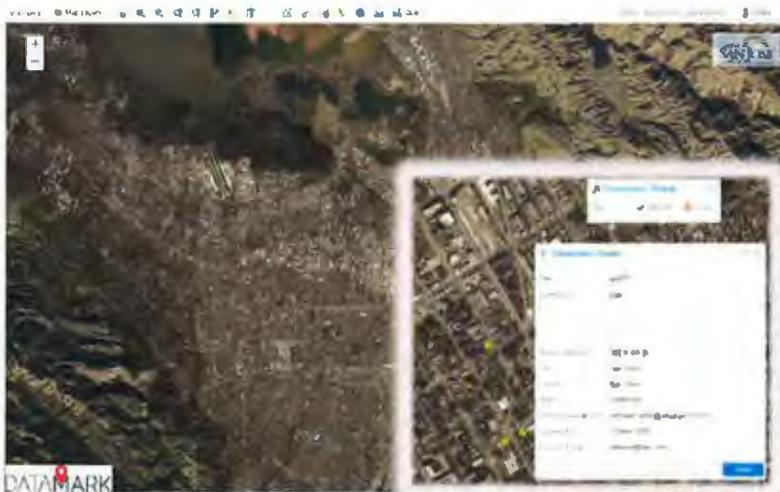
Client Reference: Vicky Gallargo
City of San José, Division Manager,
Department of Public Works
P: 408-535-8463
F: Facsimile number not available
E: Vicky.Gallargo@sanjoseca.gov

Project Duration: February 2017 –
February 2018

Completion Dates: 2018
Maintenance Contract: 2021

Budget: \$400,000

Role: Prime



The DATAMARK team contracted with the City of San José to develop a complete Master Address Database (MAD) and developed a web-based interface to allow authorized users to add and edit addresses in the MAD.

The City of San José previously developed an address point database from County Assessor data. However, this database did not account for all city addresses. Some missing address points included mobile homes, commercial units, multi-unit properties, and other secondary address information.

To identify missing address points, San José collected nine different address data sources, which were then consolidated from across the city's enterprise into one MAD by the DATAMARK team. To achieve this task, the team reviewed, normalized, and then weighted by confidence each of the datasets. The DATAMARK ACE (Address Comparison and Evaluation) tool compared the nine auxiliary datasets to the existing master address dataset to identify potential new address candidates. Those candidates that met the confidence threshold were placed into the correct parcel, on the building structure where possible, and added into the MAD. The MAD schema met the latest NENA NG9-1-1 standards, in addition to meeting the workflow needs of the city.

San José will utilize the DATAMARK VEP web-based portal interface to maintain addresses and emergency service boundaries in their jurisdictions. DATAMARK VEP allows multi-user editing and reconciliation of the data, which includes the ability for internal and external review.

NG9-1-1 DATAMARK® Address Assessment & Action Plan

CAROLINE COUNTY, MARYLAND

Client Reference: Bryan Ebling
Caroline County, Director Department of
Emergency Services
109 Market Street, Room 132
Denton, MD 21629
P: 410 479-2622
F: Facsimile number not available
E: bcebling@carolinemd.org

Project Duration: 12 months

Completion Dates:
Scheduled: December 2018
Estimated: September 2018

Budget: \$85,700

Role: Prime



The DATAMARK team prepared a complete NG9-1-1 GIS data readiness and remediation solution for Caroline County, Maryland. Caroline County currently utilizes GIS data for E9-1-1 and other public safety systems. However, with the forthcoming implementation of an ESInet, Caroline County needed to update their data to function within Next Generation Core Services (NGCS). Caroline County also needs to develop an authoritative PSAP boundary and ESBs, working collaboratively with their six neighboring jurisdictions to come to an agreement on a shared boundary solution.

The initial project kick-off meeting included county stakeholders, as well as the six neighboring jurisdictions, to identify roles and responsibilities for becoming NG9-1-1 ready.

This project features:

- MSAG/Centerline Comparison & Remediation
- PSAP and ESB Creation
- DATAMARK ACE (Address Comparison and Evaluation) Solution
- ALI/Address Point Comparison & Remediation
- Licensing of the DATAMARK VEP Solution

The final phase is implementing DATAMARK VEP for long-term data validation. Caroline County can continue utilizing current addressing workflows and maintain their own data in-house, leveraging the validation of DATAMARK VEP for NG9-1-1 data readiness. Furthermore, Caroline County will be the first authoritative PSAP boundary and ESBs in Maryland, becoming an example that other PSAPs may follow.

DATAMARK® DX

ORLEANS PARISH, LOUISIANA

Client Reference: Kathrine Cargo,
GISP, ENP Orleans Parish
Communication District (OPCD), GIS
Manager
P: 504-671-3911
F: Facsimile number not available
E. KCargo@911nola.org

Project Duration:
December 2016 - Present

Completion Dates:
November 2018 (expected)

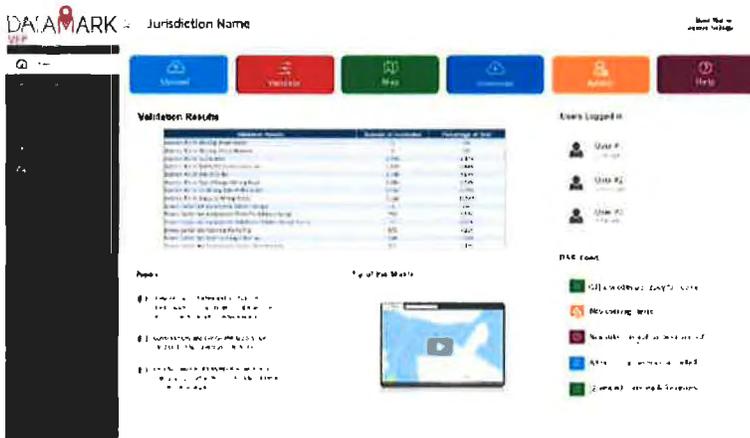
Budget: \$14,400

Role: Prime

The DATAMARK team is providing Orleans Parish Communication District (OPCD) with the company's DATAMARK DX geospatial data software to support the GIS data component of the existing 9-1-1 operations and transition to NG9-1-1. The partnership continues our response to the national mandate for NG9-1-1 upgrades to legacy systems that support first responders (police, fire, EMS, and 9-1-1 operators) across the United States.

The DATAMARK DX technology used by OPCD is part of the larger suite of GIS-centric solutions and support services for the NG9-1-1 call routing environment. DATAMARK technology is ideal for aiding PSAPs and their GIS stakeholders in this mission critical transition as it solves upgrade challenges, helps to improve public safety communications, and ensures the data meets the precise NG9-1-1 requirements. The software considers all aspects of the data that is provisioned to an NG9-1-1 system (data creation, clean-up, quality, and maintenance workflows). With extensive expertise in GIS and public safety, the DATAMARK team can help GIS departments determine what they need to support NG9-1-1, and can offer a cost-effective and highly targeted solution for public safety organizations by customizing a product to fit within a given budget.

The client recently extended their DATAMARK contract for an additional 18 months. OPCD will now begin the transition to our cloud-based DATAMARK VEP (Validate-Edit-Provision) application.



“Michael Baker International is a credible player in GIS and the only partner who brings a true GIS perspective to NG9-1-1... Our collaboration and the use of this technology has the potential to reduce emergency services’ response times and potentially save lives, and further showcases New Orleans as a technology-forward city.”

- Kathrine Cargo, GISP, ENP, GIS Manager, OPCD

I. SUMMARY OF PROPOSED PERSONNEL/MANAGEMENT APPROACH



Figure 3: Project Team Organization Chart

As principal-in-charge, Sandi Stroud will ensure that the necessary staff resources are made available and do not have any conflicts that would hinder their commitment to high quality services and products. As project manager, Jason Isherwood will be the primary point of contact to the State for the duration of this project and will be responsible for ensuring that the project meets the expectations of the State and the various PSAPs in the state.

Assisting the project manager in a “back-office” operational role will be the contract manager, Michael Skowronek, responsible for the work breakdown structure, Project Management Plan (PMP) creation, monitoring and managing the budget and “estimate to complete” levels of efforts, preparing monthly invoices, conducting internal project management reporting, working with the project manager to make operational adjustments as needed to keep the project on track, and performing contractual close-out tasks at the end of the project after the State is fully satisfied with the completed work.

As quality control lead, Beth Christenson will ensure that all work that is completed and delivered to Nebraska passes Michael Baker’s internal quality assurance/quality control (QA/QC) processes and standards. As technical lead, Keri Brennan, who is also the DATAMARK product manager, will ensure that any required updates to the DATAMARK SaaS product that are required to meet the specific needs of Nebraska are done so successfully, ensuring that DATAMARK functions properly for the specific Nebraska scope of work in this proposal and ensuring that the various reports that are generated from the data uploaded to and checked by DATAMARK are suitable for the specific needs of Nebraska. As customer service and training lead, Jennifer Dvorksy will be a responsible for providing the training necessary to enable users across the state to properly utilize the QA/QC platform as well as leading the help desk to troubleshoot technical issues, work directly with users, and maintain the FAQ and user guide.



Jason Isherwood, GISP
Project Manager

Mr. Isherwood has extensive experience with public safety GIS workflows, the DATAMARK® SaaS platform, and the full suite of Esri products and enterprise and relational database management systems. He is a proven leader in working directly with clients on NG9-1-1 and GIS-related projects, as well as collaborating with technical team members on technical briefings, presentations, analyses, and other outreach. He develops geospatial solutions and supports day-to-day technical problem solving for NG9-1-1 GIS projects. As the project manager for the State of Nebraska QA/QC for GIS Datasets project, Mr. Isherwood will direct and monitor day-to-day project performance and will be responsible for all reporting and communications with Nebraska.

Experience

Master Address Database Project, City of San Jose, California. *City of San Jose, CA, Public Works. Technical Advisor.* Acted as a technical resource and advisor responsible for overseeing the on-boarding of additional resources for the City of San Jose master address database development and portal project. The goal of this project was to develop a complete Master Address Database (MAD) and developed a web-based interface to allow authorized users to add and edit addresses in the MAD. Moving forward, San Jose will utilize the DATAMARK VEP web-based portal interface to maintain addresses and emergency service boundaries in their jurisdictions.

Risk MAP (Mapping, Assessment, and Planning), Nationwide. *Federal Emergency Management Agency (FEMA). GIS Supervisor.* Responsible for serving as the West Regional Mapping lead for Michael Baker’s ongoing mapping activities as well as managing the GIS Department at the Regional Service Center VIII (Denver) for the FEMA Risk MAP contract. The role encompassed many tasks including GIS project and client management along with GIS data coordination across FEMA Region VIII.

Community Engagement and Risk Communication and Outreach, Nationwide. *Federal Emergency Management Agency (FEMA).*

Geospatial subject matter expert and national risk assessment technical lead. Responsible for serving as the national GIS and lead data architect for Baker’s ongoing support of FEMA headquarters for the Community Engagement and Risk Communication and Outreach contract. Tasked with conceptualizing, scoping, and completing data-driven projects leveraging state-of-the-art technology platforms to create engaging outreach materials. By using existing information and proven workflow processes, the CERC medium is used to create enhanced user experiences driven by real world data.

Years with Michael Baker: 11
Years with other Organizations: 1

Education

- M.S., 2013, Geography, GIS and Remote Sensing, University of Denver
- B.S., 2007, Forest Management and Spatial Information Management Systems, Colorado State University

Licenses/Certifications

- First Aid/CPR Training, Colorado, 2016
- FEMA Hazus Trained Practitioner, Colorado, 2016
- Certified GIS Professional, Colorado, 2015, 90459

References:

- Kathleen Boyer
FEMA, Emergency Management Specialist
500 C Street, SW
Washington, DC 20472
202-646-4023
- Dawn Brabenec
FEMA Region VIII, Senior Program Engineer
Denver Federal Center
Building 710, Box 25267
Denver, CO 80225-0267
303-235-4718
- Stacey Thompson
City of Centennial, Engineer
13133 E. Arapahoe Road
Centennial, CO 80112
303-858-8844



Sandi Stroud
Principal-in-Charge

Ms. Stroud has been the director of public safety GIS for Michael Baker since 2014. She led a team of GIS, NG9-1-1, and software development experts in engineering the DATAMARK solution. She has 15 years of GIS experience, including municipal GIS management and industry involvement as an Executive Board Member of MSGIC and URISA Certified Workshop instructor/author.

Experience

Master Address Database (MAD) Project, City of San Jose, California. *City of San Jose, CA, Public Works. 9-1-1 SME.* Led the development of the scope. The City sought a consultant who could help them “true up” their address point database where there was a known gap of almost 200,000 missing addresses. Through our proprietary address comparison and evaluation process we were able to coalesce eight address databases into one and identify 198,000 missing address point candidates. Once added to the NG9-1-1 compliant database, we installed the DATAMARK editor application for the city’s internal stakeholders to use to maintain the datasets. To support data quality requirements for 9-1-1 systems, the city has licensed our DATAMARK DataExchange solution.

Geographic Information System Strategic Plan Update, Statewide, Virginia. *Virginia Geographic Information Network. 9-1-1 SME.* Michael Baker provided professional services to update the 2015 to 2020 statewide GIS Strategic Plan including facilitating a comprehensive stakeholder outreach program with town hall meetings, an online survey and one-to-one interviews; analyzing the data from the meetings, survey, and interviews; and updating the strategic plan to incorporate Next Generation 9-1-1 requirements.

DATAMARK Solution, New Orleans, Louisiana. *Orleans Parish Communications District (OPCD). Sales Representative.* Responsible for business plan development, marketing, and budget control. Part of the leadership team of subject matter experts, programmers, and technicians that developed and implemented DATAMARK products and services targeted to NG9-1-1.

NG9-1-1 GIS Map Data Aggregation and Quality Control. *Caroline County, Maryland. Project Manager. 9-1-1 SME.* Key responsibilities include stakeholder outreach, data aggregation/quality control and deployment of the DATAMARK DX for data maintenance. This project is the first in the state that includes a review of the responsibilities that addressing authorities need to serve in NG9-1-1 emergency response. The focus is maintenance/update of street centerlines, address points, and emergency service polygons.

Years with Michael Baker: 4
Years with Other Organizations: 10

Education

- B.A., 2003, Urban Studies & Planning, California State University Northridge

Affiliations

- NENA, member, NG9-1-1 Data Model and GIS Data Stewardship for NG9-1-1 Committees
- URISA International, member since 2013, NG9-1-1 and Emergency Preparedness Workshop Author & URISA Certified Workshop Instructor

References:

Kathrine Cargo, GISP, ENP
OPCD, GIS Manager
118 City Park Ave.
New Orleans, LA 70119
504-671-3911

Sheila Steffenson
1Spatial, CEO
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Michael J. Skowronek, GISP, AICP
Contract Manager

Mr. Skowronek's accreditations include Certified Geographic Information Systems Professional (GISP), and American Institute of Certified Planners (AICP). He currently serves

as a senior project manager and west lead for the Project Management Office (PMO) for Michael Baker's DATAMARK team. His professional experience includes Project Management Plan (PMP) and Quality Management Plan (QMP) development; staff management and oversight, cost control, budgeting, and invoicing, and client relations and communications. As the contract manager for this project, Mr. Skowronek will help direct and monitor day-to-day project performance.

Public Safety GIS Data Implementation and Quality Assurance Plan, San Mateo County, California. Project Manager. Michael Baker completed the following tasks for this project: assessment of current public safety system GIS usage, available GIS data and current public safety data governance; assessment of public safety GIS data quality, data gaps and estimated level of effort to fill the gaps; definition of public safety GIS data maintenance and data sharing workflows; and creation of final document. This GIS Data Implementation and Quality Assurance Plan serves as a roadmap for the successful development of next generation 911 (NG9-1-1) data for San Mateo County's new dispatch system.

San Jose Master Address Database, City of San Jose, CA, Technical Advisor. Master Address Database Project, City of San Jose, California. Michael Baker conducted a comparison of nine existing address databases from City departments to create a Master Address Database (MAD) with high quality address point placement including sub-addresses. In addition to data aggregation and creation a custom application, the Master Address Portal, was create based on Michael Baker's DATAMARK platform. The project involved participation and benefit for the Public Works, Public Safety, Planning, Building and Code Enforcement and Utility Billing departments.

Columbia County WA DATAMARK, Columbia County, Washington. Dayton, WA. Project Manager. Michael Baker conducted QA/QC on Columbia County public safety data to identify components of the data that need to be edited by the County. DATAMARK SaaS software was rolled out to allow County staff access to the online DATAMARK tool for ongoing data maintenance. Technical support and training were also provided.

Years with Michael Baker: 14
Years with Other Organizations: 13

Education

- M.A., 1991, City Planning, Georgia Institute of Technology
- B.A., 1987, Environmental Design, Texas A&M University

Licenses/Certifications

- Certified GIS Professional, 2005, 00024906
- American Institute of Certified Planners, USA and Canada, 1995, 0011763

Affiliations

- NENA, member

References:

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Keri Brennan, GISP
Technical Lead

Ms. Brennan is Certified GISP with 25 years of experience, including working in many disciplines, from forestry, mining, and land records to public safety. She has worked as a

GIS consultant for local government and product manager for a damage assessment application that combined GIS, Assessors and Emergency Management data into a single-source application for collecting damage assessment information after natural and man-made disasters. Ms. Brennan has also spent a good deal of her career working with clients in an education and training capacity, to empower and enable application users to be self-sufficient and enabled to efficiently maintain their own GIS information. She is an influential and well-respected presenter and workshop lead to GIS professionals. As the technical lead for this project, Ms. Brennan will serve as technical lead for the State of Nebraska QA/QC for GIS Datasets.

Experience

GIS Consulting Services & Staff Augmentation, Kokomo & Howard County, Indiana. Senior GIS Consultant. Served as liaison between offices within county government and external users.

GIS Consulting Services, Indianapolis, Indiana. IDAM. Product Manager. Responsible for coordination development, marketing and sales of a damage assessment tool that combined assessors, GIS and emergency management data into a mobile application for quick and efficient damage assessment after a natural or man-made disaster.

GIS Trainer, Indianapolis, Indiana. Local government clients. GIS Education Director. Responsible for developing and delivering GIS training materials for local government clients.

GIS Consulting Services & Staff Augmentation, Ninestar Connect, Indiana. Senior GIS Consultant. Served as GIS consultant for local utility, helped to implement online mapping utilities, set up processes and procedures for fiber network data conversion.

GIS Project Management, Jackson County, Iowa, Project Manager. Served as project manager for 9-1-1 field data collection, aggregation and QC project.

Years with Michael Baker: 1
Years with Other Organizations: 24

Education

- B.A., 1993, Geography, Laurentian University

Licenses/Certifications

- Geographic Information Systems Professional (GISP), 2004, License #47471

Affiliations

- NENA, member
- URISA International, member since 2005, Board of Directors (2016-18), Board Liaison to URISA GIS Leadership Academy, Annual Conference Committee, URISA Certified Workshop Instructor, and NextGen 9-1-1 Task Force

References:

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Ninestar Connect
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Chris Carver
PSAP Operations Director
National Emergency Number Association
1700 Diagonal Road
Alexandria, VA 22314
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Beth Christenson, GISP
Quality Control Lead

Ms. Christenson has eight years of experience in public safety GIS and currently serves as the quality assurance lead for the DATAMARK team at Michael Baker. Her professional experience includes geospatial analysis, statistics, application development, public safety system configuration, database maintenance, planning, and project management within the realm of public safety. Prior to joining the DATAMARK team, Ms. Christenson served as the public safety GIS coordinator for the City of Cincinnati. Ms. Christenson specifically worked to resolve citywide workflows for keeping data updated for critical public safety systems including computer-aided dispatch (CAD), 9-1-1 software, and call routing. Ms. Christenson believes that 9-1-1 is the heart of public safety; if you keep data integrity at the heart, it will keep the rest of the public safety infrastructure beating.

Experience

NG9-1-1 DATAMARK Address Assessment & Action Plan. *Caroline County, MD.* As the technical lead, Ms. Christenson is responsible for overseeing the project implementation schedule and assigning resources for analysis. She is responsible for hosting weekly meetings with the client technical staff and overseeing quality review of data delivered to county. She is also responsible for addressing any technical issues that the client experiences.

TriTech CAD Implementation Team. *Cincinnati, OH. Public Safety GIS Coordinator.* Ms. Christenson specifically worked to resolve citywide workflows for keeping data updated for critical public safety systems including computer-aided dispatch (CAD), 9-1-1 software, and call routing. Working with the local address authority, and subsequently the local telephone companies, they improved the efficiency of these workflows, improving not only the public safety data but data sets across the city. Ms. Christenson regularly perform checks and balances on the CAD data to make sure that 1) the system is performing as it should and 2) personnel are following policies and procedures when it comes to entering data.

Years with Michael Baker: 1
Years with Other Organizations: 10

Education

- Masters, 2008, Geography, Miami University
- BA, 2004, Geography, University of WI-Eau Claire

Licenses/Certifications

- Hazus Professional

Affiliations

- NENA
- URISA International

References:

Christopher (Chris) Kephart
GIS & Data Coordinator
Caroline County Planning & Codes
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Computer Systems Analyst,
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Robbyn Abbitt
GIS Coordinator, GISci Certificate
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Jennifer Dvorsky, GISP
Customer Services Lead & Training Lead

Ms. Dvorsky is a Certified GISP and currently serves as a technical support Lead for Michael Baker’s DATAMARK team. Her previous experience includes working as a GIS Analyst for El Paso-Teller 9-1-1 Authority in Colorado Springs, Colorado, working with PSAP directors, local law enforcement, and fire agencies to provide accurate spatial data for their CAD systems. As customer service lead and technical lead for this project, Ms. Dvorsky will create user-friendly, customized training, and will provide technical support to State of Nebraska QA/QC for GIS Datasets.

Experience

NG9-1-1 DATAMARK Address Assessment & Action Plan. *Caroline County, Maryland, Training Lead.* Responsible for delivering weekly public safety GIS training sprints for Caroline County to facilitate their data alignment with NENA standards and recommendations. Training modules were developed from current Caroline County datasets to provide real world, local examples of anomalies and known issues. Ms. Dvorsky provided education and data maintenance guidance weekly to assist with better consistency and accuracy of spatial data.

El Paso-Teller 9-1-1 Authority. *Colorado Springs, Colorado, GIS Analyst.* Responsible for working with stakeholders, PSAP directors, local law enforcement and fire agencies to provide accurate spatial data for their CAD systems. Administered a versioned database, while continually updating and maintaining 9-1-1 data and deploying bi-weekly updates to nine public safety answering points.

Ms. Dvorsky has previous experience as a GIS specialist working for a city government in Arizona to support the needs to Public Works, Parks and Recreation, Planning and the City Manager’s Office. She additionally has experience working for the NPS and a non-profit conservation organization and a GIS Lead in Tucson, Arizona.

Years with Michael Baker: 1
Years with Other Organizations: 5

Education

- M.S., 2012, Geographic Information Systems Technology, University of Arizona
- B.S., 2009, Wood Science and Forest Products, Virginia Tech

Licenses/Certifications

- Geographic Information Systems Professional (GISP), 2017
- License #99249

Affiliations

- NENA, member
- URISA International, member since 2015
- GITA, member

References:

Cathy Udenberg
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 Manatee County, ITS Project Manager
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 Bradenton, FL 34205
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Management Approach

Our DATAMARK team greatly values our relationships with our clients and views the work that we do as a collaborative client-consultant partnership. A key component of this is having a personal one-on-one relationship and direct, open line of communication between our team and the client. For this project, it will be the job of our project manager, Jason Isherwood, to be the "face" of our team as the primary point of contact for state of Nebraska staff for the duration of the project to ensure that the state's expectations are met during the entire life cycle of the project. Our approach is based on decades of consulting experience that emphasizes close interaction between the state of Nebraska staff and the DATAMARKS's team in a highly-collaborative nature, with frequent opportunities for engagement and interactions between project team and key state stakeholders.

