TASK ORDER NO. 4
CITY OF CLEARWATER, FLORIDA
TETRA TECH, INC.

Pursuant to the Master Services Agreement for Disaster Recovery Consulting Services entered into by and between the City of Clearwater, Florida, hereinafter referred to as "City" and Tetra Tech, Inc., hereinafter referred to as "Tetra Tech," a determination has been made by City that there is a need for the performance of or rendering of services by Tetra Tech of a certain "Task Order" under the purview of said Agreement, and Tetra Tech is hereby authorized to perform or render the particular services of work described as follows:

TITLE OF THE PROJECT: Substantial Damage Assessment |2024 Hurricane Helene and Milton

I. DURATION OF WORK:
Estimated project term: ~~October 30, 2024~~ November 1, 2024 through March 27, 2025

II. SCOPE OF SERVICES

The City suffered damages from Hurricanes Helene and Milton. To maintain compliance with the National Floodplain Insurance Program (NFIP), the City must assess the impacts the damages to structures within its established Special Flood Hazard Area (SFHA) before repairs can be made.

The NFIP regulations contained in 44 CFR §59.22 and §60.3 outline the responsibilities that communities must accept to attain and retain eligibility to participate in the NFIP. Enforcement and management of substantial improvement (SI) and substantial damage (SD) regulatory standards are a part of a jurisdiction's NFIP participation requirements. The regulations in the local floodplain management ordinance are based on requirements found in 44 Code of Federal Regulations (44 CFR). Standards set for floodplain management are set at the State level.

As outlined in the image below, FEMA outlines a multi-step process for the substantial damage assessment process. Tetra Tech will assist the City with:

- Collecting damage information
- Performing substantial damage determinations
- Communicating determinations to property owners

Figure 1: FEMA Substantial Damage Timeline

Tetra Tech shall provide technical support for field assessments and data collection to support the criteria thresholds for SD determinations as set forth by the National Flood Insurance Program. FEMA's Substantial Damage Estimator User Manual and Field Workbook, P-784/August 2017, Substantial Improvement/Substantial Damage Desk Reference, P-758/May 2010; partnered with existing local, State guidance and regulatory standards will be referenced and task deliverables aligned with FEMA's best practices for substantial damage assessments.

FEMA's Substantial Damage Estimate (SDE) 3.0 Tool will be utilized to perform a uniform assessment for residential and non-residential structure reviews. Data captured with SDE reporting may be utilized by the City to make the final SD determinations for post-disaster assessments for Hurricanes Helene and Milton. Tetra Tech Team leads will utilize FEMA guidance material, handouts, City maps, GPS devices for photo logs, and guidelines for uniform engagement with private property owners, photos standards, etc..

The section below outlines how Tetra Tech will support the City with this important effort.

Task 1 – Project Management

Project Kickoff Meeting. Within 24 hours of the issuance of a Notice to Proceed (NTP), Tetra Tech will coordinate a one-hour kickoff meeting with the City's Floodplain Manager. During this meeting, Tetra Tech's project manager will discuss:

- the project schedule,
- coordination of field operations,
- data requirements associated with conducting the assessments,
- the approach that will be taken to communicate with private property owners regarding the completion of SD

assessments, and

- health and safety considerations.

Following the meeting, Tetra Tech's project manager will develop a project schedule for review and approval by the City's Floodplain Manager.

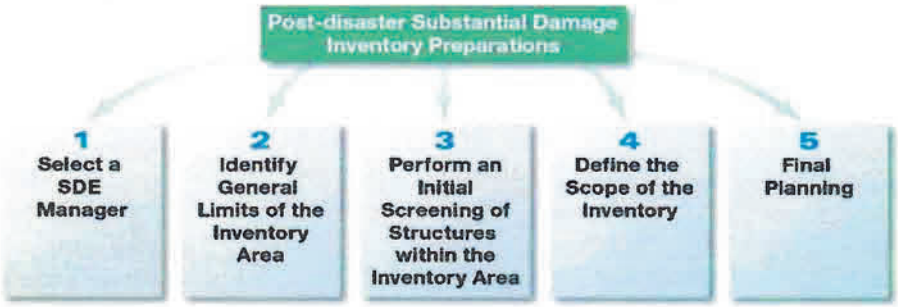
Project Management: Tetra Tech's project manager will provide weekly updates to the City's Floodplain Administrator, or their designee, on the status of data collection, the number of substantially damaged structures identified, and the expected project activities for the next week. These meetings will last approximately 60 minutes, and Tetra Tech's project manager will provide an email summary of the information covered and actions items within 24 hours of the meeting taking place along with a weekly summary of the level of effort under each task. City Staff will have the option to attend these weekly meetings based on their preference.

