



DEBRIS MONITORING SERVICES AGREEMENT

(FEMA funding)

This AGREEMENT (“Agreement”) is entered by and between **Tetra Tech, Inc.** (“Professional”), located at **2301 Lucien Way Ste 120, Maitland, FL 32751** and the **City of League City** (the “City”), a home-rule municipality, located at 300 W. Walker St., League City, Texas 77573 on the date set forth below.

Terms:

1. **Scope of Services:** Professional will perform the services as set forth in **Exhibit A**, which is attached and incorporated herein, and which can be generally described as **Debris Monitoring Services (RFP 22-025)**. If there is a conflict between the terms of this Agreement and Exhibit A, the terms of this Agreement will prevail.
2. **Term and Termination:** This Agreement shall commence on **August 24, 2022** and shall expire on **August 23, 2022**. City reserves the right to terminate this Agreement for convenience upon seven (7) days written notice to Professional. Upon such termination, City shall pay Professional, at the rate set out in **Exhibit A**, for services satisfactorily performed up through the date of termination. Notwithstanding any provision in this Agreement to the contrary, City will not be required to pay or reimburse Professional for any services performed or for expenses incurred by Professional after the date of the termination notice that could have been avoided or mitigated by Professional.
3. **Compensation:** Professional shall be paid for the services as set forth in **Exhibit A**. In no event shall the total compensation exceed **\$2,000,000.00** during the term of this Agreement. City shall tender payment (including progress/partial payments) for services only after such services are completed and are deemed to be acceptable under this Agreement, in the sole reasonable discretion of City. Professional must submit to City invoices for all services provided, which invoices must include details and dates of service. Payment by City shall be made within thirty (30) days of receipt of an invoice, except for any portion of the invoiced amount that City disapproves as not compliant under this Agreement, in the sole reasonable discretion of City. If City disapproves any amount submitted for payment by Professional, City shall give Professional specific reasons for disapproval in writing.
4. **Insurance:** Professional **is** required during the Contract Term to maintain insurance as set forth below:
 - (a) Comprehensive General Commercial Liability insurance covering bodily injury and property damage, with minimum coverage limits—exclusive of defense costs—of \$1,000,000 per occurrence and \$2,000,000 aggregate;
 - (b) Professional Liability (errors and omissions/malpractice) insurance with minimum coverage limits—exclusive of defense costs—of \$2,000,000 per occurrence; and
 - (c) If at any point during the Contract Term it is foreseeable that Professional will enter upon City premises:
 - (i) Worker’s Compensation coverage with statutory limits for the State of Texas, and
 - (ii) Commercial Automobile Liability coverage with minimum coverage limits—exclusive of defense costs—of \$1,000,000 per occurrence and \$2,000,000 aggregate.All policies must contain a waiver of subrogation against City. Comprehensive General Liability and Commercial Automobile Liability policies must name the City as Additional Insured. Professional shall pay all insurance deductibles and deductibles must not exceed \$10,000 unless approved in advance by City.

Professional shall provide City Certificates of Insurance evidencing these insurance requirements prior to the start of work.

5. **Liquidated Damages:** Professional acknowledges that time is of the essence in performing this Agreement. City and Professional (collectively, the “Parties”) agree that if Professional is late in performing any service designated as Time Critical on the Scope of Services attached to this Agreement, City will suffer loss, damages, or other harm from Professional’s delay. The Parties agree that the amount of loss, damages, or harm likely to be incurred as a result of Professional’s delay is incapable or difficult to precisely estimate, and therefore the Parties desire to stipulate the amount of such loss, damages, or harm. Accordingly, Professional shall have deducted from any amounts owed under this Agreement liquidated damages equal to the number of calendar days of the delay(s) times the daily rate, which rate shall be one-tenth of one percent (0.1%) times the compensation shown in the Scope of Services for such Time Critical service. The Parties further agree that: (i) the liquidated damages specified herein are not a penalty but rather bear a reasonable relationship to, and is not plainly or grossly disproportionate to, the probable loss likely to be incurred by City as a result of Professional’s delay; (ii) one of the reasons for City and Professional to agree to such amounts is the uncertainty and cost of litigation regarding the question of actual damages; and (iii) City and Professional are sophisticated business parties and negotiated this Agreement at arm’s length.
6. **Independent Professional:** Professional is an independent Professional and is not an employee, partner, joint venture, or agent of City. Professional understands and agrees that he/she will not be entitled to any benefits generally available to City employees. Professional shall be responsible for all expenses necessary to carry out the services under this Agreement and shall not be reimbursed by City for such expenses except as otherwise provided in this Agreement.
7. **Intellectual Property:** This Agreement shall be an Agreement for services and the parties intend and consider any work created as a result of this Agreement, including any and all documentation, images, products or results, to be a work (the “Work”) for hire under federal copyright law. Ownership of the Work shall belong to and remain the exclusive property of City. The Work may be edited at any time within City’s discretion. If the Work would not be considered a work-for-hire under applicable law, Professional hereby assigns, transfers, and conveys any and all rights, title and interest to City, including without limitation all copyrights, patents, rights of reproduction, rights to ownership, and right to secure registrations, renewals, reissues and extensions thereof. As the sole copyright holder of the Work, City maintains and asserts the rights to use, reproduce, make derivative works from, and/or edit the Work in any form of medium, expression or technology now known or hereafter developed, at any time within City’s discretion. Professional shall not sell, disclose or obtain any other compensation for the services provided herein or the Work. If the Work is one to which the provisions of 17 U.S.C. § 106A apply, Professional hereby waives and appoints City to assert on Professional's behalf Professional's moral rights or any equivalent rights regarding the form or extent of any alteration to the Work (including, without limitation, removal or destruction) or the making of any derivative works based on the Work, including, without limitation, photographs, drawings or other visual reproductions of the work, in any medium, for City’s purposes.
8. **Confidentiality:** During the course of the services to be provided under this Agreement, Professional may become privy to confidential information of City. Professional agrees to treat as confidential the information or knowledge that becomes known to Professional during performance of this Agreement and to not use, copy, or disclose such information to any third party unless authorized in writing by City. This provision does not restrict the disclosure of any information that is required to be disclosed under applicable law. Professional shall promptly notify City of any misuse or unauthorized disclosure of City’s confidential information and upon expiration of this Agreement shall return to City all confidential information in Professional’s possession or control. Professional shall further comply with all information security policies of City that may apply and shall not make any press releases, public statements or advertisement referring to the services provided under this Agreement or the engagement of Professional without the prior written approval of City.

9. **Warranties and Representations:** Professional warrants and agrees that Professional shall perform its services and conduct all operations in conformity with all applicable federal, state, and local laws, rules, regulations, and ordinances. For any service performed on premises owned or controlled by City, Professional warrants and agrees that Professional will perform said services in compliance with all City rules, including but not limited to, prohibitions related to tobacco use, alcohol, and other drugs.
10. **Licenses/Certifications:** Professional represents and warrants that it will obtain and maintain in effect, and pay the cost of, all licenses, permits or certifications that may be necessary for Professional's performance of this Agreement. If Professional is a business entity, Professional warrants, represents, covenants, and agrees that it is duly organized, validly existing and in good standing under the laws of the state of its formation; and is duly authorized and in good standing to conduct business in the State of Texas, that it has all necessary power and has received all necessary approvals to execute and deliver the Agreement and is authorized to execute this Agreement according to its terms on behalf of Professional.
11. **Performance/Qualifications:** Professional agrees and represents that Professional has the personnel, experience, and knowledge necessary to qualify Professional for the particular duties to be performed under this Agreement. Professional warrants that all services performed under this Agreement shall be performed consistent with generally prevailing professional or industry standards.
12. **Conflict of Interest:** Professional warrants, represents, and agrees that Professional presently has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with Professional's performance of the services hereunder. Professional further warrants and affirms that no relationship or affiliation exists between Professional and City that could be construed as a conflict of interest with regard to this Agreement.
13. **INDEMNIFICATION: PROFESSIONAL SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS CITY , AND EACH OF ITS OFFICIALS, OFFICERS, AGENTS AND EMPLOYEES FROM AND AGAINST ALL CLAIMS, ACTIONS, SUITS, DEMANDS, PROCEEDINGS, COSTS, DAMAGES AND LIABILITIES, INCLUDING WITHOUT LIMITATION ATTORNEYS' FEES AND REASONABLE LITIGATION COSTS, ARISING OUT OF, CONNECTED WITH, OR RESULTING FROM ANY ACTS OR OMISSIONS OF PROFESSIONAL OR ANY AGENT, EMPLOYEE, SUBCONTRACTOR, OR SUPPLIER OF PROFESSIONAL IN THE EXECUTION OR PERFORMANCE OF THIS CONTRACT, TO THE EXTENT THE CLAIM ARISES FROM NEGLIGENCE, WILLFUL ACT, BREACH OF CONTRACT OR VIOLATION OF LAW.**
14. **Force Majeure:** Neither party shall be liable to the other for (i) any delay in performance; (ii) any other breach; (iii) any loss or damage; or (iv) any contribution to or aggravation of any of the foregoing; arising solely from uncontrollable forces such as fire, theft, storm, war, or any other cause that could not have been reasonably avoided by the party's exercise of due diligence.
15. **Notices:** Any notice given under this Agreement by either party to the other may be affected either by personal delivery in writing or by mail, registered or certified postage prepaid with return receipt requested. Mailed notices shall be addressed to the addresses of the Parties as they appear in the contract. Notices delivered personally shall be deemed communicated at the time of actual receipt. Mailed notices shall be deemed communicated three (3) days after mailing.

16. **Texas Family Code Child Support Certification:** Pursuant to Section 231.006 of the Texas Family Code, Professional certifies that it is not ineligible to receive the award of or payments under the Agreement and acknowledges that the Agreement may be terminated, and payment may be withheld if this certification is inaccurate.
17. **State Auditor:** Professional understands that acceptance of funds under the Agreement constitutes acceptance of the authority of the Texas State Auditor's Office, or any successor agency (collectively, the "Auditor"), to conduct an audit or investigation in connection with those funds. Professional agrees to cooperate with the Auditor in the conduct of the audit or investigation, including without limitation providing all records requested. Professional will include this provision in all contracts with permitted subprofessionals.
18. **Jurisdiction:** Any disputes under this Agreement shall be brought in a court of competent jurisdiction in Galveston, Texas and governed by Texas law.
19. **Alternative Dispute Resolution:** To the extent that Chapter 2260, Texas Government Code, is applicable to this Contract and is not preempted by other applicable law, the dispute resolution process provided for in Chapter 2260 and the related rules adopted by the Texas Attorney General Pursuant to Chapter 2260, shall be used by City and Professional to attempt to resolve any claim for breach of contract made by Professional that cannot be resolved in the ordinary course of business. The Director of Finance of City shall examine Professional's claim and any counterclaim and negotiate with Professional in an effort to resolve such claims. This provision shall not be construed as a waiver by City of its right to seek redress in the courts.
20. **Entire Agreement:** This Agreement contains the entire understanding between the Parties and supersedes all prior agreements, arrangements, and understanding, oral or written between the Parties relating to this Agreement. This Agreement may not be modified except by mutual written agreement of the Parties executed subsequent to this Agreement.
21. **Eligibility to Receive Payment:** Professional certifies that, as a matter of state law, it is not ineligible to receive the Agreement and payments pursuant to the Agreement and acknowledges that the Agreement may be terminated, and payment withheld if this representation is inaccurate.
22. **Payment of Debt/Delinquency to State:** Professional certifies that it is not indebted to the City of League City and is current on all taxes owed to the City of League City. Professional agrees that any payments owing to Professional under the Agreement may be applied directly toward any debt or delinquency that Professional owes the City of League City regardless of when it arises, until such debt or delinquency is paid in full.
23. **Products and Materials Produced in Texas:** If Professional will provide services under the Agreement, Professional covenants and agrees that in performing its duties and obligations under the Agreement, it will purchase products and materials produced in Texas when such products and materials are available at a price and delivery time comparable to products and materials produced outside of Texas.
24. **Risk of Loss:** All work performed by Professional pursuant to the Agreement will be at Professional's exclusive risk until final and complete acceptance of the work by City. In the case of any loss or damage to the work, or the need to redo or revise the work for any reason except to accommodate a City request to materially alter the work, prior to City's acceptance, bearing the costs of such loss or damage to or such redo or revision of the work will be Professional's responsibility.
25. **Publicity:** Professional shall not use City's name, logo or likeness in any press release, marketing materials or other public announcement without receiving City's prior written approval.
26. **Legal Construction/Severability:** In the event that any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity,

illegality or unenforceability shall not affect any other provision, and this Agreement shall be construed as if such invalid, illegal or unenforceable provisions had never been contained in it. To this end, the provisions of this Agreement are declared to be severable. The Parties may mutually agree to renegotiate the Agreement to cure such illegality/invalidity or unconstitutionality if such may be reasonably accomplished.

27. **Limitations:** The Parties are aware that there are constitutional and statutory limitations on the authority of City to enter into certain terms and conditions of the Agreement, including, but not limited to, those terms and conditions relating to liens on City's property; disclaimers and limitations of warranties; disclaimers and limitations of liability for damages; waivers, disclaimers and limitations of legal rights, remedies, requirements and processes; limitations of periods to bring legal action; granting control of litigation or settlement to another party; liability for acts or omissions of third parties; payment of attorneys' fees; dispute resolution; indemnities; and confidentiality (collectively, the "Limitations"). Any terms and conditions related to the Limitations will not be binding on City except to the extent authorized by the laws and Constitution of the State of Texas.
28. **Sovereign Immunity:** The Parties agree that neither the execution of the Agreement by City nor any other conduct, action or inaction of any City representative relating to the Agreement constitutes a waiver of sovereign immunity by City.
29. **Authority:** Professional warrants and represents that Professional has full power and authority to enter into and perform this Agreement and to make the grant of rights contained herein. The person signing on behalf of City represents that he/she has authority to sign this Agreement on behalf of City.
30. **Non-Waiver:** The Parties specifically agree that neither the occurrence of an event giving rise to a breach of contract claim nor the pendency of a claim constitute grounds for the suspension of performance by Professional. No covenant or condition of this Agreement may be waived except by written consent of the waiving party. Forbearance or indulgence by one party in any regard whatsoever shall not constitute a waiver of the covenant or condition to be performed by the other party.
31. **Equal Employment Opportunity:** During the performance of this contract:
 - a. Professional will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Professional will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Professional agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
 - b. Professional will, in all solicitations or advertisements for employees placed by or on behalf of Professional, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
 - c. Professional will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of Professional's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
 - d. Professional will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

- e. Professional will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- f. In the event of Professional's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and Professional may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- g. Professional will include the portion of the sentence immediately preceding paragraph (a) and the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. Professional will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a Professional becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency Professional may request the United States to enter into such litigation to protect the interests of the United States.

32. Compliance with the Contract Work Hours and Safety Standards Act:

- a. Overtime requirements: No Professional or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- b. Violation; liability for unpaid wages; liquidated damages: In the event of any violation of the clause set forth in paragraph (a) of this section Professional and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Professional and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a) of this section.
- c. Withholding for unpaid wages and liquidated damages: The applicable federal agency or grant recipient shall, upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by Professional or subcontractor under any such contract or any other Federal contract with the same prime Professional, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime Professional, such sums as may be determined to be necessary to satisfy any liabilities of such Professional or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b) of this section.

- d. **Subcontracts:** Professional or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a) through (d) of this section and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime Professional shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a) through (d) of this section."
33. **Clean Air Act:** Professional agrees: 1) to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., 2) to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the appropriate state agency, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office; and 3) to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FEMA.
34. **Federal Water Pollution Control Act:** Professional agrees: 1) to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq., 2) to report each violation to the City and understands and agrees that the City will, in turn, report each violation as required to assure notification to the appropriate state agency, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office and 3) to include these requirements in each subcontract exceeding \$100,000 financed in whole or in part with Federal assistance provided by FEMA.
35. **Debarment and Suspension:** This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such Professional is required to verify that none of Professional's employees, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- a. Professional must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
 - b. This certification is a material representation of fact relied upon by the City. If it is later determined that Professional did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (name of state agency serving as recipient and name of subrecipient), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
 - c. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.
36. **Byrd Anti-Lobbying Amendment:** Professionals who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient
37. **Procurement of Recovered Materials:** If applicable, Professional, in the performance of this contract, shall make maximum use of products containing recovered materials that are EPA- designated items unless the product cannot be acquired-(i) Competitively within a timeframe providing for compliance with the contract performance schedule; (ii) Meeting contract performance requirements; or (iii) At a reasonable price. Information about this requirement, along with the list of EPA-designate items, is available at EPA's

Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

38. **Amendments:** To be eligible for FEMA assistance under the City's FEMA grant or cooperative agreement, the cost of the change, modification, change order, or constructive change must be allowable, allocable, within the scope of its grant or cooperative agreement, and reasonable for the completion of project scope. Therefore, no subsequent change may be made this Agreement that interferes with the City's ability to seek reimbursement from FEMA.
39. **Access to Records:** Professional agrees to provide the City, any Texas state agency, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of Professional which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.
 - a. Professional agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
 - b. Professional agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract."
40. **DHS Seal, Logo, and Flags:** Professional shall not use the Department of Homeland Security (hereinafter "DHS") seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre- approval.
41. **Compliance with Federal Law, Regulations, and Executive Orders:** This is an acknowledgement that FEMA financial assistance will be used to fund the contract only. Professional will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.
42. **No Obligation by Federal Government:** The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, Professional, or any other party pertaining to any matter resulting from the contract.
43. **Program Fraud and False or Fraudulent Statements or Related Acts:** Professional acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to Professional's actions pertaining to this contract.
44. **Prohibitions Pursuant to Texas Government Code:** By executing this Agreement Professional verifies that Professional: (1) does not boycott Israel and will not during the term of this Agreement per Section 2274.002; (2) is not engaged in business with Iran, Sudan, or any company on the list referenced in Section 2252.152; (3) does not boycott energy companies and will not during the term of this Agreement per 2274.002; and (4) does not have a practice, policy, guidance, or directive of this Agreement against a firearm entity or firearm trade association and will not during the term of this Agreement per 2274.002.

(signature block on next page)

Executed on _____, *(date to be filled in by City Secretary)*

TETRA TECH, INC. - “Professional”

Click or tap here to enter text.

CITY OF LEAGUE CITY – “City”

John Baumgartner, City Manager

Attest:

Diana Stapp, City Secretary

Approved as to Form:

Office of the City Attorney

Exhibit A

Scope of Services/Description of Products/Payment Schedule (65 pages, including this page)

Debris Monitoring Services Secondary Vendor for RFP 22-025
Three (3) year contract with two (2), one-year renewal options.



Proposal Cover Sheet
Due Date: Wednesday, June 29, 2022 by 2:00 p.m.

Tetra Tech, Inc.

