

**AGREEMENT FOR EMERGENCY DEBRIS REMOVAL MONITORING SERVICES – PRIMARY**

THIS AGREEMENT is entered into this 5 day of June 2018 by and between the **CITY OF OCALA**, a Florida municipal corporation ("City") and **TETRA TECH, INC.**, a Florida registered, foreign Delaware corporation (EIN: 95-4148514), with offices at 2301 Lucien Way, Suite 120, Maitland, Florida 32751 ("Contractor").

WHEREAS:

The City of Ocala issued a Request for Proposal on April 23, 2018 for **RFP# PWD/18-010: Pre-Event Monitoring Service for Emergency Debris Removal**.

Tetra Tech, Inc. responded and was the highest ranked of the two (2) responding firms scored by a City evaluation committee. The Contractor was subsequently selected as the intended awardee for emergency debris removal monitoring services.

NOW THEREFORE, in consideration of the matters set forth above (which are incorporated herein by reference), the parties hereto agree as follows:

1. **SERVICES.** Contractor will provide emergency debris removal monitoring services for the City as described, and pursuant to the scope of service set forth on the attached **Exhibit A - Scope of Work, Exhibit B – Contractor Proposal, Exhibit D – Federal Contract Provisions** and underlying RFP# PWD/18-010. The contract, and all exhibits, hold precedence over the RFP documents.
2. **COMPENSATION.** City shall pay Contractor for the performance of the work, and in accordance with the contract documents based on the unit prices set forth in **Exhibit C – Loaded Hourly Rates**. All loaded hourly rates in Exhibit C include all taxes, per diem, handling charges, equipment, travel, overhead, profits, etc. No additional charges shall be billed to the City.
3. **TERM & TERMINATION.** This Agreement shall begin on June 6, 2018 and terminate at the end of the business day on June 5, 2021. This Agreement may, by written consent between City and the Contractor, be renewed for up to two (2) additional, one (1) year periods. Either party may terminate this Agreement immediately upon default or breach by the other party, if said party remains in default or breach after receiving written notice and fails to cure such default or breach within thirty (30) days of said notice. Termination of this Agreement shall have no effect upon the rights of the parties that accrued prior to termination.

4. **PERFORMANCE BOND.** Upon contract activation by City, Contractor is required to furnish a Performance Bond in the amount of **\$500,000**.
5. **PERFORMANCE EVALUATION.** At the end of the contract, the City may evaluate the Contractor's performance. This evaluation will become public record.
6. **CONTRACT FULFILLMENT.** Contractors who enter into an Agreement with the City of Ocala and fail to complete the contract term, for any reason, will be subject to future bidding suspension for one (1) year, and up to a possible three (3) year bid debarment for serious contract failures.
7. **LEGAL REQUIREMENTS.** Contractor must fully comply with the Federal requirements detailed in **Exhibit D – Federal Contract Provisions**.
8. **CONTRACTOR REPRESENTATIONS.**
 - A. The Contractor has examined and carefully studied the Contract Documents and the other related data.
 - B. The Contractor is familiar with and is satisfied as to all Federal, state, and local laws and regulations that may affect cost, progress, and performance of the Work.
 - C. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
9. **METHOD OF COMPENSATION.** In consideration for providing the City with the services described in this contract, the City will compensate the Contractor as noted in **Section 2** and detailed in **Exhibit C – Loaded Hourly Rates** as follows:
 - A. The City will pay Contractor a total maximum limiting amount for each monthly period, as approved and invoiced, using the pricing schedule as noted in **Exhibit C**. The allowability of compensation sought under this Contract is expressly made subject to the terms of this Contract, and any pertinent Federal and State law.
 - B. Contractor shall invoice the City monthly for ANY completed work accomplished during the preceding calendar month. Invoices for this Agreement will be prepared by Contractor, and submitted through the responsible City Project Manager at: **City of Ocala Public Works Department, Darren Park, 1805 NE 30th Avenue, Building 300, Ocala, Florida, dpark@ocalafl.org**. Finished work and invoices must be reviewed and agreed upon by City of Ocala Project Manager; this review and agreement shall not be unreasonably withheld, conditioned, or delayed. The City contract number must be listed

on the submitted invoice along with an assigned invoice number and invoice date. One original of the invoice should be included with the submission.

- C. The City reserves the right to withhold payment for work not completed, or services completed unsatisfactorily, or work or products deemed inadequate or untimely by the City. Any payment withheld will be released and paid to Contractor promptly when work or products are subsequently performed/delivered to the City's satisfaction.

10. MISCELLANEOUS INSURANCE PROVISIONS.

- A. Insurance Requirements. These insurance requirements shall not relieve or limit the liability of Contractor. The City does not in any way represent that these types or amounts of insurance are sufficient or adequate to protect Contractor's interests or liabilities, but are merely minimums. No insurance is provided by the City under this contract to cover Contractor. No work shall be commenced under this contract until the required Certificate(s) have been provided. Work shall not continue after expiration (or cancellation) of the Certificate and shall not resume until new Certificate(s) have been provided. Insurance written on a "Claims Made" form is not acceptable without City of Ocala Risk Management consultation.
- B. Deductibles. Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the latter. Contractor is responsible for the amount of any deductible or self-insured retention.
- C. Certificates. Contractor shall provide a Certificate of insurance, issued by an agency authorized to do business in the State of Florida and with an A.M. Best rating* of at least an A, showing the "City of Ocala" as an Additional Insured for General Liability, and Business Automobile Liability insurance. The City of Ocala, Procurement Department, 110 SE Watula Ave, Ocala, FL 34471 should be shown as the Certificate Holder, and for providing for required thirty (30) day cancellation notice.

*Non-rated insurers must be pre-approved by the City Risk Manager.

- D. Failure to Maintain Coverage. In the event Contractor fails to disclose each applicable deductible/self-insured retention or obtain or maintain in full force and effect any insurance coverage required to be obtained by Contractor under this Agreement, Contractor shall be considered to be in default of this Agreement.
- E. Severability of Interests. Contractor shall arrange for its liability insurance to include General Liability, Business Automobile Liability, and Excess/Umbrella Insurance, or be endorsed to include, a severability of interests/cross liability provision, so that the "City

of Ocala" (where named as an additional insured) will be treated as if a separate policy were in existence, but without increasing the policy limits.

11. **LIABILITY INSURANCE.** Contractor shall procure and maintain for the life of this contract Commercial General Liability Insurance with limits not less than:
- A. \$1,000,000 each occurrence and \$2,000,000 aggregate for Bodily Injury, Property Damage and Personal and Advertising Injury;
 - B. \$1,000,000 each occurrence and \$2,000,000 aggregate for Products and Completed Operations;
 - C. Commercial General Liability policy must include coverage for Contractual Liability.

The City, a political subdivision of the State of Florida, its officials, employees, and volunteers will be covered as an additional insured with a CG 20 26 04 13 Additional Insured – Designated Person or Organization Endorsement or similar endorsement providing equal or broader Additional Insured Coverage regarding liability arising out of activities performed by or on behalf of Contractor. The coverage shall contain no special limitation on the scope of protection afforded to the City, its officials, employees, or volunteers.

12. **BUSINESS AUTO LIABILITY.** Contractor shall procure and maintain Automobile Insurance for the life of this contract. Coverage must be afforded for all Owned, Hired, Scheduled, and Non-Owned vehicles for Bodily Injury and Property Damage in an amount not less than \$1,000,000 combined single limit each accident. The City must be an additional insured on the policy.
13. **WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY.** Contractor shall procure and maintain for the life of this contract Workers' Compensation insurance, and Employer's Liability at statutory requirement limits. Contractor shall ensure any subcontractor has statutory coverage. The City of Ocala need not be named as an additional insured, but a subrogation waiver endorsement is required. Exceptions and exemptions will be allowed by the City's HR/Risk Director, if they are in accordance with Florida Statute.
14. **E-VERIFY.** In accordance with Executive Order 11-116, Contractor shall utilize the U.S. Agency of Homeland Security's E-Verify system, <https://e-verify.uscis.gov/emp>, to verify the employment eligibility of all employees hired during the term of this Agreement. Contractor shall also require all subcontractors performing work under this Agreement to utilize the E-Verify system for any employees they may hire during the term of this Agreement.

15. **SAFETY/ENVIRONMENTAL.** Contractor is responsible at all times for precautions to achieve the protection of all persons including employees and property. The Contractor shall make reasonable efforts to detect apparent hazardous conditions and shall take prompt action where necessary to avoid accident, injury or property damage. EPA, DEP, OSHA, and all other applicable safety laws and ordinances shall be followed as well as American National Standards Institute Safety Standards. All Contractor caused hazardous spills, accidents, injuries or claims or potential claims shall be reported promptly to the City Risk Management Department.
16. **INDEPENDENT CONTRACTOR STATUS.** City expressly acknowledges the Contractor is an independent contractor. Nothing in this Agreement is intended, nor shall be construed, to create an agency relationship, a partner or partnership, an employer/employee relationship, a joint venture relationship, or any other relationship allowing the City to exercise control or discretion over the manner or method by which Contractor performs hereunder.
17. **ACCESS TO FACILITIES.** City will provide Contractor with access to the Facilities to permit Contractor to meet its obligations hereunder.
18. **ASSIGNMENT.** Neither party may assign this Agreement or the rights and obligations thereunder to any third party without the prior express written approval of the other party, which shall not be unreasonably withheld.
19. **NON-EXCLUSIVITY.** Nothing herein is intended nor shall be construed as creating any exclusive arrangement with Contractor. This Contract shall not restrict City from acquiring similar, equal or like goods and/or services, or executing additional contracts from other entities or sources.
20. **PUBLIC RECORDS.** The Contractor shall comply with all applicable provisions of the Florida Public Records Act, Chapter 119, Florida Statutes. Specifically, the Contractor shall:
 - A. Keep and maintain public records required by the public agency to perform the service.
 - B. Upon request from the public agency's custodian of public records, provide the public agency with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
 - C. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of

the contract term and following completion of the contract if the Contractor does not transfer the records to the public agency.

- D. Upon completion of the contract, transfer, at no cost, to the public agency all public records in possession of the Contractor or keep and maintain public records required by the public agency to perform the service. If the Contractor transfers all public records to the public agency upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the public agency, upon request from the public agency's custodian of public records, in a format that is compatible with the information technology systems of the public agency.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT: CITY OF OCALA, OFFICE OF THE CITY CLERK; 352-629-8266; E-mail: clerk@ocalafl.org; City Hall, 110 SE Watula Avenue, Ocala, FL 34471.

21. **TAX EXEMPTION.** City is exempt from all federal excise and state sales taxes (State of Florida Consumer's Certification of Exemption 85-8012621655C-9). The City's Employer Identification Number is 59-60000392. Contractor doing business with City will not be exempted from paying sales tax to its suppliers for materials to fulfill contractual obligations with the City, nor will Contractor be authorized to use City's Tax Exemption Number for securing materials listed herein.
22. **EXCESS FUNDS.** Any party receiving funds paid by City under this Agreement shall promptly notify City of any funds erroneously received upon the discovery of such erroneous funds receipt. Any such excess funds shall be refunded to City within thirty (30) days, or must include interest calculated from the date of the erroneous payment or overpayment at the interest rate for judgments at the highest rate as allowed by law.

23. **AUDIT.** Contractor shall comply and cooperate immediately with any inspections, reviews, investigations, or audits relating to this Agreement as deemed necessary by the Florida Office of the Inspector General, the City's Internal or External auditors or by any other Florida official with proper authority.
24. **PUBLICITY.** Contractor shall not use City's name, logo, seal or other likeness in any press release, marketing materials, or other public announcement without City's prior written approval.
25. **CONFLICT OF INTEREST.** Contractor must have disclosed with the submission of their bid, the name of any officer, director, or agent who may be employed by the City. Contractor must disclose the name of any City employee who owns, directly or indirectly, any interest in Contractor or any affiliated business entity. Any additional conflicts of interest that may occur during the contract term must be disclosed to the City of Ocala Procurement Department.
26. **NON-DISCRIMINATORY EMPLOYMENT PRACTICES.** During the performance of the contract, the Contractor agrees to not discriminate against any employee or applicant for employment because of race, color, religion, ancestry, national origin, sex, pregnancy, age, disability, marital status, familial status, sexual orientation or veteran status and will take affirmative action to ensure that an employee or applicant is afforded equal employment opportunities without discrimination. Such action shall be taken with reference to, but not limited to: recruitment, employment, termination, rates of pay or other forms of compensation and selection for training or retraining, including apprenticeship and on-the-job training.
27. **PUBLIC ENTITY CRIMES.** Contractor on its behalf and its affiliates agrees and affirms that it has not been placed on the convicted vendor list following a conviction of a public entity crime as provided for in Section 287.133(2)(a), Florida Statutes, which states that a person or affiliate who has been placed on the convicted vendor list following a conviction for public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO, for a period of 36 months from the date of being placed on the convicted vendor list.
28. **DEFAULT.** This Agreement is critical to the City and the City reserves the right to immediately cancel either in whole or in part any portion of this Agreement due to failure of the Contractor

to carry out any obligation, term, or condition of the Agreement. The City will issue a written notice of default effective immediately and not deferred by any interval of time. Default shall be any act or failure to act on the part of the Contractor including, but not limited to, any of the following:

- A. Contractor fails to adequately perform the services set forth in the specifications of the Agreement;
- B. Contractor fails to complete the work required within the time stipulated in the Agreement; and
- C. Contractor fails to make progress in the performance of the Agreement and/or gives the City reason to believe that the Contractor will not or cannot perform to the requirements of the Agreement.

29. **REMEDIES/OPPORTUNITY TO CURE.** If Contractor defaults on any provision of this Agreement, City may, at its sole discretion, give written notice to Contractor detailing Contractor's violations and giving Contractor an opportunity to cure the default. If such violation is not corrected to the reasonable satisfaction of City within the time required by the City to cure the default, after the date of notice of violation, the City may, without further notice, declare Contractor to be in breach of this Agreement and pursue all remedies available at law or equity, including termination of this Agreement without further notice and all rights of Contractor hereunder.

