

This is a non-exclusive contract **Agreement** effective as of September 7, 2021 between **Franklin County, FL** [COUNTY], having its principal office at 33 Market Street room 203, Apalachicola, FL, 32320 and Tetra-Tech, Inc, **LLC**, a corporation chartered under the laws of the State of Florida, and incorporated state of Delaware, having its principal place of business at 2301 Lucien Way, Suite 120, Maitland FL 32751.

The COUNTY requires the services of a qualified firm to perform certain professional services for the COUNTY's projects at various locations within the COUNTY limits.

The COUNTY intends to engage Tetra-Tech, Inc to perform certain professional services related to Disaster Debris Monitoring and Technical Assistance services related to the implementation and administration of FEMA Public Assistance Category A and Category B programs [Assignment] and Tetra-Tech, Inc has the expertise and has a thorough knowledge of such services.

The Assignment will have the following characteristics: On an as-needed basis, the COUNTY will issue Task Orders to Tetra-Tech, Inc, **LLC** describing the work required under this Agreement. In response, Tetra-Tech, Inc, **LLC** will prepare a scope of work and cost estimate which shall become part of the Task Order upon execution by both parties. Franklin County has multiple debris monitoring contracts for the performance of the services set forth in this Agreement. Franklin County reserves the right to determine which one, or more, Agreement(s) it will issue Task Orders to in the event of storm damage in Franklin County which qualifies for the services set forth herein. Tetra-Tech, Inc, **LLC** acknowledges and understands that in the event of a FEMA Public Assistance Category A and Category B programs in Franklin County, Florida, that Franklin County reserves the exclusive right to select which one or more debris monitoring contractors it has under contract. The execution of this Agreement does not guarantee Tetra-Tech, Inc **LLC**, will be selected to perform the services set forth herein.

In consideration of the mutual promises herein, Tetra-Tech, Inc, **LLC**, and the COUNTY agree that the terms and conditions of this Agreement are the following:

1. BASIC SERVICES

Scope. Tetra-Tech, Inc, **LLC** shall provide the Basic Services as described in Tetra-Tech, Inc' Debris Monitoring Proposal, the Scope of Work and the individual Task Orders authorized in writing by the COUNTY. A sample Task Order form is provided in Schedule A. The Scope of Work is provided in Schedule B and the Tetra-Tech, Inc Proposal is provided in Schedule C. The Task Order format may be modified from time to time. Tetra-Tech, Inc will utilize local residents to the greatest extent practicable depending upon project specific conditions. Tetra-Tech, Inc' obligations under this Agreement are solely for the benefit of the COUNTY and no other party is intended to benefit or have rights hereunder.

- 1.1. **Standard of Care.** Tetra-Tech, Inc shall perform the professional services under this Agreement at the level customary for competent and prudent professionals performing such services at the time and place where the services are provided [Standard of Care]. These services will be provided by debris management consultants and other professionals and individuals skilled in other technical disciplines, as appropriate.
- 1.2. **Instruments of Service.** Tetra-Tech, Inc is responsible for the professional quality, technical accuracy, timely completion, and the coordination of all instruments of its services including designs, drawings, specifications, reports [collectively called **Service Instruments**] and other services provided under this Agreement.
- 1.3. **End-Users Software License.** RESERVED
- 1.4. **Applicable Codes.** The Service Instruments will conform to the generally accepted codes and regulations applicable to the Project at the time of performance.
- 1.5. **Subcontractors.** Any subcontractors and outside associates or consultants to be engaged by Tetra-Tech, Inc under this Agreement are limited to those identified in executed Task Orders or as the COUNTY specifically approves during the performance of a Task Order.
- 1.6. **Title to Hazardous Materials.** The COUNTY and Tetra-Tech, Inc agree that title to all types of hazardous or toxic wastes, materials, or substances originating at or removed from the Site will remain in and with the COUNTY.

1.7. **Transportation or Disposal of Hazardous Materials.** The COUNTY further agrees that, if this Agreement requires the containerization, transportation, or disposal of any hazardous or toxic wastes, materials or substances, Tetra-Tech, Inc is not, and has no authority to act as a generator, arranger, transporter, or disposer of any hazardous or toxic wastes, materials or substances that may be found or identified on, at, or around COUNTY's premises. In this regard, the COUNTY and Tetra-Tech, Inc agree as follows:

- 1.7.1. Tetra-Tech, Inc may assist the COUNTY in obtaining the services of licensed hazardous materials contractors for the transportation and disposal of all hazardous or toxic wastes, materials, or substances. Tetra-Tech, Inc shall not contract directly for these services.
- 1.7.2. It is understood by both the COUNTY and Tetra-Tech, Inc that the COUNTY will provide all required hazardous or toxic wastes, materials, or substance generator numbers, signed manifests, storage and treatment permits, and any permits or licenses required by local, state, or federal laws or regulations for the generation, transportation, storage, treatment and/or disposal of any hazardous or toxic wastes, materials or substances.

2. ADDITIONAL SERVICES

- 2.1. **Scope.** Tetra-Tech, Inc will provide the **Additional Services** when authorized by the COUNTY in writing in a Task Order or amendment to a Task Order.

3. THE COUNTY'S RESPONSIBILITIES

Unless stated otherwise in Section 8 or in individual Task Orders, the COUNTY shall do the following in a timely manner:

- 3.1. **The COUNTY's Representative.** Designate a representative having authority to give instructions, receive information, define the COUNTY's policies, and make decisions with respect to individual Task Orders.
- 3.2. **Project Criteria.** Provide criteria and information as to the COUNTY's requirements for a Task Order, including design objectives and constraints, space, capacity, scope of work, task assignments, and performance requirements, and any budgetary limitations to the extent known to the COUNTY.
- 3.3. **Data.** Provide all available information, including previous reports and any other data in the possession of the COUNTY relevant to a Task order.
- 3.4. **Access.** Arrange for Tetra-Tech, Inc to enter upon public property as necessary.
- 3.5. **Review.** Respond to Tetra-Tech, Inc' request for decisions or determinations.
- 3.6. **Meetings.** Hold or arrange to hold meetings required to assist in the work required by a Task Order.
- 3.7. **Project Developments.** Give prompt written notice to Tetra-Tech, Inc whenever the COUNTY observes or otherwise becomes aware of any development that affects the scope or timing of Tetra-Tech, Inc' services.

4. PERIODS OF SERVICE

- 4.1. **Time of Performance.** Sections 4 and 5 anticipate the orderly and continuous progress of Task Orders through completion of each Task Order's scope of work.
- 4.2. **Start of Performance.** Tetra-Tech, Inc will start the Services described in each Task Order upon authorization by the COUNTY. If the COUNTY gives authorization before signing a Task Order, Tetra-Tech, Inc shall be paid as if the services had been performed after both parties signed the Task Order. Task orders will only be valid if signed by the COUNTY's authorized representative.
- 4.3. **Force Majeure.** If a force, event, or circumstance beyond Tetra-Tech, Inc's control interrupts or delays Tetra-Tech, Inc's performance, the time of performance shall be equitably adjusted.
- 4.4. **Term.** This Agreement shall be in effect for two (2) years from date of execution, with an option for a one (1) year renewal.

5. COMPENSATION

- 5.1. **Tetra-Tech, Inc's Services.** Based upon the Scope of Services provided for in Schedule B and for each Task Order issued pursuant to the Agreement and Fee Schedule (Schedule D), the COUNTY shall pay Tetra-Tech, Inc the Amount stated in invoices issued for and in accordance with Schedule B: Scope of Work and each Task Order for actual work

performed and reimbursable expenses incurred during the period covered by the invoice. Invoices are payable by the COUNTY within 90 days after receipt of invoice.

6. OPINIONS OF CONSTRUCTION COST

- 6.1. **Construction Cost.** If required by this Subcontract, opinions related to cost given by Tetra-Tech, Inc are subject to the following. Tetra-Tech, Inc has no control over the cost of labor, materials, equipment, or services furnished by others, or over a Contractor's or disposal site methods of determining prices, or over competitive bidding or market conditions. Tetra-Tech, Inc opinion of probable cost is made on the basis of Tetra-Tech, Inc' experience and qualifications and represents Tetra-Tech, Inc judgment as an experienced and qualified professional firm, familiar with the debris cleanup and recovery industry. Tetra-Tech, Inc does not guarantee that proposals, bids or actual Project cost will not vary from Tetra-Tech, Inc' opinions of probable cost.

7. GENERAL CONSIDERATIONS

- 7.1. **Changes.** By written and/or electronic notice at any time, the COUNTY may change Services required by a Task Order, provided such changes are within the general scope of the services contemplated by this Agreement. In such event, an equitable adjustment both in the compensation for and time of performance of the adjusted Task Order shall be made in writing prior to Tetra-Tech, Inc performing the changed services. Such changes can only be required by the COUNTY's authorized representative.
- 7.2. **Confidentiality and Proprietary Information.** Tetra-Tech, Inc will hold secret and confidential all information designated by the COUNTY as confidential [**Confidential Information**]. Tetra-Tech, Inc will not reveal Confidential Information to a third party unless:
- 7.2.1. the COUNTY consents in writing.
 - 7.2.2 the information is or becomes part of the public domain.
 - 7.2.3 applicable law, regulation, court order or an agency of competent jurisdiction requires its disclosure; or
 - 7.2.4 failure to disclose the information would pose an imminent and substantial threat to human health or the environment.
- 7.2.5 All drawings, specifications, technical information, and other information furnished to COUNTY by Tetra-Tech, Inc or developed by Tetra-Tech, Inc in connection with the Work are, and will remain, the property the COUNTY. In addition, regarding the Automated Debris Management System, Tetra-Tech, Inc shall retain sole rights of, and COUNTY shall have no rights with respect to the Automated Debris Management System. All rights are reserved by Tetra-Tech, Inc with respect to the Automated System under the patent, copyright, trade secret and other applicable laws of the United States.
- 7.3 **CADD.** The COUNTY may provide information related to computer-assisted design and drafting format [**CADD**] to Tetra-Tech, Inc. CADD is derived in part from computer software for which the COUNTY is licensed. These licenses are not transferable. Any unlicensed reuse of CADD may subject the user to liabilities to the software licensor. Any reuse without written verification or adaptation by the COUNTY for the specific purpose intended is at Tetra-Tech, Inc' sole risk, without liability to the COUNTY.
- 7.4 **Disputes.** If a dispute or complaint [**Dispute**] arises concerning this Agreement, the COUNTY and Tetra-Tech, Inc will negotiate a resolution of the Dispute. Should negotiation be unsuccessful, mediation of the Dispute by a third party shall follow. Any time which elapses in attempting to resolve the Dispute through either or both negotiation or mediation shall extend day-for-day any applicable statute(s) of repose or limitation of actions.
- 7.4.1 **Negotiation.** Following written notice of a Dispute, a minimum of one face-to-face meeting (or less if the Dispute is resolved) shall be held.
 - 7.4.2 **Mediation.** If negotiation is unsuccessful, a mutually acceptable third party [**Facilitator**] having expertise in the subject of the Dispute shall be engaged to mediate the Dispute. The fee and expenses of the Facilitator shall be shared equally by the parties to the Dispute. The parties may present evidence and arguments to the Facilitator. Unless the Facilitator and the parties agree otherwise, a minimum of one face-to-face meeting shall be held within the sixty-day period beginning on the date of the Facilitator's engagement.

7.4.3 Following the meeting or earlier if appropriate, the Facilitator shall report to the parties whether he believes the Dispute is resolvable through mediation. At that point the parties shall elect (a) to continue mediation, (b) replace the Facilitator and continue mediation, or (c) end mediation. If the mediation is ended, the parties may litigate the Dispute.

7.5 **Insurance.** Tetra-Tech, Inc will maintain **insurance** against the following risks during the term of the Agreement:

7.5.1 workers compensation in statutory amounts and employer's liability for Tetra-Tech, Inc' employees' Project-related injuries or disease.

7.5.2 general liability and automobile liability each in the amount of \$1,000,000 for personal injury or property damage to third parties which arises from Tetra-Tech, Inc' performance under this Agreement; and

7.5.3 Professional liability in the amount of \$1,000,000 for legal obligations arising out of Tetra-Tech, Inc' failure to meet the Standard of Care.

7.6 **Indemnification.**

7.6.1 Tetra-Tech, Inc hereby agrees to indemnify and hold the COUNTY harmless from and against any and all losses, damages, settlements, costs, charges, or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings, or causes of action of every kind and character arising out of the negligent acts, errors, or omissions of Tetra-Tech, Inc or others for whose acts Tetra-Tech, Inc is responsible under this Agreement.