Name of Firm/Company

Jonathan Burgiel

Business Unit President

Agent's Name (Please Print)

Agent's Title

2301 Lucien Way Ste 120

Maitland

FL

32751

Mailing Address

City

State

Zip

321-441-8500

TDR.Contracts@tetrattech.com

Telephone Number

Email Address



06/28/22

Authorized Signature

Date

Proposal Submission Checklist

Proposal submission package shall consist of the following:

- ☒ Proposal Cover Sheet
- ☒ Proposal (If hard copy submitted: one marked original, one marked copy and a flash drive)
- ☒ Cost Proposal Sheet
- ☒ Public Information Act Form
- ☒ Conflict of Interest Questionnaire (if required)

Proposal Certification and Addenda Acknowledgement

Proposer must initial next to each addendum received to verify receipt:

Addendum #1  Addendum #2 _____ Addendum #3 _____

Addendum #4 _____ Addendum #5 _____ Addendum #6 _____

Tab A: Qualifications and Experience

a. Qualifications

a.1 Firm Summary

Tetra Tech is a leading provider of consulting, technical, environmental, and engineering services worldwide. Founded in 1966, Tetra Tech is one of the leading firms in the nation in the field of disaster management and homeland security, with millions of dollars in revenue coming from contracts in such diverse areas as infrastructure hardening and protection; disaster recovery; emergency management, planning, and preparedness; community resilience; environmental services, and grant management. Tetra Tech supports government and commercial clients by providing innovative solutions to complex problems focused on water, environment, energy, infrastructure, and natural resources. We are a global company with over 21,000 employees that is *Leading with Science®* to provide innovative solutions to complex problems for our public and private clients. Our team is recognized for its ability to quickly respond to a broad range of emergencies, allowing our clients to return to the business of running their day-to-day operations.



#1 MOST PREFERRED ADMS TECHNOLOGY

Likewise, our team’s understanding of the Federal Emergency Management Agency (FEMA), the Federal Highway Administration (FHWA) (including recent changes), Texas Department of Emergency Management, and other reimbursement agencies’ requirements for eligibility, documentation, and reimbursement helps clients receive the maximum reimbursement allowed. ***Our team has obtained over \$8 billion in reimbursement funds for our clients from federal agencies such as FEMA, FHWA, and the Natural Resources Conservation Service (NRCS).*** In total, our team has successfully managed the removal of and reimbursement for over ***160 million cubic yards (CYs) of debris.***

Knowledge and Expertise



Tetra Tech Disaster Recovery is a national leader in the field of disaster management. Our contracts with federal agencies and state and local governments are in diverse areas such as disaster recovery consulting and technical assistance; staff augmentation; community resilience;

grant management; and disaster debris planning and preparedness. We have worked closely with FEMA, FHWA, and other regulatory agencies, recipients, and subrecipients on billions of dollars' worth of projects to determine project eligibility and to provide technical assistance, detailed damage inspection reports, cost estimates, validation and testing, audit documentation, and process reimbursements. Our team also maintains strong relationships with many of the lead federal officers, state agency leadership, local governments, and other staff.

Unmatched Texas Comprehensive Disaster Recovery Experience



Tetra Tech has assisted more clients in Texas with comprehensive disaster recovery programs, including debris management programs, than any other firm. With eight offices and hundreds of disaster recovery professionals throughout the State of Texas, we can respond quickly to the City's needs. Over the years, Tetra Tech has **monitored the removal of over 33 million CYs of debris and more than 465,000 hangers, leaners, and stumps for over 100 clients across the State of Texas. This includes assisting the City of League City (City) in 2017 after Hurricane Harvey and in 2008 after Hurricane Ike.**

Unmatched Debris Monitoring Experience

Our team has provided disaster management, recovery, and consulting services to hundreds of state and local government agencies since 2001. These services have included environmental permitting; monitoring of debris collection, hazardous tree programs, temporary debris staging and reduction sites (TDSRS), and specialized debris missions; fire damage restoration; contractor invoice reconciliation; and federal grant reimbursement support. Tetra Tech has responded to over 90 events from 2001-2022. **Profiles and references from specific projects are featured later in this section. Tetra Tech can provide additional projects and information upon request.**



a.2 Resources and Ability to Respond

Clients count on us to respond in their time of need, and we have never failed to deliver. *More than 6,000 Tetra Tech field staff were deployed in concurrent responses to Hurricanes Harvey, Irma, Maria, and the California wildfires in 2017–2018.*

Tetra Tech's immediate response staffing plan utilizes our vast network of disaster recovery professionals, reserve staff from the Tetra Tech Disaster Recovery Unit, and local hires. Our staffing process has rapidly mobilized project teams for major disaster recovery projects nationwide. We prioritize deploying local staff, which benefits the local post-disaster economy and reduces mobilization and transportation costs. The number of trained HR representatives can scale up to 20 at a moment's notice, with the ability to hire 200+ staff per day. Under this process, local teams can be hired, trained, and deployed within 24 hours. Tetra Tech has consistently deployed large-scale mobilizations of hundreds of staff and thousands of dollars' worth of equipment to multiple clients in a matter of days and on very short notice.



Staffing and Personnel

Based on the workforce planning standards described in the City's request for proposals and our numerous experiences working with local governments and also for the City following debris-generating events, the matrix below illustrates our workforce mobilization following activation.

Tetra Tech Mobilization Matrix

Title	Industry Standards	Debris Hauler Mobilization	Mobilization Requirements
Supervisors			
Project Manager	1 per project	N/A	1 full time employee (FTE)
Debris Management Consultant	1 per project	N/A	1 FTE
Operations Manager	1 per project	N/A	1 FTE
Mobilization Operations			
GIS Analyst	1 per project	N/A	1 FTE
Truck Certification	3 per project	150 dump bodies	3 FTE
Environmental Specialist	as needed	N/A	1 FTE
Collection Operations			
Project Coordinator	1:50 monitors	N/A	1 FTE
Field Supervisors	1:10 monitors	N/A	3 FTE

Field Coordinator	1/loading unit	30 loading units	30 FTE
Project Inspector (Citizen Drop-Off Monitors)	as needed	N/A (2 per residential drop off site)	10 FTE
Disposal Operations			
Disposal Supervisor	1:5 Sites	N/A	1 FTE
Debris Site/Tower Monitors	2/TDSRS location	2 TDSRS location	4 FTE
Data Operations			
Billing/Invoice Analyst	1 per project	N/A	1 FTE
Automated Ticketing Specialist	1 per project	N/A	1 FTE

Equipment

Tetra Tech understands the critical nature of asset management and logistics following a disaster. To that end, Tetra Tech maintains a warehouse located in Orlando with over 120 fully stocked bays of debris monitoring supplies capable of supporting over 50 simultaneous recovery operations for over 90 days. **Tetra Tech has consistently deployed large-scale mobilizations of hundreds of staff and thousands of dollars' worth of equipment to multiple clients in a matter of days and on very short notice.**

Tetra Tech's Resource List

Field Documents* Currently in Our Warehouse	
ADMS Handheld Units	6,000
Time and Materials Forms	5,000
Truck Certification Forms (Printer Rolls)	5,000
ADMS Ticket Stubs	800,000
Haul Out Ticket Stubs	300,000
Placards	4,000
Kits	
Project Manager Kits (1 Per 100 Monitors)	40
Project Coordinator Kits (1 Per 100 Monitors)	40
Human Resources Kits (1 Per 100 Monitors)	40
Collection Monitor Kits (1 Per 25 Monitors)	90
Disposal Monitor Kits (1 Kit Per Disposal Site)	100
Leaner/Hanger/Stump Kits (1 Per 50 Monitors)	40
Equipment**	
Laptops	480
Mifi (Mobile Wireless)	90

High Speed Scanners	70
Printers	45
Mobile Command Office	2
Gas Trucks	To Be Obtained from Pre-contracted Vendor
Modular Work Locations	To Be Obtained from Pre-contracted Vendor
Generators	To Be Obtained from Pre-contracted Vendor
Portable Facilities	To Be Obtained from Pre-contracted Vendor

**All field documents are replenished as they are needed. Tetra Tech has several emergency vendors with the ability to fulfill supply needs in 24 hours or less.*

*** ADMS units are readily available and can be ordered as needed on a 24-hour turnaround.*

a.3 Staffing & Organizational Chart

Tetra Tech has assembled a team of debris removal monitoring experts with direct experience responding to recent disasters. **Our dedicated project management team is deeply familiar with the policies, procedures, and requirements associated with delivering successful disaster debris monitoring services.** Our dedicated team is available to the City 365 days/year.

Our staff members have **managed the removal of and reimbursement for over 160 million CYs of debris as well as the demolition of over 22,000 uninhabitable residential and commercial structures.** Our team has monitored and obtained FEMA, FHWA, and NRCS reimbursement on over 30 debris removal projects in excess of 1 million CYs of debris and understands the significant resource commitment and effort that is necessary to manage and monitor large-scale debris removal operations for local governments.

Our record of success includes serving over 300 state and local government clients in response to over 90 presidential disaster declarations over the last decade. Our team has obtained **over \$8 billion in reimbursement funds** for our clients from federal agencies. Tetra Tech is committed to providing the City an experienced project manager and management team that will expedite recovery efforts in the City by establishing a coordinated approach to debris removal.

Proposed Team

Tetra Tech has assembled a project team with the qualifications and expertise necessary to support the City following a disaster. The individuals selected for this project not only have national expertise from having worked on every major disaster in the past decade, but also have **hands-on experience working on prior (or current) Texas-based projects.** As a result, our staff has an in-depth understanding of how disaster response and recovery works in Texas.

Our senior management and advisory team will provide expert oversight and assistance at critical junctures. These individuals bring decades of disaster debris monitoring and reimbursement expertise. Tetra Tech has identified a team of field staff to support the City who have previous experience in similar operations. Brief summaries of their experience are provided below.

Proposed Staff Summary of Qualifications	
Senior Management Team	
Chuck McLendon	Mr. McLendon has been providing consulting engineering and disaster recovery services for 30+ years. This includes over 30 major disaster activations and more than \$2.5 billion in FEMA PA reimbursement. His background in solid and hazardous waste management has led him to become one of the leading experts in the country on the implementation of large-scale post-disaster debris removal programs.
John Buri	Mr. Buri has 16+ years of experience and is a director of post-disaster programs for Tetra Tech. Mr. Buri has a thorough understanding and practical application of industry best practices and federal guidance governing such efforts, particularly in the state of Texas. He has been involved with 22 disaster declarations, representing \$3+ billion in disaster related grants.
Ralph Natale	Mr. Natale is the director of post-disaster programs for Tetra Tech, where he leads the practice by developing programs, providing daily project support, and providing oversight and guidance to his team of project managers. He has administered nearly 250 projects in his 15-year career. This includes managing the removal of over 66 million CYs of debris, 1.7M hazardous trees, the program management of over 35,000 parcels on fire removal projects, and over \$4.5B dollars of reimbursed invoices.
Allison McLeary	Ms. McLeary has over 18 years of experience as an emergency response and recovery executive. As the former Recovery Bureau Chief of the Florida Division of Emergency Management, and the former Recovery Counsel for the Louisiana Governor's Office of Homeland Security and Emergency Preparedness she is a steadfast advisor in planning for, responding to, and recovering from challenges and disasters.
Jeff Dickerson	Mr. Jeffrey Dickerson has 30+ years of experience in program management, with extensive experience in technical organizational management, training, and readiness exercises. As the Technical Applications Manager, Mr. Dickerson is responsible for the planning, development, deployment of technical applications supporting emergency response operations for the firm.
Project Field Team	
Frank Guthman, Project Manager	Mr. Guthman is a Civil Engineer for Tetra Tech and has supported a wide range of land development and improvement projects for public and private clients. Tasks have included providing construction phase services, Resident Engineering duties, grading, drainage, utility design and site layout. He has also managed large program management and debris monitoring projects, ensuring FEMA compliance of the PA Program and Policy Guidelines.
Robert Ezelle, Operations Manager	As an operations and field project manager, Mr. Ezelle had overseen some of Tetra Tech's largest and technically challenging projects in recent history. This includes Hurricane Mathew, Harvey, and Irma, along with multiple wildfire remediation projects. Mr. Ezelle is familiar with all aspect of debris monitoring and reimbursement including staff training, documentation, eligibility, truck certification, and data management.

**Kimmi
Burkholder,
Data Manager**

Ms. Burkholder is an integral member of the Disaster Recovery Team, where she served as data manager for projects within the State of Alabama after the severe storms, straight-line winds, and tornadoes that affected the area. She also served as the lead data analyst for projects within the State of Louisiana after Hurricane Ida, and most recently being tasked with managing the day to day activities of the quality control/quality assurance (QC/QA) data team and ensuring client payment packages are submitted.

**Casey Ogden,
GIS Manager**

Mr. Casey Ogden has 20+ years of experience in Geographic Information Systems, with experience with the ESRI suite of products. As the Geospatial Applications Manager, Mr. Ogden manages a team of five GIS personnel and is responsible for developing GIS applications that are efficient, accurate and cutting edge.

a.4 Professional Certifications, Training, and Licensing

Tetra Tech remains abreast of the latest guidance, issues being debated, and current best practices through participation in expert groups, attendance in training and conference sessions, and working with national experts in disaster recovery operations, emergency management, national security, information technology, public health, transportation, and critical infrastructure protection. **Our proposed team possesses key certifications that help them provide quality technical services and have attended numerous training courses related to debris operations and emergency management.** Some of these include:

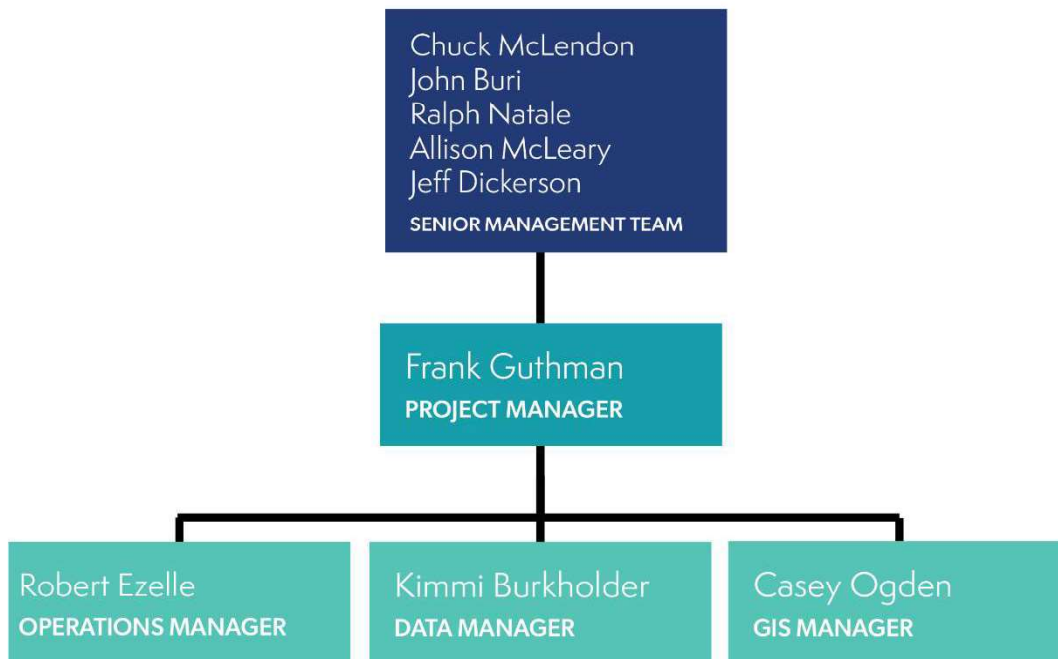
- Occupational Safety and Health Administration (OSHA) Disaster Site Worker Course
- OSHA 10-Hour Construction Safety Certification
- OSHA 40-Hour HAZWOPER Certification
- G-202: Debris Management
- IS 100: Introduction to Incident Command System
- IS-120: Introduction to Exercises
- IS 191: ICS/EOC Interface
- IS-200: Basic Incident Command
- IS 242: Effective Communication
- IS-288: Local Volunteer and Donations Management
- IS-230: Fundamentals of Emergency Management
- IS-547: Introduction to Continuity of Operations (COOP)
- IS-631: Public Assistance Operations I
- IS-632: Introduction to Debris Operations
- IS-634: Introduction to FEMA’s Public Assistance Program
- IS-700: National Incident Management System
- IS-800: National Response Program
- ICS 300: Intermediate ICS for Expanding Incidents

Organizational Chart

The proposed organization structure is based on industry best practices and an understanding of geography and the distinct management responsibilities of each position. Our proposed organizational structure ensures orderly communication, distribution of information, effective coordination of activities, and accountability. Tetra Tech’s project team can scale as needed, coordinate response, establish common processes for planning and managing resources, and

adapt organizational structure to match the needs and complexities of projects. **Résumés have been included at the end of this section.**

CITY OF LEAGUE CITY, TEXAS



b. Experience

b.1 Current Contracts

Tetra Tech has provided our current contracts held within a 100-mile radius of the City below.

Current Contracts within a 100-miles of the City	
Alvin, City of, TX	Galveston County, TX
Angleton, City of, TX	Galveston, City of, TX
Beaumont, City of, TX	Hardin County, TX
Bellaire, City of, TX	Harris County, TX
Brazoria County, TX	Houston, City of, TX
Brazoria, City of, TX	Houston-Galveston Area Council, TX
Dickinson, City of, TX	Jefferson County, TX
El Campo, City of, TX	Katy, City of, TX
Fort Bend County, TX	Nassau Bay, City of, TX
Friendswood, City of, TX	Rose Hill Acres, City of, TX

b.2 Relevant Experience

Debris Monitoring Experience Over the Past 5 Years

The table on the following page provides an abbreviated experience matrix for relevant projects conducted over the past 5 years. Tetra Tech can provide additional information upon request.

