

CENTRAL U.S. EARTHQUAKE CONSORTIUM

REQUEST FOR PROPOSALS

for

Tier I Assessments of Lake County, Tennessee, Schools

CONTRACT ADMINISTRATOR:

James M. Wilkinson, Jr.

Executive Director

(901) 544-3570

jwilkinson@cusec.org

Central U.S. Earthquake Consortium

2630 E. Holmes Rd.

Memphis, TN 38117

RFP ISSUE DATE: August 23, 2019

RFP CLOSING DATE: September 13, 2019

I. INTRODUCTION

The Central U.S. Earthquake Consortium (CUSEC) is seeking proposals to conduct Tier 1 seismic risk assessments (SRAs) for Lake County, Tennessee, schools in accordance with the American Society of Civil Engineers (ASCE) 41-13 Seismic Evaluation and Retrofit of Existing Buildings. This study will help inform county and school district officials about potential problems in school buildings should a seismic event occur and aid them in establishing risk management policies and procedures.

The requirements for the work are described below in Section VI, Scope of Services to be Performed.

II. BACKGROUND

In 2016, the University of Memphis (U of M) was awarded a grant from the Tennessee Department of Economic and Community Development (TDEC) to address areas of the state that were heavily impacted by the historic 2011 floods and are also at risk from damage by earthquakes in the New Madrid Seismic Zone. The U of M grant is part of a larger award made to TDEC by the U.S. Department of Housing and Urban Development.

Also included in the U of M grant were funds to conduct structural vulnerability assessments of all Lake County, Tennessee, schools. CUSEC was awarded the subcontract by U of M to conduct these school assessments.

Schools located in the New Madrid Seismic Zone—especially those built prior to modern seismic engineering standards—are vulnerable to damages, injuries or deaths resulting from even a moderate earthquake. Two of the three Lake County schools were built in 1951 and 1963 and do not feature seismic-resistant design considerations.

III. OBJECTIVE

The objective of this project is to screen Lake County school buildings to determine if seismic deficiencies exist that warrant further evaluation. The results will be used by county and school officials to determine the need for further study and development of mitigation measures, costs, and plans.

IV. CONTRACTOR QUALIFICATIONS

Firms, subsidiaries and individuals providing professional services must be currently licensed to practice in each of their respective areas of professional expertise in the state of Tennessee and have demonstrable experience performing at least three (3) ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings evaluations in the past five years.

V. SPECIFICATIONS

Performance Objectives:

- Risk Category = III
- Structural Performance = Per ASCE/SEI 41-13 Table 2-1, footnote b

- Nonstructural Performance = Position Retention

Seismic Hazard:

- BSE-1E shall be modified from that specified in ASCE/SEI 41-13 Chapter 2 and used for the Tier 1 evaluations. The BSE-1E shall be the higher of either:
 - 75% of BSE-1N, or
 - 10%/50-yr hazard level

VI. SCOPE OF SERVICES TO BE PERFORMED

An aerial view of each site is provided in Attachment A, Aerial Images of School Campuses and Facilities. Facility addresses are provided in Section XII, Places of Performance. Contractor should submit proposals with two possible scopes in mind:

- **Scope #1:** The contractor will perform SRAs (as specified below) of schools and district administrative offices listed in Section XII. SRAs should be performed on the primary structure of each site (i.e. the school) as observable in Attachment A.
- **Scope #2:** The contractor will perform SRAs (as specified below) of schools and district administrative offices listed in Section XII. SRAs should be performed on the primary structure (i.e. the school) and any additional substantial structures observable in Attachment A. For purposes of this RFP, substantial structures are those not physically attached to the primary structure such as detached administrative offices, gymnasiums, portable classrooms, maintenance shop, or other buildings typically found on school campuses.

