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COUNTY OF FORT BEND

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**ADDENDUM TO SHI GOVERNMENTAL SOLUTIONS, INC.'S AGREEMENT**  
**(BuyBoard Contract No. 661-22)**

THIS ADDENDUM (“Addendum”) is entered into by and between Fort Bend County, (“County”), a body corporate and politic under the laws of the State of Texas, and SHI Governmental Solutions, Inc., (“SHI”), a company authorized to conduct business in the State of Texas (hereinafter collectively referred to as the “parties”).

WHEREAS, subject to the changes herein, the parties have executed and accepted SHI's Quotation #: 21407250, and the Proposal for Pavement Condition Data Collection and Cartegraph Implementation Support for Fort Bend County, Texas (collectively the "Agreement"), attached hereto as Exhibit "A" and incorporated fully by reference, for the purchase of specified software products and services, and data collection & implementation services (collectively the "Services"); and

WHEREAS, County desires that SHI provide Services as will be more specifically described in this Agreement; and

WHEREAS, SHI represents that it is qualified and desires to resell such Services; and

WHEREAS, the parties wish to utilize BuyBoard Contract No. 661-22, incorporated fully by reference as if set forth verbatim below, for the purchase of the Services; and

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

## AGREEMENT

1. **Term.** The term of the Agreement is effective upon execution by the County (the “Execution Date”), and shall continue for a ten year term from the Execution Date, unless terminated sooner pursuant to the Agreement. This Agreement shall not automatically renew, but may be subsequently renewed in writing upon agreement of the parties.
2. **Scope of Services.** Subject to this Addendum, SHI will render Services to County as described in Exhibit A, and in accordance with the requirements of BuyBoard Contract No. 661-22. The Services shall be scheduled at a time that is mutually agreeable between the parties but without reasonable delay. All performance of the Scope of Services by SHI including any changes in the Scope of Services and revision of work satisfactorily performed will be performed only when approved in advance and authorized by County.
3. **Payment; Non-appropriation; Taxes.** Upon completion of the tasks identified in the Scope of Services, SHI shall submit to County one (1) electronic copy of each invoice, and one (1) paper copy of each invoice showing the amounts due for Services performed in a form acceptable to County to the following addresses:

Fort Bend County Road & Bridge  
Attn: Billing  
P.O. Box 148  
Richmond, Texas 77406  
Email: keli.smith@fbctx.gov

Fort Bend County Information Technology Department  
Attn: Billing  
301 Jackson Street  
Richmond, Texas 77469  
Email: melissia.barnier@fbctx.gov  
Fax: (281) 341-4525

Payment shall be made by County within thirty (30) days of receipt of invoice(s) at the rates and times specified in Exhibit A. This Agreement is not an invoice. If County disputes charges related to the invoice submitted by SHI, County shall notify SHI no later than fourteen (14) days after the date County receives the invoice. If County does not dispute the invoice, then County shall pay each such approved invoice within thirty (30) calendar days. The County will forward a copy of each invoice, with such modifications as are consistent with this Agreement, to the County Auditor's Office for processing. It is specifically understood and agreed that in the event no funds or insufficient funds are appropriated by Fort Bend County under this Agreement, Fort Bend County shall notify all necessary parties that this Agreement shall thereafter terminate and be null and void on the last day of the fiscal period for which appropriations were made without penalty, liability or expense to Fort Bend County. County is a body corporate and politic under the laws of the State of Texas and claims exemption from sales and use taxes. A copy of a tax-exempt certificate will be furnished upon request. Interest resulting from late payments by County shall be governed by Chapter 2251, TEXAS GOVERNMENT CODE. County reserves the right to withhold payment pending verification of satisfactory work performed.

Mutually approved travel and mileage expenses incurred in the performance of required Services will be compensated only in accordance with the County's Travel Policy, a copy of which will be provided upon request. Receipts evidencing travel related expenditures made by SHI and/or SHI's subcontractors or agents shall be submitted to the County Auditor's Office:

Fort Bend County Auditor  
Attn: Robert Ed Sturdivant  
301 Jackson Street, Suite 701, Richmond, TX 77469

4. **Limit of Appropriation.** SHI clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of Three Million, Two Hundred Ten Thousand, Six Hundred Twenty-Nine and 87/100 dollars (\$3,210,629.87), specifically allocated to fully discharge any and all liabilities County may incur. SHI does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that SHI may become entitled to and the total maximum sum that County may

become liable to pay to SHI shall not under any conditions, circumstances, or interpretations thereof exceed Three Million, Two Hundred Ten Thousand, Six Hundred Twenty-Nine and 87/100 dollars (\$3,210,629.87). In no event will the amount paid by the County for all services under this Agreement exceed this Limit of Appropriation without an amendment executed by the parties.

5. **Public Information Act and Open Meetings Act.** SHI expressly acknowledges that County is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 *et seq.*, as amended, and notwithstanding any provision in the Agreement to the contrary, County will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to County by SHI shall not be disclosed to any third party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed. The terms and conditions of the Agreement are not proprietary or confidential information.

SHI expressly acknowledges that County is subject to the Texas Open Meetings Act, TEX. GOV'T CODE ANN. §§ 551.001 *et seq.*, as amended, and notwithstanding any provision in the Agreement to the contrary, County will comply with the provisions of the Texas Open Meetings Act in relation to the Agreement.