Relevant Experience Matrix (2017–Present)

Year	Disaster	Representative Client(s) *Work in Progress	Contract Value	Size (CYs)								
					Contract Management	Data Management	Collection Monitoring	Disposal Monitoring	Leaker/Hanger/Slump Removal	Private Property Debris Removal	Marine/Waterway	FEMA Reimbursement
2021	Dixie Fire Clients Served: 1	CalRecycle (State Contract)*	Invoices Pending	Ongoing	■	■	■	■	■	■	■	■
	Hurricane Ida Clients Served: 11	City of Central, LA	\$81,691	62,878	■	■	■	■	■	■	■	■
		Tangipahoa Parish*	Invoices Pending	2,930,005 (ongoing)	■	■	■	■	■	■	■	■
	Surfside Condo Collapse Clients Served: 1	Miami-Dade County, FL	Invoices Pending	10,264 (tons)	■	■	■	■	■	■	■	■
	Tennessee Severe Storms and Floods Clients Served: 1	Metro Nashville and Davidson County, TN	\$368,467	804 (tons)	■	■	■	■	■	■	■	■
	Alabama Tornado Clients Served: 3	Calhoun County, AL	Invoices Pending	228,268	■	■	■	■	■	■	■	■
2020	Winter Storms Clients Served: 1	Virginia Department of Transportation	\$1,384,431	471,000	■	■	■	■	■	■	■	■
	California Wildfire Clients Served: 1	CalRecycle Northern Branch*	\$17,991,682	488,993 (tons)	■	■	■	■	■	■	■	■
		Audubon Society of LA	\$144,765	19,408	■	■	■	■				■
	Hurricane Zeta Clients Served: 7	City of Diamondhead, MS	\$322,959	200,556	■	■	■	■				■
		Dallas County, AL	\$553,066	222,732	■	■	■	■				■
		City of Youngsville, LA	\$30,163	7,646	■	■	■	■				■
	Hurricane Delta Clients Served: 3	St. Martin Parish, LA	\$220,303	30,600	■	■	■	■				■
		Baldwin County, AL	\$6,910,848	4,425,281	■	■	■	■				■
	Hurricane Sally Clients Served: 4	City of Pensacola, FL	\$1,109,949	574,579	■	■	■	■				■
		City of Lake Charles, LA	\$5,559,677	4,314,878	■	■	■	■				■
		Orange County, TX	\$1,158,261	723,064	■	■	■	■				■
	Hurricane Isaias Clients Served: 6	Town of Holden Beach, NC	\$26,171	2,150	■	■	■	■				■
		Town of Ocean Isle Beach, NC	\$48,866	6,966	■	■	■	■				■
	Hurricane Hanna Total CYs: 327,035 Clients Served: 4	Hidalgo County, TX	\$706,129	187,135	■	■	■	■				■
	South Carolina Severe Storms and Tornadoes Total CYs: 783 Clients Served: 1	Barnwell County, SC	\$21,539	783	■	■	■	■				■
		City of Chattanooga, TN	\$380,079	322,200	■	■	■	■				■
	Tennessee Severe Storms and Tornadoes Total CYs: 1,039,455 Clients Served: 3	Metro Nashville and Davidson County, TN	\$193,710	308,949	■	■	■	■				■
2019	Tropical Storm Imelda Total CYs: 73,336 Clients Served: 3	Harris County, TX	\$195,526	15,907	■	■	■	■				■
		Jefferson County, TX	\$208,610	57,429	■	■	■	■				■
	Hurricane Dorian Total CYs: 63,719 Clients Served: 5	Colleton County, SC	\$21,639	4,272	■	■	■	■				■
	Louisiana Severe Storms and Tornadoes Total CYs: 30,516	City of Ruston, LA	\$230,000	30,516	■	■	■	■				■

	Clients Served: 5						
	Alabama Severe Storms and Tornadoes Total CYs: 176,780 Total Tons: 7,262 Clients Served: 1	Lee County, AL	\$375,000	176,780 (and 7,262 Tons)	■	■	■
2018	Hurricane Michael Total CYs: 10,618,496 Clients Served: 13	Lynn Haven, City of, FL	\$3,226,800	1,280,400	■	■	■
		Callaway, City of, FL	\$1,150,500	1,468,100	■	■	■
		Parker, City of, FL	\$508,920	548,800	■	■	■
		Wakulla County, FL	\$341,704	38,085	■	■	■
		Franklin County, FL	\$548,949	126,087	■	■	■
		Albany County, GA	\$2,008,025	363,000	■	■	■
		Dougherty County, GA	\$2,008,025	207,000	■	■	■
	Hurricane Florence Total CYs: 1,365,327 Total Tons: 19,889 Clients Served: 15 Connecticut Tornadoes Total CYs: 193,222 Clients Served: 4	New Bern, City of, NC	\$665,351	155,400	■	■	■
		Craven County, NC	\$414,147	59,800	■	■	■
		Brookfield, CT	\$634,119	175,442	■	■	■
		New Fairfield, CT					
2017	California Wildfires (2017-18) Total Tons: 2,278,740 Clients Served: 4 (6 Wildfires)	CalRecycle, CA	\$1,500,000,000	2,278,740 Tons	■	■	■
		Miami-Dade County, FL	\$15,315,654	3,558,943	■	■	■
	Hurricane Irma Total CYs: 20,113,657 Clients Served: 67	Polk County, FL	\$6,190,877	2,244,330	■	■	■
		Collier County, FL	\$5,130,000	4,004,300	■	■	■
		Miami, City of, FL	\$3,911,307	540,053	■	■	■
		Corpus Christi, City of, TX	\$1,037,930	536,074	■	■	■
	Hurricane Harvey Total CYs: 5,445,225 Clients Served: 31	Dickinson, City of, TX	\$678,086	182,354	■	■	■
		Fort Bend County, TX	\$1,028,474	338,277	■	■	■
		Friendswood, City of, TX	\$747,162	135,957	■	■	■
		Harris County, TX	\$3,700,000	1,129,652	■	■	■
		Houston, City of, TX	\$7,964,528	2,500,000	■	■	■
		Katy, City of, TX	\$127,583	24,000	■	■	■
		League City, City of, TX	\$493,774	116,461	■	■	■
		Montgomery County, TX	\$902,000	119,572	■	■	■
		Pasadena, City of, TX	\$162,944	30,164	■	■	■
		Albany County, GA	\$2,008,025	380,000	■	■	■
	Georgia Tornadoes Total CYs: 920,000 Clients Served: 2	Dougherty County, GA	\$2,008,025	540,000	■	■	■

Broad Experience Maximizing Federal Grant Programs

Over the course of working with hundreds of local and state governments on disaster debris management projects, our team has developed a deep understanding of FEMA, FHWA, NRCS, and other reimbursement and regulatory agencies' policies and procedures. Our efforts allow clients to maintain their focus on continuing daily operations while relying on us to oversee the management of debris removal operations in compliance with programmatic guidelines and procedures. Our understanding of requirements for eligibility, documentation, and reimbursement has helped our clients obtain **over \$8 billion in reimbursed costs.**

For this engagement, Tetra Tech anticipates that majority of reimbursement will be pursued through the FEMA PA Program. Our team holds comprehensive qualifications in working both for and with FEMA and maintains six current contracts directly supporting FEMA, in addition to our routine work with FEMA as part of state and local projects seeking FEMA reimbursement. Our firm can maximize FEMA PA disaster debris reimbursement funding for the City based on:

- **Procedures Tailored to FEMA:** Our data management and document storage procedures are tailored to facilitate FEMA review and the generation of project worksheet versions throughout the entire project.
- **Comprehensive Understanding of FEMA Regulations:** Our management team and field staff fully understand FEMA rules and regulations for hand-loaded vehicles; stump, limb, and tree removal at unit rates; volumetric load calls at temporary disposal site locations; and right-of-way (ROW) debris removal eligibility
- **Direct Relationships with FEMA Regional Representatives:** Our team maintains strong relationships with many of the lead federal coordinating officers, debris specialists, PA coordinators and officers, and other staff.
- **Team of Grant Experts to Assist with Funding and Audits:** Our grant management experts have assisted clients with applying for and retaining grant funds, even after closeout and audit processes. Our FEMA appeals and funding specialists have worked with FEMA closeout officers to obtain millions of previously deobligated dollars for communities.

Relevant Overview of Federal Grant Funding Experience

Year	Client	Event	Program	Value (\$)	Preliminary Damage Request	Develop Request for Public Assistance	Applicant Briefing	Applicant Kickoff Meeting	Site Visits/Inspections	Project Scoping	Project Cost Estimation & Documentation	PW/Application Development	Alternate/Improved/Pilot Program Projects	Project Cost Reconciliation	Interim Inspections	Funding Disbursement	Grant Closeout	Audit/Appeals Support
2021	Frisco, TX	DR 4586	FEMA PA	700,000							■	■	■	■	■	■	■	
2021	Frisco, TX	CV19	FEMA PA	500,000							■	■	■	■	■	■	■	
2021	Frisco, TX	CV19	CRF	3,700,000						■	■	■	■	■	■	■	■	
2021	Harris County, TX	DR 4586	PA	12,300,000	■						■	■				■	■	
2020	Harris County, TX	DR 4855	FEMA PA	200,000,000	■	■	■	■	■	■	■	■	■	■	■	■	■	
2020	Houston, TX	DR 4855	FEMA PA	10,000,000	■	■	■	■	■	■	■	■	■	■	■	■	■	
2020	Miami, FL	DR-4337	Appeals	17,000,000														■
2020	Houston, TX	CV19	CRF	404,000,000							■							
2020	City of Houston, TX	DR 4586	PA	10,000,000	■	■	■	■	■	■	■	■	■	■	■	■	■	

Private Property/Right-of-Entry Debris Removal (PPDR)

Our team has administered many of the largest PPDR programs in U.S. history. Tetra Tech assists communities with ensuring they have the legal authority via local and state ordinances to enter onto private property. We also assist with preparing submittal packages for FEMA to approve the program, promoting the ROE program with residents, and ensuring the program is properly documented. Included below is a representative sample of our PPDR projects.

Relevant PPDR Experience

Client	Disaster/Year	Public Advertisement	Application Administration	Historical/Environmental Review	Property Survey	Scheduling	Individual Property Debris Tracking	Demolition Program Management	Debris Removal Monitoring	Reduction/Disposal Monitoring	Property Close Out	Data Management
Miami-Dade County, FL	Surfside Condo Collapse (2021)					■		■	■	■		■
Bay County, Florida	Hurricane Michael (2018)	■	■	■	■	■	■	■	■	■	■	■
CalRecycle/CALOES Ventura County	Wildfire (2018)	■	■	■	■	■	■	■	■	■	■	■
USACE – Napa County, CA	Wildfire (2017)	■	■	■	■	■	■	■	■	■	■	■
USACE – Mendocino County, CA	Wildfire (2017)	■	■	■	■	■	■	■	■	■	■	■
USACE – Lake County, CA	Wildfire (2017)	■	■	■	■	■	■	■	■	■	■	■
USACE – Sonoma County, CA	Wildfire (2017)	■	■	■	■	■	■	■	■	■	■	■
Dougherty County, GA	Tornado (2017)								■	■		■
Lake County, CA	Wildfires (2015)	■	■	■	■	■			■	■	■	■
Hays County, TX	Flooding (2014)	■	■	■	■	■			■	■	■	■
Boulder County, CO	Flooding (2013)	■	■	■	■	■		■	■	■	■	■
Township of Middletown, NJ	Hurricane Sandy (2012)					■	■	■	■	■		■
Bastrop County, TX	Wildfires (2011)	■	■	■	■	■			■	■	■	■
Comanche Nation, OK	Ice Storm (2009)					■	■		■	■		■
City of Cedar Rapids, IA	Flooding (2008)			■		■		■	■	■	■	■
City of Galveston, TX	Hurricane Ike (2008)	■	■	■	■	■	■		■	■	■	■

Waterways Debris Removal

Our team has worked extensively with local, state, and federal agencies (including the United States Army Corps of Engineers [USACE] and the National Oceanic and Atmospheric Administration) to determine legal responsibility and to evaluate and implement marine debris removal programs. We will help the City legal staff rapidly determine legal responsibility for waterway debris removal, verify scope eligibility, and document the work in a fashion deemed appropriate by reimbursement agencies.

Our team has performed on the following projects:

- **Waterway debris removal** efforts on behalf of the New Jersey Department of Environmental Protection (NJDEP) following Hurricane Sandy; FDEP following Hurricanes Matthew and Irma; and the City of Cape Coral, Lee County, Brevard County, Monroe County, and Collier County following Hurricane Irma.
- **Inland waterway debris removal** assignments for the Galveston City Municipal Utility District #12, Jefferson County Drainage District #7, the Trinity Bay Conservation District, and the Harris County Flood Control District with Following Hurricane Ike.
- **Removal of derelict vessels and traps from waterways** for Monroe County, Florida (the Florida Keys) following Hurricanes Katrina, Gustav, Ike, and Wilma.

Vessel and Vehicle Recovery

Tetra Tech can assist the City in documenting the locations and quantities of vessel and vehicle debris in the City and presenting a case to FEMA to approve and fund the program. The City must first show that they have a legal responsibility to remove the debris and that the debris is not the responsibility of another state or federal agency such as the Texas Commission on Environmental Quality, USACE, or the NRCS. Vessel and vehicle debris on private land may present unique ingress/egress challenges and require ROE agreements for access.

Tetra Tech has monitored vessel recovery for several clients, including:

- **NJDEP** – Hurricane Sandy | 80 vessels
- **Escambia County, FL and Monroe County, FL (Florida Keys)** – Hurricanes Wilma | 450 vessels
- **Beaufort County, SC** - Hurricane Matthew | 50+ vessels
- **FDEP** - Hurricane Matthew, Michael, & Irma | 64 vessels
- **Miami Dade County** - Surfside Condo Collapse | 100 vehicles

Hazardous Material Removal (HHW)

Major disasters, particularly those that involve significant flooding, will result in the need to address hazardous materials. Typically, the U.S. Environmental Protection Agency (EPA) is responsible for identifying and removing large quantities of HHW. Local governments are charged with implementing collection programs for HHW, including but not limited to containers with paints, pesticides, household cleaners, oils/solvents, and fuels. Our team has broad experience helping local governments plan, procure, implement, and track disaster-related HHW collection programs at curbside or drop-off locations. **Following Hurricane Ike, a storm surge covered almost all of Galveston Island, Texas. Our team helped the City of Galveston implement one of the largest post-disaster HHW programs in U.S. history, in addition to working cooperatively with the EPA on large quantity HHW recovery.**

Leaning Trees, Hanging Limbs, and Stump Removal

Tetra Tech offers expertise in reimbursement for the removal of leaning trees, hanging limbs, and stumps, including helping communities avoid the de-obligation of funds. **In 2020, our team monitored the removal and disposal of nearly 200,000 hazardous trees and hangers following consecutive Hurricanes Laura, Sally, Delta, and Zeta.**

Relevant Previous Leaner/Hanger/Stump Removal Programs

2,145,676 Total	1, 738,389 Hanging Limbs	245,122 Leaning Trees	162,165 Stumps
Event	Hanging Limbs	Leaning Trees	Stumps
2020 Hurricane Sally	43,692	5,888	56
2020 Hurricane Laura	120,198	13,160	30
2018 Hurricane Michael	27,562	9,949	124
2018 Hurricane Florence	14,609	259	8
2017 Hurricane Irma	316,108	9,045	94,030

b.3 References

References for which similar services have been provided by Tetra Tech located below.

Agency	Contact
City of Victoria, TX Disaster and/or Storm Monitoring <i>Hurricane Harvey: August 2017-May 2018</i>	Darryl Lesak, Director of Environmental Services (361) 485-3230 dlesak@victoriatx.org
Fort Bend County, TX Disaster Debris Monitoring and Grant Management <i>Hurricane Harvey: September 2017- June 2018</i> <i>2016 Floods: May 2016 - August 2016</i> <i>Hurricane Ike: September 2008 –March 2009</i>	Marc Grant, Debris Manager (832) 473-2730 grantmar@co.fort-bend.tx.us
Harris County, TX Disaster Debris Program Management <i>Hurricane Ike: September 2008 – March 2009</i> <i>Hurricane Harvey: Ongoing</i>	Alisa Max, Manager (713) 685-7351 Alisa.max@hcpid.org
City of Friendswood, TX Disaster Debris Management Services <i>Hurricane Harvey: August 2017–February 2018</i> <i>Hurricane Ike: September 2008 – January 2009</i>	Brian Mansfield, Assistant Emergency Management Coordinator (281) 996-3335 bmansfield@ci.friendswood.tx.us
Jefferson County, TX Emergency Debris Monitoring Services <i>Hurricane Imelda: September 2019 – November 2019</i> <i>Hurricane Harvey: September 2017 – December 2017</i> <i>Hurricane Rita: September 2005 – March 2006</i>	Patrick Swain, County Auditor (409) 835-8500 pswain@co.jefferson.tx.us



31+ YEARS OF
EXPERIENCE

100M CYS OF DEBRIS

\$2.5B FEMA PA
REIMBURSEMENT

Areas of Expertise

- Solid and Hazardous Waste Management
- Disaster Debris Monitoring
- Solid Waste Routing and Efficiency
- Private Property Debris Removal
- Cost of Service Evaluations
- Emergency Management
- Damage Assessment
- Utility Engineering/Consulting
- Program Management
- Public Outreach/ Communications
- Procurement (2CFR)
- Environmental Permitting
- Grant Management

Disasters

- DR4564FL, Hurricane Sally
- DR-4559LA, Hurricane Laura
- DR-4393NC, Hurricane Florence
- DR 4337FL, Hurricane Irma
- DR-4283FL, Hurricane Matthew
- DR-4241SC, Severe Flooding
- DR-4138FL, Severe Flooding
- DR-1971AL, Tornado Outbreak
- DR-4024VA, Hurricane Irene
- DR-1603LA, Hurricane Katrina
- BP Deepwater Horizon Oil Spill

Education

Florida State University
Bachelor of Science, Business
Marketing, 1991

EXPERIENCE SUMMARY

Mr. McLendon has been providing consulting engineering services to federal, state, and local governments across the U.S. for more than 30 years. His background in solid and hazardous waste management has led him to become one of the leading experts in the country on the implementation of large-scale post-disaster debris removal programs. He has routinely assembled large teams to support major infrastructure and emergency response efforts. Career highlights include:

- Experienced Executive Program Manager with over 30 years of experience working with federal, state, and local government agencies on the finance, design, permitting, procurement, construction, and operations of major infrastructure projects.
- Served as Principal in Charge for upwards of 30 major disaster activations including projects totaling more than 100 million cubic yards of debris and more than \$2.5 billion in FEMA PA reimbursement.
- Major experience in the legal substantiation and implementation of complex debris removal programs including PPDR, waterways, beaches, selective salvage, etc.
- In depth knowledge of the FEMA Public Assistance program including a strong understanding of Federal Register 2 CFR Part 200 ("the Super Circular")

RELEVANT EXPERIENCE

Surfside Condominium Collapse (2021)

Miami-Dade County, Florida

The collapse of the twelve story Champlain Towers South condominium was a high-profile, catastrophic event. Mr. McLendon served as Principal in Charge for Tetra Tech to Miami-Dade County following the collapse on June 24, 2021. Mr. McLendon was on the ground at the collapse site within hours of the building collapse and County activation in order to assess the resources needed to assist the County with emergency debris removal. Over the next several days, he assisted the County with contractor procurement efforts in addition to developing and executing a plan to monitor debris removal both from a FEMA reimbursement and evidentiary debris removal perspective.

Hurricane Sally (2020)

City of Pensacola, FL and Okaloosa County, FL

The City of Pensacola and Okaloosa County, FL have been long-standing clients of Mr. McLendon. Following the impact of Hurricane Sally, Mr. McLendon provided senior advisory services to include explanations of the FEMA Category A program as well as procurement assistance. Chuck has also provided senior level oversight to ensure that our response crews are meeting client expectations.

Hurricane Laura (2020)

Calcasieu Parish, LA

Mr. McLendon mobilized immediately to the Lake Charles, LA area in the aftermath of Category 4 Hurricane Laura. He facilitated the initial kick-off meeting with the Parish

and debris contractor and developed an immediate staffing and logistics plan for the Parish. He worked closely with our on-site project manager and senior staff from the debris contractor to ensure that emergency roadway clearance (push) crews were dispatched with their work times and locations tracked. Mr. McLendon worked throughout the project with Tetra Tech project management staff to ensure that all of the parish's needs met.

