PURCHASE AGREEMENT

THIS PURCHASE AGREEMENT ("Agreement") is made between the CITY AND COUNTY OF DENVER, a municipal corporation of the State of Colorado (the "City") and CARTEGRAPH SYSTEMS, Inc., an Iowa corporation, registered to do business in Colorado, whose address is 3600 Digital Drive, Dubuque, IA 52003 ("Contractor"), jointly "the parties." The terms of this Agreement are supplemented by the terms contained in Exhibit X.

IT IS HEREBY AGREED BETWEEN THE PARTIES AS FOLLOWS:

- **DEFINITIONS**. Whenever used herein, any schedules, exhibits, or addenda to this Agreement, the following terms shall have the meanings assigned below. Other capitalized terms used in this Agreement are defined in the context in which they are used.
 - 1.1 "Agreement" means this Cloud Computing Services Agreement between City and Contractor, inclusive of all schedules, exhibits, attachments, addenda and other documents incorporated by reference between the City and Contractor, Contract Number 201733328.
 - 1.2 "*Brand Features*" means the trade names, trademarks, service marks, logos, domain names, and other distinctive brand features of each party, respectively, as secured by such party from time to time.
 - 1.3 "City Data" includes credentials issued to City by Contractor and all records relating to City's use of Contractor Services and administration of End User accounts, including any Protected Information of City personnel that does not otherwise constitute Protected Information of an End User.
 - in a confidential Information" means any Data that a disclosing party treats (1) in a confidential manner or that is (2) marked "Confidential Information" or is considered "Protected Information" prior to disclosure to the other party. Confidential Information does not include information which: (a) is public or becomes public through no breach of the confidentiality obligations herein; (b) is disclosed by the party that has received Confidential Information (the "Receiving Party") with the prior written approval of the other party; (c) was known by the Receiving Party at the time of disclosure; (d) was developed independently by the Receiving Party without use of the Confidential Information; (e) becomes known to the Receiving Party from a source other than the disclosing party through lawful means; (f) is disclosed by the disclosing party to others without confidentiality obligations; or (g) is required by law to be disclosed.
 - 1.5 "Data" means all information, whether in oral or written (including electronic) form, created by or in any way originating with City and End Users, and all information that is the output of any computer processing, or other electronic manipulation, of any information that was created by or in any way originating

- with City and End Users, in the course of using and configuring the Services provided under this Agreement, and includes City Data, End User Data, and Protected Information.
- 1.6 "Data Compromise" means any actual or reasonably suspected unauthorized access to or acquisition of computerized Data that compromises the security, confidentiality, or integrity of the Data, or the ability of City to access the Data.
- "Documentation" means, collectively: (a) all materials published or otherwise made available to City by Contractor that relate to the functional, operational and/or performance capabilities of the Services; (b) all user, operator, system administration, technical, support and other manuals and all other materials published or otherwise made available by Contractor that describe the functional, operational and/or performance capabilities of the Services; (c) any Requests for Information and/or Requests for Proposals (or documents of similar effect) issued by City, and the responses thereto from Contractor, and any document which purports to update or revise any of the foregoing; and (d) the results of any Contractor "Use Cases Presentation", "Proof of Concept" or similar type presentations or tests provided by Contractor to City.
- 1.8 "*Downtime*" means any period of time of any duration that the Services are not made available by Contractor to City for any reason, including scheduled maintenance or Enhancements.
- 1.9 "End User" means the individuals (including, but not limited to employees, authorized agents, students and volunteers of City; Third Party consultants, auditors and other independent contractors performing services for City; any governmental, accrediting or regulatory bodies lawfully requesting or requiring access to any Services; customers of City provided services; and any external users collaborating with City) authorized by City to access and use the Services provided by Contractor under this Agreement.
- 1.10 "End User Data" includes End User account credentials and information, and all records sent, received, or created by or for End Users, including email content, headers, and attachments, and any Protected Information of any End User or Third Party contained therein or in any logs or other records of Contractor reflecting End User's use of Contractor Services.
- 1.11 "Enhancements" means any improvements, modifications, upgrades, updates, fixes, revisions and/or expansions to the Services that Contractor may develop or acquire and incorporate into its standard version of the Services or which the Contractor has elected to make generally available to its customers.
- 1.12 "Insured Contract" means that part of any other contract or agreement pertaining to Contractor's business (including an indemnification of a municipality in connection with work performed for a municipality) under which Contractor assumes the tort liability of another party or pay for "bodily

- injury" or "property damage" to a third-party or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.
- 1.13 "Intellectual Property Rights" includes without limitation all right, title, and interest in and to all (a) Patent and all filed, pending, or potential applications for Patent, including any reissue, reexamination, division, continuation, or continuation-in-part applications throughout the world now or hereafter filed; (b) trade secret rights and equivalent rights arising under the common law, state law, and federal law; (c) copyrights, other literary property or authors rights, whether or not protected by copyright or as a mask work, under common law, state law, and federal law; and (d) proprietary indicia, trademarks, trade names, symbols, logos, and/or brand names under common law, state law, and federal law.
- 1.14 "Protected Information" includes but is not limited to personally-identifiable information, student records, protected health information, criminal justice information or individual financial information (collectively, "Protected Information") that is subject to local, state or federal statute, regulatory oversight or industry standard restricting the use and disclosure of such information. These include, but are not limited to: the Colorado Constitution, the Colorado Consumer Protection Act, the Children's Online Privacy Protection Act (COPPA), Health Insurance Portability and Accountability Act (HIPAA), the Family Education Rights and Privacy Act (FERPA), the Payment Card Industry Data Security Standard (PCI DSS), and the Federal Bureau of Information Criminal Justice Information Services (CJIS) Security Policy.
- 1.15 "*Project Manager*" means the individual who shall serve as each party's point of contact with the other party's personnel as provided in this Agreement. The initial Project Managers and their contact information are set forth in the Notices section below and may be changed by a party at any time upon written notice to the other party.
- 1.16 "*RFP Response*" means any proposal submitted by Contractor to City in response to City's Request for Proposal ("RFP").
- 1.17 "Services" means Contractor's computing solutions, provided to City pursuant to this Agreement, that provide the functionality and/or produce the results described in the Documentation, including without limitation all Enhancements thereto and all interfaces.
- 1.18 "*Third Party*" means persons, corporations and entities other than Contractor, City or any of their employees, contractors or agents.
- 1.19 "Third Party Host" means that the servers where the Contractor's software resides is a physical location which is not controlled by the Contractor,

sometimes called "managed hosting", for example, Amazon Web Service. In the event that the Service is provided through a Third-Party Host, Contractor shall not be relieved of its obligations under this Agreement.

2. RIGHTS AND LICENSE IN AND TO DATA

- 2.1 The parties agree that as between them, all rights, in and to Data shall remain the exclusive property of City, and Contractor has a limited, nonexclusive license to access and use these Data as provided in this Agreement, and Exhibit X, solely for the purpose of performing its obligations hereunder.
- 2.2 This Agreement does not give a party any rights, implied or otherwise, to the other's Data, content, or intellectual property, except as expressly stated in the Agreement.
- 2.3 City retains the right to use the Services to access and retrieve Data stored on Contractor's Services infrastructure during the term of this Agreement at its sole discretion.

3. <u>DATA PRIVACY</u>

- 3.1 Contractor will use City Data and End User Data for the purpose of fulfilling its duties under this Agreement, for City's and its End User's benefit, and will only share such Data with or disclose it to any Third Party the prior written consent of City or as otherwise required by law. By way of illustration and not of limitation, Contractor will not use such Data for Contractor's own benefit and, in particular, will not engage in "data mining" of Data or communications, whether through automated or human means, except as specifically and expressly required by law or authorized in writing by City.
- 3.2 Contractor will have the right to collect and analyze non-personal information (data or information that does not identify an entity or natural person as the source thereof) resulting from City's access to and use of the Services. To the extent any such non-personal information is collected or generated by Contractor, the data and information may be used by Contractor for any lawful business purpose, provided that the data and information is used only in an aggregated form, without directly identifying City, or any other User, as the source thereof.
- 3.3 Contractor will provide access to Data only to those Contractor employees, contractors and subcontractors ("Contractor Staff") who need to access the Data to fulfill Contractor's obligations under this Agreement. Contractor will ensure that, prior to being granted access to the Data, Contractor Staff who perform work under this Agreement have all undergone and passed criminal background screenings;; and possess all qualifications appropriate to the nature of the employees' duties and the sensitivity of the Data they will be handling.

4. <u>DATA SECURITY AND INTEGRITY</u>

- 4.1 The following requirements of Sections 4, 5, and 6 are applicable to the Contractor and the Service to the extent the Contractor maintains control over the Service and the software and the requirements are not in violation of the agreement between the Contractor and the Third-Party Host.
- 4.2 All facilities used to store and process Data will implement and maintain administrative, physical, technical, and procedural safeguards and best practices at a level sufficient to provide the requested Service availability and to secure Data from unauthorized access, destruction, use, modification, or disclosure. Such measures include, but not limited to, the Telecommunications Industry Association (TIA) Telecommunications Infrastructure Standard for Data Centers (TIA-942); the Family Education Rights and Privacy Act (FERPA); the Payment Card Industry Data Security Standard; or the Federal Bureau of Investigation Criminal Justice Information Services (CJIS) Security Policy.
- 4.3 Contractor shall at all times use industry-standard and up-to-date security tools, technologies and procedures including, but not limited to anti-virus and anti-malware protections and intrusion detection and reporting in providing Services under this Agreement.
- 4.4 During the term of this Agreement, Contractor or Third-Party Host, will make available the following at least once per year, and immediately after any actual or reasonably suspected Data Compromise:
 - 4.4.1 A SSAE 16/SOC 2 or other mutually agreed upon audit of Contractor's security policies, procedures and controls.

5. RESPONSE TO LEGAL ORDERS, DEMANDS OR REQUESTS FOR DATA

- 5.1 Except as otherwise expressly prohibited by law, Contractor will:
 - 5.1.1 If required by a court of competent jurisdiction or an administrative body to disclose Data, Contractor will notify City in writing immediately upon receiving notice of such requirement and prior to any such disclosure;
 - 5.1.2 Consult with City regarding its response;
 - 5.1.3 Cooperate with City's reasonable requests in connection with efforts by City to intervene and quash or modify the legal order, demand or request; and
 - 5.1.4 Upon City's request, provide City with a copy of its response.

5.2 If City receives a subpoena, warrant, or other legal order, demand or request seeking Data maintained by Contractor, City will promptly provide a copy to Contractor. During the term, Contractor will supply City with copies of Data required for City to respond within forty-eight (48) hours after receipt of copy from City, and will cooperate with City's reasonable requests in connection with its response.

6. DATA COMPROMISE RESPONSE

- 6.1 Contractor shall report, either orally or in writing, to City any Data Compromise involving Data, or circumstances that could have resulted in unauthorized access to or disclosure or use of Data, not authorized by this Agreement or in writing by City, including any reasonable belief that an unauthorized individual has accessed Data. Contractor shall make the report to City immediately upon discovery of the unauthorized disclosure, but in no event more than forty-eight (48) hours after Contractor reasonably believes there has been such unauthorized use or disclosure. Oral reports by Contractor regarding Data Compromises will be reduced to writing and supplied to City as soon as reasonably practicable, but in no event more than forty-eight (48) hours after oral report.
- 6.2 Immediately upon becoming aware of any such Data Compromise, Contractor shall fully investigate the circumstances, extent and causes of the Data Compromise, and report the results to City and continue to keep City informed on a daily basis of the progress of its investigation until the issue has been effectively resolved.
- 6.3 Contractor's report discussed herein shall identify: (i) the nature of the unauthorized use or disclosure, (ii) the Data used or disclosed, (iii) who made the unauthorized use or received the unauthorized disclosure (if known), (iv) what Contractor has done or shall do to mitigate any deleterious effect of the unauthorized use or disclosure, and (v) what corrective action Contractor has taken or shall take to prevent future similar unauthorized use or disclosure.
- 6.4 Within five (5) calendar days of the date Contractor becomes aware of any such Data Compromise, Contractor shall have completed implementation of corrective actions to remedy the Data Compromise, restore City access to the Services as directed by City, and prevent further similar unauthorized use or disclosure.
- 6.5 Contractor, at its expense, shall cooperate fully with City's investigation of and response to any such Data Compromise incident.
- 6.6 Except as otherwise required by law, Contractor will not disclose or otherwise provide notice of the incident directly to any person, regulatory agencies, or other entities, without prior written permission from City.

6.7 Notwithstanding any other provision of this Agreement, and in addition to any other remedies available to City under law or equity, Contractor will promptly reimburse City in full for all reasonable out of pocket costs incurred by City in any remediation or litigation resulting from any such Data Compromise.

7. DATA RETENTION AND DISPOSAL

- 7.1 Contractor will retain Data in an End User's account during the term of this Agreement, including attachments, until the earlier of when the End User deletes them or fourteen (14) days following the term of this Agreement (the "Data Retention Period"). Following the Data Retention Period, Customer has the right to delete the Data in accordance with Customer's usual records retention policies.
- 7.2 Using appropriate and reliable storage media, during the term of this agreement Contractor will regularly backup Data and retain such backup copies per Section 2 Exhibit X.
- 7.3 During the term of this Agreement and at the City's election, Contractor will either securely destroy or transmit (for an agreed upon fee) to City repository any backup copies of City and/or End User Data. Contractor will supply City a certificate indicating the records disposed of, the date disposed of, and the method of disposition used.
- 7.4 Contractor will retain logs associated with End User activity during the Term of this Agreement and forty-four days (44) after its termination. For an agreed upon price, Contractor will retain logs for an agreed upon duration.
- 7.5 During the term of this Agreement and for an agreed upon fee, Contractor will immediately preserve the state of the Data at the time of the request (which is limited to a 14 day backup of the Data) and place a "hold" on Data destruction or disposal under its usual records retention policies of records that include Data, in response to an oral or written request from City indicating that those records may be relevant to litigation that City reasonably anticipates. Oral requests by City for a hold on record destruction will be reduced to writing and supplied to Contractor for its records as soon as reasonably practicable under the circumstances. City will promptly coordinate with Contractor regarding the preservation and disposition of these records. Contractor shall continue to preserve the records until further notice by City.

8. DATA TRANSFER UPON TERMINATION OR EXPIRATION

8.1 Upon termination or expiration of this Agreement, Contractor will ensure that all Data are securely transferred to City, or a Third Party designated by City, within thirty (30) calendar days. Contractor will ensure that such migration uses facilities and methods that are compatible with industry standards such as

- CSV files or Microsoft SQL format, and that City will have access to Data during the transition.
- 8.2 Contractor will provide City with no less than ninety (90) calendar days' notice of impending cessation of its business or that of any Contractor subcontractor and any contingency plans in the event of notice of such cessation. This includes immediate transfer of any previously escrowed assets and Data and providing City confirmation that Contractor has removed or destroyed any City-owned assets and Data held by Contractor.
- 8.3 Along with the notice described above, for an agreed upon fee Contractor will provide a fully documented service description and perform and document a gap analysis by examining any differences between its Services and those to be provided by its successor.
- 8.4 For an agreed upon fee, Contractor shall implement its contingency and/or exit plans and take all necessary actions to provide for an effective and efficient transition of service with minimal disruption to City.
- 9. <u>INSTITUTIONAL BRANDING</u>. Contractor Services will provide reasonable and appropriate opportunities for City branding of Contractor Services. Each party shall have the right to use the other party's Brand Features only in connection with performing the functions provided in this Agreement and as specified in the attached Plan. Any use of a party's Brand Features will inure to the benefit of the party holding Intellectual Property Rights in and to those features. Contractor may not advertise that City is a client, list City as a reference or otherwise use City's name, logos, trademarks, or service marks without prior written permission obtained from City personnel authorized to permit City brand use.
- 10. <u>COMPLIANCE WITH APPLICABLE LAWS AND CITY POLICIES</u>. Contractor will comply with all applicable laws in performing Services under this Agreement. Any Contractor personnel visiting City's facilities will comply with all applicable City policies regarding access to, use of, and conduct within such facilities. City will provide copies of such policies to Contractor upon request.
- **11.** WARRANTIES, REPRESENTATIONS AND COVENANTS SEE SECTION 11 OF EXHIBIT X and ATTACHMENT 1.
- **12. CONFIDENTIALITY-** SEE EXHIBIT X
- **PROTECTED INFORMATION**. During the course of this Agreement, should Contractor come into possession of any Protected Information, Contractor may not disclose this information to any Third Party under any circumstances except as required by law.
- 14. SOFTWARE AS A SERVICE, SUPPORT AND SERVICES TO BE

PERFORMED:

- 14.1 Contractor, under the general direction of, and in coordination with, the City's Executive Director of Public Works or other designated supervisory personnel (the "Manager") agrees to provide the Services listed on Exhibit X.
- 14.2 As the Manager directs, the Contractor shall diligently undertake, perform, and complete all of the technology related services and produce all the deliverables set forth on Exhibit X.
- 14.3 The Contractor is ready, willing, and able to provide the technology related services and the Services required by this Agreement.