Notwithstanding City's termination of the Agreement, Contractor shall remain liable to City for damages, costs, or attorney's fees arising prior to such termination. In case of default, the City reserves the right to hire another Contractor to complete the required work in accordance with the needs of the City. City may recover any actual excess costs from the Contractor by: (a) Deduction from an unpaid balance, (b) Placing a claim against the Performance Bond, or (c) Any other remedy as provided by law.

30. **TERMINATION FOR CONVENIENCE.** City may, at any time and for any reason, terminate Contractor's services and work at City's convenience. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this Agreement. Upon such termination, Contractor shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with this Agreement; plus, (2) such other costs incurred by Contractor as permitted by the contract and approved by City.

31. **NON-FUNDING.** In the event sufficient budgeted funds are not available or depleted, City shall notify the Contractor of such occurrence and contract shall terminate without penalty or expense to the City.
32. **WAIVER.** The failure or delay of any party at any time to require performance by another party of any provision of this Agreement, even if known, shall not affect the right of such party to require performance of that provision or to exercise any right, power or remedy hereunder. Any waiver by any party of any breach of any provision of this Agreement should not be construed as a waiver of any continuing or succeeding breach of such provision, a waiver of the provision itself, or a waiver of any right, power or remedy under this Agreement. No notice to or demand on any party in any circumstance shall, of itself, entitle such party to any other or further notice or demand in similar or other circumstances.
33. **FORCE MAJEURE.** Neither party shall be responsible for damages or delays caused by Force Majeure or other events beyond the reasonable control of the party and which could not reasonably have been anticipated or prevented.
- For purposes of this Agreement, Force Majeure includes, but is not limited to, war, terrorism, riots, epidemics, fire, acts of nature, strikes, lockouts, court orders, and acts, orders, laws, or regulations of the government of the United States or the several states, prohibiting or impeding any party from performing its respective obligations under the contract.
- If Force Majeure occurs, the parties shall mutually agree on the terms and conditions upon which services may continue. Should Contractor be delayed in the commencement, performance, or completion of the Work due to any of the conditions under this section, Contractor shall be entitled to an extension of time only, provided however, that in no event shall Contractor be entitled to any increased costs, additional compensation, or damages of any type resulting from such Force Majeure delays.
34. **SEVERABILITY OF ILLEGAL PROVISIONS.** Wherever possible, each provision of this Agreement shall be interpreted in such a manner as to be effective and valid under the applicable law. Should any portion of this Agreement be declared invalid for any reason, such declaration shall have no effect upon the remaining portions of this Agreement.
35. **INDEMNITY.** Contractor shall indemnify City and its elected officials, employees and volunteers against, and hold City and its elected officials, employees and volunteers harmless from, all damages, claims, losses, costs, and expenses, including reasonable attorneys' fees, which City or its elected officials, employees or volunteers may sustain, or which may be

asserted against City or its elected officials, employees or volunteers, arising out of the activities contemplated by this Agreement including, without limitation, harm or personal injury to third persons during the term of this Agreement to the extent attributable to the actions of Contractor, its agents, and employees.

36. **NO WAIVER OF SOVEREIGN IMMUNITY.** Nothing herein is intended to waive sovereign immunity by the City to which sovereign immunity may be applicable, or of any rights or limits of liability existing under Florida Statute § 768.28. This term shall survive the termination of all performance or obligations under this Agreement and shall be fully binding until any proceeding brought under this Agreement is barred by any applicable statute of limitations.

37. **NOTICES.** All notices, certifications or communications required by this Agreement shall be given in writing and shall be deemed delivered when personally served, or when received if by facsimile transmission with a confirming copy mailed by registered or certified mail, postage prepaid, return receipt requested. Notices can be concurrently delivered by email. All notices shall be addressed to the respective parties as follows:

If to Contractor:

Tetra Tech, Inc.
Betty Kamara, Contracts Administrator
2301 Lucien Way
Maitland, Florida 32751
Phone: 321-441-8518 Fax: 321-441-8501
Cell: 407-803-2551
Email: betty.kamara@tetrattech.com

If to City of Ocala:

Tiffany Kimball, Contracting Officer
110 SE Watula Avenue, 3rd Floor
Ocala, Florida 34471
Phone: 352-629-8366 Fax: 352-690-2025
Email: tkimball@ocalafl.org

Copy to:

Patrick G. Gilligan, Esquire
Gilligan, Gooding, Franjola & Batsel, P.A.
1531 SE 36th Avenue
Ocala, Florida 34471
Phone: 352-867-7707 Fax: 352-867-0237
Email: pgilligan@ocalalaw.com

38. **ATTORNEYS' FEES.** If any civil action, arbitration or other legal proceeding is brought for the enforcement of this Agreement, or because of an alleged dispute, breach, default or misrepresentation in connection with any provision of this Agreement, the successful or prevailing party shall be entitled to recover reasonable attorneys' fees, sales and use taxes, court costs and all expenses reasonably incurred even if not taxable as court costs (including, without limitation, all such fees, taxes, costs and expenses incident to arbitration, appellate, bankruptcy and post-judgment proceedings), incurred in that civil action, arbitration or legal proceeding, in addition to any other relief to which such party or parties may be entitled. Attorneys' fees shall include, without limitation, paralegal fees, investigative fees, administrative costs, sales and use taxes and all other charges reasonably billed by the attorney to the prevailing party.
39. **JURY WAIVER.** IN ANY CIVIL ACTION, COUNTERCLAIM, OR PROCEEDING, WHETHER AT LAW OR IN EQUITY, WHICH ARISES OUT OF, CONCERNS, OR RELATES TO THIS AGREEMENT, ANY AND ALL TRANSACTIONS CONTEMPLATED HEREUNDER, THE PERFORMANCE HEREOF, OR THE RELATIONSHIP CREATED HEREBY, WHETHER SOUNDING IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE, TRIAL SHALL BE TO A COURT OF COMPETENT JURISDICTION AND NOT TO A JURY. EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY. NEITHER PARTY HAS MADE OR RELIED UPON ANY ORAL REPRESENTATIONS TO OR BY ANY OTHER PARTY REGARDING THE ENFORCEABILITY OF THIS PROVISION. EACH PARTY HAS READ AND UNDERSTANDS THE EFFECT OF THIS JURY WAIVER PROVISION.
40. **GOVERNING LAW.** This Agreement is and shall be deemed to be a contract entered and made pursuant to the laws of the State of Florida and shall in all respects be governed, construed, applied and enforced in accordance with the laws of the State of Florida.
41. **JURISDICTION AND VENUE.** The parties acknowledge that a majority of the negotiations, anticipated performance and execution of this Agreement occurred or shall occur in Marion County, Florida. Any civil action or legal proceeding arising out of or relating to this Agreement shall be brought only in the courts of record of the State of Florida in Marion County or the United States District Court, Middle District of Florida, Ocala Division. Each party consents to the exclusive jurisdiction of such court in any such civil action or legal

proceeding and waives any objection to the laying of venue of any such civil action or legal proceeding in such court and/or the right to bring an action or proceeding in any other court. Service of any court paper may be effected on such party by mail, as provided in this Agreement, or in such other manner as may be provided under applicable laws, rules of procedures or local rules.

42. **REFERENCE TO PARTIES.** Each reference herein to the parties shall be deemed to include their successors, assigns, heirs, administrators, and legal representatives, all whom shall be bound by the provisions hereof.
43. **MUTUALITY OF NEGOTIATION.** Contractor and City acknowledge that this Agreement is a result of negotiations between Contractor and City, and the Agreement shall not be construed in favor of, or against, either party because of that party having been more involved in the drafting of the Agreement.
44. **SECTION HEADINGS.** The section headings herein are included for convenience only and shall not be deemed to be a part of this Agreement.
45. **RIGHTS OF THIRD PARTIES.** Nothing in this Agreement, whether express or implied, is intended to confer any rights or remedies under or because of this Agreement on any persons other than the parties hereto and their respective legal representatives, successors and permitted assigns. Nothing in this Agreement is intended to relieve or discharge the obligation or liability of any third persons to any party to this Agreement, nor shall any provision give any third persons any right of subrogation or action over or against any party to this Agreement.
46. **AMENDMENT.** No amendment to this Agreement shall be effective except those agreed to in writing and signed by both parties to this Agreement.
47. **COUNTERPARTS.** This Agreement may be executed in counterparts, each of which shall be an original and all of which shall constitute the same instrument.
48. **ELECTRONIC SIGNATURE(S).** Contractor, if and by offering an electronic signature in any form whatsoever, will accept and agree to be bound by said electronic signature to all terms and conditions of this Agreement. Further, a duplicate or copy of the Agreement that contains a duplicated or non-original signature will be treated the same as an original, signed copy of this original Agreement for all purposes.

49. **ENTIRE AGREEMENT.** This Agreement, including exhibits, (if any) constitutes the entire Agreement between the parties hereto with respect to the subject matter hereof. There are no other representations, warranties, promises, agreements or understandings, oral, written or implied, among the Parties, except to the extent reference is made thereto in this Agreement. No course of prior dealings between the parties and no usage of trade shall be relevant or admissible to supplement, explain, or vary any of the terms of this Agreement. No representations, understandings, or agreements have been made or relied upon in the making of this Agreement other than those specifically set forth herein.

50. **CONTRACT DOCUMENTS.** The contract documents that comprise the entire Agreement between the City and Contractor are made a part hereof, and are listed as exhibits. There are no contract documents other than those listed below. If there is a conflict in terms between this Agreement and the contract documents, then the terms of this Agreement will control over the terms of the contract documents listed below.

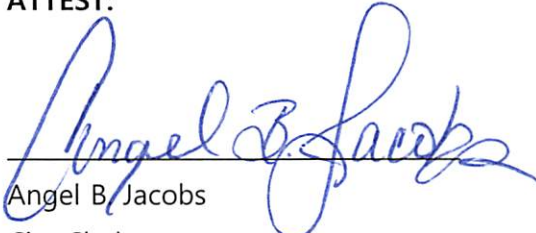
If there is a conflict within the exhibits regarding scope of service, the order of precedence is as follows: (1) Exhibit D, (2) Exhibit A, (3) Exhibit B, then (4) Exhibit C.

Exhibit A:	Scope of Work (A-1 through A-22)
Exhibit B:	Contractor Proposal (B-1 through B-17)
Exhibit C:	Loaded Hourly Rates (C-1)
Exhibit D:	Federal Contract Provisions (D-1 through D-7)

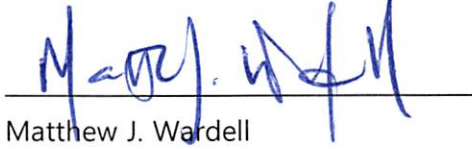
51. **LEGAL AUTHORITY.** Each person signing this Agreement on behalf of either party individually warrants that he or she has full legal power to execute this Agreement on behalf of the party for whom he or she is signing, and to bind and obligate such party with respect to all provisions contained in this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date set forth above.

ATTEST:

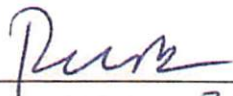

Angel B. Jacobs
City Clerk

CITY OF OCALA


Matthew J. Wardell
City Council President

Approved as to form and legality:

TETRA TECH, INC.


~~Patrick G. Gilligan~~ Robert W. Batsel, Jr. Vice President or higher
~~City Attorney~~ Assistant City Attorney Jonathan Burgiel, Business Unit President



ACCEPTED BY CITY COUNCIL
June 5, 2018
DATE
OFFICE OF THE CITY CLERK

This Scope of Work describes and defines the services which are required for the execution of natural disaster-related emergency debris removal monitoring for the City.

Contractor Responsibilities

Contractor responsibilities include, but are not limited to, monitoring and documenting the following:

- Field operations
- Debris pickup
- Debris hauling and removing
- Debris staging and reduction by grinding
- Temporary debris storage site management
- Debris management
- Final disposal to an approved facility in full compliance with regulatory agency requirements, consistent with Federal Emergency Management Agency (FEMA) requirements for debris management, removal and disposal.

The Contractor shall have experience in the Federal Emergency Management Public Assistance (FEMA-PA) Program, the Federal Highway Administration Emergency Relief (FHWA-ER) Program, and other applicable federal, state, and/or local programs to assist the City and its emergency response/recovery efforts. The Contractor will be responsible for tracking all contract costs, adhering to the "not to exceed" limit as determined by the City, and preparing the project worksheets for all disaster categories. Proper notification must be given to the City as costs approach the "not to exceed" limit. Proper documentation by the Contractor as required by FEMA, FHWA and all applicable federal, state and local agencies is required for all debris removal monitoring operations to ensure reimbursement to the City from the appropriate agency.

Contractor is responsible for ensuring the work performed under their control is progressing in a manner satisfying the expectations as noted in the FDOT Emergency Management Program 956-030-001, 23 CFR 668, and the current edition of the FHWA Emergency Relief Manual, including the supplements prepared by the FHWA Florida Division and the FEMA PA Program.

Roads and other City facilities will be identified by the City and direction will be given to the Contractor and debris removal contractor for clearing these roads and facilities. Debris removal and monitoring activities shall be in accordance with the Public Works Emergency Preparedness Manual. The City reserves the right to add or remove road segments at the direction of the City

Debris Manager. The City, at its sole discretion, may elect to perform work with in-house forces or other contract forces.

Activation

The work will begin upon written authorization by the City. Contractor shall provide a 24/7 contact number and shall be activated (project manager on-site) within twenty-four (24) hours of receipt of Notice to Proceed. Failure to meet this requirement will result in immediate termination of contract.

No guarantee of minimum or maximum amounts of work is made by the City under this contract. No adjustment to pricing will be considered due to increases or decreases in estimated quantities. The City will not provide price adjustments for cost increases or decreases in the price of fuel. The Contractor shall be able to handle multiple, simultaneous large-scale disaster events.