Task 2: Data Collection and Assessment

Data Collection and Preparation for Conducting Assessments: Tetra Tech will begin the project by reviewing existing regulatory standards that govern substantial damage assessments including flood plans, local flood damage prevention ordinance, building codes, existing building codes, and land/use regulations. The team will also review existing public access authority the City has in place to complete SD assessments from the right of way, easements, and streets; and existing right of entry legal authority the City may have for interior SD assessments, if applicable. The team will also review the existing appeals process the City has in place for properties that are considered substantially damaged. The team This will serve as the foundation for conducting assessments.

Tetra Tech will field deploy SD field assessment teams within 72 hours of the kickoff meeting. Prior to personnel beginning field work, Tetra Tech's project manager will hold a one-hour meeting with the team and the City to confirm the data baseline identified in FEMA's SD guidance, determine the methodology that will be used for inspections, and data collections requirements to meet or exceed FEMA's standards. This is anticipated to follow FEMA's SDE Field Workbook, Section 7 guidance.

Figure 2: FEMA's Five Steps for Post Disaster SDE Inventory Preparations



Additionally, before beginning field work, the Tetra Tech team will coordinate a meeting with the Building Official and Floodplain Administrator to review the common structure attributes such as residence type, use, foundation, superstructure, roof covering, common exterior finishes, depreciation ratio, and unique features to the areas identified. Guidance for estimating percent damage for residential and non-residential structures will be discussed and agreed upon before field assessments begin.

Conducting Assessments: Two person teams will be deployed to begin the data collection process. Teams will be provided with guidance materials on the data to be collected and guidance for how to conduct interactions with property owners and/or occupants. They will also be provided instructions on how to collect photos and geocode them for inclusion in a GIS map that will be provide to the City.

Each day before teams are sent into the field, and when they return, they will participate in a debrief that reviews inspection practices, how to maximize data quality and efficiencies, and to identify inconsistencies or other problems experienced in the field. City Staff will be included in these meetings to attend based on need and preference. The field inspection team will deploy with identification, field equipment and supplies, inspection area maps, hard copy letters of introduction, and SDE inspection worksheets. Tetra Tech recommends the City communicate the third-party inspection teams' locations and schedule with Emergency Management and first responders such as the Police Department prior to teams entering the field each day.

Tetra Tech teams will be responsible for collecting and recording field data required for FEMA SDE tool entry and assessment. Teams will collect the data using a computer or tablet and enter it directly into the SDE Tool. Teams will be provided paper forms that they can use should they lose connectivity and need to capture information to later be input into the tool.

Once data is entered by the field collection teams, Tetra Tech will apply the SDE data entry standards identified in FEMA's SDE Field Workbook and in coordination with data exports received from the Pinellas County Tax Assessor for structure, parcel, and value factors.

Data collected will be presented in a GIS map for the City to review.

Tetra Tech will work with the City and Forerunner representatives to ensure applicable collected data is input in Forerunner for use within the City's software system.

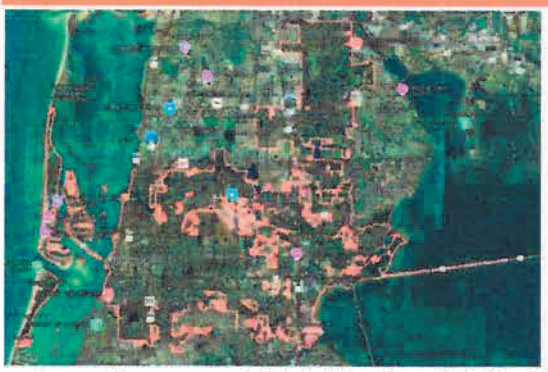
The City of Clearwater will be the responsible party for the final SD determinations using the data collected. NFIP regulations are found in Title 44 of the Code of Federal Regulations (CFR 59.1) and floodplain management criteria (CFR 60.3). Minimum requirements for substantial improvements and substantial damage are defined under the NFIP and the State of Florida has identified opportunities to enhance the minimum thresholds for SI/SD. Both minimum and enhanced requirements are required to be enforceable by adopting the regulation standards under a Flood Damage Prevention ordinance. Local jurisdiction's authority to enforce the minimum NFIP and/or adopted higher standards are held with the appointed Floodplain Administrator by ordinance.