Assisting the project manager in a "back-office" operational role will be the contract manager, Michael Skowronek, to help direct and monitor day-to-day project performance and project status. Michael Baker's processes for tracking project status include entering the complete schedule requirements into our Oracle-based resource management system. The system is an "active" alerting system that sends notices to managers when elements of projects are not within expected limits. The schedule is then monitored by the project manager, contract manager, and upper management within Michael Baker. Also, frequent monitoring and early identification of any changes affecting project costs will help control costs. This monitoring is accomplished easily through Michael Baker's comprehensive Work Breakdown Structure (WBS). Costs will be controlled with a cost-trending technique, which uses as a starting baseline the original cost estimate prepared for the project. This cost estimate will then serve as the baseline upon which any changes are measured. For all items that potentially may increase the baseline cost, careful analysis of lower cost options will be undertaken. These techniques will keep the baseline estimate up-to-date and will allow members of the project team to monitor the cost impacts of their decisions.

"Project Management - The Michael Baker Way" defines the process for which all projects are managed throughout Michael Baker. The ultimate objective of "The Michael Baker Way" is improving project performance through Product Delivery Excellence. Through better organization, tools and methods to monitor budgets, an emphasis on communication, and a structured approach to delivering quality. The Michael Baker Way clearly provides considerable value to our clients, the company, and its stakeholders. The key features of "Project Management - The Michael Baker Way" are:

- Improving project performance through consistency, organization and efficiency for the state of Nebraska.
- Serving as a one-stop reference point for scope management for this project.
- Delivering the best product to the state of Nebraska by leveraging existing best practices throughout Michael Baker, as well as referencing accepted and established practices from outside sources.

Subcontractors

Michael Baker can self-perform this scope of work and does not require the use of any subcontractors for this project.

TECHNICAL APPROACH

The DATAMARK approach aggregates GIS data into one repository, seamlessly preparing Nebraska for NG9-1-1.

This Technical Approach section is formatted per the guidelines established in the RFP, Section VI Proposal Instructions, Item 3. RFP Section V Proposal Description and Scope of Work is included directly from the RFP in Appendix V.

A. UNDERSTANDING OF THE PROJECT REQUIREMENTS

DATAMARK®, the public safety GIS team of Michael Baker, is the go-to authority on GIS for NG9-1-1. Our data-forward, vendor agnostic, full service NG9-1-1 solutions provide the highest level of public safety GIS data completeness, quality control, and accuracy. To support these workflows, DATAMARK VEP (Validate-Edit-Provision) is our recommended solution. It is a full service, yet configurable SaaS platform for GIS data preparation, validation, and maintenance for NG9-1-1. For this project, VEP is coupled with an integrated, custom application developed specifically for the State of Nebraska to meet the needs of validating the Nebraska Information Technology Commission (NITC) standards.

The DATAMARK team understands the project requirements and scope of work to be as follows:

- ❖ Establish and maintain a secure web portal through which Nebraska PSAPs, or their representatives, can upload GIS data for validation against NENA and NITC standards
- ❖ The PSAPs, upon completion of the validation process, will have instantaneous and continuous access to downloadable reports and spatial data that delineates anomalies and interactive dashboards that highlight the anomalies and history of changes.
- ❖ The local PSAP or its representative is responsible to correct all the anomalies listed in the Discrepancy Report. After correction, the local PSAP or its representative will resubmit the revised GIS dataset via the portal for another round of QA/QC review. If an anomaly cannot be corrected, it can be marked as an exception and will not be checked in future validation runs.

B. PROPOSED DEVELOPMENT APPROACH

Our DATAMARK approach for satisfying the requirements of this project entails the design of a custom application to fit the unique needs of the State of Nebraska coupled with the integration of our secure, cloud-based portal that handles all of the NENA QA/QC validations. The custom application is designed to validate PSAP data against the NITC standards outlined in the RFP. The custom application will be owned by the State

of Nebraska and DATAMARK will host it. This application will be connected with our VEP solution to create a seamless cloud-based validation experience for Nebraska PSAPs.

VEP is an end-to-end NG9-1-1 SaaS, GIS data aggregation, preparation and maintenance solution that is configurable to the needs of the end-user. It provides an intuitive, user-friendly interface for both GIS and non-GIS trained personnel to conduct 9-1-1 location data validation and quality control beyond internal datasets in a secure, web-based environment. This secure, cutting-edge SaaS solution streamlines and eases the upload, validation, and maintenance of GIS data for use in all 9-1-1 systems.

VEP is the only online application built specifically with public safety and GIS data maintenance for NG9-1-1 in mind. The platform maintains data quality control metrics to support NG9-1-1 ESnet services and quality control requirements for PSAP systems (CAD, CAD Mapping, AVL, and other business systems). Because of this, **DATAMARK VEP is perfectly positioned to serve as the QA/QC web-based platform for local county data across the State of Nebraska to aid in NG9-1-1 implementation.**



- ✓ No software dependencies results in no hidden costs
- ✓ It's subscription-based so you are only paying for what you need
- ✓ Don't have to worry about:
 - Maintenance
 - Hardware
 - Server space
- ✓ All you need is an Internet connection

Key Differentiators:

- ❖ SaaS Solution - No need to purchase additional GIS software licenses or maintain hardware
- ❖ Built on the robust Esri ArcGIS Enterprise platform
- ❖ Integrated 1Spatial 1Integrate data validation engine for quick and easy data manipulation
- ❖ DATAMARK's highly experienced team of data scientists actively work with and educate the public safety community and others integral to the implementation of NG9-1-1.
- ❖ Validates data using 38 unique validation checks, including the interrelationship between data layers
 - Includes MSAG and ALI comparisons
 - Includes address points, road centerlines, PSAP boundaries, provisioning boundaries and emergency service boundaries
- ❖ Secure user authorization
- ❖ Unique user access and role authorities
- ❖ Comprehensive support and training
- ❖ DATAMARK VEP is built on the NENA NG9-1-1 GIS database schema. All data is provisioned into this schema upon upload by the local authority. This ensures a cohesive and standardized data set for validation and provisioning.
- ❖ DATAMARK VEP allows for any native schema for field mapping to the DATAMARK schema which is built to meet the NENA GIS Data Model requirements.
- ❖ DATAMARK VEP accepts GIS data in an Esri shapefile or file geodatabase format.
- ❖ Users have access to unlimited validations that can be initialized at their convenience without relying on consultants to do so for them.

DATA QC AND VALIDATION CHECKS

Applicable NITC Standards

- ❖ Automated attribute compliance and completeness check
- ❖ Where necessary, manual validation of spatial accuracy of address points and street centerlines
 - Additional service credit cost

NENA Standards

- ❖ Several levels of data QC and validation to perform a gap analysis that enables users to visualize and understand anomalies.
- ❖ On-demand, iterative processing for all validation checks. No need to wait to have a third-party run analysis and return results.
- ❖ Identifies discrepancies among all GIS data layers (address points, road centerlines, PSAP, Emergency Service Boundaries and Provisioning Boundaries) and analysis of the inter-relationship of these layers.
- ❖ DATAMARK VEP requires data completeness checks before further validation checks can be done. GIS datasets that do not meet initial automated completeness and formatting checks as documented in the table below.
- ❖ DATAMARK VEP also validates data across authoritative boundaries to check data consistency.

Initial Automated Completeness and Formatting Checks		
#	Description	DATAMARK VEP Functionality
1	No data in the file	Already Included
2	Incompatible dataset due to improper or missing field names	Already Included
3	Lack of defining information (e.g., county name, dataset)	Already Included
4	Improper file format	Already Included
5	MSAG not included with Street Centerline file	Already Included
6	Missing or improperly formatted FDGC metadata	Part of NITC validation checks
7	Incorrect data naming convention	DATAMARK VEP allows any native schema for uploaded files, but will translate the uploaded files into the DATAMARK schema which is built on the NENA NG9-1-1 GIS data model

Figure 4: Initial Automated Completeness and Formatting Checks

After a PSAP uploads data that does not have any of the above completeness or formatting errors (as shown in Figure 4), DATAMARK VEP checks the data against NENA standards as identified in the Technical Requirements section below. After the validation checks are run, DATAMARK VEP provides instantaneous and persistent access to downloadable reports and spatial data that delineates anomalies. Validation layers are downloadable to showcase locations of validation anomalies. The local PSAP or its representatives are responsible to correct all the items listed in the discrepancy report. After correction, the local PSAP or its

C. TECHNICAL REQUIREMENTS

The DATAMARK team will follow the technical requirements as outlined in the RFP provided by the State of Nebraska. All specific NENA and NITC standards outlined in this RFP (solicitation number 5882 Z1) are validated during the quality control process.

Below is a description how we will meet the requirements.

Bidder Response:

DATAMARK will provide VEP SaaS solution to meet the needs of the Nebraska Quality Assurance/Quality Control for GIS data for PSAP's for Next Generation Core Services (NGCS). We feel that the DATAMARK VEP application, out of the box, will meet the needs as outlined in the RFP for compliance with NGCS. In addition, the DATAMARK team will build and deliver a custom NITC QC application that interfaces with VEP for seamless QA/QC of Nebraska GIS data used to support these business processes.

The DATAMARK team's approach is unique in that our solution has the built-in capabilities to mitigate all mission-critical GIS data pain points 9-1-1 authorities must address with the upgrade to NG9-1-1. By implementing the DATAMARK VEP application, the State will deploy a data forward solution that enables local stakeholders to:

- 1) Upload and validate their GIS data required for the NGCS in near real-time fashion
- 2) Leverage automated gap analysis checks to ensure data agreement along county boundaries
- 3) Interact with the data to improve flagged anomalies
- 4) Leverage a single point of upload to support the validation of both NENA and NITC standards with VEP and a custom integrated solution

DATAMARK VEP leverages the power of the 1Spatial 1Integrate solution for data validation and audit trail. By combining the power of the 1Spatial validation engine, validation processes are streamlined, handled directly within the SaaS environment, and processing inefficiencies, eliminated.

Further, when data is submitted for validation and integration into the repository, the resulting data statistics are stored, and a dashboard is available to the administrator showing the data quality. An example of this dashboard is shown below in Figure 6. This allows administrators to see how the quality of data from a provider is progressing over time. Configurable charts are available which have filters by provider and restricted to a specific timeframe. The layout of the dashboard is easily configurable by dragging and dropping the controls to allow the administrator to define which charts to display and where. An example dashboard detailing user activity is shown below in Figure 6.

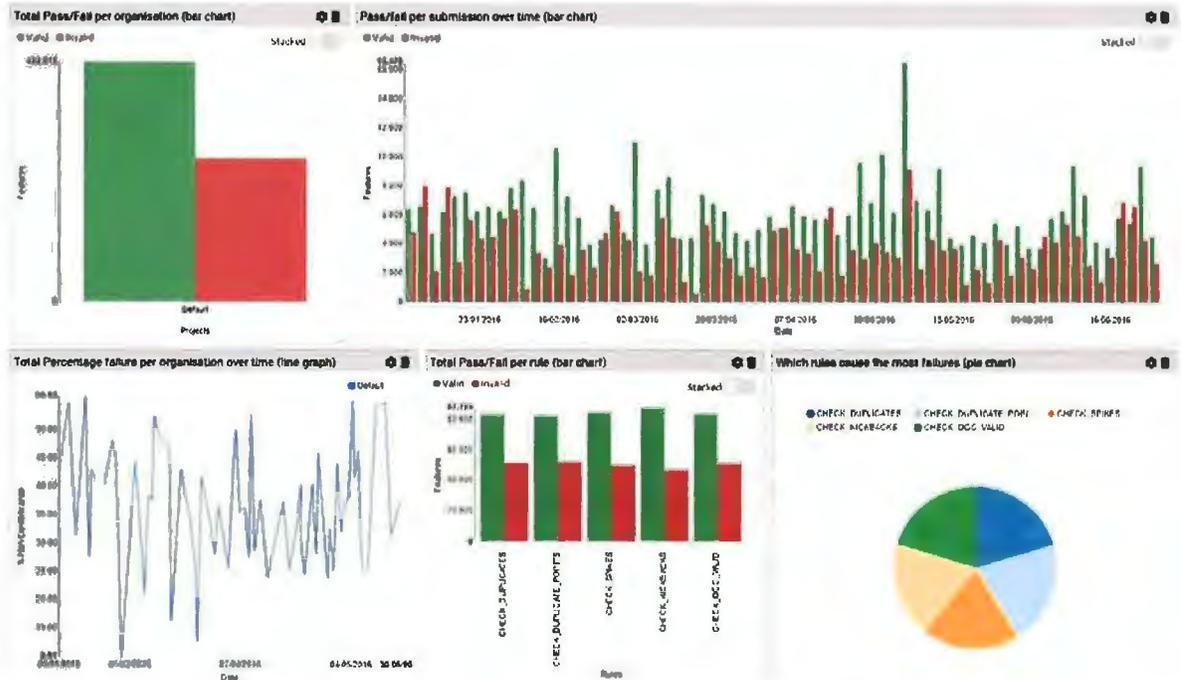


Figure 6: Example User Activity Dashboard

Initializing the validation of applicable GIS data, MSAG, and ALI data will leverage all quality control checks and rules specifically designed to ensure compliance with NENA and applicable NITC standards as outlined in this RFP. 1Spatial provides this capability in the SaaS application utilized in the iterative maintenance process. An added value to using this capability directly for the gap analysis is that we can provide results spatially that identify where roads do not break at the designated boundaries (dangles) and suggest where roads that transverse boundaries should meet (edge matching snap points) in addition to individual results for each check below.

While automating or suggesting corrections are not a recommended part of any 9-1-1 synchronization and SI solution, it provides a value-add to the individual PSAPs should they chose to utilize the automated fix-up/proposal capabilities inherent in the 1Integrate product as they ready their data for the NGCS. Figure 7 details the validation rules that the associated GIS data is run against.

Address Points	Centerlines	MSAG	ALI	1Spatial Gap Analysis	1Spatial Fishbone Analysis
Address point with null geometry	Centerline with null geometry	MSAG record zero range	ALI has no house number	Validate topological relationships of PSAPs and Jurisdictions	Ensure address is valid for fishbone analysis
Address point missing street name	Centerline incomplete address range	MSAG record has no matching road	ALI has no matching address points	Validate topological relationships of ESBs and Jurisdictions	Combine fishbone objects with the same address
Address point duplication	Centerline inconsistent to/from address range	MSAG record has no matching road range	ALI has no matching street range	Address is contained by correct PSAP	Determine the side of centerline fishbone object resides
Address point not reflected in centerline	Centerline inconsistent odd/even address range parity	Centerline has no matching MSAG record		Centerline is contained by correct PSAP	Construct fishbone geometries
Address point out of order	Centerline potential parity flip	Centerline has no matching MSAG range			
Address point out of range/wrong block	Centerline address range overlap				
Address point on wrong side of the street	Centerline inconsistent vector directionality				

Figure 7: Validation Rules

Because DATAMARK VEP can consume multiple database schemas, local data authorities will not see a major change in their workflow as it will continue to serve as the one-stop shop for data upload and validation to satisfy the requirements of this project.

To achieve the spatial accuracy requirements of address point placement, the DATAMARK team proposes a series of credits that counties may purchase for staff augmentation. The DATAMARK team will aid those counties for reviewing address points and centerlines against aerial imagery. The result of this process will be a spatial output of features that do not meet the NITC standard (see **QA/QC Methodology** for more details).

D. CONTRACTOR REQUIREMENTS

1. QA/QC PROJECT METHODOLOGY

DATAMARK will deliver a QA/QC Project Plan with the methodology for accomplishing the project and satisfying all requirements in the RFP.

Bidder Response:

DATAMARK proposes a two-tier QA/QC plan utilizing VEP as the primary web-based platform for preparing data for NG9-1-1. The QA/QC process is two-tier in that 1) the data needs to have general

compliance with applicable NITC standards and 2) meet the standards outlined within the NENA NG9-1-1 GIS data model.

To QA/QC the data for NITC standards, the DATAMARK team proposes the development and implementation of an interface in which PSAP's, or their representatives, will upload and validate their data to NITC standards including FGDC metadata completeness and other validations as outlined in the RFP. Upon further definition of required compliances between DATAMARK and NITC, it may require a modification to pricing as outlined in the attached cost proposal.

This custom application streamlines the QA/QC process empowering the PSAP to perform their NITC validations checks within a user-friendly interface. This interface will provide an output of the anomalies as well as a discrepancy report. Upon successful completion of the NITC standards check, the data is translated into VEP through a triggered process launching the secondary set of compliance checks designed specifically for NENA GIS data model.

VEP is perfectly positioned to serve as the QA/QC web-based platform for local PSAP data across the State of Nebraska to aid in NG9-1-1 implementation. VEP has the capacity to validate the GIS, MSAG, and ALI data through a series of 38 validation checks that the county may run at their discretion (See Figure 8). VEP contains a series of first-pass "completeness checks," if the data passes these, it automatically begins the secondary-pass of "standards checks."

LAYERS UTILIZED	VALIDATION CHECK
Address Point	Address Point Geometry Must Be Populated
Address Point	Address Point Attribution is Populated
Address Point	Address Does Not Contain Duplicates
Address Point	Address Point Has Unique ID
Address Point	Address is Valid for Fishbone Analysis
Address Point, Provisioning Boundary	Provisioning Boundary Contains Address Point
Address Point, PSAP Boundary	Address is Contained by Correct PSAP
Address Point, Road Centerlines	Markup Road Centerlines with Overlapping Address Ranges
Address Point, Road Centerlines	Markup Address Point with No Corresponding Road Centerline
Address Point, Road Centerlines, MARKUP_FISHBONE	Create Fishbone Object Mapping Address Point to a Single Matching Centerline
Address Point, Road Centerlines, MARKUP_FISHBONE	Check Address is on Correct Side of Road Centerline
ALI	Check ALI House Number for Integer Value
ALI	Check ALI Address Number for Value
ALI, Address Point	Check ALI Features Exist in Address Point Table
ALI, Road Centerlines	Check ALI Address within Road Centerline Range
MARKUP_LINE	Validate Road Centerline Digitized Direction and Address Range
MSAG	Check MSAG Address Range for Integer Value

MSAG	Check MSAG Address Range for Range
MSAG, Road Centerlines	Check MSAG Record Exists in Road Centerlines Layer
Provisioning Boundary, PSAP Boundary	Validate Topological Relationship of PSAPs and Provisioning Boundaries
Provisioning Boundary PSAP Boundary	Validate Topological Relationship of ESBs and Provisioning Boundaries
Road Centerline	Road Centerline Geometry Must Be Populated
Road Centerlines	Road Centerline Address Ranges Must Not Overlap
Road Centerlines	Road Centerlines Have Consistent Parity
Road Centerlines	Road Centerline Address Range Consistency
Road Centerlines	Road Centerline Address Ranges Consistency
Road Centerlines	Road Centerline Address Ranges Incomplete – Left
Road Centerlines	Road Centerline Address Ranges Incomplete – Right
Road Centerlines	Road Centerline Address Range & Parity Congruence - Left
Road Centerlines	Road Centerline Address Range & Parity Congruence – Right
Road Centerlines	Road Centerline Has Unique ID
Road Centerlines	Road Centerline Digitized Direction
Road Centerlines, MARKUP_FISHBONE	Combine Fishbone Objects with the Same Address Number
Road Centerlines, MSAG	Check Road Centerline Features Exist in MSAG Table
Road Centerlines, MSAG	Check Road Centerlines Layer Address Range Falls within MSAG Address Range
Road Centerlines, Address Point	Centerline with Populated Address Range Has Address in Range
Road CENTERLINES, MARKUP_FISHBONE	Determine the Side of the Road Centerlines that the Fishbone Object (Address Point) Resides
Road Centerlines, MARKUP_FISHBONE	Construct Fishbone Geometries
Road Centerlines, MARKUP_FISHBONE	Check Address Order Along Centerline
Road Centerlines, Provisioning Boundary	Provisioning Boundary Contains Road Centerline
Road Centerlines, PSAP Boundary	Road Centerline is Contained by Correct PSAP

Figure 8: DATAMARK VEP 38 Validation Checks

The DATAMARK team is confident in the QA/QC plan outlined here to check for data completeness and quality. However, the spatial accuracy of address point and centerline placement is not detailed in this scope of work.

To achieve the spatial accuracy requirements as outlined in the NITC standards, the DATAMARK team proposes a series of credits that counties may purchase for staff augmentation. The DATAMARK team will aid those counties for reviewing address points and centerlines against aerial imagery to ensure compliance with FGDC Geospatial Positioning Accuracy Standards as identified in NITC Standards 3-205

and 3-206. The result of this process is a spatial output of features that do not meet the associated NITC standards.

Each service credit will include 25 hours of staff augmentation at a cost of \$2,500 per credit. At the beginning of each base or option year, the State will have the ability to purchase as many or as few service credits as they anticipate consuming throughout that given year. Any service credits that are not used will roll over to the next year.

By employing this flexible, external service credit workflow the State has the ability to tailor staff augmentation based on the amount of work completed by local data authorities during that specified time period.

2. DETAILED ACTION PLAN

DATAMARK will create a detailed action plan that includes specifics on how implementation is accomplished.

Bidder Response:

One of the many benefits of using DATAMARK for this project is that the DATAMARK web portal is an existing and robust functioning application. As described above, the DATAMARK VEP application will meet the needs as outlined in the RFP for compliance with NGCS, and the DATAMARK team will build and deliver a custom NITC QC interface for use by the PSAP or designated representative for NITC compliance validations before NG9-1-1 validations. Therefore, the detailed action plan that the DATAMARK team will create will not focus on how the web portal tool will be created since the DATAMARK SaaS product already exists, but rather will focus on summarizing the specific actions for the technical approach described above. These action plan steps will be included in the scope of work summary section of a Project Management Plan (PMP) that will be delivered to the State at the beginning of the project. The PMP will also document the DATAMARK team's project management approach, techniques, and tools. The PMP will adhere to Michael Baker's well-established practices for creation of a PMP at the start of projects as a critical tool to help manage project finances, contracts, operations, and schedule. Other standard components of the PMP include the following:

- ❖ Project Goals and Objectives
- ❖ Scope of Work Summary
- ❖ Deliverables
- ❖ Project Control Procedures
- ❖ Budget Control
- ❖ Project Communication
- ❖ Online Management Tools
- ❖ Schedule and Milestones
- ❖ Billing Procedures
- ❖ Project Status/Project Tracking

The PMP follows Michael Baker's company-wide project management approach, referred to as "Project Management - The Michael Baker Way," which defines the process for which all projects are managed throughout Michael Baker. The ultimate objective of "The Michael Baker Way" is improving project performance through Product Delivery Excellence. Through better organization, tools, and methods to monitor budgets, an emphasis on communication, and a structured approach to delivering quality, "The Michael Baker Way" clearly provides considerable value to our clients, the company, and its stakeholders. The key features of "Project Management - The Michael Baker Way" are:

- ❖ Improving project performance through consistency, organization and efficiency for the State.
- ❖ Serving as a one-stop reference point for Scope Management for this project.
- ❖ Delivering the best product to the State by leveraging existing best practices throughout Michael Baker, as well as referencing accepted and established practices from outside sources.