Hurricane Florence (2018)

Boiling Spring Lakes, NC and Briarcliff Acres, SC

Following Hurricane Florence, Mr. McLendon provided disaster debris monitoring and FEMA grant management related services to the City of Boiling Spring Lakes, NC and the Town of Briarcliffe Acres, SC (through a contract with the Horry County Solid Waste Authority). Monitoring work including debris management site permitting, right of way collection, hazardous tree removal, and household hazardous waste collection.

Hurricane Irma (2017)

Numerous Central Florida Jurisdictions

Following Hurricane Irma in September of 2017, Mr. McLendon provided senior oversight of debris monitoring operations across seven counties – including Seminole, Lake, and Volusia counties in Central Florida. Chuck was responsible for assembling project management and support teams to include policy and field operations expertise. In total, he oversaw a team of over 1,000 personnel that accounted for nearly 6 million cubic yards of debris removal. This work included implementation and tracking of Private Property Debris Removal (PPDR) programs within each of the seven counties managed.

Severe Flooding (2017)

South Carolina Emergency Management Division

Mr. McLendon was retained by the SCEMD to serve as a Senior FEMA PA Policy Advisor in support of project worksheet formulation for the October 2015 flooding event that impacted much of central South Carolina. Mr. McLendon oversaw a team of Project Specialists in drafting and versioning project worksheets.

Hurricane Matthew (2016)

St. Johns and Flagler Counties, Florida

Mr. McLendon served as Principal in Charge for the debris monitoring mission in St. Johns County and Flagler County, Florida following Hurricane Matthew. Chuck oversaw the removal of more than 1.1 million cubic yards of debris from public and private roads as well as debris removal efforts along nearly 27 miles of county-maintained beach. In addition to providing daily oversight of the debris removal mission, Mr. McLendon was regularly relied upon by County staff for policy guidance related to the County's overall recovery effort.

Severe Flooding (2015)

Clarendon County, South Carolina

Mr. McLendon provided on-site technical assistance to Clarendon County following a catastrophic flooding event in 2015. Chuck assisted the County with coordination and communications with the South Carolina National Guard in the repair of County-maintained roadways. Mr. McLendon also assisted with various procurements associated with temporary and permanent repairs while helping the County to develop a system to track materials used for roadway stabilization/repair.

Severe Flooding (2014)

Escambia County, Florida

Mr. McLendon served as the Recovery Program Manager for Escambia County, Florida following a 500-year flooding event that resulted in upwards of \$100 million in damages to Escambia County. Mr. McLendon assisted with the damage assessment documentation process, procured engineers and contractors for both temporary and permanent repairs, and helped the County Public Works Dept. with overall reimbursement efforts.

Hurricane Isaac (2012)

Jefferson Parish, Louisiana

Mr. McLendon served as Principal in Charge and Project Manager to Jefferson Parish following Hurricane Isaac in 2012. A very minor hit in comparison to Hurricane Katrina, the County still had very high expectations for a rapid debris removal program.

Mr. McLendon organized a strong team that provided right of way debris removal as well as staffing at citizens convenience sites.

Northern Alabama Tornadoes Debris Monitoring (2011)

U.S. Army Corps of Engineers

Mr. McLendon served as Principal in Charge in supporting a QC team activated to support the debris management mission in Tuscaloosa, AL following the 2011 northern Alabama tornado outbreak. Mr. McLendon was essential in ensuring that the project was properly staffed with trained individuals to support the USACE mission.

Hurricane Irene (2010)

Virginia Department of Transportation

Mr. McLendon served as Principal in Charge for recovery efforts on behalf of the Hampton Roads District of the Virginia Department of Transportation following Hurricane Irene. Mr. McLendon provided senior advisory services and oversight of a team to provide FEMA PA / FHWA ER reimbursement services for the District.

Deepwater Horizon Oil Spill (2010)

Escambia and Santa Rosa Counties, Florida

Mr. McLendon provided comprehensive field environmental and reimbursement services to Escambia and Santa Rosa Counties, Florida (located in the Florida Panhandle) following the Deepwater Horizon Oil Spill. Mr. McLendon led efforts to procure containment boom contractors as well as the program management of daily containment boom operations. Mr. McLendon was also responsible for implementing a large-scale training program for County staff and volunteers on OSHA's Hazardous Waste Operations and Emergency Response Standard (HAZWOPER).

Hurricane Ike (2008)

Galveston County and City of Galveston, TX

Mr. McLendon oversaw the debris removal effort for Galveston County and the City of Galveston, Texas following Hurricane Ike in 2008. Upwards of 10 million cubic yards of debris was removed County-wide under Chuck's direction. Debris removal programs included right of way, private property debris removal (PPDR), commercial debris removal, dead animal carcasses, hazardous waste, and white goods.

Hurricane Ike (2008)

Texas Department of Transportation

Mr. McLendon served as Principal in Charge for disaster recovery services to the Beaumont District of TXDOT following Hurricane Ike. Mr. McLendon oversaw a team to assist the District with debris monitoring as well as overall FEMA PA reimbursement services.

Hurricanes Katrina and Gustav (2007-2009)

City of New Orleans, Louisiana

Mr. McLendon served as Principal in Charge for several recovery efforts for the City of New Orleans including the City's residential demolition program following Hurricane Katrina as well as the overall response effort following Hurricane Gustav. Mr. McLendon assisted project management staff in the development of a complex legal and environmental process to allow for the demolition of flood-damaged structures to occur within the City and oversaw the demolition of some 2,000 residential structures. This work included a complex legal condemnation process, selective salvage of historically significant architectural items, environmental testing, utility disconnects, and environmental monitoring. Later, Mr. McLendon served as Principal in Charge for debris management efforts in the City following Hurricane Gustav.

Hurricane Ivan (2004)

Escambia County, City of Pensacola, and FDOT District 3, Florida (2004)

Hurricane Ivan devastated northwest Florida. Mr. McLendon served as Principal in Charge for recovery efforts to Escambia County, the City of Pensacola, and Florida DOT District 3. Mr. McLendon assisted the County in putting together the legal substantiation for the County to receive approval for a major private property debris removal program including both vegetative debris and sand removal from residential structures on the beach. Upwards of 8 million cubic yards of debris was removed from County and City right of ways, private property, and county beaches.



16 YEARS OF
EXPERIENCE

41 DISASTER
DECLARATIONS

\$3B DISASTER
RELATED
GRANTS

Areas of Expertise

- DAMAGE ASSESSMENT
- POLICY AND PROCUREMENT
- DEBRIS MANAGEMENT
- DISASTER HOUSING
- GRANT APPLICATION DEVELOPMENT
- GRANT ACCOUNTING SYSTEMS
- AUDIT PROCESS
- CLOSEOUT PROCEDURES

Disasters

4245 TX FLOOD
4241 SC FLOOD
4240 CA WILDFIRE
4223 TX FLOOD
4222 OK FLOOD
4193 NAPA EARTHQUAKE
& SEVERAL MORE

Grant Experience

- FHWA-ER PROGRAM
- HUD CDBG-DR
- FEMA PA
- FEMA 404 HMGP
- FEMA HMA

Education

Texas State University
Master of Arts, Public Administration,
2002

The University of Texas
Bachelor of Arts, Government, 2000

EXPERIENCE SUMMARY

Mr. John Buri is a director of post-disaster programs for Tetra Tech, Inc., and a member of our senior management team. Mr. Buri has a thorough understanding and practical application of industry best practices and federal guidance governing such efforts including the Federal Emergency Management Agency (FEMA), Hazard Mitigation Assistance (HMA), FEMA Public Assistance (PA) Program, 2 CFR 200, HUD CDBG-DR and disaster funding strategies for local and state governments. Key highlights of Mr. Buri's career include:

- **16 years of experience:** Working with mitigation, emergency management planning, response, and recovery operations
- **\$3 billion:** His work has represented over \$3B in disaster related grants.
- **22 Disaster Declarations:** Performed in roles of project manager or principal-in-charge
- **\$142 million:** Served as program manager for \$142M in buyout /elevations
- **41 Total Disaster Declarations:** Worked on projects in either a project manager, principal in charge or support role.
- **17 States:** Worked in 17 states across 8 FEMA Regions
- **100 clients:** Mr. Buri has worked for over 100 state and local governments clients since 2004
- **39 national and state-level conference speaking engagements:** He is a nationally recognized speaker on disaster recovery and preparedness topics, presenting at the National Hurricane Conference, National Hazardous Materials Management Association Annual Conference, Solid Waste Association of North America Annual Conference (WasteCon), Maryland Emergency Management Association Conference, Government Finance Officers Association Conference, Texas Homeland Security Conference, North Carolina Emergency Management Conference, and the National Forum for Black Public Administrators Conference.

RELEVANT EXPERIENCE

Program Manager (2008, 2015, 2017)

City of Houston, Texas | Multi-Year Emergency Management and Disaster Recovery Services

- Managed emergency responses to major disasters including Hurricane Ike in 2008 (DR-1791), Memorial Day flood in 2015 (DR-4223), Tax Day flood in 2016 (DR-4269); and Hurricane Harvey 2017
- Following each disaster, coordinated with FEMA, Texas Division of Emergency Management (TDEM), USACE, Texas Commission on Environmental Quality (TCEQ), city departments, elected officials, congressional offices and volunteer groups to coordinate field activities, damage site inspections, eligibility reviews, and audits
- Managed planning team for 5 task orders under the DHS' Regional Catastrophic Planning Initiative Grant and Urban Area Security Initiative grant allocated to the City of Houston Office of Homeland Security

- Program manager for the City's flood resilience initiative in supporting the City's Flood Czar conducting damage analysis, mitigation project identification and identification of grant opportunities.

Performance and Task Manager

Various Clients - US | Hazard Mitigation Grant Program

- Overall responsibility for the management and performance of task orders supporting \$90+ in HMGP Grant applications across Texas, Georgia, Florida, South Carolina and North Carolina.
- Developed processes and implementation strategies for outreach, intake and verification for 100 elevations and 200 acquisition/demolitions.

Program Manager (2008-2016)

Montgomery County, Texas | Multi-Year Emergency Management and Disaster Recovery Services

Mr. Buri managed emergency responses to multiple major disasters including Hurricane Ike in 2008 (DR-1791) and two floods in 2016 (DR-4269 and DR-4272). He directed various task orders following disasters including project formulation, technical assistance on the PA grant program, conducting substantial damage estimation of 250 flooded properties, data collection for PA grant program and grant application for FEMA FMA grant program. He served as the client point of contact, prepared cost and technical task order proposals, assigned resources, reviewed deliverables, and tracked costs and schedules to ensure compliance with statements of work and approved budgets

Subject Matter Expert/Senior Management Oversight (October 2015 to Ongoing)

Richland County, South Carolina | Public Assistance Consulting

Mr. Buri has been an integral part of Tetra Tech's Richland County disaster recovery team assisting the Project Manager and consultants with obtain data, policy interpretation and general grant consulting. Mr. Buri has focused his time assisting with navigating the on-going challenges associated with dam reconstruction, road damage restoration and long term recovery.

Program Manager (May 2015 – 2016)

Hays County, Texas | Full Services Disaster Grant Management Consulting and Debris Management | May 2015 (DR 4223) and October 2015 Floods (DR-4245)

Mr. Buri is currently leading the Tetra Tech team supporting Hays County following two (2) major disaster declarations in 2015 including the May Memorial Day Flood and October All-Saints Day Flood that . This includes providing technical assistance to County leadership regarding FEMA PA, HMGP and CDBG-DR grant programs.

Subject Matter Expert/Senior Management Oversight (May 2015-Ongoing)

City of Houston, Texas | Disaster Debris Monitoring and Public Assistance Consulting

Following the May 2015 Memorial Day Flood in Houston, Mr. Buri worked closely with the City of Houston's Disaster Recovery team on debris and FEMA reimbursement related issues. Mr. Buri developed operational plans, press releases, USACE/FEMA coordination, and daily progress reports along with contractor and force account labor documentation for submission to FEMA.

Senior Management Oversight (February 2014-May 2014)

Counties of Barnwell; Colleton; Dorchester; Hampton; Sumter, South Carolina; City of Sumter, South Carolina; City of Augusta, Georgia | Winter Storm Pax Disaster Debris Program Management

Following the destructive effects of Winter Storm Pax in February 2014, our team was tasked with providing disaster debris program management to numerous communities in the States of South Carolina and Georgia. Mr. Buri was instrumental in the immediate deployment of our team and is currently overseeing all disaster recovery operations, including leaner and hanger removal. In addition, Mr. Buri is currently working with each community to ensure that all eligible reimbursement is captured and documented.

Program Manager (2013)

Boulder County, Colorado | Disaster Grant Management Consulting

- Overall responsibility for the management and performance of our task order for \$8M in consulting services associated with the administration and documentation to support disaster grants
- Managed the grant administration of \$300M in FEMA PA, FEMA HMGP, FHWA-ER, NRCS-EWP and HUD CDGB-DR recovery grants following the front-range floods.

- Coordinated recovery efforts between the County, USACE, NRCS, FEMA, Colorado Department of Local Affairs (DOLA), Colorado Division of Homeland Security and Emergency Management (DHSEM), Colorado Department of Transportation, Town of Lyons and Jamestown, internal county departments and elected officials.
- Facilitated strategic planning meetings with community stakeholders to identify long term recovery initiatives.

Subject Matter Expert/Senior Management Oversight (February 2013-January 2014)

New Jersey Department of Environmental Protection | Hurricane Sandy Waterway Debris Removal Project

Mr. Buri provided subject matter expertise in the development and implementation of numerous protocols and procedures to effectively manage the New Jersey Department of Environmental Protection's (NJDEP) waterways debris removal program. Mr. Buri oversaw the implementation of our automated debris management system (ADMS) technology, which increased NJDEP's visibility to the day-to-day operations and provided real-time reporting of debris quantities. Due to the excellent senior and project management provided by our team, NJDEP then tasked our team with monitoring the sediment removal process in the northern and southern region.

Senior Management Oversight (March 2013-January 2014)

New Jersey Department of Environmental Protection – Liberty State Park | Hurricane Sandy FEMA PA Program Management

Hurricane Sandy's effect on the NJDEP's Liberty State Park was epic, covering the entire park in several feet of seawater and affected nearly all of the park's facilities and infrastructure, which included the Central Railroad of New Jersey Terminal Building. Mr. Buri managed a team of senior consultants that were immediately deployed to assist with the park's federal grant management. Mr. Buri oversaw all catalogued eligible damage, established relationships with FEMA and state officials, and oversaw the submission of project worksheets (PWs). Mr. Buri also was instrumental in working with NJDEP's engineers to develop comprehensive hazard mitigation proposals to protect the facilities against future similar storms, including a \$2 million hazard mitigation plan for the Terminal Building.

Senior Management Oversight (September 2012-December 2012)

City of New Orleans, Jefferson Parish, St. John the Baptist Parish, Louisiana | Hurricane Isaac Disaster Debris Program Management

Mr. Buri provided senior management oversight and operational and client support for the debris monitoring efforts following Hurricane Isaac to numerous communities in the State of Louisiana following Hurricane Isaac. During this effort, our team monitored the collection and disposal of over 670,000 cubic yards of debris.

Program Manager (July 2010-September 2012)

Port of Galveston, Texas | Hurricane Ike Federal Grant Administration

Mr. Buri provided senior management oversight in assisting the Port of Galveston on a number of reimbursement-related issues. With Mr. Buri's management and guidance, the Port of Galveston received more than \$40 million in additional federal funding associated with permanent repairs to several of the port's piers following damage from Hurricane Ike in 2008.

Senior Management Oversight (October 2011-April 2012)

State of Connecticut | Winter Storm Alfred Disaster Debris Program Management

Mr. Buri provided senior management oversight to the State of Connecticut as a member of the Interagency Debris Management Task Force (IDMTF) at the state EOC for Winter Storm Alfred. He worked closely every day with members from Connecticut Division of Emergency Management and Homeland Security, the Connecticut National Guard, Department of Energy and Environmental Protection, and Connecticut Department of Transportation. This involved advising the State of Connecticut on all debris-related issues during response and recovery from the storms and providing operational and client support. In addition, Mr. Buri assisted in the management of 12 individual local governments and 45 communities to collect more than 1.5 million cubic yards of vegetative debris and remove over 100,000 hazardous trees.

Senior Management Oversight/Client Liaison (September 2011–August 2013)

Bastrop County, Texas | Wildfire Disaster Program Management

Mr. Buri provided senior management oversight to Bastrop County's disaster recovery operations following the most devastating wildfires in Texas history. With 1,700 structures destroyed, Mr. Buri was vital in obtaining expedited PWs, coordinating directly

with FEMA to develop disaster-specific documentation protocols, and orchestrating interlocal coordination with county municipalities, electrical co-ops, and regulatory agencies.

Statewide Trainer (January–September 2011)

Texas Department of Transportation | FHWA-ER Training Manual and Workshop

Mr. Buri is the statewide trainer for the FHWA-ER workshops being held throughout the state of Texas. Mr. Buri developed the guidebook and coordinated with state officials and the FHWA-ER coordinator for the state to deliver over 20 workshops and provide training to over 500 individuals.

Regional Program Manager (September 2008–September 2010)

State of Texas – 78 Total Clients | Hurricane Ike Comprehensive Debris Management Operations and FEMA PA Administration and Management

Following Hurricane Ike, Mr. Buri served as regional program manager and provided senior management for approximately 78 clients in the state of Texas. Mr. Buri was instrumental in the immediate mobilization of our team and provided a full range of services and client support to each client. Mr. Buri also provided management and guidance to each client to ensure they received FEMA reimbursement.

Project Manager (September 2008–September 2011)

City of Houston, Texas | Hurricane Ike Disaster Debris Program Management

Mr. Buri served as a project manager to the City of Houston following Hurricane Ike, where Mr. Buri worked closely with the City of Houston Solid Waste and Finance Department to reconcile and provide detailed information of over \$110 million in invoices and over \$3 million in FHWA funds. In total, our team's response to the City of Houston included the collection of over 5.5 million cubic yards of debris in 256 zones throughout the City. This included 300 parks and open spaces and the removal of over 214,000 hazardous trees accompanied by 630,000 photographs to document eligibility.

Senior Management Oversight (September 2008–Ongoing)

Galveston County, Texas | FEMA HMGP, Severe Repetitive Loss (SRL), and CDBG Application, Administration, and Implementation

Following Hurricane Ike, Galveston County faced the daunting task of maintaining critical operations. Galveston County engaged our team to assist with its overall recovery process. This included consulting services for the FEMA PA program and evaluating the feasibility of submitting an application for the buyout of substantially damaged or destroyed structures and the elevation of less damaged structures under the FEMA HMGP. Within 48 hours, our team deployed a team of experts to Galveston County to manage all aspects of these processes. Beginning with public outreach and program setup, our staff began collecting applications from property owners and compiling an HMGP application for the buyout of up to 1,000 properties and the elevation of 12 others through a \$102 million HMGP grant, which our team secured, implemented, and is in the process of closing out. In addition, Galveston County also engaged our team to assist with its extensive PA process and to act as a standby PA consultant for future disasters. Finally, on behalf of Galveston County, our team applied for a FEMA SRL grant to elevate many more flood-prone homes throughout Galveston County resulting in a \$31 million SRL grant award.