In cases of discrepancy between this scope and regulatory agency guidelines, the regulatory agency's guidelines will take precedence.

Definitions and Acronyms

- A. City Debris Manager: A City staff member who functions as the City point of contact and is responsible for providing overall supervision of debris clearance, removal, and disposal operations.
- B. Construction and Demolition (C&D) Debris*: Damaged components of buildings and structures such as lumber and wood, gypsum wallboard, glass, metal, roofing material, tile, carpeting and floor coverings, window coverings, plastic pipe, concrete, fully cured asphalt, heating ventilation and air conditioning (HVAC) systems and their components, light fixtures, small consumer appliances, equipment, furnishings, and fixtures that are a result of a disaster event.

*Note – This definition of C&D is for disaster recovery purposes and is not the same definition commonly as found in Chapter 62-701, Florida Administrative Code.
- C. Data Manager: Manager of data collected from monitoring operations and employed by the Contractor.
- D. Debris: Debris is scattered items and materials broken, destroyed, or displaced which is generated by an event and is located within a designated area.
- E. Debris Collection Monitor: Employee of the Contractor who observes the debris removal contractor removing debris from assigned areas.

- F. Debris Management Plan: The plan establishes policies, procedures, and guidelines for recovery from debris generating disaster events.
- G. Debris Removal Contractor: A person or entity, including employees, partners, principals, agents, and assignees that are under contract with the City to remove storm deposited debris according to federal and state guidelines.
- H. Disposal Site Monitor: The Contractor's employee(s) assigned to the debris disposal site to manage disposal operations and monitor debris removal contractor's performance. The duties include, but are not limited, ensuring the debris is eligible, to quantify and accurately document debris loads consistent with FEMA and FHWA guidelines.
- I. Drop-Off Site: A site established for residents of the City of Ocala to drop off debris.
- J. Electronic Waste (E-Waste): Loosely discarded, damaged, obsolete, or broken electrical or electronic devices including, but not limited to, computers, computer monitors, televisions, and microwaves.
- K. Eligible Debris: As determined by FEMA Section #325 Debris Management Guide and other applicable regulations – Debris resulting from a Presidentially declared disaster whose removal, as determined by the City Manager or designee, is in the public interest because it is necessary to (1) eliminate immediate threats to life, public health and safety; (2) eliminate immediate threats of significant damage to improved public or private property; or (3) ensure economic recovery.
- L. Emergency Operations Center (EOC): A central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management, disaster management functions at a strategic level in an emergency situation.
- M. Exit Site Monitor: Employee(s) of the Contractor who observe outbound trucks at Debris Management Site.
- N. Federal Aid Eligible Roads: Roads that are paved, gravel or dirt, and are eligible for repair or replacement.
- O. Federal Emergency Management Agency (FEMA): FEMA is a funding source to the City for activities during an event declared a disaster by the President of the United States. FEMA eligible debris removal is second and subsequent passes on FHWA eligible roads and other roadways not on the federal aid system.
- P. Federal Highway Administration (FHWA): FHWA, through the Emergency Relief program is a federal funding source for work on Federal-Aid roadways and facilities. FHWA has designated

federal aid roadways also known as “on-system” roadways that are eligible for Emergency Relief funding.

- Q. Field Operations Manager: Employee of the Contractor who oversees debris removal contractor(s) and general field operations including monitors and data managers.
- R. Global Positioning System (GPS): Global navigation satellite system that provides location and time information in all weather conditions, anywhere on or near the earth, where there is an unobstructed line of sight to four or more GPS satellites.
- S. Hand Held Units (HHU): Devices used to write data to, and read data from, removable storage media. The HHU are used in electronic debris monitoring.
- T. Hazardous Stump: Uprooted tree or stump (i.e. 50% or more of the root ball is exposed), greater than twenty-four inches (24”) above the ground on a public right-of-way, improved public property or improved property owned by certain private nonprofit organizations, and the exposed root ball poses an immediate threat to life, public health and safety.
- U. Hazardous Waste: Materials and products from institutional, commercial, recreational, industrial, and agricultural sources that contain certain chemicals with one or more of the following characteristics, as defined by the U.S. Environmental Protection Agency: 1) toxic; 2) flammable; 3) corrosive; and/or 4) reactive, in accordance with Environmental Protection Agency (EPA) Section for toxic, flammable, corrosive reaction Resource Conservation and Recovery Act (RCRA) Subtitle C 40 CFR Part 260.
- V. Household Hazardous Waste: Used or leftover contents of consumer products that contain chemicals with one or more of the following characteristics, as defined by the U.S. Environmental Protection Agency: 1) toxic; 2) flammable; 3) corrosive; and/or 4) reactive. Examples of Household Hazardous Waste include small quantities of normal household cleaning and maintenance products, latex and oil-based paint, cleaning solvents, gasoline, oils, swimming pool chemicals, pesticides, and propane gas cylinders in accordance with Environmental Protection Agency (EPA) Section for toxic, flammable, corrosive reaction Resource Conservation and Recovery Act (RCRA) Subtitle C 40 CFR Part 260.
- W. Mixed Debris: A mixture of various types of debris including, but not limited to, C&D debris, white goods, e-waste, household hazardous waste, metals, abandoned vehicles, tires, etc.
- X. Notice to Proceed: This is a written notice issued to the Contractor by the City fixing the date on which operations outlined will commence.

- Y. Project Manager: A Contractor who functions as the point of contact for the City responsible for the overall project management and coordination of the debris monitoring services required to oversee the debris removal operations.
- Z. System: The word "System" is used in reference to the electronic portion of electronic debris monitoring.
- AA. System Database: A system database is a compilation of all information gathered or reconciled and meets requirements set forth by this Scope of Services.
- BB. Temporary Debris Management Sites: A Florida Department of Environmental Protection authorized site where debris is stored, reduced, grinded, or sorted. Debris resides at the site for a relatively short period of time prior to final disposal during the debris management process. May also be referred to a Debris Management Site (DMS) or Temporary Debris Staging and Reduction Site (TDSR).
- CC. Ticket Manager: Contractor responsible for overseeing the electronic ticket processing.
- DD. Vegetative Debris: Clean, woody debris and other organic materials that can be chipped and mulched.
- EE. White Goods: Appliances, including, but not limited to refrigerators, freezers, stoves, washers, dryers, and HVAC units.

Personnel Qualifications

- **Data Manager**: A Data Manager must have at least two (2) years' experience working with a relational database management system. The Data Manager will work under the supervision of the Project Manager.
- **Debris Collection Monitors, Exit Site Monitors, and Disposal or Tower Monitors** must have a High School Diploma or GED, and be adequately trained on Debris Operations.
- **Field Operations Manager**: A Field Operations Manager must have a minimum of two (2) years' experience in disaster debris management
- **Project Manager**: A Project Manager must have a minimum of five (5) years' experience in disaster debris management. The Project Manager must also be a permanent staff employee of the Contractor.

Services to be Provided by the Contractor**1. Daily Reports**

The Contractor shall ensure that daily reports are provided to the City Debris Manager or designee and other key City personnel within a minimum number of hours requested by the Debris Manager.

2. Key Responsibilities

It is the responsibility of the Contractor to assist the City in performing:

- A. Contract Administration;
- B. Damage assessment;
- C. Environmental Permitting of temporary debris management sites;
- D. Truck Certification;
- E. Debris Removal Monitoring;
- F. Quality Assurance and Quality Control of all documentation pertaining to debris removal monitoring;
- G. Assist the City in responding to public inquiries;
- H. Be available to address questions from the City, FEMA and FHWA both during and after services have been performed.
- I. Provide assistance as requested, especially after the services have been performed to complete FEMA reimbursement project worksheets (PW).

3. Safety Provisions

Contractor shall provide all monitors (or ensure monitors are in possession of) appropriate personal protective equipment, to include but not limited to eye protection, hearing protection, safety work shoes, safety vests, hard hats, gloves and wet and cold weather clothing, to comply with all federal (including, but not limited to Occupational Safety and Health Administration [OSHA] guidelines), state and local requirements.

4. Annual Pre-Storm Coordination Meetings

This task will consist of any or all three separate meetings conducted in May or June of each year the contract is in force. The meetings are described below:

- A. Meeting 1 - Conduct a formal half-day meeting with all debris haulers prior to each

hurricane season. Topics of discussion will include debris removal scheduling and planning, defining specific work zones and uploading to the Contractor's computerized database and software, debris monitoring, staging area location and use, citizen drop off sites, mobilization schedules, equipment requirements, damage reporting and repair, invoicing and other topics as requested by the City.

- B. Meeting 2 - Present training materials and conduct formal half day training and coordination meeting with City staff responsible for project management, staging area tower monitors, debris monitors or other positions as required by the City.
- C. Meeting 3 - If required, Contractor will meet with the City to coordinate debris management and discuss reimbursement issues.

5. **Debris Monitoring Operations**

The Contractor shall coordinate with the City to schedule debris removal monitoring and debris removal contractor operations. The Contractor shall within twenty-four (24) hours of notification, provide an adequate number of qualified personnel to monitor debris removal sites and reduction/disposal sites along with associated roving monitors. The Contractor will be required to increase or reduce its staffing from this point depending on severity of debris generating event. The Contractor shall provide the following:

Project Manager shall be onsite within twenty-four (24) hours of notification and responsible for the overall project management and coordination of the debris monitoring services required to oversee the debris removal operations. The Project Manager shall be the point of contact to the City. The Project Manager shall assign Field Operations Manager(s) to oversee the debris removal contractor(s), monitors, and a Data Manager to provide supervision of the data entry operations and documentation process. Project Manager duties include but are not limited to the following:

- A. Ensure a sufficient number of trained debris monitors are available to monitor the "first push" (cut & toss) operations.
- B. Ensure a sufficient number of trained debris monitors are available to monitor all "first pass" and subsequent passes of debris removal and hauling activities.
- C. Provide tower/disposal site monitors to observe and record all debris loads entering the temporary debris management sites.
- D. Provide tower/disposal site monitors to observe and record all debris loads exiting the temporary debris management sites for final disposal.
- E. Provide data entry and document processing personnel, if applicable.

- F. Conduct safety meetings with field staff, as necessary.
- G. Respond to and document issues regarding complaints, damages, accidents or incidents involving the Contractor or Contractor personnel and ensure that they are fully documented and reported.
- H. Coordinate daily briefings with the City and the debris removal contractor(s), daily status reports of work progress and staffing.
- I. Review and verify documentation of environmental authorizations and/or permits for temporary debris management sites and final disposal.
- J. Review and reconcile debris removal contractor invoices submitted to the City.
- K. Preparation of interim operations, status reports and final report, as directed by the City.

6. **Field Monitoring**

The Contractor shall provide trained staff in sufficient numbers to adequately monitor all operations supervised by Field Operations Managers. Duties of monitors shall include, but are not limited to, the following:

- A. Truck certification and documentation of all vehicles used in the debris removal activities.
- B. Quality assurance/quality control (QA/QC) of truck certification measurements throughout life of project.
- C. Provide monitoring services and documentation of all eligible debris removal activities from Federal Aid eligible roadways – First Push (Cut & Toss) and First Pass.
- D. Provide monitoring services and documentation of all eligible debris removal activities on non-Federal Aid eligible roadways, as directed by the City.
- E. Provide monitoring services and documentation of all eligible debris removal activities from second and subsequent passes on all roadways, as directed by the City.
- F. Ensure that ineligible debris is not collected by the debris removal contractor, unless directed in writing by the City.
- G. Disposal Site/Tower Monitors will observe and record the truck quantity estimates of inbound and outbound debris.
- H. Exit Site Monitors will observe that all outbound trucks are fully discharged of their load prior to exit of the temporary debris management site.
- I. Monitors will ensure that accurate, legible, and complete documentation is provided through load tickets, truck certifications, and/or other logs and reports, as required.

- J. Maintain photo documentation of the debris removal trucks and activities, specifically of the hazardous stumps, hangers, leaners, or tree removal and/or other special or unusual occurrences in the field.
- K. Immediately document and report activities to the City which may require remediation, such as: fuel spills, hazardous materials collection locations, and other similar environmental concerns.
- L. Immediately document and report to the City damages which occur on public or private property as a result of the debris removal operations.
- M. Immediately document and report to the City any violations of Department of Environmental Protection's (DEP) debris site conditions.
- N. If DEP debris site conditions are violated, the Contractor shall oversee tasks sufficient to satisfy the DEP.
- O. Monitors must be capable of spending shifts in an outside environment and be able to climb a staircase ladder, ten (10) feet or higher.
- P. Monitors shall make multiple, random visits to all loading sites and disposal sites on a daily basis.

7. **Data Management and Documentation**

The Contractor shall ensure all necessary documentation is provided as follows:

- A. Ensure all eligible debris removal operations activities are documented and tracked specific to the FHWA-ER program, the FEMA PA program or other applicable Federal, state or local agencies.
- B. Documentation of the number of crews and types of equipment utilized, actual hours of operation, and locations of work performed during the time and materials phase of operations.
- C. Completion of truck certifications, equipment certifications, and establishment of a QA/QC program throughout the life of the project.
- D. Load tickets documenting the eligible debris removal and/or disposal activities by the applicable program FHWA – ER or FEMA PA, and/or other federal, state or local programs as outlined in and in accordance with the Debris Management Plan.
- E. Documentation of eligible hazardous stump removal, hangers, leaners, or tree removal

which includes photos, GPS coordinates, street or milepost identifier, and/or other information as available and applicable.

- F. Environmental authorizations and/or permits, as applicable.
- G. Daily electronic spreadsheet summaries of cubic yards/tons collected by Federal program. The daily summary shall be communicated to the City's Emergency Coordination Officer (ECO) or designee on a daily basis.
- H. Production in electronic format (scanned) and paper copies of all documentation for submittal to Federal and/or State agencies.
- I. Provide certified weigh master if necessary.
- J. Assist the City in creating field maps using GIS, as well as track and present contractor progress in GIS.
- K. Organize, maintain, and provide the City electronic copies of documentation in a satisfactory manner. All documentation and information related to the project shall be surrendered to the City upon completion of the project.
- L. Paper copies of all electronic or handwritten load tickets shall be provided daily to both the City and the Debris Removal Contractor at the daily meeting.

