

**CITY OF SCHERTZ**  
**SERVICE AGREEMENT**

**THE STATE OF TEXAS** §  
§  
**GUADALUPE COUNTY** §

This Service Agreement (“Agreement”) is made and entered by and between the City of Schertz, Texas, (the “City”) a Texas municipality, and Fugro USA Land, Inc. (Fugro), (“Contractor”).

**Section 1. Duration**

This Agreement shall become effective upon the date of the final signature affixed hereto and shall remain in effect until satisfactory completion of the Scope of Work unless terminated as provided for in this Agreement.

**Section 2. Scope of Work**

- (A) Contractor shall perform the Work as more particularly described in the Scope of Work attached hereto as Exhibit “A”. The work as described in the Scope of Work constitutes the “Project”.
- (B) The Quality of Work provided under this Agreement shall be of the level of quality performed by Contractors regularly rendering this type of service.
- (C) The Contractor shall perform its Work for the Project in compliance with all statutory, regulatory and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement.
- (D) The Contractor may rely upon the accuracy of reports and surveys provided to it by the City except when defects should have been apparent to a reasonably competent Contractor or when it has actual notice of any defects in the reports and surveys.

**Section 3. Compensation**

- (A) The Contractor shall be paid in full upon completion of the project or in the manner set forth in Exhibit “A” and as provided herein.
- (B) *Billing Period.* The Contractor may submit an invoice for payment upon completion of the described tasks. Subject to Chapter 2251, Texas Government Code (the “Prompt Payment Act”), payment is due within thirty (30) days of the City’s receipt of the Contractor’s invoice. Interest on overdue payments shall be calculated in accordance with the Prompt Payment Act.
- (C) *Reimbursable Expenses.* Any and all reimbursable expenses related to the Project shall be included in the scope of Work (Exhibit A) and accounted for in the total contract amount.

**Section 4. Time of Completion**

The prompt completion of the Work under the Scope of Work relates is critical to the City. Unnecessary delays in providing Work under a Scope of Work shall be grounds for dismissal of the Contractor and termination of this Agreement without any or further liability to the City other than a prorated payment for necessary, timely, and conforming work done by Contractor prior to the time of termination.

*(A) Contract Times: Days*

The Work is expected to be substantially completed within 270 calendar days after the Notice to Proceed is given (“Substantial Completion”)

**Section 5. Insurance**

Before commencing work under this Agreement, Contractor shall obtain and maintain the liability insurance provided for below throughout the term of the Project plus an additional two years. Contractor shall provide evidence of such insurance to the City. Such documentation shall meet the requirements noted in Exhibit B.

Contractor shall maintain the following limits and types of insurance:

Workers Compensation Insurance: Contractor shall carry and maintain during the term of this Agreement, workers compensation and employers liability insurance meeting the requirements of the State of Texas on all the Contractor’s employees carrying out the work involved in this contract.

General Liability Insurance: Contractor shall carry and maintain during the term of this Agreement, general liability insurance on a per occurrence basis with limits of liability not less than \$1,000,000 for each occurrence and for fire damage. For Bodily Injury and Property Damage, coverage shall be no less than \$1,000,000. As a minimum, coverage for Premises, Operations, Products and Completed Operations shall be \$2,000,000. This coverage shall protect the public or any person from injury or property damages sustained by reason of the Contractor or its employees carrying out the work involved in this Agreement. The general aggregate shall be no less than \$2,000,000.

Automobile Liability Insurance: Contractor shall carry and maintain during the term of this Agreement, automobile liability insurance with either a combined limit of at least \$1,000,000 per occurrence for bodily injury and property damage or split limits of at least \$1,000,000 for bodily injury per person per occurrence and \$1,000,000 for property damage per occurrence. Coverage shall include all owned, hired, and non-owned motor vehicles used in the performance of this contract by the Contractor or its employees.

Subcontractor: In the case of any work sublet, the Contractor shall require subcontractor and independent contractors working under the direction of either the Contractor or a subcontractor to carry and maintain the same workers compensation and liability insurance required of the Contractor.

Qualifying Insurance: The insurance required by this Agreement shall be written by non-assessable insurance company licensed to do business in the State of Texas and currently rated "B+" or better by the A.M. Best Companies. All policies shall be written on a "per occurrence basis" and not a "claims made" form.

Evidence of such insurance shall be attached as Exhibit "C".

Failure of Certificate Holder to demand a certificate or other evidence of full compliance with these insurance requirements or failure of Certificate Holder to identify a deficiency from evidence that is provided will not be construed as a waiver of Insured's obligation to maintain such insurance.

## **Section 6. Miscellaneous Provisions**

- (A) *Subletting.* The Contractor shall not sublet or transfer any portion of the work under this Agreement or any Scope of Work issued pursuant to this Agreement unless specifically approved in writing by the City, which approval shall not be unreasonably withheld. Subcontractors shall comply with all provisions of this Agreement and the applicable Scope of Work. The approval or acquiescence of the City in the subletting of any work shall not relieve the Contractor of any responsibility for work done by such subcontractor.
- (B) *Compliance with Laws.* The Contractor shall comply with all federal, state and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts, administrative, or regulatory bodies 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, and licensing laws and regulations. When required, the Contractor shall furnish the City with satisfactory proof of compliance.
- (C) *Independent Contractor.* Contractor acknowledges that Contractor is an independent contractor of the City and is not an employee, agent, official or representative of the City. Contractor shall not represent, either expressly or through implication, that Contractor is an employee, agent, official or representative of the City. Income taxes, self-employment taxes, social security taxes and the like are the sole responsibility of the Contractor.

- (D) *Non-Collusion.* Contractor represents and warrants that Contractor has not given, made, promised or paid, nor offered to give, make, promise or pay any gift, bonus, commission, money or other consideration to any person as an inducement to or in order to obtain the work to be provided to the City under this Agreement. Contractor further agrees that Contractor shall not accept any gift, bonus, commission, money, or other consideration from any person (other than from the City pursuant to this Agreement) for any of the Work performed by Contractor under or related to this Agreement. If any such gift, bonus, commission, money, or other consideration is received by or offered to Contractor, Contractor shall immediately report that fact to the City and, at the sole option of the City, the City may elect to accept the consideration for itself or to take the value of such consideration as a credit against the compensation otherwise owing to Contractor under or pursuant to this Agreement.
- (E) *Force Majeure.* If the performance of any covenant or obligation to be performed hereunder by any party is delayed as a result of circumstances which are beyond the reasonable control of such party (which circumstances may include, without limitation, pending litigation, acts of God, war, acts of civil disobedience, fire or other casualty, shortage of materials, adverse weather conditions [such as, by way of illustration and not of limitation, severe rain storms or below freezing temperatures, or tornados] labor action, strikes or similar acts, moratoriums or regulations or actions by governmental authorities), the time for such performance shall be extended by the amount of time of such delay, but no longer than the amount of time reasonably occasioned by the delay. The party claiming delay of performance as a result of any of the foregoing force majeure events shall deliver written notice of the commencement of any such delay resulting from such force majeure event not later than seven (7) days after the claiming party becomes aware of the same, and if the claiming party fails to so notify the other party of the occurrence of a force majeure event causing such delay and the other party shall not otherwise be aware of such force majeure event, the claiming party shall not be entitled to avail itself of the provisions for the extension of performance contained in this subsection.
- (F) *Conflict of Terms.*  
*Scope of work:*  
In the case of any conflicts between the terms of this Agreement within the Scope of Work, this Agreement shall govern. The Scope of Work is intended to detail the technical scope of Work, fee schedule, and contract time only and shall not dictate Agreement terms.  
*Other Agreements between parties:*  
In the case of any conflicts between the terms of this Agreement and wording contained within any other attachment, amendment, and agreement executed between the parties in conjunction with this Agreement, this Agreement shall govern.
- (G) *Non-Boycott of Israel.* Pursuant to Section 2270.002 of the Texas Government Code, Contractor certifies that either (i) it meets an exemption criterion under Section 2270.002; or