SRAs shall be done in conformance with ASCE standard ASCE/SEI 41-13: Seismic Evaluation and Retrofit of Existing Buildings, published by the American Society of Civil Engineers. Professional services provided by contractor will include all activities necessary to identify, assess, and document the potential seismic deficiencies of the listed buildings. These activities typically include:

- Determination of seismic hazard and level of seismicity using available information;
- Coordination with school district and facility personnel regarding:
 - As-built information availability
 - Site visit(s)
- Review of existing as-built information provided by the school district;
- Determination of common building type(s); and
- Structural and nonstructural seismic risk assessments including:
 - Benchmark building determination
 - Selection and completion of required checklists
 - Quick check analysis.

VII. DELIVERABLES

The deliverables for this project will consist of all completed checklists called for per ASCE 41-13 Section 4.4. All checklists are to be submitted to CUSEC in a PDF via email according to the dates detailed in Section VIII below. A final report summarizing findings and recommendations shall also be provided.

VIII. KEY DATES AND MILESTONES

Dates	Description
August 23, 2019	RFP issued
September 13, 2019	RFP due to CUSEC by 5:00 pm.
September 16-26, 2019	Selection process.
September 27, 2019	Notification of award and contract sent to selected provider.
October – December 2019	Contractor acquires and reviews available plans of the schools; interview parties familiar with the history of the schools' construction and any building modifications; and conducts non-intrusive, walk-through inspections using Tier 1 evaluation checklists.
January 2020 – February 2020	Contractor develops findings and final report.
February 14, 2020	Contractor final report due to CUSEC.

IX. INSPECTION AND ACCEPTANCE

Upon completion of the Tier 1 screenings, the contractor will provide to CUSEC a copy of the Tier 1 checklists and any quick check calculations prepared as a part of the Tier 1 screening. The final report accompanying the Tier 1 checklists and calculations will include a recommendation to:

1. Terminate further assessment; or
2. Proceed to a Tier 2 deficiency only evaluation; or
3. Omit the Tier 2 evaluation and proceed directly to development of conceptual retrofit measures; or
4. Proceed with some other appropriate course of action.

CUSEC's acceptance of the final report and checklists will constitute acceptance of all deliverables for this project.

X. COST PROPOSAL

Two cost proposals should be provided, one for each of the two possible scopes of services to be performed (reference Section VI), each on a fixed-firm deliverable basis.

XI. PERIOD OF PERFORMANCE

The period of performance for this task is expected to be from October 1, 2019 to February 14, 2020, unless a different period of performance is proposed by the contractor and agreed upon by CUSEC.

XII. PLACES OF PERFORMANCE

Data collection and site visits will require travel to the Lake County, Tennessee, where the schools reside (see physical addresses below). Other services associated with the Tier 1 screening and checklist preparation can take place at the contractor's facilities.

School	Location	Year Built	# of Students / Staff
Margaret Newton Elementary School	819 Church St. Tiptonville, TN 38079	1951	212 students 23 teachers/staff
Lake County High School	300 Cochran St Tiptonville, TN 38079	1963	217 students 26 teachers/staff
Lara Kendall Elementary School	200 N College St. Ridgely, TN 38080	1987 - Safe room (hallway) added in 2005 holds 600 people.	334 students 38 teachers/staff
Lake County Board of Education	819 McBride St. Tiptonville, TN 38079	Unknown	16

XIII. SUBMISSION OF PROPOSALS

Service providers interested in providing the services described above may submit a proposal via email to: Mary MacKinnon, Grants Manager, at mmackinnon@cusec.org.