6. **Indemnity.** The parties agree that under the Constitution and laws of the State of Texas, County cannot enter into an agreement whereby County agrees to indemnify or hold harmless another party; therefore, all references of any kind to County defending, indemnifying, holding or saving harmless SHI or any other party for any reason are hereby deleted. SHI shall indemnify and defend County against all losses, liabilities, third party claims, causes of action, and other expenses, including reasonable attorney's fees, arising from activities of SHI, its agents, servants or employees, performed under this agreement arising out of the gross negligence, willful misconduct, or violation of law by SHI and/or any of SHI's subcontractors, agents, servants or employees.
7. **Applicable Law; Arbitration; Attorney Fees.** The laws of the State of Texas govern all disputes arising out of or relating to this Agreement. The parties hereto acknowledge that venue is proper in Fort Bend County, Texas, for all legal actions or proceedings arising out of or relating to this Agreement and waive the right to sue or be sued elsewhere. Nothing in the Agreement shall be construed to waive the County's sovereign immunity. County does not agree to submit disputes arising out of the Agreement to binding arbitration. Therefore, any references to binding arbitration or the waiver of a right to litigate a dispute are hereby deleted. County does not agree to pay any and/or all attorney fees incurred by SHI in any way associated with the Agreement.
8. **Certain State Law Requirements for Contracts.** The contents of this Section are required by Texas Law and are included by County regardless of content. For purposes of Sections 2252.152, 2271.002, and 2274.002, Texas Government Code, as amended, SHI hereby verifies

that SHI and any parent company, wholly owned subsidiary, majority-owned subsidiary, and affiliate:

- a. Unless affirmatively declared by the United States government to be excluded from its federal sanctions regime relating to Sudan or Iran or any federal sanctions regime relating to a foreign terrorist organization, is not identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Section 806.051, 807.051, or 2252.153 of the Texas Government Code.
- b. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, SHI does not boycott Israel and is authorized to agree in such contracts not to boycott Israel during the term of such contracts. "Boycott Israel" has the meaning provided in § 808.001 of the Texas Government Code.
- c. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, SHI does not boycott energy companies and is authorized to agree in such contracts not to boycott energy companies during the term of such contracts. "Boycott energy company" has the meaning provided in § 809.001 of the Texas Government Code.
- d. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, SHI does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and is authorized to agree in such contracts not to discriminate against a firearm entity or firearm trade association during the term of such contracts. "Discriminate against a firearm entity or firearm trade association" has the meaning provided in § 2274.001(3) of the Texas Government Code. "Firearm entity" and "firearm trade association" have the meanings provided in § 2274.001(6) and (7) of the Texas Government Code.

9. **Modifications and Waivers.** The parties may not amend or waive this Agreement, except by a written agreement executed by both parties. No failure or delay in exercising any right or remedy or requiring the satisfaction of any condition under this Agreement, and no course of dealing between the parties, operates as a waiver or estoppel of any right, remedy, or condition. The rights and remedies of the parties set forth in this Agreement are not exclusive of, but are cumulative to, any rights or remedies now or subsequently existing at law, in equity, or by statute. No other provisions to this Agreement apply except for the terms which appear and/or are incorporated in this Addendum and in Exhibit A.

10. **Human Trafficking.** BY ACCEPTANCE OF CONTRACT, SHI ACKNOWLEDGES THAT FORT BEND COUNTY IS OPPOSED TO HUMAN TRAFFICKING AND THAT NO COUNTY FUNDS WILL BE USED IN SUPPORT OF SERVICES OR ACTIVITIES THAT VIOLATE HUMAN TRAFFICKING LAWS.

11. **Limitations.** Limitations for the right to bring an action, regardless of form, must be governed by the laws of the State of Texas, Texas Civil Practice and Remedies Code § 16.070, as amended, and any provision to the contrary is hereby deleted.

12. **Use of Customer Name.** SHI may use County's name without County's prior written consent only in any of SHI's customer lists, any other use must be approved in advance by County.

13. **Performance Warranty.** SHI warrants to County that SHI has the skill and knowledge ordinarily possessed by well-informed members of its trade or profession practicing in the greater Houston metropolitan area and SHI will apply that skill and knowledge with care and diligence to ensure that the Services provided hereunder will be performed and delivered in accordance with the highest professional standards.

SHI warrants to County, for a period of 90 days commencing with Final Acceptance of the Services ("Warranty Period"), that the Services will be free from material errors and will materially conform to all requirements and specifications contained in the attached Exhibit A, and BuyBoard Contract No. 661-22.

14. **Conflict.** In the event there is a conflict between this Addendum and the Agreement, this Addendum controls. In the event there is a conflict between this Addendum and the terms and conditions of BuyBoard Contract No. 661-22, then the terms and conditions of BuyBoard Contract No. 661-22 controls to the extent of the conflict.
15. **Understanding, Fair Construction.** By execution of this Addendum, the parties acknowledge that they have read and understood each provision, term and obligation contained in this Addendum. This Addendum, although drawn by one party, shall be construed fairly and reasonably and not more strictly against the drafting party than the nondrafting party.
16. **Captions.** The section captions used in this Agreement are for convenience of reference only and do not affect the interpretation or construction of this Agreement.
17. **Electronic and Digital Signatures.** The parties to this Agreement agree that any electronic and/or digital signatures of the parties included in this Agreement are intended to authenticate this writing and to have the same force and effect as the use of manual signatures.
18. **County Data.** Nothing in this Agreement will be construed to waive the requirements of § 205.009 of the Texas Local Government Code.
19. **Successors and Assigns.** County and SHI bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.
20. **Personnel.** SHI will be responsible for all work performed by subcontractors and/or agents under this Agreement. SHI will remain responsible to comply with all requirements of this Agreement.

SHI represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for the timely performance of the Services required under this Agreement and that SHI shall furnish and maintain, at its own expense, adequate and sufficient personnel, in the opinion of County, to perform the Services when and as required and without delays.

All employees, subcontractors, and/or agents of SHI shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee, subcontractor, and/or agent of SHI who, in the opinion of County, is incompetent or by his or her conduct becomes detrimental to providing Services pursuant to this Agreement shall, upon request of County, immediately be removed from association with the Services required under this Agreement.

When performing Services for County, SHI shall comply with, and ensure that all SHI employees, subcontractors, and/or agents comply with, all rules, regulations and policies of County that are communicated to SHI, including security procedures concerning systems and data and remote access thereto, building security procedures, including the restriction of access by County to certain areas of its premises or systems for security reasons, and general health and safety practices and procedures.