A critical component of the PMP will be the schedule that specifies the timeframe for each task and milestones. The DATAMARK team has developed a preliminary year one schedule for illustrative purposes for this proposal. The schedule (Figure 9) will be discussed during the initial project kickoff call. Below is the preliminary schedule that will be refined and updated in collaboration and partnership with the state.

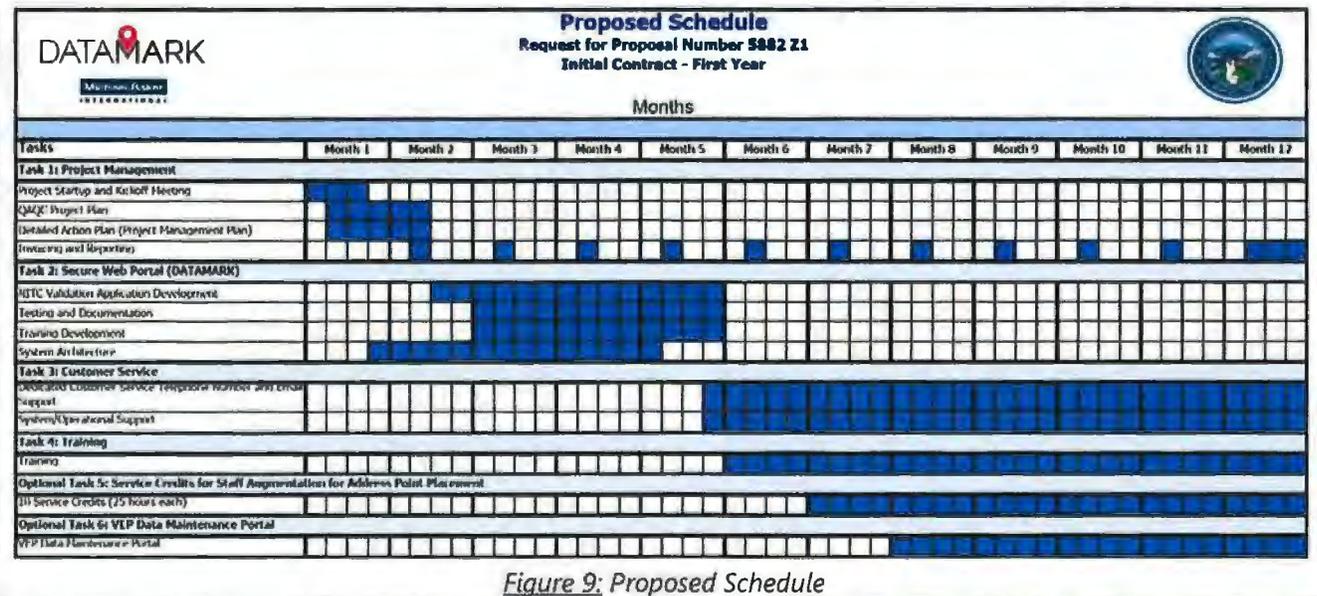


Figure 9: Proposed Schedule

3. CONTRACTOR REPORTS TO PSAPS

Upon completion of its review of any GIS dataset uploaded by a PSAP or its representative, Michael Baker will create and deliver a report in electronic format to both the PSAP responsible for uploading the file and the Commission's GIS Specialist.

Bidder Response:

DATAMARK will provide a seamless auto-reporting process to alert both the responsible PSAP and the Commission's GIS Specialist upon completion of either a NITC and NENA standards validation check. Through the custom-built application for NITC compliance, the responsible PSAP person and Commission's GIS Specialist will receive an auto-report once the validation checks are complete. The responsible PSAP personnel can download the spatial files containing any anomalies identified in the validation process. DATAMARK VEP has an improved user experience providing an interactive dashboard whereby the user can monitor progress and quickly visualize the remaining level of effort to achieve compliance and see exactly where these anomalies are located. The dashboard will also provide access to instantaneous and persistent downloadable reports and spatial data delineating anomalies.

The benefit of having DATAMARK VEP, coupled with a custom application, is that PSAPs and the State are not reliant on the vendor to run data QC checks and return data readiness, discrepancy or compliance reports. The PSAPs and the State will have the ability to run and review reports on their schedule within VEP and the custom application. If a local jurisdiction wishes to upload and validate data on a weekly basis, the DATAMARK VEP system is built to accommodate this. Furthermore, both the local PSAP and the State of Nebraska will receive formatted reports via email on a regularly scheduled basis. These reports are further detailed in the following sections.

See an example auto-generated report in the Appendix II – Contractor Report – Sample.

4. DISCREPANCY REPORT

In the case of an uploaded GIS dataset that contains errors or discrepancies, Michael Baker's report shall be a Discrepancy Report in tabular format, organized by unique object identifiers, listing all errors, discrepancies and other items of note that require correction in order to achieve compliance with applicable NITC and NENA standards. Each Discrepancy Report shall also be accompanied by a shapefile of any areas where the topology in the related dataset is incorrect. In addition, the Discrepancy Report for each dataset that includes a Street Centerline layer shall state the match rate percentage between the Street Centerline layer and the MSAG.

Bidder Response:

DATAMARK will provide discrepancy reports detailing the type of anomaly and unique identifier for both NITC and NENA standards. This report will also detail the match-rate percentage for the street centerline and MSAG. The post-processing will include a shapefile output of any areas where anomalies are identified.

for both applicable NITC and NENA standards. Due to the two-tier approach of this project to accommodate both NITC and NENA standards there are two types of Discrepancy Reports.

The first Discrepancy report is for applicable NITC standards. This will report will auto-generate after completion of the NITC validation checks. The user will have the option to download the report and the shapefile output through the custom application. The custom application will not have an interactive user experience that leverages the validation capability of 1spatial 1integrate. These spatial checks are performed on the NENA validation check side within VEP.

The second Discrepancy report is auto-generated once the NITC validation check is complete the data is pulled into VEP to complete the NENA validation checks. Not only is an auto-generated report made available but part of the DATAMARK SaaS solution is an interactive user-experience of a dashboard and the visibility of the anomalies in the mapping application. The geospatial data is downloadable for ingestion into other GIS or Analysis applications.

The results that are generated from the validations are visible in the form of point, line or polygon anomalies, showing the results of the validation rule that failed during the processing of data. The results will include not only the spatial data but also a unique identifier for each anomaly that can be easily tracked. For *MSAG to GIS* and *ALI to GIS* validation anomalies, the results are produced in the form of a table (as MSAG and ALI are non-spatial data sets) that have the unique identifier for each GIS object, so reviews and edits occur as needed.

Validation results and GIS data can be exported from VEP as spatial and tabular data at any time into the native schema and the NENA NG9-1-1 GIS data model. A user can also schedule downloads for provisioning into NGCS as needed and for consumption in other enterprise geographic information systems.

See an example auto-generated report in the Appendix III – Discrepancy Report - Sample.

5. COMPLIANCE REPORT

In the case of an uploaded GIS dataset that is determined by Michael Baker to be in compliance with all applicable NITC and NENA standards, Michael Baker shall deliver to the related PSAP a report stating that the dataset is ready for use and has been accepted for inclusion in the Commission's GIS Repository, along with any additional information Michael Baker deems appropriate. In addition, the Compliance Report for each accepted dataset that includes a Street Centerline layer shall state the match rate percentage between (i) the Street Centerline layer and the MSAG and (ii) the Address Points layer and the ALI.

Bidder Response:

DATAMARK will provide compliance reports to the associated PSAP and the Commission's GIS specialist. The compliance report is generated by VEP stating whether the dataset is ready for use and is accepted for inclusion into the Commission's GIS Repository. This report will include the match rate between the

GIS data and the tabular datasets of the MSAG and ALI. This information is also available within a dashboard format within VEP.

See an example auto-generated report in the Appendix IV – Compliance Report – Sample.

6. CONTRACTOR REPORTS TO COMMISSION

Michael Baker shall provide the Commission with a copy of each Discrepancy Report, Compliance Report, and a monthly summary of other communications the Contractor delivers to any PSAP. In addition, Michael Baker will deliver periodic reports to the Commission's GIS Specialist on a monthly basis, listing by jurisdiction each GIS dataset reviewed by Michael Baker in the prior period, including the results of each review. Each periodic report shall also include a list of all GIS datasets currently undergoing QA/QC review, organized by PSAP. In addition, each periodic report shall also include the completion date of the most recent QA/QC review conducted for each PSAP in Nebraska, along with a list of each PSAP, if any, for which no GIS dataset was submitted to the Contractor for review. The Commission must also be notified in the event any PSAP fails to make necessary changes within thirty (30) days to a GIS dataset that has been rejected for uploading or has been the subject of a Discrepancy Report.

Bidder Response:

DATAMARK will provide copies of the NITC validation checks and the NENA discrepancy and compliant reports through the auto-generated process detailed in the sections above. DATAMARK will also provide the Commission with full access to VEP to be able to access not only local jurisdictions QA/QC reports but also aggregated reports for the entire State of Nebraska. This will allow the Commission to see not only discrepancies as they are reported to the individual jurisdiction, but also discrepancy reports for the entire aggregated statewide data set.

These reports, presented as a widget within the DATAMARK dashboard, includes the statistics for compliance with the MSAG and ALI to GIS Synchronization to ensure that local jurisdictions are going beyond the 98% match rate as described in the NENA document (NENA Standard 71-501 v1 – Synchronizing GIS with MSAG and ALI).

Additionally, this interactive widget will present real-time statistics regarding user activity across the portal to inform the State of all metrics regarding usage it desires.

7. PERIODIC REMINDERS TO UPLOAD GIS DATA

Local agencies will be expected to upload revised GIS datasets to the secure portal for review on at least a monthly basis. Michael Baker will send reminder notices via e-mail to each PSAP that has gone 85 or more days without uploading a new or revised dataset for QA/QC review. Each such reminder must include a hyperlink to Michael Baker's secure portal, along with the dates and a general description of the PSAP's previous uploads to the portal.

Bidder Response:

The DATAMARK team will develop technologies that, upon initial upload, a date stamp is provided that will generate an automated email reminder to the DATAMARK VEP user of a local jurisdiction, along with a State-level administrator, to remind a jurisdiction to upload and validate their GIS and non-spatial data if the specified time frame of 85 days has pasted since their last data upload.

8. CUSTOMER SERVICE RESPONSIBILITIES

Michael Baker will support various methods by which local agencies and the Commission can raise questions and concerns or access information about Michael Baker's QA/QC process. At a minimum, such methods must include a dedicated customer service telephone number and e-mail address. Michael Baker will also maintain a User Guide and Frequently Asked Questions page dedicated to the GIS QA/QC portal on its website.

DATAMARK will provide a designated person for the Commission to contact in the event of system problems or operational questions from Commission staff. In addition, DATAMARK will maintain a responsive trouble ticket system designed to direct system issues to the person who can most efficiently obtain a resolution.

Please describe how you will meet the requirements for customer service.

Bidder Response:

DATAMARK will provide technical support for VEP. Support will consist of access to a comprehensive online library of documentation, videos, and FAQ's. Furthermore, the DATAMARK team will provide phone and email support for all users of the system, both at the local data authority and State level.

The DATAMARK team holds regularly scheduled webinars for users as regular updates to the application occur. These webinars are recorded and made available for all users of the DATAMARK VEP application. The mission of the webinars is to enable users to access focused content, such as adding a new road centerline or address point or updating a boundary.

Access to the DATAMARK support team is provided through multiple access points: an online support ticket system is available, a support email address and dedicated support phone number. Support tickets are evaluated and escalated in priority based on the escalation path (See Figure 10).

Level	Definition	Expected Response	Communication Intervals
Priority 1	Critical System Issue	Support team takes ownership of problem and implements emergency plan. System monitoring is in place internally.	4 hours maximum

Priority 2	Major Impact - Impact to the Client's Business	Problem is worked on, on a workday basis, continuously until it is resolved.	8 hours maximum
Priority 3	Large Impact - Significant inconvenience to customers where a workaround might be implemented	Work is expected to continue on a workday basis until a more permanent solution is in place.	24 hours maximum
Priority 4	Small to Minor Impact - Minor to small inconvenience	Resolution is worked into a planned project list and schedule or it can be deferred until there is time allowed in the project schedule.	72 hours maximum
Priority 5	Reported bugs or requested enhancements	Bugs are fixed if they are impacting clients' business. Enhancements are evaluated and added to development sprints as prioritized.	Quarterly unless bug fix is critical to clients' business

Figure 10: Support ticket escalation path

Training must also be made available to local agencies and designated Commission personnel on DATAMARK's QA/QC process.

Bidder Response:

DATAMARK will provide onsite and in person two-day training sessions that include administrator and validation training. Optionally, a combination of on-site and virtual training can be offered. The training is designed to give an overview of all features and functionality of VEP but will focus on the validation workflows and dashboard reporting to help users define effective workflows for data maintenance, quality control, and validations.

DATAMARK Training

DATAMARK team staff will train one user per 9-1-1 authority or county as well as two identified administrators from the State commission on-site at a regional meeting or virtually, on all aspects of the DATAMARK solution, to enable users to acquire adequate knowledge to support and use the software effectively.

We propose a total of six regional on-site training sessions overseen by your Project Manager Jason Isherwood and led by our Customer Service and Training Lead, Jennifer Dvorksy. We will work with the State to determine the optimal locations for these regional trainings and our team will travel to and conduct in-depth training on DATAMARK VEP.

Training Manuals – Training materials to support onsite or virtual training will be provided. It will feature instruction validation workflows, dashboard reporting, data export, and user administration. It will

include how to perform the DATAMARK validation and editing functions (if deemed necessary). The detailed training documentation is provided in its native digital format as well as PDF format.

Phone Support – On-call phone support will also be provided, commencing immediately following the on-site training, to answer questions that may arise, as well as two follow up sessions through conference bridge with 9-1-1 authority staff, for remote retraining if needed.

E. DELIVERABLES

The following deliverables will be produced as a result of the implementation of this project. We felt it was important to define these as it relates to the language in the Terms & Conditions (Section II from RFP). Additionally, please see the proceeding cost proposal.

- ❖ Custom generated contractor reports (discrepancy and compliance) in PDF format
- ❖ Spatial layers containing results of validation
- ❖ Custom NITC Standards Validation Application

The DATAMARK VEP SaaS Solution is a propriety technology of Michael Baker and will be licensed by the State. Is not considered a deliverable of this project.

Form A
Bidder Contact Sheet
Request for Proposal Number 5882 Z1

Form A should be completed and submitted with each response to this RFP. This is intended to provide the State with information on the bidder's name and address, and the specific person(s) who are responsible for preparation of the bidder's response.

Preparation of Response Contact Information	
Bidder Name:	Michael Baker International Inc.
Bidder Address:	1 Kaiser Plaza, Suite 1150 Oakland, CA 94612
Contact Person & Title:	Michael Skowronek, Associate Vice President, DATAMARK Public Safety GIS
E-mail Address:	mskowronek@mbakerintl.com
Telephone Number (Office):	650-207-5873
Telephone Number (Cellular):	
Fax Number:	510-879-0696

Each bidder should also designate a specific contact person who will be responsible for responding to the State if any clarifications of the bidder's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information	
Bidder Name:	Michael Baker International
Bidder Address:	165 S. Union Blvd., Suite 1000 Lakewood, CO 80228
Contact Person & Title:	Jason Isherwood, Public Safety GIS Expert & Leigh TeWinkle, Public Safety Business Analyst
E-mail Address:	jisherwood@mbakerintl.com & leigh.tewinkle@mbakerintl.com
Telephone Number (Office):	720-514-1124 Jason & 949-472-3437 Leigh
Telephone Number (Cellular):	720-879-1388 Jason & 949-973-6615 Leigh
Fax Number:	720-479-3180

II. TERMS AND CONDITIONS

Bidders should complete Sections II through VI as part of their proposal. Bidder is expected to read the Terms and Conditions and should initial either accept, reject, or reject and provide alternative language for each clause. The bidder should also provide an explanation of why the bidder rejected the clause or rejected the clause and provided alternate language. By signing the RFP, bidder is agreeing to be legally bound by all the accepted terms and conditions, and any proposed alternative terms and conditions submitted with the proposal. The State reserves the right to negotiate rejected or proposed alternative language. If the State and bidder fail to agree on the final Terms and Conditions, the State reserves the right to reject the proposal. The State of Nebraska is soliciting proposals in response to this RFP. The State of Nebraska reserves the right to reject proposals that attempt to substitute the bidder's commercial contracts and/or documents for this RFP.

The bidders should submit with their proposal any license, user agreement, service level agreement, or similar documents that the bidder wants incorporated in the contract. The State will not consider incorporation of any document not submitted with the bidder's proposal as the document will not have been included in the evaluation process. These documents shall be subject to negotiation and will be incorporated as addendums if agreed to by the Parties.

If a conflict or ambiguity arises after the Addendum to Contract Award have been negotiated and agreed to, the Addendum to Contract Award shall be interpreted as follows:

1. If only one Party has a particular clause then that clause shall control;
2. If both Parties have a similar clause, but the clauses do not conflict, the clauses shall be read together;
3. If both Parties have a similar clause, but the clauses conflict, the State's clause shall control.

A. GENERAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The contract resulting from this RFP shall incorporate the following documents:

1. Request for Proposal and Addenda;
2. Amendments to the RFP;
3. Questions and Answers;
4. Contractor's proposal (RFP and properly submitted documents);
5. The executed Contract and Addendum One to Contract, if applicable ; and,
6. Amendments/Addendums to the Contract.

These documents constitute the entirety of the contract.

Unless otherwise specifically stated in a future contract amendment, in case of any conflict between the incorporated documents, the documents shall govern in the following order of preference with number one (1) receiving preference over all other documents and with each lower numbered document having preference over any higher numbered document: 1) Amendment to the executed Contract with the most recent dated amendment having the highest priority, 2) executed Contract and any attached Addenda, 3) Amendments to RFP and any Questions and Answers, 4) the original RFP document and any Addenda, and 5) the Contractor's submitted Proposal.

Any ambiguity or conflict in the contract discovered after its execution, not otherwise addressed herein, shall be resolved in accordance with the rules of contract interpretation as established in the State of Nebraska.

B. NOTIFICATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

Contractor and State shall identify the contract manager who shall serve as the point of contact for the executed contract.

Communications regarding the executed contract shall be in writing and shall be deemed to have been given if delivered personally or mailed, by U.S. Mail, postage prepaid, return receipt requested, to the parties at their respective addresses set forth below, or at such other addresses as may be specified in writing by either of the parties. All notices, requests, or communications shall be deemed effective upon personal delivery or three (3) calendar days following deposit in the mail.

C. GOVERNING LAW (Statutory)

Notwithstanding any other provision of this contract, or any amendment or addendum(s) entered into contemporaneously or at a later time, the parties understand and agree that, (1) the State of Nebraska is a sovereign state and its authority to contract is therefore subject to limitation by the State's Constitution, statutes, common law, and regulation; (2) this contract will be interpreted and enforced under the laws of the State of Nebraska; (3) any action to enforce the provisions of this agreement must be brought in the State of Nebraska per state law; (4) the person signing this contract on behalf of the State of Nebraska does not have the authority to waive the State's sovereign immunity, statutes, common law, or regulations; (5) the indemnity, limitation of liability, remedy, and other similar provisions of the final contract, if any, are entered into subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity; and, (6) all terms and conditions of the final contract, including but not limited to the clauses concerning third party use, licenses, warranties, limitations of liability, governing law and venue, usage verification, indemnity, liability, remedy or other similar provisions of the final contract are entered into specifically subject to the State's Constitution, statutes, common law, regulations, and sovereign immunity.

The Parties must comply with all applicable local, state and federal laws, ordinances, rules, orders, and regulations.

D. BEGINNING OF WORK

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The bidder shall not commence any billable work until a valid contract has been fully executed by the State and the successful Contractor. The Contractor will be notified in writing when work may begin.

E. CHANGE ORDERS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The State and the Contractor, upon the written agreement, may make changes to the contract within the general scope of the RFP. Changes may involve specifications, the quantity of work, or such other items as the State may

find necessary or desirable. Corrections of any deliverable, service, or work required pursuant to the contract shall not be deemed a change. The Contractor may not claim forfeiture of the contract by reasons of such changes.

The Contractor shall prepare a written description of the work required due to the change and an Itemized cost sheet for the change. Changes in work and the amount of compensation to be paid to the Contractor shall be determined in accordance with applicable unit prices if any, a pro-rated value, or through negotiations. The State shall not incur a price increase for changes that should have been included in the Contractor's proposal, were foreseeable, or result from difficulties with or failure of the Contractor's proposal or performance.

No change shall be implemented by the Contractor until approved by the State, and the contract is amended to reflect the change and associated costs, if any. If there is a dispute regarding the cost, but both parties agree that immediate implementation is necessary, the change may be implemented, and cost negotiations may continue with both Parties retaining all remedies under the contract and law.

F. NOTICE OF POTENTIAL CONTRACTOR BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

If Contractor breaches the contract or anticipates breaching the contract, the Contractor shall immediately give written notice to the State. The notice shall explain the breach or potential breach, a proposed cure, and may include a request for a waiver of the breach if so desired. The State may, in its discretion, temporarily or permanently waive the breach. By granting a waiver, the State does not forfeit any rights or remedies to which the State is entitled by law or equity, or pursuant to the provisions of the contract. Failure to give immediate notice, however, may be grounds for denial of any request for a waiver of a breach.

G. BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

Either Party may terminate the contract, in whole or in part, if the other Party breaches its duty to perform its obligations under the contract in a timely and proper manner. Termination requires written notice of default and a thirty (30) calendar day (or longer at the non-breaching Party's discretion considering the gravity and nature of the default) cure period. Said notice shall be delivered by Certified Mail, Return Receipt Requested, or in person with proof of delivery. Allowing time to cure a failure or breach of contract does not waive the right to immediately terminate the contract for the same or different contract breach which may occur at a different time. In case of default of the Contractor, the State may contract the service from other sources and hold the Contractor responsible for any excess cost occasioned thereby.

The State's failure to make payment shall not be a breach, and the Contractor shall retain all available statutory remedies and protections.

H. NON-WAIVER OF BREACH

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:

The acceptance of late performance with or without objection or reservation by a Party shall not waive any rights of the Party nor constitute a waiver of the requirement of timely performance of any obligations remaining to be performed.

I. SEVERABILITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:

If any term or condition of the contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and conditions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the provision held to be invalid or illegal.

J. INDEMNIFICATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			It is requested that "defend" be removed from 1. GENERAL as marked up below.

1. GENERAL

The Contractor agrees to ~~defend~~, indemnify, and hold harmless the State and its employees, volunteers, agents, and its elected and appointed officials ("the indemnified parties") from and against any and all third party claims, liens, demands, damages, liability, actions, causes of action, losses, judgments, costs, and expenses of every nature, including investigation costs and expenses, settlement costs, and attorney fees and expenses ("the claims"), sustained or asserted against the State for personal injury, death, or property loss or damage, arising out of, resulting from, or attributable to the willful misconduct, negligence, error, or omission of the Contractor, its employees, subcontractors, consultants, representatives, and agents, resulting from this contract, except to the extent such Contractor liability is attenuated by any action of the State which directly and proximately contributed to the claims.