Tetra Tech assumes that teams will average 20 residential inspections per team per day. The average SD field inspection should take no more than 20 minutes per structure to capture property data. Teams will average 5 commercial inspections day based on the proximity of structures, structure use, access, and whether the owner or designated representative will accompany the team during the inspection.

Assessment Locations: The following areas were identified by the City from PDA windshield inspections, completed for Hurricane Helene and Milton, to have identified damage assessments under major and destroyed. These assessments have established a baseline for SD field inspections.

- Estimated 1,200 residential structures captured under "major and/or destroyed"
- Estimated 200 non-residential structures captured under "major and/or destroyed"
- 8 structures identified as a complete loss from PDA windshield inspections

Barrier Island/Clearwater Beach
Venetian Point
Inland
Mainland



The barrier island/Clearwater Beach and Venetian Point are identified to be the priority 1 areas for inspections based on the event. Inland and mainland impacted areas are identified to be priority 2 areas. Other factors to be discussed with the City to finalize SDE fieldwork include accessibility, safety for field inspection teams, areas with critical facilities that may be a priority for the community, damaged areas with a high density of development and a large number of structures, and areas where temporary or permanent access issues may take additional time to resolve.

Review of Collected Data: Data collected in the field assessments and imported into FEMA SDE software will be presented to the City for review and assessment. It is in this phase that the City will make its SD determinations and start property owner notification. Tetra Tech will present the City with FEMA samples of notices to property owners, affidavits, and other material to support SD communication including:

- Sample Substantial Improvement/Damage Notice to Property Owners
- Substantial Improvement Worksheet for Floodplain Construction for additions, rehabilitations, improvements or damage repairs
- Adjuster Preliminary Damage Assessment

To prioritize communication with citizens, a triage approach will be outlined that includes:

- Structures identified to be "highly likely" substantially damaged based on field assessment and SDE data input should receive a SD determination letter within 24 hours of the City's review and determination. Tetra Tech will work directly with the City to identify the percentage threshold for this category.
- This notice should include an opportunity for the property owner to schedule an SD inspection for interior assessment, acceptable documentation to challenge the determination, and clear information outlining the appeals process. This notice should also include NFIP Increase Cost for Compliance information and mitigation funding opportunities such as grants and available loans for recovery.
- Assessed structures where the threshold is under the "highly likely" SD threshold, should receive a determination letter addressing permitting standards, SI and SD information, and property mitigation measures a property owner can complete.
- The City of Clearwater may assess additional target audiences for SI/SD information based on historical events such as pre-FIRM structures, repetitive loss areas, etc.

Tetra Tech will help the City with developing the language for the communications. If desired by the City, Tetra Tech will print and disseminate this information to property owners.

Task 3 - Support for Appeals Process

Tetra Tech understands that property owners may desire to appeal the SD ruling issued by the City. Tetra Tech is prepared to provide ongoing support to the City during the appeals period through providing teams that can return to the property and obtain additional data and images to support the City's reassessment of the determination. Tetra Tech will work with the City to set up a time for the team to return to the property and obtain the data and images and send two team members to the location. While there, they will enter the property and obtain additional images of the extent of the damages. This information will be uploaded to the geoportal within 1 business day of collection.

Tetra Tech assumes that teams will average 4.5 residential appeals inspections per team per day. Teams will average 2.5 commercial inspections day based on the proximity of structures, structure use, access, and whether the owner or designated representative will accompany the team during the inspection.

Task 4 – Building Plans Examiner Support

To support a streamlined permitting and application review process for structures damaged in Hurricane Helene and Milton, Tetra Tech will provide on-site ICC certified, Florida licensed building plans examiner(s). Tetra Tech will support the City with the expedited reviews of construction plans associated with building permit applications. Tetra Tech will help guide City residents through the permitting and application process, and when possible, work with the City to issue permits on the spot.

Task 5 – Technical Assistance

Tetra Tech will provide an on-call technical advisor who can support the City with reviewing the data collected during the initial SD evaluations and appeals process. The advisor will be knowledgeable of the SI/SD process, NFIP and Community Rating System (CRS) requirements.

Task 6 – Next Steps and Project Closeout

Next Steps Report: To assist the City with its long-term recovery efforts, Tetra Tech will develop a summary report that provides an overview of the completed inspections and outcomes; anticipated next steps for permitting and plans reviews; recommendations for conducting ongoing inspections throughout the redevelopment process; and addressing SI/SD appeals; and suggestions for updates to flood damage prevention ordinances. The report will also provide recommendations on how to conduct routine visual inspections to support Code Enforcement elements such as work without a permit or contractor licenses enforcement and more. The report will undergo a technical and editorial review before being provided to the City. Tetra Tech's project manager will submit the report to the City's Floodplain Administrator for a one-week review period prior to the conduct of a one-hour review meeting.