15. GRANT OF LICENSE; RESTRICTIONS: SEE EXHIBIT X

16. <u>DELIVERY AND ACCEPTANCE:</u>

- 16.1 Upon set up of the Service, the City will test and evaluate same to ensure that it conforms, in the City's reasonable judgment, to the specifications outlined in the SOW or the Documentation. If the Service does not conform, the City will notify Contractor in writing within sixty (60) days of contract execution. Contractor will, at its expense, repair or replace the nonconforming product within fifteen (15) days after receipt of the City's notice of deficiency. The foregoing procedure will be repeated until the City accepts or finally rejects the product, in whole or part, in its sole discretion. In the event that the Service does not perform to the City's satisfaction, the City reserves the right to repudiate acceptance. In the event that the City finally rejects the Service, or repudiates acceptance of it, Contractor will refund to the City all fees paid, if any, by the City with respect to the Service.
- 16.2 If the City is not satisfied with the Contractor's performance of the technology related services described in the SOW, the City will so notify Contractor within sixty (60) days of contract execution. Contractor will, at its own expense, reperform the service within fifteen (15) days after receipt of City's notice of deficiency. The foregoing procedure will be repeated until City accepts or finally rejects the technology related service in its sole discretion. In the event that City finally rejects any technology related service, Contractor will refund to City all fees paid by City with respect to such technology related service.
- **17. TERM**: The term of the Agreement is from June 1, 2017 through May 31, 2020.

18. <u>COMPENSATION AND PAYMENT:</u>

18.1 Fee: The fee for the Service and technology related services described in the Investment Summary of Exhibits X (the "Fee"). The Fee shall be paid pursuant to the City's Prompt Payment Ordinance and in accordance with the Payment Milestones in Exhibit X.

- 18.2 Reimbursement Expenses: The fees specified in Exhibit X include all expenses, and no other expenses shall be separately reimbursed hereunder except as may be agreed to by the parties from time to time in writing.
- 18.3 Invoicing: Contractor must submit an invoice which shall include the City contract number, clear identification of the deliverable that has been completed, and other information reasonably requested by the City. Payment on all uncontested amounts shall be made in accordance with the City's Prompt Payment Ordinance.

18.4 Maximum Contract Liability:

- 20.4.1 Notwithstanding any other provision of the Agreement, the City's maximum payment obligation will not exceed **SIX HUNDRED SEVENTY-ONE THOUSAND NINE HUNDRED DOLLARS** (\$671,900.00) (the "Maximum Contract Amount"). The City is not obligated to execute an Agreement or any amendments for any further services, including any services performed by Contractor beyond that specifically described in Exhibit X. Any services performed beyond those in Exhibit X are performed at Contractor's risk and without authorization under the Agreement.
- 20.4.2 The City's payment obligation, whether direct or contingent, extends only to funds appropriated annually by the Denver City Council, paid into the Treasury of the City, and encumbered for the purpose of the Agreement. The City does not by the Agreement irrevocably pledge present cash reserves for payment or performance in future fiscal years. The Agreement does not and is not intended to create a multiple-fiscal year direct or indirect debt or financial obligation of the City.
- **19. STATUS OF CONTRACTOR:** The Contractor is an independent contractor retained to perform professional or technical services for limited periods of time. Neither the Contractor nor any of its employees are employees or officers of the City under Chapter 18 of the Denver Revised Municipal Code, or for any purpose whatsoever.

20. TERMINATION:

- 20.1 The City has the right to terminate the Agreement with cause upon written notice effective immediately, and without cause upon thirty (30) days prior written notice to the Contractor. However, nothing gives the Contractor the right to perform services under the Agreement beyond the time when its services become unsatisfactory to the Manager.
- 20.2 Notwithstanding the preceding paragraph, the City may terminate the Agreement if the Contractor or any of its officers or employees are convicted, plead nolo contendere, enter into a formal agreement in which they admit guilt,

- enter a plea of guilty or otherwise admit culpability to criminal offenses of bribery, kick backs, collusive bidding, bid-rigging, antitrust, fraud, undue influence, theft, racketeering, extortion or any offense of a similar nature in connection with Contractor's business. Termination for the reasons stated in this paragraph is effective upon receipt of notice.
- 20.3 Upon termination of the Agreement, with or without cause, the Contractor shall have no claim against the City by reason of, or arising out of, incidental or relating to termination, except for compensation for work duly requested and satisfactorily performed as described in the Agreement.
- 20.4 Please refer to Exhibit X for Contractor's right to terminate this Agreement.
- 21. **EXAMINATION OF RECORDS:** Any authorized agent of the City, including the City Auditor or his or her representative, has the right to access and the right to examine any pertinent books, documents, papers and records of the Contractor, involving transactions related to the Agreement to the extent retained by Contractor in accordance with its data retention policies until the latter of three (3) years after the final payment under the Agreement or expiration of the applicable statute of limitations.
- **WHEN RIGHTS AND REMEDIES NOT WAIVED:** In no event shall any action by either Party hereunder constitute or be construed to be a waiver by the other Party of any breach of covenant or default which may then exist on the part of the Party alleged to be in breach, and the non-breaching Party's action or inaction when any such breach or default shall exist shall not impair or prejudice any right or remedy available to that Party with respect to such breach or default; and no assent, expressed or implied, to any breach of any one or more covenants, provisions or conditions of the Agreement shall be deemed or taken to be a waiver of any other breach.

23. INSURANCE:

23.1 General Conditions: Contractor agrees to secure, at or before the time of execution of this Agreement, the following insurance covering all operations, goods or services provided pursuant to this Agreement. Contractor shall keep the required insurance coverage in force at all times during the term of the Agreement, or any extension thereof, during any warranty period,. required insurance shall be underwritten by an insurer licensed or authorized to do business in Colorado and rated by A.M. Best Company as "A-"VIII or better. Each policy shall contain a valid provision or endorsement requiring notification to the City in the event any of the required policies is canceled or non-renewed before the expiration date thereof. Such written notice shall be sent to the parties identified in the Notices section of this Agreement. Such notice shall reference the City contract number listed on the signature page of this Agreement. Said notice shall be sent thirty (30) days prior to such cancellation or non-renewal unless due to non-payment of premiums for which notice shall be sent ten (10) days prior. If such written notice is unavailable from the insurer, contractor shall provide written notice of cancellation, nonrenewal and any reduction in coverage to the parties identified in the Notices section by certified mail, return receipt requested within three (3) business days of such notice by its insurer(s) and referencing the City's contract number. If any policy is in excess of a deductible or self-insured retention, the City must be notified by the Contractor. Contractor shall be responsible for the payment of any deductible or self-insured retention. The insurance coverages specified in this Agreement are the minimum requirements, and these requirements do not lessen or limit the liability of the Contractor. The Contractor shall maintain, at its own expense, any additional kinds or amounts of insurance that it may deem necessary to cover its obligations and liabilities under this Agreement.

- 23.2 Proof of Insurance: Contractor shall provide a copy of this Agreement to its insurance agent or broker. Contractor may not commence services or work relating to the Agreement prior to placement of coverages required under this Agreement. Contractor certifies that the certificate of insurance attached as Exhibit B, preferably an ACORD certificate, complies with all insurance requirements of this Agreement. The City requests that the City's contract number be referenced on the Certificate. The City's acceptance of a certificate of insurance or other proof of insurance that does not comply with all insurance requirements set forth in this Agreement shall not act as a waiver of Contractor's breach of this Agreement or of any of the City's rights or remedies under this Agreement. The City's Risk Management Office may require additional proof of insurance, including but not limited to policies and endorsements.
- 23.3 <u>Additional Insureds</u>: For Commercial General Liability, Auto Liability and Excess Liability/Umbrella (if required), Contractor and subcontractor's insurer(s) shall include the City and County of Denver, its elected and appointed officials, employees and volunteers as additional insured..
- 23.4 <u>Waiver of Subrogation</u>: For all coverages required under this Agreement, Contractor's insurer shall waive subrogation rights against the City.
- 23.5 <u>Subcontractors and Subconsultants</u>: All subcontractors and subconsultants (including independent contractors, suppliers or other entities providing goods or services required by this Agreement) shall be subject to all of the requirements herein and shall procure and maintain the same coverages required of the Contractor. Contractor shall include all such subcontractors as additional insured under its policies (with the exception of Workers' Compensation) or shall ensure that all such subcontractors and subconsultants maintain the required coverages. Contractor agrees to provide proof of insurance for all such subcontractors and subconsultants upon request by the City.
- 23.6 <u>Workers' Compensation/Employer's Liability Insurance</u>: Contractor shall maintain the coverage as required by statute for each work location and shall

maintain Employer's Liability insurance with limits of \$100,000 per occurrence for each bodily injury claim, \$100,000 per occurrence for each bodily injury caused by disease claim, and \$500,000 aggregate for all bodily injuries caused by disease claims. Contractor expressly represents to the City, as a material representation upon which the City is relying in entering into this Agreement, that none of the Contractor's officers or employees who may be eligible under any statute or law to reject Workers' Compensation Insurance shall effect such rejection during any part of the term of this Agreement, and that any such rejections previously effected, have been revoked as of the date Contractor executes this Agreement.

- 23.7 <u>Commercial General Liability</u>: Contractor shall maintain a Commercial General Liability insurance policy with limits of \$1,000,000 for each occurrence, \$1,000,000 for each personal and advertising injury claim, \$2,000,000 products and completed operations aggregate, and \$2,000,000 policy aggregate.
- 23.8 <u>Business Automobile Liability</u>: Contractor shall maintain Business Automobile Liability with limits of \$1,000,000 combined single limit applicable to all owned, hired and non-owned vehicles used in performing services under this Agreement.
- 23.9 <u>Technology Errors & Omissions</u>: Contractor shall maintain Technology Errors and Omissions insurance including cyber liability, network security, privacy liability and product failure coverage with limits of \$1,000,000 per occurrence and \$1,000,000 policy aggregate.

23.10 Additional Provisions:

- (i) For Commercial General Liability, the policy must provide the following:
 - (a) That this Agreement is an Insured Contract under the policy;
 - (b) Defense costs are outside the limits of liability;
 - (c) A severability of interests or separation of insureds provision (no insured vs. insured exclusion); and
 - (d) A provision that coverage is primary and noncontributory with other coverage or self-insurance maintained by the City.
- (ii) For claims-made coverage:
 - (a) The retroactive date must be on or before the contract date or the first date when any goods or services were provided to the City, whichever is earlier
 - (b) Contractor shall advise the City in the event any

general aggregate or other aggregate limits are reduced below the required per occurrence limits. At their own expense, and where such general aggregate or other aggregate limits have been reduced below the required per occurrence limit, the Contractor will procure such per occurrence limits as available to the Contractor and furnish a new certificate of insurance showing such coverage is in force.

24. REPRESENTATION AND WARRANTY: Contractor represents and warrants that:

- 24.1 The Service will conform to applicable specifications, operate in substantial compliance with applicable Documentation, and will be free from deficiencies and defects in materials, workmanship, design and/or performance;
- 24.2 all technology related services will be performed by qualified personnel in a professional and workmanlike manner, consistent with industry standards;
- 24.3 all technology related services will conform to applicable specifications and the Exhibits attached hereto;
- 24.4 it has the requisite ownership, rights and licenses to perform its obligations under this Agreement fully as contemplated hereby and to grant to the City all rights contemplated by this Agreement to be granted to City with respect to the software and services free and clear from any and all liens, adverse claims, encumbrances and interests of any Third Party;
- 24.5 there are no pending or threatened lawsuits, claims, disputes or actions: (i) alleging that any software or service infringes, violates or misappropriates any Third-Party rights; or (ii) adversely affecting any software, service or supplier's ability to perform its obligations hereunder;
- 24.6 the Service will not violate, infringe, or misappropriate any patent, copyright, trademark, trade secret, or other intellectual property or proprietary right of any Third Party;
- 24.7 the software and Service will contain no malicious or disabling code that is intended to damage, destroy or destructively alter software, hardware, systems or data.

25. <u>DEFENSE AND INDEMNIFICATION:</u>

25.1 Contractor hereby agrees to defend, indemnify, reimburse and hold harmless City, its appointed and elected officials, agents and employees for, from and against all liabilities, claims, judgments, suits or demands for damages to persons or property arising out of, resulting from, or relating to the work performed under this

Agreement ("Claims"), unless such Claims have been specifically determined by the trier of fact to be the sole negligence or willful misconduct of the City. This indemnity shall be interpreted in the broadest possible manner to indemnify City for any acts or omissions of Contractor or its subcontractors either passive or active, irrespective of fault, including City's concurrent negligence whether active or passive, except for the negligence or willful misconduct of City.

- 25.2 Contractor's duty to defend and indemnify City shall arise at the time written notice of the Claim is first provided to City regardless of whether Claimant has filed suit on the Claim. Contractor's duty to defend and indemnify City shall arise even if City is the only party sued by claimant and/or claimant alleges that City's negligence or willful misconduct was the sole cause of claimant's damages.
 - 25.3 Contractor will defend any and all Claims which may be brought or threatened against City and will pay on behalf of City any actual and reasonable out-of-pocket expenses incurred by reason of such Claims including, but not limited to, court costs and attorney fees incurred in defending such Claims or seeking to enforce this indemnity obligation. Such payments on behalf of City will be in addition to any other legal remedies available to City and will not be the City's exclusive remedy.
 - 25.4 Insurance coverage requirements specified in this Agreement shall in no way lessen or limit the liability of the Contractor under the terms of this indemnification obligation. The Contractor shall obtain, at its own expense, any additional insurance that it deems necessary for the City's protection.
 - 25.5 Contractor will, at Contractor's expense, indemnify, defend and hold harmless the City, its officers, agents and employees from and against any loss or liability and any actual and reasonable out-of-pocket cost or expense (including but not limited to attorney's fees and awarded damages) arising out of a claim that the Services, or their use by the City, infringe, violate or misappropriate a patent, copyright, trademark, trade secret or other intellectual property or proprietary right of any Third Party. The City will promptly notify Contractor in writing of any claim and cooperate with Contractor and its legal counsel in the defense thereof. Contractor may in its discretion (i) contest, (ii) settle, (iii) procure for the City the right to continue using the Software, or (iv) modify or replace the infringing Service so that it no longer infringes (as long as the functionality and performance are not degraded as reasonably determined by the City). The City may participate in the defense of such action at its own expense. If Contractor concludes in its reasonable judgment that none of the foregoing options are commercially reasonable, then Contractor may terminate this Agreement upon written notice to the City and will refund any prepaid fees to the City for the Services.
 - 25.6 This defense and indemnification obligation shall survive the expiration or termination of this Agreement.