8. **Electronic Debris Monitoring**

The Contractor may exercise the option to utilize electronic debris monitoring and if chosen, the Contractor must comply with requirements set forth in Paragraphs 3.4.6.1 - 3.4.6.3 below:

Equipment Requirements

- A. Data Storage Media – Debris management data will be stored and transferred on encryption protected removable data storage media. All data media will be provided by the Contractor. Data must include a unique user ID which identifies the user's role, limits the user's ability to collect or validate information, etc. and employs an anti-tampering mechanism. Contractor shall provide media to each person performing a debris mission role that results in data collection, i.e., drivers, ticket managers, etc.
- B. Handheld Units (HHU) - The Contractor will provide weather proof and shock resistant handheld units (HHU) for recording debris management data in the field. These HHU devices will be capable of writing data to, and reading data from, the removable data storage media. HHUs shall have the capability to determine

locations by GPS and the capability to write GPS coordinates to the removable media. The HHUs will perform two functions: (1) Recording of initial load data information, and (2) verification of vehicle certification, and recording of debris type and quantity and (3) All field units will be operated by standalone power sources which will allow the units to perform uninterrupted for a shift.

- 1) HHUs capable of recording truck certification data onto driver removable media are used at the truck certification area. Truck certification records will include truck measurements, Truck ID, Driver ID and a digital photograph of the truck and trailers.
 - 2) HHUs capable of recording user ID information, including a unique user ID, digital photograph and any additional user information required for system operation.
 - 3) GPS- HHU units shall have integrated GPS capability. GPS readings (accuracy within 3 meters of the HHU) shall automatically be recorded without any additional manual effort each time the HHU unit records and retrieves information related to the debris mission. External GPS units shall have reliable connectivity to the HHU and be rugged and durable.
- C. Durable Printer – The Contractor shall provide a durable printer to print load tickets at the request of the City. Once the tower manager completes the load data entries the information shall be transmitted to the printer. The printer will print a minimum 2 copies of the ticket. Two copies shall be given to the driver (one copy for the driver and the other for the prime contractor. The HHU should have program flexibility to alter the number of printed tickets. The printed ticket paper and print shall be of a quality that the print is not affected by harsh weather conditions and does not fade over time, nor smear or deteriorate due to moisture or UV rays. All field units will be operated by stand-alone power sources which will allow the units to perform uninterrupted for a minimum of a shift.
- D. Server(s) – The Contractor shall provide computer servers for the storage and maintenance of records. The data contained in the Contractor's database shall be placed on the Internet for controlled use, and be password protected by the Contractor. Upon completion of the work, the Contractor shall surrender the records to the City who shall maintain the official database and records on its government furnished secure server. Access to the City server is limited to "Official Use Only". The City server is provided and maintained by the City.

- E. Back-up equipment – In the event of equipment malfunction, loss or damage, the Contractor shall assure a sufficient supply of replacement equipment and personnel are available such that production is not affected. The back-up equipment shall be readily available on-site for rapid distribution.
- F. GIS – GIS mapping shall be provided by the Contractor from the most current source(s) available. This information shall be used as a base map to visually illustrate work zones, ticket and tower personnel locations and activities, work progress, historically and/or environmentally sensitive areas, geospatial data and other mission informational needs from the data gathered by the HHUs.
- G. Internet Accessible database – The Contractor will establish a web based database which is updated daily if not real-time. The data shall be accessible, by permission only, to sub-contractors, local and state officials and others on a “need to know” basis. Database access will be role-based and no direct access to the data tables shall be allowed, unless approved by the City.

General Statement of Electronic Debris Monitoring System Parameters

- A. The system must utilize an encryption protected removable data storage device. The data storage device will store data collected in the field, such as fields from traditional debris paper load tickets as well as truck certification information. The device must be capable of depicting images and other identifying data.
- B. The system must have a database capable of storing all data collected in the field. The Contractor shall provide the City a copy of the database with a matching structure at the completion of the work unless otherwise specified.
- C. The system must include the capability to share database records with contractors, sub-contractors, the City, and others via the internet. Data contained in the system must be password protected, implement role-based access controls and must have viewing, printing and editing capabilities. Each contractor, subcontractor and customer must have permissions that allow only them to review and print information specific to their need. The system shall also have the capability to generate reports on all aspects of the debris mission.
- D. The Contractor uses the HHU to initiate the load data by entering the debris type into the HHU. The driver’s media card will either be swiped or inserted into the HHU and the HHU will write the debris type, pick-up GPS location), address of pick-up if applicable, time, date, truck certification and driver information, and the ticket manager’s unique ID Code onto the removable media. Once the data

is written to the media, the Ticket Manager will return the media to the driver. By this action, the Contractor verifies the debris meets FEMA and FHWA eligibility requirements.

- E. HHUs are used at the debris verification area of disposal site(s) by tower manager. The vehicle driver presents the removable media, which was previously initiated by the field monitor, to the tower manager personnel located in the disposal site tower(s). The tower manager verifies the debris classification is appropriate (vegetative, C&D, mixed, etc. and manually revises, if needed), verifies vehicle(s) and driver information is correct, estimates and enters the load quantity into the HHU. The HHU will automatically extract the information recorded earlier on the smart card and add the information to the tower manager's HHU including the date, time debris arrives, site ID, GPS readings, load quantity and tower manager unique ID Code.
- F. All information regarding each debris load will be stored in the HHUs internal memory or on a separate, encryption protected removable media device. The debris load information will be uploaded to the City and Contractor databases. Once this information is recorded, the tower manager HHU will clear the removable media's debris data for the driver to re-use.
- G. The media will retain a running total of the quantity and type of debris hauled by a particular vehicle. All debris load information within the tower manager HHU will be retained until upload to the database has been accomplished and confirmed by authorized personnel. Direct access to data on the HHU will be restricted to personnel specifically authorized to do so by the City.

Functional Specifications and System Architecture

A. Ticket/Tower Managers – Personnel Registration, Administration and Management:

The system shall have the capability to manage user roles. The majority of the system users will be either ticket or tower managers. At a minimum, the system must have the following capabilities:

- 1) A means to create encryption protected electronic media with unique User ID, digital photograph, user roles;
- 2) Other identifying data;
- 3) Electronic registration of ticket/tower monitor;
- 4) Link designated ticket/tower personnel roles to a specific mission;

- 5) The ability to edit ticket/tower personnel roles i.e., create, update and delete;
- 6) Store ticket/tower personnel contact information relative to the mission;
- 7) Track and manage ticket/tower personnel role and status;
- 8) Assign and track equipment assigned to the user;
- 9) Reject invalid ticket/tower personnel credentials;
- 10) Reject invalid certification credentials;

B. Truck Certification: The system shall have the capability to record truck and trailer certification data. Truck certification is used to register authorized debris hauling vehicles and equipment. At a minimum, the following must be included:

- 1) A means of electronically registering authorized debris Contractor vehicles and equipment;
- 2) Link electronic registration to digital images identify mission and respective City;
- 3) Generate unique ID's for contractor vehicles and equipment;
- 4) Utilize uniform measurements e.g. feet and inches;
- 5) Capture vehicle volume;
- 6) Utilize industry standard equations for all volume calculations;
- 7) Capture drivers and certification team member unique identification number;
- 8) A means to create encryption protected electronic driver removable media with unique Truck ID, digital photograph, truck and/or trailer measurements, vehicle volume, and other identifying data;
- 9) Must depict image and other identifying data;
- 10) Must contain counter area for total cubic yards hauled;
- 11) Must employ anti-tampering mechanism;
- 12) Capability to recertify vehicles;
- 13) Recertified vehicles must be recorded in an audit table;
- 14) Certification data must be associated to authorized system user;
- 15) Reject media which are not associated with current event and applicant;
- 16) Capture vehicle audit records;
- 17) Create a printed certification record;

18) Administrative reporting capabilities.

C. **Right-of-Way (ROW) Debris Management:** ROW transactional data must be captured, stored, validated, audited, reported and transmitted to mission managers, haulers and applicants. At a minimum, the application must exhibit the following characteristics:

- 1) Allow creation of point of origin load data on encryption protected driver media when position is known and credentials have been authenticated;
- 2) Capture date and time and other relevant point of origin data;
- 3) Validate media is present in system and configured to receive data;
- 4) Designate debris type;
- 5) Designate debris location as Federal Aid or Non- Federal Aid;
- 6) Designate first pass and subsequent passes;
- 7) Write point of origin load data using encrypted storage algorithms;
- 8) Associate ticket/tower personnel credentials with point of origin load data;
- 9) Acknowledge successful card write via display status message;
- 10) Provide user configurable time option for GPS audit;
- 11) Detect current location using GPS and store data to secure memory location;
- 12) Provide capability to add digital image if debris is other than vegetative or C&D.

D. **Debris Disposal Site Management:** Completed ROW, and Per-unit point of origin transactions must be received at the approved disposal site. Transactions are not considered complete until they are processed thru the receiving applications. At a minimum, the system must provide the capability to:

- 1) Accept site configuration data at the beginning of each work day.
- 2) Dynamically configure receiving application based on site configuration data.
- 3) Display certification data and photo from driver smart card so that ticket/tower personnel can perform a field audit of truck/trailer to assure data matches certification and placard number.
- 4) Accept loads where:
 - a) Mission and applicant are valid;
 - b) Media authentication data is valid and unaltered;

- c) Media contains valid load data.
- d) Designate debris type;
- e) Record debris volume (based on unit of measure);
- f) Receive volume or per unit loads;
- g) Identify original load data;
- h) Identify duplicate load data;
- i) Configure number of hard copies;
- j) Create load data record in internal storage;
- k) Create backup copy of internal storage;
- l) Prepare driver media for next load;
- m) Increment driver smart card based on total CY counter value;
- n) Continuously calculate and present real-time disposal site statistics;
- o) Re-print load ticket data;
- p) Interface with durable outdoor printer;
- q) Preserve in its original state, then transmit daily transaction data;
- r) Associate ticket/tower personnel credentials with each received load.

E. Field Administrative Functions: The system must have the capability to perform administrative duties in the field. Requirements include the capability to edit user roles, verify vehicle audit information, display real-time collection volumes, and review ticket/tower personnel GPS audit logs. At a minimum, the system must provide the capability to:

- 1) Change ticket/tower personnel identification badge roles and responsibilities;
- 2) Review media total CY counter value;
- 3) Audit vehicle certification data;
- 4) Validate/Invalidate smart cards;
- 5) Reinitiate security sequence for ticket/tower personnel or media;
- 6) In tabular format, display the results of ticket/tower GPS audit files by limiting access to the internet data or by the Department secure server.

F. **Data Consolidation and Analysis/Reports Generation:** Transactional data must be summarized, validated, presented and audited to provide an overall status of mission performance. The system must facilitate billing, error reporting, performance tracking and graphical data preparation. At a minimum the Data Consolidation/Data Storage and Data Analysis/Reports tools must provide the capability to:

- 1) Accept transactional data sets from multiple debris location systems;
- 2) Recognize multiple mission/applicant configurations;
- 3) Grant access to authorized authenticated users or processes;
- 4) Contain a master record of:
 - a) Roles and responsibilities;
 - b) Ticket/tower personnel credentials and other data;
 - c) Certification credentials and other data;
 - d) Mission data;
 - e) Applicant data;
 - f) Geospatial data;
 - Street centerlines
 - City outlines
 - Population and demographic
 - Elevation
 - Wetlands delineation
 - Historic and Environmentally Sensitive areas
 - Debris work zones
 - Parcel data
 - Land use
 - FEMA flood zones
 - g) Graphically depict:
 - Load locations by contractor
 - Load locations by subcontractor
 - Load locations by driver

- Load locations by ticket/tower personnel
 - Load locations by date range
 - Load locations by zone
 - Load locations by municipality
 - Load locations by applicant
 - Load locations by mission
 - Load locations by debris type
 - Load locations by disposal site
 - Load locations by federal, state and private roads
 - Load locations by land use
 - Load locations by disposal site
- 8) Thematic mapping techniques to distinguish different data by color and/or symbol
- 9) Identify data attributes for a single point of data
- 10) Select one or many points of data
- 11) Calculate operational efficiency statistics such as:
- Trip turnaround time
 - Trip distance to disposal site (straight line projection sorted by 0 -15 miles, 16– 30 miles, 31 – 60 miles and greater than 61 miles)
 - Average container fill percentage
 - Average tower manager load call
 - Load call trend data e.g., by tower managers, contractor, sub-contractor, driver, etc.
- 12) Dynamically configure user interface in response to point data selection to limit user authorities
- 13) Multiple data selections generate tabular data reports
- 14) Filter mechanisms to highlight geospatial data
- 15) Control data access using role based security
- 16) User interface and access to underlying system data must dynamically configured at run time through the presentation of appropriate user credentials

- 17) Manage data ownership
- 18) Provide access based on security role model
- 19) Identify and distribute "owned" transactional datasets to limit internet access to the website data to view only your data
- 20) Prevent distributed data from being reprocessed for billing purposes
- 21) Identify billing data sets based on parameters such as:
 - Time/Date
 - Contractor/Subcontractor
 - Debris type
 - Debris disposal method (haul-in, reduction, open burn, incineration, haul out, leave in place, etc.)
 - Haul distance
- 22) Route billing data sets via defined and customizable workflow rules
- 23) Approved billing data sets
- 24) Communicate general event status e.g.:
 - Total CY hauled (by debris type);
 - Total CY by disposal site;
 - Total CY by contractor/subcontractor;
 - Total CY by work zone/sector;
 - Total CY by municipality;
 - Total CY by Federal, state and private roads;
 - Total CY by certified vehicle;
 - Number of vehicles utilized;
 - Number of ticket/tower personnel resources assigned;
- 25) Manage user roles, responsibilities and passwords
- 26) Prevent modification to original data by unauthorized or unauthenticated users
- 27) Insert audit records into audit tables for all insertions, modifications, and deletions to original data.