7.7 **Reserved.**

7.8 **Interpretation.** This Agreement shall be interpreted in accordance with the laws of Florida and the exclusive venue for any disputes between the parties shall be within Franklin County, Florida.

7.9 **Successors.** This Agreement is binding on the successors and assigns of the COUNTY and Tetra-Tech, Inc. The Agreement may not be assigned in whole or in part to any third parties without the written consent of the COUNTY.

7.10 **Independent Contractor.** Tetra-Tech, Inc represents that it is an independent contractor and is not an employee of the COUNTY.

7.11 **Notices.** Written notices may be delivered in person or by certified mail, or by facsimile, or by courier or by email. All notices shall be effective upon the date of receipt by the party.

7.12 **Applicable Law.** If applicable to this Agreement, Tetra-Tech, Inc will comply with the requirements of:

7.12.1 the Equal Employment Opportunity clause in Section 202 of Executive Order 11246, as amended,

7.12.2 Utilization of Small and Disadvantaged Business Concerns (Public Law 95-507), and

7.12.3 all other federal, state, and local laws and regulations or orders issued under such laws.

7.13 **Entire Agreement.** This Agreement, including Tetra-Tech, Inc Proposal, Schedules, Attachments, Task Orders executed pursuant to this Agreement, and referenced documents, is the entire agreement between the COUNTY and the Tetra-Tech, Inc. Any prior or contemporaneous agreements, promises, negotiations or representations not expressly stated herein are of no force and effect. Any changes to this Agreement shall be in writing and signed by the COUNTY and Tetra-Tech, Inc.

7.14 **Waivers and Severability.** A waiver or breach of any term, condition, or covenant by a party shall not constitute a waiver or breach of any other term, condition, or covenant. If any court of competent jurisdiction declares a provision of this Agreement invalid, illegal, or otherwise unenforceable, the remaining provisions of the Agreement shall remain in full force and effect.

7.15 **Termination.** This Agreement may be terminated by either Party at will and without cause, at any time upon three (3) days prior written notice to the other Party and shall remain in force until so terminated. All information, data, materials, software, and any other materials provided to the Party must be returned to the other Party upon termination of the Agreement.

7.16 **Effective Date.** This Agreement is effective on the date shown on the cover page.

8 SPECIAL PROVISIONS, EXHIBITS and SCHEDULES

8.1 Special Provisions. This Agreement is subject to the following special provisions:

Duties and Responsibilities of Consultant. Tetra-Tech, Inc or its representative will be on site during the various stages of the work to observe the progress and quality of the work and to determine, in general, if the work is proceeding in accordance with the intent of the Agreement. Visits and observations made by Tetra-Tech, Inc will not relieve Debris Contractors of its obligation to conduct comprehensive inspections of the work, to furnish materials, to perform acceptable work, and to provide adequate safety precautions.

Limitations of Consultant's Responsibilities. Tetra-Tech, Inc will not be responsible for the Debris Contractor's or other contractors' means, methods, techniques, sequences or procedures of the work, or the safety precautions, including compliance with the program's incident thereto. Tetra-Tech, Inc will not be responsible for Debris Contractor's or their subcontractor's failure to perform the work in accordance with their contract with the COUNTY or any other agreement. Tetra-Tech, Inc will not be responsible for the acts or omissions of Debris Contractor, their subcontractors, or any other contractors, or any of its or their agents or employees or any other persons at the site or otherwise performing any of the Work.

8.2 Schedules. The following **Schedules** are attached to and made a part of this Agreement:

8.2.1 **Schedule A** Sample Task Order Form

8.2.2 **Schedule B** Scope of Work

8.2.3 **Schedule C** Tetra-Tech, Inc Proposal

8.2.4 **Schedule D** Fee Schedule

8.2.5 Tetra-Tech, Inc shall comply with the Davis-Bacon Act (40 USC 276a to 276a-7) as supplemented by Department of Labor Regulations (29 CFR part 5), as applicable.

8.2.6 Tetra-Tech, Inc shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 USC 327-330) as supplemented by Department of Labor regulations (29 CFR part 5), as applicable.

8.2.7 Franklin County shall exclusively retain the patent right to any discovery or invention which arises or is developed in the course of or under this contract.

8.2.8 Franklin County shall exclusively retain the copy rights and rights in data to materials which arises or is developed in the course of or under this contract.

8.2.9 Tetra-Tech, Inc shall grant access to Franklin County, the Federal government and the State of Florida, the Comptroller General of the United States, or their authorized representatives to any books, documents, papers and records of Tetra-Tech, Inc which are directly pertinent to this contract for the purpose of making an audit, examination, excerpts, and transcriptions.

8.2.10 Tetra-Tech, Inc shall retain all required records of this contract for three years after Franklin County makes final payment and all other pending matters are closed.

Execution Authority. This Agreement is a valid and authorized undertaking of the COUNTY and Tetra-Tech, Inc. The representatives of the COUNTY and Tetra-Tech, Inc who have signed below have been authorized to do so.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year shown on the cover page.

FRANKLIN COUNTY, FL

By Ricky D. Jones

Title: Chairman

Witness _____

By Jonathan Beyer

Title: Business Unit President

Witness [Signature]

[Handwritten signature]

Schedule A

SAMPLE

PROFESSIONAL SERVICES TASK ORDER

SAMPLE

Project Number--Task Order Number: ____-- ____

Task Order Date: _____

Subject to the Agreement between *the COUNTY* [the COUNTY] and *Tetra-Tech, Inc, LLC* [*Tetra-Tech, Inc, LLC*], effective September , 7, 2021 the COUNTY hereby authorizes Tetra-Tech, Inc to perform services as specified in this Task Order and in accordance with the above mentioned Agreement.

1. **Basic Project Information.**

Project Name: _____

Project Number: _____

Project Location: _____

The COUNTY Representative: _____

Tetra-Tech, Inc Representative: _____

2. **Project Description:** A description of Project for which this Task Order is issued is provided in Task Order Attachment 1, Project Description, incorporated into this Task Order.
3. **Scope of Services:** Tetra-Tech, Inc shall perform its Basic and Optional Services as described in Attachment 2, Scope of Services, attached and incorporated into this Task Order.
4. **Period of Services:** The period of service shall be: _____.
5. **Compensation:** Tetra-Tech, Inc' compensation under this Task Order, which shall not be exceeded without prior written authorization of the COUNTY, is: \$ _____
6. This Task Order's Pricing Schedule is incorporated and attached as Attachment 3.
7. **Special Conditions:** This Task Order is subject to the special terms and conditions as described in Attachment 4, attached and incorporated into this Task Order.
8. **Amendment:** [_____] This Task Order amends a previously executed Task Order No. _____, Date _____
9. **(Reserved)**

ISSUED AND AUTHORIZED BY:
FRANKLIN COUNTY, FL

By: _____ SAMPLE _____

Title: _____

ACCEPTED AND AGREED TO BY:

By: _____ SAMPLE _____

Title: _____

SAMPLE

SAMPLE

PROFESSIONAL SERVICES TASK ORDER

Task Order Number: _____

Attachment 1

Description of Project

PROFESSIONAL SERVICES TASK ORDER

Task Order Number: _____

Attachment 2

Scope of Services

PROFESSIONAL SERVICES TASK ORDER

Task Order Number: _____

Attachment 3

Fee Schedule

PROFESSIONAL SERVICES TASK ORDER

Task Order Number: _____

Attachment 4

Special Conditions

Schedule B: Scope of Work

1. GENERAL

CONSULTANT will provide debris monitors and debris monitoring services to assist the COUNTY with monitoring the operations of the disaster debris removal and disposal contractor(s). The debris monitoring services to be provided are debris contractor compliance monitoring and oversight, not professional engineering services. The COUNTY will provide a Project Manager to work directly with the Debris Collection Contractor and the CONSULTANT. The COUNTY will provide debris management site(s) (DMS) for disposal of the storm debris.

The CONSULTANT is knowledgeable in Federal Emergency Management Agency (FEMA), Federal Highway Administration (FHWA), and other applicable regulations, guidelines, and operating policies. The CONSULTANT will support the COUNTY during a disaster recovery effort and will be responsible for all aspects of the debris monitoring process. The CONSULTANT shall coordinate with the disaster debris removal Contractor(s) and the COUNTY to ensure a compliant, well-managed and organized approach to debris collection and disposal within FEMA guidelines.

The CONSULTANT will oversee the debris removal and monitoring processes utilizing the following rules and regulations as guidance:

- The Stafford Act, Section 407
- The Stafford Act, Section 406
- 44 CFR § 206.224
- FEMA 321, Public Assistance Policy Digest
- FEMA 322, Public Assistance Guide
- FEMA 325, Debris Management Guide
- FEMA 327, Debris Monitoring Guide
- FEMA Disaster Assistance Policy 9523.4, Demolition of Private Structures
- FEMA Disaster Recovery Policy 9523.11, Hazardous Stump Extraction and Removal Eligibility
- FEMA Disaster Recovery Policy 9523.12, Debris Operations – Hand Loaded Trucks and Trailers
- FEMA Disaster Assistance Policy 9526.1, Hazard Mitigation Under Section 406 of the Stafford Act
- FEMA Disaster Specific Guidance – as Published specifically for this disaster declaration

CONSULTANT will provide pre-event assistance in preparation for disasters through participation in meetings and workshops and the establishment of data management and other integrated systems.

CONSULTANT will, at no cost to the County:

- Provide County full-time personnel with a half-day debris management training session. Training program must, at a minimum, meet the training requirement for debris monitors as outlined by current FEMA debris management guidance.
- Provide a list of key personnel and subcontractors that may be involved in the disaster debris monitoring activities to include facsimile, cell phone numbers, and e-mail addresses.
- Participate in annual workshop or planning meetings with County representative and debris hauling and disposal contractor(s) to establish/review applicable policies and procedures.

The scope of services to be provided includes Debris Monitoring and Administration, Debris Assessment, Collection Monitoring, Load Ticket Processing, DMS monitoring, Debris Vehicle and Equipment Certification, Damage Complaint Tracking, Data Compilation and Reporting, Debris Contractor Payment Monitoring and Reconciliation Processing, Category A and B Public Assistance Support, Reporting and Coordinating with the COUNTY's Project Manager, and other related services as outlined in this Scope of Services, and as directed by the COUNTY.

2. DEBRIS MONITORING AND ADMINISTRATION

- A. The CONSULTANT shall appoint a qualified and experienced Project Manager for overall coordination and communication with the COUNTY. The Project Manager shall remain on the job and available to the COUNTY at all times during the operational phases of the debris collection and disposal project. CONSULTANT shall supply sufficient number of trained debris monitors and trained field supervisors to accommodate the volume of debris to be removed at loading sites and debris management sites or final disposal sites. CONSULTANT shall remove and replace employees immediately upon notice from the COUNTY Debris Project Manager for conduct or actions not in keeping with the Agreement.
- B. Examples of project management and administrative responsibilities include but are not limited to:
 - 1. Coordinate daily briefings with key operational staff, COUNTY staff and debris management contractor(s) to review, formulate and update debris assessment and removal operations and strategies. Schedule, manage and conduct periodic meetings with field staff and contractors. Meetings shall be scheduled so that they will not impede, hinder nor delay the debris management contractor(s) and the debris management operation.
 - 2. Provide a daily report of debris contractor crew assignments, working locations, number of trucks assigned, total loads, cubic yards collected by debris type, an updated map of streets where debris is collected, and other key operational statistics to the COUNTY's Project Manager or designee.
 - 3. Coordinate daily scheduling, dispatching and logistical operations of the field collection monitors.
 - 4. Hire, train, deploy and supervise all field collection monitors and staff.
 - 5. Conduct debris surveys and perform debris estimation by debris types as requested by the COUNTY.
 - 6. Maintain accurate records of all debris collection vehicles, including the measurements of the inside of the useable bed space, photographs, license information, vehicle identification decal issuance and regular monitoring for vehicle modifications.
 - 7. Track and coordinate responses to problems identified in the field, citizen complaints related to debris removal, including commercial and/or residential property damage claims as a result of debris removal. CONSULTANT shall maintain a detailed GIS database of customer complaints and resolutions.
 - 8. Make all reasonable efforts to ensure that DMS have access control and security. Conduct end of the day duties and verify that all vehicles have left the DMS at the specified time

established by the COUNTY.