Project Manager (September 2005–August 2006)

Jefferson County, Texas | Hurricane Rita Disaster Management

Served as project manager to mobilize and deploy a full emergency response team in Jefferson County, Texas to assist with staging operations, project staffing and scheduling, and contracting and negotiations with the County's two debris removal contractors: Crowder Gulf and DRC. Services included temporary debris storage and recovery sites (TDSRS) selection and management, monitoring services, data management and call center operations.

Project Manager (September 2004–October 2007)

Escambia County, Florida | Hurricane Ivan Comprehensive Disaster Program Management

Our team provided comprehensive disaster debris program management services to Escambia County following one of the worst disasters in the Florida panhandle (Hurricane Ivan). Mr. Buri managed the collection and processing of approximately 10 million cubic yards of vegetative and construction and demolition debris, including 1.5 million cubic yards of contaminated sand. Mr. Buri was also instrumental in assisting the County to obtain approval from FEMA to remove debris from private property (as a reimbursable expense).



15+ YEARS OF EXPERIENCE

250+ PROJECTS

\$4.5B REIMBURSED INVOICES

Areas of Expertise

Program Development
Documentation Management
Private Property Debris Removal Services
Debris Removal Planning
Debris Removal Monitoring
Packet Management
Geospatial Reporting

Grant Experience

FEMA-PA
NRCS-EWP
FHWA-ER
CDBG-DR

Disasters

4240 VALLEY AND BUTTE FIRES
4084 HURRICANE ISAAC
1971 AL TORNADOES
1791 HURRICANE IKE
1763 IA FLOODING
1609 HURRICANE WILMA
1602 HURRICANE KATRINA
& SEVERAL MORE

Certifications

OSHA 40-Hour Asbestos Training
IS-632: Debris Operations
HSEEP-Certified
OSHA Asbestos Health and Safety
IS-30: Mitigation Grants System
IS-100, 200, and 700: ICS and NIMS
IS-630: Intro to the PA Process

EXPERIENCE SUMMARY

Mr. Ralph Natale is the director of post-disaster programs for Tetra Tech, Inc. He leads the practice by developing programs, providing daily project support, and providing oversight and guidance to his team of project managers and projects. Mr. Natale is an expert in Federal Emergency Management Agency-Public Assistance (FEMA-PA) Grant Program reimbursement policies and has administered nearly 250 projects in his 15-year career.

Mr. Natale specializes in large scale responses and has served as a principal in charge or project manager in response to some of the country's largest debris-generating disasters, including 19 state level responses after major hurricanes, floods and fire events. This includes managing and documenting the removal of **over 66 million cubic yards (CYs) of debris, 1.7M hazardous trees**, and the program management of **debris collection and demolition of over 35,000 parcels on fire removal projects** and over **200,000 environmental samples**. These programs equate to over **\$4.5B dollars of reimbursed invoices**.

RELEVANT EXPERIENCE

Subject Matter Expert (Debris Documentation, Program Management, Grant Management)

Mr. Natale has served as a program manager and grant consultant for state and local governments during his extensive career in disaster debris industry. This includes the largest debris projects since Katrina for federal, State and local government work. Mr. Natale also supports missions as a sr consultant serving as a member of the State of Connecticut Emergency Operations Debris Task Force, where he was activated during the recovery operations following Hurricane Irene and Winter Storm Alfred.

Mr. Natale has also served on the following projects:

- State of California Dixie Fire Response (2021 - current)
- Hurricane Ida (2021 - current)
- Hurricane Laura (2021 - current)
- State of California Camp Fire Response (2018- 2020)
- Hurricane Micheal local and USACE response (2018-2019)
- NorCal Wildfires | USACE (2017–2018)
- Hurricane Harvey (2017-2018)
- Hurricane Ike, Severe Droughts, Floods | City of Houston, Texas (June 2009–Present)
- Winter Storms | State of Connecticut, Interagency Debris Management Task Force (August 2010–Present)

Principal in Charge/Senior Program Manager

As director of post-disaster programs for Tetra Tech, Mr. Natale has focused on developing and improving program management processes. These processes ensure the most efficient methods of managing debris removal programs to maximize federal reimbursement via the FEMA 325, and 327 guidelines. As a senior program manager, Mr. Natale ensures quality control and quality assurance of project managers' deliverables on all Tetra Tech projects. A representative list of projects he has worked on is included below.

Hurricane Laura

Following Hurricane Laura in August of 2020, Mr. Natale oversaw debris monitoring operations for over 11 communities and 1,000 personnel across Louisiana. This included the Calcasieu Parish/Lake Charles area, where at peak Tetra Tech had nearly 600 monitors working in conditions typical of a category 4 hurricane. Without power or infrastructure, the operational response plan was implemented and our team had to mobilize and establish power and infrastructure for all the projects. This was completed successfully without any debris haulers having to wait on monitoring resources.

Hurricane Micheal

Following Hurricane Michael in September of 2018, Mr. Natale oversaw debris monitoring operations for several communities in the Florida Panhandle and a USACE response in Georgia that covered 12 counties. The devastation was 250 miles wide for this category 5 storm, which included working in areas that had no power or electricity for well over a month. At peak, Tetra Tech had nearly 600 monitors working in the field. Documentation was created for almost 10 million cubic yards of debris. Work also included NRCS funding of nearly 25 miles of waterways through Bay County, FL.

Camp Fire Response

Mr. Natale serves as project manager and is responsible for oversight of debris and environmental work related to the hazardous material removal of over 12,000 parcels located in the County of Butte. This is possibly the largest debris operation in history with over 2 billion dollars in costs.

Northern California (NORCAL) Wildfire Response (November 2017-Present)

Mr. Natale serves as principal in charge for USACE ADMS services for all the work completed after the Northern California wildfires in 2015. This included debris and environmental services of over 8,000 homes and over 1 billion dollars in costs. Mr. Natale oversees the overall project management team and assists with staffing and logistics for this four county response.

Florida Department of Environmental Protection (2016-2018)

Mr. Natale serves as principal in charge for FDEP waterways debris removal programs (wet debris). Unlike conventional debris removal programs that are well established every waterways program needs a level of customization. Mr. Natale has provided this oversight working with the State of Florida, FEMA and the local counties that recovery was being conducted. Counties worked post Matthews and Irma include; Nassau, St. Johns, Ventura, Brevard, Monroe, Collier, Lee.

California | Valley and Butte Fire (October 2015–2016)

Mr. Natale helped create and implement programs for several projects after the Valley and Butte fires of 2015, which burned over 150,000 acres of forests and destroyed over 2,000 homes, with recovery costs of over \$300 million. Each program developed was unique but necessary for the community as a whole to recover. Programs included geospatial live tracking of work completed and equipment deployed; mitigation of hazardous trees from rights of ways and private property that was fully funded by CalOES and FEMA; private property debris removal packet management and database support; and management of a unique mix of environmental scientists and debris specialists to provide documentation for remediation of asbestos and other contaminants left behind, including debris quantities. These clients included Lake County Public Works, CalRecycle (AJ Diani), CalRecycle (Sukut), and PG&E.

State of New Jersey | Hurricane Sandy Disaster Recovery Operations (October 2012–January 2013)

Mr. Natale supported debris monitoring efforts for seven separate municipalities and state agencies following Hurricane Sandy. These clients including but not limited to the City of Newark, City of Sayreville, Ocean Township, and the New Jersey Parks Department.

City of New Orleans; Jefferson Parish; and St. John the Baptist Parish, LA | Hurricane Isaac Debris Monitoring Operations (September–December 2012)

Mr. Natale oversaw the debris monitoring efforts following Hurricane Isaac. During this effort, our team monitored the collection and disposal of over 670,000 CYs of debris. Mr. Natale coordinated with several local governments, including the City of New Orleans, Jefferson Parish, and St. John the Baptist Parish.

State of Connecticut | Winter Storm Alfred Statewide Debris Monitoring Operations (October 2011–April 2012)

Mr. Natale oversaw efforts to coordinate with 12 individual local governments and 45 Connecticut Department of Transportation towns to collect more than 1.5 million CYs of vegetative debris and remove over 100,000 hazardous trees.

Mr. Natale has provided senior management on the following projects:

- City of New Orleans, Louisiana | Hurricane Katrina Residential Demolitions (April 2010–Present)
- Bastrop County, Texas | Wildfires (September 2011–August 2013)
- City of Cedar Rapids, Iowa | Severe Flooding (May 2010–June 2011)
- University of Iowa | 2008 Severe Flooding (March 2012–Present)
- City of Houston, Texas | Standing Dead Trees (May 2010–June 2011)
- Terrebonne Parish, Louisiana | Hurricane Ike (July 2010–February 2011)
- State of Connecticut Hurricane Irene (September 2011–November 2011)

Project Management

On large debris projects, Mr. Natale will be temporally relieved of his director duties by senior management support and focus on the management of a single project. As a result, Mr. Natale has managed some of the largest debris-generating projects in the country with great success.

City of Houston, Texas | Hurricane Harvey (August 2017- Present)

Hurricane Harvey caused an unprecedented Citywide flooding event with a total of 13 primary debris haulers responding. Mr. Natale helped create new systems and reports were developed to manage the debris haulers and support a live web feed on the Houston recovery webpage. To date the City and its debris haulers collected over 2.5 million cubic yards of flood debris. The project is expected to continue through the end of this year as residents continue to recover from this catastrophic event.

Town of Hilton Head Island, South Carolina | Hurricane Matthew (October 2016–June 2017)

Mr. Natale provided project management and oversight for the popular tourist destination, Hilton Head Island, following extensive damage caused by Hurricane Matthew. Within hours of the disaster, Mr. Natale was on-site to assess the damage and meet with Town officials. Mr. Natale managed the mobilization of a local team of debris monitors and established our automated debris management system (ADMS) for the City to provide real-time updates on the debris removal operations. In total, our team monitored the removal of 2,187,080 cubic yards of debris.

New Jersey Department of Environmental Protection (NJDEP) | Hurricane Sandy Waterway Debris Removal Project (February 2013–January 2014)

Mr. Natale developed and implemented many of the protocols and procedures to effectively manage the wet debris removal process. This has included the implementation of our proprietary automated debris management system (ADMS) technology, which has increased NJDEP's visibility to the day-to-day operations and provided real-time reporting of debris quantities. Due to Mr. Natale's excellent project management, NJDEP then tasked our team with monitoring the sediment removal process in the northern and southern region.

City of Houston, Texas | Hurricane Ike Disaster Debris Program Management (October 2008–July 2010)

Our response to the City of Houston following Hurricane Ike included the collection of over 5.5 million CYs of debris in 256 zones throughout the City. This also included 300 parks and open spaces. Mr. Natale also was tasked with managing the firm's largest hazardous tree removal program, involving the removal of over 214,000 hazardous trees accompanied by 630,000 photographs to document eligibility. Mr. Natale worked closely with the City of Houston to reconcile and provide detailed information of over \$110 million in invoices and over \$3 million in FHWA funds. Mr. Natale also helped reconcile and submit over \$9 million in force account labor.



18 YEARS OF
EXPERIENCE

Areas of Expertise

- Disaster Response & Recovery
- Grant Administration
- Stafford Act Compliance
- Alternative Procedures

Grant Experience

- FEMA Public Assistance
- CARES Act
- USDA Agriculture Recovery Block Grants
- HUD CDBG
- ARPA

Education

Auburn University, Bachelor of Arts,
March 2000

Louisiana State University- Paul M.
Hebert Law Center, Juris Doctorate,
May 2004

Louisiana State University- Paul M.
Hebert Law Center, Bachelor of Civil
Law, May 2004

EXPERIENCE SUMMARY

Ms. Allison McLeary is an experienced emergency response and recovery executive with a demonstrated history of building meaningful relationships across all levels of government. As former Recovery Bureau Chief of the Florida Division of Emergency Management, she offers more than 3 years of direct experience administering grant programming throughout the State of Florida. She also served as **Recovery Counsel for the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)**. She is a steadfast advisor in planning for, responding to, and recovering from challenges and disasters.

RELEVANT EXPERIENCE

Director, Disaster Recovery Programs (March 2021 – Present) **Tetra Tech, Inc.**

Ms. McLeary serves as Director of Disaster Recovery Programs, providing policy guidance and program support. Ms. McLeary is an expert in FEMA policies, building and maintaining relationships with FEMA representatives. She analyzes policy and provides policy guidance to clients. She supports the Tetra Tech team to build programs that align with federal expectations and comply with client/federal requirements. She maximizes operational efficiencies by analyzing individual projects with a holistic lens, leveraging best practices from Tetra Tech debris management operations throughout the Nation. Additionally, Ms. McLeary coordinates relationships with funding agencies and local partners to streamline project operations.

Recovery Bureau Chief (March 2020 – February 2021) **Compliance and Appeals Officer (December 2018 – February 2020)** **Florida Division of Emergency Management**

- Administered all FEMA Stafford Act programs for the State of Florida (\$9.8+ Billion over 26 federally declared events under management)
- Validated and Paid through FDEM an unprecedented \$4.1 Billion in Recovery funds in the period January 2019-February 2021, including \$2.7 Billion in PA and over \$300 Million in USDA Agriculture Recovery Block Grants
- Developed and implemented the State strategy for \$1.275 Billion in CARES-Coronavirus Relief Fund payments to 55 medium and small counties. (\$1.07 Billion validated and paid June 2020-February 2021)
- Served as Alternate Governor's Authorized Representative and Deputy State Coordinating Officer for all FEMA declared events in Florida
- Created a comprehensive FEMA PA Compliance program, including risk assessments, monitoring, and technical assistance and programmatic guidance tailored to address specific compliance risks

Recovery Legal Counsel (January 2017 – November 2018)**Louisiana Governor's Office of Homeland Security and Emergency Preparedness**

- Served as Recovery counsel- advising on all matters of emergency management and whole community Recovery
 - Programs included FEMA/Stafford Act programs and HUD-Community Development Block Grants (CDBG-DR)
- Audit liaison to US Department of Homeland Security- Office of Inspector General and FEMA
- Developed and delivered a comprehensive outreach and education technical assistance strategy to grant subrecipients in Louisiana

FirstNet Program Manager (February 2015 – January 2017)**Louisiana Division of Administration, Office of Technology Services**

- Oversaw a team effort to identify needs, perform gap analyses, and plan for the buildout of the State's portion of the Nationwide Broadband network, known as FirstNet.
- Identified the needs and expectations of the State's 62,000+ first responders and worked with the US Department of Commerce and the FirstNet Authority to include those inputs in the \$7 Billion RFP for the buildout and operation of the FirstNet network.

State Police Legal Counsel (August 2003 – May 2013)**Louisiana Department of Public Safety and Corrections, Louisiana State Police, Office of Legal Affairs**

- Counsel to State Police on matters of policy, operations, public records law, personnel management, emergency management/crisis response, and investigations
- Served as legislative liaison and helped draft numerous bills and testified in committee on several measures including revisions to the electronic surveillance framework and the regulation of private security, and the role of volunteers in emergency response.
- Represented the Louisiana Oil Spill Coordinator's Office and was assigned Attorney Supervisor throughout the response to the Deepwater Horizon event
 - Led a multi-agency team of in house, state agency lawyers in the early days of the disaster
 - Coordinated efforts among state agency counsel to ensure that necessary inputs needed for the response, damage assessment and claims under the Oil Pollution Act of 1990, Clean Water Act and other applicable federal and state laws were supported.



30+ YEARS OF
EXPERIENCE

1,000+ MANAGED
FIELD
MONITORS

5M CYS OF
DEBRIS

Areas of Expertise

- Solid Mobile and GIS Technology
- Resource Deployment and Tracking
- Readiness Training and Exercises
- Disaster Operations Support
- 20+ Years Military Experience

Grant Experience

- CDBG-DR

Key Training/Certifications

- FEMA IS-632, IS-700, IS-922
- MCDBA, Microsoft Certified Database Administrator
- MCSE, Microsoft Certified Network Engineer
- MCT, Microsoft Certified Trainer

Disasters

4340 HURRICANE MARIA
4240 CA WILDFIRES
4223 TX FLOODING
4145 CO FLOODING
4115 SD WINTER STORM
4087 HURRICANE SANDY
4024 HURRICANE IRENE
4106 CT WINTER STORM
1609 HURRICANE WILMA
1602 HURRICANE KATRINA

Education

Thomas Edison University

Associate of Science, Nuclear
Engineering Technology, 1997

EXPERIENCE SUMMARY

Mr. Jeffrey Dickerson has more than 30 years of experience in program management, with extensive experience in technical organizational management, training, and readiness exercises. He is a military veteran with skills in leadership, training, and personnel development. As the Technical Applications Manager, Mr. Dickerson is responsible for the planning, development, deployment of technical applications supporting emergency response operations for the firm.

Mr. Dickerson has extensive experience in process improvement and application of advanced technology to boost efficiency post-disaster field and data operations. He recently presented at the National Hurricane Conference on the use and application of technology to improve disaster response cost efficiency.

Mr. Dickerson has led the development and support of Tetra Tech's *RecoveryTrac*™ Automated Debris Management System (ADMS). As one of only three systems validated by the USACE, it is the preferred provider by the USACE debris contractors, providing ADMS services to 6 of 8 USACE districts globally. *RecoveryTrac*'s flexibility and GIS capabilities provide best-in-class reporting and analysis tools. Additionally, *RecoveryTrac*™ ADMS technology web-based data feeds enable direct integration into client GIS and emergency management systems.

RELEVANT EXPERIENCE

Senior Project Manager (March 2021 – Present)

Emergency Rental Assistance Program | Various Clients

Established the infrastructure for 2 project offices supporting Call Center and Application Review services. The offices supported over 400 team members providing Internet connectivity and workstation equipment. Communications included VOIP phone system, Call Center call handlers, Email and SMS tools.

Program Manager (July 2019–Present)

Puerto Rico Department of Housing (PRDOH) R3 Puerto Rico CDBG Program

Mr. Dickerson managed technical program and staffing for the HUD-mandated environmental reviews (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate, LBP, and Asbestos Inspection program in accordance with 24 CFR Part 58 and the current Puerto Rico PRDOH R3 Program Environmental Review (Tier II) Procedures for an estimated 60,000 hurricane and flood damaged properties.

Program Manager (Oct 2019–Present)

Harris County, Project Recovery CDBG Program

Mr. Dickerson managed technical program and staffing for the HUD-mandated environmental reviews (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate, and LBP program in accordance with 24 CFR Part 58 for an estimated 2,500 hurricane and flood damaged properties.

Project Manager (December 2018–Present)**State of Florida, Rebuild FL CDBG Program**

Mr. Dickerson managed technical program and staffing for the HUD-mandated environmental reviews (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate and LBP Inspection program in accordance with 24 CFR Part 58 and the current Florida Department of Economic Opportunity (DEO) Program Environmental Review (Tier II) Procedures for an estimated 7,000 flood damaged properties.