2. INTELLECTUAL PROPERTY

The Contractor agrees it will, at its sole cost and expense, defend, indemnify, and hold harmless the indemnified parties from and against any and all claims, to the extent such claims arise out of, result from, or are attributable to, the actual or alleged infringement or misappropriation of any patent, copyright, trade secret, trademark, or confidential information of any third party by the Contractor or its employees, subcontractors, consultants, representatives, and agents; provided, however, the State gives the Contractor prompt notice in writing of the claim. The Contractor may not settle any infringement claim that will affect the State's use of the Licensed Software without the State's prior written consent, which consent may be withheld for any reason.

If a judgment or settlement is obtained or reasonably anticipated against the State's use of any intellectual property for which the Contractor has indemnified the State, the Contractor shall, at the Contractor's sole

cost and expense, promptly modify the item or items which were determined to be infringing, acquire a license or licenses on the State's behalf to provide the necessary rights to the State to eliminate the infringement, or provide the State with a non-infringing substitute that provides the State the same functionality. At the State's election, the actual or anticipated judgment may be treated as a breach of warranty by the Contractor, and the State may receive the remedies provided under this RFP.

3. PERSONNEL

The Contractor shall, at its expense, indemnify and hold harmless the indemnified parties from and against any claim with respect to withholding taxes, worker's compensation, employee benefits, or any other claim, demand, liability, damage, or loss of any nature relating to any of the personnel, including subcontractors and their employees, provided by the Contractor.

4. SELF-INSURANCE

The State of Nebraska is self-insured for any loss and purchases excess insurance coverage pursuant to Neb. Rev. Stat. § 81-8,239.01 (Reissue 2008). If there is a presumed loss under the provisions of this agreement, Contractor may file a claim with the Office of Risk Management pursuant to Neb. Rev. Stat. §§ 81-8,829 – 81-8,306 for review by the State Claims Board. The State retains all rights and immunities under the State Miscellaneous (Section 81-8,294), Tort (Section 81-8,209), and Contract Claim Acts (Section 81-8,302), as outlined in Neb. Rev. Stat. § 81-8,209 et seq. and under any other provisions of law and accepts liability under this agreement to the extent provided by law.

5. The Parties acknowledge that Attorney General for the State of Nebraska is required by statute to represent the legal interests of the State, and that any provision of this indemnity clause is subject to the statutory authority of the Attorney General.

K. ATTORNEY'S FEES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

In the event of any litigation, appeal, or other legal action to enforce any provision of the contract, the Parties agree to pay all expenses of such action, as permitted by law and if order by the court, including attorney's fees and costs, if the other Party prevails.

L. ASSIGNMENT, SALE, OR MERGER

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

Either Party may assign the contract upon mutual written agreement of the other Party. Such agreement shall not be unreasonably withheld.

The Contractor retains the right to enter into a sale, merger, acquisition, internal reorganization, or similar transaction involving Contractor's business. Contractor agrees to cooperate with the State in executing amendments to the contract to allow for the transaction. If a third party or entity is involved in the transaction, the Contractor will remain responsible for performance of the contract until such time as the person or entity involved in the transaction agrees in writing to be contractually bound by this contract and perform all obligations of the contract.

M. CONTRACTING WITH OTHER NEBRASKA POLITICAL SUB-DIVISIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The Contractor may, but shall not be required to, allow agencies, as defined in Neb. Rev. Stat. §81-145, to use this contract. The terms and conditions, including price, of the contract may not be amended. The State shall not be contractually obligated or liable for any contract entered into pursuant to this clause. A listing of Nebraska political subdivisions may be found at the website of the Nebraska Auditor of Public Accounts.

N. FORCE MAJEURE

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

Neither Party shall be liable for any costs or damages, or for default resulting from its inability to perform any of its obligations under the contract due to a natural or manmade event outside the control and not the fault of the affected Party ("Force Majeure Event"). The Party so affected shall immediately make a written request for relief to the other Party, and shall have the burden of proof to justify the request. The other Party may grant the relief requested; relief may not be unreasonably withheld. Labor disputes with the impacted Party's own employees will not be considered a Force Majeure Event.

O. CONFIDENTIALITY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			The following paragraph is requested as an addition to this section to clarify what can be considered confidential information, and what can legally be kept confidential.

All materials and information provided by the Parties or acquired by a Party on behalf of the other Party shall be regarded as confidential information. All materials and information provided or acquired shall be handled in accordance with federal and state law, and ethical standards. Should said confidentiality be breached by a Party, the Party shall notify the other Party immediately of said breach and take immediate corrective action.

It is incumbent upon the Parties to inform their officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a. Specifically, 5 U.S.C. 552a (i)(1), which is made applicable by 5 U.S.C. 552a (m)(1), provides that any officer or employee, who by virtue of his/her employment or official position has possession of or access to agency records which contain individually identifiable information, the disclosure of which is prohibited by the Privacy Act or regulations established thereunder, and who knowing that disclosure of the specific material is prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than \$5,000.

The preceding restriction shall not apply to information which is in the public domain, was previously known to the receiving Party, was acquired by the receiving Party from others who have no confidential relationship to the disclosing Party with respect to same, or which through no fault of the receiving Party, comes into the public domain. The receiving Party shall not be restricted from releasing information, including confidential information, in response to a subpoena, court order, or other legal process. The receiving Party shall not be required to resist such subpoena, court order, or legal process, but shall promptly notify the disclosing Party in writing of the demand for information before the receiving Party responds to such demand.

P. EARLY TERMINATION

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The contract may be terminated as follows:

1. The State and the Contractor, by mutual written agreement, may terminate the contract at any time.
2. The State, in its sole discretion, may terminate the contract for any reason upon thirty (30) calendar day's written notice to the Contractor. Such termination shall not relieve the Contractor of warranty or other service obligations incurred under the terms of the contract. In the event of termination the Contractor shall be entitled to payment, determined on a pro rata basis, for products or services satisfactorily performed or provided.
3. The State may terminate the contract immediately for the following reasons:
 - a. if directed to do so by statute;
 - b. Contractor has made an assignment for the benefit of creditors, has admitted in writing its inability to pay debts as they mature, or has ceased operating in the normal course of business;
 - c. a trustee or receiver of the Contractor or of any substantial part of the Contractor's assets has been appointed by a court;
 - d. fraud, misappropriation, embezzlement, malfeasance, misfeasance, or illegal conduct pertaining to performance under the contract by its Contractor, its employees, officers, directors, or shareholders;
 - e. an involuntary proceeding has been commenced by any Party against the Contractor under any one of the chapters of Title 11 of the United States Code and (i) the proceeding has been pending for at least sixty (60) calendar days; or (ii) the Contractor has consented, either expressly or by operation of law, to the entry of an order for relief; or (iii) the Contractor has been decreed or adjudged a debtor;
 - f. a voluntary petition has been filed by the Contractor under any of the chapters of Title 11 of the United States Code;
 - g. Contractor intentionally discloses confidential information;
 - h. Contractor has or announces it will discontinue support of the deliverable; and,
 - i. In the event funding is no longer available.

Q. CONTRACT CLOSEOUT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			Michael Baker will necessarily retain ownership and title to our proprietary software as will third parties that are involved in using their own proprietary software and materials to fulfill the services, therefore removal of #2 is requested

Upon contract closeout for any reason the Contractor shall within 30 days, unless stated otherwise herein:

1. Transfer all completed or partially completed deliverables to the State;
2. ~~Transfer ownership and title to all completed or partially completed deliverables to the State;~~
3. Return to the State all information and data, unless the Contractor is permitted to keep the information or data by contract or rule of law. Contractor may retain one copy of any information or data as required to comply with applicable work product documentation standards or as are automatically retained in the course of Contractor's routine back up procedures;
4. Cooperate with any successor Contractor, person or entity in the assumption of any or all of the obligations of this contract;
5. Cooperate with any successor Contractor, person or entity with the transfer of information or data related to this contract;
6. Return or vacate any state owned real or personal property; and,
7. Return all data in a mutually acceptable format and manner.

Nothing in this Section should be construed to require the Contractor to surrender intellectual property, real or personal property, or information or data owned by the Contractor for which the State has no legal claim.

III. CONTRACTOR DUTIES

A. INDEPENDENT CONTRACTOR / OBLIGATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

It is agreed that the Contractor is an independent contractor and that nothing contained herein is intended or should be construed as creating or establishing a relationship of employment, agency, or a partnership.

The Contractor is solely responsible for fulfilling the contract. The Contractor or the Contractor's representative shall be the sole point of contact regarding all contractual matters.

The Contractor shall secure, at its own expense, all personnel required to perform the services under the contract. The personnel the Contractor uses to fulfill the contract shall have no contractual or other legal relationship with the State; they shall not be considered employees of the State and shall not be entitled to any compensation, rights or benefits from the State, including but not limited to, tenure rights, medical and hospital care, sick and vacation leave, severance pay, or retirement benefits.

By-name personnel commitments made in the Contractor's proposal shall not be changed without the prior written approval of the State. Replacement of these personnel, if approved by the State, shall be with personnel of equal or greater ability and qualifications.

All personnel assigned by the Contractor to the contract shall be employees of the Contractor or a subcontractor, and shall be fully qualified to perform the work required herein. Personnel employed by the Contractor or a subcontractor to fulfill the terms of the contract shall remain under the sole direction and control of the Contractor or the subcontractor respectively.

With respect to its employees, the Contractor agrees to be solely responsible for the following:

1. Any and all pay, benefits, and employment taxes and/or other payroll withholding;
2. Any and all vehicles used by the Contractor's employees, including all insurance required by state law;
3. Damages incurred by Contractor's employees within the scope of their duties under the contract;
4. Maintaining Workers' Compensation and health insurance that complies with state and federal law and submitting any reports on such insurance to the extent required by governing law; and
5. Determining the hours to be worked and the duties to be performed by the Contractor's employees.
6. All claims on behalf of any person arising out of employment or alleged employment (including without limit claims of discrimination alleged against the Contractor, its officers, agents, or subcontractors or subcontractor's employees)

If the Contractor intends to utilize any subcontractor, the subcontractor's level of effort, tasks, and time allocation should be clearly defined in the bidder's proposal. The Contractor shall agree that it will not utilize any subcontractors not specifically included in its proposal in the performance of the contract without the prior written authorization of the State.

The State reserves the right to require the Contractor to reassign or remove from the project any Contractor or subcontractor employee.

Contractor shall insure that the terms and conditions contained in any contract with a subcontractor does not conflict with the terms and conditions of this contract.

The Contractor shall include a similar provision, for the protection of the State, in the contract with any subcontractor engaged to perform work on this contract.

B. EMPLOYEE WORK ELIGIBILITY STATUS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of an employee.

If the Contractor is an individual or sole proprietorship, the following applies:

1. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at <http://das.nebraska.gov/materiel/purchasing.html>
The completed United States Attestation Form should be submitted with the RFP response.
2. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the US Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.
3. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. §4-108.

C. COMPLIANCE WITH CIVIL RIGHTS LAWS AND EQUAL OPPORTUNITY EMPLOYMENT / NONDISCRIMINATION (Statutory)

The Contractor shall comply with all applicable local, state, and federal statutes and regulations regarding civil rights laws and equal opportunity employment. The Nebraska Fair Employment Practice Act prohibits Contractors of the State of Nebraska, and their subcontractors, from discriminating against any employee or applicant for employment, with respect to hire, tenure, terms, conditions, compensation, or privileges of employment because of race, color, religion, sex, disability, marital status, or national origin (Neb. Rev. Stat. §48-1101 to 48-1125). The Contractor guarantees compliance with the Nebraska Fair Employment Practice Act, and breach of this provision shall be regarded as a material breach of contract. The Contractor shall insert a similar provision in all subcontracts for services to be covered by any contract resulting from this RFP.

D. COOPERATION WITH OTHER CONTRACTORS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

Contractor may be required to work with or in close proximity to other contractors or individuals that may be working on same or different projects. The Contractor shall agree to cooperate with such other contractors or individuals, and shall not commit or permit any act which may interfere with the performance of work by any other contractor or individual. Contractor is not required to compromise Contractor's intellectual property or proprietary information unless expressly required to do so by this contract.

E. PERMITS, REGULATIONS, LAWS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The contract price shall include the cost of all royalties, licenses, permits, and approvals, whether arising from patents, trademarks, copyrights or otherwise, that are in any way involved in the contract. The Contractor shall obtain and pay for all royalties, licenses, and permits, and approvals necessary for the execution of the contract. The Contractor must guarantee that it has the full legal right to the materials, supplies, equipment, software, and other items used to execute this contract.

F. OWNERSHIP OF INFORMATION AND DATA / DELIVERABLES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			For the services required, Michael Baker will retain ownership of our proprietary software. A 'Software as a Service' agreement is proposed for use between the parties to clearly show the parameters of rights of use, licensing, etc.

~~The State shall have the unlimited right to publish, duplicate, use, and disclose all information and data developed or obtained by the Contractor on behalf of the State pursuant to this contract.~~

~~The State shall own and hold exclusive title to any deliverable developed as a result of this contract. Contractor shall have no ownership interest or title, and shall not patent, license, or copyright, duplicate, transfer, sell, or exchange, the design, specifications, concept, or deliverable.~~

G. INSURANCE REQUIREMENTS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			Policies of insurance for Commercial Criminal coverage is not a usual requirement for professional services. If possible, we request removal of the requirement to carry this policy of insurance; and adjustment of the required limits of \$10,000,000 for Cyber Liability insurance to \$5,000,000

The Contractor shall throughout the term of the contract maintain insurance as specified herein and provide the State a current Certificate of Insurance/Acord Form (COI) verifying the coverage. The Contractor shall not commence work on the contract until the insurance is in place. If Contractor subcontracts any portion of the Contract the Contractor must, throughout the term of the contract, either:

1. Provide equivalent insurance for each subcontractor and provide a COI verifying the coverage for the subcontractor;
2. Require each subcontractor to have equivalent insurance and provide written notice to the State that the Contractor has verified that each subcontractor has the required coverage; or,
3. Provide the State with copies of each subcontractor's Certificate of Insurance evidencing the required coverage.

The Contractor shall not allow any subcontractor to commence work until the subcontractor has equivalent insurance. The failure of the State to require a COI, or the failure of the Contractor to provide a COI or require subcontractor insurance shall not limit, relieve, or decrease the liability of the Contractor hereunder.

In the event that any policy written on a claims-made basis terminates or is canceled during the term of the contract or within (two (2) years of termination or expiration of the contract, the Contractor shall obtain an extended discovery or reporting period, or a new insurance policy, providing coverage required by this contract for the term of the contract and two (2) years following termination or expiration of the contract.

If by the terms of any insurance a mandatory deductible is required, or if the Contractor elects to increase the mandatory deductible amount, the Contractor shall be responsible for payment of the amount of the deductible in the event of a paid claim.

Notwithstanding any other clause in this contract, the State may recover up to the liability limits of the insurance policies required herein.

1. WORKERS' COMPENSATION INSURANCE

The Contractor shall take out and maintain during the life of this contract the statutory Workers' Compensation and Employer's Liability Insurance for all of the contractors' employees to be engaged in work on the project under this contract and, in case any such work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation and Employer's Liability Insurance for all of the subcontractor's employees to be engaged in such work. This policy shall be written to meet the statutory requirements for the state in which the work is to be performed, including Occupational Disease. **The policy shall include a waiver of subrogation in favor of the State. The COI shall contain the mandatory COI subrogation waiver language found hereinafter.** The amounts of such insurance shall not be less than the limits stated hereinafter. For employees working in the State of Nebraska, the policy must be written by an entity authorized by the State of Nebraska Department of Insurance to write Workers' Compensation and Employer's Liability Insurance for Nebraska employees.

2. COMMERCIAL GENERAL LIABILITY INSURANCE AND COMMERCIAL AUTOMOBILE LIABILITY INSURANCE

The Contractor shall take out and maintain during the life of this contract such Commercial General Liability Insurance and Commercial Automobile Liability Insurance as shall protect Contractor and any subcontractor performing work covered by this contract from claims for damages for bodily injury, including death, as well as from claims for property damage, which may arise from operations under this contract, whether such operation be by the Contractor or by any subcontractor or by anyone directly or indirectly employed by either of them, and the amounts of such insurance shall not be less than limits stated hereinafter.

The Commercial General Liability Insurance shall be written on an **occurrence basis**, and provide Premises/Operations, Products/Completed Operations, Independent Contractors, Personal Injury, and Contractual Liability coverage. **The policy shall include the State, and others as required by the contract documents, as Additional Insured(s).** This policy shall be primary, and any insurance or self-insurance carried by the State shall be considered secondary and non-contributory. **The COI shall contain the mandatory COI liability waiver language found hereinafter.** The Commercial Automobile Liability Insurance shall be written to cover all Owned, Non-owned, and Hired vehicles.

REQUIRED INSURANCE COVERAGE	
COMMERCIAL GENERAL LIABILITY	
General Aggregate	\$2,000,000
Products/Completed Operations Aggregate	\$2,000,000
Personal/Advertising Injury	\$1,000,000 per occurrence
Bodily Injury/Property Damage	\$1,000,000 per occurrence
Medical Payments	\$10,000 any one person
Damage to Rented Premises (Fire)	\$300,000 each occurrence
Contractual	Included
Independent Contractors	Included
<i>If higher limits are required, the Umbrella/Excess Liability limits are allowed to satisfy the higher limit.</i>	
WORKER'S COMPENSATION	
Employers Liability Limits	\$500K/\$500K/\$500K
Statutory Limits- All States	Statutory - State of Nebraska
Voluntary Compensation	Statutory
COMMERCIAL AUTOMOBILE LIABILITY	
Bodily Injury/Property Damage	\$1,000,000 combined single limit
Include All Owned, Hired & Non-Owned Automobile liability	Included
Motor Carrier Act Endorsement	Where Applicable
UMBRELLA/EXCESS LIABILITY	
Over Primary Insurance	\$5,000,000 per occurrence
PROFESSIONAL LIABILITY	
All Other Professional Liability (Errors & Omissions)	\$1,000,000 Per Claim / Aggregate
COMMERCIAL CRIME	
Crime/Employee Dishonesty Including 3rd Party Fidelity	\$1,000,000
CYBER LIABILITY	
Breach of Privacy, Security Breach, Denial of Service, Remediation, Fines and Penalties	\$10,000,000 \$5,000,000
MANDATORY COI SUBROGATION WAIVER LANGUAGE	
"Workers' Compensation policy shall include a waiver of subrogation in favor of the State of Nebraska."	
MANDATORY COI LIABILITY WAIVER LANGUAGE	
"Commercial General Liability & Commercial Automobile Liability policies shall name the State of Nebraska as an Additional Insured and the policies shall be primary and any insurance or self-insurance carried by the State shall be considered secondary and non-contributory as additionally insured."	

If the mandatory COI subrogation waiver language or mandatory COI liability waiver language on the COI states that the waiver is subject to, condition upon, or otherwise limit by the insurance policy, a copy of the relevant sections of the policy must be submitted with the COI so the State can review the limitations imposed by the insurance policy.

3. EVIDENCE OF COVERAGE

The Contractor shall furnish the Contract Manager, with a certificate of insurance coverage complying with the above requirements prior to beginning work at:

911 Director
 Nebraska Public Service Commission
 300 The Atrium, 1200 N Street
 P.O. Box 94927
 Lincoln, NE 68509

These certificates or the cover sheet shall reference the RFP number, and the certificates shall include the name of the company, policy numbers, effective dates, dates of expiration, and amounts and types of coverage afforded. If the State is damaged by the failure of the Contractor to maintain such insurance, then the Contractor shall be responsible for all reasonable costs properly attributable thereto.

Reasonable notice of cancellation of any required insurance policy must be submitted to the contract manager as listed above when issued and a new coverage binder shall be submitted immediately to ensure no break in coverage.

4. DEVIATIONS

The insurance requirements are subject to limited negotiation. Negotiation typically includes, but is not necessarily limited to, the correct type of coverage, necessity for Workers' Compensation, and the type of automobile coverage carried by the Contractor.

H. ANTITRUST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The Contractor hereby assigns to the State any and all claims for overcharges as to goods and/or services provided in connection with this contract resulting from antitrust violations which arise under antitrust laws of the United States and the antitrust laws of the State.

I. CONFLICT OF INTEREST

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

By submitting a proposal, bidder certifies that there does not now exist a relationship between the bidder and any person or entity which is or gives the appearance of a conflict of interest related to this RFP or project.

The bidder certifies that it shall not take any action or acquire any interest, either directly or indirectly, which will conflict in any manner or degree with the performance of its services hereunder or which creates an actual or an appearance of conflict of interest.

The bidder certifies that it will not knowingly employ any individual known by bidder to have a conflict of interest.

The Parties shall not knowingly, for a period of two years after execution of the contract, recruit or employ any employee or agent of the other Party who has worked on the RFP or project, or who had any influence on decisions affecting the RFP or project.

J. STATE PROPERTY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The Contractor shall be responsible for the proper care and custody of any State-owned property which is furnished for the Contractor's use during the performance of the contract. The Contractor shall reimburse the State for any loss or damage of such property; normal wear and tear is expected.

K. SITE RULES AND REGULATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The Contractor shall use its best efforts to ensure that its employees, agents, and subcontractors comply with site rules and regulations while on State premises. If the Contractor must perform on-site work outside of the daily operational hours set forth by the State, it must make arrangements with the State to ensure access to the facility and the equipment has been arranged. No additional payment will be made by the State on the basis of lack of access, unless the State fails to provide access as agreed to in writing between the State and the Contractor.

L. ADVERTISING

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The Contractor agrees not to refer to the contract award in advertising in such a manner as to state or imply that the company or its services are endorsed or preferred by the State. Any publicity releases pertaining to the project shall not be issued without prior written approval from the State.

M. NEBRASKA TECHNOLOGY ACCESS STANDARDS (Statutory)

Contractor shall review the Nebraska Technology Access Standards, found at <http://nitc.nebraska.gov/standards/2-201.html> and ensure that products and/or services provided under the contract are in compliance or will comply with the applicable standards to the greatest degree possible. In the event such standards change during the Contractor's performance, the State may create an amendment to the contract to request the contract comply with the changed standard at a cost mutually acceptable to the parties.

N. DISASTER RECOVERY/BACK UP PLAN

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

The Contractor shall have a disaster recovery and back-up plan, of which a copy should be provided upon request to the State, which includes, but is not limited to equipment, personnel, facilities, and transportation, in order to continue services as specified under the specifications in the contract in the event of a disaster.

O. DRUG POLICY

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

Contractor certifies it maintains a drug free work place environment to ensure worker safety and workplace integrity.
Contractor agrees to provide a copy of its drug free workplace policy at any time upon request by the State.

IV. PAYMENT

A. PROHIBITION AGAINST ADVANCE PAYMENT (Statutory)

Payments shall not be made until contractual deliverable(s) are received and accepted by the State.

B. TAXES (Statutory)

The State is not required to pay taxes and assumes no such liability as a result of this solicitation. Any property tax payable on the Contractor's equipment which may be installed in a state-owned facility is the responsibility of the Contractor.

