TETRA TECH

May 10, 2019

Mr. Dan Nelson
Naperville Office of Emergency Management
1380 Aurora Avenue
Naperville, Illinois 60540

Subject: **Response to Request for Proposal 18-21 – Development of Continuity of Operations Plans for the Cities of Aurora and Naperville, Illinois (Scope Amendment to Conduct Threat and Vulnerability Assessment at City Infrastructure in Aurora and Naperville)**

Dear Mr. Nelson:

Tetra Tech Inc. is pleased to submit the attached Scope of Work (SOW) and summary of the Budget Request to support the Cities of Aurora and Naperville, Illinois in their ongoing Public Safety/Homeland Security mission. Funding for the activities will be made available from the Complex Coordinated Terrorism Attack (CCTA) grant received from the Department of Homeland Security. This SOW outlines the tasks that Tetra Tech will perform and associated costs to produce the following deliverables:

- Phase 1: Site Assessments
- Phase 2: Threat Assessment
- Phase 3: Site Specific Reports

Introduction. Tetra Tech will conduct a threat and vulnerability assessment (TVA) of specified Aurora and Naperville city-owned infrastructure. Tetra Tech will accomplish this by leveraging our management organization, established TVA methodology, expert personnel, and existing relationships with stakeholders. Employing an established TVA methodology, we apply the perspective of an adversary as a part of our overarching TVA strategy. This approach allows our team to closely examine vulnerabilities associated with the selected infrastructure.

Tetra Tech will provide a brief summary report for each assessed site that contains actionable mitigation strategies. Recommended mitigation measures will include improvements in processes and procedures; delay features, such as barriers; detection features, such as CCTV; and response/interdiction features, including law enforcement involvement. Our TVA process includes the following activities:

- **Threat Assessment –** We develop a summary Design Basis Threat (DBT). The DBT defines the threats that we assess vulnerabilities against. During the site visits, we apply the perspective of a potential adversary that incorporates the DBT to validate applicable threats to specific infrastructure.
- **Infrastructure Characterization -** We prioritize functions and systems and identify critical assets (e.g., personnel, single points of failure, etc.) within each of the assessed sites. We also evaluate buffer zones - surrounding areas that may support an attack and or be impacted by an attack against a site.
- **Vulnerability Assessment –** We apply our TVA methodology to assess countermeasures (detect, delay, interdict) and evaluate the ability to deter, detect, delay, and respond to an attack or security breach.
- **Risk Reduction –** We provide recommendations that comprise personnel and training; equipment and hardening; policies and procedures to improve physical protection system effectiveness against threats.

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Site Assessments. Tetra Tech personnel will conduct site assessments of 22 Aurora and Naperville selected sites (refer to Attachment 1). The assessment team will comprise an ASIS International Certified Protection Professional (CPP) and/or Physical Security Professional (PSP). We will use Tetra Tech's TVA checklists that focus on physical attributes, countermeasures, threat target locations, and other security concerns. The Tetra Tech team will also validate DBT actions such as avenues of approach and visualize vulnerabilities that could be exploited by persons with malicious intent, and/or review the critical assets at the selected sites.

Reviews of sites and facilities will include the identification of all access points, common areas, security concerns and evidence of past breaches (e.g., holes in fences, broken locks, graffiti etc.). Tetra Tech will also look to identify countermeasures such as CCTV, badge access, lighting, locking mechanisms, fencing, gates, and other Crime Prevention Through Environmental Design (CPTED) assets. Countermeasures will then be examined for their effectiveness and any potential gaps that can be identified. The team will also attempt to review and identify issues such as: the video storage and recall of surveillance video captured by cameras and CCTV; door, lock and badge assess design and functionality; window design and potential access, height and integrity of fence lines; vehicle access; visibility of grounds, vegetation along fence lines; effectiveness of lighting; security presence; visitor sign-in and access procedures; staffing hours and normal operating procedures to determine access to the asset.

The site visits will include interviews with facility staff to gather their input on the overall function and design of physical security, how the assets/facilities operate, staffing levels, safety and security concerns including past or potential issues, and potential enterprise-wide consequences if a particular asset was impacted by a threat.