9. Make all reasonable efforts to ensure the field collection monitors are accurately recording the streets and locations where debris was collected.
10. Schedule work for all team members and sub-contractors on a daily basis.
11. Conduct inspections on a regular, predetermined and random basis. Make all reasonable efforts to ensure the appropriate frequency of oversight is performed for all work crews, vehicles and locations.
12. Monitor the debris removal contractor(s) and DMS(s) for compliance with their contract with the COUNTY.
13. Provide training to COUNTY staff in essential debris management and collection functions to ensure appropriate and responsive interface with disaster debris collection contractor(s), County, state and federal agencies.
14. Develop forms, databases, etc. for tracking field activities, and submitting invoices for reimbursement, etc.
15. Daily personnel tracking sheets (field reports) shall be maintained for all CONSULTANT personnel assigned to the project.
16. Set up schedules for monitors each day and coordinate cleanup crew assignments. Survey and maintain list of areas with special needs, including but not limited to, hazardous stumps, trees, hangers/leaners, debris types, and other potential problems.
17. Prepare daily and periodic tracking reports to support debris removal, DMS operations and final debris disposal for audit purposes. Maintain a database of debris managed, costs incurred and reconcile debris collection and contractor invoices.
18. Compile records and assist the COUNTY with the preparation of required forms for reimbursement.
19. If requested by the COUNTY, provide call center operators to receive and process calls from customers with disaster debris collection concerns within Franklin County.

3. COLLECTION MONITORING

- A. In order to obtain maximum reimbursement, all debris loads shall be monitored in the field by collection monitors to assure debris eligibility. The CONSULTANT shall provide fully trained collection monitors to assure proper and compliant documentation protocols are instituted and followed.
- B. The CONSULTANT shall provide a field quality control team consisting of one field collection monitor per debris removal crew and at least one field supervisor for every five monitors unless otherwise approved by the COUNTY. This team will monitor the debris contractors for contract compliance, efficiency and regulatory compliance. The team shall provide daily feedback to the COUNTY through their Project Manager. All field team members shall be equipped with the state-of-the-art technology, which shall include cameras, computers, communication devices with GPS, and other equipment as deemed necessary and/or appropriate.
- D. The CONSULTANT will establish a Quality Control Program.

Examples of collection monitoring quality control tasks include, but are not limited to, the following:

1. Verifying that all debris picked up is a direct result of the disaster.
2. Accurately recording the addresses, streets and locations where debris was collected.
3. Verifying that the debris collection contractor(s) are working in their assigned collection areas and roads.
4. CONSULTANT shall stop work in progress immediately for improper monitoring documentation or work not being performed in the approved manner. The CONSULTANT shall immediately notify the COUNTY's Project Manager to review matter and provide final resolution.
5. Inspecting work in progress to assure that removal efforts include debris of the proper type in the proper areas.
6. Assuring compliance with COUNTY contracts by all debris contractors and debris subcontractors.
7. Identifying eligible stumps, hangers and leaners. Coordinating with the COUNTY and federal/state representatives for eligibility determination and assure documentation (forms, photos, etc) are completed for reimbursement purposes as may be required by FEMA.
8. Making all reasonable efforts to ensure that its employees and its subcontractor(s) are working in compliance with all federal, state, local safety regulations appropriate for the task being performed.
9. Coordinating with the COUNTY to respond to problems in the field, such as property damage complaints, debris crew issues, other customer complaints, etc. CONSULTANT shall maintain a detailed database of customer complaints and resolutions. Property damage complaints must be tracked using a GIS.
10. Neither the services performed by the CONSULTANT under this Agreement nor the presence of CONSULTANT nor shall its employees nor subcontractors at any site in performance of its services relieve debris removal contractor or their subcontractors, the COUNTY or any other entity of their obligations duties and responsibilities with respect to job site safety. CONSULTANT has no authority to exercise any control over the debris contractor or their subcontractors, the COUNTY or any other entity in connection with any health or safety precautions. CONSULTANT shall have no responsibility for, advice on, or to issue directions regarding or assume control over safety precautions and programs in connection with the services performed by debris removal contractor or their subcontractors or any other entity except to the extent relating to CONSULTANT's employees.

4. AUTOMATED DEBRIS MANAGEMENT SYSTEM (ADMS).

The electronic debris management system shall at a minimum create load tickets electronically eliminating the need for handwritten and scanned tickets. The system features shall include the following:

1. Paperless electronic (handheld device) data collection
2. Database will be internet accessible to subcontractors, COUNTY, state, and other public entities on a need-to-know basis.

3. Minimal manual entry of load ticket data fields.
4. Automation of debris pickup location thru use of GPS technologies.
5. Evaluation of daily event status using web-based reporting and GIS tools.
6. Coordination of contractor invoice reconciliation, FEMA documentation and applicant payment process enabled thru an integrated database management system.

5. DEBRIS MANAGEMENT SITE MONITORING

- A. The CONSULTANT shall be capable of conducting pre- and post-use environmental monitoring of the temporary Debris Management Site (DMS) locations to detect environmental contamination of the DMS, either present before use or after closeout of DMS operations, if requested by the COUNTY.
- B. All debris collected and disposed of, and certifications of collection vehicles shall be documented and monitored by the DMS monitors. The CONSULTANT shall assure that DMS and field collection monitors are deployed and operational commensurate with the beginning of debris collection and the establishment of debris site(s).
- C. The CONSULTANT shall provide DMS monitors to observe debris unloading operations at the COUNTY's designated DMS(s). A minimum of two DMS monitors are required per debris site. These staff members, in conjunction with the project management team and the debris contractor, shall coordinate the logistics of the DMS to assure efficient traffic flow and proper handling of load tickets that record FEMA data (such as vehicle volume, type of waste, etc.). The CONSULTANT shall observe vehicles entering and exiting the DMS and make reasonable efforts to ensure that vehicles are in compliance with their truck certifications (e.g., side boards in place, full tailgate, etc.). Additionally, the DMS monitor shall calibrate their debris vehicle load determinations with the FEMA monitors. DMS monitors are expected to provide volume determination consistent with FEMA.
- D. The CONSULTANT's Project Manager or designee shall conduct field quality inspections to check and verify information on debris removal and at DMS located throughout the County.
- E. Examples of DMS monitoring tasks include but shall not be limited to:
 1. Keeping accurate records of debris vehicles, cubic yard volume determinations, time in and out, number of loads per day and other data as requested by COUNTY.
 2. Coordinating with local, state and federal agencies as needed for DMS on issues such as notification, obtaining permits, determining reimbursement, etc.
 3. Providing preliminary assessment and documentation of DMS and assist in return of site to original conditions.
 4. Providing personnel to supervise the operation of DMS including monitoring incoming loads of debris, processing of debris and outgoing loads of processed debris.
 5. Conducting end of day activities, such as verifying completion of debris crew assignments, completing all record keeping, and assuring that all vehicles have left the DMS.

6. DEBRIS VEHICLE & EQUIPMENT CERTIFICATION

- A. All debris hauling vehicles and equipment shall be measured and certified prior to performing debris removal. The CONSULTANT shall complete a certification on each vehicle deemed appropriate for collection. In addition to completing vehicle certification forms, photographs must be taken of each vehicle showing the vehicle number and type of vehicle. These photographs shall be attached with the certification. Original copies of these certifications, including photographs, shall be retained by the CONSULTANT on behalf of the COUNTY and provided to the COUNTY upon their request or project completion. Additional copies shall be provided to the debris removal contractor and the vehicle driver. Once these vehicles are certified, random verifications shall be performed at each DMS to assure that no vehicle modifications have been made and to confirm data accuracy.
- B. The CONSULTANT shall measure the volume to the nearest cubic yard of usable space for each debris collection vehicle. The CONSULTANT shall complete the COUNTY Vehicle Certification Form provided for each vehicle. The original Vehicle Certification Form shall be delivered to the COUNTY Project Manager or designee. The COUNTY Vehicle Certification Form will have the following information:
1. Vehicle make, model
 2. Length
 3. Width
 4. Height
 5. Volume in cubic yards
 6. Tag number of vehicle
 7. VIN number of vehicle
 8. Vehicle type
 9. Driver of vehicle name
 10. Sub-Contractor representative name
 11. Certification monitor name certifying vehicle
 12. Date
 13. Vehicle certification number
- C. When a certification monitor signs a vehicle certification, he or she is certifying that to the best of his or her knowledge and belief, the information is complete and correct. The certification monitor shall not sign or accept any partially completed information. The CONSULTANT's Project Manager or designee shall review all truck certification forms with the debris contractor to assure completeness and accuracy of each form before forwarding to the COUNTY'S Project Manager or designee.

7. PUBLIC INFORMATION ASSISTANCE

- A. The CONSULTANT shall provide regular status updates to the COUNTY's Project Manager for public information use.
- B. The CONSULTANT shall provide appropriate staff to assist with damage complaints resulting from the debris removal. Complaints shall be tracked and forwarded to the project management team to be resolved with the debris contractor(s). A weekly log of such complaints and their resolution shall be provided to the COUNTY's Project Manager. Upon request of the COUNTY, the CONSULTANT may also be called upon to provide appropriate staffing of a customer call center

to assist with public telephone inquiries, concerns, and complaints regarding debris removal operations.

- C. The CONSULTANT shall provide the COUNTY's Project Manager and the debris contractor(s) with daily Disaster Debris Status Reports. Each daily report shall contain the following:
1. Overview of daily activities including status of damage complaints
 2. Cumulative debris totals by debris site
 3. Cumulative debris totals by day
 4. Summary of monthly debris removal efforts (cumulative and by debris site)
 5. Summary of mulch removal efforts (cumulative and by debris site)
 6. Summary of mixed/construction & demolition removal efforts (cumulative and by debris site)
 7. Stump volume by site
 8. DMS status
 9. Labor force report
 10. Debris site processing equipment summary

This reporting is due no later than 12:00 noon the following business day or as requested by the COUNTY.

Additional debris streams may be added on an as-needed basis.

- D. The CONSULTANT shall track overall collection status and include with the Daily Reports.

8. DATABASE REPORTING

- A. The CONSULTANT shall be responsible for collecting, auditing for completeness and accuracy, tabulating and organizing debris disposal data into electronic formats to support federal, (FEMA and FHWA), state and local reimbursements, and subsequent audits.
- B. A single database shall be created by the CONSULTANT. This database shall include all information on debris removal and disposal including but not limited to:
1. Complete load ticket information,
 2. Vehicle certification information,
 3. Stump removal information,
 4. Hanger removal data,
 5. Leaner removal information.
 6. Other debris removal information as required.

9. PAYMENT MONITORING AND RECONCILIATION PROCESS

The CONSULTANT shall review, validate and reconcile debris management contractor(s) invoices prior to submission to the COUNTY for processing. The CONSULTANT shall conduct a meeting at the beginning of the debris management operation to fully explain the process to the COUNTY and debris contractor(s) representatives. All invoices from the debris contractor(s) shall be directed to the CONSULTANT. Within seven (7) calendar days of receipt, the invoices shall be reviewed by the

CONSULTANT to be accepted or rejected. The CONSULTANT shall issue in writing to the COUNTY and the debris contractor, the acceptance or rejection of the invoices and a payment recommendation. If the invoice is rejected, the monitoring CONSULTANT shall clearly state the reasons for rejection and work with the debris contractor to resolve immediately.

10. OTHER RELATED SERVICES

A. Event Closure

The CONSULTANT shall assist the COUNTY in preparing final reports necessary for reimbursement by FEMA, FHWA and other applicable agencies for disaster recovery efforts by COUNTY staff and designated debris management contractors. The CONSULTANT shall assist in reviewing and processing requests for payment by the debris management contractor(s).

B. Federal Funding

To ensure that processing of federal funding is acquired as quickly as possible, the following information and its accuracy is the responsibility of the CONSULTANT:

1. Review/reconciliation of debris contractor invoices
2. Monitoring information
3. Project Status Reports
4. Completed Load tickets
5. CONSULTANT invoices
6. Review of debris contractor equipment hours of operation
7. Vehicle certifications
8. Start and end dates of the first debris removal pass and all subsequent passes

C. Compliance

The CONSULTANT shall provide professional oversight to monitor compliance with local, state and federal regulations. The CONSULTANT shall stay current with FEMA and FHWA policies and procedures and notify the COUNTY's Project Manager immediately as changes occur.

D. Meetings with COUNTY Personnel

The CONSULTANT shall meet with COUNTY representatives and the debris contractor daily during disaster recovery operations.

E. The COUNTY may order changes in the service consisting of additions, deletions, or other revisions to the Scope of Services for debris monitoring.