C. INVOICES

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

Invoices for payments must be submitted by the Contractor to the Commission with sufficient detail to support payment at the following address: Nebraska Public Service Commission, Attention: Business Manager, P.O. Box 94927, Lincoln, NE 68509. The terms and conditions included in the Contractor's invoice shall be deemed to be solely for the convenience of the parties. No terms or conditions of any such invoice shall be binding upon the State, and no action by the State, including without limitation the payment of any such invoice in whole or in part, shall be construed as binding or estopping the State with respect to any such term or condition, unless the invoice term or condition has been previously agreed to by the State as an amendment to the contract.

D. INSPECTION AND APPROVAL

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

Final inspection and approval of all work required under the contract shall be performed by the designated State officials.

E. PAYMENT

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
			

State will render payment to Contractor when the terms and conditions of the contract and specifications have been satisfactorily completed on the part of the Contractor as solely determined by the State. (Neb. Rev. Stat. Section 73-506(1)) Payment will be made by the responsible agency in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §81-2401 through 81-2408). The State may require the Contractor to accept payment by electronic means such as ACH deposit. In no event shall the State be responsible or liable to pay for any services provided by the Contractor prior to the Effective Date of the contract, and the Contractor hereby waives any claim or cause of action for any such services.

F. LATE PAYMENT (Statutory)

The Contractor may charge the responsible agency interest for late payment in compliance with the State of Nebraska Prompt Payment Act (See Neb. Rev. Stat. §81-2401 through 81-2408).

G. SUBJECT TO FUNDING / FUNDING OUT CLAUSE FOR LOSS OF APPROPRIATIONS

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
SO			

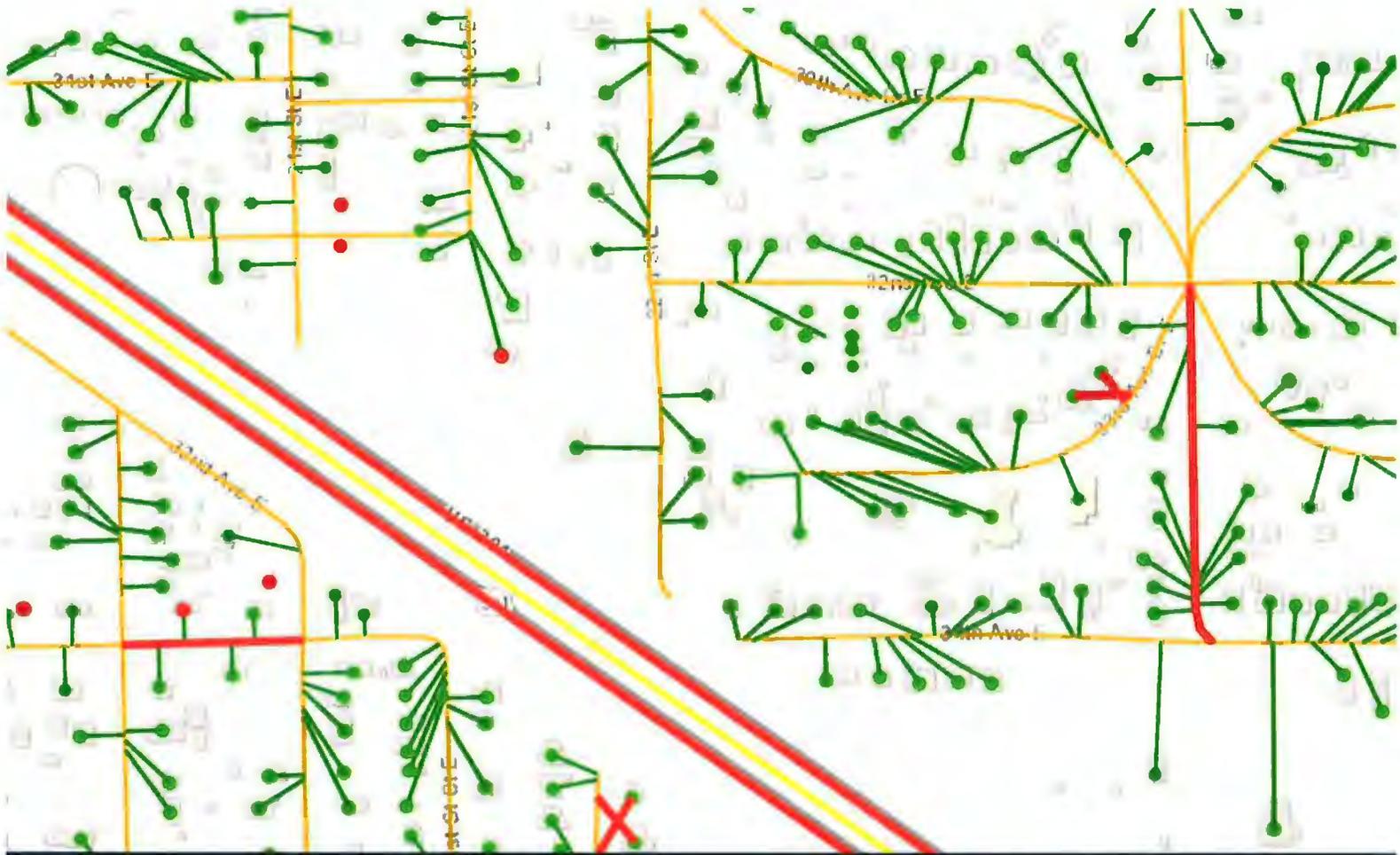
The State's obligation to pay amounts due on the Contract for a fiscal years following the current fiscal year is contingent upon legislative appropriation of funds. Should said funds not be appropriated, the State may terminate the contract with respect to those payments for the fiscal year(s) for which such funds are not appropriated. The State will give the Contractor written notice thirty (30) calendar days prior to the effective date of termination. All obligations of the State to make payments after the termination date will cease. The Contractor shall be entitled to receive just and equitable compensation for any authorized work which has been satisfactorily completed as of the termination date. In no event shall the Contractor be paid for a loss of anticipated profit.

H. RIGHT TO AUDIT (First Paragraph is Statutory)

Accept (Initial)	Reject (Initial)	Reject & Provide Alternative within RFP Response (Initial)	NOTES/COMMENTS:
SO			

The State shall have the right to audit the Contractor's performance of this contract upon a 30 days' written notice. Contractor shall utilize generally accepted accounting principles, and shall maintain the accounting records, and other records and information relevant to the contract (Information) to enable the State to audit the contract. The State may audit and the Contractor shall maintain, the Information during the term of the contract and for a period of five (5) years after the completion of this contract or until all issues or litigation are resolved, whichever is later. The Contractor shall make the Information available to the State at Contractor's place of business or a location acceptable to both Parties during normal business hours. If this is not practical or the Contractor so elects, the Contractor may provide electronic or paper copies of the Information. The State reserves the right to examine, make copies of, and take notes on any Information relevant to this contract, regardless of the form or the Information, how it is stored, or who possesses the Information. Under no circumstance will the Contractor be required to create or maintain documents not kept in the ordinary course of Contractor's business operations, nor will Contractor be required to disclose any information, including but not limited to product cost data, which is confidential or proprietary to Contractor.

The Parties shall pay their own costs of the audit unless the audit finds a previously undisclosed overpayment by the State. If a previously undisclosed overpayment exceeds one percent (.1%) of the total contract billings, or if fraud, material misrepresentations, or non-performance is discovered on the part of the Contractor, the Contractor shall reimburse the State for the total costs of the audit. Overpayments and audit costs owed to the State shall be paid within ninety days of written notice of the claim. The Contractor agrees to correct any material weaknesses or condition found as a result of the audit.



APPENDIX I - CONTRACTOR REPORT - SAMPLE

Michael Baker

INTERNATIONAL

We Make a Difference



Lancaster County, Nebraska

Contractor Report Template

8/6/2018

DATA**MARK**

County/PSAP Contact
Lancaster County
555 South 10th Street
Lincoln, NE 68508

To whom it may concern:

The review of your submitted data is completed. These data have been validated against the applicable NENA and NITC standards. The results are as follows.

NENA Standards	PASS/FAIL
NITC Standards	PASS/FAIL

If errors are found in validation

Your data does not meet the compliance standards necessary and are not yet ready to be provisioned into the state of Nebraska online GIS repository to support NG9-1-1. Please review the discrepancy report on the proceeding pages and ensure all errors are addressed. See below for the reported match rate metrics of your data.

Street Centerline to MSAG	72%
Address Point to ALI	56%

Attached you will find a shapefile identifying the features the do not meet the established standards and require your attention. Note that you can also access the results of your validation and review the status via dashboard directly in DATAMARK VEP using your log-in credentials.

If no errors are found in validation

Your data meets the compliance standards necessary and are ready to be provisioned into the state of Nebraska online GIS repository to support NG9-1-1. Please see below for the reported match rate metrics of your data.

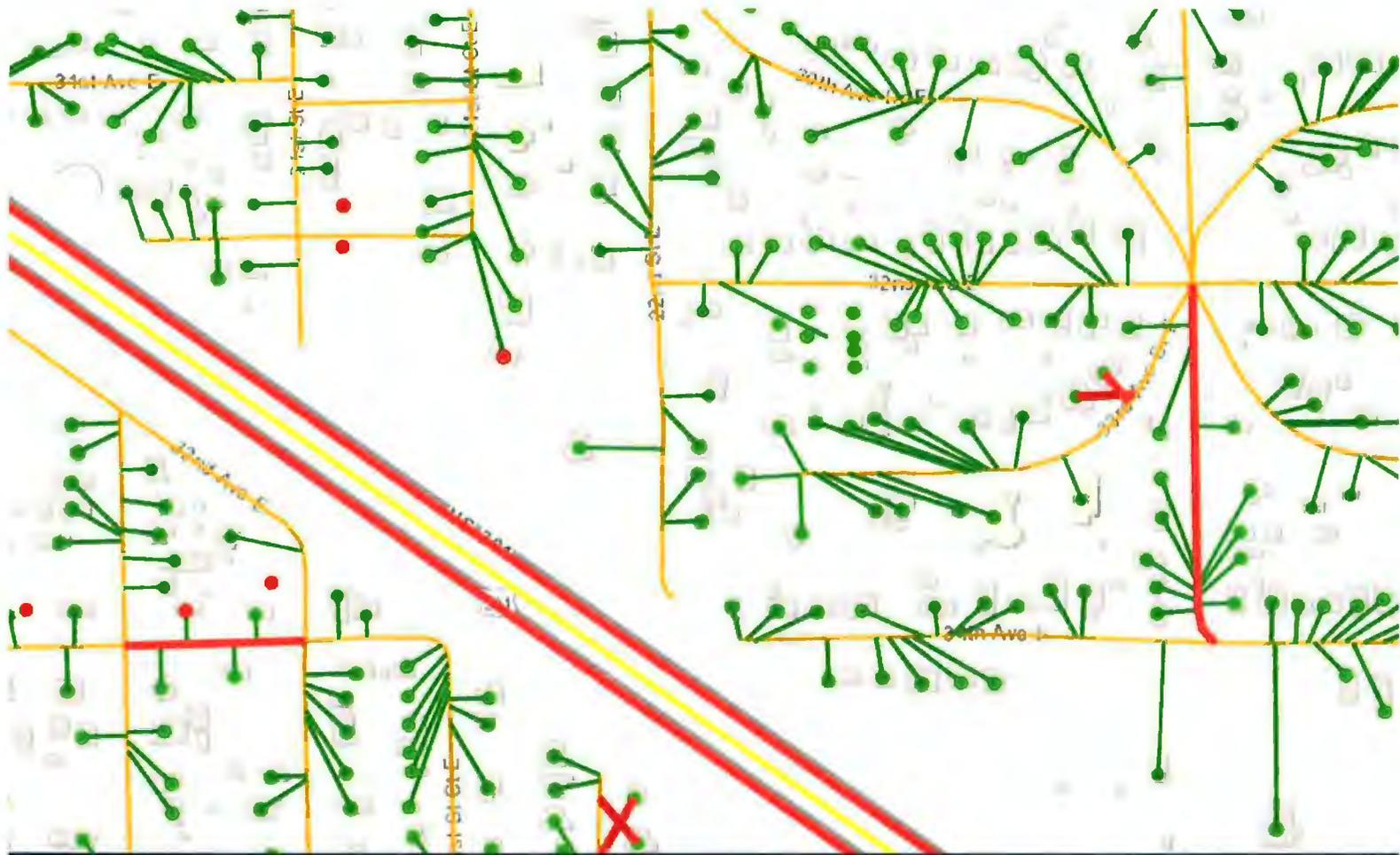
Street Centerline to MSAG	98%
Address Point to ALI	100%

Note that you can also access the results of your validation and review the status via dashboard directly in DATAMARK VEP using your log-in credentials. Please continue to validate your data as updates are made to ensure it remains in compliance.

Sincerely,

The DATAMARK team

***please note that this report is a conceptual sample and the official version may contain minor changes not reflected in this sample version**



APPENDIX II - DISCREPANCY REPORT - SAMPLE

Michael Baker

INTERNATIONAL

We Make a Difference



Lancaster County, Nebraska

Discrepancy Report Template

8/6/2018

DATA**MARK**

County/PSAP Contact
Lancaster County
555 South 10th Street
Lincoln, NE 68508

To whom it may concern:

The review of your submitted data is completed. These data have been validated against the applicable NENA and NITC standards. The results are as follows.

NENA Standards	FAIL
NITC Standards	FAIL

Your data does not meet the compliance standards necessary and are not yet ready to be provisioned into the state of Nebraska online GIS repository to support NG9-1-1. Please review the discrepancy report on the proceeding pages and ensure all errors are addressed. See below for the reported match rate metrics of your data.

Street Centerline to MSAG	72%
Address Point to ALI	56%

Attached you will find spatial data identifying the features that do not meet the established standards and require your attention. Note that you can also access the results of your validation and review the status via dashboard directly in DATAMARK VEP using your log-in credentials.

Sincerely,

The DATAMARK team

***please note that this report is a conceptual sample and the official version may contain minor changes not reflected in this sample version**

EXECUTIVE SUMMARY

The following layers were analyzed to determine inconsistencies and anomalies that may impact the internal PSAP systems (CAD, CAD mapping, AVL (Automatic Vehicle Location), etc.) and the Next Generation 9-1-1 (NG9-1-1) core services that leverage GIS data; the emergency call routing function (ECRF) and location validation function (LVF).

- Street Centerlines
- Address Points
- PSAP Boundaries
- Emergency Service Boundaries
- Provisioning Boundary
- MSAG Table
- ALI Table

This analysis is a critical first-step in any attempt to migrate to an NG9-1-1 system which relies on highly precise GIS location data to route the 9-1-1 call to the correct PSAP. Without sound and accurate GIS data, implementation of an NG9-1-1 system may face a hampered schedule and problematic budget as the longer any jurisdiction waits to address the data issues the costlier it will be to remedy. GIS serves as the foundation of a dependable and reliable NG9-1-1 system and is therefore elevated to a mission critical level.

This report contains results from each validation process and an explanation of each check. While the summary provides an excellent baseline “fitness” of the GIS data, it is acknowledged that only upon detailed analysis can it be determined if an anomaly is a legitimate error. Not all anomalies in this report would cause a failure or error in an NG9-1-1 ESInet, however, it may delay the call being routed to the PSAP. Further, this series of checks, that once reviewed and corrected, will provide an improved processing for PSAP systems like CAD and AVL. Some of the features flagged are likely exceptions and do not reflect actual errors in the data. Although there may be many exceptions, completely vetting the list of anomalies is recommended before the GIS data is provisioned to an NG9-1-1 system. The number of anomalies that do not meet NENA standards are highlighted in the following tables.

Additionally, detailed tables broken up by each layer contain individual features flagged as an error when compared to both NENA and NITC standards.

RESULTS

Tables 1-5 provide a summary of anomalies associated with street centerlines, address points, PSAP boundaries, emergency service boundaries, political boundaries, MSAG, and ALI data.

Table 1: Summary of Address Point Anomalies

Address Point Anomaly Type	Number of Anomalies	Percentage of Total Features
Address Point with Null Geometry	0	0%
Address Point with Invalid Geometry	0	0%

Address Point Missing Street Name	30	.03%
Address Point Missing House Number	243	.24%
Address Point Duplication	7	.01%
Address Point Not Reflected in Centerline	321	.32%
Address Point Out of Order	1265	1.25%
Address Point Out of Range/Wrong Block	3439	3.40%
Address Point on Wrong Side of the Street	1587	1.57%
Address Point Snaps to Wrong Street	11702	11.56%

Table 2: Summary of Centerline Anomalies

Centerline Anomaly Type	Number of Anomalies	Percentage of Total Features
Street Centerline with Null Geometry	0	0%
Street Centerline with Invalid Geometry	0	0%
Street Centerline Incomplete Address Range	0	0%
Street Centerline Inconsistent From/To Address Range	10	.06%
Street Centerline Inconsistent Odd/Even Address Range Parity	11	.06%
Street Centerline Potential Parity Flip	268	1.48%
Street Centerline Address Range Overlap	191	1.05%
Street Centerline Inconsistent Vector Directionality	808	4.45%

Table 3: Summary of MSAG Anomalies

MSAG Anomaly Type	Number of Anomalies	Percentage of Total Features
MSAG Record Zero Range	0	0%
MSAG Record No Matching Road	324	4.31%
MSAG Record No Matching Road Range	1148	15.27%
Centerline No Matching MSAG Record	873	11.62%
Centerline No Matching MSAG Range	1001	13.32%

Table 4: Summary of ALI Anomalies **Data Not Provided for Lancaster County**

ALI Anomaly Type	Number of Anomalies	Percentage of Total Features
ALI Has No House Number		%
ALI Has No Matching Address Points		%
ALI Has No Matching Street Range		%

Table 5: Summary of PSAP Boundary Anomalies **Data Not Provided for Lancaster County**

PSAP Boundary Anomaly Type	Number of Anomalies	Percentage of Total Features
Gaps and Overlaps		%
PSAP Missing Agency ID		%
Street Crosses PSAP		%
Street Not Covered by PSAP		%
Address Not Covered by PSAP		%
Address on PSAP Boundary		%

Tables 6-12 provide the detail of anomalies associated with the specific features in the street centerlines, address points, PSAP boundaries, emergency service boundaries, political boundaries, MSAG, and ALI data.

Table 6: Street Centerline Errors

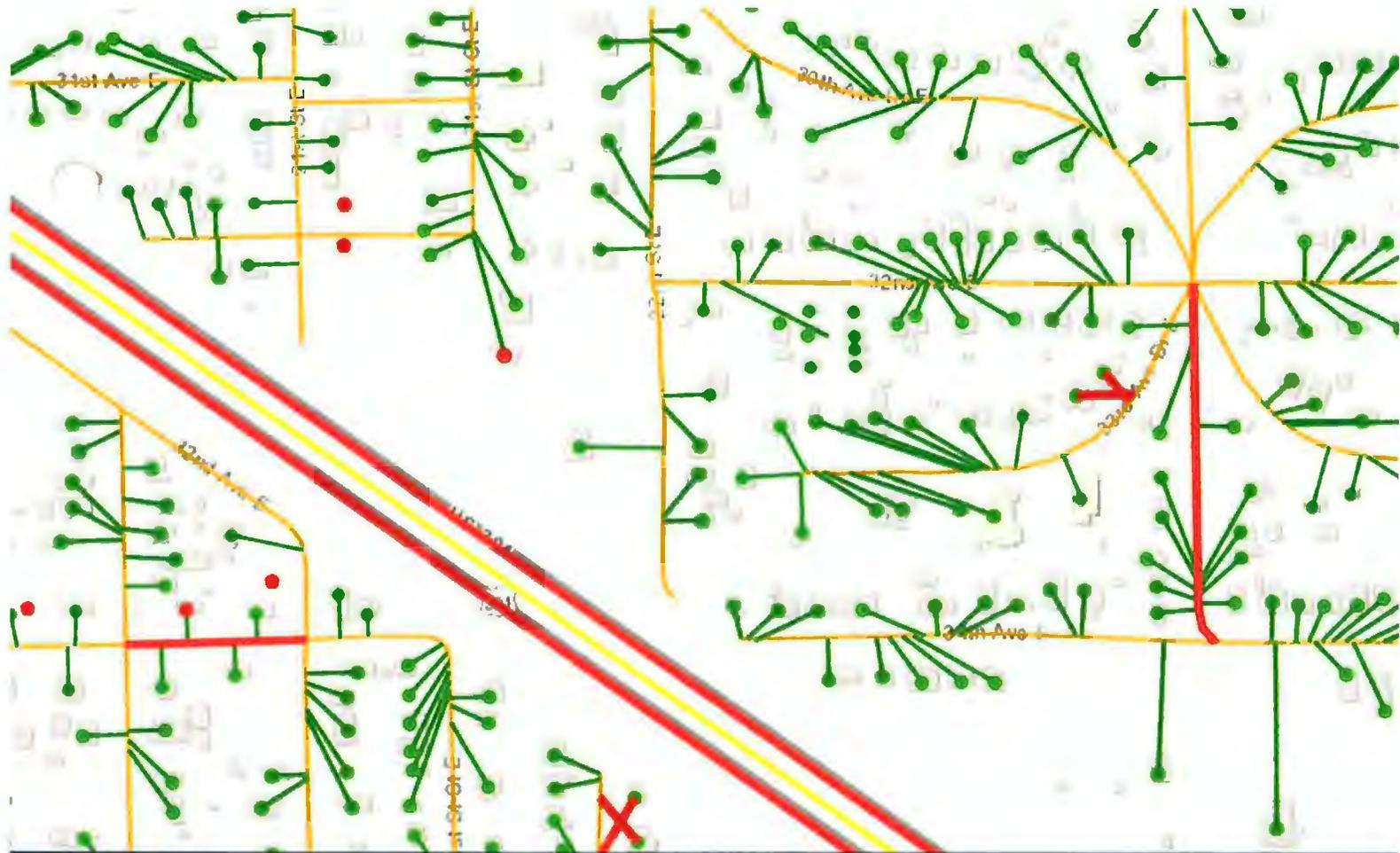
Unique ID	Error Reported
17778	Street Centerline Potential Parity Flip
303	Street Centerline Inconsistent Vector Directionality
10004	Street Centerline Address Range Overlap
17458	Street Centerline Inconsistent Odd/Even Address Range Parity
17444	Street Centerline Inconsistent From/To Address Range
8318	Street Centerline Inconsistent From/To Address Range

Table 11: MSAG errors

Unique ID	Error Reported
2513	MSAG Record No Matching Road
2070	MSAG Record No Matching Road Range
5806	MSAG Record No Matching Road Range
17291	Centerline No Matching MSAG Record
12486	Centerline No Matching MSAG Range

Table 12: ALI Table errors **Data Not Provided for Lancaster County**

Unique ID	Error Reported



APPENDIX III - COMPLIANCE REPORT - SAMPLE

Michael Baker

INTERNATIONAL

We Make a Difference



**Lancaster County, Nebraska
Compliance Report Template**

8/6/2018

DATA**MARK**

County/PSAP Contact
Lancaster County
555 South 10th Street
Lincoln, NE 68508

To whom it may concern:

The review of your submitted data is completed. These data have been validated against the applicable NENA and NITC standards. The results are as follows.

NENA Standards	PASS
NITC Standards	PASS

Your data meets the compliance standards necessary and are ready to be provisioned into the state of Nebraska online GIS repository to support NG9-1-1. Please see below for the reported match rate metrics of your data.