(ii) it does not boycott Israel and will not boycott Israel during the term of the contract resulting from this solicitation. Contractor shall state any facts that make it exempt from the boycott certification as an attachment to this agreement.

Relevant definitions from the bill:

"Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company, or affiliate of those entities or business associations that exists to make a profit.

"Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

- (H) *Access to Premises.* Authorized representatives of the Contractor will be allowed access to the facilities on City premises at reasonable times to perform the obligations of the Contractor regarding such facilities. Contractor shall adhere to all City rules, regulations, and guidelines while on City property. It is expressly understood that the City may limit or restrict the right of access herein granted in any manner considered necessary (e.g., national security, public safety).

## **Section 7. Termination**

(A) This Agreement may be terminated:

- (1) By the mutual agreement and consent of both Contractor and City;
  - (2) By either party, upon the failure of the other party to fulfill its obligations as set forth in either this Agreement or a Scope of Work issued under this Agreement;
  - (3) By the City, immediately upon notice in writing to the Contractor, as consequence of the failure of Contractor to perform the Work contemplated by this Agreement in a timely or satisfactory manner;
  - (4) By the City, at will and without cause upon not less than five (5) days written notice to the Contractor.
- (B) If the City terminates this Agreement pursuant to subsection 7(A)(2) or (3), above, the Contractor shall not be entitled to any fees or reimbursable expenses other than the fees and reimbursable expenses then due and payable as of the time of termination and only then for those Work that have been timely and adequately performed by the Contractor considering the actual costs incurred by the Contractor in performing work to date of termination, the value of the work that is nonetheless usable to the City, the cost to the City of employing another Contractor to complete the work required and the time required to do so, and other

factors that affect the value to the City of the work performed at time of termination. In the event of termination not the fault of the Contractor, the Contractor shall be compensated for all basic, special, and additional Work actually performed prior to termination, together with any reimbursable expenses then due.

**Section 8. Indemnification**

**CONTRACTOR AGREES TO INDEMNIFY AND HOLD THE CITY OF SCHERTZ, TEXAS AND ALL OF ITS PRESENT, FUTURE AND FORMER AGENTS, EMPLOYEES, OFFICIALS AND REPRESENTATIVES HARMLESS IN THEIR OFFICIAL, INDIVIDUAL AND REPRESENTATIVE CAPACITIES FROM ANY AND ALL CLAIMS, DEMANDS, CAUSES OF ACTION, JUDGMENTS, LIENS AND EXPENSES (INCLUDING ATTORNEY'S FEES, WHETHER CONTRACTUAL OR STATUTORY), COSTS AND DAMAGES (WHETHER COMMON LAW OR STATUTORY), COSTS AND DAMAGES (WHETHER COMMON LAW OR STATUTORY, AND WHETHER ACTUAL, PUNITIVE, CONSEQUENTIAL OR INCIDENTAL), OF ANY CONCEIVABLE CHARACTER, FOR INJURIES TO PERSONS (INCLUDING DEATH) OR TO PROPERTY (BOTH REAL AND PERSONAL) CREATED BY, ARISING FROM OR IN ANY MANNER RELATING TO THE WORK OR GOODS PERFORMED OR PROVIDED BY CONTRACTOR – EXPRESSLY INCLUDING THOSE ARISING THROUGH STRICT LIABILITY OR UNDER THE CONSTITUTIONS OF THE UNITED STATES.**

**Section 9. Notices**

Any notice required or desired to be given from one party to the other party to this Agreement shall be in writing and shall be given and shall be deemed to have been served and received (whether actually received or not) if (i) delivered in person to the address set forth below; (ii) deposited in an official depository under the regular care and custody of the United States Postal Service located within the confines of the United States of America and sent by certified mail, return receipt requested, and addressed to such party at the address hereinafter specified; or (iii) delivered to such party by courier receipted delivery. Either party may designate another address within the confines of the continental United States of America for notice, but until written notice of such change is actually received by the other party, the last address of such party designated for notice shall remain such party's address for notice.

**Section 10. No Assignment**

Neither party shall have the right to assign that party's interest in this Agreement without the prior written consent of the other party.

**Section 11. Severability**

If any term or provision of this Agreement is held to be illegal, invalid or unenforceable, the legality, validity or enforceability of the remaining terms or provisions of this Agreement shall not be affected thereby, and in lieu of each such illegal, invalid or unenforceable term or provision, there shall be added automatically to this Agreement a legal, valid or enforceable term or provision as similar as possible to the term or provision declared illegal, invalid or unenforceable.

**Section 12. Waiver**

Either City or the Contractor shall have the right to waive any requirement contained in this Agreement that is intended for the waiving party's benefit, but, except as otherwise provided herein, such waiver shall be effective only if in writing executed by the party for whose benefit such requirement is intended. No waiver of any breach or violation of any term of this Agreement shall be deemed or construed to constitute a waiver of any other breach or violation, whether concurrent or subsequent, and whether of the same or of a different type of breach or violation.

**Section 13. Governing Law; Venue**

This Agreement and all of the transactions contemplated herein shall be governed by and construed in accordance with the laws of the State of Texas. The provisions and obligations of this Agreement are performable in Guadalupe County, Texas such that exclusive venue for any action arising out of this Agreement shall be in Guadalupe County, Texas.

**Section 14. Paragraph Headings; Construction**

The paragraph headings contained in this Agreement are for convenience only and shall in no way enlarge or limit the scope or meaning of the various and several paragraphs hereof. Both parties have participated in the negotiation and preparation of this Agreement and this Agreement shall not be construed either more or less strongly against or for either party.

**Section 15. Binding Effect**

Except as limited herein, the terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, devisees, personal and legal representatives, successors and assigns.

**Section 16. Gender**

Within this Agreement, words of any gender shall be held and construed to include any other gender, and words in the singular number shall be held and construed to include the plural, unless the context otherwise requires.

**Section 17. Counterparts**

This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, and all of which shall constitute but one and the same instrument.