G. **Field Architecture:** The field based system must be characterized by the following general statements of direction with respect to construction, operability, supportability and security. At a minimum, the system must:

- 1) Require user authentication credentials;
- 2) Display current version at application start-up;
- 3) Synchronize with Greenwich Mean Time (GMT) for all date/time fields;
- 4) System must utilize location specific configuration data to initiate a warm start sequence for global positioning system;
- 5) System must remain in a ready state by default;
- 6) Acknowledge successful card write via display status message;
- 7) Create identification structures which utilize encryption technologies;
- 8) Employ anti-tamper and anti-tearing methods and technologies;
- 9) Where applicable, utilize 3 DES data encryption technologies to protect data;
- 10) Perform validation and checksum (a running production total of cubic yards or appropriate payment capacity) stored on each debris vehicle's removable media).

H. **Back-office Architecture:** At a minimum, the back-office applications must be characterized by the following general statements of direction with respect to construction, operability, supportability and security.

- 1) Utilize relational database technology;
- 2) Employ geospatial analysis tools for data visualization;
- 3) Enable audit ability for:
 - Data insertion;
 - Data modification;
 - Data deletion;
- 4) Prevent field and row level data deletion;
- 5) All access to data must be controlled;
- 6) Store certification and other identification data using encrypted relational technology;
- 7) Reside in a secure internet environment;

- 8) Preserve base transactional data in its original state prior to processing or consolidation with other data.
 - 5) Initial Startup Procedure For Debris Removal – Debris missions are critical to emergency response and the Contractor should be adequately prepared to respond.
- I. **Reporting:** The City requires the Contractor to provide daily status reports, unless otherwise specified, of the debris removal operations, preparation of interim reports (as directed by the City), as well as a final report of the debris removal operations.
- 1) The daily status report shall include at a minimum: the daily cubic yards/tons collected by material and by program (FHWA-ER First Pass, First Pass on non-Federal Aid roadways, second and subsequent passes on all roadways), cumulative totals in cubic yards/tons by debris type, number of debris removal crews and equipment operating, number of debris monitors in field, cubic yards/ton by debris type hauled to final disposal and location of final disposal, and total cubic yard/tons hauled to recycling or salvage facilities.
 - 2) An interim status report may be required at the discretion of the City. A final report covering the history of the operations, the locations temporary debris sites used, remediation and site closure activities, including any environmental reports or authorizations generated; and the locations of final disposal sites and permits, recycling facilities and salvage facilities used during operations. The report may include identification of weakness in the operations and recommendations for future debris activities.
- J. **Permits:**
- 1) Assist the City with any permit applications and coordination with environmental agencies.
 - 2) Assist the City with any pre- or post-sampling of soil or groundwater.
 - 3) Monitor compliance by the contractors to any permit requirements.
- K. **Meetings and Communication:**
- 1) Conduct daily meetings with the City and the Debris Removal Contractor.
 - 2) Conduct field meetings, as needed.
- L. **Invoicing:**
- 1) Ensure all contract quantities for both the contractors and monitors are

documented and recorded according to current Federal requirements, including but not limited to FHWA-ER actual costs incurred (cradle to grave) for work conducted on First Push and First Pass Federal Aid roadways, including time at disposal sites estimating loads on incoming and outgoing debris loads.

- 2) For Non-Federal Aid eligible roadways FEMA PA program actual costs incurred (cradle to grave) for work conducted on non-Federal Aid eligible roadways First Push, First Pass, and second and subsequent passes. Monitor's invoices must delineate between hours spent on FHWA vs. FEMA reimbursed tasks.
 - a. Maintain a database of all contract quantities and perform contractor invoice verification for the City.
 - b. All invoices shall be submitted in an acceptable format to the City in an electronic and hard copy format with daily reports as supporting documentation. The invoices must be submitted in accordance with the Contractor Invoice Transmittal System (CITS) procedures and other federal, state and local rules, regulations and laws.
 - c. Invoices shall be submitted on a monthly basis to the City.
 - d. Final invoice will be submitted to the City not later than the 30th day following final acceptance of the individual task of as requested by the City.

Proposer Information

Firm Data

Legal Name: Tetra Tech, Inc.

Company Type: Corporation

Incorporation Date: 02/04/1988

State of Incorporation: Delaware

Tax Payer ID: 95-4148514

Business Address: 2301 Lucien Way, Suite 120, Maitland, FL 32751 | Fax: (321) 441-8501

Website: tetrattech.com

Technical representative:

Ms. Anne Cabrera

Phone: 954-559-4951

Email: anne.cabrera@tetrattech.com

Contractual representative:

Ms. Betty Kamara

Phone: 407-803-2551

Email: betty.kamara@tetrattech.com

Authorized Negotiator:

Mr. Jonathan Burgiel

Business Unit President/Tetra Tech Disaster Recovery

Phone: 407-803-2551

Email: jonathan.burgiel@tetrattech.com

Corporate Officers

A list of names of all corporate officers is listed below.

Title	Name
Chairman, Chief Executive Officer, and President	Dan L. Batrack
Executive Vice President, Chief Financial Officer	Steven M. Burdick
Executive Vice President, Operations and President, Commercial/International Services Group (CIG)	Leslie L. Shoemaker
Senior Vice President, Chief Engineer and Corporate Risk Management Officer	William R. Brownlie
Senior Vice President, Corporate Controller and Chief Accounting Officer	Brian N. Carter
Senior Vice President, Chief Information Officer	Craig L. Christensen
Senior Vice President, General Counsel and Secretary	Preston Hopson
Senior Vice President, Corporate Administration	Richard A. Lemmon
Senior Vice President, Human Resources and Leadership Development	Kevin P. McDonald
Operational Leadership: President, Commercial Account Management Division	Derek G. Amidon
Operational Leadership: President, Government Services Group and President, U.S. Government Division	Roger R. Argus
Operational Leadership: President, Global Development Services Division	Jan K. Auman
Operational Leadership: President, Asia Pacific Division	Urs B. Meyerhans
Operational Leadership: President, U.S. Infrastructure Division	Mark A. Rynning

Qualifications of Key Team Members

Senior Management Team

Our senior management team will provide expert oversight and assistance at critical junctures and is prepared to assist the project management team for the duration of any disaster recovery operation. These individuals bring decades of disaster debris monitoring and reimbursement expertise.

- **Mr. Jonathan Burgiel** has 31 years of experience in solid waste and disaster recovery. His disaster-related work has included serving as principal in charge of over 30 projects, helping clients throughout the country prepare for, respond to, and recover from natural and human-caused disasters. Mr. Burgiel has provided senior management leadership to various communities following Hurricane Maria (Puerto Rico), Hurricane Irma (Florida and U.S. Virgin Islands), Hurricane Harvey (Texas), Hurricane Matthew (Florida and Richland County), Historic 1,000 Flooding Event (South Carolina), Hurricane Sandy (New Jersey Department of Environmental Protection and State of Connecticut), Hurricane Isaac (State of Louisiana), Hurricane Katrina (Residential Demolition Program City of New Orleans, LA), Hurricane Ike (Harris County, TX), and Hurricanes Katrina and Wilma (Miami-Dade County, FL), to name a few.
- **Mr. Ralph Natale** has overseen response to some of the country's largest debris-generating disasters. He is an expert in FEMA Public Assistance (PA) Grant Program reimbursement policies and has administered nearly 100 projects in his 13-year career. This includes managing and documenting the removal of over 16 million CYs of debris and 895,000 hazardous trees totaling over \$470 million dollars of reimbursed invoices. He has served as a debris specialist and grant consultant for state and local governments, including for the State of Connecticut Emergency Operations Debris Task Force following Hurricane Irene and Winter Storm Alfred and the City of New Orleans, Louisiana, following Hurricane Isaac. He currently serves as principal in charge for several of the firm's response efforts in California following the devastating fires and for 38 communities following Hurricane Harvey in Texas.
- **Ms. Anne Cabrera** has worked nationwide on numerous major post-disaster activations since Hurricane Wilma in 2005. She has served in a variety of roles focusing on reimbursement for more than \$2 billion from the FEMA. Ms. Cabrera has worked on behalf of cities and counties throughout the United States and is a highly regarded expert in the debris management industry. In addition to her work with post-disaster recovery operations, Ms. Cabrera has worked with a number of clients on their longer-term financial recovery, including serving as a technical resource to clients during implementation of the FEMA PA grant program and other federal grant programs and assisting in the preparation, development, and review of FEMA PA project worksheets (PWs) for disaster-related activities, state appeals, and close out processes.
- **Mr. Jeff Dickerson** has more than 20 years of experience in program management and information technology and is the principal system architect of our automated debris management system (ADMS), RecoveryTrac™. Mr. Dickerson has managed numerous large disaster response operations with over 1,000 field monitors, coordinated the operation of 24-hour data processing centers (some with nearly 100 personnel), and provided technical support for a debris management database to track over 1,000 trucks and the documentation for over 5 million CYs of debris brought to clients' debris management sites. Mr. Dickerson has led deployment and logistics efforts for some of the firm's largest debris monitoring efforts. Most recently, he oversaw the deployment of over 4,000 field units to over 100 clients following Hurricanes Harvey, Irma, and Maria.
- **Mr. Oliver Yao** has over 10 years of disaster recovery experience and has supported response efforts to some of the largest disasters to affect the United States, including Hurricanes Katrina, Ike, and Sandy. Mr. Yao is responsible for the operational oversight of field projects, which includes ADMS implementation, logistics management, safety protocols, and senior management of data and reimbursement support. Mr. Yao has developed a team of seasoned data managers trained on the standard operating procedures he has developed to support project closeout and audit. Mr. Yao is a leading subject matter expert in reimbursement documentation and closeout audit support. In addition, Mr. Yao has assisted numerous local governments with FEMA appeals following Hurricanes Charley, Frances, Jeanne, and Wilma.
- **Mr. John Buri** is a versatile emergency management, disaster mitigation, response and recovery, and grant management professional with 16 years of experience. Mr. Buri has provided senior management oversight on

22 major disasters declarations for over 100 clients since 2007, representing over \$3 billion in disaster-related grants. He has responded to numerous large-scale activations and engages with FEMA and state regulatory agencies and debris contractors in addition to providing FEMA PA consulting for tasks and activities associated with each disaster recovery operation. Mr. Buri also is familiar with FEMA Hazard Mitigation Assistance, HUD CDBG-DR and disaster funding strategies for local and state governments.

- **Mr. Dick Hainje** serves as a senior advisor and the former administrator of FEMA Region VII, where he led the region through 60 presidentially declared disasters. Mr. Hainje was the director of operations for Hurricane Charley and was responsible for the entire Florida operations division, which at the time was the largest deployment in FEMA's history. His extensive experience working with senior first responders as well as local, state, and federal elected officials during times of crisis has included providing full briefings to the president of the United States five times at the scene of major disaster operations. He was responsible for creating a long-term community recovery process for FEMA Region VII, which provides heavily impacted communities the opportunity to go through a FEMA-sponsored planning process after a catastrophic incident. Following Hurricane Katrina, Mr. Hainje was asked by Secretary Chertoff to serve as the deputy Principal Federal Official for the Mid-Atlantic States, where he was involved with every aspect of preparation for all of the states from Georgia to Delaware, including leading major hurricane preparation exercises in FEMA Regions III and IV.

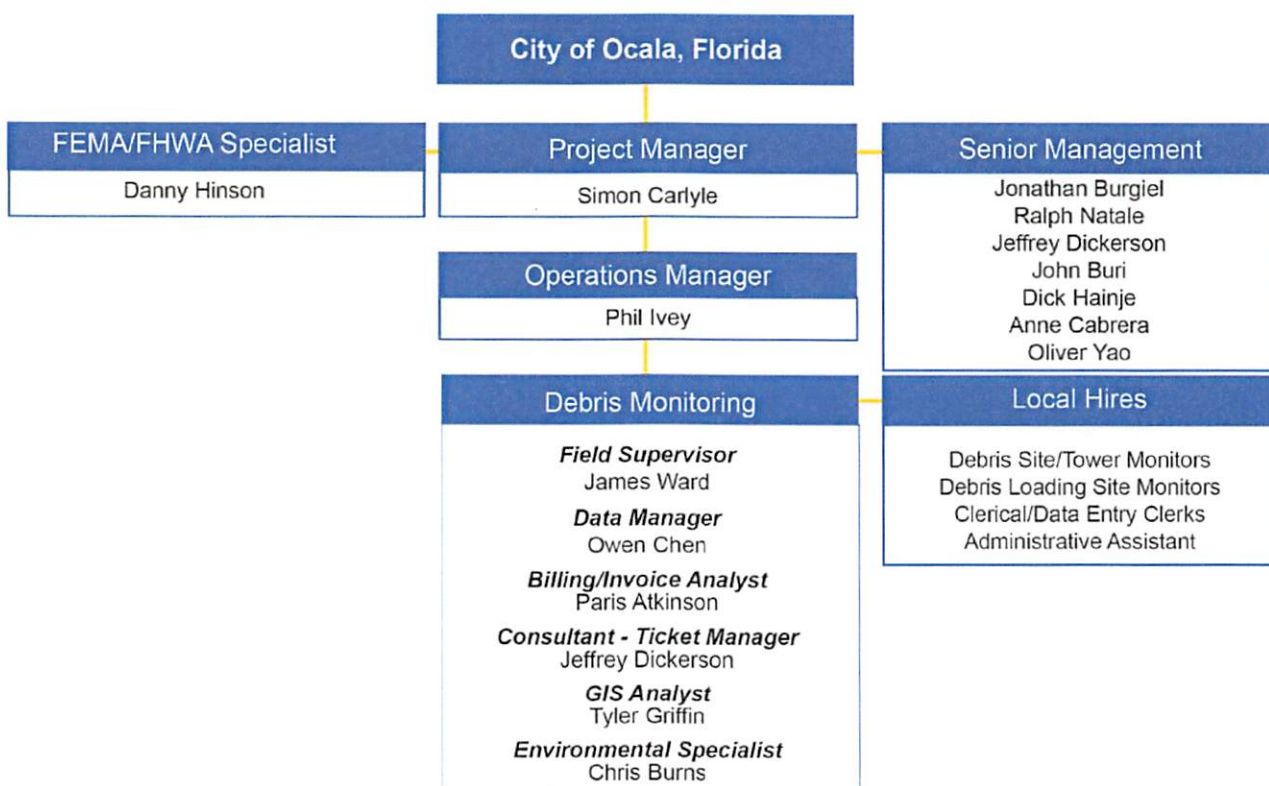
Project Management Team

In addition to our senior management team, our dedicated project management team consists of disaster recovery professionals who are uniquely familiar with the policies, procedures, and requirements associated with providing disaster recovery services. ***Tetra Tech's staff members constitute an integrated team with unparalleled skills and experience that is uniquely qualified to manage the debris monitoring operations.***