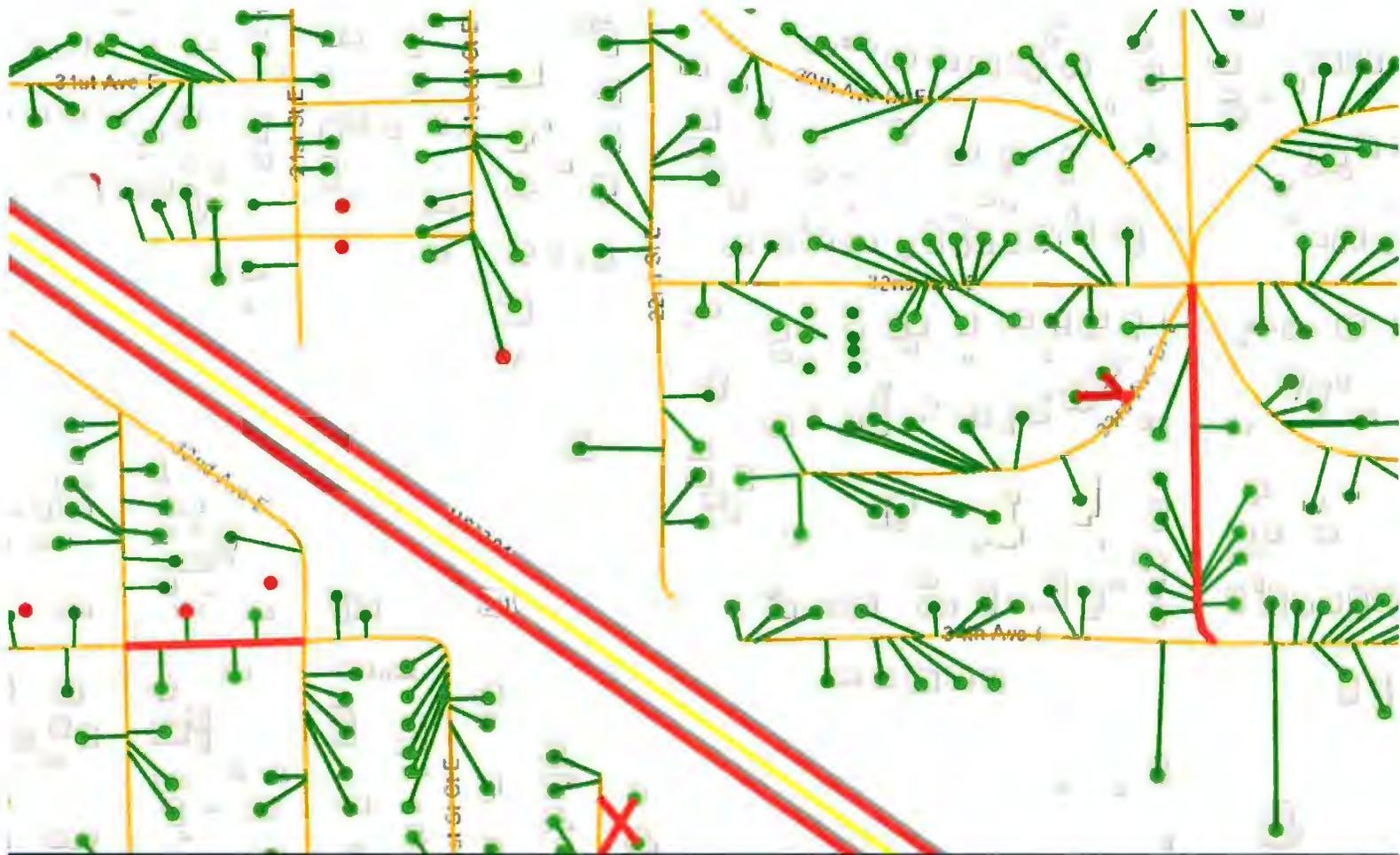
Street Centerline to MSAG	98%
Address Point to ALI	100%

Note that you can also access the results of your validation and review the status via dashboard directly in DATAMARK VEP using your log-in credentials. Please continue to validate your data as updates are made to ensure it remains in compliance.

Sincerely,

The DATAMARK team

***please note that this report is a conceptual sample and the official version may contain minor changes not reflected in this sample version**



APPENDIX IV - DATAMARK® SOFTWARE AS A SERVICE AGREEMENT

DATAMARK®
Software as a Service Agreement

This Software as a Service (SaaS) Agreement (the “**Agreement**”), dated as of the ___ day of _____, is by and between Michael Baker International, Inc., a Pennsylvania corporation with offices located at _____ (“**Provider**”) and _____, (“**Customer**”), a political subdivision of the State of _____ with offices located at _____.

WHEREAS, Customer wishes to procure from Provider the software services described herein, and Provider wishes to provide such services to Customer, each on the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, terms and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Definitions.

“**Access Credentials**” means any user name, identification number, password, or other means used to verify an individual’s identity and authorization to access and use the Hosted Services.

“**Authorized User**” means an employee of Customer that is authorized by Customer to use and/or access the Services solely for a purpose that is consistent with the terms and conditions of this Agreement and for whom Provider has created Access Credentials. For clarity, an Authorized User may not be a third party unless expressly agreed to by Provider.

“**Customer Data**” means, other than Resultant Data, information, data and other content, in any form or medium that is collected, downloaded or otherwise received, directly or indirectly from Customer or an Authorized User by or through the Services.

“**Customer Systems**” means the Customer’s information technology infrastructure, including computers, software, hardware, databases, electronic systems (including database management systems) and networks, whether operated directly by Customer or through the use of third-party services.

“**Documentation**” means any manuals, instructions or other documents or materials that the Provider provides or makes available to Customer in any form or medium and which describe the functionality, components, features or requirements of the Services or Provider Materials, including any aspect of the installation, configuration, integration, operation, use, support or maintenance thereof.

“**Effective Date**” means the date on which Customer notifies Provider of its Acceptance of the Hosted Services.

“**Harmful Code**” means any software, hardware or other technology, device or means, including any virus, worm, malware or other malicious computer code, the purpose or effect of which is to (a) permit unauthorized access to, or to destroy, disrupt, disable, distort, or otherwise harm or impede in any

manner any (i) computer, software, firmware, hardware, system or network or (ii) any application or function of any of the foregoing or the security, integrity, confidentiality or use of any data Processed thereby, or (b) prevent Customer or any Authorized User from accessing or using the Services or Provider Systems as intended by this Agreement. Harmful Code does not include any Provider Disabling Device.

“Intellectual Property Rights” means any and all registered and unregistered rights granted, applied for or otherwise now or hereafter in existence under or related to any patent, copyright, trademark, trade secret, database protection or other intellectual property rights laws, and all similar or equivalent rights or forms of protection, in any part of the world.

“Law” means any statute, law, ordinance, regulation, rule, code, order, constitution, treaty, common law, judgment, decree or other requirement of any federal, state, local or foreign government or political subdivision thereof, or any arbitrator, court or tribunal of competent jurisdiction.

“Losses” means any and all losses, damages, liabilities, deficiencies, claims, actions, judgments, settlements, interest, awards, penalties, fines, costs or expenses of whatever kind, including reasonable attorneys’ fees and the costs of enforcing any right to indemnification hereunder and the cost of pursuing any insurance providers.

“Permitted Use” means any use of the Services by an Authorized User for the benefit of Customer solely for the purpose of accessing and maintaining Customer Data and/or Resultant Data.

“Person” means an individual, corporation, partnership, joint venture, limited liability entity, governmental authority, unincorporated organization, trust, association or other entity.

“Process” means to take any action or perform any operation or set of operations that the SaaS Services are capable of taking or performing on any data, information or other content, including to collect, receive, input, upload, download, record, reproduce, store, organize, compile, combine, log, catalog, cross-reference, manage, maintain, copy, adapt, alter, translate or make other derivative works or improvements, process, retrieve, output, consult, use, perform, display, disseminate, transmit, submit, post, transfer, disclose or otherwise provide or make available, or block, erase or destroy. **“Processing”** and **“Processed”** have correlative meanings.

“Provider Disabling Device” means any software, hardware or other technology, device or means (including any back door, time bomb, time out, drop dead device, software routine or other disabling device) used by Provider or its designee to disable Customer’s or any Authorized User’s access to or use of the Services automatically with the passage of time or under the positive control of Provider or its designee.

“Provider Materials” means the Service Software, Specifications, Documentation and Provider Systems and any and all other information, data, documents, materials, works and other content, devices, methods, processes, hardware, software and other technologies and inventions, including any deliverables, technical or functional descriptions, requirements, plans or reports, that are provided or used by Provider or any Subcontractor in connection with the Services or otherwise comprise or relate to the Services or Provider Systems. For the avoidance of doubt, Provider Materials do not include Customer Data or Resultant Data.

“Provider Personnel” means all individuals involved in the performance of Services as employees, agents or independent contractors of Provider or any Subcontractor.

“Provider Systems” means the information technology infrastructure used by or on behalf of Provider in performing the Services, including all computers, software, hardware, databases, electronic systems (including database management systems) and networks, whether operated directly by Provider or through the use of third-party services.

“Representatives” means, with respect to a party, that party’s employees, officers, directors, consultants, agents, independent contractors, service providers, subcontractors and legal advisors.

“Resultant Data” means information, data and other content that is derived by or through the Services from Processing Customer Data.

“Service Software” means the Provider software application or applications and any third-party or other software, and all new versions, updates, revisions, improvements and modifications of the foregoing, that Provider provides remote access to and use of as part of the Services.

“Specifications” means any specifications for the Services set forth in Schedule A hereto.

“Third Party Materials” means materials and information, in any form or medium, including any software, documents, data, content, specifications, products, equipment or components of or relating to the Services that are not proprietary to Provider.

2. Services;

2.1. Services. Subject to and conditioned on Customer’s and its Authorized Users’ compliance with the terms and conditions of this Agreement, during the Term, Provider shall use commercially reasonable efforts to provide to Customer and its Authorized Users the services the services described below, (collectively, the **“Services”**), in accordance with the Specifications and terms and conditions hereof, including to host, manage, operate and maintain the Service Software for remote electronic access and use by Customer and its Authorized Users.

Services Description. The DataMark® VEP SaaS application (Service), consisting of Services that are implemented using conventional web technology. No additional plugins or downloads are required to access the Services. No data is made publicly available. Access to the Services is restricted to Authorized Users only. Customer’s data access is also restricted. All access to Customer Data and/or Resultant Data is facilitated by the Services through customized download and editing modules. File level access or repository browsing, such as traditional FTP capabilities, are not exposed to any Customer. All Customer interaction with the Services is transported by HTTPS. Internally, files used with the Services are scanned for virus and malware. This action is performed in isolation from other Customer Data and Resultant Data.

Maintenance of the Service Software for remote electronic access and use by Customer and its Authorized Users (**“Hosted Services”**) will be in substantial conformity with the Specifications, except for:

- a) Scheduled Downtime in accordance with Section 6.2;
- b) Service downtime or degradation due to a Force Majeure Event;
- c) any other circumstances beyond Provider's reasonable control, including Customer's or any Authorized User's use of Third Party Materials, misuse of the Hosted Services, or use of the Services other than in compliance with the express terms of this Agreement and the Specifications; and
- d) any suspension or termination of Customer's or any Authorized Users' access to or use of the Hosted Services as permitted by this Agreement.

2.2. Service and System Control. Except as otherwise expressly provided in this Agreement, as between the parties:

- a) Provider has and will retain sole control over the operation, provision, maintenance and management of the Services and Provider Materials, including the: (I) Provider Systems; (ii) selection, deployment, modification and replacement of the Service Software; and (iii) performance of Support Services and Service maintenance, upgrades, corrections and repairs; and
- b) Customer has and will retain sole control over the operation, maintenance and management of, and all access to and use of, the Customer Systems, and sole responsibility for all access to and use of the Services and Provider Materials by any Person by or through the Customer Systems or any other means controlled by Customer or any Authorized User, including any: (i) information, instructions or materials provided by any of them to the Services or Provider; (ii) results obtained from any use of the Services or Provider Materials; and (iii) conclusions, decisions or actions based on such use.

2.3. Project Management. Each party shall, throughout the Term, maintain within its organization a project manager to serve as such party's primary point of contact for day-to-day communications, consultation and decision-making regarding the Services (each a "**Project Manager**"). Each Project Manager shall be responsible for providing all day-to-day consents and approvals on behalf of such party under this Agreement. Each party shall ensure its Project Manager has the requisite organizational authority, skill, experience and other qualifications to perform in such capacity. The parties' initial Project Managers are identified in Schedule B attached hereto. Each party shall use commercially reasonable efforts to maintain the same Project Manager in place throughout the Term. If either party's Project Manager ceases to be employed by such party or such party otherwise wishes to replace its Project Manager, such party shall promptly name a new Project Manager by written notice to the other party in accordance with the notice requirements in Section 17.4 of this Agreement.

2.4. Changes. Provider reserves the right, in its sole discretion, to make any changes to the Services and Provider Materials that it deems necessary or useful to: (a) maintain or enhance (i) the quality or delivery of Provider's services to its customers, (ii) the competitive strength of or market for Provider's services or (iii) the Services' cost efficiency or performance; or (b) to comply with

applicable Law. Without limiting the foregoing, either party may, at any time during the Term, request in writing changes to the Services. No requested changes will be effective unless and until memorialized in a written change order signed by both parties.

- 2.5. Subcontractors. Provider may from time to time in its discretion engage third parties to perform Services (each, a “**Subcontractor**”).
- 2.6. Suspension or Termination of Services. Provider may, directly or indirectly, and by use of a Provider Disabling Device or any other lawful means, suspend, terminate or otherwise deny Customer’s, any Authorized User’s or any other Person’s access to or use of all or any part of the Services or Provider Materials, without incurring any resulting obligation or liability, if: (a) Provider receives a judicial or other governmental demand or order, subpoena or law enforcement request that expressly or by reasonable implication requires Provider to do so; or (b) Provider believes, in its good faith and reasonable discretion, that: (i) Customer or any Authorized User has failed to comply with, any term of this Agreement, or accessed or used the Services beyond the scope of the rights granted or for a purpose not authorized under this Agreement or in any manner that does not comply with any instruction or requirement of the Specifications; (ii) Customer or any Authorized User is, has been, or is likely to be involved in any fraudulent, misleading or unlawful activities relating to or in connection with any of the Services; or (iii) this Agreement expires or is terminated. This Section 2.7 does not limit any of Provider’s other rights or remedies, whether at law, in equity or under this Agreement.
- 2.7. Optional Professional Services. Provider may, at the direction of the Customer, engage Michael Baker International to perform other professional services with the issuance of a task order and without an additional contract on a Time & Materials (T&M) basis utilizing the following rate schedule, subject to further agreed to rate increases at the time of contract renewal.
 - 2.7.1. Principal: _____
 - 2.7.2. Project Manager: _____
 - 2.7.3. Public Safety Subject Matter Expert: _____
 - 2.7.4. Public Safety GIS Subject Matter Expert: _____
 - 2.7.5. GIS Developer _____
 - 2.7.6. Sr. GIS Analyst: _____
 - 2.7.7. GIS Analyst: _____
 - 2.7.8. GIS Technician: _____

3. Authorization and Customer Restrictions.

- 3.1. Authorization. Subject to and conditioned on Customer’s payment of the Fees and compliance and performance in accordance with all other terms and conditions of this Agreement, Provider hereby grants to Customer, during the Term, a non-exclusive, non-sublicensable, worldwide right and license to access, use, display, and execute the Provider Materials in connection with the Services, solely for the Permitted Use by and through Authorized Users in accordance with the Specifications, the conditions and limitations set forth in this Agreement. This authorization, other than as may be expressly set forth in Section 17.8, is non-transferable.
- 3.2. Reservation of Rights. Except as expressly set forth in Section 3.1 hereto, nothing in this Agreement grants any right, title or interest in or to (including any license under) any Intellectual

Property Rights in or relating to, the Services, Provider Materials or Third Party Materials, whether expressly, by implication, estoppel or otherwise. Subject to Section 3.1 hereto, all right, title and interest in and to the Services, the Provider Materials and the Third Party Materials are and will remain with Provider and the respective rights holders in the Third Party Materials.

3.3. Authorization Limitations and Restrictions. Customer shall not, and shall not permit any other Person to, access or use the Services or Provider Materials except as expressly permitted by this Agreement and, in the case of Third-Party Materials, the applicable third-party license agreement. For purposes of clarity and without limiting the generality of the foregoing, Customer shall not, except as this Agreement expressly permits:

- a) copy, modify or create derivative works or improvements of the Services or Provider Materials;
- b) rent, lease, lend, sell, sublicense, assign, distribute, publish, transfer or otherwise make available any Services or Provider Materials to any Person, including on or in connection with the internet or any time-sharing, service bureau, software as a service, cloud or other technology or service;
- c) reverse engineer, disassemble, decompile, decode, adapt or otherwise attempt to derive or gain access to the source code of the Services or Provider Materials, in whole or in part;
- d) bypass or breach any security device or protection used by the Services or Provider Materials or access or use the Services or Provider Materials other than by an Authorized User through the use of his or her own then-valid Access Credentials;
- e) input, upload, transmit or otherwise provide to or through the Services or Provider Systems, any information or materials that are unlawful or injurious, or contain, transmit or activate any Harmful Code;
- f) damage, destroy, disrupt, disable, impair, interfere with or otherwise impede or harm in any manner the Services, Provider Systems or Provider's provision of services to any third party, in whole or in part;
- g) remove, delete, alter or obscure any trademarks, Specifications, Documentation, warranties or disclaimers, or any copyright, trademark, patent or other intellectual property or proprietary rights notices from any Services or Provider Materials, including any copy thereof;
- h) access or use the Services or Provider Materials in any manner or for any purpose that infringes, misappropriates or otherwise violates any Intellectual Property Right or other right of any third party, or that violates any applicable Law;
- i) access or use the Services or Provider Materials for purposes of competitive analysis of the Services or Provider Materials, the development, provision or use of a competing software service or product or any other purpose that is to the Provider's detriment or commercial disadvantage; or

- j) otherwise access or use the Services or Provider Materials beyond the scope of the authorization granted under Section 3.1 hereto.

3.4. Service Use and Data Storage.

Schedule A sets forth a schedule of Fees for designated levels of Hosted Service usage (each a “**Service Allocation**”), beginning with the Fees payable by Customer for the levels of Hosted Service usage in effect as of the Effective Date. The usage of the service is bound to an agreed upon geographic extent of data based upon the data footprint provisioned for application onboarding. Any changes to this extent will result in additional licensing fees for access to the Service via a written change order in accordance with Section 2.4 hereto.

4. Customer Obligations.

4.1. Customer Systems and Cooperation. Customer shall at all times during the Term: (a) set up, maintain and operate in good repair and in accordance with the Specifications all Customer Systems on or through which the Services are accessed or used; (b) provide Provider Personnel with such access to Customer’s premises and Customer Systems as is necessary for Provider to perform the Services in accordance with the Availability Requirement and Specifications; and (c) provide all cooperation and assistance as Provider may reasonably request to enable Provider to exercise its rights and perform its obligations under and in connection with this Agreement.

4.2. Effect of Customer Failure or Delay. Provider is not responsible or liable for any delay or failure of performance caused in whole or in part by Customer’s delay in performing, or failure to perform, any of its obligations under this Agreement (each, a “**Customer Failure**”).

4.3. Corrective Action and Notice. If Customer becomes aware of any actual or threatened activity prohibited by Section 3.3, Customer shall, and shall cause its Authorized Users to, immediately: (a) take all reasonable and lawful hereto measures within their respective control that are necessary to stop the activity or threatened activity and to mitigate its effects (including, where applicable, by discontinuing and preventing any unauthorized access to the Services and Provider Materials and permanently erasing from their systems and destroying any data to which any of them have gained unauthorized access); and (b) notify Provider of any such actual or threatened activity.

4.4. Audit. Customer shall provide Provider with access to conduct an on-premises audit of Customer’s compliance with the use of the Services with forty-eight (48) hours of advance notice to Customer.

5. User Acceptance Testing.

5.1. When Provider notifies Customer in writing that the Hosted Services are ready for use in a production environment, Customer shall have thirty (30) calendar days from receipt of the notice to test the Hosted Services to determine whether they comply in all material respects with the requirements of this Agreement and the Specifications.

- 5.2. Upon completion of Customer's testing, Customer shall notify Provider of its acceptance ("**Accept**" or "**Acceptance**") or, if it has identified any noncompliance with the Specifications, rejection ("**Reject**" or "**Rejection**"), of the Hosted Services. If Customer Rejects the Hosted Services, Customer shall provide a written list of items that must be corrected. On receipt of Customer's notice, Provider shall promptly commence, at no additional cost or charge to Customer, all reasonable efforts to complete, as quickly as possible such necessary corrections, repairs and modifications to the Hosted Services to bring them into full compliance with the Specifications.
- 5.3. If any corrective measures are required under Section 5.2, upon its completion of all such measures, Provider shall notify Customer in writing and the process set forth in Section 5.2 shall be repeated; provided that if Customer determines that the Hosted Services, as revised, still do not comply in all material respects with the Specifications, Customer may, in its sole discretion, require the Provider to repeat the correction, repair and modification process set forth in Section 5.2 at no additional cost or charge to Customer. The parties shall repeat the foregoing procedure until Customer Accepts the Hosted Services.

6. Service Levels.

- 6.1. Service Levels. Subject to the terms and conditions of this Agreement and as set forth in below hereto, Provider will use commercially reasonable efforts to make the Hosted Services Available during the applicable Service Windows (except during Force Majeure events) and in accordance with generally recognized industry Service Level Standards for non-mission-critical SaaS applications, excluding unavailability as a result of any of the Exceptions described below in this Section 6.1 (the "**Availability Requirement**"). "**Service Level Failure**" means a material failure of the Hosted Services to meet the Availability Requirement. "**Available**" means the Hosted Services are available for access and use by Customer and its Authorized Users over the Internet and operating in material accordance with the Specifications.

For purposes of calculating the Availability Requirement, the following are "**Exceptions**" to the Availability Requirement, and neither the Hosted Services will be considered un-Available nor any Service Level Failure be deemed to occur in connection with any failure to meet the Availability Requirement or impaired ability of Customer or its Authorized Users to access or use the Hosted Services that is due, in whole or in part, to any: (a) access to or use of the Hosted Services by Customer or any Authorized User, or using Customer's or an Authorized User's Access Credentials, that does not strictly comply with this Agreement and the Specifications; (b) Customer Failure; (c) Customer's or its Authorized User's Internet connectivity; (d) Force Majeure Event; (e) failure, interruption, outage or other problem with any software, hardware, system, network, facility or other matter not supplied by Provider pursuant to this Agreement; (f) Scheduled Downtime; or (g) disabling, suspension or termination of the Services pursuant to Section 2.7 hereto.

- 6.2. Scheduled Downtime. For each scheduled outage of the Hosted Services ("**Scheduled Downtime**") Provider shall:

- a) for non-emergency maintenance to be performed on the Hosted Services, provide five (5) calendar days prior written notice to Customer of such non-emergency maintenance, such written notice to include a general description of all such non-emergency maintenance; and
- b) for emergency maintenance to be performed on the Hosted Services, (i) provide Customer as much prior notice as is commercially practicable of all such emergency maintenance to be performed on the Services, and (ii) provide a general description of all such emergency maintenance performed no more than ten (10) calendar days following completion of such emergency maintenance.