**Section 18. Exhibits & Attachments**

All exhibits and attachments to this Agreement are incorporated herein by reference for all purposes wherever reference is made to the same.

**Section 19. Entire Agreement**

It is understood and agreed that this Agreement contains the entire agreement between the parties and supersedes any and all prior agreements, arrangements or understandings between the parties relating to the subject matter. No oral understandings, statements, promises or inducements contrary to the terms of this Agreement exist. This Agreement cannot be changed or terminated orally.

**Section 20. Relationship of Parties**

Nothing contained in this Agreement shall be deemed or construed by the parties hereto or by any third party to create the relationship of principal and agent or of partnership or of joint venture or of any association whatsoever between the parties, it being expressly understood and agreed that no provision contained in this Agreement nor any act or acts of the parties hereto shall be deemed to create any relationship between the parties other than the relationship of independent parties contracting with each other solely for the purpose of effecting the provisions of this Agreement.

**Section 21. Right To Audit**

City shall have the right to examine and audit the books and records of Contractor with regards to the work described in Exhibit A, or any subsequent changes, at any reasonable time. Such books and records will be maintained in accordance with generally accepted principles of accounting and will be adequate to enable determination of: (1) the substantiation and accuracy of any payments required to be made under this Agreement; and (2) compliance with the provisions of this Agreement.

**Section 22. Dispute Resolution**

In accordance with the provisions of Subchapter I, Chapter 271, TEX. LOCAL GOV'T CODE, the parties agree that, prior to instituting any lawsuit or other proceeding arising from a dispute under this agreement, the parties will first attempt to resolve the dispute by taking the following steps: (1) A written notice substantially describing the nature of the dispute shall be delivered by the dissatisfied party to the other party, which notice shall request a written response to be delivered to the dissatisfied party not less than 5 days after receipt of the notice of dispute. (2) If the response does not reasonably resolve the dispute, in the opinion of the dissatisfied party, the dissatisfied party shall give notice to that effect to the other party whereupon each party shall appoint a person having authority over the activities of the respective parties who shall promptly meet, in person, in an effort to resolve the dispute. (3) If those persons cannot or do not resolve the dispute, then the parties shall each appoint a person from the highest tier of managerial responsibility within each respective party, who shall then promptly meet, in person, in an effort to resolve the dispute.

**Section 23. Disclosure of Business Relationships/Affiliations; Conflict of Interest Questionnaire**

Contractor represents that it is in compliance with the applicable filing and disclosure requirements of Chapter 176 of the Texas Local Government Code.

**Certificate of Interested Parties**

Effective January 1, 2016, pursuant to House Bill 1295 passed by the 84th Texas Legislature (Section 2252.908, Texas Government Code, as amended) and formal rules released by the Texas Ethics Commission (TEC), all contracts with private business entities requiring approval by the Schertz City Council will require the on-line completion of Form 1295 "Certificate of Interested Parties." Form 1295 is also required for any and all contract amendments, extensions or renewals.

Contractors are required to complete and file electronically with the Texas Ethics Commission using the online filing application.

Please visit the State of Texas Ethics Commission website, [https://www.ethics.state.tx.us/whatsnew/elf\\_info\\_form1295.htm](https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm) and <https://www.ethics.state.tx.us/tec/1295-Info.htm> for more information.

IF YOU HAVE ANY QUESTIONS ABOUT COMPLIANCE, PLEASE CONSULT YOUR OWN LEGAL COUNSEL. COMPLIANCE IS THE INDIVIDUAL RESPONSIBILITY OF EACH PERSON OR AGENT OF A PERSON WHO IS SUBJECT TO THE FILING REQUIREMENT. AN OFFENSE UNDER CHAPTER 176 IS A CLASS C MISDEMEANOR.


*[The remainder of this page is intentionally left blank.]*

**EXECUTED** on this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

**CITY:**

By: \_\_\_\_\_  
Name: Dr. Mark Browne  
Title: City Manager

**CONTRACTOR:**

By:   
Name: Sirous Alavi, Ph.D., P.E., PTOE  
Title: Manager, Pavement Engineering

**ADDRESS FOR NOTICE:**

**CITY:**

City of Schertz  
Attn: Dr. Mark Brown, City Manager  
1400 Schertz Parkway  
Schertz, Texas 78154

**CONTRACTOR:**

# **Exhibit “A”**

## **SCOPE OF WORK**

### **Scope of Work**

The contractor shall provide all equipment, materials, and personnel necessary to complete the following minimum requirements. The scope of work is described in Section B of the enclosed Fugro proposal, dated May 24, 2021.

# Exhibit “B”

## REQUIREMENTS FOR ALL INSURANCE DOCUMENTS

The Contractor shall comply with each and every condition contained herein. The Contractor shall provide and maintain the minimum insurance coverage set forth below during the term of its agreement with the City. Any Subcontractor(s) hired by the Contractor shall maintain insurance coverage equal to that required of the Contractor. It is the responsibility of the Contractor to assure compliance with this provision. The City of Schertz accepts no responsibility arising from the conduct, or lack of conduct, of the Subcontractor.

### INSTRUCTIONS FOR COMPLETION OF INSURANCE DOCUMENT

With reference to the foregoing insurance requirements, Contractor shall specifically endorse applicable insurance policies as follows:

1. The City of Schertz shall be named as an additional insured with respect to General Liability and Automobile Liability **on a separate endorsement.**
2. A waiver of subrogation in favor of The City of Schertz shall be contained in the Workers Compensation and all liability policies and must be provided **on a separate endorsement.**
3. All insurance policies shall be endorsed to the effect that The City of Schertz will receive at least thirty (30) days written notice prior to cancellation or non-renewal of the insurance.
4. All insurance policies, which name The City of Schertz as an additional insured, must be endorsed to read as primary and non-contributory coverage regardless of the application of other insurance.
5. **Chapter 1811 of the Texas Insurance Code, Senate Bill 425 82(R) of 2011, states that the above endorsements cannot be on the certificate of insurance. Separate endorsements must be provided for each of the above.**
6. All insurance policies shall be endorsed to require the insurer to immediately notify The City of Schertz of any material change in the insurance coverage.
7. All liability policies shall contain no cross liability exclusions or insured versus insured restrictions.
8. Required limits may be satisfied by any combination of primary and umbrella liability insurances.
9. Contractor may maintain reasonable and customary deductibles, subject to approval by The City of Schertz.
10. Insurance must be purchased from insurers having a minimum AmBest rating of B+.
11. All insurance must be written on forms filed with and approved by the Texas Department of Insurance. (ACORD 25 2010/05). Coverage must be written on an occurrence form.
12. Contractual Liability must be maintained covering the Contractors obligations contained in the contract. Certificates of Insurance shall be prepared and executed by the insurance company or its authorized agent and shall contain provisions representing and warranting all endorsements and insurance coverages according to requirements and instructions contained herein.
13. Upon request, Contractor shall furnish The City of Schertz with certified copies of all insurance policies.
14. A valid certificate of insurance verifying each of the coverages required above shall be issued directly to the City of Schertz within ten (10) business days after contract award and prior to starting any work by the successful Contractor's insurance agent of record or insurance company. Also, prior to the start of any work and at the same time that the Certificate of Insurance is issued and sent to the City of Schertz, all required endorsements identified in sections A, B, C and D, above shall be sent to the City of Schertz. The certificate of insurance and endorsements shall be sent to:

**City of Schertz  
Purchasing Department  
1400 Schertz Parkway  
Schertz, TX 78154**

**emailed to: [purchasing@schertz.com](mailto:purchasing@schertz.com)  
Faxed to: 210-619-1169**



# CERTIFICATE OF LIABILITY INSURANCE

A

DATE (MM/DD/YYYY)  
01/01/1000

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).

