JUDSON INDEPENDENT SCHOOL DISTRICT

Meeting Date: April 23, 2026

Submitted By: Daniel Brooks
Title: Assistant Superintendent

Agenda Item: Consider and take action approving the selection of design and engineering services for the Copperfield Elementary School Site and Civil Upgrades project in Bond 2022.

CONSENT ITEM

RECOMMENDATION:

It is recommended that the Board approve the selection of Colliers Engineering & Design, Inc. to provide the design and engineering services for the Copperfield ES Site and Civil Upgrades project in Bond 2022 and that the Board of Trustees delegate the authority to the Superintendent to execute all contracts and related documents necessary to complete this project. The scope of work includes but is not limited to providing professional design services for the site and civil upgrades project for Copperfield ES. This includes survey services (courtyard and entries, storm drains and parking, underfloor, etc.), geotechnical services (subsurface utility investigation services, etc.), civil services (site and civil assessment, schematic design, etc.), architecture services (structural services), and mechanical, electrical and plumbing (MEP) professional services (design, construction phase, etc.). Expenditures will be made from Bond 2022 funds at a total estimated cost of $768,757.50.

IMPACT/RATIONALE:

Allows the district to procure professional services in accordance with Section 44.031 of the Texas Education Code. Expenditures will be made from Bond 2022 funds at a total estimated cost of $768,757.50. The scope of work includes but is not limited to providing professional design services for the site and civil upgrades project for Copperfield ES. This includes survey services (courtyard and entries, storm drains and parking, underfloor, etc.), geotechnical services (subsurface utility investigation services, etc.), civil services (site and civil assessment, schematic design, etc.), architecture services (structural services), and mechanical, electrical and plumbing (MEP) professional services (design, construction phase, etc.). The contract will be for a specific project and will expire upon completion of all related services.

BOARD ACTION REQUESTED:

Approval/Disapproval

Date: April 23, 2026

To: Lynnette Trevino, Director of Purchasing

From: Benjamin S. Mora, Executive Director of Facilities Planning

Project: Copperfield Elementary School Site and Civil Upgrades Project

The Department of Facilities Planning has found Colliers Engineering & Design, Inc. to be a highly qualified firm to provide design and engineering services for the submittal for the Copperfield Elementary School Site and Civil Upgrades project in Bond 2022.

- Colliers Engineering & Design, Inc.
- Moy Tarin Ramirez (MTR) Engineers, LLC.
- KCI Technologies, Inc.
- IMEG Consultants Corp.

The scope of work includes but is not limited to providing professional design services for the site and civil upgrades project for Copperfield ES. This includes survey services (courtyard and entries, storm drains and parking, underfloor, etc.), geotechnical services (subsurface utility investigation services, etc.), civil services (site and civil assessment, schematic design, etc.), architecture services (structural services), and mechanical, electrical and plumbing (MEP) professional services (design, construction phase, etc.).

The total estimated cost to procure these design and engineering services is $768,757.50 (Basic Services $732,150.00 + Owner Contingency allowance $36,607.50).

Expenditures will be made from Bond 2022 funds.

Colliers Engineering & Design, Inc. were selected from a pool of highly qualified engineering firms that submitted to RFQ 23-18 Engineering Services.

The terms of RFQ 23-18 Engineering Services were to commence on or about August 15, 2024, for an initial period of three (3) years with the option, at the district's discretion, for one (1) additional two (2) year extension.

The Board of Trustees approved the respondents to RFQ 23-18 Engineering Services for design and engineering services, as being qualified on August 15, 2024.

CC: Cecilia Davis, Deputy Superintendent of Operations
Daniel Brooks, Assistant Superintendent of Operations

Tabulation
Copperfield ES Site and Civil Upgrades Project

Vendor	Ranking
SUMMARY	
Colliers Engineering & Design, Inc.	1
Moy Tarin Ramirez (MTR) Engineers, LLC.	2
KCI Technologies, Inc.	3
IMEG Consultants Corp.	4

DEPARTMENT RECOMMENDATION

I have reviewed the submittals for this offering and recommend the following vendor(s) for award:

Benjamin S. Mora	Lynnette Trevino
Executive Director of Facilities Planning	Director of Purchasing

3421 Paesanos Parkway Suite 103
San Antonio, Texas 78231
United States
Main: 877 627 3772

TBPLS Reg. 10194550 • TBPE Reg. F-14909 • TBPG 50617

Colliers
Engineering & Design

March 20, 2026

Judson Independent School District
Attn: Benjamin S. Mora
Executive Director, Facilities Planning
7980 Pat Booker Road
Live Oak, TX 78233

Proposal for Professional Services
RFQ 23-18 Engineering Services
(Copperfield Elementary School Site & Civil Upgrades)
Converse, Texas
Proposal No.: 24002853P

Dear Mr. Mora,

Colliers Engineering & Design, Inc. is pleased to submit this proposal to provide professional services for proposed site and civil upgrades for Copperfield Elementary School in Converse, Texas. The property in question is located along the west side of Loop 1604, north of Coppergate. The overall property consists of approximately 18 acres of land and is an operating Elementary School.

This proposal is divided into four sections as follows:

Section I – Scope of Services
Section II – Business Terms and Conditions
Section III – Technical Staff Hourly Rate Schedule and Reimbursable Expenses
Section IV – Client Contract Authorization

The order in which the following scope of services are presented generally follows the sequence in which the project will be accomplished; however, depending on the project, the various authorized services contained in this proposal may be performed in a sequence as deemed appropriate by Colliers Engineering & Design to meet project schedules.