Schedule C: Tetra-Tech, INC's Proposal

E. Proposal Matrix

Ability to Provide the Proposed Scope of Services

Franklin County is a Florida coastal community with a population of roughly 11,700. The County is located on the Gulf of Mexico and covers a total of 1,026 square miles of land and water, making it vulnerable to natural disasters such as hurricanes and flooding, as seen with the impact of Hurricane Michael in 2018. As such, the County is seeking a contractor with the ability to efficiently oversee the removal of large volumes of debris, while remaining cost-effective. The services requested by the County may include:

Pre-event Services

- Debris Management Plan and Standard Operating Procedure updates
- Interagency cooperative exercises and training
- Policy guidance
- Review of Temporary Debris Storage and Reduction Sites (TDMS)
- Debris management contractor bid preparation and review

Post-event Services

- Contract administration
- Debris estimates
- Oversight of road clearance and debris loading by debris management contractors
- TDMS monitoring
- Environmental assessments of TDMS
- Truck Certification
- Quality Assurance/Quality Control
- Health & Safety procedures
- Technical Assistance
- Project closeout

Tetra Tech fully understands the County's operational needs and expectations as it pertains to the proposed scope of work. **Our team responded to Franklin County following Hurricane Michael, where we monitored the removal of more than 126,000 CYs of debris, including removal of debris from County parks.** We understand the special services the County may require and need to coordinate with municipalities throughout the County. Furthermore, Tetra Tech is a Florida-based firm with more disaster debris monitoring experience across the state than any other firm. Our project approach focuses on the following principles:

- *Continuous Coordination and Communication with County Officials and Stakeholders:* A dedicated project management team will be appointed to coordinate with County officials throughout the year, not just during times of activation.
- *Immediate Response Capabilities:* Tetra Tech has disaster recovery personnel and 24 offices throughout the state, including our disaster recovery hub near Orlando and two offices in Tallahassee. Additionally, we utilize an immediate response staffing and logistics plan that will allow the County to return to the business of running day-to-day operations.
- *Focus on Hiring Locally:* Tetra Tech focuses on hiring and training local residents, thereby benefiting the local economy and reducing mobilization and transportation costs.
- *Project Transparency and Real-time Reporting:* Our proprietary automated debris management system (ADMS) technology, RecoveryTrac™, provides detailed reporting systems and mapping capabilities that are available in real-time to the County and are tailored to the County's data needs. RecoveryTrac™ was utilized by the County following Hurricane Michael.
- *Maximum Reimbursement for the County:* Tetra Tech's knowledge of Federal Emergency Management Agency (FEMA), Federal Highway Administration (FHWA), and other applicable regulations, guidelines, and operating policies paired with our stringent quality assurance program and documentation procedures will help the County to receive and keep the maximum reimbursement allowed following a disaster.



Franklin County is a coastal community, which may require special services, including beach remediation, vessel removal, and waterway debris removal.

Value Added Benefits (Pro Bono Publico)

Tetra Tech's commitment to our clients begins with value-added pre-disaster training and coordination to ensure that we provide the best available end-to-end response and recovery program management services should we be called upon in the event of a future disaster. After contract award, Tetra Tech will provide the following services at no cost to the County:

- Review of open Project Worksheets (PWs) from previous open disasters
- Annual coordination meeting with County stakeholders and debris removal contractors
- 1-day FEMA Public Assistance (PA) orientation and training or tabletop exercise for County staff
- Review and comment on the County's Disaster Debris Management Plan
- Review of existing TDMS and selection criteria
- Review/update of the County's Geographic Information Systems (GIS) Center line data
- Annual updates regarding FEMA and other agency policy changes
- Review of local ordinances and code(s) related to County debris removal operations

Project Approach

Tetra Tech's project approach has been refined over the course of more than 300 activations, including Franklin County's disaster debris project following Hurricane Michael. The following project approach describes Tetra Tech's proposed plan to deliver the services requested by the County, and addresses the following:

- The instructions for Tab E described on page 22 of the RFP;
- Project Approach requirements listed in the evaluation criteria on page 24 of the RFP; and
- The Scope of Services described in Section 7.

Activation

Tetra Tech has never failed to respond to our client's needs, Tetra Tech will be prepared for activation, in the even that a future disaster or disaster threat occurs. As identified in the County's request for proposals, Tetra Tech will be prepared to respond immediately after tropical sustained winds are below 40 mph.

Selection and Mobilization

Should Tetra Tech be selected by the County to provide disaster debris monitoring services, we ensure the County that our team will respond to the County at any point before, during, and after a possible debris-generating event. 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 County. Following an event without warning (such as tornadoes or flooding), Tetra Tech will begin response at H-0.

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

Time	Task	Deliverables/Milestones
Preparedness		
Pre-event (normal conditions)	Meet with the County to review plans and documents	<ul style="list-style-type: none"> • Conduct annual pre-event meeting with the County and debris contractor • Review the County'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 County and initiate daily conference call • Determine resource requirements from debris model • Review the County's emergency policies and contracts

Time	Task	Deliverables/Milestones
H-72	Execute responsibilities and activate contracts	<ul style="list-style-type: none">Establish contact with the County's debris hauler and ensure Tetra Tech has the most up-to-date copy of the debris hauler contractReview possible critical areas of concern, hospitals, major transit systems, historic districts, environmental issues, and critical infrastructureReview protocols for private property, gated communities, and public drop-off sitesReview TDMS locations and follow up with the Florida Department of Environmental Protection (FDEP) on permitting proceduresEstimate equipment requirements and TDMS capacity to haul and stage debrisPrepare ADMS technology for mobilization
H-48	Monitor storm track and continue preparations	<ul style="list-style-type: none">Conduct regular meetings with County staff as requestedConfirm staging location and begin mobilization of resourcesMobilize project assets and begin base camp coordination and logistics (food, water, housing, etc.) with the County and Tetra Tech headquarters (if necessary)Review list of priority roads and the operational planObtain GIS files for municipalities that the County will assist with debris removalContinue to update and gather updates from the County'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 driveCertify emergency road clearance equipment (in coordination with the County'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 exceedBegin emergency pushMaintain time and materials (T&M) logs for push equipmentCoordinate with the County to conduct preliminary damage assessments and road closures (if requested)Supervisors report to pre-designated locations and prep staff on projectBegin establishing ADMS infrastructureBegin recruiting and training monitors, project coordinators, and data staffInitiate opening of TDMS locationsFollow up with FDEP on debris permits (if required)Work with the County 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 pushContinue preliminary damage assessmentDevelop debris cost estimate required for presidential disaster declarationDevelop operational plan for disaster-specific issuesRefine health and safety plan for disaster-specific issues
H +72	Disaster debris vehicle certification/ site preparation	<ul style="list-style-type: none">Begin hauling truck certificationInstall ADMS tower monitor infrastructureTrain monitors on policies, ADMS, and safety

Time	Task	Deliverables/Milestones
H +96	Begin debris collection monitoring	<ul style="list-style-type: none"> • Open public drop-off sites as requested • Assign monitors to trucks • Assign supervisors to monitors • Hold morning and afternoon meeting with County staff and debris hauler • Implement QA/QC procedures
Recovery		
Week 1+	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 County, 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 RecoveryTracTM • 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 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 County with long-term reimbursement • Audit assistance • Appeal support if necessary

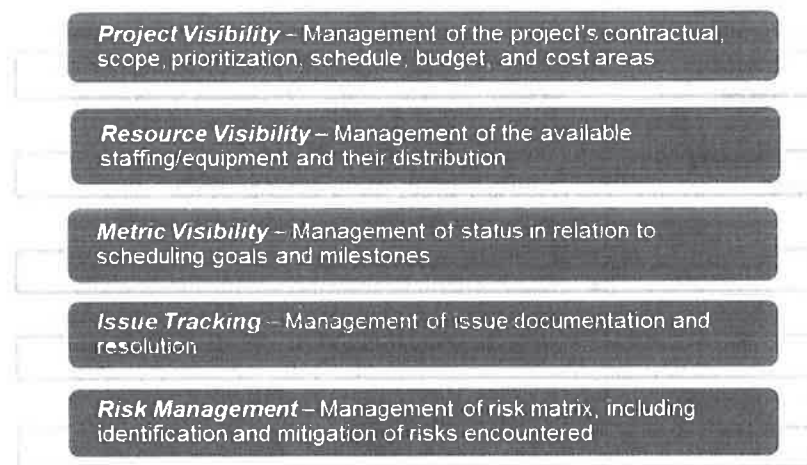
Pre-event Assistance

Tetra Tech has proposed a dedicated project management team who will be available to the County before, during, and after a future event occurs. Although some disasters take place without warning, having a plan in place before a disaster occurs is crucial to conducting efficient recovery operations. This means working with County officials to review plans, provide training, and communicate expectations. Pre-event assistance may include, but is not limited to:

- **Annual coordination** – Conduct annual trainings and meetings to plan and test execution protocols and identify potential risks/mitigation opportunities. Trainings will include a half-day debris management session for personnel.
- **Key Personnel** – Tetra Tech will provide a list of key personnel that may be involved in the disaster debris monitoring activities, including contact information.
- **Contract review** – Review contracts for understanding of contractual requirements and possible cost savings.
- **Communication systems checks** – Verify that communication systems function as designed and reporting needs are understood.

Debris Monitoring and Administration

Our methodology of project management governs both the planning and execution of all project work. The strategy, structure, and staffing requirements for the project organization are based on client expectations and the desired outcome. Tetra Tech's project management methodology enables our team to achieve success despite the unpredictable nature of disasters. Our methodology addresses the project management areas shown below.



These management areas are administered using the established project management procedures and protocols we have developed and refined over the years and numerous disaster activations. Our interactions with our clients are based on best practices that balance the need for direction of operational priority, issue resolution, and relevant information with considerations for the time availability of the client.

Each phase of Tetra Tech project management has documented procedures that govern the execution to provide **scalable, consistent, high-quality results**. We use a systematic approach with frequent in-process quality checks to execute our project processes. Our general project approach includes tasks in each of the following phases:

- **Mobilization (Immediately Prior to and Following Event)**
 - **Scope, tasking, and budget** – Determine services required, performance metrics, schedule, and budget constraints.
 - **Deployment and resource requirements** – Develop work plan and safety plans. Update risk matrix for work plan specifics.

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

Communication with the County

Coordinated project communications coupled with accurate information enables effective decision-making. Our implementation of this provides our clients with the benefits:

- **Common Operating Picture**
 - Tetra Tech's real-time data sharing information portal allows the client, the debris removal contractors, and the monitoring firm to access the same accurate information, which markedly improves their ability to execute efficiently. The result is a much more efficient completion of project objectives.
- **Interoperability**
 - The information portability across disparate systems is the true power of Tetra Tech's client interaction and communication system. It allows integration with existing systems to provide better understanding and coordination among organizations.
- **Reliability, Scalability, and Portability**
 - Documented procedures and protocols *enable scalability without loss in fidelity* and quality of work product. When in-process quality controls and team cross-training are added, the ability to tolerate faults without affecting outcome is substantially increased.
- **Resiliency and Redundancy**
 - Experience operating in disasters enables Tetra Tech to design systems and processes to be *able to withstand loss of infrastructure and key personnel* yet maintain client expectations for information. This is accomplished not only in technology design, but in effective procedural protocols and our risk mitigation component.

Emergency Push Period

The emergency push period begins immediately following an event. Debris removal contractors coordinate with County crews to clear blocked roadways for emergency vehicle passage. 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

Debris Estimate Methodology

It is critical to understand estimated quantities of debris to adequately plan for project operations and mobilization. Tetra Tech has found that rather than relying on a single approach, a combination of debris-estimating methodologies generally produces a more accurate estimate. Tetra Tech uses the following debris-estimating methodologies:

Data-driven debris-estimating model. Tetra Tech has developed a data-driven debris-estimating model that takes into consideration factors such as hurricane strength category, estimated storm surge, coastal households, amount of vegetative cover, dockage, and other unique factors to develop debris estimates for a community.

Field survey. “Boots on the ground” Tetra Tech staff will also work to estimate the expected volume of debris. Tetra Tech’s experienced field staff complete windshield surveys and the information collected is aggregated by an experienced project manager to generate field survey-based debris estimates.

Aerial surveys. Finally, Tetra Tech can develop debris estimates using Unmanned Aircraft Systems (UAS, or more commonly, drones) to estimate debris quantities from inaccessible areas. Tetra Tech drones can capture topographic survey data, including **orthophoto, contour, digital terrain, and dense point** cloud data to develop estimated volumes of debris within an impacted community. See page 4-18 for additional information.

Monitor Hiring and Training Program

Should the need arise, Tetra Tech may 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.

To properly instruct newly hired employees, Tetra Tech has developed a training program that includes modules specific to the County. These modules are complete with the information required to facilitate accurate field monitoring and ADMS implementation. Qualifying tools included in the training modules assist with the retention of the material and assist Tetra Tech in screening and selecting the most qualified personnel for the monitoring task. Training module topics include truck certification, load site monitor responsibilities, disposal monitor responsibilities, hazardous trees monitor responsibilities, and field supervisor responsibilities. Project managers, data managers, and operations managers follow standard operating procedures and protocols established in our concept of operations plan.