PRODUCER ABC Insurance Agency 555 Main Street Tampa, FL 33333-0000	CONTACT NAME: PHONE: FAX: ADDRESS:
	INSURER(S) AFFORDING COVERAGE INSURER A: Insurance Carrier INSURER B: Insurance Carrier INSURER C: Insurance Carrier INSURER D: Insurance Carrier INSURER E: Insurance Carrier INSURER F: Insurance Carrier
INSURED XYZ Company 123 Apple Street Tampa, FL 22222-0000	RATING # 00000 00000 00000 00000 00000 00000

COVERAGES      CERTIFICATE NUMBER:      REVISION NUMBER:

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.

ITEM	TYPE OF INSURANCE	ADDITIONAL	POLICY NO.	POLICY EFF.	POLICY EXP.	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOSS	Y Y	X123456	01/01/1000	01/01/1000	EACH OCCURRENCE \$ 1,000,000 PRODUCTS TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Per one claim) \$ 5,000 PERSONAL & ADY INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMMOP AGG \$ 1,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWN AUTOS	Y Y	123456789	01/01/1000	01/01/1000	COVERED SWDGE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
C	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> OCCUR <input checked="" type="checkbox"/> CLAIMS-MADE DED    RETENTION \$	Y Y				EACH OCCURRENCE \$ AGGREGATE \$
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in all) Yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N/A Y	01234	01/01/1000	01/01/1000	<input checked="" type="checkbox"/> NON-STATUTORY LIMITS E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
E	<input checked="" type="checkbox"/> Builder's Risk <input type="checkbox"/> Professional Services	Y Y	123456	01/01/1000	01/01/1000	100% Insurable Value, replacement cost basis \$1,000,000 each claim / \$1,000,000 aggregate

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks & Schedules, if more space is required)

Effective January 1, 2012 must be compliant with Chapter 1811, Tex. Ins. Code (SB 425 enacted by Texas Legislature 82(R) session in 2011).

CERTIFICATE HOLDER City of Schertz 1400 Schertz Parkway Schertz, Tx 78154 Attn: Purchasing Dept.	CANCELLATION 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 AUTHORIZED SIGNATURE REQUIRED HERE
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*(Instructions for completing and submitting a certificate to the City of Schertz)*

Complete the certificate of insurance with the information listed below:

- A) Certificate of Insurance date
- B) Producer (Insurance Agency) Information – complete name, address, telephone information, & email address.
- C) Insured's (Insurance Policy Holder) Information – complete name & address information
- D) Insurer (name/names of insurance company) **\*\***(Remember the city requires all insurance companies to be Authorized to do business in the State of Texas be rated by A.M. Best with a rating of B+ (or better) Class VI (or higher) or otherwise be acceptable to the City if not rated by A.M. Best)
- E) NAIC # (National Association of Insurance Commissioners, a # that is assigned by the State to all insurance companies)
- F) Insurer letter represents which insurance company provides which type of coverage from D
- G) General Liability Insurance Policy – must have an (x) in box. Also, "Occurrence" type policy – must have an (x) in the box (occurrence policy preferred but claims made policy can be accepted with special approval)
- H) This section shall be filled in with "Y" for yes under Additional Insured for all coverages, except for Contractor Liability and Workers' Compensation. There shall also be a "Y" for yes under all coverages for subrogation waived.
- I) Automobile Liability Insurance – must be checked for Any Auto, All Owned Autos, Hired Autos
- J) Umbrella Coverage – must be checked in this section and by occurrence whenever it is required by written contract and in accordance with the contract value.
- K) Worker's Compensation and Employers Liability Insurance – information must be completed in this section of the certificate of insurance form (if applicable).
- L) Builder's Risk Policy – for construction projects as designated by the City of Schertz.  
Professional Liability Coverage – for professional services if required by the City of Schertz.
- M) Insurance Policy #'s
- N) Insurance policy effective dates (always check for current dates)
- O) Insurance Policy limits (See Insurance Requirements Checklist)
- P) This section is to list projects, dates of projects, or location of project. Endorsements to the insurance policy(ies) must be provided separately and not in this section. The following endorsements are required by the City of Schertz.
  - (1) Adding the City of Schertz as an additional insured. The "additional insured" endorsement is not required for professional liability and workers compensation insurance; and
  - (2) Waiver of Subrogation
  - (3) Primary and Non-Contributory
  - (4) Cancellation Notice
- Q) City of Schertz's name and address information must be listed in this section
- R) Notice of cancellation, non-renewal, or material change to the insurance policy(ies) must be provided to the City of Schertz in accordance with a cancellation notice endorsement to the policy and/or per the policy provisions based on the endorsement adding the city as an additional insured. (Sec. 1811.155, Tex. Ins. Code)
- S) The certificate must be signed by the Authorized Agent in this section of the certificate form.

# **Exhibit “C”**

## **EVIDENCE OF INSURANCE**



**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE**

This endorsement modifies insurance provided under the following:

- AUTO DEALERS COVERAGE FORM
- BUSINESS AUTO COVERAGE FORM
- MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

### **SCHEDULE**

**Name Of Person(s) Or Organization(s):**

Any person or organization whom you have agreed in writing to add as an additional insured, but only to coverage and minimum limits of insurance required by the written agreement, and in no event to exceed either the scope of coverage or the limits of insurance provided in this policy.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Each person or organization shown in the Schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Paragraph **A.1.** of Section **II** - Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph **D.2.** of Section **I** - Covered Autos Coverages of the Auto Dealers Coverage Form.