Project Manager (Nov 2018–Present)**State of Texas, Rebuild TX CDBG Program**

Mr. Dickerson managed the HUD-mandated environmental reviews program and staffing (Tier II Site Specific Reviews), Damage Assessment Inspection/Cost Estimate and LBP Inspection program in accordance with 24 CFR Part 58 and the Texas General Land Office (GLO) Program Environmental Review (Tier II) Procedures for an estimated 1,200 flood damaged properties.

Project Manager (Jul 2018–Oct 2019)**State of North Carolina, Rebuild NC CDBG-DR Program**

Mr. Dickerson managed the HUD-mandated environmental reviews program and staffing (Tier II Site Specific Reviews) and LBP/Asbestos Inspection program in accordance with 24 CFR Part 58 and the NCEM/NCORR Program Environmental Review (Tier II) Procedures for an estimated 1,300 flood damaged properties.

Deputy Project Manager (May 2017–Present)**State of Louisiana, Restore Louisiana (ReLa) CDBG Program**

Mr. Dickerson managed the HUD-mandated environmental reviews (Tier II Site Specific Reviews) in accordance with 24 CFR Part 58 and the current Restore Louisiana Program Environmental Review (Tier II) Procedures for over 24,500 flood damaged properties.

GIS/Mobile Data Collection Manager (October 2017–June 2018)**Sonoma, Napa, Lake and Mendocino Counties, CA | Wildfire Disaster Debris Private Property Debris Removal (PPDR) Program Management**

As part of a FEMA-Army Corps of Engineers (ACE) contractor team, Mr. Dickerson supported the deployment and data management of the ACE compliant ADMS and GIS technologies to automate documentation of the private property hazard removal and fire debris removal mission. Mission assignment also included site assessment and environmental remediation sampling. Completed assessment, sampling and fire debris removal generating nearly 1.657MM tons of debris for nearly 7,900 properties. Advanced GIS mapping, document, and data analysis portals were used extensively to document FEMA, ACE, and California environmental requirements.

GIS/ADMS Applications Manager (October 2016–May 2017)**States of Florida, Georgia, South Carolina and North Carolina | Hurricane Matthew Disaster Debris Public and Private Property Debris Removal (PPDR) Program Management**

Mr. Dickerson managed the deployment of customized GIS-enabled ADMS technology. The system documented removal of over 8.5 million CYs of debris and 198,000 tree hazards while supporting 720 ADMS field employee and 47 debris management sites at a removal rate of nearly 165,000 CYs/day.

Project Manager (August 2016–Present)**Miami Dade County, FL | Zika Mosquito Transmission Outreach and Remediation Program**

Mr. Dickerson designed, deployed, and managed 10 technical support staff and a GIS-based field data collection and reporting application to track the activities of 80 contractors assigned to reduce mosquito habitats and educate the public. The GIS database tracked over 300K outreach and remediation activities on nearly 650K parcels throughout the County.

GIS/ADMS Applications Manager (October 2015–Present)**Lake and Calaveras Counties, CA | Wildfire Disaster Debris Private Property Debris Removal (PPDR) Program Management**

Mr. Dickerson managed the development and deployment of customized GIS-enabled ADMS technology to automate a

private and commercial property hazard removal and demolition program, including environmental remediation sampling. Over 4,000 hazardous tree were removed, and 1,000 structures were demolished, generating nearly 100,000 cubic yards of mixed debris. Advanced GIS mapping, document, and data analysis portals were used extensively to document California environmental requirements.

GIS Field Application Manager (November 2014–May 2015)

City of New Orleans, LA | Hurricanes Katrina Demolition Phase II Program Management

Mr. Dickerson developed and deployed mobile field GIS technology to automate the private property demolition survey and documentation. Custom GIS base workflow automation provided custom form generation from collected field data. Phase II included the survey and demolition of over 375 structures.

ADMS Application Manager (October 2013–December 2013)

State of New Jersey Department Environmental Protection | Hurricane Sandy Disaster Debris Program Management

Mr. Dickerson managed the logistics and deployment of ADMS technology, including over 45 handheld devices for waterway debris and sediment removal for two-thirds of New Jersey's coastline. The RecoveyTrac™ work documentation module was heavily used to document the step-by-step progress. Over 58,000 photos documenting the collection and disposal of the debris and sediment were recorded.

ADMS Application Manager (September 2011–June 2013)

City of Houston, Texas | Drought & Wildfires Debris Removal Monitoring

Mr. Dickerson managed the multi-year logistics and deployment of ADMS technology, including over 25 handheld devices in a multi-phased removal of thousands of trees following a severe drought documenting over 260,000 cubic yards of debris. His responsibilities include the deployment, support, and staff training of the ADMS mobile system and development of custom mapping and reports.

5+ YEARS OF
EXPERIENCE**11** DISASTERS**Professional Affiliations**

American Society of Civil Engineers

Disasters

Oregon Fire

4558 CA Northern Branch Fire

4570 Hurricane Delta

4559 Hurricane Laura

4541 TN Tornado (Chattanooga)

4476 TN Tornado (Nashville)

5278 Camp Fire

4393 NC Hurricane Florence

4385 CT Severe Storms

4337 FL Irma

4286 SC Matthew

Key Training/Certifications

Project Management I,

OSHA 40-Hour HAZWOPER, OSHA 10-Hour Safety,

FAA Licensed Drone/SUAS Remote Pilot,

Xactimate 28 Level 1 Certification

EducationRoger Williams University BS,
Civil Engineering, Discipline, School of
Engineering, 2013**EXPERIENCE SUMMARY**

Mr. Guthman is a Civil Engineer for Tetra Tech. He has supported a wide range of land development and improvement projects for public and private clients. Tasks have included providing construction phase services, Resident Engineering duties, grading, drainage, utility design and site layout. He has also managed large program management and debris monitoring projects, ensuring FEMA compliance of the Public Assistance (PA) Program and Policy Guidelines. As such, he has developed an extensive understanding of federal, state, and local regulations, protocols, processes, and guidance with respect to homeland security response, and recovery.

RELEVANT EXPERIENCE**Debris Group Supervisor (November 2020 - January 2021)****CalRecycle | Northern Branch Complex Fires 2020**

Mr. Guthman was the debris group supervisor for hazardous tree assessment and hazardous tree removal program where he oversaw a team of monitors and trained arborists monitoring the removal of hazardous trees in the right-of-way.

Project Manager (August 2020 - November 2020)**City of Lake Charles, LA | Hurricanes Laura and Delta**

Mr. Guthman served as project manager for the City of Lake Charles, following subsequent hurricanes, Hurricane Laura and Hurricane Delta, which caused devastating damage to the City. He assisted with project initiation, identification of 5 local debris management sites, and the hiring and training of over 250 locally hired debris monitors. Tetra Tech monitored the **removal of over 4 million CYs of debris** from the City of Lake Charles.

Operations Manager Chattanooga (April 2020 - June 2020)**City of Chattanooga, TN | Severe Storms and Tornadoes**

The City of Chattanooga, TN was impacted by one of the largest tornado outbreaks in the state's history. Having not experienced a debris generating event of this magnitude, the City of Chattanooga immediately contracted with Tetra Tech to guide staff through a turn-key recovery effort. Mr. Guthman served as operations manager for the project where he assisted with hiring of local monitors, health and safety, and project oversight. In total, Tetra Tech monitored the **removal of 322,000 CYs** of vegetative debris and construction and demolition debris. The project also included monitoring debris removal from the City's parks.

Operations Manager (March 2020 - May 2020)**City of Nashville, TN | Severe Storms and Tornadoes**

In the early morning of March 3rd, 2020, a powerful weather band produced 2 tornadoes that ripped through the City of Nashville. Within hours of impact, Tetra Tech was mobilized to meet with City of Nashville officials.

As Operations Manager, Mr. Guthman assisted with implementation of Tetra Tech's ADMS, hiring and training of local field staff, identification of debris management sites, and project oversight.

For this project, Tetra Tech worked quickly and efficiently to monitor the removal of **over 300,000 CYs** of debris in roughly 90 days.

Operations Section Chief

Butte County, CA | Camp Fire

Mr. Guthman serves as a Deputy Operations Section Chief overseeing the debris removal operations for the east portion of the City of Paradise. The project is projected to require the demolition and debris removal of nearly 13,000 structures.

Regional Project Manager

North Carolina | Hurricane Florence

Following shortly after Hurricane Florence devastated the Eastern shores of the Carolinas, Mr. Guthman served as the project manager assisting Craven County, Town of New Bern, Town of Trent Woods, and Town of River Bend during the ROW disaster debris removal monitoring operations.

Project Manager

Town of New Fairfield, CT | Macrobust

Following shortly after the macroburst devastated central parts of Connecticut, Mr. Guthman served as the project manager assisting the Town of New Fairfield during the ROW disaster debris removal monitoring operation.

Project Manager

Town of Brookfield, CT | Macrobust

Following shortly after the macroburst devastated central parts of Connecticut, Mr. Guthman served as the project manager assisting the Town of Brookfield during the ROW disaster debris removal monitoring operation.

Project Manager

Collier County | Hurricane Irma

Following Hurricane Irma's impact in South Florida, Mr. Guthman mobilized to Naples, FL where he served as project manager and assisted Collier County with waterway disaster debris removal monitoring operations. In total, Tetra Tech **monitored over 4,000,000 CY of ROW debris and over 60,400 CYs of debris from waterways.**

Project Manager

Miami Dade County Parks and Miami Dade County Fire Rescue | Hurricane Irma

Mr. Guthman assisted Miami Dade County Parks and Miami Dade County Fire Rescue immediately after Hurricane Irma struck South Florida. Mr. Guthman managed the logistics for the debris removal monitoring operations and supervised the debris management sites used to process the debris.

Project Manager

City of Miami – Hurricane Irma

Following Hurricane Irma's impact in South Florida, Mr. Guthman deployed to the City of Miami where he served as project manager and assisted the City of Miami with disaster debris removal monitoring operations for **over 540,000 cubic yards of debris.**

Operations Manager

Hilton Head Island, South Carolina | Hurricane Matthew

Mr. Guthman served as operations manager where he was responsible for implementing Tetra Tech's work plan, staffing, dispatching field personnel, and overseeing adherence to safety protocols. He also oversaw truck certifications, field and disposal operations. In total, our team monitored the removal of 2,187,080 cubic yards of debris.

4+ YEARS OF
EXPERIENCE

5 DISASTERS

12+ COUNTIES
ASSISTED

Areas of Expertise

Eligibility and Reimbursement

Project Staffing and Training

Coordination of multiple
funding/reimbursement agencies

Grant Experience

FEMA Public Assistance

NRCS-ER

Disasters

4283 Hurricane Matthew

4332 Hurricane Harvey

4337 Hurricane Irma

4400 Hurricane Michael

4297 GA Tornadoes

Training and Certifications

FEMA IS – 100.c

FEMA IS – 101.c

FEMA IS 102.C

FEMA IS 200.c

FEMA IS 230.d

Education

Auburn University

Materials Engineering, 1991

EXPERIENCE SUMMARY

As an operations and field project manager, Mr. Ezelle had overseen some of Tetra Tech largest and technically challenging projects in recent history. This includes Hurricane Mathew, Harvey and Irma along with multiple wildfire remediation projects. Mr. Ezelle is familiar with all aspect of debris monitoring and reimbursement including staff training, documentation, eligibility, truck certification, and data management.

Most recently, Mr. Ezelle oversaw field operations following Hurricane Michael in Southwest Georgia, where he responded to the City of Albany, Georgia and Dougherty County, Georgia, as well as 12 other counties that assigned by the United States Army Corps of Engineers (USACE).

RELEVANT EXPERIENCE

Operations Manager (2016 – Present)

Mr. Ezelle has served as Operations Manager on the following projects:

- **Collier County, FL** (October 2017 to January 2018) – Hurricane Irma DR-4337 | 3,137,314 CYs
- **Charlotte County, FL** (October 2017 to January 2018) – Hurricane Irma DR-4337 | 6,212 tons
- **City of Naples, FL** (October 2017 to January 2018) – Hurricane Irma DR-4337 | 201,896 CYs
- **City of Marco Island, FL**(October 2017 to January 2018) – Hurricane Irma DR-4337 | 271,733 CYs
- **City of Cape Coral, FL** (October 2017 to January 2018) – Hurricane Irma DR-4337 | 367,636 CYs (ROW), 165,776 CY (Waterway)
- **City of Victoria, TX** (August 2017 to September 2017) – Hurricane Harvey DR-4332 | 16,436.45 CYs
- **City of Albany, GA** (February 2017 to August 2017) – GA Tornadoes DR-4297 | 700,000 CYs
- **Volusia County, FL** (October 2016 to January 2017) – Hurricane Matthew DR-4283 | 1.6M CYs
- **Chehaw Park Authority** (April 2019) to Hurricane Michael DR-4400 | 23,000 CYs

Field Supervisor (2017)

Nassau County Waterways Survey – Hurricane Matthew DR-4283 | 8,407.55 CYsm (January 2017)

Project Manager (2017 – Present)

City of Wharton, TX – Hurricane Harvey, TX DR-4332 | 35,000 CYs (September 2017 to October 2017)

City of Albany, GA – Hurricane Michael DR-4400 | 350,000 CYs (October 2018 to Present)

Dougherty County, GA – Hurricane Michael DR-4400 | 200,000 CYs (October 2018 to Present)

USACE GA Projects – Hurricane Michael DR-4400 | 4M CYs (October 2018 to Present)

1.5 YEARS OF
EXPERIENCE**6** DISASTERS

Areas of Expertise

Quality Control/Quality Assurance

FEMA Compliance Monitoring

Invoice Reconciliation

Data Management

Key Training/CertificationsFEMA Debris Removal Eligibility
Specialist

Microsoft Office Suite

Education

Penn State University, MBA, 2004

Penn State University, B.S. in
Management, 2003

EXPERIENCE SUMMARY

Ms. Burkholder began her debris management career with the recovery efforts following Hurricane Laura in 2021 by assisting with reconciling contractor invoices for work performed in the State of Louisiana. Since then she has quickly developed into an integral member of the Disaster Recovery Team, acting as Data Manager for projects within the State of Alabama after the severe storms, straight-line winds, and tornadoes that affected the area. She also served as the Lead Data Analyst for projects within the State of Louisiana after Hurricane Ida, and most recently being tasked with managing the day to day activities of the quality control/quality assurance (QC/QA) data team and ensuring client payment packages are submitted in a timely manner for multiple disaster relief projects.

RELEVANT EXPERIENCE**Lead Data Analyst (February 2022 – Present)****Virginia Department of Transportation | Virginia Severe Winter Storm and Snowstorm (FEMA-DR-4644)**

Responsible for reconciling contractor invoices for debris removal and corresponding services. Ensured contractor invoice payment packages were submitted to the client in a timely manner.

- Performed QA/QC on data points required for payment recommendation
- Managed team of analysts to ensure QA/QC processes were performed accurately and efficiently
- Verified FEMA guidelines for debris removal were met

Lead Data Analyst (January 2022 – Present)**Tangipahoa Parish | Louisiana Hurricane Ida (FEMA-DR-4611)**

Responsible for reconciling contractor invoices for debris removal and corresponding services.

- Led the QA/QC team to analyze data and reconcile hauler invoices for over 3 million cubic yards in disaster debris removal
- Verified FEMA guidelines for debris removal were met
- Managed invoice/task tracker to ensure all necessary audits were completed on tickets for payment recommendation

Lead Data Analyst (September 2021 – October 2021)**Audubon Institute, LA | Louisiana Hurricane Ida (FEMA-DR-4611)**

Responsible for reconciling contractor invoices for debris removal and corresponding services.

- Ensured hauler invoices were submitted correctedly based on specific work zones as requested by the client
- Created tracking method for ineligible unit rate tickets to be confirmed as void by the contractor in a timely manner. Led to quicker turn around time for invoice reconciliation, client submittal

Data Manager/Lead Data Analyst (September 2021 – January 2022)**State of New Jersey | Remnants of Hurricane Ida (FEMA-DR-4614)**

Responsible for monitoring ticket data in real time, auditing field logs for accuracy, sending nightly reports to the client with daily debris removal totals. Reconciled contractor invoices.

- Efficiently handled QA/QC tasks for field data and invoice reconciliation for four different contractors operating on the same project
- Developed standardized processes for QC'ing monitor logs to ticket data on an hourly time schedule
- Compiled additional reports requested by the client that included disaster debris removal totals, full ticket details, contractor invoicing information, and payment recommendations

Data Manager (August 2021 – September 2021)**Randolph County, AL | Alabama Severe Storms, Straight-Line Winds, and Tornadoes (FEMA-DR-4596)**

Responsible for monitoring ticket data in real time, auditing field logs for accuracy, sending nightly reports to the client with daily debris removal totals. Reconciled contractor invoices.

- Monitored field data in real time to quickly spot and correct errors
- Submitted nightly debris removal quantity reports to the client
- Organized all monitor logs and uploaded to designated file sharing portal in a timely manner

Data Manager (June 2021 – July 2021)**Bibb County, AL | Alabama Severe Storms, Straight-Line Winds, and Tornadoes (FEMA-DR-4596)**

Responsible for monitoring ticket data in real time, auditing field logs for accuracy, sending nightly reports to the client with daily debris removal totals. Reconciled contractor invoices.

- Monitored field data in real time to quickly spot and correct errors
- Submitted nightly debris removal quantity reports to the client
- Organized all monitor logs and uploaded to designated file sharing portal in a timely manner

Supporting Data Analyst (May 2021 – June 2021)**Bay County, FL | Florida Hurricane Michael (FEMA-DR-4399)**

Assisted with reconciling contractor invoices for the PPDR program, conducting QA/QC on ticket data and field logs.

- Audited and reconciled outstanding hauler invoices
- Verified addresses with debris removal were part of the PPDR program

Supporting Data Analyst (March 2021 – May 2021)**Virginia Department of Transportation | Virginia Severe Winter Storms (FEMA-DR-4602)**

Assisted with QC/QC on ticket data in real time to provide insight to the field on operations.

- Worked as part of a team of analysts, handling specific crew assignments to review photos for leaner/hanger tickets and flag potential eligibility issues
- Relayed information to the field supervisors to resolve monitor photo issues in a timely manner

Supporting Data Analyst (February 2021 – March 2021)**Lake Charles, LA | Louisiana Hurricane Laura (FEMA-DR-4559)**

Assisted with reconciling contractor invoices for the ROW program, conducting QA/QC on ticket data and field logs. This includes performing audits on contractor invoices and creating payment packages for contractor invoices.

20+ YEARS OF
EXPERIENCE

Areas of Expertise

GIS Programming

ESRI Enterprise Geodatabase and Services

GNSS Survey Grade Data Collection

ArcGIS Pro / ArcMap Operation and Support

ArcGIS Server and AGOL Administration

Project Experience

Mapping Report Automation for flood events to include heavy rainfall, sea level rise, and storm surge

Data Standardization including domain and subtype configuration

Created Wildfire Boundary Map toolset to include status assignment, load data, preview buffer and generate report functions.