Health and Safety

Tetra Tech’s employees are the foundation of our business, and protecting them at all work sites is our highest priority. The company subscribes to the philosophy that all occupational incidents can be prevented and that no incident is treated as an acceptable event when we execute our work. To achieve this, the company’s health and safety processes are a vital and integral part of our work.

Health and safety addressed in our operations and management systems is supported by strong leadership. Tetra Tech’s leaders understand their responsibility and accountability to plan for safety and to implement safety measures. Preventing incidents also relies on a management system that regularly evaluates performance and identifies necessary adjustments to target continual improvement. The principal objectives of our program are codified in our written health and safety policy, which is endorsed and regularly monitored by the highest levels of our management team. Industry metrics for our 2020 health and safety performance are provided below:

- FY 2021 US Experience Modification Rate (EMR) of 0.86
- 2020 Enterprise-Wide Total Recordable Injury Rate (TRIR) 0.45
- 2020 Enterprise-Wide Lost Workday Incident Rate (LWDIR) 0.19

Tetra Tech is committed to workplace safety. As such, a project-specific health and safety plan will be developed for the scope of work. Field staff assigned to the project will be trained on the health and safety plan. Additionally, Tetra Tech project managers have completed the Occupational Safety and Health Administration (OSHA) Disaster Site Worker course and have their 10-hour Construction Safety Certification. During a debris recovery operation, Tetra Tech project managers and supervisors routinely examine the safety of field and debris staging site operations and have the authority to shut down unsafe operations. Debris staging site monitors are equipped with the appropriate personal protective equipment, which may include hard hats, appropriate footwear, reflective vests, hearing protection, and eye protection. Additionally, Tetra Tech



project managers conduct regular tailgate safety sessions with their field employees to alert them of potential work hazards and review safe work practices.

Right-of-Way Collection Reporting

Our ADMS technology allows the County to view debris collection points, truck locations, monitor locations, damage, incidents, and daily metrics at any given time. The additional geospatial reporting capabilities are made possible through the Tetra Tech approach to field monitoring.

At each debris collection point, the field collection 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.

Exhibit E-2: Waypoint Collection/Hazardous Tree Maps



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 exhibits below.

Exhibit E-3: Monitoring Locations



Exhibit E-4: Truck Locations



Field Collection Monitoring

The Tetra Tech debris monitoring program includes the following:

- **Operations.** Field collection monitors report to a staging location prior to the commencement of daily operations 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 devices and debris tickets.
- **Deployment.** A field monitor is assigned to one loading unit or to a leaner and hanger removal crew. In instances where leaner and hanger crews have multiple saw operators, the cut crew can request the addition of a monitor (this typically happens when a cut crew can complete over 60 hazard removals per day).
- **Field Supervision.** Responsibilities of the field supervisor monitor 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. This will verify 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 devices.
- **Contractor Completion.** Tetra Tech will assist the County in completing the project efficiently and within the timelines 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 the County 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.
 - Leapfrogging by the contractor (cherry-picking work being performed) is detrimental to the efficiency of operations and will be reported.
 - 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 County 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 County officials to adjust the timeline to appropriately reflect the changing estimates.

In addition, there are circumstances out of the control of all parties that could negatively impact a debris removal operation (for example, inclement weather). In the event any of these circumstances occur, Tetra Tech will work closely with the County to refine timelines and support an expeditious recovery for the County.

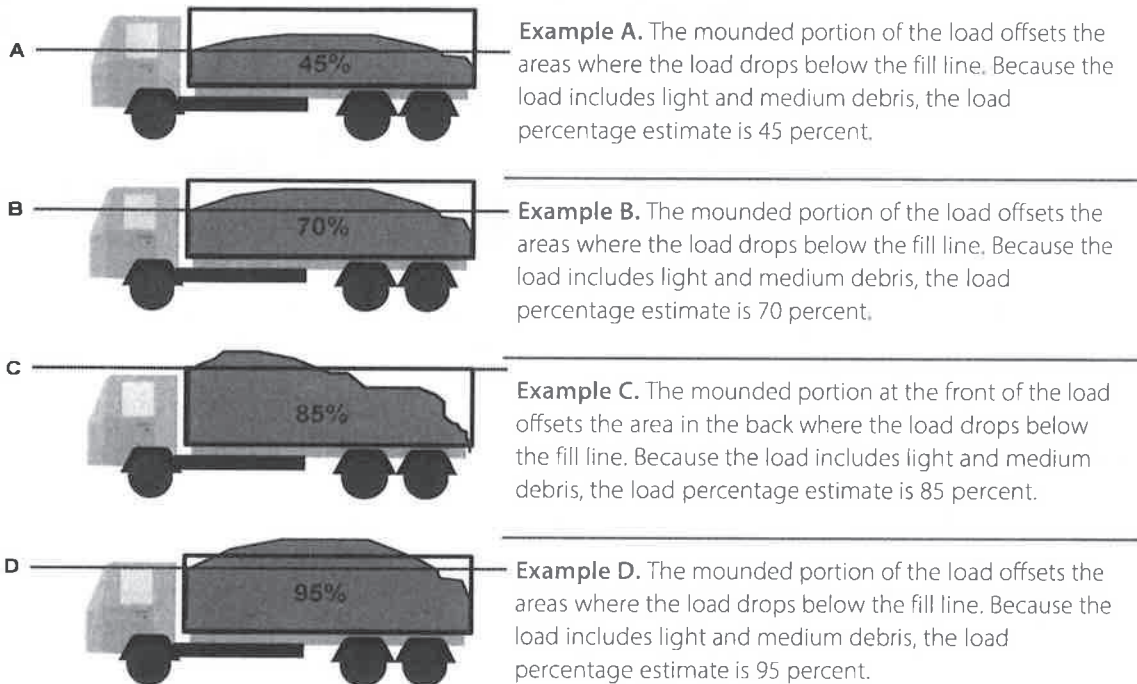
Temporary Debris Management Site

Response to debris-generating events requires locating TDMS, emergency permitting of TDMS (including debris burning and state regulatory permits), baseline soil testing before the TDSR are opened and as part of remediation process, and recycling and diversion initiatives once the reduced vegetative debris is collected and processed. Tetra Tech has had significant experience assisting local governments in Florida with pre-permitting TDSR before a disaster event as well as post-disaster permitting.

As TDMS are activated, Tetra Tech will provide a minimum of two disposal monitors per site. Staffing numbers may also increase or decrease, depending on site layout. Tetra Tech verifies hauler passes through the TDMS and documentation remains accurate and complete with several daily audits by project operations managers and supervisors to verify load call accuracy and consistency. Specific documentation kept by Tetra Tech TDMS disposal monitors includes the following:

- **Load Ticket.** The load ticket is used to document that debris removal complies with all FEMA requirements.
- **Disposal Monitor Log.** The disposal monitor log is used as backup documentation as required by FEMA.
- **Scale Manifest Tickets.** If the debris hauling contract is weight-based, Tetra Tech will digitize and catalog tickets generated by the existing scales at the County's TDMS.
- **Incident Report.** Tetra Tech will document property damage, arguments, unsafe practices, and injuries.
- **Photographic Documentation.** Tetra Tech disposal supervisors will photograph a TDMS frequently to create a visual timeline of the site.
- **QA/QC of Field Tickets.** Disposal monitors review and verify collection monitors' work in the field.

Exhibit E-5: Load Call Estimate Examples



Residential Drop-Off Sites

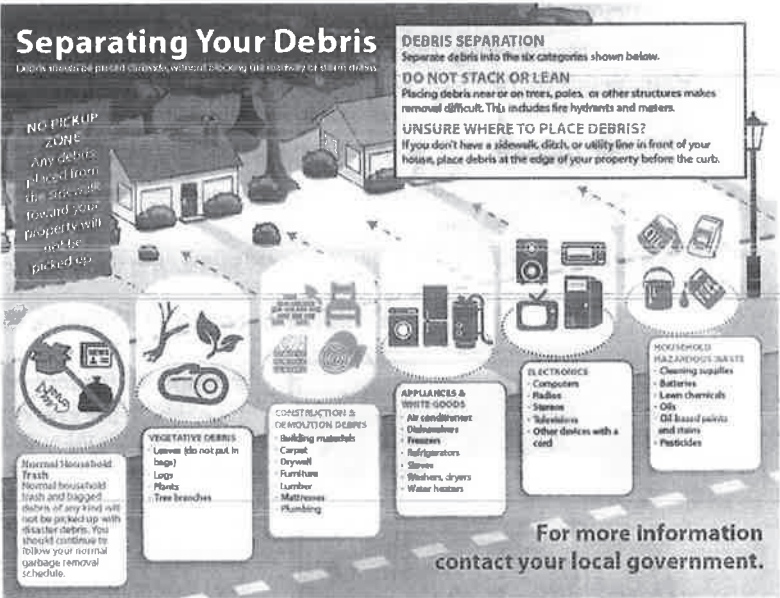
To provide documentation to FEMA that supports reimbursement of debris brought by the County's residents to residential drop-off sites and proves the debris is not commercial, the County must monitor each site and screen citizens who enter. Tetra Tech is prepared to support the County by assisting with this task if needed.

Public Information

Tetra Tech is prepared to assist with developing a means for the County to manage inquiries from residents regarding the debris removal process. Tetra Tech has staffed debris hotlines for some of the largest disasters that have impacted the United States and is prepared to help the County establish and staff a debris hotline (including supplying equipment, phone lines, etc.) to respond to public inquiries and concerns.

Public information for debris operations should focus on two components: safety for handling debris and proper set-out procedures. Many hurricane-related injuries and deaths occur after the incident because citizens do not safely address disaster damage and debris. Some of these deaths and injuries could be avoided if residents were provided timely information on how to safely address disaster-related damage to their homes. Public information for residents should include

safety precautions for assessing their damaged homes and operating dangerous equipment to remove debris. In addition to safety instructions, proper set-out procedures are critical to ensure that the County can maximize recycling opportunities, reduce impacts to landfill capacity, and maintain efficient debris removal operations. Public information should include instructions for residents to properly separate their debris streams such as HHW, electric waste, construction and demolition debris, vegetative debris, and white goods. Public information should provide residents with specific instructions for separating and bundling their debris and include any information for citizen drop-off locations.



Public messages must meet the needs of the community to ensure all populations receive and understand critical information in a culturally appropriate and effective manner. Tetra Tech will coordinate with the County's public information officer to ensure the correct information regarding debris operations is provided to the public in a format that is accessible to the County's diverse population, in a language all can understand.

Hazardous Tree Removal

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

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

Exhibit E-6: Real-Time Ticket

RecoveryTrac Unit Rate Audit Report (Crew: *All)

Date: 06/01/2018

Project: CITY OF DORAL HURRICANE IRMA ROW COLLECTION

Total Ticket Count: 21

Ticket No.	Monitor	Date	GPS-Lat	GPS-Long	Address	Sys Code	Unit Cost	Mean	Zone	Photo Count	QC Audit Score
181706077	TRISTAN ZLACKI (B227102)	06/01/2018 11:25 AM	25.820005	-80.383981	DORAL MEADOWS PARK	3A	0.33	0.75		1	95.4483000