- 26. COLORADO GOVERNMENTAL IMMUNITY ACT: The parties hereto understand and agree that the City is relying upon, and has not waived, the monetary limitations and all other rights, immunities and protection provided by the Colorado Governmental Act, § 24-10-101, et seq., C.R.S. (2003).
- TAXES, CHARGES AND PENALTIES: The City shall not be liable for the payment of taxes, late charges or penalties of any nature other than the compensation stated herein, except for any additional amounts which the City may be required to pay under D.R.M.C. § 20-107 to § 20-115.
- ASSIGNMENT; SUBCONTRACTING: Neither party may assign any of its rights or obligations hereunder, whether by operation of law or otherwise, without the other party's prior written consent (not to be unreasonably withheld); provided, however, either party may assign this Agreement in its entirety, together with all Purchase Agreements and Addendums, without the other party's consent in connection with a merger, acquisition, corporate reorganization, or sale of all or substantially all of its assets. Notwithstanding the foregoing, if a party is acquired by, sells substantially all of its assets to, or undergoes a change of control in favor of, a direct competitor of the other party, then such other party may terminate this Agreement upon written notice. In the event of such a termination, Cartegraph will refund Customer any prepaid fees covering the remainder of the term of all subscriptions. Subject to the foregoing, this Agreement will bind and inure to the benefit of the parties, their respective successors and permitted assigns.
- 29. NO THIRD PARTY BENEFICIARY: Enforcement of the terms of the Agreement and all rights of action relating to enforcement are strictly reserved to the parties. Nothing contained in the Agreement gives or allows any claim or right of action to any third person or entity. Any person or entity other than the City or the Contractor receiving services or benefits pursuant to the Agreement is an incidental beneficiary only.
- **30. NO AUTHORITY TO BIND CITY TO CONTRACTS:** The Contractor lacks any authority to bind the City on any contractual matters. Final approval of all contractual matters that purport to obligate the City must be executed by the City in accordance with the City's Charter and the Denver Revised Municipal Code.
- 31. AGREEMENT AS COMPLETE INTEGRATION-AMENDMENTS: The Agreement inclusive of all schedules, exhibits, attachments, addenda, and other documents incorporated by reference are the complete integration of all understandings between the parties as to the subject matter of the Agreement. No prior, contemporaneous or subsequent addition, deletion, or other modification has any force or effect, unless embodied in the Agreement in writing. No oral representation by any officer or employee of the City at variance with the terms of the Agreement or any written amendment to the Agreement will have any force or effect or bind the City.
- **SEVERABILITY:** Except for the provisions of the Agreement requiring appropriation of funds and limiting the total amount payable by the City, if a court of competent jurisdiction finds any provision of the Agreement or any portion of it to be invalid,

illegal, or unenforceable, the validity of the remaining portions or provisions will not be affected, if the intent of the parties can be fulfilled.

33. <u>CONFLICT OF INTEREST:</u>

- 33.1 No employee of the City shall have any personal or beneficial interest in the services or property described in the Agreement. The Contractor shall not hire, or contract for services with, any employee or officer of the City that would be in violation of the City's Code of Ethics, D.R.M.C. §2-51, et seq. or the Charter §§ 1.2.8, 1.2.9, and 1.2.12.
- 33.2 The Contractor shall not engage in any transaction, activity or conduct that would result in a conflict of interest under the Agreement. The Contractor represents that it has disclosed any and all current or potential conflicts of interest. A conflict of interest shall include transactions, activities or conduct that would affect the judgment, actions or work of the Contractor by placing the Contractor's own interests, or the interests of any party with whom the Contractor has a contractual arrangement, in conflict with those of the City. The City, in its sole discretion, will determine the existence of a conflict of interest and may terminate the Agreement in the event it determines a conflict exists, after it has given the Contractor written notice describing the conflict.
- **NOTICES**: All notices required by the terms of the Agreement must be hand delivered, sent by overnight courier service, mailed by certified mail, return receipt requested, or mailed via United States mail, postage prepaid, if to Contractor at the address first above written, and if to the City at:

Executive Director of Public Works or Designee 201 West Colfax Avenue, Dept. 614 Denver, Colorado 80202

With a copy of any such notice to:

Denver City Attorney's Office 1437 Bannock St., Room 353 Denver, Colorado 80202

Notices hand delivered or sent by overnight courier are effective upon delivery. Notices sent by certified mail are effective upon receipt. Notices sent by mail are effective upon deposit with the U.S. Postal Service. The parties may designate substitute addresses where or persons to whom notices are to be mailed or delivered. However, these substitutions will not become effective until actual receipt of written notification.

DISPUTES: All disputes between the City and Contractor arising out of or regarding the Agreement will be resolved by administrative hearing pursuant to the procedure established by D.R.M.C. § 56-106(b)-(f). For the purposes of that administrative

- procedure, the City official rendering a final determination shall be the Manager as defined in this Agreement.
- 36. GOVERNING LAW; VENUE: The Agreement will be construed and enforced in accordance with applicable federal law, the laws of the State of Colorado, and the Charter, Revised Municipal Code, ordinances, regulations and Executive Orders of the City and County of Denver, which are expressly incorporated into the Agreement. Unless otherwise specified, any reference to statutes, laws, regulations, charter or code provisions, ordinances, executive orders, or related memoranda, includes amendments or supplements to same. Venue for any legal action relating to the Agreement will be in the District Court of the State of Colorado, Second Judicial District. Contractor shall perform or cause to be performed all services in full compliance with all applicable laws, rules, regulations and codes of the United States, the State of Colorado; and with the Charter, ordinances, rules, regulations and Executive Orders of the City and County of Denver.
- 37. NO DISCRIMINATION IN EMPLOYMENT: In connection with the performance of work under this contract, the Contractor may not refuse to hire, discharge, promote or demote, or discriminate in matters of compensation against any person otherwise qualified, solely because of race, color, religion, national origin, gender, age, military status, sexual orientation, gender identity or gender expression, marital status, or physical or mental disability. The Contractor shall insert the foregoing provision in all subcontracts.
- 38. <u>USE, POSSESSION OR SALE OF ALCOHOL OR DRUGS</u>: Contractor shall cooperate and comply with the provisions of Executive Order 94 thereto concerning the use, possession or sale of alcohol or drugs. Violation of these provisions or refusal to cooperate with implementation of the policy can result in the City barring Contractor from City facilities or participating in City operations.
- 39. <u>LEGAL AUTHORITY</u>: Contractor represents and warrants that it possesses the legal authority, pursuant to any proper, appropriate and official motion, resolution or action passed or taken, to enter into the Agreement. Each person signing and executing the Agreement on behalf of Contractor represents and warrants that he has been fully authorized by Contractor to execute the Agreement on behalf of Contractor and to validly and legally bind Contractor to all the terms, performances and provisions of the Agreement. The City shall have the right, in its sole discretion, to either temporarily suspend or permanently terminate the Agreement if there is a dispute as to the legal authority of either Contractor or the person signing the Agreement to enter into the Agreement.
- **40. NO CONSTRUCTION AGAINST DRAFTING PARTY**: The parties and their respective counsel have had the opportunity to review the Agreement, and the Agreement will not be construed against any party merely because any provisions of the Agreement were prepared by a particular party.

- **41. ORDER OF PRECEDENCE**: In the event of any conflicts between the language of the Agreement and the exhibits, the language of the Agreement controls.
- **42. SURVIVAL OF CERTAIN PROVISIONS**: The terms of the Agreement and any exhibits and attachments that by reasonable implication contemplate continued performance, rights, or compliance beyond expiration or termination of the Agreement survive the Agreement and will continue to be enforceable.
- **INUREMENT**: The rights and obligations of the parties herein set forth shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns permitted under this Agreement.
- **44. TIME IS OF THE ESSENCE**: The parties agree that in the performance of the terms, conditions, and requirements of this Agreement, time is of the essence.
- 45. FORCE MAJEURE: Neither party shall be responsible for failure to fulfill its obligations hereunder or liable for damages resulting from delay in performance as a result of war, fire, strike, riot or insurrection, natural disaster, unreasonable delay of carriers, governmental order or regulation, complete or partial shutdown of plant, unreasonable unavailability of equipment or software from suppliers, default of a subcontractor or vendor (if such default arises out of causes beyond their reasonable control), the actions or omissions of the other party or its officers, directors, employees, agents, Contractors or elected officials and/or other substantially similar occurrences beyond the party's reasonable control ("Excusable Delay") herein. In the event of any such Excusable Delay, time for performance shall be extended for a period of time as may be reasonably necessary to compensate for such delay.
- **46. PARAGRAPH HEADINGS**: The captions and headings set forth herein are for convenience of reference only, and shall not be construed so as to define or limit the terms and provisions hereof.
- **47.** <u>CITY EXECUTION OF AGREEMENT</u>: This Agreement is expressly subject to and shall not be or become effective or binding on the City until it has been fully executed by all signatories of the City and County of Denver.
- **48. COUNTERPARTS OF THIS AGREEMENT**: This Agreement may be executed in counterparts, each of which shall be deemed to be an original of this Agreement.
- 49. ELECTRONIC SIGNATURES AND ELECTRONIC RECORDS: Each party consents to the use of electronic signatures by the other party. The Agreement, and any other documents requiring a signature hereunder, may be signed electronically either party. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the ground that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

- 50. ADVERTISING AND PUBLIC DISCLOSURE: The Contractor shall not include any reference to the Agreement or to services performed pursuant to the Agreement in any of the Contractor's advertising or public relations materials without first obtaining the written approval of the Manager. Any oral presentation or written materials related to services performed under the Agreement will be limited to services that have been accepted by the City. The Contractor shall notify the Manager in advance of the date and time of any presentation. Nothing in this provision precludes the transmittal of any information to City officials.
- **ON-LINE AGREEMENT DISCLAIMER.** Any 'click-wrap' agreement, terms of use, electronic acceptance or other terms and conditions which attempt to govern the subject matter of this Agreement that either party might be required to acknowledge or accept before or after entering into this Agreement are of no force and effect as between the City and Contractor and are superseded by this Agreement.

Exhibits

EXHIBIT X – ADDITIONAL TERMS AND CONDITIONS

EXHIBIT B - CERTIFICATE OF INSURANCE

ATTACHMENT 1-FUNCTIONAL REQUIREMENTS

Contract Control Number:	
IN WITNESS WHEREOF, the parties h Denver, Colorado as of	ave set their hands and affixed their seals at
SEAL	CITY AND COUNTY OF DENVER
ATTEST:	By
APPROVED AS TO FORM:	REGISTERED AND COUNTERSIGNED
By	By
	By



Contract Control Number:

PWADM-201733328-00

Contractor Name:

CARTEGRAPH SYSTEMS INC

Зу: _

Name:

(please print)

Title:

please print)

ATTEST: [if required]

Bv

Name:

(please print)

Title:

(please print)

This Exhibit X by and between Cartegraph Systems, Inc., an Iowa corporation having its principal place of business at 3600 Digital Drive, Dubuque, Iowa, 52003 ("Cartegraph"), and City and County of Denver ("Customer") with an address of 1437 Bannock Street, Denver, CO 80202 is part of the Purchase Agreement and contains additional terms and conditions between the parties. In the event of any conflict between these term and conditions and those contained in the Purchase Agreement, the terms and conditions in the Purchase Agreement shall prevail.

The following are the terms and conditions under which Cartegraph licenses its Software and provides Support, Services and Hosting.

1. Grant of License to Software.

- A. Cartegraph is licensed by third parties ("Third Party Licensors") to sublicense certain third party software products to Customer and to offer services to Customer for these third party software products under this Agreement.
- B. Each Software product, including all data programs or set of programs, or routines and subroutines, consisting of a series of instructions or statements in machine readable form, and including any documentation relating to or describing such Software, such as, but not limited to manuals, online documentation and user instructions, flow charts, database schemas and improvements or updates provided by Cartegraph (collectively "Software"), is furnished to Customer under a personal, non-exclusive, nontransferable limited license solely for Customer's own internal use on Host Computer System (as defined below) and with Customer's Clients.
 - 1. Host Computer Systems, if applicable, are Servers owned or controlled by Cartegraph that Customer may access under this Agreement (the provision of this service is herein referred to as "Hosted" or "Hosting").
 - Servers are personal computers, minicomputers, mainframes, workstations, and terminal devices that interact with Client Software and have been approved by Cartegraph or Third Party Licensors for operation of Software.
 - 3. Server Software is a copy of Software residing on a server, multiple servers, or a Host Computer System.
 - Clients are personal computers, minicomputers, mainframes, workstations, mobile devices, and terminal devices
 that interact with Server Software and have been approved by Cartegraph or Third Party Licensors for operation
 of Software.
 - 5. Client Software is a copy of Software residing on a Client that interacts with Server Software.
 - 6. Data Files are those files which contain data that is input by the Customer during the use of the Software.
- C. Customer agrees that the number of users licensed will be listed in the Purchase Agreement and only that number of users may use the Software at any given time.
 - If Customer has purchased a Per-User License, as indicated in the Purchase Agreement, only a finite number of licenses have been purchased by Customer and only that finite number of users may access and use the Software at any given time. The specific number of licenses purchased shall be identified in the Purchase Agreement.
 - 2. If Customer has purchased an Unlimited License, as indicated in the Purchase Agreement, all employees of Customer are considered to be licensed to access and use the Software at any given time. Such Unlimited License applies only to employees of Customer and does not allow the access or use of the Software by any independent contractors, affiliated entities or organizations, or any other individual, party, or entity that is not an employee of Customer.
- D. Customer agrees the Software license for the Software is limited as follows:
 - 1. Browser Based User Each browser based user is defined by unique ID and password.
 - 2. For Server Software one copy of Server Software for each Server or, if Hosted, no copies of Server Software for a Server that is not a Host Computer System.
- E. Customer agrees that this license does not permit Customer to: (1) use the Software for a service bureau application or (2) sublicense the Software.
- F. Except as set forth in this Agreement or as may be permitted in writing by Third Party Licensors, Customer shall not use, provide or otherwise make available the Software or any part or copies thereof to any third party.
- G. Customer shall not, and shall not permit others to:
 - Reverse engineer, decompile, decode, decrypt, disassemble, or in any way derive source code from the Software;
 - 2. Modify, translate, adapt, alter, or create derivative works from the Software;
 - 3. Copy, (other than one back-up copy), distribute, publicly display, transmit, sell, rent, lease or otherwise exploit the Software; or
 - 4. Distribute, sublicense, rent, lease, loan (or grant any third party access to or use of) the Software to any third party.
- H. Customer may make copies of the Client Software for archival purposes. The Server Software may not be copied, in whole or in part.
- 2. Title to Software and Data Files.

- A. Ownership of the Software, any portions thereof and any modifications, translations, or derivatives thereof, even if unauthorized, remains with Cartegraph or Third Party Licensors, as do all applicable rights in patents, copyrights and trade secrets and any other proprietary rights in the Software. Software provided hereunder is valuable, proprietary and unique, and Customer agrees to be bound by and observe the proprietary nature thereof as provided herein.
- B. Customer acknowledges that unauthorized reproduction, use, or disclosure of the Software or any part thereof may cause irreparable injury to Cartegraph or Third Party Licensors, who may therefore be entitled to injunctive relief to enforce these license restrictions, in addition to any other remedies available at law, in equity, or under this Agreement.
- C. Customer agrees that Cartegraph or Third Party Licensors may audit Customer's Software usage remotely or on-site during Support, Services or Hosting or upon reasonable notice and during standard business hours. Prevention of audit by Customer may be grounds for termination of this Agreement.
- D. Cartegraph agrees that ownership of data in Data Files remains with Customer. However, Customer agrees that Cartegraph may access Data Files and grants Cartegraph a license to use the data for 1) internal business purposes to evaluate the use and operation of the Software, Support, Services or Hosting; and 2) marketing purposes provided that any information shared with third parties is anonymized and/or aggregated so that Customer cannot be identified from the information.

3. License Fees, Support Charges, Services and Hosting Charges.

- A. Customer agrees to pay the license fees for the Software, Support charges, Services charges and Hosting charges as set forth in the Purchase Agreement for each Product.
- B. Cartegraph agrees that the total amount listed in the Purchase Agreement shall be considered the not-to-exceed price for the Software, Support, Services and Hosting included in that Purchase Agreement. Hosting includes 20G of available file storage. If additional storage is required, the Customer can purchase in 10G increments
- C. Customer agrees that all payments are due 35 days from date of invoice and Customer shall be in default if amounts due have not been received in that time period. Customer's default will constitute sufficient cause for Cartegraph to suspend or terminate the Software license, Support, Services and Hosting under this Agreement.
- D. Customer shall be invoiced for Software, Support, Hosting and hardware upon delivery. Customer shall be invoiced for Services as set forth in the Purchase Agreement.

4. Delivery and Installation.

A. Hosting

- 1. This subsection "A" regarding Hosting shall apply if Customer elects, as indicated in the Purchase Agreement, to utilize the Hosting services offered by Cartegraph instead of having the Software installed On-Site.
 - Execution of a Purchase Agreement shall be considered as Customer's notification to Cartegraph to
 proceed with delivery of the Software and Services as indicated in the Purchase Agreement.
 - b. Delivery of Software, Support, and Hosting shall take place reasonably quickly after execution of the Purchase Agreement. Cartegraph shall provide access to the Server Software to Customer on a Host Computer System. Notification by Cartegraph that Server Software is available for access shall constitute delivery of Server Software, Support and Hosting, regardless of when Customer first accesses the Server Software.
 - c. Cartegraph shall be responsible for installation of the Server Software on Cartegraph's Host Computer System. Customer shall be responsible for installation of the Client Software on Customer's Clients, unless agreed otherwise.
 - d. After execution of the Purchase Agreement, delivery of Services will be scheduled in cooperation with Customer. Customer shall remain responsible for Service charges even if Services are not delivered.
 - e. Any hardware included in the Purchase Agreement shall be ordered after execution of the Purchase Agreement. Delivery of hardware will be scheduled in cooperation with Customer.