6.3. If Provider fails to meet the Availability Requirement for a calendar month during the term of their service contract, Customer will be entitled to collect a credit from Provider for the following percentages of the pro-rata monthly portion of the annual fees paid by Customer for the Provider web hosting service for the month at issue (i.e. the “Monthly Annual Fees”):

Outage Percentage (in a given calendar month)	Credit Percentage (of the monthly portion of the annual fees)
Less than or equal to 0.1%	None
Greater than 0.1% and less than or equal to 1.0%	50%
Greater than 1.0% and less than or equal to 3.0%	75%
Greater than 3%	100%

In order to be entitled to a credit in any instance to which a credit may be collected above, Customer must inform Provider’s Technical Support Department by email (a “Credit Request”) within ten (10) days from the end of the month in which the Customer believes that Provider did not satisfy the Availability Commitment, in each instance, and the Credit Request must include a listing of the date(s), time(s) and duration of the downtime experienced during the applicable month. Failure to do so, in any instance, will forfeit Customer’s right to seek a credit from Provider for the failure to achieve the Availability Commitment during the month at issue.

Unless Provider disputes in good faith that its Availability Requirement was not met in the month at issue, in which event it shall explain to Customer the basis for its disagreement and share any related documentation in this regard, Provider will issue the appropriate credit to Customer to be used against a future invoice.

In the event of a dispute regarding whether an Outage occurred, or as to the duration of an Outage, the output of the monitoring tools utilized by Provider and agreed upon and confirmed by the Customer shall be conclusive and controlling.

Customer’s right to receive a credit for a failure to meet the Availability Requirement for a given month shall be Customer’s exclusive remedy in connection with the Outage(s) giving rise to the credit. The aggregate maximum value of credits to be issued by Provider to Customer for any and all Outages that occur in a single month will not exceed twenty percent (20%) of the Monthly Annual Fees.

- 7. **Data Backup.** As part of the Services, Provider Systems perform routine data backups of Customer Data. Provider shall backup Customer Data no less than daily. Any backups of Customer Data shall not be considered in calculating storage used by Customer.

8. Security.

- 8.1. Provider Systems and Security Obligations. Provider will employ security measures in accordance with applicable industry practice.
- 8.2. Customer Control and Responsibility. Customer has and will retain sole responsibility for: (a) all Customer Data, including its content and use; (b) all information, instructions and materials provided by or on behalf of Customer or any Authorized User in connection with the Services; (c) Customer's information technology infrastructure, including computers, software, databases, electronic systems (including database management systems) and networks, whether operated directly by Customer or through the use of third-party services ("**Customer Systems**"); (d) the security and use of Customer's and its Authorized Users' Access Credentials; and (e) all access to and use of the Services and Provider Materials directly or indirectly by or through the Customer Systems or its or its Authorized Users' Access Credentials, with or without Customer's knowledge or consent, including all results obtained from, and all conclusions, decisions and actions based on, such access or use.
- 8.3. Access and Security. Customer shall employ all physical, administrative and technical controls, screening and security procedures and other safeguards necessary to: (a) securely administer the distribution and use of all Access Credentials and protect against any unauthorized access to or use of the Hosted Services; and (b) control the content and use of Customer Data, including the uploading or other provision of Customer Data for Processing by the Hosted Services.

9. Fees; Invoices; Payment Terms.

- 9.1. Fees. Customer shall pay Provider the fees set forth in Schedule A of this Agreement ("**Fees**") in accordance with this Section 9
- a) The Customer contract number assigned to this Agreement will be provided to the Provider, in writing, prior to the start of any work.
 - b) The Customer agrees to pay the Provider for the herein described services at a rate of compensation according to the deliverable payment schedule stated in **Schedule A**. The Customer shall have the right to retain from any payment due the Provider under this Agreement, an amount sufficient to satisfy any amount of service level credits due and owing to the Customer by the Provider.
 - c) The Customer Project Manager must approve all invoices prior to payment being made.
 - d) The Customer shall have thirty (30) days from the receipt of an invoice seeking payment of fees or costs to either pay the invoice, or notify the Provider that the deliverable, or any part thereof, is unacceptable, and/or that any asserted expense is not reimbursable.
- 9.2. Fee Increases. Provider may not increase Fees beyond the terms defined in Schedule A of this Agreement. These terms are good for one (1) year from the execution of this agreement but subsequently the Provider reserves the right to negotiate and increase these fees.

9.3. Reimbursable Expenses. If approved by Customer in writing in advance, Customer shall reimburse Provider for out-of-pocket expenses incurred by Provider in connection with performing the Services (“**Reimbursable Expenses**”).

9.4. Taxes. All Fees and other amounts payable by Customer under this Agreement are exclusive of taxes and similar assessments. Customer is responsible for all sales, use and excise taxes, and any other similar taxes, duties and charges of any kind imposed by any federal, state or local governmental or regulatory authority on any amounts payable by Customer hereunder, other than any taxes imposed on Provider’s income. Customer hereby agrees to indemnify Provider should any taxes be lived against Provider.

9.5. Payment. Customer shall pay all Fees and Reimbursable Expenses within thirty (30) calendar days after the date of the invoice therefor. Customer shall make all payments hereunder in US dollars. Customer shall make payments to the address or account specified in Schedule A or such other address or account as Provider may specify in writing from time to time.

9.6. Late Payment. If Customer fails to make any payment when due then, in addition to all other remedies that may be available:

- a) Provider may charge interest on the past due amount at the rate of 0.25% per month calculated daily and compounded monthly or, if lower, the highest rate permitted under applicable Law;
- b) Customer shall reimburse Provider for all costs incurred by Provider in collecting any late payments or interest, including attorneys’ fees, court costs and collection agency fees; and
- c) if such failure continues for thirty (30) calendar days following written notice thereof, Provider may suspend performance of the Services until all past due amounts and interest thereon have been paid, without incurring any obligation or liability to Customer or any other Person by reason of such suspension.

9.7. No Deductions or Setoffs. All amounts payable to Provider under this Agreement shall be paid by Customer to Provider in full without any setoff, recoupment, counterclaim, deduction, debit or withholding for any reason (other than any deduction or withholding of tax as may be required by applicable Law).

10. Intellectual Property Rights.

10.1. Services and Provider Materials. All right, title and interest in and to the Services and Provider Materials, including all Intellectual Property Rights therein, are and will remain with Provider and the respective rights holders in the Third-Party Materials. Customer has no right, license or authorization with respect to any of the Services or Provider Materials (including Third-Party Materials) except as expressly set forth in Section 3.1 or the applicable third-party license. All other rights in and to the Services and Provider Materials (including Third-Party Materials) are expressly reserved by Provider and the respective third-party licensors.

10.2. Customer Data; Resultant Data. As between Customer and Provider, Customer is and will remain the sole and exclusive owner of all right, title and interest in and to all Customer Data and all Resultant Data, including all Intellectual Property Rights relating thereto, subject to the rights and permissions granted in Section 10.3 hereto.

10.3. Consent to Use Customer Data, Resultant Data. Customer hereby irrevocably grants all such rights and permissions in or relating to Customer Data and Resultant Data: (a) to Provider, its Subcontractors and the Provider Personnel as are necessary or useful to perform the Services; and (b) to Provider as are necessary or useful to enforce this Agreement and exercise its rights and perform its hereunder.

11. Confidentiality

11.1. Confidential Information. In connection with this Agreement each party (as the “**Disclosing Party**”) may disclose or make available Confidential Information to the other party (as the “**Receiving Party**”). Subject to Section 11.2, “**Confidential Information**” means information in any form or medium (whether oral, written, electronic or other) that the Disclosing Party considers confidential or proprietary, including information consisting of or relating to the Disclosing Party’s technology, trade secrets, know-how, business operations, plans, strategies, customers, and pricing, and information with respect to which the Disclosing Party has contractual or other confidentiality obligations, in each case whether or not marked, designated or otherwise identified as “confidential”. Without limiting the foregoing: all Provider Materials are the Confidential Information of Provider and the financial terms of this Agreement are the Confidential Information of Provider.

11.2. Exclusions. Confidential Information does not include information that the Receiving Party can demonstrate by written or other documentary records: (a) was rightfully known to the Receiving Party without restriction on use or disclosure prior to such information’s being disclosed or made available to the Receiving Party in connection with this Agreement; (b) was or becomes generally known by the public other than by the Receiving Party’s or any of its Representatives’ noncompliance with this Agreement; (c) was or is received by the Receiving Party on a non-confidential basis from a third party that was not or is not, at the time of such receipt, under any obligation to maintain its confidentiality; or (d) was or is independently developed by the Receiving Party without reference to or use of any Confidential Information.

11.3. Protection of Confidential Information. As a condition to being provided with any disclosure of or access to Confidential Information, the Receiving Party shall:

- a) not access or use Confidential Information other than as necessary to exercise its rights or perform its obligations under and in accordance with this Agreement;
- b) except as may be permitted by and subject to its compliance with Section 11.4, not disclose or permit access to Confidential Information other than to its Representatives who: (i) need to know such Confidential Information for purposes of the Receiving Party’s exercise of its rights or performance of its obligations under and in accordance with this Agreement; (ii) have been informed of the confidential nature of the Confidential Information and the Receiving Party’s obligations under this Section 11.3; and (iii) are bound by confidentiality

and restricted use obligations at least as protective of the Confidential Information as the terms set forth in this Section 11.3;

- c) safeguard the Confidential Information from unauthorized use, access or disclosure using at least the degree of care it uses to protect its most sensitive information and in no event less than a reasonable degree of care; and
- d) ensure its Representatives' compliance with, and be responsible and liable for any of its Representatives' non-compliance with, the terms of this Section 11.

11.4. Compelled Disclosures. If the Receiving Party or any of its Representatives is compelled by applicable Law to disclose any Confidential Information then, to the extent permitted by applicable Law, the Receiving Party shall: (a) promptly, and prior to such disclosure, notify the Disclosing Party in writing of such requirement so that the Disclosing Party can seek a protective order or other remedy or waive its rights under Section 11.3 hereto; and (b) provide reasonable assistance to the Disclosing Party, at the Disclosing Party's sole cost and expense, in opposing such disclosure or seeking a protective order or other limitations on disclosure. If the Disclosing Party waives compliance or, after providing the notice and assistance required under this Section 11.4, the Receiving Party remains required by Law to disclose any Confidential Information, the Receiving Party shall disclose only that portion of the Confidential Information that the Receiving Party is legally required to disclose and, on the Disclosing Party's request, shall use commercially reasonable efforts to obtain assurances from the applicable court or other presiding authority that such Confidential Information will be afforded confidential treatment.

12. Term and Termination.

12.1. Initial Term. The initial term of this Agreement commences as of the upon Final Acceptance by the Customer unless terminated earlier pursuant any of this Agreement's express provisions, will continue in effect until twelve (12) months from such date (the "**Initial Term**").

12.2. Renewal. This Agreement will automatically renew for up to four (4) additional successive twelve (12) month term(s) unless earlier terminated pursuant to this Agreement's express provisions or either party gives the other party written notice of non-renewal at least sixty (60) calendar days prior to the expiration of the then-current term (each a "**Renewal Term**" and together with the Initial Term, the "**Term**").

12.3. Termination. In addition to any other express termination right set forth elsewhere in this Agreement:

- a) Provider may terminate this Agreement, effective on written notice to Customer, if Customer: (i) fails to pay any amount when due hereunder, and such failure continues more than forty-five (45) calendar days after Provider's delivery of written notice thereof; or (ii) breaches any of its obligations under Sections 3.3 (Use Limitations and Restrictions) or 11 (Confidentiality).
- b) Either party may terminate this Agreement, effective on written notice to the other party, if the other party materially breaches this Agreement, and such breach: (i) is incapable of

cure; or (ii) being capable of cure, remains uncured thirty (30) calendar days after the non-breaching party provides the breaching party with written notice of such breach; and

- c) Either party may terminate this Agreement, effective immediately upon written notice to the other party, if the other party: (i) becomes insolvent or is generally unable to pay, or fails to pay, its debts as they become due; (ii) files or has filed against it, a petition for voluntary or involuntary bankruptcy or otherwise becomes subject, voluntarily or involuntarily, to any proceeding under any domestic or foreign bankruptcy or insolvency Law; (iii) makes or seeks to make a general assignment for the benefit of its creditors; or (iv) applies for or has appointed a receiver, trustee, custodian or similar agent appointed by order of any court of competent jurisdiction to take charge of or sell any material portion of its property or business.

12.4. Effect of Expiration or Termination. Upon any expiration or termination of this Agreement, except as expressly otherwise provided in this Agreement:

- a) all rights, licenses, consents and authorizations granted by either party to the other hereunder will immediately terminate;
- b) Provider shall immediately cease all use of any Customer Data or Customer's Confidential Information and (i) within five (5) business days return to Customer, or at Customer's written request destroy, all documents and tangible materials containing, reflecting, incorporating or based on Customer Data or Customer's Confidential Information; and (ii) permanently erase all Customer Data and Customer's Confidential Information from all systems Provider directly or indirectly controls, provided that, for clarity, Provider's obligations under this Section 12.4(b) do not apply to any Resultant Data;
- c) Customer shall immediately cease all use of any Services or Provider Materials and (i) within five (5) business days return to Provider, or at Provider's written request destroy, all documents and tangible materials containing, reflecting, incorporating or based on any Provider Materials or Provider's Confidential Information; (ii) permanently erase all Provider Materials and Provider's Confidential Information from all systems Customer directly or indirectly controls; and (iii) certify to Provider in a signed written instrument that it has complied with the requirements of this Section 12.4(c);
- d) notwithstanding anything to the contrary in this Agreement, with respect to information and materials then in its possession or control: (i) the Receiving Party may retain the Disclosing Party's Confidential Information in its then current state and solely to the extent and for so long as required by applicable Law; (ii) Provider may also retain Customer Data in its backups, archives and disaster recovery systems until such Customer Data is deleted in the ordinary course; and (iii) all information and materials described in this Section 12.4(d) will remain subject to all confidentiality, security and other applicable requirements of this Agreement;
- e) Provider may disable all Customer and Authorized User access to the Hosted Services and Provider Materials;

- f) If Customer terminates this Agreement pursuant to Section 12.3(b), Customer will be relieved of any obligation to pay any Fees attributable to the period after the effective date of such termination; and
- g) If Provider terminates this Agreement pursuant to Section 12.3(a) or 12.3(b), all Fees that would have become payable had the Agreement remained in effect until expiration of the Term will become due and payable within thirty (30) calendar days, and Customer shall pay such Fees, together with all previously-accrued but not yet paid Fees and Reimbursable Expenses, on receipt of Provider's invoice therefor.

13. Representations and Warranties.

13.1. Mutual Representations and Warranties. Each party represents and warrants to the other party that:

- a) it is duly organized, validly existing and in good standing as a corporation or other entity under the Laws of the jurisdiction of its incorporation or other organization;
- b) it has the full right, power and authority to enter into and perform its obligations and grant the rights, licenses, consents and authorizations it grants or is required to grant under this Agreement;
- c) the execution of this Agreement by its representative whose signature is set forth at the end of this Agreement has been duly authorized by all necessary corporate or organizational action of such party; and
- d) when executed and delivered by both parties, this Agreement will constitute the legal, valid and binding obligation of such party, enforceable against such party in accordance with its terms.

13.2. Additional Provider Representations, Warranties and Covenants. Provider represents, warrants and covenants to Customer that Provider will perform the Services using personnel of required skill, experience and qualifications and in a professional and workmanlike manner in accordance with generally recognized industry standards for similar services and will devote adequate resources to meet its obligations under this Agreement.

13.3. Additional Customer Representations, Warranties and Covenants. Customer represents, warrants and covenants to Provider that Customer owns or otherwise has and will have the necessary rights and consents in and relating to the Customer Data so that, as received by Provider and Processed in accordance with this Agreement, they do not and will not infringe, misappropriate or otherwise violate any Intellectual Property Rights, or any privacy or other rights of any third party or violate any applicable Law.

13.4. DISCLAIMER OF WARRANTIES. EXCEPT FOR THE EXPRESS WARRANTIES SET FORTH IN SECTION 13.1, SECTION 13.2 AND SECTION 13.3 HEREIN, ALL SERVICES AND PROVIDER MATERIALS ARE PROVIDED "AS IS" AND PROVIDER HEREBY DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, STATUTORY OR

OTHER, AND PROVIDER SPECIFICALLY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT, AND ALL WARRANTIES ARISING FROM COURSE OF DEALING, USAGE OR TRADE PRACTICE. WITHOUT LIMITING THE FOREGOING, PROVIDER MAKES NO WARRANTY OF ANY KIND THAT THE SERVICES OR PROVIDER MATERIALS, OR ANY PRODUCTS OR RESULTS OF THE USE THEREOF, WILL MEET CUSTOMER'S OR ANY OTHER PERSON'S REQUIREMENTS, OPERATE WITHOUT INTERRUPTION, ACHIEVE ANY INTENDED RESULT, BE COMPATIBLE OR WORK WITH ANY SOFTWARE, SYSTEM OR OTHER SERVICES, OR BE SECURE, ACCURATE, COMPLETE, FREE OF HARMFUL CODE OR ERROR FREE. ALL THIRD-PARTY MATERIALS ARE PROVIDED "AS IS" AND ANY REPRESENTATION OR WARRANTY OF OR CONCERNING ANY THIRD PARTY MATERIALS IS STRICTLY BETWEEN CUSTOMER AND THE THIRD-PARTY OWNER OR DISTRIBUTOR OF THE THIRD-PARTY MATERIALS

14. Indemnification.

14.1. Provider Indemnification. Provider shall indemnify, defend and hold harmless Customer and Customer's officers, directors, employees, agents, permitted successors and permitted assigns (each, a "**Customer Indemnitee**") from and against any and all Losses incurred by such Customer Indemnitee arising out of or relating to any claim, suit, action or proceeding (each, an "**Action**") by a third party (other than an Affiliate of a Customer Indemnitee) to the extent that such Losses arise from any allegation in such Action that Customer's or an Authorized User's use of the Services (excluding Customer Data and Third Party Materials) in compliance with this Agreement (including the Specifications) infringes a U.S. Intellectual Property Right. The foregoing obligation does not apply to any Action or Losses arising out of or relating to any:

- a) access to or use of the Services or Provider Materials in combination with any hardware, system, software, network or other materials or service not provided or authorized in the Specifications or otherwise in writing by Provider;
- b) modification of the Services or Provider Materials other than: (i) by or on behalf of Provider; or (ii) with Provider's written approval in accordance with Provider's written specification;
- c) failure to timely implement any modifications, upgrades, replacements or enhancements made available to Customer by or on behalf of Provider; or
- d) act, omission or other matter described in Section 14.2 hereto, whether or not the same results in any Action against or Losses by any Provider Indemnitee.

14.2. Customer Indemnification. Customer shall indemnify, defend and hold harmless Provider and its Subcontractors and Affiliates, and each of its and their respective officers, directors, employees, agents, successors and assigns (each, a "**Provider Indemnitee**") from and against any and all Losses incurred by such Provider Indemnitee in connection with any Action by a third party (other than an Affiliate of a Provider Indemnitee) that arises out of or relates to any:

- a) Customer Data, including any Processing of Customer Data by or on behalf of Provider in accordance with this Agreement;
- b) any other materials or information (including any documents, data, specifications, software, content or technology) provided by or on behalf of Customer or any Authorized User, including Provider's compliance with any specifications or directions provided by or on behalf of Customer or any Authorized User to the extent prepared without any contribution by Provider;
- c) allegation of facts that, if true, would constitute Customer's breach of any of its representations, warranties, covenants or obligations under this Agreement; or
- d) negligence or more culpable act or omission (including recklessness or willful misconduct) by Customer, any Authorized User, or any third party on behalf of Customer or any Authorized User, in connection with this Agreement.

14.3. Indemnification Procedure. Each party shall promptly notify the other party in writing of any Action for which such party believes it is entitled to be indemnified pursuant to Section 14.1 or Section 14.2 hereto, as the case may be. The party seeking indemnification (the "**Indemnitee**") shall cooperate with the other party (the "**Indemnitor**") at the Indemnitor's sole cost and expense. The Indemnitor shall immediately take control of the defense and investigation of such Action and shall employ counsel of its choice to handle and defend the same, at the Indemnitor's sole cost and expense. The Indemnitee's failure to perform any obligations under this Section 14.3 will not relieve the Indemnitor of its obligations under this Section 14 except to the extent that the Indemnitor can demonstrate that it has been prejudiced as a result of such failure. The Indemnitee may participate in and observe the proceedings at its own cost and expense with counsel of its own choosing.

14.4. Mitigation. If any of the Services or Provider Materials are, or in Provider's opinion are likely to be, claimed to infringe, misappropriate or otherwise violate any third-party Intellectual Property Right, or if Customer's or any Authorized User's use of the Services or Provider Materials is enjoined or threatened to be enjoined, Provider may, at its option and sole cost and expense:

- a) obtain the right for Customer to continue to use the Services and Provider Materials materially as contemplated by this Agreement;
- b) modify or replace the Services and Provider Materials, in whole or in part, to seek to make the Services and Provider Materials (as so modified or replaced) non-infringing, while providing materially equivalent features and functionality, in which case such modifications or replacements will constitute Services and Provider Materials, as applicable, under this Agreement; or
- c) by written notice to Customer, terminate this Agreement with respect to all or part of the Services and Provider Materials, and require Customer to immediately cease any use of the Services and Provider Materials or any specified part or feature thereof.

THIS SECTION 14 SETS FORTH CUSTOMER'S SOLE REMEDIES AND PROVIDER'S SOLE LIABILITY AND OBLIGATION FOR ANY ACTUAL, THREATENED OR ALLEGED CLAIMS THAT THIS AGREEMENT OR ANY SUBJECT MATTER HEREOF (INCLUDING THE SERVICES AND PROVIDER MATERIALS) INFRINGES, MISAPPROPRIATES OR OTHERWISE VIOLATES ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHT.

15. Limitations of Liability.

15.1. EXCLUSION OF DAMAGES. EXCEPT AS OTHERWISE PROVIDED IN SECTION 15.3 HERETO, IN NO EVENT WILL PROVIDER OR ANY OF ITS LICENSORS, SERVICE PROVIDERS OR SUPPLIERS BE LIABLE UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ITS SUBJECT MATTER UNDER ANY LEGAL OR EQUITABLE THEORY, INCLUDING BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY AND OTHERWISE, FOR ANY: (a) LOSS OF PRODUCTION, USE, BUSINESS, REVENUE OR PROFIT OR DIMINUTION IN VALUE; (b) IMPAIRMENT, INABILITY TO USE OR LOSS, INTERRUPTION OR DELAY OF THE SERVICES, (c) LOSS, DAMAGE, CORRUPTION OR RECOVERY OF DATA, OR BREACH OF DATA OR SYSTEM SECURITY, OR (d) CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL, ENHANCED OR PUNITIVE DAMAGES, REGARDLESS OF WHETHER SUCH PERSONS WERE ADVISED OF THE POSSIBILITY OF SUCH LOSSES OR DAMAGES OR SUCH LOSSES OR DAMAGES WERE OTHERWISE FORESEEABLE, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER REMEDY OF ITS ESSENTIAL PURPOSE.