Name	Summary of Qualifications
Simon Carlyle <i>Project Manager</i>	<ul style="list-style-type: none"> • Over 12 years of experience responding to over 20 disasters; directly involved in all phases of disaster recovery efforts, with significant knowledge of federal, state, and local regulations. • Provides clients with thorough annual training meetings and constant communication at times of potential storm impact • Works with client staff to review and provide consultation during development of client's FEMA-approved Disaster Debris Management Plans.
Phil Ivey <i>Field Operations Manager</i>	<ul style="list-style-type: none"> • Over 10 years of experience overseeing recovery operations on some of the country's largest debris-generating disasters. • Has worked in communities stretching from the Gulf Coast region to upstate New York providing disaster recovery operations to ensure compliance with all FEMA and other reimbursement agency regulations. • Provides FEMA-related guidance during times of activation based on extensive experience managing disaster recovery efforts.
James Ward <i>Field Supervisor</i>	<ul style="list-style-type: none"> • Over 7 years of experience providing program management services for hazard mitigation, emergency preparedness, response and recovery. • Supported clients in the states of Louisiana, Texas, California, Florida, South Carolina and South Dakota.
Danny Hinson <i>FEMA/FHWA Specialist</i>	<ul style="list-style-type: none"> • Over 42 years of experience. • Has previously managed presidentially declared disaster responses, developed and managed operating budgets, and various emergency management Urban Area Security Initiative (UASI) and State Homeland Security Grant Program (SHSGP) grants, and established a National Incident Management System / Incident Command System (NIMS/ICS) training program.
Owen Chen <i>Data Manager</i>	<ul style="list-style-type: none"> • Experienced quality control and data manager with over 4 years of experience. • Areas of expertise include geographic information systems, documentation management, QA/QC, database management, and reporting.

Name	Summary of Qualifications
Chris Burns <i>Environmental Specialist</i>	<ul style="list-style-type: none"> • Over 15 years of experience in the environmental field. • Responded to over 400 oil spills, numerous wildfires, and other disaster incidents. • Experienced in the collection of asbestos samples and is versed in the 2009 asbestos framework for collection asbestos samples, and currently manages five asbestos sites.
Paris Atkinson <i>Billing/Invoice Analyst</i>	<ul style="list-style-type: none"> • Over 12 years of data management experience in the disaster recovery field. • Extensive experience on all aspects of program data management up to and including project closeout and post-closeout audit support. • High-level knowledge and understanding of federal grant programs, including the FHWA Emergency Relief (ER) program and FEMA PA program.
Jeff Dickerson <i>Consultant (Ticket Manager)</i>	<ul style="list-style-type: none"> • Has over 20 years of experience in program management and information technology. • Principal system architect of our ADMS, RecoveryTrac™.
Tyler Griffin <i>GIS Analyst</i>	<ul style="list-style-type: none"> • Has over 15 years of experience in executive management reporting and analysis. • He is a talented analyst with a strong background in the transportation industry.

Exhibit B-5 shows our proposed project team organizational structure. Résumés have been included at the end of this section.



Resources/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. All of the resources and equipment listed below is certified to be in working condition and serviceable for field use. Exhibit B-6 lists all available equipment readily available upon activation.

Exhibit B-6: Resource List

FIELD DOCUMENTS* CURRENTLY IN THE WAREHOUSE

ADMS Handheld Units	1,400
Time and Materials Forms	9,446
Truck Certification Forms	4,500
ADMS Ticket Stubs	530,000
Haul Out Ticket Stubs	50,000
Placards	4,500

KITS

Project Manager Kits (1 per 100 monitors)	40
Project Coordinator Kits (1 per 100 monitors)	20
Human Resources Kits (1 per 100 monitors)	40
Collection Monitor Kits (1 per 25 monitors)	90
Disposal Monitor Kits (1 kit per disposal site)	40
Leaner/Hanger/Stump Kits (1 per 50 monitors)	40

EQUIPMENT**

Laptops	250
Mifi (Mobile Wireless)	250
High Speed Scanners	35
Printers	45
Mobile Command Office	3
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.

Staffing Plan

Staffing Plan

The following table lists our proposed staff and their availability in the event of an activation. We have also provided the point of contacts authorized to give and support information both in writing and oral presentation on behalf of Tetra Tech.

Name	Availability
Simon Carlyle <i>Project Manager</i>	100%
Phil Ivey <i>Field Operations Manager</i>	100%
James Ward <i>Field Supervisor</i>	100%
Danny Hinson <i>FEMA/FHWA Specialist</i>	80%
Jeff Dickerson <i>Consultant (i.e. Ticket Manager)</i>	80%
Tyler Griffin <i>GIS Analyst</i>	50%
Paris Atkinson <i>Billing/Invoice Analyst</i>	50%
Owen Chen <i>Data Manager</i>	100%
Chris Burns <i>Environmental Specialist</i>	50%

Authorized to Give and Support Information:

Ms. Anne Cabrera
Deputy Director, Post Disaster Programs
2301 Lucien Way, Suite 120, Maitland, FL 32751
954-559-4951 Mobile | 321-441-8501 (f)
anne.cabrera@tetrattech.com

Mr. Ralph Natale
Director, Post Disaster Programs
2301 Lucien Way, Suite 120, Maitland, FL 32751
(407) 580-8184 Mobile | 321-441-8501 (f)
ralph.natale@tetrattech.com

For more information on our personnel please refer to [Section B – Qualifications and Experience](#) for our qualifications of proposed senior management and project management team members including resumes and organizational structure.

Approach and Methodology

Project Understanding

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 City of Ocala's (City) request for proposal (RFP) and can assure the City that we have the extensive experience, understanding, and knowledge of the City to successfully perform all aspects of the scope of work. 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. Our project team will continue to dedicate themselves to the City's needs throughout the year, not just during times of activation.

Ability to Handle Multiple Contractual Obligations

As a United States Army Corps of Engineers (USACE) contractor for large-scale debris removal missions and a firm with multiple statewide contracts, Tetra Tech prepares and responds to multiple contractual obligations routinely by planning, implementing, and updating a concept of operations plan (CONOPS). The Tetra Tech CONOPS uses the Incident Command System (ICS) structure, which allows the project team to scale as needed, coordinate responses, and adapt an organization structure to match the needs and complexities of projects. The Tetra Tech CONOPS also provides the project team with established common processes for managing resources, timelines, schedules, problem resolution, and tasks.

In addition to a strong CONOPS, to successfully manage multiple contracts, Tetra Tech reviews its projected workload and regularly assesses the firm's staffing requirements. The assessment of staff and resources is tested annually during a firm-wide tabletop exercise. The firm-wide tabletop exercise tests our readiness while also identifying areas for improvement. Topics that are continually addressed and refined are managing logistical deployment resources, recruiting, automated debris management system (ADMS) implementation, and changes necessary to comply with current Federal guidance. Some positions within the Tetra Tech ICS organization structure are responsible for field level responsibilities and some are an overarching support function for the projects needs. The Tetra Tech ICS organizational structure also contains subcommittees or task forces who are assigned specific tasks or support the resolution of problems identified.

Disasters and Simultaneous Contracts

- Hurricane Irma: 58
- Hurricane Harvey: 31
- Hurricane Matthew: 35
- Hurricane Matthew: 35
- Winter Storm Pax: 7
- Superstorm Sandy: 13
- Hurricane Isaac: 5
- Winter Storm Alfred: 19
- Hurricane Irene: 22
- Hurricane Ike: 80

Operational Schedule

Based on Tetra Tech's understanding of the City and their needs, we have developed a draft mobilization schedule with key project management tasks in chronological order. The timeline is based on a typical activation; however, Tetra Tech is prepared to work with the City to adjust the timing of the specific elements below to meet the City's needs.

Prior to an event with warning (such as a hurricane), our team will begin monitoring the landfall of any tropical system at H-96 and will coordinate via conference call with the City. Following an event without warning (such as tornadoes, or flooding), Tetra Tech will begin response at H-0.

Exhibit D-1: Disaster Debris-Generating Event Operational Plan

Time	Task	Deliverables/Milestones
Preparedness		
Pre-event (normal conditions)	Meet with the City to review plans and documents	<ul style="list-style-type: none">• Conduct annual pre-event meeting with the City and debris contractor• Review the City's disaster recovery contracts for FEMA compliance• Update critical documents and files, including any GIS files
H-96	Review capabilities and resources	<ul style="list-style-type: none">• Contact the City and initiate daily conference call• Determine resource requirements from debris model• Review the City's emergency policies and contracts• Establish contact with the City's debris hauler and ensure Tetra Tech has the most up to date copy of the debris hauler contract.
H-72	Execute responsibilities and activate contracts	<ul style="list-style-type: none">• Review possible critical areas of concern, hospitals, major transit systems, historic districts, environmental issues, and critical infrastructure• Review protocols for private property, gated communities, and public drop-off sites• Review debris management site (DMS) locations and follow up with the Florida Department of Environmental Protection (FDEP) on permitting procedures• Estimate equipment requirements and DMS capacity to haul and stage debris• Prepare ADMS technology for mobilization
H-48	Monitor storm track and continue preparations	<ul style="list-style-type: none">• Conduct regular meetings with City staff as requested• Confirm staging location and begin mobilization of resources• Mobilize project assets and begin base camp coordination and logistics (food, water, housing, etc.) with the City and Tetra Tech headquarters (if necessary)• Review list of priority roads and the operational plan• Obtain GIS files for municipalities that the City will assist with debris removal• Continue to update and gather updates from the City's debris hauler
H-24	Prepare final reports	<ul style="list-style-type: none">• Save all critical documents and files to the network drive, USB drive, and laptop hard drive• Certify emergency road clearance equipment (in coordination with the City's debris hauler)• Determine emergency road clearance priorities
H-0	ARRIVAL OF NOTICE EVENT/INITIATE RESPONSE TO NO-NOTICE EVENT	
Response		
H +24	Emergency push	<ul style="list-style-type: none">• Receive notice to proceed with not to exceed• Begin emergency push• Maintain time and materials (T&M) logs for push equipment• Coordinate with the City to conduct preliminary damage assessments and road closures (if requested)• Supervisors report to pre-designated locations and prep staff on project• Begin establishing ADMS infrastructure• Begin recruiting and training monitors, project coordinators, and data staff• Initiate opening of DMS locations• Follow up with FDEP on debris permits (if required)• Work with the City to establish public information protocols to respond to concerns and comments
H +48	Emergency push/ damage assessment	<ul style="list-style-type: none">• Continue emergency push• Continue preliminary damage assessment• Develop debris cost estimate required for presidential disaster declaration• Develop operational plan for disaster-specific issues• Refine health and safety plan for disaster-specific issues
H +72	Disaster debris vehicle certification/	<ul style="list-style-type: none">• Begin hauling truck certification• Install ADMS tower monitor infrastructure

Time	Task	Deliverables/Milestones
H +96	site preparation	<ul style="list-style-type: none"> • Train monitors on policies, ADMS, and safety • Open public drop-off sites as requested
	Begin debris collection monitoring	<ul style="list-style-type: none"> • Assign monitors to trucks • Assign supervisors to monitors • Hold morning and afternoon meeting with City staff and debris hauler • Implement QA/QC procedures
• Recovery		
Week 1+	Right-of-way (ROW) debris collection monitoring	<ul style="list-style-type: none"> • Continue ROW collection • Address household hazardous waste (HHW) issues (if critical) • Issue daily reports/GIS maps • Hold daily meetings with the City, hauler, and/or State/FEMA as required • Staff citizens debris management hotline (if requested) • Define supplemental programs required (private roads, HHW) and prepare eligibility request
Week 1+	Data management and invoice reconciliation	<ul style="list-style-type: none"> • Provide ADMS reports and real-time monitoring access • Establish client GeoPortal to provide insight into project progress • Review truck metrics provided by RecoveryTrac™ • Initiate weekly reconciliation • Initial payment recommendations with retainage
Week 1+	Reimbursement support/grant administration (FEMA, NRCS)	<ul style="list-style-type: none"> • Prepare damage/cost estimates • Compile supporting documentation (debris permits, debris contracts, etc.) • Liaise with FEMA Region 4, Florida Division of Emergency Management (FDEM), U.S. Army Corps of Engineers (USACE), etc.
Week 2+	Special projects (if required)	<ul style="list-style-type: none"> • Waterway debris removal • Private property debris removal (PPDR) • Public drop-off sites • HHW • Mud/silt/sand removal (from storm drains, ditches, etc.) • Identify areas of operational concern and make disaster-specific recommendations to FEMA to improve efficiency
Week 3+	Financial recovery assistance staff engaged (if requested)	<ul style="list-style-type: none"> • Facilitate kickoff meetings with primary stakeholders • Draft a PA work plan • Conclude/review preliminary damage assessments • Gather documentation for project worksheet (PW) development • Identify opportunities for mitigation • Conduct site visits
Project completion	Document turnover/closeout	<ul style="list-style-type: none"> • Final reconciliation • Retainage release • Release hard copy files • Provide electronic database • Assist with PW development • Assist the City with long-term reimbursement • Audit assistance • Appeal support if necessary

Time and Materials

The emergency push period begins immediately following an event. Tetra Tech will work with the debris removal contractors, in coordination with City crews, to first clear the blocked roadways for emergency vehicle passage to critical facilities. Tetra Tech is prepared to assist during the push period by providing the following services:

- Documenting blocked roads that require immediate clearance

- Administering the sign-in and sign-out of labor and equipment to track T&M charges
- Helping staff maintain maps or databases to track road clearance progress and other essential tasks, as requested
- Maintaining documentation for reimbursement of emergency push work

On-Boarding/Hiring Approach

Immediately following the impact of a known event, Tetra Tech will establish Human Resources (HR) hiring centers in the field throughout the region in the affected areas. The hiring center provides efficient hiring and training processes that meet the stringent Tetra Tech field operation requirements and any specific requirements of our clients. The hiring center is designed to be quickly mobilized, transported, and set up to allow near immediate response for field staffing needs. The hiring center is typically staffed by three trained HR representatives and can process hiring of hundreds of staff per day. The hiring center can be quickly scaled to meet the most demanding needs for staff. The hiring center advertises locally and reaches out to local workforce centers to utilize persons seeking employment in the community.