2. Hosting Services

- a. Cartegraph will install, and operate Server Software on one or more Host Computer Systems.
- b. Cartegraph will provide all equipment, software and services necessary for the operation, maintenance and support of one or more Host Computer Systems and the Server Software. Cartegraph may contract with third parties for all or part of such equipment, software and services ("Third Party Hosts"). Cartegraph reserves the right to change the configuration of the Host Computer System and the Server Software and to change or delete such equipment or software at any time, but Cartegraph shall make the Software compatible with such change or deletion without additional charge to Customer.

- c. Customer shall have access to and be permitted to use the Server Software via Clients.
- d. Customer shall provide a computing and networking environment that meets the minimum requirements set forth in Cartegraph's published specifications.
- e. Customer shall be responsible for all bandwidth between Host Computer System and Clients and in such amounts as to provide reasonable responsiveness of the system.
- f. Cartegraph shall perform a full back-up of data files on a daily basis. The daily full back-up will be retained for (14) fourteen days and then deleted unless customer contracts for additional days. After the termination of this Agreement, data files are held for only (14) fourteen days and then deleted. Cartegraph's hosting services uses RAID 10 which both mirrors the data and stripes across multiple drives creating redundancy.
 - Cartegraph hosting services have dual redundancy with offsite back-up storage and a back-up data centers
- g. The Host Computer System shall be used by Customer only for purposes relating to Customer's own use of the Software. Customer shall have no right to assign any of its rights under this section.
- Cartegraph will apprise Customer of the terms and conditions of Third Party Host agreements from time to time.
- Cartegraph will take reasonable precautions to guard against unauthorized access to Data Files. However, Cartegraph assumes no responsibility that the Software will be used properly.
- j. Customer shall have the right to receive Data Files within sixty (60) days of termination of any Hosting on the condition that customer has paid all outstanding invoices owed to Cartegraph.

3. Availability of Host Computer System.

- a. If Cartegraph contracts with a Third Party Host to provide Hosting, the service level provided by the Third Party Host shall be the service level provided by Cartegraph to Customer, except as required for Cartegraph to provide Support under this Agreement.
- b. In general, Server Software will be available for use and access by Customer 24 hours a day, 7 days a week, except for scheduled maintenance to take place at commercially reasonable times. Furthermore, if access to the Server Software becomes a problem, then Cartegraph shall provide Support in view of the severity of the problem.
- Server Software will be available for use and access by Customer during back-up activities performed by Cartegraph.

5. Support.

- A. Scope of Support. Support includes the response to and resolution of Customer-encountered problems with the Software as reported to Cartegraph by Customer.
 - 1. Resolution of Customer-encountered problems shall, at Cartegraph's option, consist of (1) maintenance provided through telephone, email or remote access; (2) correction of the problem in the Software program; or (3) delivery of bug fixes or workarounds limited to the current or immediate prior Software release.
 - 2. Cartegraph will only support licensed Software located on Servers or Clients. Cartegraph will use commercially reasonable efforts to respond to Customer problems according to the priority level of the problem.
 - 3. Support may also include upgrades to Software.
- B. Support Limitations. Any Support is dependent upon the use by Customer of unmodified Software (except as authorized by Cartegraph) operated in accordance with Cartegraph's documentation. Support specifically excludes the following: (1) Support to a version of Software other than the current or immediate prior release; (2) efforts to restore a release of the Software beyond the current or immediate prior release; (3) efforts to restore a Customer Data File beyond the most recent back-up; and (4) efforts to convert a Customer Data File to another format.

As part of Support, Cartegraph is under no obligation to modify the Software so that the modified Software would depart from Cartegraph's published specifications for the Software.

6. Professional Services.

A. The professional consulting services and deliverables to be performed or delivered by Cartegraph under this Agreement may include, but are not limited to: consulting, network engineering, systems integration, hardware installation, special studies, pre-installation support, installation of Client Software, installation support, training, custom Software modification, tools/utilities components, programming and documentation, data conversion,

- application design and development, systems analysis and design, conversions, implementing planning and implementation of the Software (collectively referred to as the "Services").
- B. Services shall only be provided as the result of a Purchase Agreement and any attached statements of work.
- C. Services will be provided during the hours of 7:00 a.m. to 7:00 p.m., Central Standard or Central Daylight Time, whichever is applicable, Monday through Friday excluding holidays.

7. Customer's Responsibilities.

- A. Customer is responsible for maintenance and installation of any Clients, common carrier equipment or communication equipment related to the operation of the Software and not furnished by Cartegraph. Before Customer introduces equipment not within Cartegraph's published specification, Cartegraph must approve the additional equipment.
- B. Customer is responsible for charges incurred for communication facilities at Customer's facilities, whether incurred by Customer or by Cartegraph Support representatives while performing Support on the Software.
- C. Customer is responsible for performing Software back-ups in accordance with published documentation.
- D. Customer shall notify Cartegraph of any problem and shall allow Cartegraph reasonable access to the Software for performing Support, Services or Hosting.
- E. Customer shall furnish Cartegraph, at Customer's expense, all technical data and information as may be necessary to furnish Support, Services or Hosting.
- 8. Software Modification. Cartegraph and Third Party Licensors will not be responsible to Customer for loss of use of the Software or data or for any other liabilities arising from alterations, additions, adjustments or repairs which are made to the Software by Customer or third parties. Cartegraph reserves the right to terminate the Software license, Support, Services or Hosting under this Agreement upon written notice to Customer if any such alteration, addition, adjustment or repair adversely affects Cartegraph's ability to render Support, Services or Hosting.

9. Term.

- A. Support for any subsequently added components or upgrades shall be either coterminous with the term of Support applicable to the Software initially covered or as otherwise agreed and stated in the Purchase Agreement.
- B. If Customer elects to purchase Services, then Services shall terminate as agreed in the appropriate Purchase Agreement.
- C. Notwithstanding anything to the contrary in this Section, Support, Services and Hosting shall terminate immediately upon termination of this Agreement.

10. Termination.

- A. Notwithstanding the foregoing, Cartegraph shall have the right to terminate this Agreement if Customer fails to pay any and all required license fees, Support charges, Services charges, Hosting charges or otherwise fails to comply with this Agreement or the terms and conditions of any applicable Third Party Licensor agreement.
- B. Upon expiration of the license term or upon notice of such termination, Customer shall immediately return or destroy the Software and all portions and copies thereof as directed by Cartegraph or Third Party Licensors and, if requested by Cartegraph or Third Party Licensors, shall certify in writing as to the destruction or return of the same.
- C. Any termination of this Agreement shall automatically terminate Support, Services and Hosting provided under any Purchase Agreement or Statements of Work, unless otherwise agreed. All confidentiality and non-disclosure obligations shall survive any such termination.
- D. Customer may terminate this Agreement prior to the end of the term of this Agreement by providing Cartegraph with written notice of such intent to terminate at least sixty (60) days prior to the effective date of such termination. Upon termination of this Agreement, according to the terms provided herein, by returning or destroying the Software and all portions and copies thereof and certifying in writing as to the destruction or return of the same.
- E. Cartegraph shall have the right to terminate Hosting, if Hosting services are being provided, by giving at least ninety (90) days written notice that Cartegraph cannot meet its obligations of availability of the Host Computer System.
- F. In addition to the right of termination provided to Cartegraph under other sections of this Agreement, Cartegraph shall have the right to terminate the Software license, Support, Services and/or Hosting upon the occurrence of any of the following events:
 - 1. Customer's oldest invoice is ninety (90) days past due. Support hold will be initiated when customer's oldest invoice is thirty (30) days past due or,
 - 2. There is an assignment of this Agreement without the prior written consent of Cartegraph.
- G. Termination shall not be Cartegraph's exclusive remedy and termination shall not adversely affect any claim for damages against Customer.

11. Limited Warranty.

- A. Cartegraph warrants that it has the right to sublicense the Software being licensed hereunder pursuant to the terms provided herein.
- B. Cartegraph warrants that the Software will conform to Cartegraph's published specifications until Support ends.
- C. Provided that the Software is used in a manner for which it was designed as set forth in the Software, Cartegraph's sole obligation and liability hereunder for the Software shall be to use reasonable efforts to remedy any substantial non-conformance which is reported to Cartegraph. In the alternative, Cartegraph may refund amounts paid by Customer pursuant to Purchase Agreements for such Software products.
- D. THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT WITH RESPECT TO THE SOFTWARE LICENSED HEREUNDER.
- E. SUPPORT, SERVICES AND HOSTING SET FORTH IN THIS AGREEMENT ARE IN LIEU OF ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SUPPORT, SERVICES AND HOSTING PROVIDED UNDER THIS AGREEMENT DO NOT ASSURE THE UNINTERRUPTED OPERATION OF THE SOFTWARE.
- 12. Limitation of Liability. TO THE MAXIMUM EXTENT ALLOWED UNDER APPLICABLE LAW:
 - A. IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR LOSS OF DATA, HOWEVER ARISING, EVEN IF THAT PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES:
 - B. EXCEPT FOR CARTEGRAPH INDEMNIFICATION OBLIGATIONS, DAMAGES RESULTING FROM BODILY INJURY OR PATENT OR COPYRIGHT INFRINGEMENT, AS DISCUSSED BELOW, IN NO EVENT SHALL THE MAXIMUM CUMULATIVE LIABILITY OF EITHER PARTY TO THE OTHER UNDER THIS AGREEMENT, UNDER ANY CAUSE OF ACTION OR THEORY OF LIABILITY, EXCEED THREE TIMES THE AMOUNT PAID BY CUSTOMER TO CARTEGRAPH DURING THE TWELVE (12) MONTH PERIOD IMMEDIATELY PRECEDING THE EVENT GIVING CAUSE TO SUCH LIABILITY.
 - C. If Cartegraph will provide Support or Services at Customer's location, liability of Cartegraph arising out of bodily injury, shall not in any event exceed the limits of its insurance coverage.
- 13. U.S. Government Restricted Rights. The Software is commercial software and the Software is provided with restricted rights. Use, duplication or disclosure by the Government is subject to restrictions as set forth in paragraph (c)(1)(ii) of the Rights in Technical Data and Computer Software Clause at DFARS 252.227-7013 of subparagraphs (c)(1) and (2) of the Commercial Computer Software-Restricted Rights at 48 CFR 52.227-19, as applicable.
- **14.** Employees and Conflicts of Interest. This Agreement shall not prevent Cartegraph from performing similar services or restrict Cartegraph's use of the employees or contractors provided under this Agreement.

15. Proprietary Rights and Confidential Information of Cartegraph.

- A. Certain information and materials supplied by Cartegraph with the Products, such as, without limitation, deliverables, manuals, diagrams, drawings, plans, flowcharts, software, technical processes and formulae, source codes, product designs, sales, costs and other unpublished financial information, product and business plans, usage rates, relationships, projects and data, are Cartegraph's or Third Party Licensors' confidential or proprietary trade secrets (the "Confidential Information") and Cartegraph furnishes them solely to assist Customer in the installation, operation and use of Software. Customer must not reproduce, copy or disclose such Confidential Information except as is reasonable and necessary to properly use Software. Nothing herein shall restrict Customer from complying with its obligations under any law requiring disclosure, but Customer shall give Cartegraph five days prior notice before any release of Confidential Information.
- B. Customer acknowledges and agrees that Cartegraph or Third Party Licensors shall suffer irreparable injury not compensable by money damages and therefore shall not have an adequate remedy at law in the event of an unauthorized use of proprietary rights or an unauthorized use or disclosure of any Confidential Information in breach of the provisions of this Agreement. Accordingly, Cartegraph or Third Party Licensors shall be entitled to injunctive relief to prevent or curtail any such breach, threatened or actual. The foregoing shall be in addition and without prejudice to such rights that Cartegraph or Third Party Licensors may have at law or in equity.

16. Proprietary Information of Customer.

In order to provide Products under this Agreement, Customer may, from time to time, disclose to Cartegraph certain information respecting Customer's technical, financial, statistical and personnel data, (hereinafter "Information"). Any such Information which is submitted in writing to Cartegraph by the Customer and which is clearly and conspicuously marked as confidential shall be protected by Cartegraph against unauthorized disclosure by using the same degree of care and discretion that Cartegraph uses with similar Information which Cartegraph does not want disclosed to

third parties. However, Cartegraph shall not be required to protect Information which (a) is or becomes publicly available, (b) is already in Cartegraph's or its related companies' possession, (c) is independently developed by Cartegraph outside the scope of this Agreement, or (d) is rightfully obtained from third parties. Cartegraph's obligations under this Section shall cease immediately upon return to Customer or destruction by Cartegraph of such Information.

A. Cartegraph shall not be required to protect any ideas, concepts, know-how, or techniques relating to data, electronic document processing and image processing developed or resulting from the Information or the Services provided under this Agreement.

17. Infringement Indemnification.

- A. Cartegraph or Third Party Licensors will defend any action, suit or proceeding brought against Customer if based on a claim that Products infringe any United States patent or copyright of any third party ("Intellectual Property") provided that Customer promptly notifies Cartegraph or Third Party Licensors immediately and gives Cartegraph or Third Party Licensors full authority, information and assistance for the action's defense. Cartegraph or Third Party Licensors will pay all damages and costs awarded therein against Customer, but shall not be responsible for any compromise made without its consent. Cartegraph or Third Party Licensors may, at any time it is concerned over the possibility of such an infringement, at its option and expense, replace or modify Products so that infringement will not exist. In the alternative, Cartegraph may remove a component of Products involved and refund to Customer the price as depreciated by an equal annual amount over five (5) years.
- B. Cartegraph and Third Party Licensors shall have no liability to Customer if any Intellectual Property infringement or claim thereof is based upon the use of Products in connection or in combination with equipment, devices, or software not supplied by Cartegraph or used in a manner not expressly authorized by this Agreement or in a manner for which Products were not designed, or if the claim of infringement would have been avoided but for Customer's use of software other than the latest, unmodified release of Software made available to Customer by Cartegraph.

18. Miscellaneous.

A. Export. Customer agrees that the Software, Support, Services and Hosting purchased hereunder will not be exported directly or indirectly, separately or as part of any system, without first obtaining a license from the U.S. Department of Commerce or any other appropriate agency of the U.S. Government, as required.

Investment Summary

Cartegraph's fees for this project are included in the summary below.

Date: April 24, 2017 Purchase Agreement May 26,2017 Purchase #PA291 Expiration Date: Agreement No.:

Purchase Type Citizen/Qty. **Unit Price Total Price** YEAR 1 SOFTWARE PRODUCTS Cartegraph OMS Transportation Domain per citizen 488,000 \$0.20 \$97,600.00 Platform by Domain Subscription, Cartegraph Cloud Cartegraph OMS Advanced Asset Management per-488,000 \$0.15 \$73,200.00 Extension citizen Subscription Discount (\$37,332.00) Cartegraph OMS User Pack Subscription - 100 Named 1 \$17,500.00 \$17,500.00 Users Users Cartegraph OMS -Cartegraph Cloud Shared Hosting 1 \$5,000.00 \$5,000.00 Hosting Subscription Cartegraph OMS -Cartegraph Cloud Shared Hosting, 1 \$15,000.00 \$15,000.00 Additional Storage, 10TB Hosting Cartegraph OMS -**Test Environment** 1 \$2,400.00 \$2,400.00 Test Environment FIELD SERVICES Implementation Fixed Fee Service \$104,700.00 \$104,700.00 Services ESTIMATED EXPENSES \$19,600.00 YEAR 1 SUB-TOTAL \$297,668.00

YEAR 2				
SOFTWARE PRODUCTS				
Cartegraph OMS Platform by Domain	Transportation Domain per citizen Subscription, Cartegraph Cloud	488,000	\$0.20	\$97,600.00
Cartegraph OMS Extension	Advanced Asset Management per- citizen Subscription	488,000	\$0.15	\$73,200.00
Discount				(\$37,332.00)
Cartegraph OMS Users	User Pack Subscription – 100 Named Users	1	\$17,500.00	\$17,500.00
Cartegraph OMS – Hosting	Cartegraph Cloud Shared Hosting Subscription	1	\$5,000.00	\$5,000.00
Cartegraph OMS – Hosting	Cartegraph Cloud Shared Hosting, Additional Storage, 10TB	1	\$15,000.00	\$15,000.00
Cartegraph OMS – Test Environment	Test Environment	1	\$2,400.00	\$2,400.00
YEAR 2 SUB-TOTAL				\$173,368.00
YEAR 3				
SOFTWARE PRODUCTS				
Cartegraph OMS Platform by Domain	Transportation Domain per citizen Subscription, Cartegraph Cloud	488,000	\$0.20	\$97,600.00
Cartegraph OMS Extension	Advanced Asset Management per- citizen Subscription	488,000	\$0.15	\$73,200.00
Discount				(\$37,332.00)
Cartegraph OMS Users	User Pack Subscription – 100 Named Users	1	\$17,500.00	\$17,500.00
Cartegraph OMS – Hosting	Cartegraph Cloud Shared Hosting Subscription	1	\$5,000.00	\$5,000.00
Cartegraph OMS – Hosting	Cartegraph Cloud Shared Hosting, Additional Storage, 10TB	1	\$15,000.00	\$15,000.00
Cartegraph OMS – Test Environment	Test Environment	1	\$2,400.00	\$2,400.00
YEAR 3 SUB-TOTAL				
Total Cost (3-Year Term)			\$644,404.00	

NOTES:	The Cartegraph OMS pricing listed above does not include Esri ArcGIS licenses.