Proposals should include the following

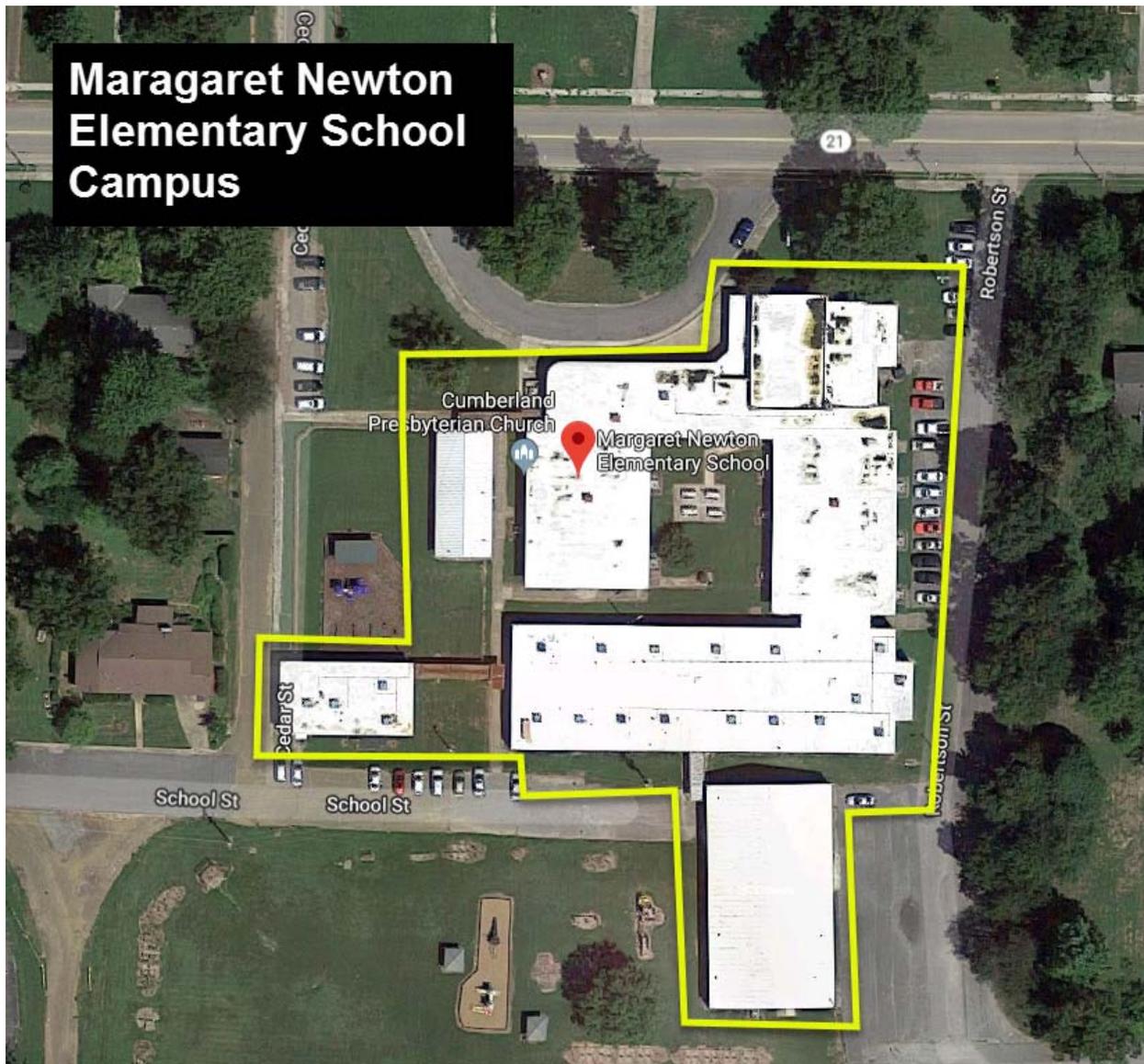
- Firm name, address, phone number, email address;
- Cost proposal;
- Tentative schedule for review and approval using tasks and milestones in Section VIII;
- List of key personnel who would be assigned to this project; and
- Description of at least three (3) relevant projects completed by the firm.