21. **Compliance with Laws.** SHI, and/or any subcontractors and/or agents of SHI shall comply with all federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required by County, SHI, and/or any subcontractors and/or agents of SHI shall furnish County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.
22. **Independent Contractor.** In the performance of work or services hereunder, SHI shall be deemed an independent contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of SHI or, where permitted, of its subcontractors. SHI and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.
23. **Termination.**

- 23.1. Termination for Convenience. County may terminate this Agreement at any time upon thirty (30) days written notice. Termination of the Agreement shall not affect the obligations of the County or SHI under any existing purchase order issued under this Agreement, and such purchase order shall continue in effect as though this Agreement had not been terminated, and was still in effect with respect to such purchase order.

- 23.2. Termination for Default. County may terminate the whole or any part of this Agreement for cause in the following circumstances:

- (a). If SHI, and/or any subcontractors and/or agents of SHI fails to timely perform Services pursuant to this Agreement or any extension thereof granted by the County in writing;

(b). If SHI, and/or any subcontractors and/or agents of SHI materially breaches any of the covenants or terms and conditions set forth in this Agreement or fails to perform any of the other provisions of this Agreement or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and in any of these circumstances does not cure such breach or failure to County's reasonable satisfaction within a period of ten (10) calendar days after receipt of notice from County specifying such breach or failure.

- 23.3. If, after termination, it is determined for any reason whatsoever that SHI, and/or any subcontractors and/or agents of SHI was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County in accordance with § 23.1 above.
- 23.4. Upon termination of this Agreement, County shall compensate SHI in accordance with § 3, above, for those Services which were provided under this Agreement prior to its termination and orders deemed "non-cancellable" or "non-returnable" which have not been previously invoiced to County. SHI's final invoice for said Services will be presented to and paid by County in the same manner set forth in § 3 above.
- 23.5. If County terminates this Agreement as provided in this Section, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to SHI.
- 23.6. If County terminates this Agreement prior to the termination date, County shall not be subject to any early termination fee or other penalty.
- 23.7. Upon termination of this Agreement for any reason, if SHI, and/or any subcontractors and/or agents of SHI has any property in its possession belonging to County, SHI will account for the same, and dispose of it in the manner the County directs.

#### **24. Notices.**

- 24.1. Each party giving any notice or making any request, demand, or other communication (each, a "Notice") pursuant to this Agreement shall do so in writing and shall use one of the following methods of delivery, each of which, for purposes of this Agreement, is a writing: personal delivery, registered or certified mail (in each case, return receipt requested and postage prepaid), or nationally recognized overnight courier (with all fees prepaid).
- 24.2. Each party giving a Notice shall address the Notice to the receiving party at the address listed below or to another address designated by a party in a Notice pursuant to this Section:

County: Fort Bend County Information Technology Department  
Attn: Information Technology Director  
301 Jackson Street  
Richmond, Texas 77469

With a copy to: Fort Bend County  
Attn: County Judge  
301 Jackson Street  
Richmond, Texas 77469

Contractor: SHI Government Solutions, Inc.  
Attn: Legal Department  
290 Davidson Avenue  
Somerset, NJ 08873

24.3. A Notice is effective only if the party giving or making the Notice has complied with subsections 24.1 and 24.2 and if the addressee has received the Notice. A Notice is deemed received as follows:

24.3.1. If the Notice is delivered in person, or sent by registered or certified mail or a nationally recognized overnight courier, upon receipt as indicated by the date on the signed receipt.

24.3.2. If the addressee rejects or otherwise refuses to accept the Notice, or if the Notice cannot be delivered because of a change in address for which no Notice was given, then upon the rejection, refusal, or inability to deliver.

25. **Insurance.** Prior to commencement of the Services under this Agreement, SHI, and any subcontractors and/or agents of SHI shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. SHI, and any subcontractors and/or agents of SHI shall provide certified copies of insurance endorsements and/or policies if requested by County. SHI, and any subcontractors and/or agents of SHI shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. SHI, and any subcontractors and/or agents of SHI shall obtain such insurance written on an Occurrence form from such companies having Bests rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:

(a). Workers' Compensation insurance. Substitutes to genuine Workers' Compensation Insurance will not be allowed. Employers' Liability insurance with limits of not less than \$1,000,000 per injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.

(b). Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily



injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.

(c). Business Automobile Liability insurance with a combined Bodily Injury/Property Damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.

(d). Professional Liability insurance with limits not less than \$1,000,000.

(e). Professional Liability insurance for Information Technology, including Cyber Risk may be made on a Claims Made form with limits not less than \$1,000,000 each claim/loss with a \$2,000,000 aggregate. The insurance should provide coverage for the following risks:

(1). Liability arising from theft, dissemination, and/or use of confidential information (a defined term including but not limited to bank account, credit card account, personal information such as name, address, social security numbers, etc.,) stored or transmitted in electronic form.

(2). Network security liability arising from the unauthorized access to, use of, or tampering with computer systems, including hacker attacks or inability of an authorized third party to gain access to your services, including denial of service, unless caused by a mechanical or electrical failure

(3). Liability arising from the introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network, or similar computer-related property and the data, software, and programs thereon.

County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation. All Liability policies including Workers' Compensation written on behalf of SHI shall contain a waiver of subrogation in favor of County and members of Commissioners Court.

If required coverage is written on a claims-made basis, SHI warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of two years beginning from the time that work under the Agreement is completed.

SHI's, and/or any subcontractors and/or agents of SHI's insurance will be primary to any insurance carried or self-insurance program established by the County. SHI's, and any subcontractors and/or agents of SHI's insurance will be kept in force until all service have been fully performed and accepted by County in writing. Approval of the insurance by Fort Bend County shall not relieve or decrease the liability of SHI.