Payment Terms and Conditions

In consideration for the Services and Products provided by **Cartegraph** to **Customer**, **Customer** agrees to pay **Cartegraph** Software Costs and Professional Service Fees in U.S. Dollars as described below:

- 1. **Delivery:** Software Products shall be licensed upon acceptance of this Purchase Agreement. If applicable, Services will be scheduled and delivered upon your acceptance of this Purchase Agreement, which will be considered as your notification to proceed.
- 2. **Services Scheduling: Customer** agrees to work with **Cartegraph** to schedule Services in a timely manner. All undelivered Services shall expire 365 days from the signing of this Purchase Agreement.
- 3. **Software Invoicing:** The Software Subscription Licenses fee will be due in annual installments 15 days prior to the anniversary of the initial term as follows:
 - a. \$173,368.00 due upon the earlier of a successful "Go-Live" or 90 days after execution of the Purchase Agreement.
 - b. \$173,368.00 due 15 days prior to 1st year anniversary of term start date.
 - c. \$173,368.00 due 15 days prior to 2nd year anniversary of term start date.
- 4. **Field Services Invoicing:** Invoicing for the Field Services fee shall occur upon the acceptance of this Purchase Agreement and shall be invoiced as follows:
 - a. 25% upon completion and CCD acceptance of Project Plan.
 - 50% at the completion of the test environment deployment and CCD confirmation and acceptance of system capability according to Request For Proposal, Functional Requirement response.
 - c. 25% at the completion of product deployment, and final system acceptance by City and County of Denver.
- 5. **Expenses:** In providing the services included in this Purchase Agreement, **Cartegraph** shall be reimbursed for any reasonable out-of-pocket costs, including, but not limited to, travel, lodging, and meals. Out-of-pocket expenses are billed based on actual costs incurred and are due separately.
- 6. Payment Terms: All payments are due Net 35 days from date of invoice.

Cartegraph Systems, Inc. Addendum A - Software Products

Cartegraph hereby pledges to issue software licenses in the agreed upon quantities specified in your Investment Summary. The "Software," as defined in Master Agreement #MA190, consists of developed and supported technology products available from Cartegraph.

In addition to full access to Cartegraph licensed software, your organization will receive:

1. Support

a. Campus - www.cartegraph.com/campus

Our User Assistance area is a convenient and easily-shareable resource designed to help you and your co-workers better understand the functions and capabilities of your Cartegraph applications. Instantly access user tips, step-by-step guides, videos, and more.

b. Dedicated, Unlimited, Toll-free Phone Support - 877.647.3050

When questions need answers and difficulties arise, count on our industry-leading Support team to provide the guidance and assistance you need. Reach us as often as you need Monday-Friday, 7:00 am-7:00 pm CT.

	High Severity	Normal Severity	Low Severity
Situation	System down or other dire situation	Important issue but major system functions operational, system is not down	Minor issue
Initial Contact	Direct voice connect or response within 2 hours	Direct voice connect or within 1 business day response back	Direct voice connect or next business day response back
Follow-up	Within 4 hours	Within 48 hours	Within 5 business days
Resolution	95% of cases resolved within 24 hours	95% of cases resolved within 3 to 5 business days	95% of cases resolved within 14 business days

c. Secure, Live Remote Support

If your challenge requires a more hands-on approach, we have the remote support tools to fix it. Let one of our Support Team members directly interact with your system to find a fast, effective solution.

2. Training & Education

a. Convenient Online Resources

All the information you need, one click away. Take advantage of online training opportunities, tutorial videos, upcoming event information, and more.

b. Regional User Groups

Meet and network with similar Cartegraph users in your region. Our smaller, more personalized User Groups allow you to find out what other organizations are doing to get more from their Cartegraph Systems.

3. Software Releases & Upgrades

a. New Software Releases

Be the first to know about all new Cartegraph releases, enhancements, and upgrades. Gain immediate access to the latest features and functionality, and increased system performance.

b. Hot Fixes

If an issue is determined to be a software defect and falls outside the standard release cycle, Cartegraph will issue a hot fix and provide application specialists with detailed levels of product knowledge to work with you in achieving a timely and effective resolution.

Cartegraph Systems, Inc.

Addendum B - Field Services (Fee for Service)

The Fee for Field Service Implementation Services as listed in the *Investment Summary* of the Purchase Agreement are specific Cartegraph services which will be delivered to the Customer based on the descriptions below and any descriptions that may be found in the Purchase Agreement's Exhibits. Cartegraph will coordinate with the Customer on service delivery expectations and timeframes. This is an addendum to Customer's Master Agreement #MA190.

Cartegraph OMS – Implementation Scope of Work

Implementation of the Operations Management System (OMS) includes the following professional services:

Setup

- Cartegraph will setup a hosted, production OMS environment. If a test or sandbox environment is purchased, Cartegraph will also setup a hosted, test OMS environment.
- Cartegraph will provide an overview, up to two (2) hours, of Cartegraph and ArcGIS Online user-based logins and User/Role functionality.
- Cartegraph will provide a template file to be utilized by your staff to populate Roles and Users to be utilized for OMS.
- Cartegraph will utilize the template to create users and roles in OMS. (Note: Subsequent User and/or Role changes will be your administrator's responsibility.)
- Cartegraph will provide documentation and guidance, up to four (4) hours, for your technical GIS staff to configure Esri Basemap Services for OMS integration. Guidance will be geared towards OMS/Esri integration functionality and requirements.
- Cartegraph will setup the OMS Platform, including the Request, Work, Resource, and Asset Management areas of the software. Asset Management solutions will be setup for all solutions referenced in the Assets section of the scope unless otherwise noted.

Consulting

Cartegraph will provide a three-day (3-day) onsite requirement gathering workshops to increase
our understanding of your business and functional goals. Through workshops and interviews,
Cartegraph will identify best fit scenarios for OMS and provide a brief including any challenges as
well as recommendations for OMS best practices relevant to your implementation.

Training

- Cartegraph will provide remote train-the-trainer training, up to four (4) hours, on overall system
 navigation and functionality to help familiarize your staff with the software environment and its
 common functions. Training topics include:
 - Home Screen
 - o Logins/Permission
 - Layers
 - Filters
 - Maps
 - o Grids

- System Navigation
- Views (List & Detail)
- Standard Reports
- Attachments
- o Requests, Work, Assets, Resources, Reports, and Administrator Tabs
- Cartegraph will provide remote train-the-trainer training, up to two (2) hours, on OMS Esri integration functionality. Training topics include:
 - OMS Esri integration configuration options
 - Integration functionality (basemap and feature)
 - Overall Esri integration requirements, considerations, and Cartegraph recommended best practices
- Cartegraph will provide a three-day (3-day) onsite "train-the-trainer" training event. The training agenda will be defined and agreed upon by both Cartegraph and your project manager. Topics may include any of the following:
 - Request Management:
 - Requests
 - Requesters
 - Task Creation from Requests
 - Issue library (including settings such as Applies to Asset and Non-Location)
 - Cartegraph recommended best practices for Request and Requester Management
 - Work Management:
 - Create Task(s) (Asset/Non-Asset)
 - Assignments (Add, Edit, Remove)
 - Task Menu Actions
 - Related Work Items
 - Create Work Order
 - Associate Task to WO
 - Repeat Work Orders
 - Work Order Menu Actions
 - Enter Resources
 - Timesheets
 - Activity library (including settings such as Applies to Asset, Inspection, Key Dates, Cost, and Productivity)
 - Cartegraph recommended best practices for Work Management
 - Asset Management:
 - Asset Details
 - Inspections
 - Linked assets (if applicable)
 - Container/Component Relationships (if applicable)
 - Cartegraph recommended best practices for Asset Management

To avoid redundancy, and to utilize service time efficiently, training may cover a subset of the assets listed in the Asset section of the scope.

- Resource Management:
 - Resource Details
 - Labor/Equipment Rates
 - Material Management (Stock, Usage, Adjustments)

- Vendor Price Quotes
- Cartegraph recommended best practices for Resource Management
- Cartegraph for iPad:
 - Overall system functionality (Navigation, Interface, Maps, Attachments, Sorting)
 - Work Management
 - Create and Update Tasks (Asset/Non-Asset)
 - Assign Tasks
 - Enter Resources
 - Inspections
 - Asset Management
 - Create and Update Assets
 - Request Management
 - View and Update Requests
 - View Requester information
 - Create Task from Request
 - Cartegraph recommended best practices for mobile device use
- Administrator:
 - Administrator:
 - User Administration, Role Administration, Import/Export, Error Log
 - Settings:
 - System Settings, Base Map Administration, Geocode Settings, GIS Integration Settings, Background Task Scheduler, Asset Color Manager
 - Manager:
 - Layout Manager, Library Manager, Preventative Maintenance, Asset Condition Manager, Notification Manager, Structure Manager
 - Cartegraph Administrator Application
 - Report Creation

Extensions

- Cartegraph will provide remote train-the-trainer training, up to eight (8) hours, on Advanced Asset functionality. Training topics include:
 - Preventative Maintenance
 - Performance Management
 - Prediction Groups
 - Minimum Condition Groups
 - Activities and Impacts
 - Criticality Factor
 - Install/Replaced Dates
 - Cartegraph recommended best practices for advanced asset management

To avoid redundancy, and to utilize service time efficiently, training may cover a subset of the assets listed in the Asset section of the scope.

Go-Live Support

- Cartegraph will provide a three-day (3-day) onsite event for Go-Live support. The agenda will be defined, and agreed upon, by both your and Cartegraph's project managers. Topics may include any of the following:
 - Refresher training for items listed in the scope of work.
 - Software and process support for staff during production roll out.
 - o Field, Layout, and Report configuration guidance, if applicable

Annual Training Events

• Cartegraph will provide 4 additional three-day (3-day) onsite Annual Training events for years two (2) through five (5) of the agreement. The agenda will be defined, and agreed upon, by both your and Cartegraph's project managers.

Data Services

- Cartegraph will provide one test and one production data load service through standard import/export functionality. Cartegraph will provide template documents for data population. Once populated by your staff, Cartegraph will load the data into your test or production OMS environment. Data loads may include data such as:
 - o Parent level asset records
 - Asset location (spatial x/y) attributes
 - o Parent level resource (Labor, Equipment Material, Vendor) records
 - o Resource Rate (Labor, Equipment, Material) records
 - Standard system libraries
- Cartegraph will provide custom data conversion services for existing Signs and Fiber (CAD) data. CAD
 data must include sufficient data attributes including unique identifiers and spatial coordinates for
 conversion.

Assets

Asset implementation includes the following professional services:

- Cartegraph will provide installation and training on the following eight (8) asset types:
 - Transportation (2)
 - Marking and Sign
 - Traffic (4)
 - Signalized Intersections, School Flashers, Cameras, and VMS
 - Other (2)
 - Bollards and Fiber
- Cartegraph will provide up to five (5) field configurations for each asset type listed above.

Cartegraph will provide all services remotely via audio, video, and web conferences unless otherwise noted.

Customer Responsibility

For the project, you will be responsible for appointing a dedicated project manager that will be responsible for:

- Reviewing the implementation scope of work
- All internal aspects of the project including, but not limited to, internal change management, internal documentation, staff coordination, task completion, and schedule commitment
- Ensuring all scheduled meetings are attended by invited staff
- Partnering with the Cartegraph Project Manager to ensure project success
- Providing leadership and insight on all relevant internal issues such as policy/procedure, organizational structure, project stakeholders, technical architecture, data, and current systems

Exclusions

The following service items are not included in the scope of this project:

- Implementation of any custom modification or integration developed by Cartegraph, your internal staff, or any third-party is not included in the scope of this project unless specifically listed above.
- Data conversion services from other software system(s) or sources (including Cartegraph Navigator databases) are not included in the scope of this project unless specifically listed above.
- Any service items discussed during demonstrations, conference calls, or other events are not included in the scope of this project unless specifically listed above.

Customer/Cartegraph Responsibilities

Project representatives from Customer and Cartegraph accepts responsibility for all aspects of project planning, management, and execution not specifically identified as the responsibility of Cartegraph in the Master Agreement or in this Purchase Agreement. Ongoing management of the day-to-day allocation of Customer and Cartegraph resources and management of project tasks is the responsibility of the Customer and Cartegraph project representatives. Customer and Cartegraph project representatives will provide overall guidance and direction for the project and will direct the project accordingly. Further, and with regard to the Cartegraph obligations listed in this Purchase Agreement, Customer understands that it is vital to the success of the project that Customer provides assistance in the following matters:

- For those services listed under Field Services, Cartegraph personnel will conduct information gathering and evaluation sessions with various Customer users and management. While Cartegraph respects the time and workload of Customer staff, dedicated time on the part of the appropriate Customer resources is necessary to complete these exercises.
- 2. The installation process requires the assistance of Customer personnel and suitable access to hardware and systems (e.g., security clearance). Customer is required to supervise the installation process while systems are accessible to Cartegraph. All hardware and software, for both Personal Computers and servers, is expected to be available, installed, and operating as specified in Cartegraph's System Requirements documentation such that delivery and execution of Cartegraph Field Services will not be impeded.
- Customer and Cartegraph understand that the successful performance of Field Services depends upon Customer fulfilling its responsibilities. The Project assumes that Customer will provide all personnel required to achieve a successful implementation.
- 4. Customer will provide Internet access and IT staff support as required. For those services that are web-based, Cartegraph utilizes WebEx Meeting (or similar) technology.

Customer shall ensure that their workstation platform and database meet Cartegraph system requirements as specified in the Cartegraph System Requirements documentation. Cartegraph Software will be supported within new versions of these workstation platforms and databases within a reasonable period of time from their release from their manufacturer. Cartegraph will discontinue support of its Software within older versions of these workstation platforms and databases as their support is discontinued by their manufacturers.

5. Customer agrees to work with Cartegraph to schedule Field Services in a timely manner. All undelivered Field Services shall expire 365 days from the execution of this Purchase Agreement, unless noted differently in Services Scope listed above. Upon expiration of services, the project may be cancelled at Cartegraph's discretion.