Attachment A

Aerial Images of School Campuses and Facilities

- A) Margaret Newton Elementary School
- B) Lake County High School
- C) Lara Kendall Elementary School
- D) Lake County Board of Education

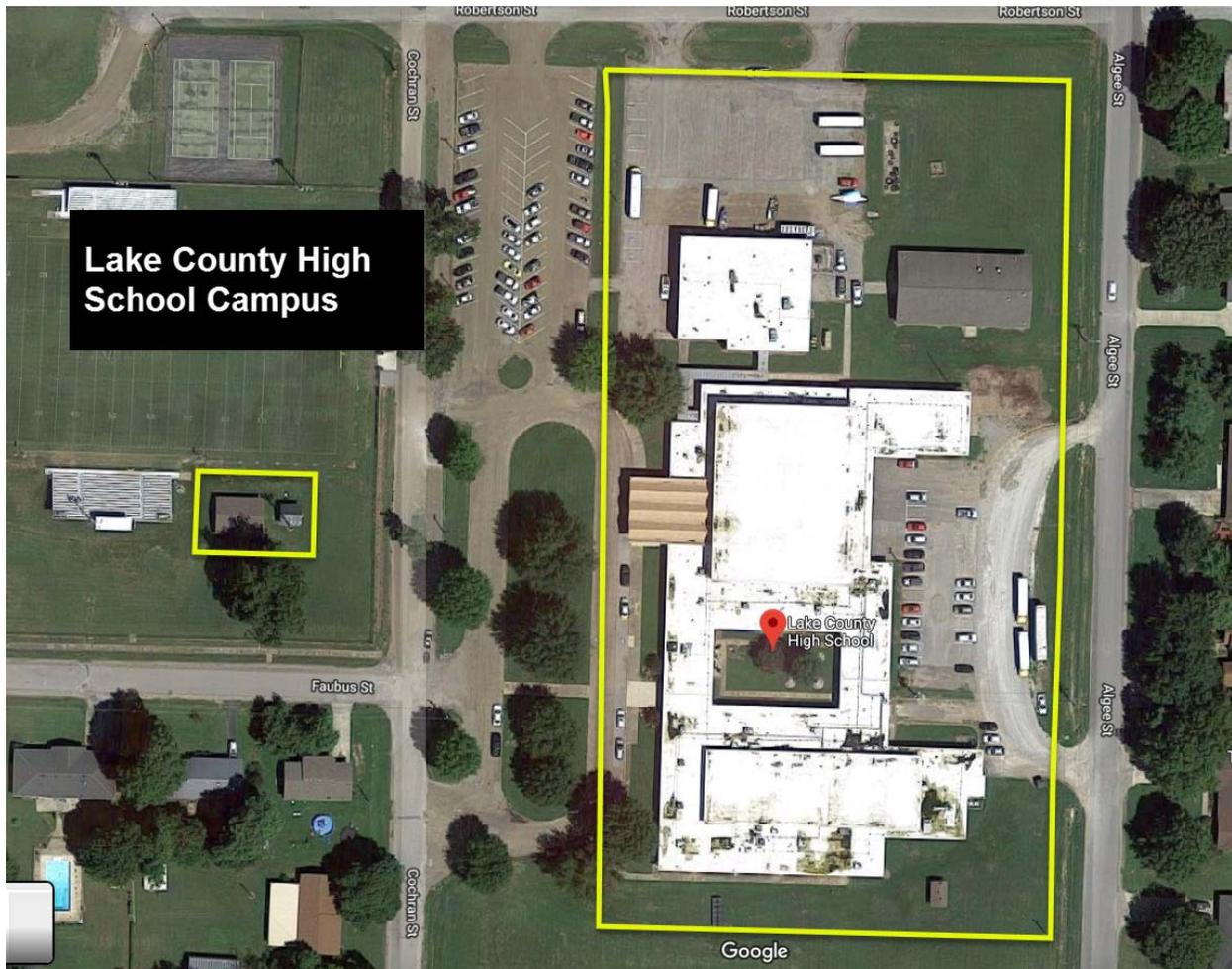
A) Margaret Newton Elementary School



Margaret Newton Elementary School
819 Church St.
Tiptonville, TN

Notes: Campus includes multiple buildings as indicated by the outline boundary marks. One building is erroneously labeled “Cumberland Presbyterian Church” but is a school building.