Certificates of Insurance and Additional Insured Endorsements as required by this Agreement will be mailed, or faxed to the following County contact:

Name: Wyatt Scott, Director of Risk Management  
 Address: 301 Jackson St., Suite 224, Richmond, TX 77469  
 Facsimile Number: 281-341-3751

## 26. Dispute Resolution.

- 26.1. The parties shall attempt in good faith to resolve promptly any dispute arising out of or relating to this Agreement by negotiation between the parties. In the event the dispute cannot be settled through negotiation, the parties agree to submit the dispute to non-binding mediation.
- 26.2. The party requesting mediation shall notify the other party in writing of the dispute desired to be mediated. If the parties are unable to resolve their differences within ten (10) days of the receipt of such notice, such dispute shall be submitted for mediation.
- 26.3. Each party shall be responsible for its own costs associated with the mediation.
- 26.4. The requirement to seek mediation shall be a condition required before filing an action at law or in equity, unless to do so would prevent either party from seeking relief in a court of law or equity under any applicable statute of limitations.
- 26.5. SHI acknowledges that County is subject to the requirements of the Texas Open Meetings Act, TEX. GOV'T CODE ANN. §§ 551.001 *et seq.*, as amended, and notwithstanding any provision in the Agreement to the contrary, the County will comply with the provisions of the Open Meetings Act.
27. **Severability.** If any provision of this Agreement is determined to be invalid, illegal, or unenforceable, the remaining provisions remain in full force, if the essential terms and conditions of this Agreement for each party remain valid, binding, and enforceable.
28. **Further Assurances.** Each party further agrees that it shall take any and all necessary steps and sign and execute any and all necessary documents or agreements required to implement the terms of the agreement of the parties contained in this contract, and each party agrees to refrain from taking any action, either expressly or impliedly, which would have the effect to prohibiting or hindering the performance of the other party to this Agreement.
29. **Remote Access.** As applicable to this Agreement, if SHI and/or SHI's Workforce requires remote access to County Systems for support, installation, integrations, configurations, and/or maintenance, except as otherwise agreed by the parties and approved by the County's Information Technology Director in writing, the below requirements must be met before SHI and/or SHI's Workforce is granted remote access to County Systems:
  - (A). SHI and/or SHI's Workforce will adhere to the restricted and monitored channels that are provided by the County, or other technologies approved in advanced in writing by the County's Information Technology Security Manager or the Assistant Information Technology Manager.
  - (B). SHI and/or SHI's Workforce will neither implement nor deploy a remote access solution which bypasses and/or is designed to bypass County provided or approved

controls. SHI and/or SHI's Workforce will not access County Systems via unauthorized methods.

- (C). SHI's and/or SHI's Workforce's remote access to County Systems will only be requested and activated on as-needed basis and disabled when not in use.
- (D). Remote access is restricted only to County Systems necessary for SHI and/or SHI's Workforce to provide Services to County pursuant to this Agreement.
- (E). SHI will allow only its Workforce approved in advance by County to access County Systems. SHI and/or SHI's Workforce will promptly notify County whenever an individual member of SHI's Workforce who has access to County Systems leaves its employ or no longer requires access to County Systems. SHI and/or SHI's Workforce will keep a log of access when its Workforce remotely accesses County Systems. SHI and SHI's Workforce will supply County with evidence of access logs concerning remote access to County Systems upon written request from County. Such access logs will be provided to County, within three business days from the date of County's request. These requests may be used to confirm compliance with these terms and/or to investigate a security incident.
- (F). If any member(s) of SHI's Workforce is provided with remote access to County Systems, then SHI's Workforce will not remotely log-in to County Systems from a public internet access device (e.g., airport computer terminal, or Internet café). This is due to the possibility of sensitive information being monitored by video or computer surveillance in public areas.
- (G). Failure of SHI and/or SHI's Workforce to comply with this Section may result in SHI and/or SHI's Workforce losing remote access to County Systems. County reserves the right at any time to disable remote access to protect County Systems.
- (H). For purposes of this Section, "Workforce" means employees, agents, subcontractors (where permitted), and/or other persons whose conduct, in the performance of work for SHI, is under the direct control of SHI, whether or not they are paid by SHI and who have direct or incidental access to County Systems.
- (I). For purposes of this Section, "Systems" means any: (i.) computer programs, including, but not limited to, software, firmware, application programs, operating systems, files and utilities; (ii.) supporting documentation for such computer programs, including, without limitation, input and output formats, program listings, narrative descriptions and operating instructions; (iii.) data and/or media; (iv.) equipment, hardware, servers, and/or devices; and/or (v.) network(s).

(Execution Page Follows)

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IN WITNESS WHEREOF, this Addendum is signed, accepted, and agreed to by all parties by and through the parties or their agents or authorized representatives. All parties hereby acknowledge that they have read and understood this Addendum and the attachments and exhibits hereto. All parties further acknowledge that they have executed this legal document voluntarily and of their own free will.

**FORT BEND COUNTY**

\_\_\_\_\_  
 KP George, County Judge

\_\_\_\_\_  
 Date

ATTEST:

\_\_\_\_\_  
 Laura Richard, County Clerk

REVIEWED:

Robyn Douglas  
 Information Technology Office

REVIEWED:

Scott Wieghat  
 Road and Bridge Department

**SHI GOVERNMENT SOLUTIONS, INC.**

DocuSigned by:  
Elisabeth Arnold  
 6384336583F14CD...  
 Authorized Agent – Signature

Elisabeth Arnold  
 Authorized Agent- Printed Name

Senior Lead Contracts Specialist  
 Title

1/31/2022  
 Date

**AUDITOR'S CERTIFICATE**

I hereby certify that funds in the amount of \$\_\_\_\_\_ are available to pay the obligation of Fort Bend County within the foregoing Agreement.