Not-to-Exceed Proposal

Cartegraph will not exceed the total included in this Purchase Agreement without written approval from Customer. In the event it becomes apparent to Cartegraph that additional service efforts will be needed due to any changes in the scope of this Purchase Agreement, Cartegraph will notify Customer prior to exceeding the approved efforts and obtain written approval if additional Software or services are required.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/23/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

certificate holder in fleu of Such	endorsement(s).			
PRODUCER		CONTACT Pam Buchholtz		
Friedman Insurance, Inc. PO Box 759		PHONE (A/C, No, Ext): 563-556-0272	FAX (A/C, No): 563-5	56-4425
Dubuque IA 52004-0759		E-MAIL ADDRESS: buchholtzp@friedman-group.com		
		INSURER(S) AFFORDING COVERAGE		NAIC #
		INSURER A: Travelers Property Casualty Ins Co	om	36161
INSURED	CARTSYS-01	INSURER B: Continental Casualty Company		20443
Carte'Graph Systems, Inc.		INSURER C:		
3600 Digital Dr. Dubuque IA 52003		INSURER D:		
Dubuque IA 32003		INSURER E:		
		INSURER F:		
COVERAGES	CERTIFICATE NUMBER: 868992768	REVISION NUM	/IBER:	

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

TYPE OF INSURANCE COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR AGGREGATE LIMIT APPLIES PER: OLICY PRO- DITHER:	Y	SUBR WVD	POLICY NUMBER ZLP-14T1793A	POLICY EFF (MM/DD/YYYY) 11/1/2016	POLICY EXP (MM/DD/YYYY) 11/1/2017	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ \$1,000,000 \$500,000
CLAIMS-MADE X OCCUR AGGREGATE LIMIT APPLIES PER: OLICY PRO- JECT LOC OTHER:	Y		ZLP-14T1793A	11/1/2016	11/1/2017	DAMAGE TO RENTED	· //
AGGREGATE LIMIT APPLIES PER: OLICY PRO- LOC OTHER:							\$500,000
OLICY PRO- JECT LOC OTHER:							
OLICY PRO- JECT LOC OTHER:						MED EXP (Any one person)	\$10,000
OLICY PRO- JECT LOC OTHER:						PERSONAL & ADV INJURY	\$1,000,000
THER:						GENERAL AGGREGATE	\$2,000,000
						PRODUCTS - COMP/OP AGG	\$2,000,000
							\$
MOBILE LIABILITY	Υ		BA-4C272345	11/1/2016	11/1/2017	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000
NY AUTO						BODILY INJURY (Per person)	\$
LL OWNED SCHEDULED AUTOS						BODILY INJURY (Per accident)	\$
IIRED AUTOS NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	\$
							\$
MBRELLA LIAB X OCCUR			ZUP-14T17941	11/1/2016	11/1/2017	EACH OCCURRENCE	\$5,000,000
XCESS LIAB CLAIMS-MADE						AGGREGATE	\$
ED X RETENTION \$ 10,000							\$
ERS COMPENSATION MPLOYERS' LIABILITY			HJUB-4C27710-7-15	11/1/2016	11/1/2017	X PER OTH- STATUTE ER	
	1					E.L. EACH ACCIDENT	\$1,000,000
ROPRIETOR/PARTNER/EXECUTIVE	٠٨					E.L. DISEASE - EA EMPLOYEE	\$1,000,000
ROPRIETOR/PARTNER/EXECUTIVE FR/MEMBER EXCLUDED?						E.L. DISEASE - POLICY LIMIT	\$1,000,000
ROPRIETOR/PARTNER/EXECUTIVE R/MEMBER EXCLUDED?			B2087285333	11/1/2016	11/1/2017		\$1,000,000 \$2,000,000
	/MEMBER EXCLUDED? ory in NH) scribe under	MEMBER EXCLUDED? ry in NH) scribe under TION OF OPERATIONS below	/MEMBER EXCLUDED? rry in NH) scribe under	MEMBER EXCLUDED? N/A rey in NH) scribe under TION OF OPERATIONS below	MEMBER EXCLUDED? N/A ryg in NH) scribe under TION OF OPERATIONS below	MEMBER EXCLUDED? N/A ray in NH) scribe under TION OF OPERATIONS below	MEMBER EXCLUDED?

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Professional Errors & Omission Policy - B2087285333

Includes Information Risk Network Security & Privacy Injury Liability Sublimits \$1,000,000\$ with a \$25,000 deductible

Proposal 28391 Cloud based EAM for the City of Denver Traffic Assets

The City and County of Denver, its elected and appointed officials, employees and volunteers are included as additional insured on the general liability as required in the written contract as provided by endorsement CGD417. Additional insureds included on the business auto as provided by CAT353

CERTIFICATE HOLDER	CANCELLATION
City and County of Denver 201 W Colfax Ave Dpt 304 Denver CO 80202	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE Tenanci Miredonan



Appendix A Mandatory Business Requirements

Requirements Sections No.	Description of Requirement	Yes	No	Explanation / Comments
3.0 Asset Invent	ory Management			
3.1 Inventory Attributes				
3.1.1	Basic Asset Identifiers			
3.1.1.1	The System shall use a standard identification (ID) convention with unique ID for each Asset.	Yes		
3.1.1.2	The System shall have the ability to identify each Asset by its type.	Yes		
3.1.1.3	The System shall provide a description field for each Asset that shall allow user to input additional text and numerical information about the Asset.	Yes		
3.1.1.4	The System shall provide the ability to assign each Asset to the maintenance group (signals, signs, etc.) as designated by the City.	Yes		
3.1.1.5	The System shall allow the ability to tie each Asset to multiple groups – Neighborhood, Projects, Roadway, Council District, etc. based on City's business needs.	Yes		
3.1.1.6	The System shall have the ability to associate barcode to each Asset.	Yes		
3.1.2	Asset Location Identifiers			
3.1.2.1	The System shall provide the ability to identify each Asset location by GPS reference coordinate system that can be used with the City's GIS system to display Assets on the GIS map.	Yes		
3.1.2.2	The GPS coordinate system shall work with the City's GIS system.	Yes		
3.1.2.3	The System shall interface with City's ArcGIS software version 10.3.1	Yes		
3.1.2.4	The System shall be able to accommodate multiple Assets at one specific location.	Yes		
3.1.3	City's Location Code Database			



3.1.3.1	The System shall be able to incorporate the data from the City's location code database. All intersections and street segments have location codes.	Yes	
3.1.4	Asset Attributes		
3.1.4.1	The System shall provide the City the ability to assign Asset attributes based on each Traffic Asset type.	Yes	
3.1.4.2	The System shall not restrict the number of attributes that can be associated with a type of Asset and shall be configurable by the City.	Yes	
3.1.4.3	The System shall allow the City to change the names of attributes to meet its business needs.	Yes	
3.1.4.4	The System shall have the ability to include any physical access requirements. (i.e. ground, ladder or bucket truck)	Yes	
3.1.4.5	The System shall have the ability to include lane closure requirements. (i.e. all lanes, behind guardrail, left/right shoulder, median, not applicable, lane one and two, etc.)	Yes	
3.1.5	Asset Components		
3.1.5.1	The System shall provide the City with the ability to list major components for each Asset. At a minimum, the System shall allow at least	Yes	
	ten (10) major components to be listed for each Asset.		
3.1.5.2		Yes	
3.1.5.2 3.1.6	Asset. The System shall provide the ability to include component identifiers as defined by the City and these can include, but not limited to, the following: Manufacturer, Model, and Serial	Yes	
	Asset. The System shall provide the ability to include component identifiers as defined by the City and these can include, but not limited to, the following: Manufacturer, Model, and Serial Number.	Yes	
3.1.6	Asset. The System shall provide the ability to include component identifiers as defined by the City and these can include, but not limited to, the following: Manufacturer, Model, and Serial Number. Installation, Warranty and License The System shall provide the ability to include the acceptance date, month, and year for each		



each of the major components of the Asset. (If applicable to the Asset)					
The System shall provide the ability to include license expiration date, month, and year for each firmware and software component of the Asset. (If applicable to the Asset)	Yes				
Asset Physical Location					
The system shall provide the ability for the City to define condition of the Asset in at least the following conditions, with the ability to add more conditions later based on the City's business needs: Good, Fair, Poor	Yes				
Distance Factors					
The System shall provide the ability to incorporate average travel time (round trip) from one of the two maintenance facilities (Roslyn and Central Platte location) depending on Asset and its associated maintenance facility. The travel time shall be able to be inputted in minutes. The City intends to use this information for maintenance resource planning.	Yes				
Asset Configuration					
Asset Configuration Adding New Text					
	Yes				
Adding New Text The System shall allow City's EAM System	Yes				
Adding New Text The System shall allow City's EAM System Administrator to add new Asset(s). The System shall allow the City's EAM System Administrator to complete addition of the Asset based on the requirements listed in Section					
Adding New Text The System shall allow City's EAM System Administrator to add new Asset(s). The System shall allow the City's EAM System Administrator to complete addition of the Asset based on the requirements listed in Section 3.1. Upon new Asset configuration, the System	Yes				
Adding New Text The System shall allow City's EAM System Administrator to add new Asset(s). The System shall allow the City's EAM System Administrator to complete addition of the Asset based on the requirements listed in Section 3.1. Upon new Asset configuration, the System shall log the configuration activity. The System shall allow approved users to temporarily add new Asset(s) to the EAM System. Also, the System shall notify the EAM Administrator for final verification and approval	Yes				
	applicable to the Asset) The System shall provide the ability to include license expiration date, month, and year for each firmware and software component of the Asset. (If applicable to the Asset) Asset Physical Location The system shall provide the ability for the City to define condition of the Asset in at least the following conditions, with the ability to add more conditions later based on the City's business needs: Good, Fair, Poor Distance Factors The System shall provide the ability to incorporate average travel time (round trip) from one of the two maintenance facilities (Roslyn and Central Platte location) depending on Asset and its associated maintenance facility. The travel time shall be able to be inputted in minutes. The City intends to use this information for maintenance resource	The System shall provide the ability to include license expiration date, month, and year for each firmware and software component of the Asset. (If applicable to the Asset) Asset Physical Location The system shall provide the ability for the City to define condition of the Asset in at least the following conditions, with the ability to add more conditions later based on the City's business needs: Good, Fair, Poor Distance Factors The System shall provide the ability to incorporate average travel time (round trip) from one of the two maintenance facilities (Roslyn and Central Platte location) depending on Asset and its associated maintenance facility. The travel time shall be able to be inputted in minutes. The City intends to use this information for maintenance resource planning.	The System shall provide the ability to include license expiration date, month, and year for each firmware and software component of the Asset. (If applicable to the Asset) Asset Physical Location The system shall provide the ability for the City to define condition of the Asset in at least the following conditions, with the ability to add more conditions later based on the City's business needs: Good, Fair, Poor Distance Factors The System shall provide the ability to incorporate average travel time (round trip) from one of the two maintenance facilities (Roslyn and Central Platte location) depending on Asset and its associated maintenance facility. The travel time shall be able to be inputted in minutes. The City intends to use this information for maintenance resource	The System shall provide the ability to include license expiration date, month, and year for each firmware and software component of the Asset. (If applicable to the Asset) Asset Physical Location The system shall provide the ability for the City to define condition of the Asset in at least the following conditions, with the ability to add more conditions later based on the City's business needs: Good, Fair, Poor Distance Factors The System shall provide the ability to incorporate average travel time (round trip) from one of the two maintenance facilities (Roslyn and Central Platte location) depending on Asset and its associated maintenance facility. The travel time shall be able to be inputted in minutes. The City intends to use this information for maintenance resource	applicable to the Asset) The System shall provide the ability to include license expiration date, month, and year for each firmware and software component of the Asset. (If applicable to the Asset) Asset Physical Location The system shall provide the ability for the City to define condition of the Asset in at least the following conditions, with the ability to add more conditions later based on the City's business needs: Good, Fair, Poor Distance Factors The System shall provide the ability to incorporate average travel time (round trip) from one of the two maintenance facilities (Roslyn and Central Platte location) depending on Asset and its associated maintenance facility. The travel time shall be able to be inputted in minutes. The City intends to use this information for maintenance resource



T			
3.2.2.2	Prior to removal of the Asset from the inventory, the System shall archive the Asset's complete history.	Yes	
3.2.2.3	Upon Asset removal configuration the System shall log the configuration activity.	Yes	
3.2.3	Relocating Assets		
3.2.3.1	The System shall allow the City's EAM System Administrator to relocate the Asset. This shall be accomplished by changing relevant information based on the requirements in Section 3.1.	Yes	
3.2.3.2	Prior to relocation of the Asset within the inventory, the System shall archive the Asset's complete history. However, the Asset history shall remain with the relocated Asset.	Yes	
3.2.3.3	Upon Asset relocation configuration, the System shall log the configuration activity.	Yes	
3.2.3.4	The System shall allow approved users to temporarily relocate Asset(s) in the EAM System. Also, the System shall notify the EAM Administrator for final verification and approval into the EAM System	Yes	
3.2.4	Updating Asset		
3.2.4.1	The System shall allow the City's EAM System Administrator to update the Asset information. This shall be accomplished by changing relevant information based on the requirements in Section 3.1.	Yes	
3.2.4.2	Prior to update of the Asset, the System shall archive the Asset's complete history. However, the Asset history shall remain with the updated Asset.	Yes	
3.2.4.3	Upon update of Asset configuration, the System shall log the configuration activity.	Yes	
3.2.4.4	The System shall allow approved users to temporarily update Asset(s) to the EAM System. Also, the System shall notify the EAM Administrator for final verification and approval into the EAM System.	Yes	
3.3	Asset Data		
3.3.1	Storing Supportive Data		



3.3.1.1	The System shall be able to store data, graphic(s) and web files for each Asset or Asset type.	Yes		
3.3.1.2	The System shall allow for unlimited number of files to be attached to an Asset or Asset type.	Yes		
3.3.1.3	The System shall accommodate, but not be limited to, the following file formats: JPG, BMP, GIF, PDF, DWG, DOC, TXT, HTML etc.	Yes		
3.3.1.4	The System shall accommodate the following specific groups for each Asset or Asset type: Photos, As-Builts (if applicable), Technical Specs (if applicable)	Yes		
3.3.2	Storage Performance			
3.3.2.1	The System shall include a minimum of 20TB storage capacity and if additional storage is required, the City shall be allowed to purchase additional storage capacity in 10TB increments as needed.	Yes		
3.3.2.2	The storage capacity shall not impact or affect performance of the EAM System for its users. The vendor shall disclose any limitations with storage capacity, performance and required bandwidth connection.	Yes		
3.3.3	Accessing Data			
3.3.3.1	The System shall allow for access of information files stored for each Asset or Asset type.	Yes		
3.3.3.2	The System shall display the information file under the selected Asset group.	Yes		
3.3.3.3	Upon user's selection of the information file, the System shall allow access to the file.	Yes		
3.3.4	Removing Data and Archival			
3.3.4.1	The System shall allow for removal of information files for each Asset or Asset type by user.	Yes		
3.3.4.2	Prior to removal of the information file, the System shall archive the file in a compressed format to reduce space.	Yes		



3.3.4.3	The system shall store all Asset inventory and maintenance history regardless if it is removed or relocated.	Yes			
3.3.4.4	The system shall allow EAM administrator the ability to permanently delete data based on business needs.	Yes			
3.4	Asset Preventative Maintenance Protocols				
3.4.1	Protocol Configuration				
3.4.1.1	The System shall allow for preventative maintenance protocol configuration by: Individual or multiple Asset(s). Type of Asset or combination of type of	Yes			
	 Asset and manufacturer. Major components within each type of Asset. When new Asset is added." 				
3.4.1.2	The System shall allow EAM Administrator to configure preventative maintenance protocols.	Yes			
3.4.1.2 3.4.2		Yes			
	configure preventative maintenance protocols.	Yes			
3.4.2	Changes to the Protocol The System shall allow for changes to the existing preventative maintenance protocol by: Individual or multiple Asset(s). Type of Asset or combination of type of Asset and manufacturer. Major components within each type of				
3.4.2.1	Changes to the Protocol The System shall allow for changes to the existing preventative maintenance protocol by: Individual or multiple Asset(s). Type of Asset or combination of type of Asset and manufacturer. Major components within each type of Asset." The System shall allow EAM Administrator to make changes to preventative maintenance	Yes			
3.4.2.1 3.4.2.2	Changes to the Protocol The System shall allow for changes to the existing preventative maintenance protocol by: Individual or multiple Asset(s). Type of Asset or combination of type of Asset and manufacturer. Major components within each type of Asset." The System shall allow EAM Administrator to make changes to preventative maintenance protocols. The System shall allow Managers and approved users to temporarily make changes to preventative maintenance protocols. Also, the System shall notify the EAM Administrator for final verification and approval into the EAM	Yes			