Project Closeout: At the completion of the project Tetra Tech will provide the City with electronic copies of project records including GIS files, images, etc.

III. ESTIMATED COST (not to exceed)

Estimated Not-to-Exceed: **$1,517,563.20**

The estimated not-to-exceed amount is based on Tetra Tech's current understanding of the project requirements and best estimates of level of effort required to perform the basic services and may be subject to change upon agreement between the City and Tetra Tech. The fee for the services will be based on the actual hours of services furnished multiplied by Tetra Tech's hourly rates as set forth in the Master Services Agreement between the City and Tetra Tech, procured under RFP No. 54-22 for Disaster Recovery Consulting Services. Table 1 below outlines the anticipated staff positions and level of effort for these services.

Table 1: Estimated Cost Breakdown [1][2][3][4]

Position (*Contract Title*)	Hourly Rate	Estimated # of Staff	Estimated Total Hours	Estimated Total
Task 1: Program Management				
Program Manager (*Sr. Program Manager*)	$198.00	1	40	$7,920.00
Project Manager (*Program Manager*)	$189.60	1	40	$7,584.00
Financial Manager (*Project Control Specialist*)	$99.60	1	24	$2,390.40
Subtotal:				***$17,894.40***
Task 2: SDE Initial – Data Collection & Assessment				
Project Manager (*Program Manager*)	$189.60	1	256	$48,537.60
GIS Manager (*System Administrator*)	$126.00	1	24	$3,024.00
Data Collection (*Assistant Planner*)	$114.00	8	1,600	$182,400.00
Field Supervisor (*Consultant/Planner*)	$150.00	1	200	$30,000.00
Data Entry Analyst (*Assistant Planner*)	$114.00	3	720	$82,080.00
Data Entry Supervisor/QCC (*Planner II*)	$132.00	1	240	$31,680.00
Subtotal:				**$377,721.60**
Task 3: SDE Appeals				
Project Manager (*Program Manager*)	$189.60	1	256	$48,537.60
GIS Manager (*System Administrator*)	$126.00	1	16	$2,016.00
Data Collection (*Assistant Planner*)	$114.00	16	3,328	$379,392.00
Field Supervisor (*Consultant/Planner*)	$150.00	2	416	$62,400.00
Data Entry Analyst (*Assistant Planner*)	$114.00	3	840	$95,760.00
Data Entry Supervisor/QCC (*Planner II*)	$132.00	1	280	$36,960.00
Subtotal:				**$625,065.60**
Task 4: Building Plans Examiner Support				
Building Plans Examiner *(Principal Consultant)*	$210.00	2	1900	$399,000.00
Subtotal:				**$399,000.00**
Task 5: Technical Advisory Support				
Project Manager (*Program Manager*)	$189.60	1	16	$3,033.60
NFIP SME (*Principal Consultant*)	$210.00	1	288	$60,480.00
Program Manager (*Sr. Program Manager*)	$198.00	1	80	$15,840.00
Subtotal:				**$79,353.60**
Task 6: Project Closeout and Next Steps				
Program Manager (*Sr. Program Manager*)	$198.00	1	40	$7,920.00
Project Manager (*Program Manager*)	$189.60	1	40	$7,584.00
GIS Manager (*System Administrator*)	$126.00	1	24	$3,024.00
Subtotal:				***$18,528.00***
Estimated Total				**$1,517,563.20**

[1] The above estimated level of effort and associated costs are based on available information at the time the estimates were prepared and do not represent the actual cost of the project. The fee for services will be based on the actual hours of services furnished multiplied by Tetra Tech's hourly rates.

[2] The hourly rates are fully burdened to include wages, applicable overhead, and other direct costs (vehicle rental, gas, printing, shipping, etc.).

[3] Tetra Tech may take the following actions, in its discretion, so long as Tetra Tech does not exceed the estimated total: (i) Use fewer hours of one labor category and more hours of another labor category or categories and (ii) use fewer hours within one task and more hours within another task as necessary.

[4] Total estimates are based on assessing 1400 parcels for initial SDE determination and 840 during the appeals process.

Iv. PROJECT ASSUMPTIONS

This proposal is based on our current understanding of the project. Revisions will be subject to a mutual agreement on the final work scope/schedule and other technical/management requirements desired by the City.