Policy Number: AS2-641-005066-021  
 Issued By: Liberty Mutual Fire Insurance Co.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**NOTICE OF CANCELLATION TO THIRD PARTIES**

This endorsement modifies insurance provided under the following:

- BUSINESS AUTO COVERAGE PART
- MOTOR CARRIER COVERAGE PART
- GARAGE COVERAGE PART
- TRUCKERS COVERAGE PART
- EXCESS AUTOMOBILE LIABILITY INDEMNITY COVERAGE PART
- SELF-INSURED TRUCKER EXCESS LIABILITY COVERAGE PART
- COMMERCIAL GENERAL LIABILITY COVERAGE PART
- EXCESS COMMERCIAL GENERAL LIABILITY COVERAGE PART
- PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
- LIQUOR LIABILITY COVERAGE PART

Schedule		
Name of Other Person(s)/ Organization(s):	Email Address or mailing address:	Number Days Notice:
Per schedule on file with the Company	Per schedule on file with the Company	30

- A. If we cancel this policy for any reason other than nonpayment of premium, we will notify the persons or organizations shown in the Schedule above. We will send notice to the email or mailing address listed above at least 10 days, or the number of days listed above, if any, before the cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B. This advance notification of a pending cancellation of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

All other terms and conditions of this policy remain unchanged.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)**

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM  
BUSINESS AUTO COVERAGE FORM  
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

### **SCHEDULE**

**Name(s) Of Person(s) Or Organization(s):**

Any person or organization for whom you perform work under a written contract if the contract requires you to obtain this agreement from us, but only if the contract is executed prior to the injury or damage occurring.

**Premium: \$ INCL**

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The **Transfer Of Rights Of Recovery Against Others To Us** condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR  
CONTRACTORS – SCHEDULED PERSON OR  
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

**SCHEDULE**

<b>Name of Person or Organization:</b>	All persons or organizations with whom you have entered into a written contract or agreement, prior to an "occurrence" or offense, to provided additional insured status, where the written contract or agreement obligates you to procure additional insured coverage for the additional insured's sole negligence or utilize the October 2001, or earlier, version of the ISO additional insured endorsement. Additional insured status will apply only if the applicable law allows for the indemnification of the additional insured for liability arising out of the additional insured's sole negligence. Time Element Pollution Coverage under this policy is only provided to the additional insured where the written contract or agreement signed prior to an "occurrence" or offense specifically requires that the Time Element Pollution Coverage be provided to the additional insured.
--	---

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

**A. Section II – Who Is An Insured** is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

**B.** With respect to the insurance afforded to these additional insureds, the following exclusion is added:

**2. Exclusions**

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- (1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or

- (2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

This endorsement is executed by the LIBERTY MUTUAL FIRE INSURANCE COMPANY

Premium \$

Effective Date

Expiration Date

For attachment to Policy No.

TB2-641-005066-031

Audit Basis

Issued To

Countersigned by

.....  
Authorized Representative

Issued

Sales Office and No.

End. Serial No.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

## ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

### SCHEDULE

<b>Name of Person or Organization:</b>	All persons or organizations with whom you have entered into a written contract or agreement, prior to an "occurrence" or offense, to provided additional insured status, where the written contract or agreement obligates you to procure additional insured coverage for the additional insured's sole negligence or utilize the October 2001, or earlier, version of the ISO additional insured endorsement. Additional insured status will apply only if the applicable law allows for the indemnification of the additional insured for liability arising out of the additional insured's sole negligence.
<b>Location And Description of Completed Operations:</b>	All locations as required by a written contract or agreement entered into prior to an "occurrence" or offense.
<b>Additional Premium:</b>	

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

**Section II – Who Is An Insured** is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" at the location designated and described in the schedule of this endorsement performed for that insured and included in the "products-completed operations hazard".

This endorsement is executed by the LIBERTY MUTUAL FIRE INSURANCE COMPANY

Premium \$

Effective Date

Expiration Date

For attachment to Policy No.

TB2-641-005066-031

Audit Basis

Issued To

Countersigned by

.....  
Authorized Representative

Issued

Sales Office and No.

End. Serial No.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**NOTICE OF CANCELLATION TO THIRD PARTIES**

This endorsement modifies insurance provided under the following:

- BUSINESS AUTO COVERAGE PART
- MOTOR CARRIER COVERAGE PART
- GARAGE COVERAGE PART
- TRUCKERS COVERAGE PART
- EXCESS AUTOMOBILE LIABILITY INDEMNITY COVERAGE PART
- SELF-INSURED TRUCKER EXCESS LIABILITY COVERAGE PART
- COMMERCIAL GENERAL LIABILITY COVERAGE PART
- EXCESS COMMERCIAL GENERAL LIABILITY COVERAGE PART
- PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
- LIQUOR LIABILITY COVERAGE PART
- COMMERCIAL LIABILITY – UMBRELLA COVERAGE FORM

<b>Schedule</b>
-----------------

<b>Name of Other Person(s) / Organization(s):</b>	<b>Email Address or mailing address:</b>	<b>Number Days Notice:</b>
Per schedule on file with the Broker	Per schedule on file with the Broker	30

- A. If we cancel this policy for any reason other than nonpayment of premium, we will notify the persons or organizations shown in the Schedule above. We will send notice to the email or mailing address listed above at least 10 days, or the number of days listed above, if any, before the cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B. This advance notification of a pending cancellation of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

All other terms and conditions of this policy remain unchanged.

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

## **PRIMARY AND NONCONTRIBUTORY – OTHER INSURANCE CONDITION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART  
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:

### **Primary And Noncontributory Insurance**

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

(1) The additional insured is a Named Insured under such other insurance; and

(2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.



## NOTICE OF CANCELLATION TO THIRD PARTIES

- A.** If we cancel this policy for any reason other than nonpayment of premium, we will notify the persons or organizations shown in the Schedule below. We will send notice to the email or mailing address listed below at least 10 days, or the number of days listed below, if any, before cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B.** This advance notification of a pending cancellation of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

### Schedule

<b>Name of Other Person(s) / Organization(s):</b>	<b>Email Address or mailing address:</b>	<b>Number Days Notice:</b>
Per schedule on file with the company		30

All other terms and conditions of this policy remain unchanged.

Issued by Liberty Insurance Corporation 21814

For attachment to Policy No. WA7-64D-005066-131

Effective Date

Premium \$

Issued to Fugro (USA) Holdings Inc.

Endorsement No.

## WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

### Schedule

Where required by contract or written agreement prior to loss and allowed by law.

Issued by Liberty Insurance Corporation 21814

For attachment to Policy No. WA7-64D-005066-131

Effective Date

Premium \$

Issued to Fugro (USA) Holdings Inc.

Endorsement No.

**WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT -  
CALIFORNIA**

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be 2% of the California workers' compensation premium otherwise due on such remuneration.

**Schedule**

Additional premium is a percent of the California Manual Workers Compensation premium. Subject to a minimum premium charge of \$250 per policy.

<u>Person or Organization</u>	<u>Job Description</u>
Where required by contract or written agreement prior to loss and allowed by law.	

Issued by Liberty Insurance Corporation 21814

For attachment to Policy No. WA7-64D-005066-131

Effective Date

Premium \$

Issued to Fugro (USA) Holdings Inc.

Endorsement No.

## TEXAS WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement applies only to the insurance provided by the policy because Texas is shown in Item 3.A. of the Information Page.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule, but this waiver applies only with respect to bodily injury arising out of the operations described in the Schedule where you are required by a written contract to obtain this waiver from us.

This endorsement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

The premium for this endorsement is shown in the Schedule.