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existing preventative maintenance protocol by: Individual or multiple Asset(s). Type of Asset or combination of type of Asset and manufacturer. Major components within each type of Asset. The System shall allow EAM Administrator to delete preventative maintenance protocols. Asset Replacement Protocols 3.5.1 Protocol Configuration 3.5.1.1 The System shall allow for replacement protocol configuration by: Type of Asset or combination of type of Asset and manufacturer. Major components within each type of Asset. When new Asset is added 3.5.1.2 The system shall be capable of calculating the remaining useful life of the Asset. Tyes Tyes Tyes Tyes Tyes Tyes Tyes Tyes Tyes The System shall be capable of calculating the remaining useful life of the Asset. Tyes Tyes	3.4.4	Deleting the Protocol			
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Asset. 3.4.4.2 The System shall allow EAM Administrator to delete preventative maintenance protocols. 3.5 Asset Replacement Protocols 3.5.1 Protocol Configuration 3.5.1.1 The System shall allow for replacement protocol configuration by: Type of Asset or combination of type of Asset and manufacturer. Major components within each type of Asset. When new Asset is added 3.5.1.2 The system shall be capable of calculating the remaining useful life of the Asset. 3.5.1.3 The System shall allow EAM Administrator to Yes		Type of Asset or combination of type of			
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Asset and manufacturer. Major components within each type of Asset. When new Asset is added 3.5.1.2 The system shall be capable of calculating the remaining useful life of the Asset. The System shall allow EAM Administrator to Yes	3.5.1.1		Yes		
Asset. When new Asset is added 3.5.1.2 The system shall be capable of calculating the remaining useful life of the Asset. The System shall allow EAM Administrator to Yes					
3.5.1.2 The system shall be capable of calculating the remaining useful life of the Asset. 3.5.1.3 The System shall allow EAM Administrator to Yes					
remaining useful life of the Asset. 3.5.1.3 The System shall allow EAM Administrator to Yes		When new Asset is added			
	3.5.1.2		Yes		
	3.5.1.3	The System shall allow EAM Administrator to configure replacement protocols.	Yes		
3.5.2 Changes to the Protocol	3.5.2	Changes to the Protocol			



3.5.2.1	The System shall allow for changes to the existing replacement maintenance protocol by: Individual or multiple Asset(s) Type of Asset or combination of type of Asset and manufacturer. Major components within each type of	Yes	
	Asset.		
3.5.2.2	The System shall allow EAM Administrator to make changes to replacement protocols.	Yes	
3.5.2.3	The System shall allow Managers and approved users to temporarily make changes to replacement protocols. Also, the System shall notify the EAM Administrator for final verification and approval into the EAM System.	Yes	
3.5.3	Removing the Protocol		
3.5.3.1	The System shall allow users to remove the existing replacement maintenance protocol by: Individual or multiple Asset(s) Type of Asset or combination of type of Asset and manufacturer. Major components within each type of Asset.	Yes	
3.5.3.2	The System shall allow EAM Administrator to remove replacement protocols.	Yes	
3.5.3.3	The System shall allow Managers and approved users to temporarily remove preventative maintenance protocols. Also, the System shall notify the EAM Administrator for final verification and approval into the EAM System.	Yes	
3.5.4	Deleting the Protocol		
3.5.4.1	The System shall allow user to delete the existing replacement maintenance protocol by: Individual or multiple Asset(s) Type of Asset or combination of type of Asset and manufacturer. Major components within each type of Asset.	Yes	
3.5.4.2	The System shall allow EAM Administrator to delete replacement protocols.	Yes	



Asset Inventory Data		
Traffic Signs		
The System shall incorporate the City's existing data provided by the City.	Yes	
The System shall be able to incorporate the new data procured by the City from the Inventory Data RFP.	Yes	
Traffic Signals		
The system shall be able to incorporate the new data procured by the City from the inventory Data RFP.	Yes	
Pavement Markings		
The System shall be able to incorporate the new data procured by the City from the Inventory Data RFP.	Yes	
The System shall have the ability to input existing retro value and associated Asset data into the System through City's vehicles with auto mounted retro meter for running linear records for pavement markings.	Yes	
Bollards		
The System shall be able to incorporate the new data procured by the City from the Inventory Data RFP.	Yes	
ITS Assets (Traffic Cameras and VMS)		
The System shall be able to incorporate the new data procured by the City from the Inventory Data RFP.	Yes	
Asset Inventory Templates and Preloaded Data		
Traffic Signs		
The System shall come pre-loaded with Manual of Uniform Traffic Control Devices (MUTCD) signs codes.	Yes	
The System shall have the ability to add custom signs codes in the format used by the City.	Yes	
	Traffic Signs The System shall incorporate the City's existing data provided by the City. The System shall be able to incorporate the new data procured by the City from the inventory Data RFP. Traffic Signals The system shall be able to incorporate the new data procured by the City from the inventory Data RFP. Pavement Markings The System shall be able to incorporate the new data procured by the City from the inventory Data RFP. The System shall have the ability to input existing retro value and associated Asset data into the System through City's vehicles with eact mounted retro meter for running linear records for pavement markings. Bollards The System shall be able to incorporate the new data procured by the City from the inventory Data RFP. TS Assets (Traffic Cameras and VMS) The System shall be able to incorporate the new data procured by the City from the inventory Data RFP. Asset Inventory Templates and Preloaded Data Traffic Signs The System shall come pre-loaded with Manual of Uniform Traffic Control Devices (MUTCD) signs codes in the format used by the Custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom signs codes in the format used by the custom s	Traffic Signs The System shall incorporate the City's existing data provided by the City. The System shall be able to incorporate the new data procured by the City from the inventory Data RFP. Traffic Signals The system shall be able to incorporate the new data procured by the City from the inventory Data RFP. Pavement Markings The System shall be able to incorporate the new data procured by the City from the inventory Data RFP. The System shall be able to incorporate the new data procured by the City from the inventory Data RFP. The System shall have the ability to input existing retro value and associated Asset data into the System through City's vehicles with auto mounted retro meter for running linear records for pavement markings. Bollards The System shall be able to incorporate the new data procured by the City from the inventory Data RFP. TS Assets (Traffic Cameras and VMS) The System shall be able to incorporate the new data procured by the City from the inventory Data RFP. Asset Inventory Templates and Preloaded Data Traffic Signs The System shall come pre-loaded with Manual of Uniform Traffic Control Devices (MUTCD) signs codes. The System shall have the ability to add custom signs codes in the format used by the



3.7.2	Traffic Signals		
3.7.2.1	The System shall come loaded with a template of industry standard components.	Yes	
3.7.2.2	The System shall have the ability to add more components.	Yes	
3.7.3	Pavement Markings		
3.7.3.1	The System shall come loaded with MUTCD pavement markings data.	Yes	
3.7.3.2	The System shall have the ability to add more customized symbols.	Yes	
3.7.4	Bollards		
3.7.4.2	The System shall have the ability to add more components.	Yes	
3.8	Asset Inventory Management and User Level Roles		
3.8.1	Management – The System shall allow for full access to generate reports but with no ability for any configuration.	Yes	
3.8.2	EAM Administrator – The System shall allow for full administrative access and configuration as described in this Section 3.0. The System shall allow EAM Administrator to customize individual user role and capabilities for Asset inventory management.	Yes	
3.8.3	Managers and Dispatch Personnel – The System shall allow for full access but with no ability for configuration as described in this Section 3.0. Users as identified by EAM Administrator shall also be able to add new Assets, relocate and update existing Assets in the EAM System. Also, the System shall notify the EAM Administrator for final verification and approval into the EAM System.	Yes	
3.8.4	Operational and Crew Supervisors – The System shall allow access for only Assets that are tied to their Asset group and with ability to update Asset physical condition and other inventory data. Users as identified by EAM Administrator shall also be able to add new Assets, relocate and update existing Assets in the EAM System. Also, the System shall notify	Yes	



	0.00
the EAM Administrator for final verification and approval into the EAM System.	
3.8.5 Maintenance Technicians – The System shall allow access for only Assets that are tied to their Asset group with ability to update Asset inventory data. Users as identified by EAM Administrator shall also be able to add new Assets, relocate and update existing Assets in the EAM System. Also, the System shall notify the EAM Administrator for final verification and approval into the EAM System.	
3.8.6 Warehouse Personnel – The System shall allow access to Asset inventory but no ability to configure or update Asset data.	
4.0 Components and Materials Inventory Management	
4.1 Track Components and Materials	
 The System shall provide the ability to track components and materials inventory across multiple inventory locations and maintenance vehicles associated with City maintenance. At a minimum, the tracking shall include the following: Components and Materials Descriptive name Available number of quantity by warehouse location and maintenance vehicle 	
4.1.2 The System shall allow EAM Administrator to delete replacement protocols.	
4.2 Support Scanning Technologies	
4.2.1 The System shall support industry standard bar code technologies and symbologies (e.g. Code 39, UPC and Code 128, ISBN, ISSN, EAN 8/13 etc.) for tracking components and materials.	
4.2.2 The System shall allow for capturing and translation of relevant fields, forms and screens	
using the scanning technologies.	
using the scanning technologies. 4.2.3 The System shall allow for flexible inventory numbering conventions. Yes	



4.3.1	The System shall support a notification capability to an assigned user based on minimum stock counts or quantities.	Yes	
4.3.2	The System shall support the ability to assign minimum stock counts or quantities by Asset and specific components or materials.	Yes	
4.4	Components and Materials Management and User Level Roles		
4.4.1	Management – The System shall allow full access to reports related to inventory view of components and materials.	Yes	
4.4.2	EAM Administrator – The System shall allow full administrative access, inventory view of components and materials available and have the ability to set minimum stock notification for all components and materials. The System shall allow EAM Administrator to customize individual user role and capabilities for components and materials management.	Yes	
4.4.3	Managers and Dispatch Personnel – The System shall allow inventory view of components and materials available across multiple locations and provide notification when inventory is at minimum stock counts or quantities.	Yes	
4.4.4	Operational and Crew Supervisors – The System shall allow inventory view of components and materials available across multiple locations only for related group.	Yes	
4.4.5	Maintenance Technicians – The System shall allow inventory view of components and materials across multiple locations only for related group.	Yes	
4.4.6	Warehouse Personnel – The System shall allow full administrative access, inventory view of components and materials across multiple locations for all groups and have the ability to update, edit, add, remove, relocate, etc. components and materials.	Yes	
5.0 Work Order I	Management		
5.1	General Requirements		
5.1.1	The System shall provide a work order system from which work elements (preventative,	Yes	



	reactive and replacement) can be input, organized and prioritized before they are committed to a Work Order process.		
5.1.2	The System shall provide flexibility needed to accommodate the City's work flow process for each Asset type.	Yes	
5.1.3	The System shall be able to accommodate unlimited number of work orders at any given time.	Yes	
5.1.4	The System shall be able to re-assign and change work elements as needed within a work-order.	Yes	
5.1.5	The System shall identify, track, and maintain active (or open) Work Order records.	Yes	
5.1.6	The System shall allow for creation of multiple Work Orders from one service request for various groups within the City.	Yes	
5.1.7	The System shall allow for a stair-stepped work order process that allows work order to be routed to various users as part of the work order process.	No	
5.1.8	For each work order, the System shall have the ability to record the time stamp without human integration for each change to the work order and/or each procedural step completed as part of the work order process. In addition, the system shall record the user who made the changes or completed the procedural step.	Yes	
5.1.9	The System shall allow the Manager to change the type of maintenance. This shall automatically close the existing type of work order and start a new work order with the relevant type of maintenance.	No	
5.1.10	The System shall allow the Manager the ability to change or cancel work orders at any time. The cancelled work order shall be discarded by the System.	Yes	
5.1.11	The System shall allow for work order file access under each specific group and user permission levels.	Yes	
5.1.12	The System shall have the ability to incorporate the City's existing accident damage recovery process including incorporation of the	Yes	



	City's Incident Repair Cost Summary Form into the System.		
5.1.13	The System shall allow Dispatch Personnel to create work order for Utility Locate Request and assign work order to a Utility Locator.	Yes	
5.1.14	The System shall provide the ability to develop a contact list for Dispatch Personnel consisting of Subject Matter Experts (SME) with name, contact information and area of expertise.	Yes	
5.2	Preventative Maintenance Work Orders		
5.2.1	Based on the maintenance protocols in Section 3.4, the System shall generate planned maintenance events for each Asset at the City's desired time interval prior to scheduled maintenance.	Yes	
5.2.2	The System shall NOT automatically convert planned maintenance event(s) to work orders.	Yes	
5.2.3	The System shall allow the Manager to be able to commit the planned maintenance event(s) and the Work Order process without reentering information.	Yes	
5.3	Reactive and Replacement Maintenance Work Orders		
5.3.1	The System shall allow approved users the ability to generate a reactive and replacement type of work order.	Yes	
5.3.2	The System shall allow the Manager the ability to prioritize a reactive and replacement type of work order.	Yes	
5.3.3	The System shall provide Dispatch Personnel a contact list consisting of SMEs.	Yes	
5.4	Work Order Attributes		
5.4.1	Work Order Functionality and Priority		
5.4.1.1	Based on the City's business needs, type of Asset, type of problem code, etc. The System shall automatically provide the ability to define the work order priority of the Asset based on the City's priority list, with visual alarming capability. • Highest Priority work orders with red color	Yes	



	 Second Priority work orders with yellow color 			
	 Third Priority work orders with green color 			
	The Priority can be manually re-assigned:			
	 By Dispatcher who receives the call and determines the priority by the type of caller (Police Officer, Citizen, etc.) and type of malfunction (signal light flashing, parking sign damaged, etc.) 			
	 By Managers and crew supervisor who review the work order and determine priority based on business needs and resource availability. 			
5.4.2	Initial Identifiers			
5.4.2.1	At the user's request, the System shall generate work order(s) with unique number ID.	Yes		
5.4.2.2	For each work order, the System shall provide the ability to include the following information:	Yes		
	Asset ID (see Section 3.1.1.1)			
	Type of Asset (see Section 3.1.1.2)			
	Location Identifiers (see Section 3.1.2)			
5.4.2.3	For each work order, the System shall provide the ability to identify the type of maintenance being committed to the work order process.	Yes		
5.4.2.4	For each work order, the System shall provide the ability to include the Maintenance Technician ID.	Yes		
5.4.2.5	For each preventative, reactive and replacement maintenance work order, the System shall have the ability to add a list of problem codes that include a short problem description with a code associated with it. The code shall act as an identifier while the short description shall be used in display. In addition to the codes, the System shall allow the code of the codes of the codes.	Yes		
	user to manually enter additional information about the problem.			
5.4.2.6	For preventative maintenance work order, the System shall provide the ability to include the following information:	Yes		



	 Maintenance Procedure(s) – This is a generic description of maintenance to be performed with an associated code. Comments - Additional information inputted by the previous Maintenance Technician. 		
5.4.2.7	The System shall provide the capability to account for Work Orders that apply to a Warranty situation and note that in the Work Order.	Yes	
5.4.2.8	The System shall include the relevant Asset condition criteria.	Yes	
5.4.3	Work Order Assignment and Duration		
5.4.3.1	The System shall provide the ability to route the work order to an individual or multiple individuals depending on the City's internal maintenance procedures and/or work order process.	Yes	
5.4.3.2	Based on the protocols defined by each Asset in Sections 3.1.7.1, 3.4, and 3.5, the System shall generate the total hours assigned for the work order including the drive time.	Yes	
5.4.3.3	Based on Section 5.4.1, the System shall generate a priority for the work order.	Yes	
5.4.3.4	The System shall provide the supervisor the ability to change the work order priority.	Yes	
5.4.4	Work Performed		
5.4.4.1	The System shall have the ability to manually and automatically track the actual hours spent on the work order by individual or multiple individuals. The City will adopt a business process to meet its business needs.	Yes	
5.4.4.2	The System shall have the ability to track work order times for received call time, time work order is created, arrival time of personnel, and time when work is completed.	Yes	
5.4.4.3	The System shall have the ability to track the materials and components used by individual or multiple individuals.	Yes	
5.4.4.4	The System shall have the ability to track the equipment used by individual or multiple individuals.	Yes	
			<u> </u>



5.4.4.5	The System shall have the ability to track the actual mileage and drive time to accomplish the work order. The City's internal procedures shall identify how to treat the mileage and drive time if multiple work orders are accomplished on the same trip.	Yes	
5.4.4.6	The System shall have the ability to track work order completion.	Yes	
5.4.4.7	The System shall have the ability to add comments after the work completion.	Yes	
5.4.4.8	The System shall provide the ability to note the Asset condition based on field observation (see Section 3.1.7) and this condition shall be automatically updated in inventory management.	Yes	
5.4.4.9	The System shall provide the ability to track additional activities. This could result in the generation of a new work order.	Yes	
5.4.5	Work Order Status		
5.4.5.1	The System shall provide the ability to assign a work order status code as follows: submitted for approval, opened, suspended for third party dependencies with work remaining, completed and/or closed.	Yes	
5.4.5.2	The System shall provide the ability to include additional user comments.	Yes	
5.4.6	Work Order Dependents		
5.4.6.1	For each work order, the System shall be capable of tracking multiple dependencies (third party or otherwise) identified below: Telephone Company Power Company Vendors Contractors Construction Projects Public and Traffic safety Personnel Safety Other	Yes	