Data Loading, Conversion and Partitioning

Projection and Reprojection of datasets and feature classes

Training/Certifications

GISP-URISA

Education

Florida State University
Master of Science, Geography, 2004

Louisiana State University Bachelor of Science, Geography, 1999

EXPERIENCE SUMMARY

Mr. Casey Ogden has more than 20 years of experience in Geographic Information Systems, with experience with the ESRI suite of products. He holds a Master's degree from Florida State University with a Certificate of Emergency Management, as well as, a Bachelor's Degree from Louisiana State University in the field of Geography. As the Geospatial Applications Manager, Mr. Ogden manages a team of five GIS personnel and is responsible for developing GIS applications that are efficient, accurate and cutting edge.

RELEVANT EXPERIENCE

Program Manager (April 2022 – Present)

CA, Office of Emergency Services

Mr. Ogden is responsible for the creation of the toolset for boundary maps that aid in wildfire management for the Office of Emergency Services in California. This includes functions that calculate tree hazard status, provide buffer analysis and generate parcel boundary maps.

GIS Applications Manager (April 2022 – Present)

Harris County, TX

Mr. Ogden is responsible for automating Day/Night Noise Level reporting to include measurements to nearest roadways, railroads, airports and managing map book production for debris zone map books.

GIS Developer (June 2021–May 2022)

NASA (Genex Systems)

Mr. Ogden created an ArcGIS Web Appbuilder site that links data submitted for personnel to the reserved parking dataset by applying immediate calculation attribute rules developed using Arcade expressions in ArcGIS Pro. This application also incorporates validation attribute rules and smart editor rules to restrict editing capability and manage data content. This JSC Parking Application includes an Editor, Security Viewer and Viewer site and replaces the existing parking management system.

Assistant CTO and GIS Team Lead (Jan 2017–May 2017)

Mr. Ogden automated Coastal Risk Rapid Assessment / Risk Footprint reports by utilizing ArcGIS Modelbuilder and Python scripts, turning a 3-hour process into a 1 minute runtime and allowing the user the ability to enter an address and receive a comprehensive flood report for any address in the United States. Established various property specific tools that determine flood vulnerability by analyzing Parcels, Light Detection and Ranging (LIDAR), Tidal Gauges, Flood Zones (NFHL), and Storm Surge models (SLOSH). Product outputs include graphs, tables, and maps in a variety of formats, csv, excel, pdf, and images.

GIS Manager (Nov 2015–Sept 2016)

NAVY, NRJ (Capstone Corporation)

Mr. Ogden assisted Navy Region Japan's Emergency Management Division by maintaining the 'One Clear Picture' GIS web application. Duties included providing

training to military personnel on techniques to broadcast Emergency Incidents to the region and establishing links/feeds from Disaster Monitoring Agencies.

GIS Specialist (Oct 2014–Oct 2015)

NOAA, (Cyberdata Technologies)

Mr. Ogden created and fully automated GIS tools that parse ASCII files to display Tropical Cyclone Rainfall and Hurricane Best Track operational products. The mapping product that he developed and is now in production is the Arrival of Tropical Storm Force Winds.

GIS/Mobile Data Collection Manager (August 2012–June 2014)

Cablevision Systems

As GIS Lead, Mr. Ogden managed contracts related to LIDAR and high-resolution aerial imagery in South Florida, Los Angeles and New York. With this technology, he performed Equivalent Power Flux Density (EPFD) analysis of potential service towers and directed site survey efforts to determine possible interference with alternative Direct Broadcast Satellite (DBS) providers. Additionally, he was responsible for identifying serviceable homes based on Line of Sight/Diffraction Analysis and Parcel/Tax Roll databases, which were the drivers for site selection, sales territory development and the mapping application utilized by door-to-door sales team. Developed process to automate publishing of ArcGIS Server web services to report Wi-Fi antenna performance changes, as well as, co-developed Wi-Fi coverage prediction tool to measure dB loss from Access Point to potential customer residences.

B. Project Methodology



Tetra Tech implements a best practices approach to disaster debris monitoring when planning for and responding to debris-generating events. Tetra Tech has carefully reviewed the scope of work requested in the request for proposals (RFP) and can assure the City of League City (City) that we have the extensive experience, understanding, and knowledge of the City to successfully perform all aspects of the scope of work.

Given our most recent experience working with the City after Hurricane Harvey, we are aware of the magnitude and importance of organizing and directing the necessary resources to define and carry out the tasks associated with the scope of work, and we are committed to providing a consistent and coordinated team to perform these services upon activation.

Following Hurricane Harvey in 2017, Tetra Tech monitored the removal of over 116,460 cubic yards (CYs) of debris within the City. Should the need arise, we are prepared to continue to support the City with debris monitoring services, including deploying monitoring personnel within 24 hours of a notice to proceed. Tetra Tech is prepared to provide debris management operations in public and private areas throughout the City and with complex temporary debris staging and reduction site (TDSRS).

Tetra Tech has never failed to respond to our clients' deployment and mobilization needs, regardless of location or disaster. In 2017, Tetra Tech successfully deployed **more than 6,000 field staff** throughout the country to respond to clients affected by Hurricane Irma in Florida, Hurricane Harvey in Texas, Hurricane Maria in Puerto Rico, and multiple wildfires in California.

a. Scenario 1 Work Plan

In compliance with City's RFP, we have provided the following scenario-based debris monitoring plan describing the planning and actions proposed to be taken in a response scenario. In this scenario, we estimated a 426,000 CY event.

The 426,000 CY event estimation includes debris streams of vegetative, construction and demolition (C&D), mixed, white goods, metals, and hazardous waste debris. When the number of debris collection hauling units needed to complete a project is estimated, there are two primary variables: the timeframe specified to complete the project, and the estimated number of trips a hauling unit can make each day.

Debris Estimate

Tetra Tech will assist the City in a systematic approach of cataloging, reporting, and documenting disaster-generated debris. We will develop a work plan with the City, ahead of storm season to maximize the efficient use of City and Tetra Tech resources to quickly and accurately find and report debris. This sample scenario is informed by an example of an event generating 426,000 CYs of debris for planning purposes.

Debris Loading Capacity and Load Removal

We estimate about **50 CYs per load** and a **ratio of 2 double barrel trucks**. Tetra Tech estimates an average number of **26 loading units** to monitor per day throughout the debris collection process. With an average of **7 loads per day** per truck and an estimated number of 26 trucks available, Tetra Tech estimates that it would take **27 days to remove** the 426,000 CYs of debris.

Debris Staging Locations

Tetra Tech has assumed pre-identification of a total of **2 TDSRS locations** for the staging and reduction of storm generated debris.

Staffing Estimate

Tetra Tech will comply with the City's staffing requirements and coordinate with the City and the debris removal contractor's project manager to estimate the number of field monitors that will be required for the following day. To be responsive and mitigate overstaffing, Tetra Tech requests that the debris removal contractor release the next day's schedule by 5 p.m. so that our project manager can dispatch the appropriate number of field monitors.

Based on the total number of loading units to monitor and total estimated days to collect the 426,000 CYs of debris in this sample scenario, we planned to staff **2 debris site/tower monitors per TDSRS**, for a total of **30 total monitors**. Operations are estimated to run for **12 hours per day**. Tetra Tech typically operates with a 10:1 field staff supervision ratio.

b. Project Strategies and Methodology

Emergency Push

During the emergency push period, debris removal contractors coordinate with City crews to clear blocked roadways for emergency vehicle passage. Tetra Tech can support the City with emergency push efforts. Tetra Tech services may include the following:

- Coordination with the City to conduct preliminary damage assessments and road closures
- Document blocked roads that require immediate clearance
- Help staff maintain maps or databases to track road clearance progress and other essential tasks, as requested
- Administer the sign-in and sign-out of labor and equipment to track time and materials (T&M) charges
- Maintain reimbursement documentation of emergency push work
- Establish public information protocols to respond to concerns and comments

Training

In disaster response and recovery, training is not one-size-fits-all. Tetra Tech customizes formal trainings to the duties of each new employee, and hosts trainings in the Hiring Center with a Tetra Tech certified trainer.

To properly instruct newly hired employees, Tetra Tech has developed a training program that includes modules specific to the City. These modules are complete with the information required to facilitate accurate field monitoring and ADMS implementation. By using interactive

qualifying tools throughout the training modules, Tetra Tech helps trainees better retain information while also screening and selecting the most qualified personnel as field monitors. Training module topics include truck certification, load site monitor responsibilities, disposal monitor responsibilities, hazardous trees monitor responsibilities, and field supervisor responsibilities. Project managers, data managers, and operations managers follow standard operating procedures and protocols established in our concept of operations plan.

Vehicle Certification

Tetra Tech uses the *RecoveryTrac*™ system to electronically certify all trucks used in an activation. Our team follows a proven vehicle certification procedure that complies with FEMA guidelines and results in maximum reimbursement. Certification includes:

- Unique truck numbers for contractor crews and equipment
- Automated truck certification form, including:
 - FEMA guidelines on truck certification documentation and volume calculations
 - Barcode for automated ticket scanning
- Vehicle notations on the truck certification form and vehicle placard, informing tower monitors of sideboards, tailgates, or other modifications
- Photographs of vehicles, vehicle cavities, and drivers
- Periodic spot checks and recertification of trucks to identify trucks altered after initial certification

Benefits of using Tetra Tech's mobile truck certification include:

Electronic volume calculations

Instantaneous upload to the *RecoveryTrac*™ database

Immediate QA/QC checks to verify the truck certification calculations

Automated photo-matching of truck and driver photographs

*The truck certification application allows us to complete truck certifications in **30% less time than with a paper-based system.***

Monitoring the Removal of Debris

Each phase of Tetra Tech project management has documented procedures that govern the execution to provide **scalable, consistent, high-quality results**. Our general project approach includes tasks in each of the phases: initiation, mobilization, execution, and closeout.

- **Initiation (Pre-Event)**
 - **Annual coordination** – Conduct annual trainings and meetings to plan and test execution protocols and identify potential risks/mitigation opportunities.
 - **Contract review** – Review contracts for understanding of contractual requirements and possible cost savings.
 - **Communication systems checks** – Verify that communication systems function as designed and reporting needs are understood.
- **Mobilization (Immediately Prior to and Following an Event)**
 - **Scope, tasking, and budget** – Determine services required, performance metrics, schedule, and budget constraints.
 - **Deployment and resource requirements** – Develop work plan and safety plans. Update risk matrix for work plan specifics.

- **Staging of equipment and resources** – Coordinate movement of required support equipment/supplies and setup of communication and information systems.
- **Execution (Post-Event)**
 - **On-boarding and training staff** – Conduct suitability for work checks and provide targeted training program based on work and safety plans.
 - **Monitoring** – Supervise field operations, quality assurance/quality control (QA/QC) in-process checks, prioritization of resource management, and project reporting.
 - **Communication** – Conduct status meetings and communicate project metrics and other pertinent information.
 - **Issue tracking/resolution** – Conduct issue identification, staff communication, and resolution tracking.
- **Closeout (Post-Event)**
 - **Documentation deliverable** – Produce and deliver required documentation to support auditing.
 - **Demobilization** – Manage reduction in staff, post-use maintenance, and movement of equipment and supplies.
 - **Audit support** – Provide continued availability of information systems to support closeout information requests.

Debris Management Site Monitoring

Tetra Tech has industry-leading experience assisting local and state governments with locating and permitting TDSRS before a disaster event as well as post-disaster. Based on State environmental agency guidelines, TDSRS locations typically require baseline soil testing before use. Following the completion of work at the TDSRS, the baseline soil testing is used to verify site remediation is complete.

As TDSRS locations are activated, Tetra Tech will provide a minimum of two disposal monitors per site, which may scale depending on site layout and operational needs. The disposal monitors will verify that the debris contractor passes through the TDSRS and will verify accurate and complete documentation. Several daily audits will be performed by project managers and supervisors to verify that load call data is consistent and accurate. Documentation includes:

- **Load Ticket.** Documents that debris removal complies with all FEMA requirements.
- **Disposal Monitor Log.** Used as backup documentation as required by FEMA.
- **Scale Manifest Tickets.** For weight-based debris hauling contracts, Tetra Tech will digitize and catalog scale tickets.
- **Incident Report.** Tetra Tech will document property damage, arguments, unsafe practices, and injuries.
- **Photographic Documentation.** Tetra Tech disposal supervisors will photograph a TDSRS frequently to create a visual timeline of the site.
- **QA/QC of Field Tickets.** Disposal monitors review and verify collection monitors' work in the field.

Stumps and Leaners/Hangers

Guidance established by FEMA requires supporting photo documentation for each ticket issued for hazardous tree or hanger removal services. The previous standard for monitoring firms was to take supporting photographs with a digital camera and manually associate the photos to each tree ticket. Tetra Tech utilizes ADMS technology to automatically associate photographs for all hazardous tree and hanger removal operations, which eliminates the potentially extensive labor associated with this task. Additionally, our ADMS technology and software is designed to manage photo documentation by compressing and securely storing photos for field validations and audits in real time. The ability to associate photo documentation to unit rate tickets is critical for FEMA reimbursement, QA/QC, and fraud deterrence.

As work in the field is completed, the information and supporting photos are uploaded directly to our database for QA/QC checks. A QA/QC manager verifies that the photographs comply with FEMA regulations and that all measurements meet the City's contractual agreement with the contractor.

Reporting

Tetra Tech has extensive experience in collecting, managing, and tracking financial and project data. Our firm has a full suite of existing reports to allow for custom reporting requested from our clients. Tetra Tech has years of experience tracking invoice amounts and payments, budget forecasting, and more. We understand the importance of accurate data and cost tracking and have developed several reports to enhance visibility into essential project aspects.

Daily Report

Tetra Tech has a suite of reports that are automated from *RecoveryTrac*™ ADMS and available in real-time via PC, tablet, or smart phone. Although the reports are available at any time to the City, Tetra Tech will submit a daily status report that includes daily cubic yards/tons collected by material and program, cumulative cubic yard/tons collected, number of debris monitors in the field, cumulative cubic yards/tons hauled to final disposal, and daily/cumulative hazard removals. Below are samples of these reports created for recent projects. Additionally, Tetra Tech takes pride in the customization of reports to meet our client's specific needs and provided reports tailored to any metrics not captured in the generic reports.

Contractor Reconciliation

The *RecoveryTrac*™ system significantly reduces the amount of time needed for a contractor to generate an invoice and for the subsequent invoice reconciliation with Tetra Tech.

To expedite contractor invoice reconciliation efforts, Tetra Tech requires copies of contracts for all primary debris contractors. After reviewing the necessary contract(s), Tetra Tech sets up the *RecoveryTrac*™ database to generate transactions applicable to contract terms for tickets issued to each debris contractor. Prior to the start of debris removal operations, Tetra Tech will meet with the debris contractor(s) to review the invoicing processes, contract services established in our database, Tetra Tech data tools available for their use, and any other accounting needs as tasked by the City.

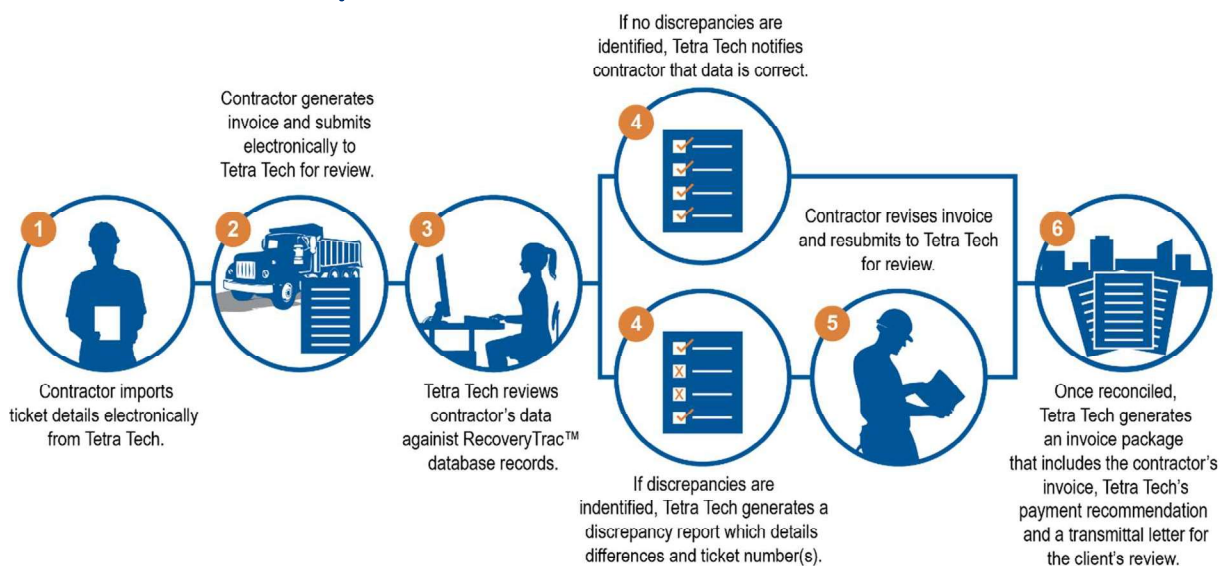
During this meeting, the typical components of the Tetra Tech payment recommendation will be reviewed, the process for adjustment reconciliation will be explained, and the debris contractor(s) will be trained on how to access Tetra Tech's suite of debris hauler reconciliation data reports (including reconciled transactional and live ticket data).

If *RecoveryTrac*™ ADMS will be used to document the debris contractor's work, Tetra Tech will review the automated reports generated by the system to verify that the dataset is sufficient to reconcile with that contractor's subcontractors, and to generate invoices for payment by the City. If another cost tracking system will be used to document the debris contractor's work, Tetra Tech will review the work that has to be documented to verify that our staff will be able to capture the information needed for accounting and invoice review.

Whether using *RecoveryTrac*™ ADMS or paper logs, Tetra Tech will use our *RecoveryTrac*™ database to store and review data generated in the field documenting debris contractor work. Tetra Tech will submit invoices within the timeframes determined by the City.

Our invoicing process includes several real-time QA/QC checks throughout the day, and a final daily comprehensive data analysis is performed at the close of operations. A final QA/QC check is completed when the debris contractor sends the invoice dataset to Tetra Tech for reconciliation. Incongruencies in the debris contractor's data are flagged for review and must be resolved prior to the issuance of a final invoice.

Summary of Contractor Invoice Reconciliation Process



Final Report/Closeout

Tetra Tech has extensive experience completing final reports for disaster debris removal projects. The Final Report will summarize the pre-debris removal, pre-tree removal, and post-debris and post-tree removal conditions. The Final Report typically includes the initial and final assessments, right-of-entry (ROE), summary of quantities of materials removed, environmental sampling information, pre and post-work photographs, and final sign off.

In addition, data can be downloaded directly from the *RecoveryTrac*TM system using ESRI's ArcGIS feature services. These feature services allow location base selection and download of the data contained within the selected area. *RecoveryTrac*TM Fleet history, including individual route history can be downloaded and is available over the life of the project.

Upon project closeout, geospatial data will be provided in an ESRI File Geodatabase (FGDB). Non-geospatial data would be provided in Microsoft Excel format, as directed by the City. The data formats provided do not require a *RecoveryTrac*TM license.