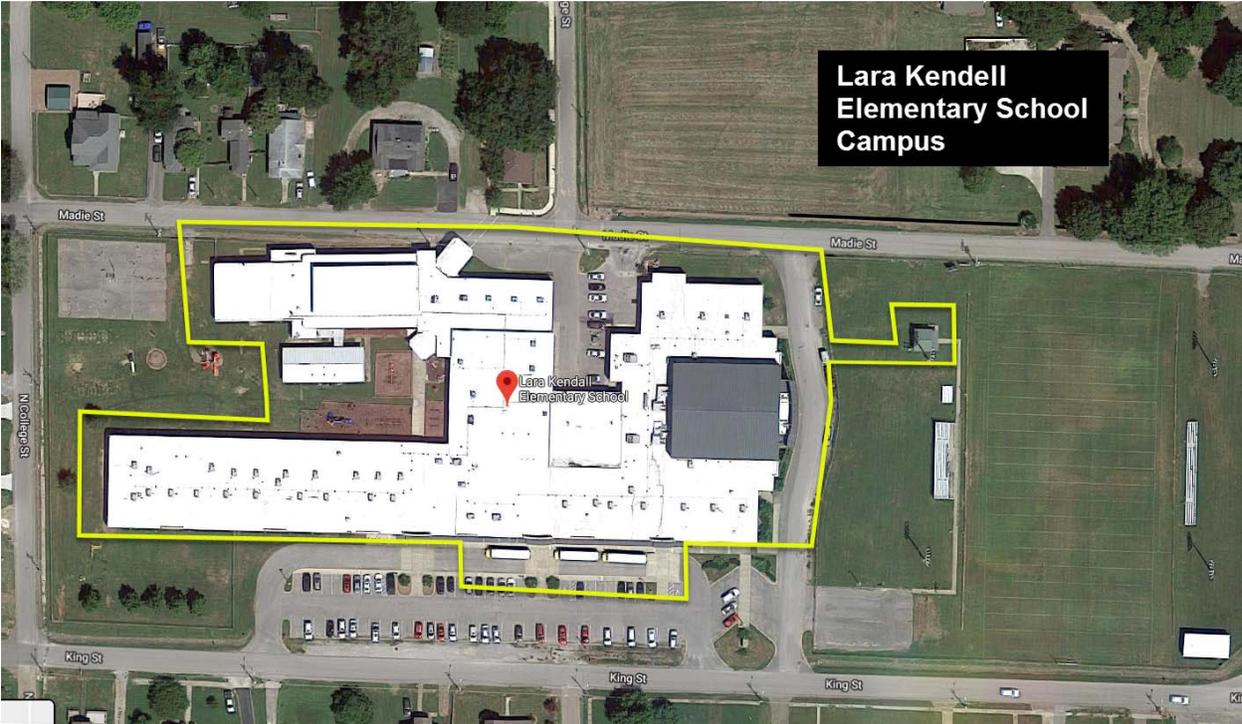
B) Lake County High School



Lake County High School Campus
300 Cochran St.
Tiptonville, TN

Notes: Campus includes multiple buildings as indicated by the outline boundary marks. Some of the structures appear to be temporary classrooms and on the football field, storage and concessions buildings.