Additionally, during the site assessments, the team will look to identify buffer zones, facility hardening measures, and ease of access for malicious actors such as active shooters. We take into consideration unique geographic and demographic concerns such as surrounding area, exposed infrastructure, proximity to high value targets, and high concentrations of people. During the site assessments, the team will take comprehensive notes and photographs of each observation. The photographs will be geotagged and captioned.

Threat and Vulnerability Assessment. Tetra Tech will use an established process we have employed nationwide to meet our clients' needs. Our methodology is tailored for the customer, facilitates effective decisionmaking among stakeholders, and includes a multiphase process that will derive effective mitigation measures. At its most basic, the methodology is designed to establish threat scenarios based upon a DBT, evaluate the vulnerabilities/ gaps, and then develop mitigation strategies.

Step 1: Threat Identification and Assessment: To provide a strong foundation for the TVA, a full range of threats that could impact sites is considered. Tetra Tech team will identify threats based upon Aurora – Naperville stakeholder inputs, available open source intelligence, applicable DHS notices, and security subject matter expertise. Tetra Tech will work with stakeholders to define and develop an appropriate DBT for each of the assessed sites. The DBT will summarize potential threat types. This information, along with the identification of each site's avenues of approach, potential adversary pathways and locations of critical assets (e.g., personnel, single points of failure, hazmat) will be utilized to develop pragmatic protection strategies that provide in-depth defense for the assets.

Step 2. Vulnerability Assessment. Using the information that the team gathered during the site assessments, Tetra Tech will work with stakeholders to identify physical features or operational attributes that render its various assets susceptible or exposed to the identified threats. This step also considers the existing steps that the respective facilities have taken to protect their assets through other design elements. A countermeasure is any

action, measure, or device to include building standards, security equipment, personnel, plans, policies, and procedures that reduce the likelihood that an identified hazard will impact the asset.

For manmade malevolent threats, we apply an adversarial perspective, including terrorist motivations, resources, and training as a part of the vulnerability assessment phase. This approach allows our team to closely examine vulnerabilities of the selected sites. Our team determines whether a scenario would be possible with the current security/mitigation measures in place.

Step 3: Identification of Countermeasure Considerations. Tetra Tech will work with the stakeholders to identify and evaluate actions, measures, or devices that can be implemented to mitigate threats through avoidance, control/mitigation, and transference strategies. The key elements of an effective Physical Protection System (PPS) will include the capacity to detect and assess, delay, and interdict a threat. The mitigation strategies that the Tetra Tech team may apply will be based upon the integration of security technologies, personnel, procedures, principles of CPTED, etc. in order to provide concentric layers of protection.

Deliverables. In performing specific tasks under this contract, the PM will be responsible for ensuring that peer reviews accompany the performance of all tasks and that the level of review prescribed is consistent with the complexity of the work performed. We will submit soft copies of Security Vulnerability Assessment Summary Report(s) in either MS Word or Adobe PDF to Aurora and Naperville for their selected assets.

Cost. Tetra Tech has prepared a cost estimate (see Attachment 2) that encompasses and expenses and fee associated all proposed work. Tetra Tech will complete the work for a firm-fixed price of $75,380.00. Tetra Tech has provided a cost breakdown by activity associated for the scope of work. Work requested outside the scope contained in this proposal may necessitate a change order. Tetra Tech made the following assumptions:

- Each City will assign a Project Officer to serve as the primary point of contact for this project.
- Tetra Tech proposes deliverable-based invoicing for this firm fixed price contract.
- The site assessment activities will be conducted over the period of 5 consecutive days for each City's assets. Tetra Tech will work with each City's representative to develop a schedule.
- A Quick Look Report will be developed for each asset.
- All data generated from the assessment will be submitted to each City.
- Any additional services not defined in this scope of work such as updating plans, site drawings, or securing additional services for exercise implementation will not be assumed by Tetra Tech under this contract.

We look forward to working with the City of Aurora and the City of Naperville on this important project. Tetra Tech is committed to providing the required high-quality services at the price and schedule proposed. If you have any questions or need additional information, you can contact one of the representatives listed below.