Vehicle Certification

Tetra Tech has a proven vehicle certification procedure that complies with FEMA guidelines to maximize reimbursement for our clients. Tetra Tech will certify all trucks used in an activation via the mobile application included in our ADMS technology. Benefits of using the mobile truck certification application include **electronic volume calculations**, instant upload to the RecoveryTrac™ database to allow a QA/QC check to immediately verify the truck certification is calculated correctly, and automated photo matching of truck and driver photographs to the truck. The truck certification application allows us to complete truck certifications in **30 percent less time than with a paper-based system**.

Exhibit D-2: Truck Audit Report

Our disaster debris vehicle certification procedure includes the following:

- Automated truck certification form, which includes the latest FEMA guidelines on truck certification documentation and volume calculations and a bar code for automated ticket scanning
- Special vehicle notations on the truck certification form and vehicle placard, which inform tower monitors of sideboards, tailgates, or other modifications, thus discouraging debris removal contractors from fraudulently altering vehicles after certification
- Photographs of vehicles, vehicle cavities, and drivers
- Periodic spot checks and recertification of trucks to identify trucks altered after initial certification
- Visual inspections of motor vehicle compliance with support from a City staff member. This can be done at the time of inspection or through our QC in real-time from an office environment.

Monitoring the Removal of Debris

Tetra Tech deploys loading site monitors to monitor the activities of each debris removal crew. Loading site monitors will document the initial step when tracking debris from collection to disposal. RecoveryTrac™ load tickets document where and when debris is collected along with other required information. Tetra Tech loading site monitors will also mark where every load of debris is collected using the RecoveryTrac™ waypoint system. This information can be used by multiple entities (the City, municipalities that may fall under the City's program, debris hauler, etc.) to verify completeness and maximize project schedule.

The bullets below highlight various aspects of Tetra Tech's debris removal monitoring program.

Operations. Field collection monitors report to a staging location prior to the field operations beginning for a briefing to be given by the project manager or field supervisors and the distribution of safety gear (for example, caution lights or safety vests), map books, and ADMS handheld units/debris tickets.

Deployment. A field monitor is assigned to one loading unit.

Field Supervision. Responsibilities of the field supervisor include training, QA/QC of work being performed, verifying load ticket accuracy, and responding to field monitor and debris contractor issues in the field.

Responsibilities. Field monitors will verify the proper loading of debris into the debris removal contractor's certified loading container. Monitors will document that contractors and their subcontractors adhere to local, state and federal regulations and that they are working safely and efficiently. Field monitors often notice inconsistencies with debris removal procedures and submit them to their supervisors. If a field monitor feels there is justifiable need to stop operations, the monitor is instructed to refrain from issuing a ticket until the debris hauler supervisor and a Tetra Tech supervisor can be called in to determine the appropriate action.

Work Scheduling. Tetra Tech will coordinate with 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 hauler release the next day's schedule by 5 p.m. so that the appropriate number of field monitors is dispatched.

Daily Closeout. At the close of operations each day, all collection and disposal monitors will report to the staging area to clock out and turn in their ADMS handheld units.

Contractor Completion. Tetra Tech will assist in completing the project efficiently and within the time lines set forth in the RFP. There are many aspects of debris removal that are outside of the monitoring firm's control but will still need to be managed. Tetra Tech will assist with managing these goals, including the following:

- The ability of a debris contractor to respond with sufficient equipment will affect the proposed schedule. Tetra Tech will provide burn rate analysis to verify the proper equipment is being provided. This will be adjusted as more accurate debris estimates are available.
- Invoices by the contractor need to be produced in a timely manner so that Tetra Tech can reconcile in a timely manner. Tetra Tech will work to make the contractors aware of an appropriate time frame for invoicing and will communicate with the City if deadlines are not being met.
- Deadlines for collecting debris are set to correspond with the work schedule that is based on estimated work to be completed. As damage estimates become more accurate (as is typical throughout the process), Tetra Tech will work with officials to adjust the timeline appropriately to reflect the changing estimates.

Debris Management Site Monitoring

DMS locations are approved areas where debris contractors can truck eligible debris so it can be further separated or processed before being hauled to a final disposal facility. Tetra Tech can assist the City in obtaining necessary permits or approval of designated DMS as requested by the City. Debris is quantified by volumetric load calls. Towers are set up, and ingress and egress patterns are established. Each site will be restricted to a maximum capacity that will need to be monitored. Tetra Tech will provide a minimum of two monitors per site, which may increase or decrease based on need. The Tetra Tech monitors will be prepared to work a 12–14 hour

shift, 7 days per week. Construction and demolition debris may be directly hauled to a final disposal facility. Specific documentation kept by DMS monitors includes the following:

Load Ticket. The load ticket is used to document debris removal.

Disposal Monitor Log. The disposal monitor log is used as backup documentation (and serves as a fail-safe if any documentation is missing).

Scale Manifest Tickets. If the debris hauling contract payment method is weight-based, tickets generated by the existing scales at the City's DMS will be digitized and cataloged by Tetra Tech.

Incident Report. The incident report is used to document anything out of the ordinary while monitoring at the DMS, including property damage, arguments, unsafe practices, and personal injury.

Photographic Documentation. Tetra Tech disposal supervisors will photograph a DMS frequently in order to create a visual timeline of the site.

QA/QC of Field Tickets. DMS monitors must review and correct errors made by loading site monitors in the field.

Due to the critical nature of load calls and the impact they can have on a project, Tetra Tech has developed a thorough Disposal Monitor Training Program that will be reviewed by every disposal site monitor for consistency in load calls. After a load call has been made, the disposal site monitor will issue the truck driver a printed Tetra Tech ADMS ticket.

Quality Assurance/Quality Control Program

Implementing comprehensive QA/QC protocols and technologies is critical to a debris monitoring effort. Proper QA/QC protocols reduce the amount of work associated with back-end data management, reduce invoice reconciliation timeframes, prevent fraud, and establish a sound dataset for future audits. Throughout years of experience assisting local governments with recovering from disasters and the subsequent audits, Tetra Tech has developed industry-leading QA/QC standards and protocols. The use of our ADMS technology expedites the QA/QC process and virtually eliminates ticket errors that can result from traditional manual (paper and pen) debris monitoring operations. For example, monitors no longer have to carry a GPS device and manually write in GPS coordinates – this is automatically logged. Due to the real-time information collected by our ADMS technology, Tetra Tech can establish a virtual command center to audit project information during the collection process and correct issues as they appear.

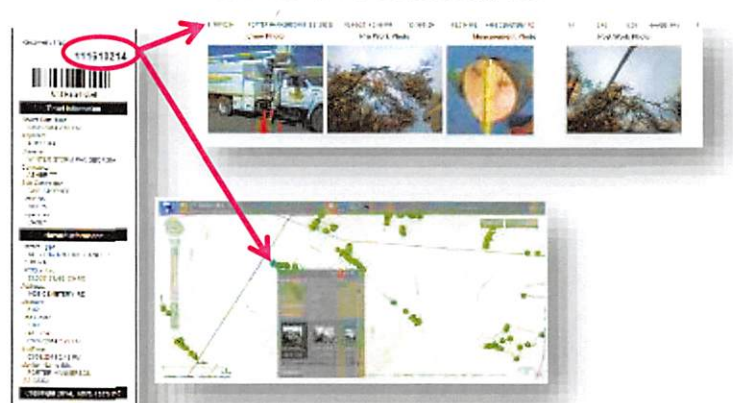
The use of our ADMS technology expedites the QA/QC process and virtually eliminates ticket errors that can result from traditional manual (paper and pen) debris monitoring operations.

For example, our ADMS technology provides reporting and tracking on missed debris piles. This allows Tetra Tech to improve our responsiveness to resident complaints and provide real-time tracking tools to manage removal of these missed piles to the County.

Hazardous Tree Removal

Established FEMA guidance 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 can utilize RecoveryTrac™ ADMS technology to document all hazardous tree and hanger removal operations. Additionally, Tetra Tech ADMS technology and software is designed to manage photo documentation by compressing

Exhibit D-3: Real-Time Ticket Report



Daily Reporting Metrics

- Daily operations cost accounting
- Debris contractor metrics and operations time by truck
- Daily load tickets and cumulative volumes
- Daily reporting of ongoing work and completed areas of debris removal activities
- Fiscal reports, including:
 - Cost of monitoring operations (weekly or monthly)
 - Hauling cost data (weekly or monthly)

Delta Removal Status Report

NEW ORLEANS

UNOFFICIAL NAME: FORM COLLECTION

Monday, July 22, 2019

Delta Removal by Zone

Zone	Total Count
1	101
2	100
3	100
4	100
5	100
6	100
7	100
8	100
9	100
10	100
11	100
12	100
13	100
14	100
15	100
16	100
17	100
18	100
19	100
20	100
21	100
22	100
23	100
24	100
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89	100
90	100
91	100
92	100
93	100
94	100
95	100
96	100
97	100
98	100
99	100
100	100

Delta Removal by Day

Day	Count
1	100
2	100
3	100
4	100
5	100
6	100
7	100
8	100
9	100
10	100
11	100
12	100
13	100
14	100
15	100
16	100
17	100
18	100
19	100
20	100
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66	100
67	100
68	

Depending on the type of incident, priority e-mails may be sent out by the reporting server to City representatives, Tetra Tech project team, and debris contractor representatives. Our firsthand experience assisting local governments with recovering from disasters has shown that accurately capturing and photographing pre-existing damage can alleviate residential damage claims that may be submitted to the City. Additionally, the incident map developed from the collection information is essential to quickly identifying unresolved contractor damages before the completion of the program.

Exhibit D-5: Incident Reporting Tool

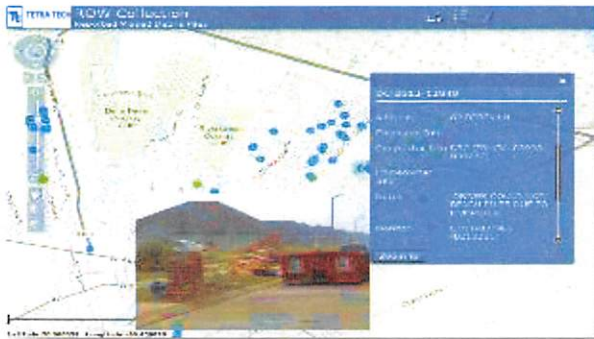


Exhibit D-6: Missed Piles Tracking



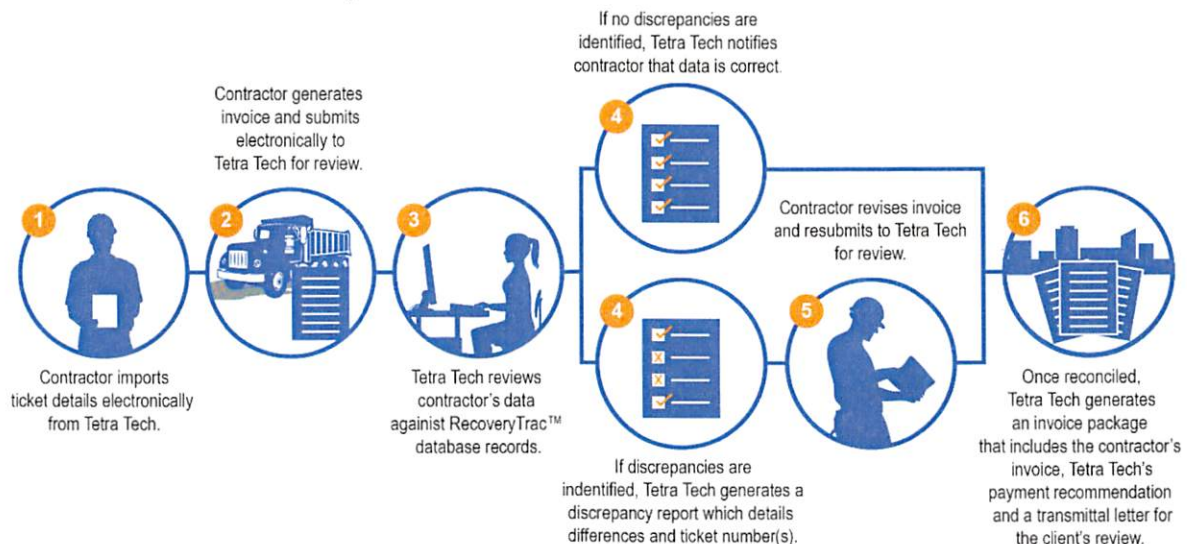
Project Manager's Daily report

In addition to the standard daily reports, Tetra Tech's project management team will also provide a daily project manager's report. The daily project manager's report will be submitted to the City Debris Manager or their authorized representative daily. The project manager's report will include the following:

- Volumes of debris category collected
- Debris monitor metrics
- Maps depicting geographic areas where debris has been removed
- Tetra Tech's overall progress in completing task orders and estimated completion date
- Coordination issues (if any) with the contractor
- Damage claims or incident reports

Contractor Reconciliation

To expedite contractor invoice reconciliation efforts, Tetra Tech requires copies of all primary debris hauler contracts with the City. After reviewing the contracts, Tetra Tech will set up the RecoveryTrac™ database to generate transactions for tickets issued to each debris contractor. Tetra Tech will then meet with each primary debris contractor to review the debris contractor reports that will be generated automatically through RecoveryTrac™ Mobile. The debris contractor reports will provide each contractor with sufficient data to reconcile with their subcontractors as well as generate invoices for payment by the City. Several QA and QC checks will be conducted on data before it is provided to the contractor. The application of RecoveryTrac™ Mobile significantly reduces the amount of time needed for a contractor to generate an invoice and for the subsequent invoice reconciliation with Tetra Tech. The process for contractor invoice reconciliation is as follows:



Project Closeout

Upon project completion, Tetra Tech will prepare both physical records as well as RecoveryTrac™ database digital documentation for submittal to the City. Physical documentation such as load tickets, truck certificates, and field logs are organized and packaged in a manner conducive to easy retrieval. In addition to the physical documentation, Tetra Tech provides a final data export of the RecoveryTrac™ database, which serves to hasten any forthcoming auditing efforts. The records extracted from the database contain a digital copy of the ticket given to the contractor and the corresponding supporting photographic and/or supplemental documentation, truck certificate images and corresponding photographic documentation, and digital copies of all invoice payment recommendation packages that have been issued for the project. The ticket line item data is conveniently hyperlinked so that a simple click will yield the desired images. The RecoveryTrac™ final export data may be provided either via DVD or external hard drive.