\_\_\_\_\_  
 Robert Ed Sturdivant, County Auditor

Exhibit A: SHI's Quotation #: 21407250, and the Proposal for Pavement Condition Data Collection and Cartegraph Implementation Support for Fort Bend County, Texas

# Exhibit A



Pricing Proposal  
 Quotation #: 21407250  
 Created On: 12/22/2021  
 Valid Until: 1/31/2022

## FORT BEND COUNTY

### Robert Sturdivant

122 GOLFVIEW DRIVE  
 ATTN: ACCOUNTS PAYABLE  
 RICHMOND, TX 77469  
 United States  
 Phone: 2813418645  
 Fax:  
 Email: Ed.Sturdivant@fortbendcountytexas.gov

## IAM

### Gregory Gonedes

SHI Government Solutions  
 3828 Pecana Trail  
 Austin, TX 78749  
 Send PO's to: Texas@shi.com  
 8008706079  
 5127320232  
 Phone: 800-870-6079  
 Fax: 512-732-0232  
 Email: gregory\_gonedes@shi.com

All Prices are in US Dollar (USD)

Product	Qty	Retail	Your Price	Total
1 Cartegraph OMS Premium 10-year License Cartegraph - Part#: Contract Name: BuyBoard - Technology Equipment, Products, Services and Software Contract #: 661-22 Coverage Term: 1/1/2022 – 12/31/2031 <b>Note:</b> includes: • Domains: Transportation, Stormwater, Signal, Walkability • 100 Users • SeeClickFix • AWS Cloud Hosting	1	\$0.00	\$2,481,929.87	\$2,481,929.87
2 Data Collection & Implementation Services Cartegraph - Part#: Contract Name: BuyBoard - Technology Equipment, Products, Services and Software Contract #: 661-22 <b>Note:</b> Included • Pavement Data Collection Services by Applied Pavement Technology • Cartegraph Implementation Services • Cartegraph Travel Expenses	1	\$0.00	\$728,700.00	\$728,700.00
				Subtotal \$3,210,629.87
				Shipping \$0.00
				Total \$3,210,629.87

### Additional Comments

Thank you for choosing SHI-GS! The pricing offered on this quote proposal is valid through the expiration date set above. To ensure the best level of service, please provide End User Name, Phone Number, Email Address, Quote Number, and applicable Contract Number when submitting a Purchase Order. SHI Government Solutions, Inc. is 100% Minority Owned, Woman Owned Business. TAX ID# 22-3695478; DUNS# 14-724-3096

### Payment Terms & Conditions:

Noncancelable upon PO being processed

CARTEGRAPH OMS PREMIUM 10-YEAR LICENSE – JANUARY 1, 2022 TO DECEMBER 31, 2031:

• Payment due upon execution of the contract

Exhibit A

**PAVEMENT DATA COLLECTION BY APPLIED PAVEMENT TECHNOLOGY:**

- \$6,000 invoiced at start of contract
- \$325,000 invoiced at completion of field data collection
- \$294,000 invoiced at completion of PCI analysis and data import into Cartegraph OMS
- \$25,000 invoiced at completion of budget scenarios

**CARTEGRAPH IMPLEMENTATION SERVICES:**

- \$16,875 (25%) upon contract execution.
- \$16,875 (25%) at the completion of the assessment/delivery, or 3 months from contract execution, whichever is sooner.
- \$16,875 (25%) at the completion of the test deployment, or 4 months from contract execution, whichever is sooner.
- \$16,875 (25%) at the completion of production deployment, or 6 months from contract execution, whichever is sooner.

**CARTEGRAPH TRAVEL EXPENSES (\$11,200):**

- Billed based on actual costs incurred and are due separately.

Please note, if Emergency Connectivity Funds (ECF) will be used to pay for all or part of this quote, please let us know as we will need to ensure compliance with the funding program.

Hardware items on this quote may be updated to reflect changes due to industry wide constraints and fluctuations.

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*The products offered under this proposal are resold in accordance with the terms and conditions of the Contract referenced under that applicable line item.*

# Proposal for Pavement Condition Data Collection and Cartegraph Implementation Support for Fort Bend County, Texas

## Introduction

Fort Bend County, Texas (County) requires a consultant to assist it with collection of condition information and implementation of the Cartegraph OMS pavement management software for its roadway network. This proposal introduces Applied Pavement Technology, Inc. (APTech) as a qualified vendor to provide the required services.

APTech is a civil engineering consulting firm that specializes in pavements. Since its founding in 1994, APTech has worked with private and government clients to successfully complete a broad range of pavement engineering projects. We bring a winning combination of pavement- and materials-focused knowledge, diverse and meaningful related project experience, company leadership with national acclaim for their expertise, state-of-the-art technology for testing and data collection, and a commitment to quality and client focus. APTech helps clients achieve their objectives through creativity, technical excellence, and attention to quality.

The foundation of any analysis of roadway needs is quality condition data. APTech provides skilled staffing and calibrated equipment specifically focused on pavement condition data collection. Our capabilities range from detailed manual surveys to state-of-the-art, semi-automated surveys using Laser Crack Measurement System (LCMS)-equipped automated data collection vans. Our staff is trained in data collection techniques specifically, including ASTM D6433 Pavement Condition Index (PCI) surveys, and takes pride in the quality of collected data.

APTech provides engineering services from seven office locations: Urbana, Illinois (corporate headquarters); Round Rock, Texas; Shorewood, Illinois; Waunakee, Wisconsin; Reno, Nevada; Albany, New York; and Spokane, Washington. The Round Rock office will be responsible for the overall management of this project.

The following sections of this proposal provide a brief statement of professional qualifications and experience, staffing qualifications, a detailed project approach, and a proposed cost. This information will demonstrate that APTech is qualified, equipped, and staffed to perform these services for the County.

## Project Experience

APTech is ideally suited to perform this work for the County because of our extensive capabilities and experience with automated pavement data collection, our ability to provide geo-referenced condition data, and our demonstrated experience incorporating pavement condition data in Cartegraph OMS so that agencies can use the data to manage their roadway assets. APTech is client-focused, working to ensure that the data supports a goal-oriented program and accountable decision making.

APTech's qualifications are exemplified by the diversity of our related project experience. Figure 1 illustrates the breadth of our pavement evaluation and management experience. APTech delivers pavement engineering excellence to clients throughout the United States.