### Schedule

1.  Specific Waiver

Name of person or organization

Blanket Waiver

Any person or organization for whom the Named Insured has agreed by written contract to furnish this waiver.

2. Operations:

All Texas Operations

3. Premium:

The premium charge for this endorsement shall be 2 percent of the premium developed on payroll in connection with work performed for the above person(s) or organization(s) arising out of the operations described.

4. Advance Premium:

Issued by Liberty Insurance Corporation 21814

For attachment to Policy No. WA7-64D-005066-131

Effective Date

Premium \$

Issued to Fugro (USA) Holdings Inc.

Endorsement No.



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## PCI Data Update

Proposal No. 178949 | May 24, 2021

**City of Schertz, Texas**



FUGRO  
8613 Cross Park Drive  
Austin, Texas 78754  
T +1 512 977 1800

May 24, 2021

Mr. John Nowak, P.E.

City of Schertz  
1400 Schertz Parkway  
Schertz, Texas 78154

Dear Mr. Nowak,

Fugro USA Land, Inc. is pleased to submit this proposal to perform pavement condition survey and pavement management services for the City of Schertz (City) as a member listed on the North Texas SHARE Buy Board for Pavement Analysis Services (RFQ #NCT-2016-14).

Fugro's project team has the experience and resources necessary to deliver projects on time and to the quality standards expected by the City of Schertz. We have had the privilege of providing pavement engineering & management services within the State of Texas, including NCTCOG participating agencies for over 20 years. Based on our experience with other similarly sized projects, we have put together this proposal to provide an overview of our related services, our team's qualifications as well as our proposed scope of work, schedule, and fee.

Please do not hesitate to contact me by phone at 949.536.5175 or email at [salavi@fugro.com](mailto:salavi@fugro.com) if you have questions or need additional information.

Sincerely,

Fugro USA Land, Inc.



Sirous Alavi, Ph.D., P.E., PTOE  
Manager, Pavement Engineering & Infrastructure Management

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# Section A: Description of Fugro Capabilities

## A.1: Introduction to Fugro

Fugro has over 45 years of experience with pavement and roadway asset data collection. Fugro provides services for all aspects of pavement management and evaluation, planning and oversight, developing maintenance and rehabilitation strategies, and optimizing network conditions within available budgets. Our services deliver value by accurately diagnosing, and prioritizing maintenance and rehabilitation activities.

Nearly 50% of State DOTs and numerous federal and municipal agencies rely on our automated data collection technology for their roadway asset management needs, and we have approximately a quarter of a million miles presently under contract for data collection and analysis services. Fugro has collected and processed more than 3,000,000 miles of pavement data collection in North America in the past few decades. Fugro's data collection and analysis services are described in the following subsections.

### A.1.1: Pavement Management System (PMS) Services

Fugro is experienced with a variety of pavement management software packages such as Cartegraph, StreetSaver, AgileAssets, Deighton dTIMS and PAVER. Our experience with these software packages includes developing condition listings, condition maps, work plans, budget optimization, and maintenance and rehabilitation alternatives for agencies.

Fugro can provide tailored pavement management solutions to clients based upon their specific requirements. Fugro has provided pavement management services for all different sized agencies with a wide variety of needs:

- Data migration from legacy systems
- Loading of Pavement Management Data
- Pavement Management Implementation
- Pavement Management Update
- Geographic Information System services
- Work plans, budget analysis, and network condition reporting
- Performance Modelling
- Computer Hardware and PMS/Asset Software
- Presentations to City Councils

### A.1.2: Training

Fugro's certified professionals have years of experience providing clients and engineering professionals with a variety of training and continuing education courses pertaining to pavement design, materials, pavement management, and pavement preservation.

### A.1.3: Pavement and Asset Data Collection and Processing

Fugro's Automatic Road Analyzer (ARAN), as shown in Figure 1 is the world's most reliable and trusted fully integrated pavement surveying vehicle. Today's sixth generation ARAN technology collects more miles per day than any other platform. Each ARAN has the ability to collect and measure all the necessary data types in a single pass at posted speeds. Its modular design enables us to quickly configure any ARAN vehicle in our fleet to fit the client's needs. Operators are trained in the use of the ARAN's quality assurance systems in order to quickly identify errors that may impact the integrity of collected data. In addition, each day, a data subset is uploaded and examined by Fugro's project manager and data analysis department.



Figure 1: The Automatic Road Analyzer (ARAN)

Fugro's ARAN data collection vehicle offers the ability to collect the following data types automatically and synchronously:

- Roadway geometry (POS LV)
- Linear reference data with the use of a Distance Measurement Instrument (DMI)
- Geo-referenced data with the use of an inertial aided Global Positioning System (GPS)
- Right of Way (ROW) and pavement digital images
- Surface distresses rated from the pavement images
- Transverse profile and rutting
- Longitudinal profile and roughness, measured as International Roughness Index (IRI)
- Roadway assets (e.g., sidewalk, signs, ramps, curbs and gutters) extracted from ROW images
- Texture data, mean profile depth (MPD) from our laser-based system
- LiDAR
- Ground Penetrating Radar



Digital pavement images collected by the ARAN serve as input to the distress rating process. Right-of-Way (ROW) images (forward-view) are also used to enhance distress-rating accuracy. Each distress can be identified in terms of location, severity, exact dimensions, and other characteristics. This level of detail can provide benefits during planning, performing maintenance, and detailed pavement design. It is also possible to greatly expand the types of distresses monitored for only a minor increase in effort. This detailed categorization can be used to provide more accurate predictions of future conditions and enhance recommendations for preventative maintenance strategies.

#### A.1.3.4: Rutting

Transverse profile and rutting data are collected and measured according to client specifications. The Laser XVP produces excellent results on all pavement surfaces. Fugro's Vision software is used for the review and plotting of transverse profile raw data or data corrected as a result of inputs for vehicle roll. Furthermore, the software can recalculate rut depth using the straight-edge method and detect and measure edge drop-off from stored raw transverse profiles. Edge drop-off can be a critical safety factor for high-speed roadways that have unpaved or soft shoulders.

Rutting will also be categorized based on severity levels and can be uploaded into the pavement management system. Pavement rutting can either be included in the Pavement Condition Index (PCI) Score or reported as its own index. Rut measurements will be in accordance with AASHTO R 48.

#### A.1.3.5: Pavement Roughness Data

The ARAN's Profiler subsystem provides longitudinal profile measurements that will be collected in both wheel paths and used to calculate International Roughness Index (IRI). The Laser SDP is a non-contact Class 1 inertial profiler that uses lasers and accelerometers mounted over each wheel path to determine pavement profile in real-time.

#### A.1.3.6: Digital Right-of-Way (ROW) Images

The ARAN will be equipped with 3 Sensor cameras offering a high 1920 x 1080 image resolution, a standard angle lens (63°), and a free-running frame rate of 60 frames per second (fps). The additional advantage of using 3 Sensor cameras is the increased color density of images. Figure 3 provides an example of the ROW image collected by Fugro's ARAN.