PRE-WORK

MEASUREMENT

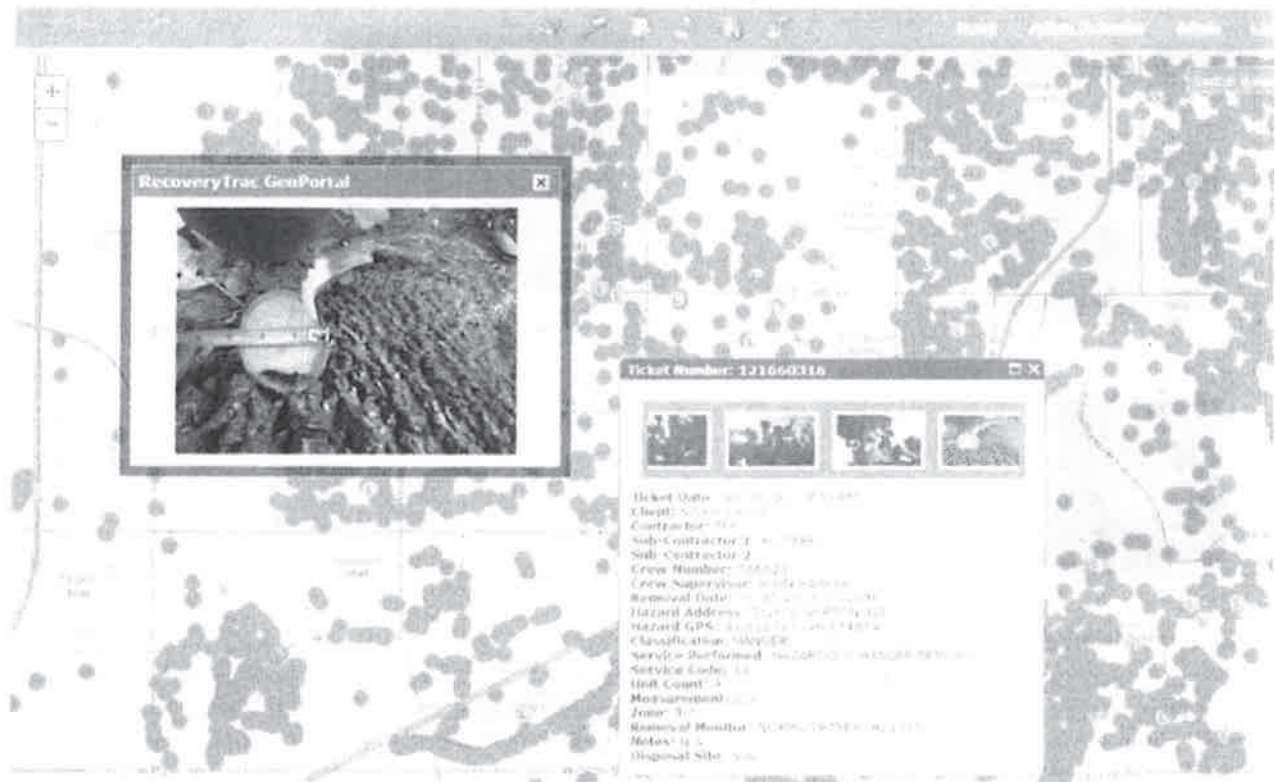
POST-WORK

Three black and white photographs documenting a hazardous tree removal. The first, labeled "PRE-WORK", shows a large tree trunk being cut. The second, labeled "MEASUREMENT", shows a person using a measuring tape on a tree trunk. The third, labeled "POST-WORK", shows the ground after the tree has been removed.

Unit Rate Ticket Geoportal Report

As monitors complete unit rate tickets for hazardous trees or hangers, their locations are logged and collected. The map below displays locations where hazardous tree or hanger removals were documented in the field. Clicking on the marker allows the user to review the data and photos collected by the field monitor (see example below). The unit rate ticket report is updated in real-time.

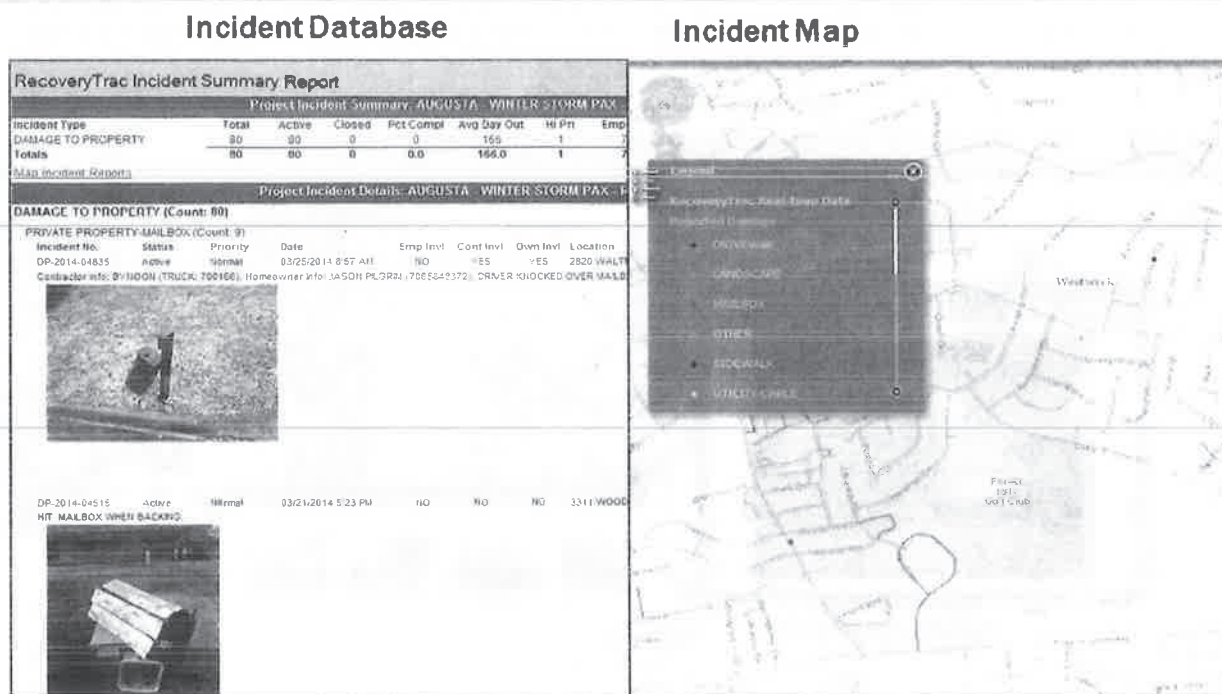
Exhibit E-7: Unit Rate Ticket Map



Incident Reporting

Another key feature of our ADMS technology is that it allows field monitors to report incidents and provide supporting photographs in real time to the County, Tetra Tech, and the debris contractor. Examples of incidents include reporting pre-existing damage, damage caused by the contractor, debris piles skipped by the contractor, safety hazards, and other incidents critical to a debris removal program. As monitors complete incident reports in the field, the information and supporting photographs are uploaded to the Tetra Tech reporting server. Depending on the type of incident, priority e-mails may be sent out by the reporting server to County representatives, Tetra Tech's 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 County. Additionally, the incident map developed from the collection information is essential to quickly identify unresolved contractor damages before the completion of the program.

Exhibit E-8: Incident Report

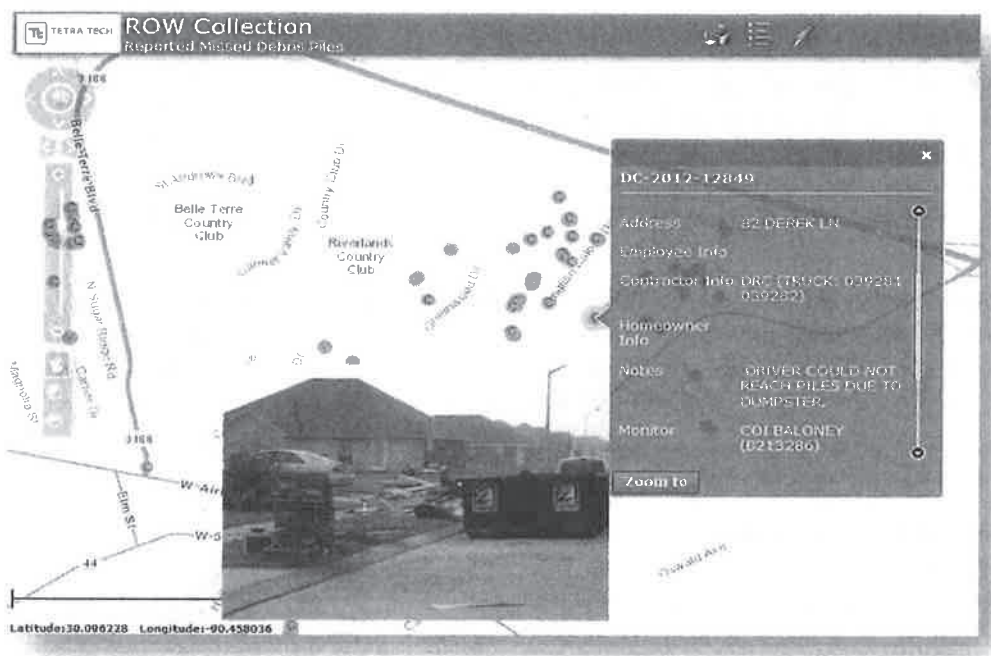


Quality Assurance/Quality Control Program

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 drastically reduces 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 because this is logged automatically.

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. For example, our ADMS technology provides reporting and tracking on any 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.

Exhibit E-9 Missed Piles Tracking



Fraud Prevention

Several practices are used to prevent debris haulers from committing fraud both in the field and remotely by real-time data monitoring. At TDMS locations, Tetra Tech disposal monitors or supervisors will randomly recertify a previously certified truck. Recalculating the truck hauling capacity helps verify that the original work was accurate and that nothing has been altered since certification. Additionally, ADMS technology displays a photo of the truck as a ticket is scanned by the disposal monitor. This makes it nearly impossible for a debris hauler to switch truck certifications between trucks or alter their truck configuration (i.e., remove sideboards).

Fraud prevention reports are run daily to identify data anomalies that may be a result of fraud. The load call report shows all load calls for a given day/monitor to confirm no trucks are receiving extraordinarily high load calls. The load ticket report and unit rate daily ticket report determine if monitors are issuing an excessive number of tickets in relation to the average number of tickets per day. The RecoveryTrac™ system includes built-in project controls that alert the data manager to anomalies that may be indicative of fraud. For example, the following data features are flagged:

- **Truck Turn-Around-Time.** The time between last pick-up location and arrival of a truck at the TDMS is tracked. A time that is too short may indicate that the debris hauler is not filling the vehicle to capacity.
- **Out-of-Bounds.** The municipality boundaries are programmed geospatially to confirm that debris pick-up remains within the eligible bounds of the County.
- **Debris Type.** Discrepancies between the debris type noted by the collection monitor and the debris type noted by the disposal monitor are flagged for review.

Automated Debris Management System (ADMS)

In today's technology-driven society, paper-based systems are quickly becoming obsolete. Recognizing the migration to electronic-based systems, our team has spent years on research and development to streamline the debris collection documentation process, with a focus on minimizing the cost to our clients while improving the visibility of debris project operations. RecoveryTrac™ is the result



of these efforts. RecoveryTrac™ is a scalable and fully featured disaster management application designed specifically to address the operational challenges faced during a disaster recovery project.

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

Tetra Tech has implemented RecoveryTrac™ ADMS technology on our last 200 FEMA PA-eligible projects. On these projects, our clients and FEMA found this state-of-the-art technology to increase efficiency and improve the management of debris removal efforts.

Tetra Tech's RecoveryTrac™ ADMS system is regarded as the #1 debris tracking system in the industry for the following reasons:

- **Most Tested ADMS in the Industry.** RecoveryTrac™ is a proven system that has been used to execute the largest USACE activations involving ADMS technology, including the State of California NORCAL Fire response and the State of Georgia Hurricane Michael statewide activations. During simultaneous response to Hurricanes Harvey and Irma in 2017, Tetra Tech deployed approximately 6,000 ADMS devices to collect and manage data for over 100 projects. **No other system has tracked and documented as much debris as RecoveryTrac™.**
- **Most Stable and Secure ADMS System.** RecoveryTrac™ is the industry leader in secure data systems. The RecoveryTrac™ system is securely hosted in the Microsoft Azure Government high-availability, cloud-based data center with restricted access and transaction-level auditing. The database is continually backed up and immediately replicated to an off-site location. The database is geospatially based and is maintained and synchronized with the reporting database in near real-time to maximize system performance, availability, and security.
- **Unmatched Flexibility to Meet the Needs of Any Client.** The system is designed to be fully customizable and allows for multiple data collection methods. Tetra Tech has invested heavily in research and development in efforts to streamline the debris collection documentation process with a focus on minimizing the cost to our clients and improving the visibility and transparency of debris project operations. RecoveryTrac™ is the result of these efforts.
- **Unrestricted by Hardware.** Because RecoveryTrac™ utilizes readily available hardware, there are no restrictions to the number of ADMS units our team can provide. Our team stocks 6,000 units and can expand to fit any client's needs, including multiple simultaneous activations.

Benefits of RecoveryTrac™

Ability to Respond. Combined with the on-hand inventory of over 6,000 handheld devices and the ability to rapidly procure additional equipment through preferred vendor relationships, the County can rely on our mobilization strategy for zero-day activations in disasters covering large areas with little or no notice. *The on-hand inventory can be on-site and ready to use within 24 hours of a notice to proceed*, and additional needs can be met quickly (in most cases, 72 hours or less).

Simple and Intuitive. A key foundation of our mobilization strategy is the ability to quickly hire and train local residents and begin debris removal operations. The mobile application is simple to understand and intuitive, allowing most users to begin using the device once the standard monitor training is completed.