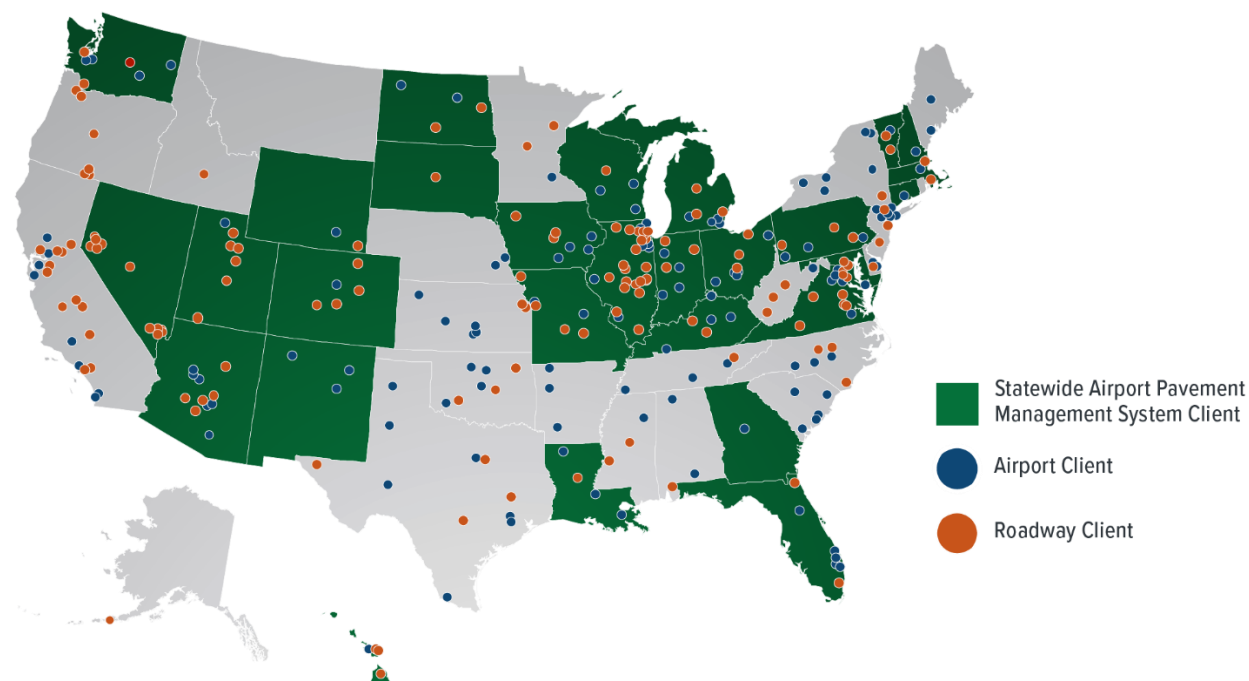


Figure 1. APTech pavement evaluation and pavement management clients.

The following are some of our recent projects that demonstrate our expertise with automated data collection and use of the resulting condition and asset data:

- **City of Northlake, Texas:** Completed automated pavement condition data collection and assisted with the implementation of Cartegraph OMS software.
- **US Navy Installation Pavement Condition Survey:** Used an LCMS-equipped automated data collection van to collect condition information on more than 50 million square feet of roadway pavement at eight Navy installations in five states, stretching from Texas to California. The collected data was used to determine PCI, International Roughness Index (IRI), and Ride Numbers. This information was used to plan work needs and efficiently allocate funds to meet those needs.
- **Energy industry pavement damage assessments:** Used the automated data collection van to assess the condition of over 3,600 lane miles of local and county roads stretching from Illinois to Oklahoma, documenting roadway conditions (PCI, IRI, and rutting) before and after energy industry construction projects.
- **Knoxville Regional Transportation Planning Organization:** In this ongoing project, APTech is supporting condition data collection and pavement management system implementations in multiple member agencies, including the Cities of Oak Ridge, Knoxville, Clinton, and Maryville, and Blount County. This represents almost 3,000 miles of data collection, calculation of PCI values for each road segment, and implementation of two different PMS software platforms that will be used by the member agencies.

APTech has collected condition data for agencies across the US, including the Cities of Bastrop, Texas (100 miles); Fort Wayne, Indiana (2,600 lane miles); Glenwood Springs, Colorado (105 lane miles); Cave Creek, Arizona (100 lane miles); Henderson, Nevada (177 centerline miles); and Champaign, Illinois (400 lane miles); among many others.

APTech's project experience demonstrates our substantial capabilities collecting pavement condition data using both automated and manual methods and importing that data into pavement management systems to facilitate the agency's management of roadway assets. APTech has developed tools and processes to support an efficient, smooth, and error-free transfer of data.

## Staffing

Staff from APTech's Local Agencies team will complete this project. These engineers have collected thousands of miles of condition data for clients and helped them use that data to plan maintenance and rehabilitation needs and inform decision makers. The proposed Project Manager and point of contact, Mr. Mark Gardner, P.E., has 38 years of pavement data collection and management experience. Mr. Gardner will be responsible for the daily management of the project work and serve as the primary point of contact with the County. Mr. David Peshkin, P.E. will serve as Principal-In-Charge, maintaining attention to project quality and client commitment. Engineers Luis Sibaja and Mariela Solis will assist with data processing and quality control. APTech's data collection team, overseen by Will Andresen, the Data Collection Manager, will ensure that the data is collected safely, efficiently, and with the utmost attention to quality. Detailed resumes for all proposed staff are available upon request.

## Project Approach

Proposed project tasks are described below.

### Task 1. Project Initiation and Network Definition

This project is scheduled to occur in 2022 after approval by the County. We propose a short kickoff meeting at the beginning of the project to review the work plan, schedule, and deliverables. This discussion will help establish a foundation for successful completion. Once the project is underway, we will schedule routine project coordination teleconferences. APTech will provide periodic status updates to confirm project progress. Dates that the equipment is in the County will be coordinated so that the County can review the EDGE van should they desire to do so.

APTech has a GIS shapefile of the County roadway network provided for project scoping. It would be prudent to coordinate and update this information before proceeding to ensure that all streets within the County jurisdiction are included. Based on our initial review of the available files, it appears the County streets total approximately 2,000 centerline miles, are predominantly 2-lane, and consist of a mix of hot-mix asphalt concrete, portland cement concrete, and gravel surfaces.