Figure 3: HD Camera View

#### A.1.3.7: Roadway Asset Data Collection and Processing

The calibrated, geo-referenced HD ROW images can be used in combination with our Surveyor software (Figure 4) for asset extraction and inventory. The combination of the forward-facing ROW images and Fugro’s Surveyor software can be used for the initial assessment of asset inventories for assets such as sidewalks, sidewalk ramps, and sign inventories. Field assessment crews will only be deployed if additional condition assessment is required, saving both time and money.

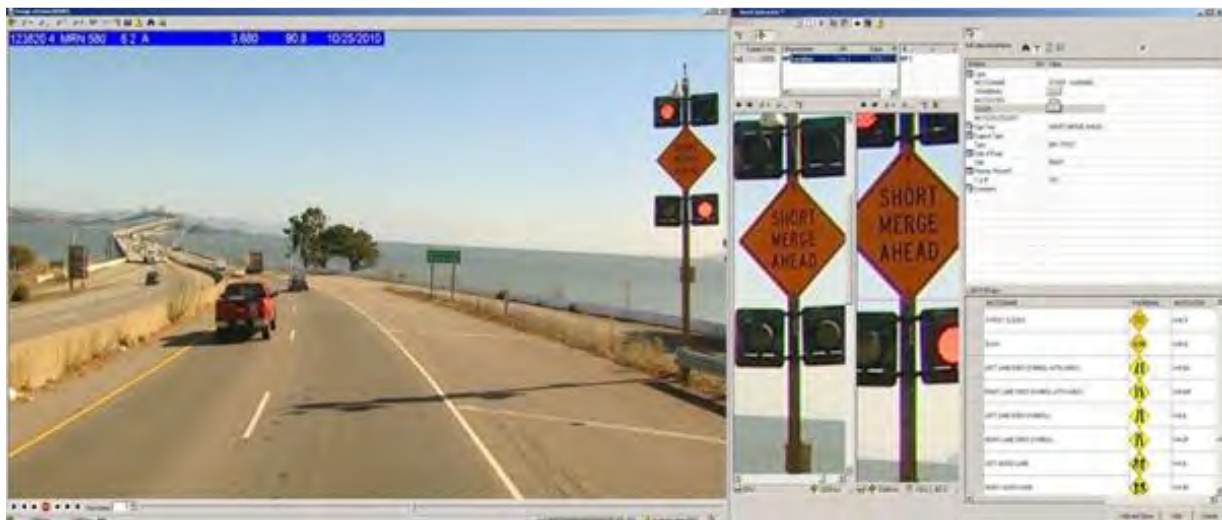


Figure 4: Surveyor Software Screenshot

### A.1.3.8: iVision Hosting Service

The City will receive the managed hosting services from Fugro for all of the collected roadway data and images. This will be completely free of charge for one year for up to 5 users. iVision is Fugro's web-based software that requires only a web browser with internet connectivity (see Figure 5). iVision allows client staff to view ROW digital images, pavement images, and a choice of collected pavement management and condition data over the internet. All of the client's data can be displayed in maps, charts, and tables. With just a few clicks, iVision can present information in the way that best suits the City's needs.

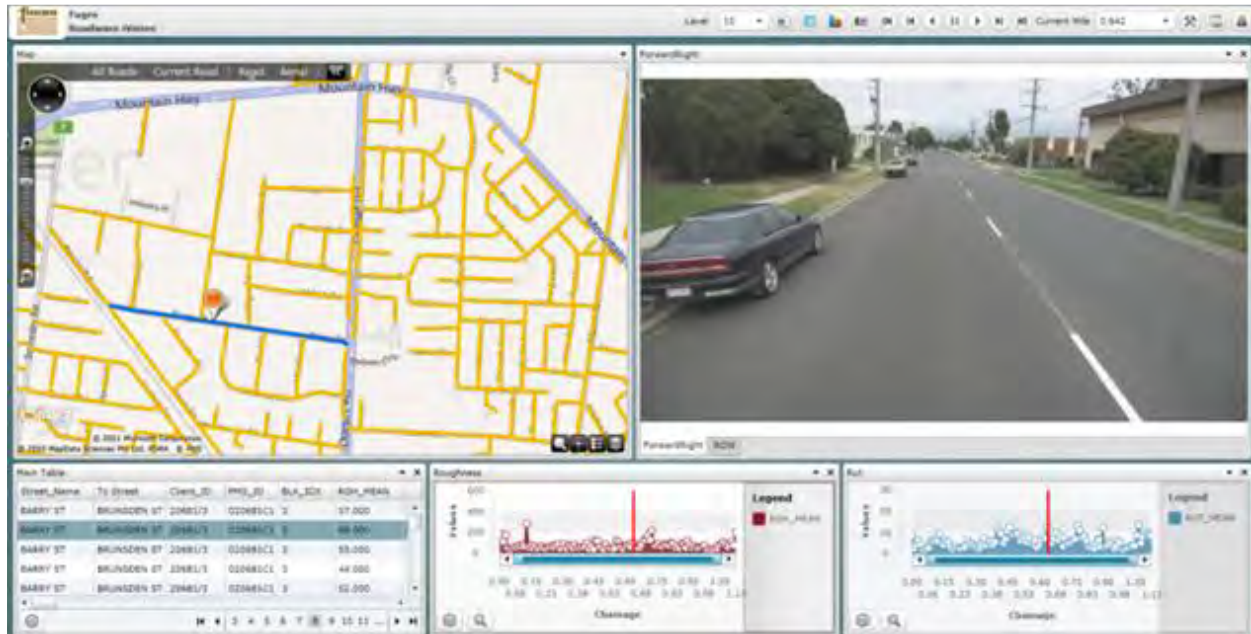


Figure 5: iVision Screenshot

## Section B: Scope of Work

Fugro will provide all the necessary resources required to perform the professional pavement management services proposed for this project including:

- Automatic and continuous measurement of pavement cracking, texture, rutting (both wheel path ruts), digital images, and dual-wheel path roughness data according to International Roughness Index (IRI) standards.
- Calculation of PCI for each surveyed road segment.
- Delivery of PCI data in a format compatible with the City's Geographic Information System (GIS) database.
- Inclusion of any newly constructed street to the City's PAVER system with GIS updates.
- Pavement management data reporting including a detailed description of current network condition results.
- Asset inventory data reporting with available attributes of signs.

Based on the GIS shapefile received from the City, there are approximately 147 centerline miles of roadways. City's PAVER database has approximately 193 PAVER section miles. The draft RFP from the City, dated February 20, 2020, states that the City's public street system consists of 171 centerline miles (348 lane miles). Fugro will collect pavement data along one lane for each local and residential street and one lane in each direction for each collector and arterial street. We are assuming that 348 test miles of pavement distress data will be collected for this project. This assumption can be modified based on further discussions with the City.