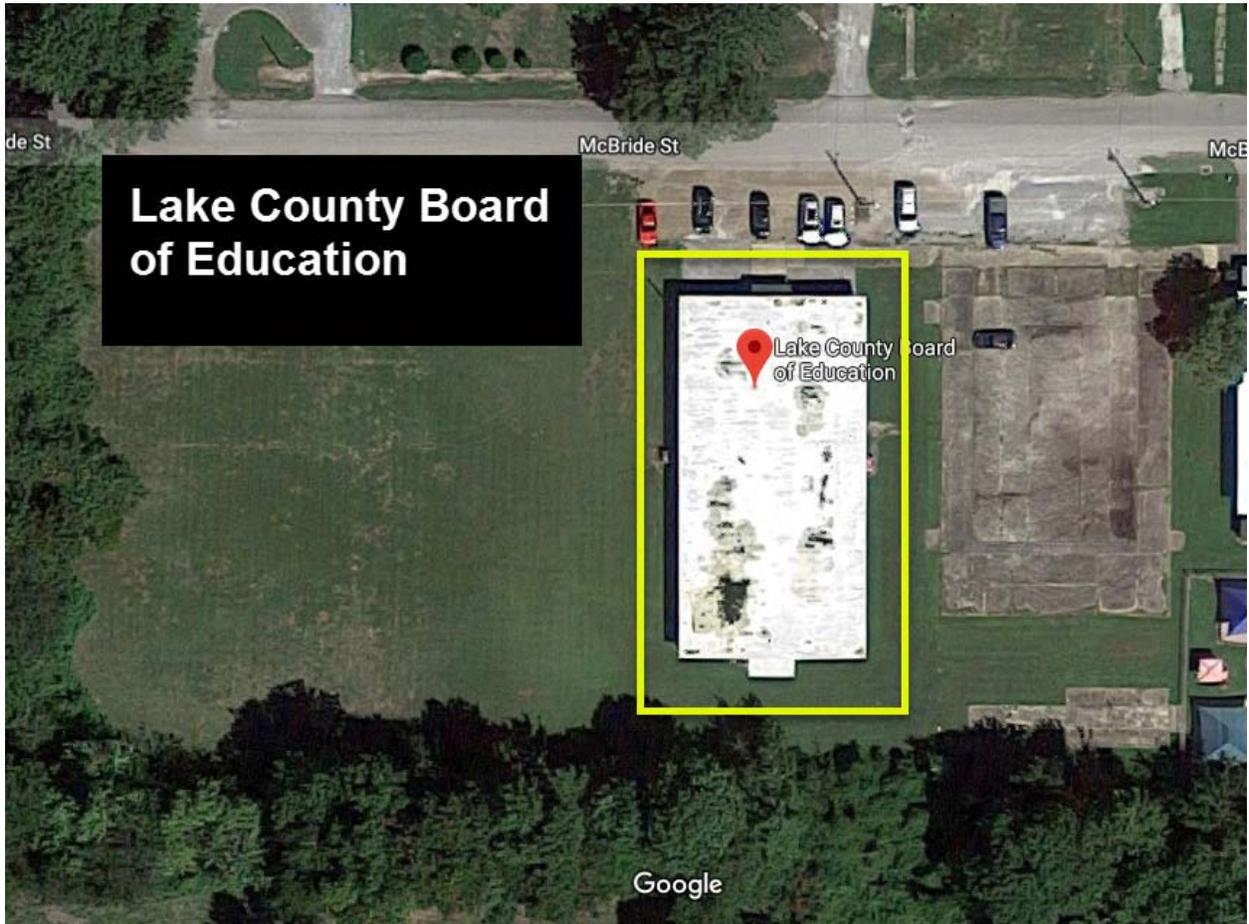
C) Lara Kendall Elementary School



Lara Kendall Elementary School
200 N. College St.
Ridgely, TN

Notes: Campus includes multiple buildings as indicated by the outline boundary marks. Some of the structures appear to be temporary classrooms and on the football field, a concessions building. The structure in the lower right corner appears to be a storage building.

D) Lake County Board of Education



Lake County Board of Education
819 McBride St.
Tiptonville, TN