- **Project Lead:** The City's Floodplain Administrator, or their designee, will serve as the project lead who will work with Tetra Tech to address administrative and financial aspects of the project in coordination with Tetra Tech's project manager.
- **Data and Mapping:** The City will be responsible for providing Tetra Tech with available GIS data, property tax assessments, and other relevant records needed to conduct the SD assessment within 3 business days of request.
    - Tetra Tech will rely on City determinations for the market value of the structure, adjusted assessed values, and depreciation factors of the physical condition of the structure pre-event.
    - Tetra Tech will provide and manage a geospatial database showing the progress of structures visited each day.
    - Tetra Tech will complete SD field data entry within 24-hours of the day of the data collected. Record keeping will be set up that follows best practices; the SD inventory will include 1 folder per street address.
    - Tetra Tech will provide and manage a geospatial database showing the progress of structures visited each day.
    - Tetra Tech will complete SD field data entry within 24-hours of the day of the data collection. The SD inventory will include 1 folder per street address.
    - Tetra Tech will establish a Share Point site for sharing documents and information with the City. The City's Floodplain Administrator will be responsible for providing Tetra Tech's project manager with the names and email addresses of staff members that need to be provided access to the site.
    - Tetra Tech will provide the City with the GIS datasets (shapefile or geodatabase format) generated for this project. If Tetra Tech needs to develop GIS and other spatial datasets, these datasets will be created at accuracy levels suitable for analysis and presentation required to meet FEMA's requirements.
- **Data Security:** Tetra Tech is not responsible for the security, privacy, compliance, and updates of software and data maintained by third-party providers (i.e., Esri, Microsoft, etc.). Esri is responsible for all data security, privacy, and compliance for their software.
- **Accuracy:** Work will be conducted in accordance with FEMA's SDE 3.0 User Manual and Field Workbook, the SD Quick Guide, and SD Desk Reference.
- **Level of Effort:** The number, size, and scope of activities will be based on the extent of damage, number of structures to be inventoried, and the geographic areas to be inventoried.
- **Field Inspections:**
    - Tetra Tech field inspections teams will consist of two personnel per team.
    - The City will provide space where Tetra Tech teams can conduct daily briefings and debriefings at no additional cost to Tetra Tech.
- **Outreach and Notifications:** The City will be responsible for all community notification, outreach, and discussions with impacted property owners.
- **Safety:**
    - Safety is a top concern for Tetra Tech. Staff will operate at all times under the conditions outlined in the Health and Safety Plan (HASP) established for the project.

- Tetra Tech will not be responsible for entering areas where conditions are unsafe (i.e., roads are impassable due to damage or debris). Such conditions will be reported to the City's Floodplain Administrator and alternative plans will be made for conducting inspections.
- Tetra Tech's team will not interact directly with property owners. Should the team become engaged with a hostile situation, they will call law enforcement and notify Tetra Tech's project manager immediately. Tetra Tech's project manager will notify the City's Floodplain Administrator.

- **Reimbursement for Services:** FEMA Policy FP 204-079-01 enacted implemented section 1206 of DRRA through FEMA's Public Assistance (PA) Program with the intent to provide communities with the resources needed to effectively administer and enforce state and locally adopted building codes and floodplain management ordinances for a period of no longer than 180 days after the date of the major disaster declaration. Eligible activities included within this proposal scope of work can be reimbursed through FEMA PA's Category G projects when appropriate criteria are met. While Tetra Tech cannot guarantee reimbursement for these services, it is anticipated the FEMA will likely reimburse associated costs as outlined in the policy mentioned above.
- **Invoicing:** The City will be invoiced monthly based on hours and expenses incurred. Payment terms are net 30 days.

V. INVOICE AND PAYMENT:

Monthly Invoices are to be emailed to:	Payments are to be mailed to:
Gina L. Clayton	Tetra Tech, Inc.
Planning and Development Director	PO Box 911642
City of Clearwater, Florida	Denver, CO 80291-1642
gina.clayton@myclearwater.com	Attn: TDR Operations

Tetra Tech agrees to perform or render Services in accordance with the Master Services Agreement for Disaster Recovery Consulting Services (Contract #RFP #54-22) and this Task Order.

For CITY OF CLEARWATER, FL:		**For TETRA TECH, INC.**	
Signature:		Signature:	
Name/Title:	Jennifer Poirrier, City Manager	Name/Title	Jonathan Burgiel, Business Unit President
Date:	November 1, 2024	Date:	October 30, 2024