## B.1: Kick-off Meeting and Data Needs

Fugro will schedule a project kick-off meeting with City staff to confirm that all aspects of the project align with the City's goals. We will begin by reviewing the project approach, methods, and tasks. Any gaps that are identified in the project approach will be resolved prior to commencing the pavement management assessment. The final deliverables of the project will then be discussed. In addition, we will verify the format in which the final deliverables will be provided to the City. We will provide a data dictionary to the City that describes all datasets that will be collected and delivered to ensure that all data needs are met. The project schedule will be reviewed to ensure that all deadlines meet the goals of the City, and Fugro will adhere to the project schedule upon approval by the City.

Another critical topic that will be discussed during the project kick-off meeting is existing sources of data that will be required for project completion. We understand that the City will provide us a street centerline inventory file of all roadways (i.e., a GIS shapefile) to be included in the pavement management assessment. This centerline file will be important for efficient data collection and processing activities as well as for linking pavement management results back to the City's current systems and processes.

We will also discuss our communication plan during the project kick-off meeting. It is our goal to provide monthly updates to the City regarding the progress of the project as well as meetings with our project manager as requested by the City. Weekly updates will be provided during data collection to ensure the City is aware of activities on their streets. Fugro anticipates meeting with City staff at the following milestones:

- Kick-off meeting
- Vehicle Visit
- Review of Work Plan
- Discussion of Draft Final Report
- Presentation of Final Report to City Project Team (if requested)

## B.2: Right-of-Way (ROW) and Pavement Images

ROW and pavement images will be collected for each lane surveyed using the ARAN. ROW images will be collected at an interval of 25 feet, and pavement images will be collected continuously along the surveyed lane. All images will be delivered to the City electronically. Images will also

be available to the City for one year via Fugro's Web based iVision viewing software with five (5) user licenses. After one year, licenses can be renewed annually for additional fees. After the first year, the fee is approximately \$1,500 a year for the City's network size.

### **B.3: Pavement Data Collection and Processing**

For each surveyed lane, Fugro will document the street name, segment ID, segment length, pavement width, inspection date, pavement type, etc. Pavement images will be utilized to rate the distresses observed for each road. Pavement ride quality and rutting will be collected as part of the automated data collection using ARAN. Fugro will make reasonable effort in the field to maximize the collection of valid PCI and IRI data. Recollection will not be performed for pavement sections with invalidated PCI or IRI data for reasons such as ongoing construction, gated communities, or slow travel speeds (i.e., speeds below 15 mph impacting IRI values).

### **B.4: Pavement Management Data Reporting**

Fugro will utilize the PAVER pavement management software licensed to Fugro to calculate the pavement condition index (PCI) for each pavement sections. PCI is calculated based on the type, severity, and extent of surface distresses to provide a factual presentation of the overall network condition. PCI uses a scale from 0 to 100, where 0 represents a completely failed pavement and 100 represents a pavement in perfect condition. By assigning a PCI score to each pavement section, the City will be able to objectively compare the condition of the roads across the City's network.

Fugro will develop a comprehensive report that summarizes all project activities and project results including an updated PAVER database with current PCI scores. The scope of the work does not include any additional pavement management services and rehabilitation recommendations.

### **B.5: Roadway Asset Data Processing & Reporting**

Fugro will use the ROW images collected by Fugro's ARAN in conjunction with our Surveyor software to extract and report the asset data requested by the City specifically for signs. Fugro will provide the City with a geodatabase with asset attributes, which can be incorporated in the City's GIS.

## Section C: Project Schedule

Fugro proposes the following timeline (Figure 6) to complete the pavement assessment project for the City of Schertz.

Task	Month 1				Month 2				Month 3				Month 4				Month 5				Month 6			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Notice to Proceed	█																							
Kick-off Meeting		█																						
Project Setup		█	█	█	█																			
Data Collection					█	█																		
Data Processing							█	█	█	█	█	█	█	█										
Pavement Analysis													█	█	█	█								
Preliminary Results																	█							
Draft Report																	█	█	█					
Final Report																					█	█		

Figure 6: Project Schedule

**Note:** The data collection start date is dependent on equipment availability at the time the notice to proceed is received. An updated schedule will be provided to the client once the data collection is scheduled.

## Section D: Project Fee

The following table represents Fugro’s proposed fee for this project, which includes 348 test miles of pavement data collection. This fee is compliant with the NCTCOG North Texas SHARE contract for pavement analysis services. The fee does not include assessment, purchase or implementation price of a PMS software for the City.

Item	Description	Unit	Base Cost (\$)	Unit Cost (\$)	Quantity	Item Total (\$)
1	Automatically and continuously measure pavement cracking, texture, rutting, width, and pavement type	Test Mile	5,000	100	348	39,800
2	Collect pavement surface distress through automated means	Test Mile	5,000	60	348	25,880
3	Provide a digital condition rating system to collect user defined severity/extent based pavement distresses and pertinent roadway attributes to accommodate a standardized approach to collecting data	Lump Sum	2,000		1	2,000
4	Collect dual-wheel path roughness data to International Roughness Index standards	Test Mile		10	348	3,480
5	Roadway information that shall be collected and provided to the Participant at a minimum includes: street name, endpoints, segment ID, segment length, pavement width, inventory date, pavement type, functional class, pavement condition score, rutting, surface distress, and pavement age.	Test Mile		20	348	6,960
6	Collect digital images at 25-foot intervals of the road surface condition and link to a geodatabase (minimum forward facing imagery)	Test Mile		10	348	3,480
9	Collect roadway sign data to include type and location and create and create shape (.shp) files for incorporation into the Participants GIS system, if applicable.	Test Mile		25	348	8,700
10	Collect photos of sidewalks, ADA ramps, and/or roadway signs inventoried under items 8, 9, 12.	Test Mile		-	-	-
13	Load assessment data for all Participant-maintained pavements into a pavement management software system required by local government Participant(s), if applicable. Cost includes base cost plus lane mile unit cost.	Each Participant	5,000	5	348	6,740

Item	Description	Unit	Base Cost (\$)	Unit Cost (\$)	Quantity	Item Total (\$)
14	Implement map module so that pavement condition and other data can be integrated, displayed, and accessed through the map interface in a format consistent with the Participant's horizontal and vertical control network system, if applicable. Cost includes base cost plus lane mile unit cost.	Each Participant	5,000	5	348	6,740
15	Provide to the Participant the pavement condition data in a pavement management system database approved by Participant. Coordinate with the Participant's IT department to provide pavement condition data in a format compatible with the Participant's Environmental Systems Research Institute (ESRI) GIS database, if applicable. Cost includes base cost plus lane mile unit cost.	Each Participant	5,000	5	348	6,740
16	Calculate a Pavement Condition Index (PCI) score for each road segment using an approved pavement management system and in accordance with ASTM D6433. Provide results compatible with the Participant's GIS database, if applicable	Test Mile		15	348	5,220
17	Calculate the International Roughness Index for each road segment in accordance with ASTM E1926. Provide results compatible with the Participant's GIS database, if applicable	Test Mile		5	348	1,740
<b>Grand Total</b>						<b>117,480</b>

