U.S. General Services Administration

SCOPE OF WORK

DFC CHILD-CARE CENTER BLAST STUDY

***\*Note that this sample has been revised from the source document on the Government Point of Entry as necessary to align formatting and applicable FAR procedures.\****

Project Location

Building 64/64A Child-Care Center

Denver Federal Center

Denver, Colorado

A. PROJECT SUMMARY & OBJECTIVES:

1. Project Summary: The General Services Administration, Region 8, is initiating a project to conduct a blast study of the Child-Care Center at the Denver Federal Center.

2. Project Background: The GSA controls a dedicated Child-Care facility at the Denver Federal Center, The Clever Kids Learning Center. This facility is a one-story, brick and concrete type structure comprised of a 1973 original building, B64, and a 1998 building addition (B64A). The building was remodeled in 2006 to upgrade interior conditions. The Child Care Center has direct street access and on-site parking on both the north and south sides of the building. There is a large fenced play area on the southeast of the building. Total facility square footage is approximately 9,800 SF.

3. Goals and Objectives: GSA Region 8 seeks to conduct a study to determine requirements to meet Interagency Security Committee (ISC) Blast Resistance Standards and vehicle anti Ramming Standards identified in ISC Appendix C: Child Care Center Level of Protection Template, 2019. Threat modeling will be based on the latest ISC Design Basis Threat document. The contractor will provide a site visit(s) and professional services required to develop a complete blast and set back study to determine if the current level of protection meets performance requirements. The A-E shall ensure that all applicable codes and standards are incorporated into the study. If ISC Standards are unfeasible, contractor shall develop alternatives with cost estimates. Any deviation from code will require an approval letter from the GSA.

B. A/E PROGRAM:

1. Scope of the A/E Work:

The scope of work includes, but is not limited to, the professional services required to accomplish the objectives stated above. The following components should be addressed in the study process:

A. The A-E shall perform a review of available standards, as-built construction documents, and perform a site visit to verify actual conditions of the building and site, including pertinent features adjacent to the site. Visual access beyond architectural finishes is likely limited. Scheduling of the site visit shall be coordinated with the COR and local GSA Field Office staff.

B. The A-E shall utilize verified SDOF methods (SBEDS/SBEDS-W or equal is recommended) to perform structural analyses of the façades, and the various window glazing configurations, including their mullions, frames and connections for conformance with the applicable design/performance criteria using the current design basis threats. This shall include an evaluation of the window/frame structural system’s ability to transfer blast reaction loads in a balanced manner. If applicable, it shall also address the system’s ability to transfer loads and determine the system’s failure mode/sequence considering the limiting capacity of the wall/façade.

C. Where glazing systems fail to meet the applicable performance criteria, the A-E shall develop retrofit alternatives to meet the current design criteria, including strengthening of mullions, frames and anchorage to the building structure.

D. Where façade systems fail to meet the applicable performance criteria, the A-E shall develop retrofit alternatives to meet the current design criteria including anchorage to the building structure

E. If, when evaluating existing facilities, façade systems fail to meet the applicable damage level performance criteria, the A-E shall extend the failure analysis to estimate levels of damage beyond the GSA standard, and predict failure levels such that hazards to building occupants are quantified by the likelihood of debris entering the occupied space. Summarize the results in terms of maximum inward debris travel distance and velocity on a floor by floor basis until the hazard is less than the performance condition required for windows. Lacking adequate as-built data, use both conservative and non-conservative assumptions to envelope a range of anticipated performance based on varying construction quality within the existing walls.

F. The AE shall evaluate the existing site features relative to perimeter protection systems and adjacent properties. Provide a discussion of physical security vulnerabilities relative to the condition of existing equipment, and any potential threats. The AE shall provide a list of recommended improvements, with cost estimate of probable construction costs. This should include a review of recent Facility Security Committee notes and Facility Security Assessments prepared by the facility’s security agency.

G. The A-E shall develop estimates of probable construction cost for each retrofit alternative. These shall address a limited balanced design if applicable.