RecoveryTrac™ Key Facts

- Owned and operated by Tetra Tech
- Over 6,000 mobile units on-hand and ready for state-wide multi-district mobilizations
- Meets USACE specifications for electronic debris monitoring handhelds
- Real-time situation awareness of field resources and efficient direction to support County priorities
- Real-time GIS web services for EOC information and visualization systems
- Capable of collecting data regardless of cellular service
- Automated photograph and GPS capture
- Provides reports and pass map tracking in real-time
- Minimizes chance of fraud through real-time monitoring
- Minimizes data entry and human error
- Expedites invoice reconciliation
- Intuitive and user-friendly

Cost Effective. RecoveryTrac™ combines the advantage of automation and the desire of our customers to control costs by utilizing widely available commercial equipment and increasing the simplicity of operations.

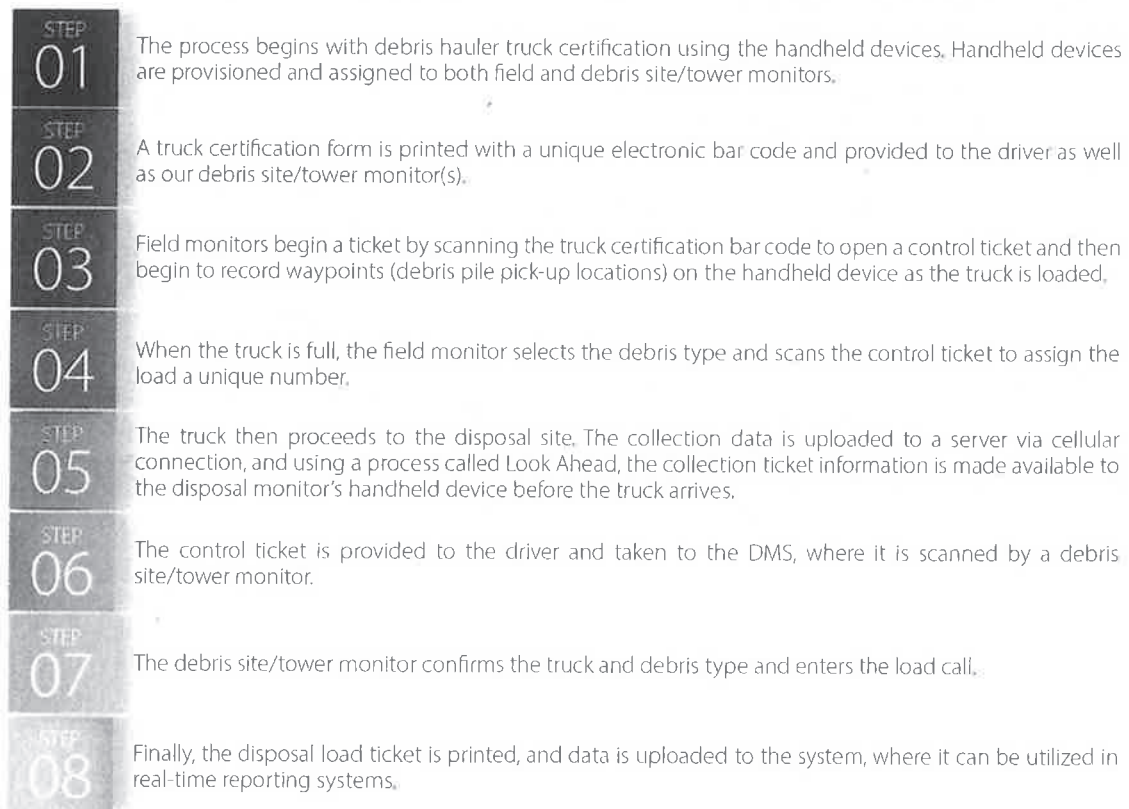
Technical Support. RecoveryTrac™ is designed to be self-repairing when possible; most support needs are resolved by field supervisors who are able to reach field monitors within 15–30 minutes in most cases. In addition, we have dedicated technicians at disposal sites and provide a field service center to maintain and repair equipment.

Real-Time Reporting. The key to successful management of a debris project is the timely availability of relevant information needed to make sound decisions and respond to anomalies before they become issues. Our powerful reporting engine allows the user to monitor contractor performance, track damages, track street-by-street debris removal progress, and identify and resolve potential problems as they happen. The geospatial reporting systems within RecoveryTrac™ provide real-time information that raises the bar for post-disaster project management.

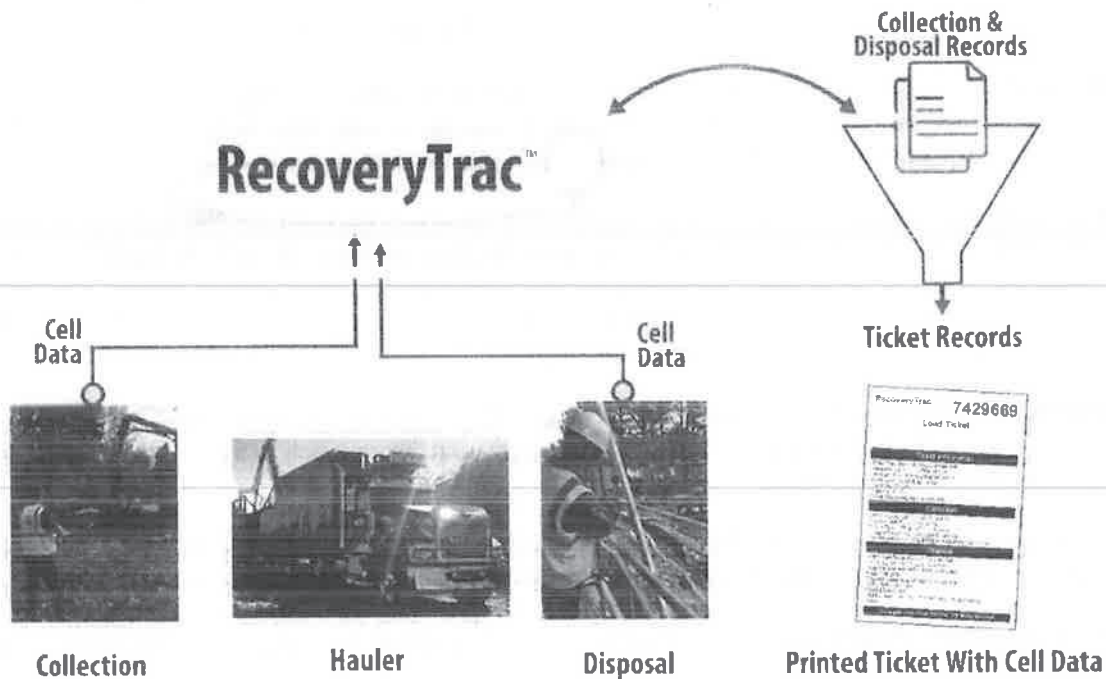
Truck Tracking. Our system provides the County with real-time location data for debris hauler assets. This translates into the ability to manage assets to those hardest hit locations or distribute assets more evenly based on issues such as first-pass completion, traffic patterns, and hot spots.

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.

The steps of the RecoveryTrac™ process are as follows:



Even when there is no cellular connection, the handheld devices continue to operate in connected mode; however, the data is stored on the device until a data connection is restored. The device periodically searches for this connection, and when services are device automatically uploads the stored ticket data.



Debris Vehicle and Equipment Certification

Tetra Tech's RecoveryTrac™ ADMS technology is used to electronically certify all trucks used in an activation. Our team follows a proven vehicle certification procedure that complies with FEMA guidelines and results in maximum reimbursement. Our certification includes:





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

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

Electronic volume calculations
 Instantaneous upload to the RecoveryTrac™ database
 Immediate QA/QC checks to verify the truck certification calculations
 Automated photo-matching of truck and driver photographs

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

Exhibit E-10: Truck Audit Report

CITY OF DORAL HURRICANE IRMA ROW COLLECTION - Project Truck Certification Details								
Contractor: ASHBRITT								
Sub-Contractor 1: CAR GREEN LANDSCAPING								
<u>Sub-Contractor 2</u>	<u>Truck No.</u>	<u>Capacity</u>	<u>Cert Date</u>	<u>Status</u>	<u>Vehicle Tag</u>	<u>Vehicle Type</u>	<u>Vehicle Features</u>	<u>QC Audit/Approval</u>
<input checked="" type="checkbox"/> NONE	009027	44	10/15/2017 9:08 AM	ACTIVE	GDR-K90 (FL)	SELF-LOADING TRUCK	DOG BOX/CURVED/ANGLED SIDE/FLOORS	QC Pending
Sub-Contractor 1: INTERCITY								
<u>Sub-Contractor 2</u>	<u>Truck No.</u>	<u>Capacity</u>	<u>Cert Date</u>	<u>Status</u>	<u>Vehicle Tag</u>	<u>Vehicle Type</u>	<u>Vehicle Features</u>	<u>QC Audit/Approval</u>
<input checked="" type="checkbox"/> NONE	009028	30	10/16/2017 3:46 PM	ACTIVE	N42-78Y (FL)	SELF-LOADING TRUCK	CURVED/ANGLED SIDE/FLOORS	QC Pending
Primary Box (L x W x H): 118x91x72 = 773136 0 (+) Type Box (L x W x H): 122x91x57 = 632814 0 (+) Type Box (L x W x H): 3x240x3 = 2160 0 (-) Total Volume: 1403790.0 Cu Inches (49856) = 30.09 CuYds								
<u>Driver-Placard View</u>		<u>Side View</u>		<u>Back-Interior View</u>		<u>Front View</u>		
								

Our disaster debris vehicle certification procedure includes the following:

- Generation of unique truck numbers for contractor crews and equipment
- 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

Payment Monitoring and Reconciliation Process

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

To expedite contractor invoice reconciliation efforts, Tetra Tech requires copies of contracts for all primary debris contractors. After reviewing the necessary contract(s), Tetra Tech sets up the RecoveryTrac™ database to generate transactions applicable to contract terms for tickets issued to each debris contractor.

Next, Tetra Tech meets with each primary debris contractor to review the debris contractor project reports that will be generated automatically via RecoveryTrac™. The debris contractor project reports will provide the debris contractors with sufficient data to reconcile with their subcontractors as well as generate invoices for payment by the client. The debris contractor is given a report login, which enables them to access the data remotely. They may run the report for a specific date or a range of dates.

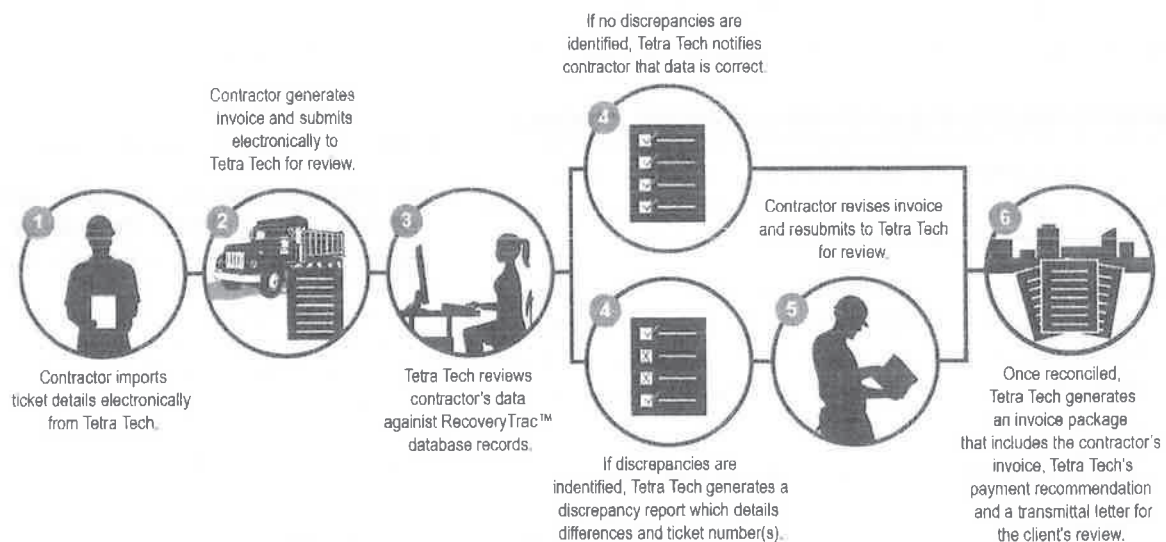
Tetra Tech conducts several real-time QA/QC checks throughout the day, and a final daily comprehensive data analysis is performed at the close of operations. A final QA/QC check is completed when the debris contractor sends the invoice dataset to Tetra Tech for reconciliation. Incongruencies in the debris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

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

Tetra Tech will submit invoices within the timeframes determined by the County. The process for contractor invoice reconciliation is as follows:

1. Debris contractor manually enters ticket detail into a contractor database or imports ticket data based on debris contractor reports.
2. Debris contractor generates an invoice for a specified period and submits the invoice and electronic backup to Tetra Tech for review.
3. Tetra Tech reviews the contractor data against RecoveryTrac™ database records:
 - a. If no discrepancies are identified, Tetra Tech notifies the debris contractor of no discrepancies in the data set.
 - b. If discrepancies are identified, Tetra Tech generates a discrepancy report noting ticket numbers and differences between the two data sets.
4. If applicable, Tetra Tech will also perform a full reconciliation of end use/disposal facility data corresponding to debris contractor disposed debris.
5. Tetra Tech submits the discrepancy report for the debris contractor's review. The debris contractor revises its invoice based on the discrepancies and resubmits to Tetra Tech for review.
6. Once a debris contractor's invoice has been reconciled, Tetra Tech generates a payment recommendation and transmittal letter for each invoice and submits the invoice package for review by the County. Tetra Tech's invoice package includes the following:
 - a. Contractor invoice
 - b. Tetra Tech transmittal letter and payment recommendation
 - c. Cost allocation data, if applicable
7. Electronic copies of supporting documentation (i.e., load tickets, unit rate tickets, or time and material logs).