***RecoveryTrac*TM Automated Debris Management System**

Our team has spent years on research and development to streamline the debris collection documentation process, with a focus on minimizing the cost to our clients while improving the visibility of debris project operations. *RecoveryTrac*TM ADMS is the result of these efforts. *RecoveryTrac*TM ADMS is a scalable and fully featured disaster management application designed to address the operational challenges faced during a disaster recovery project.

Our proprietary *RecoveryTrac*TM ADMS technology is validated by the U.S. Army Corps of Engineers (USACE). The system provides real-time collection of data and offers multiple solutions to data management, reporting, invoice reconciliation, and project controls that cannot be achieved with a paper-based program.

Tetra Tech has implemented *RecoveryTrac*TM ADMS technology on our last 200 FEMA PA-eligible projects. On these projects, our clients and FEMA found this state-of-the-art technology to increase efficiency and improve the debris removal management efforts. *RecoveryTrac*TM ADMS system is regarded as the #1 debris tracking system in the industry due to the following:

***RecoveryTrac*TM ADMS Key Facts**

- Owned and operated by Tetra Tech
- Thousands of mobile units on-hand and ready for city-wide or multi-district mobilizations
- Meets USACE specifications for electronic debris monitoring handhelds
- Real-time situation awareness of field resources and efficient direction to support City priorities
- Real-time GIS web services for EOC information and visualization systems
- Capable of collecting data regardless of cellular service
- Automated photograph and GPS capture
- Provides reports and pass map tracking in real-time
- Minimizes chance of fraud through real-time monitoring
- Minimizes data entry and human error
- Expedites invoice reconciliation
- Intuitive and user-friendly

- **Most Broadly Tested ADMS in the Industry – *RecoveryTrac*TM ADMS** is a proven system that has been used to execute the largest USACE activations involving ADMS technology. During simultaneous response to Hurricanes Harvey and Irma in 2017, Tetra Tech deployed approximately 6,000 ADMS devices to collect and manage data for over 100 projects. **No other system has tracked and documented as much debris as *RecoveryTrac*TM.**

- **Stable and Secure ADMS System** – *RecoveryTrac*™ ADMS is the industry leader in secure data systems. The *RecoveryTrac*™ system is securely hosted in the Microsoft Azure Government high-availability, cloud-based data center with restricted access and transaction-level auditing. The database is continually backed up and replicated to an off-site location.
- **Unmatched Flexibility to Meet the Needs of Any Client** – The system is designed to be fully customizable and allows for multiple data collection methods to streamline the debris collection documentation process with a focus on minimizing the cost to our clients and improving the visibility and transparency of debris project operations.
- **Unrestricted by Hardware** – Because *RecoveryTrac*™ ADMS utilizes readily available hardware, there are no restrictions to the amount of ADMS units our team can provide. Our team stocks thousands of units and can expand to fit any client’s needs, including multiple simultaneous activations.

The *RecoveryTrac*™ Process

The steps of the *RecoveryTrac*™ ADMS process are as follows:

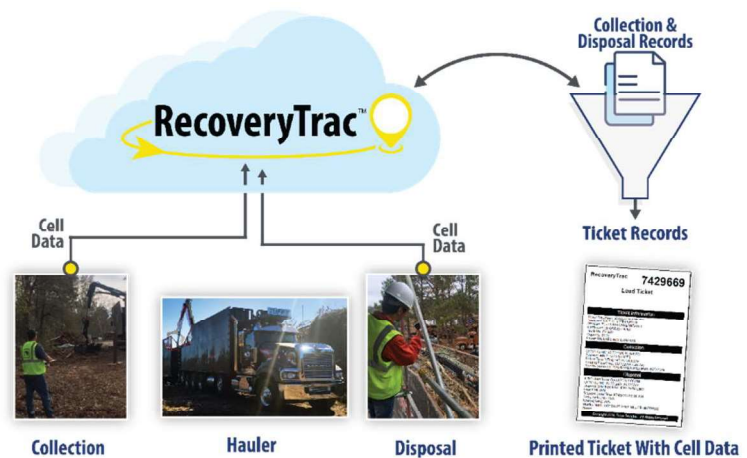
STEP 01	The process begins with debris hauler truck certification using the handheld devices. Handheld devices are provisioned and assigned to both field and debris site/tower monitors.
STEP 02	A truck certification form is printed with a unique electronic bar code and provided to the driver as well as our debris site/tower monitor(s).
STEP 03	Field monitors begin a ticket by scanning the truck certification bar code to open a control ticket and then begin to record waypoints (debris pile pick-up locations) on the handheld device as the truck is loaded.
STEP 04	When the truck is full, the field monitor selects the debris type and scans the control ticket to assign the load a unique number.
STEP 05	The truck then proceeds to the disposal site. The collection data is uploaded to a server via cellular connection, and using a process called Look Ahead, the collection ticket information is made available to the disposal monitor’s handheld device before the truck arrives.
STEP 06	The control ticket is provided to the driver and taken to the DMS, where it is scanned by a debris site/tower monitor.
STEP 07	The debris site/tower monitor confirms the truck and debris type and enters the load call.
STEP 08	Finally, the disposal load ticket is printed, and data is uploaded to the system, where it can be utilized in real-time reporting systems.

Even when there is no cellular connection, the handheld devices continue to operate in connected mode; however, the data is stored on the device until a data connection is restored.

RecoveryTrac™ ADMS Features

Tetra Tech brings significant experience and understanding in the design and build of disaster debris removal data management systems that offer data collection, storage, sharing, analysis, and reporting.

Because of our previous experience, we have several ready-to-use components already built and ready to deploy. These components can be quickly repurposed saving time and cost while ensuring field work starts quickly.



Emergency Management Planning

Unlike many emergency management firms that focus on planning, Tetra Tech is a full-service firm that works in all phases of emergency management. As an experienced leader in the emergency management industry, Tetra Tech knows what it takes to respond effectively and to initiate recovery activities almost simultaneously, while maintaining transparency for the public.

We are better planners because of our active involvement in response and recovery efforts. We develop realistic plans that can be effectively implemented during a response. Tetra Tech works with organizations across the country in jurisdictions that face a variety of threats and hazards, from dense urban areas susceptible to security threats to coastal communities prone to hurricanes. For that reason, Tetra Tech maintains a multidisciplinary staff with backgrounds and experience in emergency management, hazardous materials (HAZMAT) response and recovery, public health and healthcare planning, transportation and evacuation, all-hazards mitigation, disaster resiliency and readiness planning, and response and recovery, among other fields.

Infrastructure Restoration

Tetra Tech also offers a diverse suite of solutions to complex problems in water, environment, infrastructure, resource management, energy, advanced data analytics, and more. With proven experience in engineering and architecture design, planning, program management, and operations and maintenance, Tetra Tech is the best choice for your infrastructure needs.

Grant Support Services

Tetra Tech is prepared to assist the City in all levels of grant management including:

- Eligibility Review
- Inspections/Monitoring
- Contractor Reconciliations
- Project Scope Finalization
- Procurement Scope and Review
- PW Versioning
- Environmental Review
- FEMA/TDEM Reporting
- 12/18 Month Extension Requests
- 2 CFR 200 Eligibility Review

Overall Grant Management Approach

Our team will deliver a program that can guide the City through the cost reimbursement cycle. Tetra Tech will employ its time-tested, four-step CASE Management Approach to the federal grant program.

Step 1 - Collect the Data.

The biggest challenge typically faced in a grant management program is obtaining necessary data quickly and completely. We have found time and time again that our ability to work with our client on collecting the data upfront will lead to success as we monitor the City's program spending and build the FEMA reimbursement documentation. We employ a number of methods to collect, store, and report data, including rapid and detailed program assessments, one-on-one meetings with departments to collect and secure data, a robust SQL server database to store data offsite, and Microsoft PowerBI to report the City on the status of the project.

Step 2 - Analyze the Projects.

Whether it is analyzing thousands of labor records, assessing the plans to make emergency purchases, identifying mitigation measures to protect damaged assets, or designing a multi-billion-dollar COVID-19 economic recovery program, the Tetra Tech team has unparalleled expertise the City needs to support its recovery efforts. Tetra Tech will work closely with the City from the beginning of our engagement to understand the project status, scope, and goals to determine the best course of action.

Step 3 - Submit to FEMA.

We understand the need for the City to expedite the recovery process and keep pace on program timelines. We have found that the best way to do this under FEMA's New Delivery Model for PA is actively working within the construct of FEMA's GrantsPortal side-by-side with Tetra Tech's proprietary *RecoveryTrac*™ data management tool. Aligning these systems will result in the City's ability to transmit data more quickly to FEMA and the State, maintain visibility in the status of its programs, and quickly illustrate when funds have been obligated. Our ability to integrate these programs has been a transformative tool that has led to a more streamlined and transparent process. Since first working in Grants Portal under FEMA's beta-test in Albany, GA in 2017, we have worked hundreds of projects in Grants Portal and know the system "inside and out".

Step 4 - Expedite the Requests.

When a project is submitted to FEMA or the State for review, Tetra Tech is with the City each step of the way. Within each of the steps, FEMA or State personnel must review the submission. This may result in one or more RFIs or specialized requests or meetings. These requests must be dealt with timely and with the appropriate amount of information to maintain that the PW does not stall in the process or get moved to a previous step. Our team has responded to tens of thousands of RFIs for Essential Elements of Information (EEIs) and Hazard Mitigation Proposals as well as DURs for Detailed Damage Descriptions since 2017 alone.

C. Cost

Tetra Tech has included Attachment A: Proposal Cost Sheet and Cost Assumptions on the following pages.



Proposal Cost Sheet

DUE DATE: Wednesday, June 29, 2022 by 2:00 p.m.

POSITIONS	HOURLY RATES
Senior Program Manager	-
Project Manager	\$85.00
Operations Manager	\$65.00
Field Manager	-
Field Supervisor	\$45.00
Field Monitor	-
Debris Site / Tower Monitor	\$37.00
Load Ticket Data Entry Clerk	-
Collection Monitor	-
Citizen Drop-Off Monitor	-
Billing / Invoice Manger	-
Billing / Invoice Analyst	-
Project Inspector	-
Project Assistant	-
Field Coordinator (Crew Monitor)	\$37.00
Senior Project Inspector	-
Waste Management Specialist	-
Senior Public Assistance – Grant Management Consultant	-
Principal In Charge	-
Public Assistant Consultant	-
Public Assistant Consultant Aide	-
Project Coordinator	\$35.00
Debris Site Security	-
Safety Manager	-
Data Manager	\$55.00
Data Support Personnel	-
Marine Debris Monitor	-
Schedules / Expenditures (Logistics)	-
Environmental Specialist	-
Project Inspector	-
Residential Monitor	-
Automated Ticket Specialist	-



Aerial Photographer	-
FEMA Specialist	-
Administration Assistant	-
Call Center Staff	-
Senior Technical Specialist	-
Fire / HAZMAT Subject Matter Expert / Trainer	-
OTHER REQUIRED POSITIONS: Proposer may include other positions, with hourly rates, as needed.	
GIS Analyst	\$55.00

Total Cost for Scenario in Section III:

Please see attached scenario
\$ detail per Addendum 1

Unit prices listed above are good for ninety (90) calendar days after receipt of proposal.

Cost Assumptions: Scenario Model

Assumptions

Estimated Volume of Debris	426,000
Estimated Number of Trucks	26
Estimated Ratio of Double Barrel Trucks	2
Estimated Volume Per Load	50
Estimated Loads Per Day	7
Estimated Days to Complete Work	27
Estimated Hours Per Day	12
Temporary Debris Staging and Reduction Sites (TDSRS)	2
Number of Debris Site/Tower Monitors per TDSRS	2
No Citizen Drop Off Sites	-
Total Monitors	30

Staffing Estimates

Description	Quantity	Hours Per Day	Days	Total Hours	Hourly Rate	Extended Rate
Project Manager	1	12	27	324	\$85.00	\$27,540.00
Operations Manager	1	12	27	324	\$65.00	\$21,060.00
Field Supervisor	3	12	27	972	\$45.00	\$43,740.00
Crew Monitor	26	12	27	8,424	\$37.00	\$311,688.00
Disposal Site/Dump Monitor	4	12	27	1,296	\$37.00	\$47,952.00
Data Manager	1	12	27	324	\$55.00	\$17,820.00
GIS Analyst	1	12	27	324	\$55.00	\$17,820.00
Project Coordinator	1	12	27	324	\$35.00	\$11,340.00
Total						\$498,960.00

D. Forms

Tetra Tech has included and completed the following requested forms on the following pages:

- a) City of League City Texas Public Information Act
- b) Conflict-of-Interest Questionnaire (Form CIQ).
- c) Federally Required Contract Clauses

In regard to Section VI(B) in the City's Request for Proposal, Tetra Tech, Inc. (Tetra Tech) respectfully requests that the City consider the following modification to the proposed indemnification provision, which matches our current agreement with the City:

Contractor shall defend, indemnify and hold harmless the City , and each of its directors, officers, agents and employees from and against all claims, actions, suits, demands, proceedings, costs, damages and liabilities, including without limitation attorneys' fees and reasonable litigation costs, arising out of, connected with, or resulting from any acts or omissions of contractor or any agent, employee, subcontractor, or supplier of contractor in the execution or performance of this contract, to the extent the claim arises from negligence, willful act, breach of contract or violation of law.

To the extent the above requests do not meet the City's requirements; Tetra Tech is prepared to negotiate mutually agreeable terms and conditions.



Texas Public Information Act

Steps to Assert that Information is Confidential or Proprietary

All proposals, data, and information submitted to the City of League City are subject to release under the Texas Public Information Act (“Act”) unless exempt from release under the Act. You are not encouraged to submit data and/or information that you consider to be confidential or proprietary unless it is absolutely required to understand and evaluate your submission.

On each page where confidential or proprietary information appears, you must label the confidential or proprietary information. Do not label every page of your submission as confidential as there are pages (such as the certification forms and bid sheet with pricing) that are not confidential. It is recommended that each page that contains either confidential or proprietary information be printed on colored paper (such as yellow or pink paper). At a minimum, the pages where the confidential information appears should be labeled and the information you consider confidential or proprietary clearly marked.


Failure to label the actual pages on which information considered confidential appears will be considered as a waiver of confidential or proprietary rights in the information.

In the event a request for public information is filed with the City which involves your submission, you will be notified by the City of the request so that you have an opportunity to present your reasons for claims of confidentiality to the Texas Attorney General.

In signing this form, I acknowledge that I have read the above and further state (Please check one):

- ☐ The proposal/bid submitted to the City **contains NO confidential information** and may be released to the public if required under the Texas Public Information Act.
- ☒ The proposal/bid submitted **contains confidential information** which is labeled and which may be found on the following pages: Tab C: Cost Assumptions-1
and any information contained on page number not listed above may be released to the public if required under the Texas Public Information Act.

Vendor/Proposer Submitting: Tetra Tech, Inc.

Signature:  Date: 06/28/22

Print Name: Jonathan Burgiel Print Title: Business Unit President

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

FORM CIQ

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

None

2 ☐ Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

None

Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

None

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes

☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?


☐ Yes

☐ No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

None

6 ☐ Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7 

Signature of vendor doing business with the governmental entity

06/28/22

Date

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

Local Government Code § 176.001(1-a): "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

- (a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

- (2) the vendor:

(A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that

(i) a contract between the local governmental entity and vendor has been executed;
or

(ii) the local governmental entity is considering entering into a contract with the vendor;

(B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:

- (i) a contract between the local governmental entity and vendor has been executed; or
- (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

- (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

(1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);

(2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or

(3) has a family relationship with a local government officer of that local governmental entity.

- (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

- (1) the date that the vendor:

(A) begins discussions or negotiations to enter into a contract with the local governmental entity; or

(B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or

- (2) the date the vendor becomes aware:

(A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);

(B) that the vendor has given one or more gifts described by Subsection (a); or

(C) of a family relationship with a local government officer.

THE FOLLOWING FEDERALLY REQUIRED CONTRACT CLAUSES, OR SIMILAR CLAUSES, WILL BE REQUIRED FOR ALL CONTRACTS RESULTING FROM THIS SOLICITATION.

Please sign the last page to acknowledge these clauses and include in the forms section of your response.

1. Equal Employment Opportunity.

During the performance of this contract, the contractor agrees as follows:

- a) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- b) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- c) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- e) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- f) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such

direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

2. Davis Bacon Act and Copeland Anti-Kickback Act.

- a) In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.
- b) The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Compliance with the Copeland "Anti-Kickback" Act.

- a) Contractor. The contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.
- b) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as the FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- c) Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12.

3. Contract Work Hours and Safety Standards Act.

Compliance with the Contract Work Hours and Safety Standards Act.

- a) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- b) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including

watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section .

- c) Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.
- d) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

4. Clean Air Act and the Federal Water Pollution Control Act

Clean Air Act

- a) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- b) The contractor agrees to report each violation to the (name of the state agency or local or Indian tribal government) and understands and agrees that the (name of the state agency or local or Indian tribal government) will, in turn, report each violation as required to assure notification to the (name of recipient), Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- c) The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

Federal Water Pollution Control Act

- a) The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- b) The contractor agrees to report each violation to the (name of the state agency or local or Indian tribal government) and understands and agrees that the (name of the state agency or local or Indian tribal government) will, in turn, report each violation as required to assure notification to the (name of recipient), Federal Emergency Management Agency,

and the appropriate Environmental Protection Agency Regional Office.

- c) The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

5. Debarment and Suspension.

- a) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the contractor is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- b) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- c) This certification is a material representation of fact relied upon by (insert name of subrecipient). If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to (name of state agency serving as recipient and name of subrecipient), the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.
- d) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

6. Byrd Anti-Lobbying Amendment.

Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended)

Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.”

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements (To

be submitted with each bid or offer exceeding \$100,000) The undersigned

[Contractor] certifies, to the best of his or her knowledge, that:

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

This certification is a material representation of fact upon which reliance was placed when



this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, Tetra Tech, Inc., certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 *et seq.*, apply to this certification and disclosure, if any.



Signature of Contractor's Authorized Official

Jonathan Burgiel, Business Unit President

Name and Title of Contractor's Authorized Official

06/28/22

Date

7. Procurement of Recovered Materials.

- a) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA- designated items unless the product cannot be acquired—
 - (i) Competitively within a timeframe providing for compliance with the contract performance schedule;
 - (ii) Meeting contract performance requirements; or
 - (iii) At a reasonable price.
- b) Information about this requirement, along with the list of EPA- designate items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.

8. Additional FEMA Requirements.

- a) The contractor agrees to provide (insert name of state agency or local or Indian tribal government), (insert name of recipient), the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.
- b) The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- c) The contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

9. DHS Seal, Logo, and Flags.

The contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre- approval.

10. Compliance with Federal Law, Regulations, and Executive Orders.

This is an acknowledgement that FEMA financial assistance will be used to fund the contract only. The contractor will comply will all applicable federal law, regulations, executive orders, FEMA policies, procedures, and directives.

11. No Obligation by Federal Government.

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.



12. Program Fraud and False or Fraudulent Statements or Related Acts.

The contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the contractor's actions pertaining to this contract.

Jonathan Burgiel

(PRINT NAME OF SIGNATORY)



(SIGNATURE)

06/28/22

(DATE)