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5.4.6.2	The System shall provide the capability to include estimated resolution date(s) for the dependency(s).	Yes		
5.4.6.3	The System shall be capable of setting reminders to assigned user(s) for such dependency(s) based on the user's desired time frames.	Yes		
5.4.7	Date/Time Stamps			
5.4.7.1	For each work order, the following date/time stamps shall be readily available: Date and Time when Work Order is created. Date and Time when Work Order is submitted for approval. Date and Time when Work Order is Opened Date and Time when Work Order is suspended due to third party dependencies. Date and Time when Work Order is Completed Date and Time when Work Order is Completed	Yes		
5.4.8	Response Time			
5.4.8.1	The System shall provide the ability to capture response time from the time the work order was created to the time when City maintenance personnel arrived at the Asset.	Yes		
5.4.9	City's traffic Asset Accident Recovery Process			
5.4.9.1	The System shall allow Manager or Dispatcher to create work order and assign priority as soon as the information is received about damage to a Traffic Asset due to accident.	Yes		
5.4.9.2	The System shall allow the Manager or Dispatcher to flag the work order to being tied to the accident.	Yes		
5.4.9.3	After the work is performed and work order is completed, the System shall generate the City's Incident Repair Cost Summary Form	Yes		



with relevant details that are currently available.				
City's Utility Locate Request				
The System shall allow the Dispatcher to create a work order for all locate requests.	Yes			
The System shall allow the Dispatcher to clear the work order if conduit and infrastructure map shows no infrastructure in area.	Yes			
If maps shows no infrastructure in area, then dispatch will document it as clear. If the location shows underground infrastructure in the area, the System shall allow the Dispatcher to assign to Utility Locator and schedule an appointment in the work order.	Yes			
Tracking Capabilities				
Tracking Expenditures for Each Asset				
The System shall be able to track all maintenance costs and shall be capable of producing a detailed breakdown of all costs relating to maintenance including labor, materials, components, equipment and Traffic Asset costs. This shall include contractor costs – labor, materials, components, equipment and Traffic Asset costs.	Yes			
The System shall be able to record multiple labor costs, by job class, hourly rate type (i.e. regular, overtime, double time, holiday time, etc.) number of hours, and extended (i.e. calculated) cost.	Yes			
The System shall be able to record multiple materials or components costs, part number, quantity, and extended (i.e. calculated) cost.	Yes			
The System shall be able to record multiple equipment used (i.e. backhoe, vehicle, etc.) including equipment ID, miles, hours used, and extended (i.e. calculated) cost.	Yes			
The System shall be able to modify and update individual labor, materials, and equipment cost line items, at any time.	Yes			
Tracking Other Expenditures for Each Asset				
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5.5.2.1	The System shall provide a line item on the maintenance expenditure to add utility costs to operate Assets by month year or any desired time frame.	Yes		
5.5.2.2	The System shall provide a line item for each Asset's maintenance expenditure to add telephone communication costs by each month or year. Alternatively, the System shall provide a line item on the maintenance expenditure to add utility costs to operated Assets by month or year for each City.	Yes		
5.5.3	Tracking Maintenance History and Activity for Each Asset			
5.5.3.1	The System shall provide a complete life-to-date (i.e. installation-to-replacement) maintenance history of each Asset.	Yes		
5.5.3.2	The System shall maintain a history of all maintenance activities, including labor, parts and equipment costs that have been performed on a particular Asset.	Yes		
5.5.4	Tracking Preventative Maintenance for Each Asset			
5.5.4.1	The System shall be capable of tracking the prescribed maintenance events per the maintenance protocols against the actual maintenance events	Yes		
5.5.4.2	The System shall keep track of preventative maintenance activities and generate preventative maintenance schedule based on when the last activity was performed three (3) months in advance to its scheduled time, and the system shall reset the tracking counter to the time the task was actually performed.	Yes		
5.5.5	Scheduling and Resource Requirements for Each Asset			
5.5.5.1	The System shall provide the capability to generate a preventative maintenance event schedule along with estimated resource requirements one (1) month in advance or user-defined time frame. The resource requirements shall include labor, parts, materials and equipment costs.	No		
5.5.5.2	The System shall provide the capability to generate an estimate of resource requirements	Yes		_



	based on the outstanding work orders (preventative and non-preventative)			
5.6	Work Order Management and User Level Roles			
5.6.1	Management – The System shall allow full access for all reports.	Yes		
5.6.2	EAM Administrator – The System shall allow full administrative access to work orders and configuration of work orders (complete, change, cancel, edit, update, etc.). The System shall allow EAM Administrator to customize individual user role and capabilities for work order management.	Yes		
5.6.3.	Managers and Dispatch Personnel – The System shall allow full access to all work orders with the ability to write, assign, reassign, update, edit, set priority, etc. for all groups	Yes		
5.6.4	Operational and Crew Supervisors – The System shall allow access to only work orders to Assets that are tied to their group and have the ability to write, assign, re-assign, update, edit, etc. only for related group.	Yes		
5.6.5	Maintenance Technicians – The System shall allow access to only work orders related to the group and have the ability to update only work orders assigned to the Maintenance Technician.	Yes		
5.6.6	Warehouse Personnel – The System shall not allow any access of work orders.	Yes		
6.0 Warranty Ma	nagement			
6.1	Track Warranty by Asset or Major Component			
	For each Asset or major component, the System shall have the capability to issue a warranty expiration notification to the assigned user based on user-defined time frame.	Yes		
6.2	Track Work Performed under Warranty			
	The system shall track the materials and parts replaced or repaired under warranty.	Yes		



6.3	Track License by Asset or Major Component		
	For each Asset or major component, the System shall have the capability to issue a license expiration notification to the assigned user based on user-defined time frame.	Yes	
7.0 Generating P	Performance Measures and Reporting Capabiliti	es	
7.1	Custom Reporting Tools		
7.1.1	The System shall be capable of generating custom reports that can be developed by user through search functionality.	Yes	
7.1.2	The System shall provide the ability to save the user developed search request.	Yes	
7.2	Automated Reports		
7.2.1	The System shall provide the ability to generate the following reports at the user's command or user defined time frames.	Yes	
7.2.2	The System shall provide the ability to automatically route the reports via email to designated or assigned users.	Yes	
7.2.3	Asset Physical Condition Report		
	The System shall generate Asset physical condition reports for the following levels of aggregations: Individual Asset level Type of Assets level – by City wide, neighborhood, council district, etc. Asset functionality level – by City wide, neighborhood, council district, etc. System level – by City wide, neighborhood, council district, etc.	Yes	
7.2.4	Mean time between Failure (MTBF) Report		
7.2.4.1	The System shall generate MTBF report for the following: By Asset By type of Asset or component By Asset or component manufacturer	Yes	



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7.2.5	State of the Inventory Report		
	Based on the actual remaining life and the replacement protocols in Section 3.5, the System shall generate the state of the inventory report that shows the remaining useful life in terms of years and whole percentages for the follow level of aggregation:	Yes	
	 Individual Asset level 		
	 Type of Assets level – by City wide, neighborhood, council district, etc. 		
	 Asset functionality level – by City wide, neighborhood, council district, etc. 		
	 System level – by City wide, neighborhood, council district, etc. 		
	It is expected that the System shall be capable of reporting the remaining useful life of an Asset beyond 100% for Assets that exceeded their useful life.		
7.2.6	Maintenance Costs Report		
7.2.6.1	The System shall generate reports for maintenance cost, material costs, labor costs, components and equipment cost and total cost for the following levels of aggregation at user defined time frames:	Yes	
	Individual Asset level		
	 Type of Assets level – by City wide, neighborhood, council district, etc. 		
	 Asset functionality level – by City wide, neighborhood, council district, etc. 		
	 System level – by City wide, neighborhood, council district, etc. 		
7.2.6.2	The System shall generate comparative maintenance costs for multiple manufacturers of a type of Asset.	Yes	
7.2.7	Life Cycle Cost		
	The System shall generate reports for the life cycle cost and will include costs for materials, labor, components and equipment for the following conditions: By Asset By type of Asset or component	Yes	
	by type of Addet of deliperiorit		<u>'</u>



Py Accet or component manufacturer	
by Asset or component manufacturer	
Response Time	
The System shall provide the ability to generate report for response time	Yes
 Work Order priority. 	
Type of malfunction of problem code.	
Bad Actors Report	
The System shall be able generate a list of Assets where most maintenance occurs.	Yes
erformance Measures and Reporting User Leve	el and Roles
Management – The System shall allow full access for all reports.	Yes
EAM Administrator – The System shall allow full administrative access to reports, performance measures and have configuration capabilities. The System shall allow EAM Administrator to customize individual user role and capabilities for generating performance measures and reporting.	Yes
Managers and Dispatch Personnel – The System shall allow full access to all reports and performance measures.	Yes
Operational and Crew Supervisors – The System shall allow access to reports and performance measures only related to Assets that are tied to their group.	Yes
Maintenance Technicians – The System shall allow access to reports only related to the group and performance measures only related to group.	Yes
Warehouse Personnel – The System shall not allow any access of reports or performance measures.	Yes
sual and Customizable Dashboard	
The System shall provide real-time visual dashboard of all active maintenance activities for City's EAM System users.	Yes
The System shall only show active information that is based on user level.	Yes
	The System shall provide the ability to generate report for response time Work Order priority. Type of malfunction of problem code. Bad Actors Report The System shall be able generate a list of Assets where most maintenance occurs. Performance Measures and Reporting User Level Management – The System shall allow full access for all reports. EAM Administrator – The System shall allow full administrative access to reports, performance measures and have configuration capabilities. The System shall allow EAM Administrator to customize individual user role and capabilities for generating performance measures and reporting. Managers and Dispatch Personnel – The System shall allow full access to all reports and performance measures. Operational and Crew Supervisors – The System shall allow access to reports and performance measures only related to Assets that are tied to their group. Maintenance Technicians – The System shall allow access to reports only related to the group and performance measures only rela



8.1.1.3 Real time dashboard shall be customizable by users and based on their user levels. 9.0 System Tectnical Requirements 9.1 Requirements 9.1.1 The overall architecture and Performance Requirements 9.1.2 The System shall be available 99.99% of the time when planned downtime is not scheduled and with no more than 40 minutes of unplanned downtime annually. 9.1.3 The System must contact EAM Administrator for approval of planned downtime at least three (3) working days in advance. 9.1.4 The System must send the EAM Administrator are report for each occurrence when the System is unavailable. The downtime report will show start and end time of downtime. 9.2 Size and Expansion Requirements 9.2.1 The System shall accommodate a minimum of 100 users and be expandable to unlimited number of users. 9.2.2 The System shall accommodate unlimited number Assets. 9.2.3 The System shall accommodate unlimited types of Assets. 9.3.4 Mapping Display 9.3.1.1 The System shall support accurate, to-scale maps (at a City wide scale) that zoom down and up. The overall components shall therefore support as a minimum the following maps: GIS maps, aerial photomaps, Google maps and others. 9.4 System Access Capabilities 9.4.1 Desktop and Field Laptop Accessibility	T	T		
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9.4.1 Desktop and Field Laptop Accessibility	9.4	System Access Capabilities		
	9.4.1	Desktop and Field Laptop Accessibility		



9.4.1.1 The System shall be available to users using desktops or field laptops that have wireline or wireless communications. 9.4.1.2 The system shall be available for such users via an app and/or website. 9.4.2 Tablet Accessibility 9.4.2.1 The System shall be accessible through tablets provided by the City to their maintenance personnel. These tablets use Verizon Wireless communications. 9.4.2.2 The system shall store the data on the app where there is loss of wireless connectivity and sync up with the cloud system when wireless connection is restored. 9.4.2.3 It is acceptable for tablets to have a scaled down version of the System. However, the vendor must disclose the capabilities that are not available on the mobile version of the System. However, the vendor must disclose the capabilities that are not available on the mobile version of the System. 9.4.3 City Permissions and Security 9.4.3.1 The City user privileges shall be definable at a functional level. This shall allow for different levels of access to the System features and functions. 9.4.3.2 The EAM Administrator shall have full access to the System as well as the capability for maintaining user account passwords and privilege level masks. 9.4.3.3 Before gaining access to the System, the user shall be required to enter user name and password. The System shall validate the code against an encrypted database or authorized users. Successful completion of the login shall result in the execution of a session start-up procedure. The start-up procedure shall establish the privileges, object menu option, windows, and tools an operator may utilize. Any function that a user does not have access to shall either not be shown or be grayed out so the operator can aeaily distinguish what function the user has access to. 9.5 System Log Requirements				
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9.5 System Log Requirements	9.4.3.3	shall be required to enter user name and password. The System shall validate the code against an encrypted database or authorized users. Successful completion of the login shall result in the execution of a session start-up procedure. The start-up procedure shall establish the privileges, object menu option, windows, and tools an operator may utilize. Any function that a user does not have access to shall either not be shown or be grayed out so the operator can easily distinguish what	Yes	
	9.5	System Log Requirements		



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	The System shall be capable of logging and archiving of various function through the system database. The logging and archiving period shall be user definable.	Yes		
9.5.1	System Log			
	The System log shall record all of the transactions (i.e. work order process actions, notifications etc.) and user changes within the system. This shall include information about user and their associated group.	Yes		
9.5.2	Operating System Log			
	The operating system log shall log all of the System related events such as: Internal system errors System hardware failures System network failures Software fatal errors"	Yes		
9.5.3	Search Capability			
	The System shall provide a search capability that allows the user to track specific transactions, user changes, etc. Example: The user shall be able to track all of the specific actions and/or changes associated with a particular work order.	Yes		
9.6	System User for Non-Traffic Applications			
	It is the City's intent that the System shall be potentially used for other non-traffic maintenance applications such as: • Bridges Management • Pavement Management Each of these potential non-traffic applications shall work independently of each other without interference and loss of functionality from the City's EAM System.	Yes		
9.8	Training and Support			
9.8.1	The EAM System vendor shall include professional services for system setup within sixty (60) days after executed agreement of the EAM System.	Yes		



9.8.2	To better understand the City's requirements, the System vendor shall provide an onsite workshop to increase the knowledge of what are the City's business and functional goals.	Yes
9.8.3	In the first (1st) year, the EAM System vendor shall provide two and a half (2.5) days onsite train-the-trainer training event(s) for EAM Administrator, Manager(s), Dispatch(s), Crew/Operational Supervisor(s) and Warehouse Personnel. The training agenda should be agreed upon by City EAM Administrator and the EAM System vendor.	Yes
9.8.4	The EAM System vendor shall provide a half day in person training for City Staff within sixty (60) days after executed agreement of the EAM System, on overall system navigation and functionality to help familiarize City with software and its common functions.	Yes
9.8.5	The EAM System vendor shall provide documentation and guidance within sixty (60) days after executed agreement of the EAM System for the City's GIS staff to configure ESRI Base map Services for operation management integration.	Yes
9.8.6	The EAM System vendor shall provide live and online support for the EAM System with the following: Training Videos on EAM vendor website Live user support during normal business hours (8am to 5pm MST) Online technical support/training	Yes
9.8.7	The EAM System vendor shall provide an onsite event for Post-Production Support with the following topics: System Configurations Consulting and/or best practice recommendations Software Update	Yes
9.8.8	The EAM System vendor shall provide three (3) days onsite train-the-trainer training event(s) for EAM Administrator, Manager(s), Dispatch(s), Crew/Operational Supervisor(s) and Warehouse Personnel annually for years two (2) to five (5). The training agenda should	Yes



	be agreed upon by City EAM Administrator and the EAM System vendor. Topics may include 9.8.3 topics in this RFP.		
9.9	Manuals		
9.9.1	The EAM System vendor shall provide the City with online or hard copy manuals of the EAM System navigation and functionality within sixty (60) days after the executed agreement of the EAM System. The manuals may consist of, but not limited to, the following as mutually agreed upon between the City EAM Administrator and the EAM System Vendor: • EAM System, Request Management, Work Management, Asset	Yes	
	Management, Asset Management, Resource Management, tablet Navigation, Administrator Navigation, etc.		