H. The A-E shall summarize all findings and analyses into a formal report and shall make recommendations with varying costs and degrees of performance.

I. All work shall be approached with the objective of providing a Blast Study while meeting current codes with the least amount of tenant interruption. This scope is not to be considered all inclusive, therefore the A-E shall exercise due diligence to ensure that all aspects of the study are addressed.

J. If additional services outside the scope of this contract are required, the A-E shall notify the GSA project manager before any additional work begins.

K. The A-E shall perform whatever site visits and plan reviews are necessary to ensure the design documents correctly reflect the existing conditions and work to be performed. L. Provide a cost estimate at each submission based upon MEANS type guides, previous construction costs, and current material and labor costs for the area. Each estimate shall be dated and based on 2008 CSI format, with each division and element in each division included as necessary.

2. Standards and Guidelines:

A. All applicable codes shall be adhered to the maximum extent possible; the study shall be accomplished in accordance with all applicable standards and guidelines. At a minimum, the latest versions of following codes apply:

i. ISC Appendix C: Child Care Center Level of Protection Template

ii. ISC Appendix A: The Design Basis Threat Report

iii. GSA P-100

iv. GSA Child Care Center Design Guide

Note: ISC Standards can be obtained through request access via email to [insert email here] . The request should include the requestors full name and contact information, including email, company name, and reason for access to these documents

3. A/E Schedule and Submittals:

A. All documents will be as defined in the core A/E Services IDIQ Contract. All submittals and approvals will be in accordance with the schedule as stated in Part C of this document. The quantity and type of submittals for each design milestone will be as specified in PART D of this document.

C. DESIGN SERVICES, DRAWINGS & SPECIFICATIONS:

1. Provide professional services, drawings, specifications and reports to accomplish the work described in the A/E Program. The A-E shall provide an estimated cost of construction (ECCA) with each submittal. All calculations performed for the study shall be included with each submission.

2. Mid-Point Study Submittal (60% study completion)

a. The midpoint design will include specifications, drawings, estimates and all calculations. The report shall be edited to remove any extraneous sections or paragraphs.

3. Pre-Final Study Submittal (95% study completion)

a. The pre-final submittal will include the fully edited specifications, drawings, estimates and all calculations. The 95% construction cost estimate shall include detailed labor and material unit costs with overhead and profit included. Action on previous project review comments shall be incorporated in the report documents. If not incorporated, a written justification for not doing so is required. A 95% submission is expected to be 100% complete with regards to all study information, notes and coordination. The intent is to allow the Government an opportunity to make any final comments.

4. Final Study Submittal (100% study completion)

a. Action on previous project review comments shall be incorporated in the Final Study Submittal. If not incorporated, a written justification for not doing so is required. The 100% construction cost estimate shall include detailed labor and material unit costs with overhead and profit included.

b. The 100% estimate, when accepted by GSA, may become the Government estimate to be used for the analysis of future proposals received.

c. Contractor shall have 120 calendar days from notice to proceed to complete this study.

5. A/E Program Schedule

|  |  |
| --- | --- |
| **Milestone** | **Calendar Days** |
| Site Visit | 20 |
| Midpoint (60%) Submission Due | 20 |
| Midpoint Review | 14 |
| Pre-Final (95%) Submission Due | 22 |
| Pre-Final Review | 14 |
| Final (100%) Submission Due | 30 |
| **Total Time** | **148** |

The A-E shall confirm the above dates upon receipt of award.

D. DRAWINGS, COST ESTIMATES & REPORT REQUIREMENTS:

|  |  |  |  |
| --- | --- | --- | --- |
| **Design Stage** | **Drawings** | **Cost Estimates** | **Reports** |
| Midpoint (60%) | 3 | 3 | 3 |
| Pre-Final (95%) | 3 | 3 | 3 |
| Final (100%) \* | 3 | 3 | 3 |
| Half-Size (100%) | 3 | 3 | 3 |

\*Four sets of electronic 100% project documents on CD in AutoCAD 2010 &

Word 2007 format.