Technical Representative:
Jeremy Kaufman
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Director
Edward Schuessler
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Sincerely,

Tetra Tech, Inc.
Jeremy Kaufman

Attachments:

1. Aurora and Naperville Critical Infrastructure
2. Cost Estimate

Attachment 1: Aurora and Naperville Critical Infrastructure:

Aurora Critical Infrastructure

- Aurora Police Department (1200 E. Indian Trail, Aurora 60506)
  - Dispatch Center
  - Evidence Building
  - Gun Range
  - EMA EOC
  - Harris Radio
- Aurora Fire Station #1 (75 N. Broadway St., Aurora 60505)
  - Fire administration
- Aurora Fire Station #8 (3770 McCoy Dr., Aurora 60504)
  - Telecom Backup Center
  - City of Aurora Customer Service Center
  - Harris Radio
- Aurora City Hall (44 E. Downer Pl., Aurora 60505)
  - Mayor's Office
  - City Council
  - Finance
- Water Treatment (1111 Aurora Av., Aurora 60505)
  - Chemical Storage
- Barnes Rd. water tower (225 Barnes Rd. Aurora)
  - Harris Radio
- Central Garage (720 N. Broadway St., Aurora 60505)
  - Fleet Operations
  - Fueling Stations (gas and diesel pumps)
  - Chemical Storage
- RiverEdge Park (360 N. Broadway St., Aurora 60505)
  - Whole park
  - Pedestrian bridge currently under construction
- Route 59 Train Station (1090 N. Route 59, Aurora 60504)
- Aurora Water and Sewer (649 S. River St., 60506)
  - Harris Radio

Naperville Critical Infrastructure:

- Naperville Police Department (1350 Aurora Av., Naperville) – to include
  - PSAP/Dispatch Center
  - Animal Control Building
  - Gun Range
  - Safety Town
- Naperville Fire Administration (1380 Aurora Av., Naperville)
  - Fire Admin building
  - FD Station 7 (attached)
  - EMA EOC
- Naperville City Hall (400 S. Eagle St., Naperville) – entire building & parking deck

- Naperville PSAP/City Dispatch (1350 Aurora Av., Naperville – see above)
- City of Naperville Department of Public Works (180 Fort Hill Dr, Naperville)
    - Administrative area
    - Garage/Fleet Maintenance area (interior)
    - Fleet Maintenance yard area (exterior)
    - Fuel pumps on the DPW campus – Gasoline & Diesel
    - Seizure Tow Lot Yard
- City of Naperville Electric Service Center (1392 Aurora Av, Naperville)
    - Dispatch center/Back-up Communications Center (BCC)
    - Electric Service Center fenced in "yard"
    - Fuel pumps on the ESC Campus – aka "West Pumps" – Gasoline & Diesel
- City of Naperville Springbrook Water Treatment Center (3712 Plainfield-Naperville Rd, Naperville)
    - Wastewater treatment facility
    - Chemical Storage
- At least 1 Water Tower
- Harris Radio towers (numerous)
- City of Naperville Household hazardous waste (156 Fort Hill Dr, Naperville)
- City owned large parking structures:
    - 75 E. Chicago Avenue (3 floor structure)
    - 43 W. Van Buren (5 floor structure)
    - 120 Water Street (5 floor structure)
- Downtown Train Depot (105 4th Avenue)
    - Depot Building
    - Parking area – North side of the tracks
    - Parking area – South side of the tracks

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Attachment 2: Cost Estimate:

Task	Name / Labor Rate	Metler $105.00	Kaufman $165.00	Editor $100.00	Quality $150.00
TVA Preparation					
Project Preparation		8.0	2.0		
Site Assessment					
Site Visit Travel		16.0			
Site Visits		120.0	40.0		
Quick Look Report		352.0	24.0	22.0	22.0
Vulnerability Assessment					
Area Risk Analysis		12.0			
	Labor Hours	508.0	66.0	22.0	22.0
	Labor Total	$53,340.00	$10,890.00	$2,200.00	$3,300.00
	Travel Cost	$5400.00	250.00		
	Individual Total	$58,740.00	$11,140.00	$2,200.00	$3,300.00
				Grand Total	**$75,380.00**

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