15.2. CAP ON MONETARY LIABILITY. EXCEPT AS OTHERWISE PROVIDED IN SECTION 15.3 HERETO, IN NO EVENT WILL THE AGGREGATE LIABILITY OF PROVIDER AND ITS LICENSORS, SERVICE PROVIDERS AND SUPPLIERS UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ITS SUBJECT MATTER, UNDER ANY LEGAL OR EQUITABLE THEORY, INCLUDING BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY AND OTHERWISE, EXCEED THE FEES PAID OR PAYABLE UNDER THIS AGREEMENT. THE FOREGOING LIMITATION APPLIES NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER REMEDY OF ITS ESSENTIAL PURPOSE.

15.3. Exceptions. The exclusions and limitations in Sections 15.1 and 15.2 hereto do not apply to Provider's obligations under Section 14 hereto (Indemnification) or liability for Provider's gross negligence or willful misconduct.

16. Force Majeure.

16.1. No Breach or Default. In no event will Provider be liable or responsible to the other party, or be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement, when and to the extent such failure or delay is caused by any circumstances beyond Provider's reasonable control (a "**Force Majeure Event**"), including acts of God, flood, fire, earthquake or explosion, war, terrorism, invasion, riot or other civil unrest, embargoes or blockades in effect on or after the date of this Agreement, national or regional emergency, strikes, labor stoppages or slowdowns or other industrial disturbances,

passage of Law or any action taken by a governmental or public authority, including imposing an embargo, export or import restriction, quota or other restriction or prohibition or any complete or partial government shutdown, or national or regional shortage of adequate power or telecommunications or transportation. Either party may terminate this Agreement if a Force Majeure Event continues substantially uninterrupted for a period of thirty (30) calendar days or more.

16.2. Affected Party Obligations. In the event of any failure or delay caused by a Force Majeure Event, Provider shall give prompt written notice to Customer stating the period of time the occurrence is expected to continue and use commercially reasonable efforts to end the failure or delay and minimize the effects of such Force Majeure Event.

17. Miscellaneous.

17.1. Further Assurances. Upon a party's reasonable request, the other party shall, at the requesting party's sole cost and expense, execute and deliver all such documents and instruments, and take all such further actions, necessary to give full effect to this Agreement.

17.2. Relationship of the Parties. The relationship between the parties is that of independent contractors. Nothing contained in this Agreement shall be construed as creating any agency, partnership, joint venture or other form of joint enterprise, employment or fiduciary relationship between the parties, and neither party shall have authority to contract for or bind the other party in any manner whatsoever.

17.3. Public Announcements. Neither party shall issue or release any announcement, statement, press release or other publicity or marketing materials relating to this Agreement or otherwise use the other party's trademarks, service marks, trade names, logos, domain names or other indicia of source, affiliation or sponsorship, in each case, without the prior written consent of the other party.

17.4. Notices. All notices, requests, consents, claims, demands, waivers and other communications under this Agreement have binding legal effect only if in writing and addressed to a party as follows (or to such other address or such other person that such party may designate from time to time in accordance with this Section 17.4):

If to Provider:

MICHAEL BAKER INTERNATIONAL, INC.

Address: _____

E-mail: _____

Attention: _____

If to Customer:

Address: _____

E-mail: _____

Attention: _____

Notices sent in accordance with this Section 17.4 will be deemed effectively given: (a) when received, if delivered by hand, with signed confirmation of receipt; (b) when received, if sent by a nationally recognized overnight courier, signature required; (c) when sent, if by facsimile or e-

mail, in each case, with confirmation of transmission), if sent during the addressee's normal business hours, and on the next business day, if sent after the addressee's normal business hours; and (d) on the third (3rd) day after the date mailed by certified or registered mail, return receipt requested, postage prepaid.

- 17.5. Interpretation. The parties intend this Agreement to be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting an instrument or causing any instrument to be drafted. The exhibits, schedules, attachments and appendices referred to herein are an integral part of this Agreement to the same extent as if they were set forth verbatim herein.
- 17.6. Headings. The headings in this Agreement are for reference only and do not affect the interpretation of this Agreement.
- 17.7. Entire Agreement. This Agreement and the Attachments and Exhibits attached hereto and incorporated herein constitute the entire, fully integrated agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous verbal or written agreements between the Parties with respect thereto, excepting any past or contemporaneous written or verbal agreements expressly and clearly incorporated by reference within the four corners of this Agreement.
- 17.8. Assignment. Customer shall not assign or otherwise transfer any of its rights, or delegate or otherwise transfer any of its obligations or performance, under this Agreement, to any other party without the prior written consent of Provider. The identity of the person or the entity, if not an individual, who or which shall be the owner or holder of the rights granted under this Agreement is very important to the CUSTOMER. Therefore, the PROVIDER shall not, without prior written consent of the CUSTOMER, sell, pledge, transfer or otherwise encumber this Agreement, or the rights granted therein, to any third party. Assignment, pledging, sale, transferring, or encumbering of any interest in or under this Agreement or the rights thereunder, to anyone other than the Customer, without the prior written consent of the Customer, shall be grounds for immediate termination of this Agreement. All terms and conditions of this Agreement shall extend to and be binding on any approved purchaser, assignee, or other successor in interest.
- 17.9. No Third-party Beneficiaries. This Agreement is for the sole benefit of the parties hereto and their respective permitted successors and permitted assigns and nothing herein, express or implied, is intended to or shall confer upon any other Person any legal or equitable right, benefit or remedy of any nature whatsoever under or because of this Agreement.
- 17.10. Amendment and Modification; Waiver. No amendment to or modification of this Agreement is effective unless it is in writing and signed by an authorized representative of each party. No waiver by any party of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. Except as otherwise set forth in this Agreement, no failure to exercise, or delay in exercising, any rights, remedy, power or privilege arising from this Agreement shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power or privilege.

- 17.11. Severability. If any term or provision of this Agreement is invalid, illegal or unenforceable in any jurisdiction, such invalidity, illegality or unenforceability shall not affect any other term or provision of this Agreement or invalidate or render unenforceable such term or provision in any other jurisdiction. Upon such determination that any term or other provision is invalid, illegal or unenforceable, the parties hereto shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in a mutually acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the greatest extent possible.
- 17.12. Surviving Terms. The provisions set forth in the following sections shall survive any expiration or termination of this Agreement: Section 1 and any other definitions included throughout this Agreement, and Sections 3.3, 9, 10, 11, 12.4, 13-15, 16 and 17.
- 17.13. Governing Law; Submission to Jurisdiction. This Agreement is governed by and construed in accordance with the internal laws of the State of Pennsylvania without giving effect to any choice or conflict of law provision or rule that would require or permit the application of the laws of any jurisdiction other than those of the State of Pennsylvania, except as otherwise mutually agreed upon between the parties in writing, in which case the laws of the State of _____ may apply. Any legal suit, action or proceeding arising out of or related to this Agreement or the licenses granted hereunder shall be instituted exclusively in the federal courts of the United States or the courts of the mutually agreed upon state in each case, and each party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action or proceeding. Service of process, summons, notice or other document by mail to such party's address set forth herein shall be effective service of process for any suit, action or other proceeding brought in any such court.
- 17.14. Equitable Relief. Each party acknowledges and agrees that a breach or threatened breach by such party of any of its obligations under Section 11, or in the case of Customer, Sections 3.3, 4.3, or 8.2, would cause the other party irreparable harm for which monetary damages would not be an adequate remedy and agrees that, in the event of such breach or threatened breach, the other party will be entitled to equitable relief, including a restraining order, an injunction, specific performance and any other relief that may be available from any court, without any requirement to post a bond or other security, or to prove actual damages or that monetary damages are not an adequate remedy. Such remedies are not exclusive and are in addition to all other remedies that may be available at law, in equity or otherwise.
- 17.15. Counterparts. This Agreement may be executed in counterparts, each of which is deemed an original, but all of which together are deemed to be one and the same agreement. A signed copy of this Agreement delivered by facsimile, e-mail or other means of electronic transmission is deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Software as a Service Agreement as of the date first above written.

MICHAEL BAKER INTERNATIONAL, INC.

By: _____

Name: _____

Title: _____

_____, a political subdivision of
the State of _____

By: _____

Name: _____

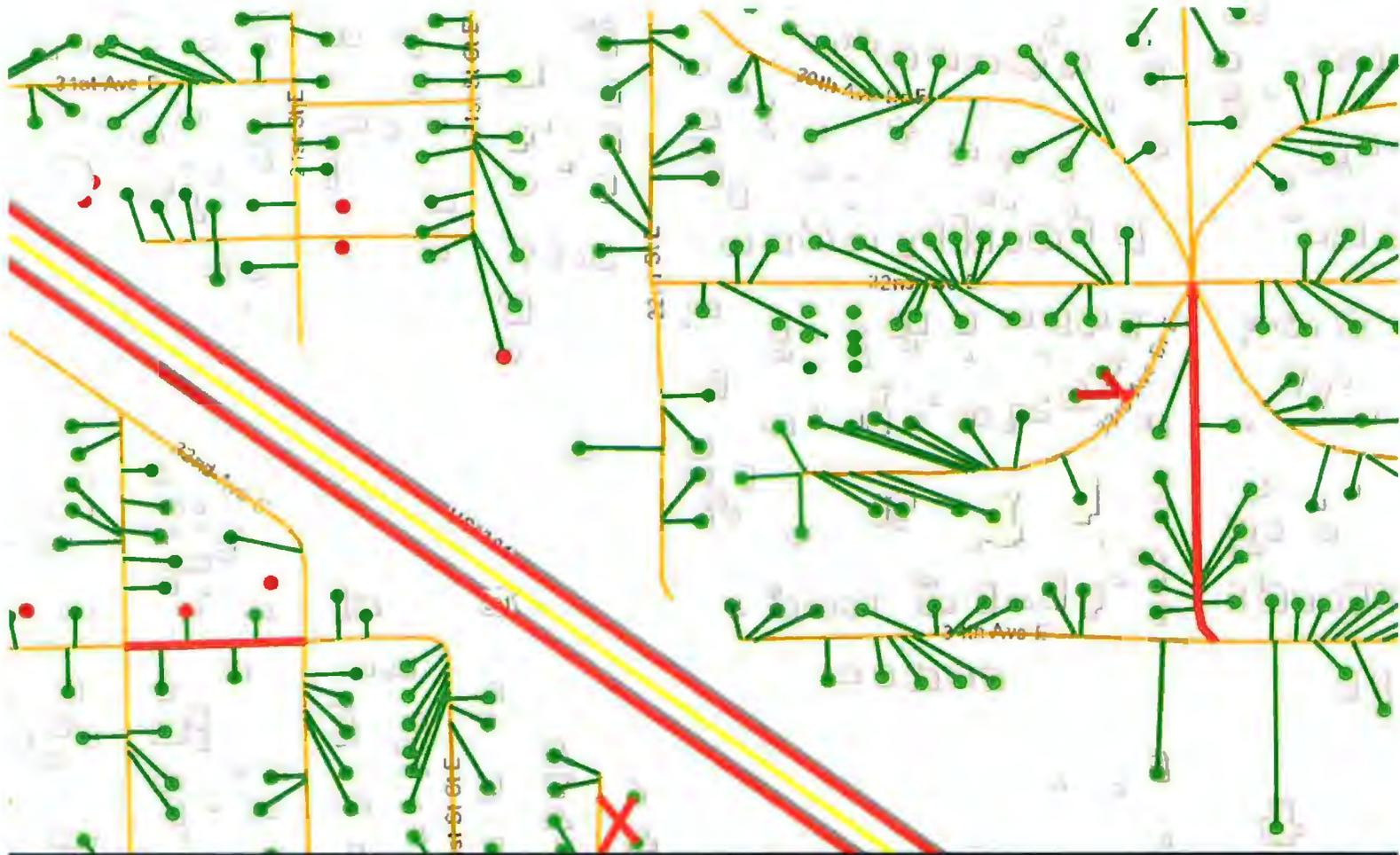
Title: _____

Schedule A

MILESTONE PAYMENT SCHEDULE

Schedule B

PROJECT MANAGERS & POINTS OF CONTACT



APPENDIX V - PROJECT DESCRIPTION AND SCOPE OF WORK

As per the RFP page 25 - 29 below is a copy of the section under Project Description and Scope of Work. Our Technical Approach for the scope of work is provided in that section.

V. PROJECT DESCRIPTION AND SCOPE OF WORK

The bidder should provide the following information in response to this RFP

A. PROJECT OVERVIEW

The Commission is seeking a Contractor to provide Quality Assurance/Quality Control (QA/QC) services with respect to Geographic Information Systems (GIS) datasets in order to verify that GIS data used by Public Safety Answering Points (PSAPs) in Nebraska complies with the National Emergency Number Association (NENA) NG9-1-1 data model.

As more fully described below, the Contractor's role will be to analyze GIS data uploaded by local agencies in order to confirm compliance with Nebraska Information Technology Council (NITC) and NENA standards for use in NG9-1-1 applications.

B. PROJECT ENVIRONMENT

The Commission is the statewide implementation and coordinating authority for 911 service in the State of Nebraska, with the statutory responsibility to plan, implement, coordinate, manage, maintain, and provide funding assistance for a cost-efficient 911 service system pursuant to the Nebraska 911 Service System Act. Local governing bodies are responsible for the dispatch and provision of emergency services within their respective jurisdictions. However, the Commission provides funding and other assistance to PSAPs across the state.

Some Nebraska PSAPs serve a single city or county, while others serve multiple counties or parts of counties. Some PSAPs are governed by local boards, while others are operated by local law enforcement. Some PSAPs operate independently, while others are organized into cooperative regions to share resources and provide mutual back-up. Currently, the local governing bodies that operate the PSAPs throughout the State are responsible to maintain GIS data for each PSAP at the local level. Although a few Nebraska PSAPs use in-house personnel to maintain GIS data, most PSAPs contract for 911-related GIS services from approved "vendors of choice" selected through an earlier RFP process. Nebraska PSAPs are responsible for uploading copies of their most recent GIS datasets on a monthly basis to an online GIS repository maintained by the Commission. Presently, there is no single authoritative statewide 9-1-1 GIS dataset.

To prepare for next generation 911, the Commission is undertaking a quality assurance/quality control project to confirm that the GIS data used by Nebraska PSAPs comply with NITC and NENA standards and is appropriate to support the spatial routing of 911 calls in the NG9-1-1 environment.

C. PROJECT REQUIREMENTS

The Contractor will be required to maintain a secure web portal through which Nebraska PSAPs or their representatives will upload GIS data to be analyzed by the Contractor. Access to the portal must be limited to authorized users via login and password or other similar secure authentication. The portal must require each person authorized to upload GIS datasets to identify the applicable jurisdiction, geographic area and type of dataset before a file will be accepted for uploading.

The portal must be capable of accepting GIS data in any ESRI format. The portal should automatically reject GIS datasets that are incomplete or defective and immediately notify the local agency if an attempted upload was unsuccessful. The portal should return, prior to QA/QC review, GIS datasets having any of the following characteristics, and provide notice to the uploading party to correct any such errors:

1. No data in the file
2. Incompatible dataset due to improper or missing field names
3. Lack of defining information, e.g., county name, dataset
4. Improper file format
5. MSAG not included with Street Centerline file
6. Missing or improperly formatted FDGC metadata
7. Incorrect data naming convention

Datasets that do not have any of the above-referenced errors should automatically be accepted for QA/QC review by the Contractor's secure portal.

D. SCOPE OF WORK

The Contractor will analyze each GIS dataset uploaded to the portal to identify any errors and discrepancies based on NITC and NENA standards. After review, the Contractor will return datasets that are shown to have errors and/or discrepancies to the uploading agency, along with a discrepancy report listing the items that need to be corrected in order to achieve compliance with the standards. Each such discrepancy report must be accompanied by a shapefile of areas where the topology is incorrect. The local PSAP or its representatives will be responsible to correct all the items listed in the discrepancy report. After correction, the local PSAP or its representative will be expected to resubmit the revised GIS dataset via the Contractor's dedicated portal for further QA/QC review.

GIS data that is confirmed by the Contractor to meet all required standards will be accepted for provisioning to the NG9-1-1 environment and uploaded by the Contractor to the Commission's GIS repository. The Contractor will also notify the Commission's GIS Specialist and the PSAP responsible for uploading the file that the dataset meets all required standards and is ready for use.

E. TECHNICAL REQUIREMENTS

The specific NITC and NENA standards that apply to this project are the following:

1. NITC Standards & Guidelines
 - a. 3-201. Geospatial Metadata Standard
 - b. 3-202. Land Record Information and Mapping Standard
 - c. 3-205. Street Centerline Standard
 - d. 3-206. Address Standard
2. NENA Standards
 - a. NENA 02-014
 - b. NENA 71-501
 - c. NENA REQ-002.1-2016
 - d. NENA STA-005.1.1-2017
 - e. NENA STA-006 NG9-1-1 Data Model

In the event of any conflict between NITC standards and NENA standards, NITC standards shall control.

3. The GIS datasets to be reviewed by Contractor after being uploaded by to the secure portal will consist of the following GIS layers:
 - a. Street Centerlines (with accompanying MSAG);
 - b. Street/Structure address points (with accompanying ALI);
 - c. PSAP boundaries;
 - d. Emergency service zones (police, fire, EMS); and,
 - e. Political boundaries (used to define the provisioning of GIS data).
4. The Contractor shall review Street Centerline Layer data to identify, at a minimum, the following items:
 - a. Comparison of MSAG vs. Street Centerline segments to minimum 98% match;
 - b. Comparison of ALI to Street Centerline to minimum 98% match with road name;
 - c. Overlapping address ranges between jurisdictions;
 - i. Region free of overlaps: 98% unique ranges;
 - d. Misalignments;
 - i. Overlaps
 - ii. Gaps
 - iii. Overhangs
 - iv. Duplicate features
 - v. Incorrectly named road segments
 - e. Road segments running the wrong direction;
 - f. Road segments not broken at intersections and/or ESZ boundaries;
 - g. Road name consistency;
 - h. Misaligned road segments at county and jurisdictional boundaries;
 - i. Required metadata; and,
 - j. General compliance with applicable NITC and NENA standards.

5. The Contractor shall review jurisdictional boundary Polygon Layers to identify, at a minimum, the following items:

- a. Redundancy, misalignment and others errors in topology;
 - i. Overlaps
 - ii. Gaps
 - b. Duplication of features between PSAPs;
 - i. ESZ numbers match
 - ii. ESZ numbers do not match
 - c. County boundaries alignment to neighboring counties;
 - d. Correct boundaries (police, fire, EMS) included in the ESZ boundary;
 - e. Fields within each layer conform to NITC and NENA standards for names, content, and format;
 - f. Required metadata; and,
 - g. General compliance with applicable NITC and NENA standards.
6. The Contractor shall review Address Point Layers to identify, at a minimum, the following items:
- a. Placement of Address Points on Street Centerline address ranges;
 - b. Comparison of ALI to Address Points to minimum 98 percent match to full address;
 - c. Discrepancies between the telephone number (TN) list and site/structure address point layer;
 - d. Multi-address structure address formats;
 - e. Fields within each layer conform to NITC and NENA standards for names, content, and format;
 - f. Required metadata; and,
 - g. General compliance with applicable NITC and NENA standards.

In addition to the foregoing, the Contractor will also review each uploaded dataset to determine compatibility with GIS data provided by adjoining counties. Adjoining county data will be reviewed to identify any overlaps and gaps, Street Centerline alignments, stacked roads and inconsistent road names. Resolution of inconsistencies in adjoining counties' datasets will be the responsibility of the counties involved.

Please describe how your company will meet all of the above requirements.

Bidder Response:

F. CONTRACTOR REQUIREMENTS

1. **QA / QC PROJECT METHODOLOGY**
 Contractor shall deliver a QA/QC Project Plan proposing Contractor's methodology for accomplishing the Project and satisfying all requirements in this RFP.

Bidder Response

2. **DETAILED ACTION PLAN**
 Please provide a detailed action plan that includes specifics on how implementation will be accomplished.

Bidder Response:

3. **CONTRACTOR REPORTS TO PSAPs**
- Upon completion of its review of any GIS dataset uploaded by a PSAP or its representative, the Contractor will create and deliver a report in electronic format to both the PSAP responsible for uploading the file and the Commission's GIS Specialist.

Please submit a copy of your proposed form of the report with your response.

4. **DISCREPANCY REPORT**
- In the case of an uploaded GIS dataset that contains errors or discrepancies, the Contractor's report shall be a Discrepancy Report in tabular format, organized by unique object identifiers, listing all errors, discrepancies and other items of note that require correction in order to achieve compliance with applicable NITC and NENA standards. Each Discrepancy Report shall also be accompanied by a shapefile of any areas where the topology in the related dataset is incorrect. In addition, the Discrepancy

Report for each dataset that includes a Street Centerline layer shall state the match rate percentage between the Street Centerline layer and the MSAG.

Please submit a copy of your proposed form of the report with your response.

5. COMPLIANCE REPORT

In the case of an uploaded GIS dataset that is determined by the Contractor to be in compliance with all applicable NITC and NENA standards, the Contractor shall deliver to the related PSAP a report stating that the dataset is ready for use and has been accepted for inclusion in the Commission's GIS Repository, along with any additional information the Contractor deems appropriate. In addition, the Compliance Report for each accepted dataset that includes a Street Centerline layer shall state the match rate percentage between (i) the Street Centerline layer and the MSAG and (ii) the Address Points layer and the ALI.

Please submit a copy of your proposed form of the report with your response.

6. CONTRACTOR REPORTS TO COMMISSION

The Contractor shall provide the Commission with a copy of each Discrepancy Report, Compliance Report, and a monthly summary of other communications the Contractor delivers to any PSAP. In addition, The Contractor will be required to deliver periodic reports to the Commission's GIS Specialist on a monthly basis, listing by jurisdiction each GIS dataset reviewed by the Contractor in the prior period, including the results of each review. Each periodic report shall also include a list of all GIS datasets currently undergoing QA/QC review, organized by PSAP. In addition, each periodic report shall also include the completion date of the most recent QA/QC review conducted for each PSAP in Nebraska, along with a list of each PSAP, if any, for which no GIS dataset was submitted to the Contractor for review. The Commission must also be notified in the event any PSAP fails to make necessary changes within thirty (30) days to a GIS dataset that has been rejected for uploading or has been the subject of a Discrepancy Report.

Please submit a copy of your report with your response.

7. PERIODIC REMINDERS TO UPLOAD GIS DATA

Local agencies will be expected to upload revised GIS datasets to the secure portal for review on at least a monthly basis. The Contractor will be required to send reminder notices via e-mail to each PSAP that has gone 85 or more days without uploading a new or revised dataset for QA/QC review. Each such reminder must include a hyperlink to the Contractor's secure portal, along with the dates and a general description of the PSAP's previous uploads to the portal.

8. CUSTOMER SERVICE RESPONSIBILITIES

The Contractor must support various methods by which local agencies and the Commission can raise questions and concerns or access information about the Contractor's QA/QC process. At a minimum, such methods must include a dedicated customer service telephone number and e-mail address. The Contractor must also maintain a User Guide and Frequently Asked Questions page dedicated to the GIS QA/QC portal on its website.

The Contractor must also provide a designated person for the Commission to contact in the event of system problems or operational questions from Commission staff. In addition, the Contractor must maintain a responsive trouble ticket system designed to direct system issues to the person who can most efficiently obtain a resolution.

a. Please describe how you will meet the requirements for customer service.

Bidder Response:

Training must also be made available to local agencies and designated Commission personnel on the Contractor's QA/QC process.

- b. Please describe how you will approach and accomplish training local agencies and Commission personnel.**

Bidder Response:

G. DELIVERABLES

Please see Cost Proposal Template.