APTech will review the GIS roadway shapefile with the County, and once complete will use that information to plan the data collection effort. This will include a review of roadway segmentation and planning for routing to make sure that data collection is complete and efficient. Data collected by our vehicle is geo-referenced, so we maintain the ability to validate location of collected data and correct segmentation as required.

### Task 2. Field Data Collection

APTech will mobilize its EDGE automated data collection van (shown in figure 2) to Fort Bend County, Texas to survey all paved streets within the County's jurisdiction. We have estimated that these surveys will take approximately 50 working days to complete and will be accomplished in 3 trips. Data collection may only occur when roads are clear, dry, and free of debris. APTech's proposal assumes collection of data for one lane, one direction on two-lane roads, and one lane each direction for four- or more-lane or divided roads.

APTech's data collection van is equipped with state-of-the-art LCMS technology for pavement data collection. The van collects downward facing pavement line-scan laser data providing a 3D image of the pavement surface for distress detection. The van also measures transverse profile (rutting), longitudinal

profile (IRI or roughness), and collects forward and rearward facing right-of-way (ROW) images. All data for one lane is collected in a single pass at approximate roadway speeds, eliminating any need for traffic control. There is no exposure of operators to the driving public, making data collection safer for all parties. All data is geo-referenced, and a distance measurement instrument (DMI) is used to increase the location accuracy.



Figure 2. The EDGE data collection vehicle.

### Task 3. Data Post Processing, Distress Surveys, Quality Assurance, and Data Loading

This task includes activities necessary to convert information gathered in the field into measurements and distress values, and preparation of required import tables for OMS where the Overall Condition Index (OCI) is calculated. As stated previously the EDGE collects geo-referenced ROW images and line-scan laser data. The line-scan laser data is primarily used to measure distresses. To apply the laser data in that manner, they must be processed to generate images of the surface showing distresses, and then algorithms are used for initial automated distress identification. Trained surveyors then complete workstation surveys to confirm automated results and identify distresses not discernible with automation. The results of this effort include tabulated distress data by type, severity, and extent; rutting measurements; and IRI measurements. Distress data and rutting measurements go into the calculation of PCI. Steps in this critical path process include:

- Post-processing LCMS data to produce range and intensity images, and to identify automated distresses.
- Post-processing profile data to produce longitudinal roughness (IRI) and transverse profile (rutting).
- Workstation surveys to extract distress type, severity, and extent from images.
- Quality control review – Review of distress data to confirm that segment distress data is reasonable. This review will be done using both automated and manual image reviews.

Quality control of the data collection process is essential to this project's success. APTech's quality control begins well before data collection, doesn't end until the delivery of the data, and is continuous throughout the process. Due to the importance we place on quality control, the efforts we take to ensure the quality of the delivered data are discussed separately.

Once the distress information has been summarized it is ready for import into OMS. APTech has developed OMS import tables many times and will work closely with Cartegraph to make sure the data is properly imported into OMS. Cracking distress, rutting, and IRI are imported separately into OMS for each paved road segment where they are used in analyses. Cracking distress and rutting go into the calculation of PCI. PCI and IRI are combined using a weighted average formula configurable by the agency to calculate OCI that is used by OMS for analyses.

This task will be considered complete when all data is loaded into OMS.

## Task 5. Budget Scenarios

APTech will work in collaboration with Cartegraph and the County to define OMS parameters necessary for budget scenario analyses. This will likely require multiple web conferences to review information requirements and aid the County in assembling the information. The following configuration items are required:

- Pavement Families – These are groups of roads that perform and are maintained similarly.
- Treatment Strategies (Protocols) – This is information related to the treatment types used in the County, the unit costs, what triggers their use, and the performance expectation. Treatment strategies are established for each pavement family.
- Performance Models – These define the anticipated performance over time for each pavement family. Initial performance models will consider experience of the agency with performance of County roads.
- Budget – This information defines how much the agency spends on maintenance and repair of roads, and how that money is split between various activities.

Once these items are configured in OMS APTech will run initial scenarios using the current County budget to verify that projections appear reasonable. We will review results with the County and adjust if necessary. Once the current budget scenario results appear reasonable, we will run additional scenarios to consider goal condition values or alternative budget amounts for presentation to the County.

As part of this effort APTech will provide training in how OMS was configured and how scenarios were run so that County staff understand the process and can repeat it. This training is typically delivered in three sessions of a few hours each, remotely, in a web-based learning format.

## Quality Control

APTech takes the quality control process very seriously and processes are put in place throughout the project tasks to ensure data quality is maintained. Some of the more important provisions are:

- All staff participate in annual training to perform their job functions. Staff will only be used if they are qualified and adequately trained to perform the services they are assigned.
- Surveyors follow documented procedures in the completion of condition surveys. In this case, ASTM D6433 will govern.
- Equipment defined for use on the project is maintained in excellent working order and is calibrated in accordance with or exceeding manufacturer's requirements.

- Prior to data collection, a series of daily checks will be performed to confirm that the equipment is operating properly (such provisions are defined in manufacturer's operating instructions and relevant specifications for data collection).
- During data collection, images and data are monitored for clarity and unusual patterns.
- A crew of two is used for data collection, allowing the driver to focus on safe driving, and the equipment operator to review the data as it is collected and monitor equipment operation.
- At the conclusion of each day's testing, data are reviewed for adequacy. The primary goal is to ensure that before leaving the site the data are suitable for post-processing and condition surveys, avoiding re-collection of data if at all possible.
- The distress data summaries will be reviewed, and any unusual distress types or quantities will be verified by visual review prior to data submittal.
- All segments with PCI values of 100 will be checked for accurate data reduction.
- All segments with missing PCI values will be checked to determine why no value was calculated.
- All project deliverables are reviewed and approved by an APTech principal before submission.

## Proposed Cost

APTech's proposed costs by task to complete this effort are below. APTech will bill the County monthly as a lump sum by task based on the estimated task percentage completion at the end of each month.