Exhibit E-11: Contractor Invoice Reconciliation Process



Tetra Tech's Payment Recommendation Reports provide summarized and reconciled totals for contractor invoices.

Payment Recommendation Report										
Friday, July 10, 2015										
Invoice Cover Information					Invoice Number: 1002-15-009					
Applicant: CITY OF HOUSTON					Date Of Invoice: 37/09/2015					
Contractor: DRC					Gross Amount per Invoice: \$325,381.75					
Disaster: TX-SEVERE STORMS AND FLOODING					Amount Held In Retainage: \$0.00					
Invoice Date Range: FROM 06/15/2015 TO 06/21/2015					Net Amount Invoiced for Payment: \$325,381.75					
Supporting Electronic Backup Summary										
Code	Matching Service Description				Invoiced Qty	Invoiced Rate	Invoiced Total			
50A	VEG ROW DEBRIS REMOVAL 0-15MI TO DISPOSAL				26,455.10	\$7.22	\$191,005.92			
50B	VEG ROW DEBRIS REMOVAL 16-30MI TO DISPOSAL				554.25	\$9.41	\$5,215.49			
51A	C&D ROW DEBRIS REMOVAL 0-15MI TO DISPOSAL				16,222.35	\$7.50	\$122,289.96			
51B	C&D ROW DEBRIS REMOVAL 16-30MI TO DISPOSAL				546.10	\$10.75	\$5,870.58			
Total Amount of Supporting Electronic Backup Data (This amount pending reconciliation):							\$325,381.75			
Amount Adjusted (Deducted) from Gross Invoice Total (Backup Difference):							\$0.00			
100% Payable Transactions:										
Ticket Item	Invoiced Qty	Invoiced Rate	Invoiced	Tetra Tech Match	Resolved Date	Resolved Qty	Rate	Resolved Value	Adjustment	Reason
4035113-1	42.40	\$7.50	\$322.24	4035115	06/15/2015	42.40	\$7.50	\$322.24	\$0.00	Verified and Approved
4036116-1	36.80	\$7.50	\$279.58	4036116	06/15/2015	36.80	\$7.50	\$279.58	\$0.00	Verified and Approved
4036117-1	34.45	\$7.50	\$261.82	4036117	06/15/2015	34.45	\$7.50	\$261.82	\$0.00	Verified and Approved
4036118-1	27.50	\$7.50	\$209.76	4036118	06/15/2015	27.50	\$7.50	\$209.76	\$0.00	Verified and Approved
4036119-1	31.85	\$7.50	\$241.68	4036119	06/15/2015	31.85	\$7.50	\$241.68	\$0.00	Verified and Approved
4036176-1	53.20	\$7.22	\$384.10	4036176	06/15/2015	53.20	\$7.22	\$384.10	\$0.00	Verified and Approved
4036177-1	37.70	\$7.22	\$272.19	4036177	06/15/2015	37.70	\$7.22	\$272.19	\$0.00	Verified and Approved
4036178-1	45.60	\$7.22	\$329.23	4036178	06/15/2015	45.60	\$7.22	\$329.23	\$0.00	Verified and Approved
4036179-1	43.50	\$7.22	\$314.87	4036179	06/15/2015	43.50	\$7.22	\$314.87	\$0.00	Verified and Approved
4105960-1	33.80	\$7.50	\$256.88	4105960	06/15/2015	33.80	\$7.50	\$256.88	\$0.00	Verified and Approved
4105961-1	54.00	\$7.50	\$410.40	4105961	06/15/2015	54.00	\$7.50	\$410.40	\$0.00	Verified and Approved
4105962-1	34.30	\$7.50	\$260.58	4105962	06/16/2015	34.30	\$7.50	\$260.58	\$0.00	Verified and Approved

Continued, see additional data through page 2

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Deliverables

As shown above, Tetra Tech's ADMS has extensive reporting and documentation capabilities that can be made available to the County in real-time and will be stored in RecoveryTrac™'s cloud-based system for future use, should the need arise. Tetra Tech has reviewed the deliverable requirements listed on page 35 of the County's request for proposals and assures the County that these deliverables will be provided within the requested timeframes.

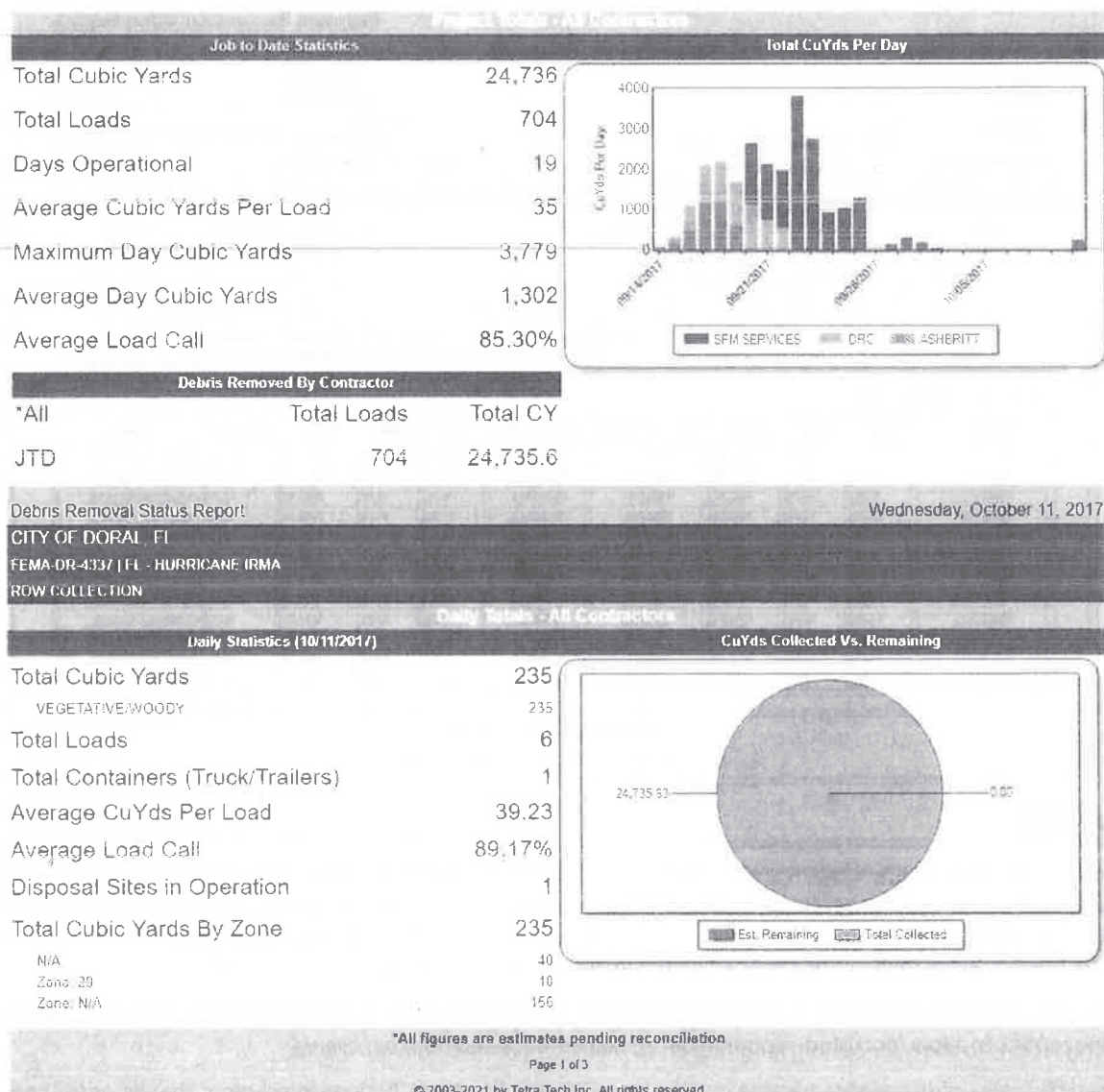
Tetra Tech has extensive experience in collecting, managing, and tracking financial and project data. Our firm has a full suite of existing reports to allow for custom reporting on all metrics requested from our clients.

Tetra Tech has years of experience tracking invoice amounts and payments, budget forecasting, change order, and work order attributable costs, etc. We understand the importance of accurate data and cost tracking and have developed several reports over the years to enhance visibility into essential project aspects.

Daily Operational Reporting Metrics

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

Exhibit E-12: Sample Custom Reports Developed



Documentation Necessary for Project Worksheets

No other firm can provide the years of experience and depth of knowledge in disaster debris management and the FEMA PA Program that Tetra Tech can offer. We have managed debris operations all over the country and have encountered unique challenges, including endangered species protection, private property debris removal, hazardous materials, waterways, and parks in urban, rural, and suburban landscapes.

Our team of industry experts has decades of experience coordinating with state and federal partners, compiling documentation, navigating regulatory audits, and supporting clients through complicated federal grant programs. We also have in-house experts in engineering, environmental considerations, health and safety, and regulatory requirements so that we can overcome challenges during debris operations.

Additionally, Tetra Tech's RecoveryTrac™ system was specifically designed with FEMA and other reimbursement agency requirements in mind. This means that all necessary documentation required for reimbursement is tracked through our ADMS system. This information is also available in real-time and stored to provide audit support, should the need arise.

Tetra Tech can assist in all phases of PW development, including but not limited to the following phases of PW development and monitoring:

- Sites visits to damaged sites
- Detailed Damage Descriptions and Dimensions development
- Repair Scope of Works
- Cost Estimates
- Engineering reviews (if applicable)
- Environmental reviews
- Historic preservations reviews
- Insurance subrogation
- Negotiations with FEMA on project scope and costs
- Responding to FEMA RFIs
- Interim and final inspections
- Audit support
- Appeals support

Tetra Tech and our project team have significant experience supporting clients in performing cost analyses and will support the County in its PW development and forensic needs.

Final Report

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

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

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

Schedule D: Fee Schedule

HOURLY RATE SCHEDULE

NAME OF BUSINESS: Tetra Tech, Inc.

CONTACT PERSON: Marina Armanious

EMAIL ADDRESS: tdr.contracts@tetrattech.com

AUTHORIZED SIGNATURE: 

The hourly rates shall include all cost including applicable overhead and profit, lodging, meals, transportation, rentals, safety gear, telephone costs, cameras, GPS devices and other incidentals.

	<u>POSITIONS</u>	<u>HOURLY RATES*</u>	<u>HOURS**</u>	<u>TOTAL</u>
1.	Project Manager	\$ 65.00	70	\$ 4,550.00
2.	Data Manager	\$ 55.00	70	\$ 3,850.00
3.	Cost Recovery Specialist	\$ 95.00	4	\$ 380.00
4.	Field Supervisors	\$ 42.00	70	\$ 2,940.00
5.	Fixed Site Monitors	\$ 33.00	140	\$ 4,620.00
6.	Environmental Specialist	\$ 60.00	2	\$ 120.00
7.	GIS Specialist	\$ 50.00	4	\$ 200.00
8.	Supervising Monitors	\$ 45.00	70	\$ 3,150.00
9.	Billing/Invoice Analysts	\$ 45.00	21	\$ 945.00
10.	Administrative Assistants	\$ 20.00	55	\$ 1,100.00
11.	Field Monitors	\$ 33.00	380	\$ 12,540.00
	TOTAL (Items 1-11)			\$ 34,395.00

*Any overtime will be billed at the Hourly Rate times 1.5. Overtime is not to be included in the rates above.

**These hours are not intended to represent the actual contract amount but are an estimated representation of a typical work week. The actual contract value will be negotiated with the successful proposing agency prior to issuance of the notice to proceed for each event.

This document must be completed and returned with your Submittal