RecoveryTrac™ Automated Debris Management System

Electronic System – Key Benefits

- *Real-time situation awareness of field resources and efficient direction to support City priorities*
- *Easily integrated with other systems*
- *Real-time GIS web services for EOC information and visualization systems*
- *Disconnected field mobile based GIS integrated data collection*
- *Wide area, rapid deployment in less than 24 hours with pre-trained technical staff*
- *6,000 mobile units on-hand and ready for City-wide multi-jurisdiction mobilizations*

With a focus on the ability to accurately collect field information when the typical infrastructure is not available, Tetra Tech developed the mobile collection tool. We made this tool simple to use, reliable, and most importantly, able to collect and store information and photos offline until they can be uploaded. The “disconnected” capability provides the ability to operate anytime, anywhere with a minimal infrastructure support footprint. The end result is accurate, real-time debris removal **information made available minutes after completion instead of the next day as with paper-based systems.**

Real-Time Information and Visualization Increases Efficiency

Over the last several years, the cellular industry has invested heavily in the hardening of infrastructure in areas most susceptible to environmental disasters. We have taken advantage of these improvements by partnering with the Tier 1 providers to get the information from the field as quickly as possible, ideally in real-time. Field devices are constantly looking for connectivity to immediately upload collected information. Once the field data is uploaded, RecoveryTrac™ geospatial services provide rich information and visualization of the field data.

Using the EOC operation board concept, users can visualize everything from damage concentrations to field debris equipment locations and more. The end result is better information, resulting in better decisions and less waste.

Exhibit D-7: Previous Collection and Current Truck



Coordinated Reporting and Quality Control

RecoveryTrac™ ADMS can provide the one-stop information in a consistent, easily consumed format that can provide a City-wide operations status picture. These data feeds are in real-time; there is no spreadsheet to import and no conversion—just a single GIS web data service to pull required information. Some examples of data included:

- Road Clearance Status (Pass Map)
- Hazard Removal Locations
- Debris Pickup Locations
- Truck and Monitor Locations
- Reported Damage Locations
- Debris Removed

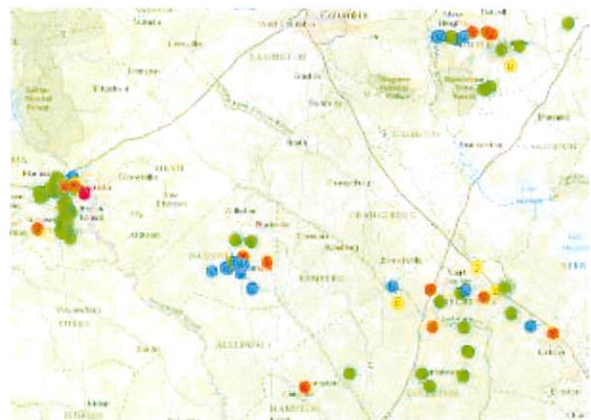
Data managers assigned to continuously monitor the information flowing into the system check for potential problems and dispatch supervisors to respond to the problem. The system monitoring panel shows real-time statistics and potential problems for operations based on exhaustive in-process quality checks that occur continually. The exhibit below details how we use RecoveryTrac™ ADMS to meet our quality standards using the direct monitoring and immediate feedback technique.

Debris Tracking

RecoveryTrac™ allows real-time access and visibility into field operations. At each debris collection point, the roadway monitor marks the “waypoint” or location of the debris pile to collect GPS coordinates. The map below displays the waypoints associated with each collection ticket issued in the field. The waypoint collection report is updated in real-time and can be filtered by date.

An additional feature of our ADMS technology is that each handheld device reports back the location of the device regularly. By leveraging this location information, Tetra Tech can view monitor locations and truck locations in real-time, as demonstrated in Exhibit D-8.

Exhibit D-8: Monitoring Locations

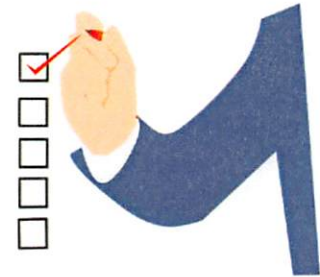


Understanding of FEMA Programs, Policies, and Requirements

Our approach to debris monitoring has been tested on over 300 clients in the past 14 years. From our project management plan to data reporting, reconciliation, and final closeout, our staff is trained and ready to implement our approach with or without warning. As demonstrated throughout our approach, Tetra Tech ensures the City's compliance with FEMA Policies and Guidance including the most recent FEMA Public Assistance Program and Policy Guide (PAPPG), FHWA-ER including recent changes based on the Moving Ahead in the 21st Century (MAP-21) Act, and the Sandy Recovery Improvement Act.

Quality Control and Assurance

Tetra Tech has an outstanding reputation for completing projects on time and within budget. Clients count on us to deliver projects even when timeframes are compressed. We understand the nature of debris monitoring projects, including milestones, deadlines, supporting documentation, and compliance. *The team recognizes the single most important aspect of our work is to deliver high quality, cost effective and useful products to our clients.* Simply put, providing high quality, highly-valued service ensures that we can expand our business because our reputation lays the ground work of trust and respect in the eyes of existing and future clients.



A key aspect of ensuring quality is effective time and resource management. Most errors occur when projects are rushed or when resources become limited. To help prevent this from occurring, our Quality Assurance (QA) process is designed to be implemented from project inception (e.g., the proposal process) through project completion. Upon contract award, the project manager (PM) uses our PM checklist to establish the framework for ensuring quality. This tool enables managers to start a project correctly, ensuring that files, processes, accounting and other associated requirements are addressed at project start and prepares the PM to meet with the client to begin technical delivery.

Tetra Tech uses proven methods for tracking and monitoring progress and costs for the entire project. Tetra Tech's procedures for controlling schedules and ensuring the timing of contract deliverables are based on two premises: (1) an understanding of client milestones and due dates for all services and deliverables and for any interim/working products needed on the project; and (2) maintaining regular communication with the client's managers about changing needs and priorities. These methods provide for the ability to provide real time, on-demand, and immediate deliverables from day one.

Additionally, we will maintain project financial information using our robust and audit-tested enterprise resource program, TetraLinx. Oracle-based TetraLinx is a fully integrated accounting and financial management relational database that is able to provide the Tetra Tech Team and client staff with fast and reliable retrieval of financial data and reports with required backup information. The TetraLinx system has a built-in, easy-to-use functionality that allows us to meet each client's unique needs. The system allows for pre-programmed financial reports that are generated on a weekly and monthly basis; however, our finance administrator can run ad hoc reports to access data collected in the system on a daily basis, if necessary. Our financial system is fully cost accounting standard-compliant. Our financial and management systems undergo routine auditing by the Defense Contract Audit Agency, and they find that our accounting, billing, purchasing, disclosure statement, and estimating practices are in full compliance with applicable standards and regulations. For more information on our Quality Assurance/Quality Control Program please also refer to [Section D: Approach and Methodology](#).

Exhibit C – Loaded Hourly Rates**CONTRACT# PWD/18-010A**

Item	Description	Hourly Rate
1	Project Manager	\$70.00/per hour
2	Field Operations Manager	\$58.00/per hour
3	Tower Monitor	\$34.00/per hour
4	Debris Collection Monitor	\$34.00/per hour
5	Data Manager	\$55.00/per hour
6	Consultant (i.e. Ticket Manager)	\$60.00/per hour
7	Field Supervisor	\$42.00/per hour
8	Scheduler/Expeditors	\$36.00/per hour
9	GIS Analyst	\$65.00/per hour
10	Environmental Specialist	\$65.00/per hour
11	Billing/Invoice Analyst	\$52.00/per hour
12	FEMA/FHWA Specialist	\$95.00/per hour
13	Administrative Assistants	\$30.00/per hour

DRUG FREE WORKPLACE REQUIREMENTS

Drug free workplace requirements in accordance with Drug Free Workplace Act of 1988 (Publ 100-690, Title V, Subtitle D) Contractor entering into Federal funded contracts over \$100,000 must comply with Federal Drug Free workplace requirements in accordance with the Drug Free Workplace Act of 1988.

EQUAL EMPLOYMENT OPPORTUNITY

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

Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender, identity, 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, sexual orientation, gender identity, 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. Contractor will ensure that conduct and communication at the DMS and with all personnel will not be discriminatory, inappropriate or offensive and the City shall have the right to request replacement personnel when violations of this policy occur.

Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

Contractor will send to each labor union or representative of workers with which he/she 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.

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.

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 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.

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 Successful Proposer may request the United States to enter into such litigation to protect the interests of the United States.

COMPLIANCE WITH THE COPELAND "ANTI-KICKBACK" ACT

Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 CFR pt. 3 as may be applicable, which are incorporated by reference into this contract.

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 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.

A breach of the contract clauses above may be grounds for termination of the contract, and for disbarment as a Contractor and subcontractor as provided in 29 CFR § 5.12.13.5

CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (40 U.S.C. 3701–3708)

Where applicable, all contracts awarded in excess of \$100,000 that involve the employment of mechanics or laborers must be in compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor is required to compute the wages of every mechanic and laborer on the basis of a standard workweek of 40 hours. Work in excess of the standard workweek is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the workweek. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Compliance with the Contract Work Hours and Safety Standards Act:

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.

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

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.

Withholding for unpaid wages and liquidated damages. The City of Tampa 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 Contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same 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.

Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The 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.

CLEAN AIR ACT AND THE FEDERAL WATER POLLUTION CONTROL ACT

Clean Air Act

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.

The Contractor agrees to report each violation to the City and Contractor understands and agrees that the City will, in turn, report each violation as required to assure notification to the State of Florida, Federal Emergency Management Agency, and the appropriate Regional Office of the Environmental Protection Agency.

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.

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.

The Contractor agrees to report each violation to the City and Contractor understands and agrees that the City will, in turn, report each violation as required to assure notification to the State of Florida, Federal Emergency Management Agency, and the appropriate Regional Office of the Environmental Protection Agency.

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.

SUSPENSION AND DEBARMENT

This contract is a covered transaction for purposes of 2 CFR pt. 180 and 2 CFR pt. 3000. As such the Contractor is required to verify that none of the Contractor, its principals (defined at 2 CFR §180.995), or its affiliates (defined at 2 CFR § 180.905) are excluded (defined at 2 CFR § 180.940) or disqualified (defined at 2 CFR § 180.935).

The Contractor must comply with 2 CFR pt. 180, subpart C and 2 CFR pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

This certification is a material representation of fact relied upon by the City. If it is later determined that the Contractor did not comply with 2 CFR pt. 180, subpart C and 2 CFR pt. 3000, subpart C, in addition to remedies available to THE city, the State of Florida and the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

The Contractor agrees to comply with the requirements of 2 CFR pt. 180, subpart C and 2 CFR pt. 3000, subpart C throughout the period of the contract. The Contractor further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Consultant certifies it is not so listed as excluded or disqualified from contracting and shall confirm same for every subcontractor receiving any payment in whole or in part from federal funds.

ACCESS TO RECORDS

Access to Records. The following access to records requirements apply to this contract:

Contractor agrees to provide the City, 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 Agreement for the purposes of making audits, examinations, excerpts, and transcriptions.

Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

Contractor agrees to provide the FEMA Administrator or his/her authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

DHS SEAL, LOGO AND FLAGS

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

COMPLIANCE WITH FEDERAL LAW, REGULATIONS, AND EXECUTIVE ORDERS

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

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.

PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

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.

CONFLICT OF INTEREST

Contractor must disclose in writing any potential conflict of interest to the City or pass-through entity in accordance with applicable Federal policy.

MANDATORY DISCLOSURES

Contractor must disclose in writing all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award.

UTILIZATION OF MINORITY AND WOMEN FIRMS (M/WBE)

Contractor must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Contractor has documented efforts to utilize M/WBE firms including what firms were solicited as suppliers and/or subcontractors as applicable and submit this information with their proposal, which shall be made part of the Agreement.

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.

Contractor's certification of compliance with certification requirements under 10 CFR Part 601 New Restrictions on Lobbying is attached and incorporated by reference into and made part of the Agreement.