Task 1 – Project Initiation and Network Definition	\$ 6,000
Task 2 – Field Data Collection	\$ 325,000
Task 4 – Post Processing, PCI, Data Load	\$ 294,000
Task 5 – Budget Scenarios	\$ 25,000
<b>Total Proposed Cost</b>	<b>\$ 650,000</b>

## Schedule

A schedule for this work has not been discussed with the County. It is our understanding that this will be 2022 work. APTech is prepared to perform the condition data collection and PCI determination once the weather permits operation of the data collection equipment: data collection must occur when the roads are clear, dry, and free of debris.

## Deliverables

The primary APTech deliverables from this effort include the following:

- Pavement condition data, including distresses rated in accordance with ASTM D6433 for calculation of PCI, rutting, and IRI values for each paved roadway segment.
- Condition data loaded into OMS.
- Configuration of OMS with information required to perform budget scenario analyses (i.e., definition of pavement families, treatment strategies, performance models).
- Initial budget scenario analyses, including
  - No funding
  - Fix everything
  - Current Budget
  - Budget required to achieve a goal OCI.
- Training in performing budget scenario analyses.



# Cartegraph OMS – Implementation Scope of Work

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

## Setup

- Cartegraph will setup a hosted, test and production 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 workshop 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:
  - Dashboards
  - Standard KPI/ROI Gadgets
  - Logins/Permission
  - Layers
  - Filters
  - Maps
  - Grids
  - System Navigation
  - Views (List & Detail)
  - Standard Reports
  - Attachments
  - 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
    - Preventative Maintenance Plans
    - 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 Mobile:
    - 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
  - Offline use for Cartegraph for iPad
  - Cartegraph recommended best practices for mobile device use
- Administrator:
  - Administrator:
    - User Administration, Role Administration, Asset Administration, Record Filter Administration, Import/Export, Scheduled Process Log, Error Log
  - Settings:
    - System Settings, Map Administration, Geocode Settings, GIS Integration settings, Asset Color Manager
  - Manager:
    - Layout Manager, Library Manager, Preventative Maintenance, Asset Condition Manager, Notification Manager, Structure Manager, Automation Manager
- Cartegraph will provide remote train-the-trainer training, up to six (6) hours, on OMS Reporting functionality. Training topics include:
  - Security/Roles
  - Report Designer
    - Report Types, Report Styling, Filtering\Parameters, Basic Formulas, Grouping/Sorting
  - Report Viewer
  - Reporting best practices and solution tips/tricks.
- Cartegraph will provide remote train-the-trainer training, up to eight (8) hours, on SeeClickFix Request functionality. Training topics include:
  - Administrator functions
  - Web-Based CRM
  - Cartegraph and SeeClickFix recommended best practices for citizen engagement and request management

In addition to training, Cartegraph will provide supporting services related to mobile app configuration and citizen engagement marketing materials.
- Cartegraph will provide remote train-the-trainer training, up to twelve (12) hours, on Advanced Material Management functionality. Training topics include:
  - Material Locations
  - Material Transfers
  - Material Orders
  - Settings:
    - Vendor Price Quotes
    - Re-order points



- Cartegraph recommended best practices for advanced material management
- Cartegraph will provide remote train-the-trainer training, up to four (4) hours, on Preventative Maintenance Plans functionality. Training topics include:
  - Preventative Maintenance
  - Cartegraph recommended best practices for proactive 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.*

- Cartegraph will provide remote train-the-trainer training, up to four (4) hours, on Advanced Inspections and Asset Condition Manager functionality. Training topics include:
  - Performance Management
    - Prediction Groups
    - Minimum Condition Groups
    - Activities and Impacts
    - Criticality Factor
    - Install/Replaced Dates
  - Cartegraph recommended best practices for advanced inspections and condition 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.*

- Cartegraph will provide remote train-the-trainer training, up to sixteen (16) hours, on Scenario Builder functionality. Training topics include:
  - Scenario Builder
    - Settings:
      - Prediction Groups
      - Minimum Condition Groups
      - Activities and Impacts
      - Criticality Factor
      - Install/Replaced Dates
    - Scenarios:
      - Planned Work
      - Map Control
      - Work Order Creation
      - Scenario Types
      - Plan Years and Budgets
      - Protocols
      - Data Exports
    - Cartegraph recommended best practices for scenario builder

*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.*

- Cartegraph will provide remote train-the-trainer training, up to two (2) hours, on Asset Builder functionality. Training topics include:
  - OMS Administrator

- Structure Manager
- Library Manager
- Layout Manager
- User/Role Configurations
- Cartegraph recommended best practices for expanding the system's use and/or building assets

## Go-Live Support

- Cartegraph will provide a three-day (3-day) onsite 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
  - Field, Layout, and Report configuration guidance, if applicable

## 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:
  - Parent level asset records
  - Asset location (spatial x/y) attributes
  - Parent level resource (Labor, Equipment Material, Vendor) records
  - Resource Rate (Labor, Equipment, Material) records
  - Standard system libraries

## Extended Support

- Cartegraph will provide a three-day (3-day) onsite event for post-production system development. The agenda will be defined, and agreed upon, by both your and Cartegraph's project managers. Topics may include any of the following:
  - Project or implementation consulting
  - System configuration for your current products
  - Training

## Assets

Asset implementation includes the following professional services:

- Cartegraph will provide installation and training on the following thirty-five (35) asset types:
  - Signals (8)
    - Preemption; Signal Cabinet; Signal Head; Traffic Camera; Signalized Intersection; Signal Controller; Signal Monitor; Traffic Detector

- Stormwater (9)
    - Storm Basin; Storm Channel; Storm Culvert; Storm Facility; Storm Inlet; Storm Manhole; Storm Outlet; Storm Pipe; Storm Pump
  - Transportation (8)
    - Bridge; Light Fixture; Pavement; Sign; Guardrail; Marking; Pavement Area; Support
  - Walkability (2)
    - ADA Ramp; Sidewalk
  - Fleet
- 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.

## 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.