Section I – Scope of Services

Based on our conversations and information noted above, we propose to complete the following:

Survey Services:

Task 1: As-Built Plans

This task is divided into four (4) areas: Courtyard and Entries, Storm Drains and Parking Areas, Access Drives, and Underfloor. This task depicts the relationship of physical improvements on the property. The topographical survey will be performed on the ground in a 50-foot grid, plus additional grade breaks. CED will locate improvements, including but not limited to, existing buildings, concrete rip-rap,

curbing, driveways, fences, and visible utilities. The underfloor as-built and topographic survey will include 3D scanning of the areas beneath the main floor of the school to capture existing conditions for design purposes.

Geotechnical Services:

Task 2: Subsurface Utility Investigation Services (SUE)

Colliers Engineering & Design proposes to provide the following professional Subsurface Utility Investigation Services in support of the above-named project in accordance with the locations and project limits as indicated by the client. The extent of the utility investigation service is only within the boring location.

Service	Description
Utility Designation	Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities.

Designating Service (Horizontal Location of Utilities)

Designating is to indicate, by marking with paint, the presence and approximate horizontal location of subsurface utilities using geophysical prospecting techniques including electromagnetic, sonic and acoustical techniques. Colliers Engineering & Design will provide the following designating services to aid the Client:

- Provide equipment, personnel and supplies needed for performing designating. Colliers Engineering & Design shall determine equipment, personnel and supplies needed to perform these services.
- Designate the existing underground utility pipeline facilities within the identified area of boring location.
- Conduct appropriate investigation of site conditions.
- Mark the target utilities on the ground with spray paint.
- Client must furnish primary on-site contact person or permissions for our field crew to enter the property.
- Colliers Engineering and Design will designate all utilities within a 25' radius of the proposed Geotechnical bore locations.
- Colliers Engineering and Design will stake out the locations prior to designating services being performed.

Deliverables

Colliers Engineering & Design will provide:

- Electronic (KMZ) sketches of designated utilities.

Task 3: Phase I - Preliminary Geotechnical Exploration and Report

We will perform a preliminary geotechnical exploration in accordance with sound engineering practice and state/local regulations to evaluate subsurface conditions at the property through subsurface explorations and laboratory testing of representative soil samples. These results will help define the scope for Phase II, which will provide additional explorations as needed and final foundation remediation recommendations.

We have assumed the following in preparation of this proposal:

- Structurally supported floor slab on pier and beams is assumed to be structurally sound and not contributing to the distress observed around the site;
- Expansive Fat Clays are understood to be present throughout the property, causing the distress observed around the site.

If these assumptions differ from what we encounter during our review of available information and what we encounter during our site explorations activities, the boring depths and locations herein may need to be altered.

Proposed boring locations are provided below:

Proposed boring locations may be offset as needed depending on access and existing site conditions (e.g., utilities, structures, obstructions, etc.).

1. We will provide a contractor to mobilize truck-mounted drilling equipment to perform Standard Penetration Test (SPT) borings to visually classify the subsurface soils, evaluate groundwater conditions, and obtain soil samples for laboratory testing. Up to **eight (8) SPT borings** will be performed and will be advanced to a depth of up to ±15 ft. below the ground surface. It is noted that the borings are planned to be backfilled with cuttings. We will perform a maximum of five (5) pavement cores at each of the proposed boring locations. Each of the five (5) pavement cores will be cold-patched after completion.

Improvement	Number of Explorations	Type of Exploration	Proposed Depth of Exploration (feet)
Perimeter of School	4	SPT Borings	15
Parking Lots and Paved Areas	4	SPT Borings	15

We anticipate up to **two (2) days** will be required to perform the proposed explorations. The first day is a site visit to generally observe site conditions and confirm SBSA, Inc. Construction and Design Compliance Report observations and adjust proposed exploration locations provided above, as necessary. We will adjust boring locations pending distressed surface conditions observed during this site visit.

The project schedule should consider up to a 15-business day lead time between the 1st and 2nd site visit. This lead time will allow the review of the current site conditions, develop an updated exploration location plan, and confirm Texas 811 tickets. Once Texas 811 tickets are confirmed we will schedule the 2nd site visit with client contact personnel.

2. The preliminary subsurface exploration program will be performed under the full-time supervision of a geotechnical specialist who will observe and log the explorations, collect soil samples, and will be acting under the direction of a licensed geotechnical engineer. Explorations will be field located by our representative using hand-held GPS equipment and/or by measuring from existing site features using conventional taping methods.

3. Representative samples obtained from the explorations may be subjected to limited laboratory testing as necessary to evaluate general engineering characteristics. Such testing may include moisture contents, grain size analysis, and Atterberg limits.

4. We will prepare a preliminary report that contains the results of the field and laboratory testing of the subject property, including:

    a. A summary of the key findings and potential data limitations of the provided documents listed above.
    b. Our findings and general geotechnical considerations regarding:
        i. Individual soil profile logs, including groundwater levels;
        ii. Calculated Potential Vertical Rise (PVR);
        iii. Risk ratings for potential geotechnical hazards at the subject property;
        iv. Potential remediation options;

Next steps to provide updated scope for phase II – geotechnical remediation recommendations.

Task 4: Phase II - Final Geotechnical Exploration and Report

To support budget planning as the project progresses, we have outlined a tentative scope for Phase II geotechnical exploration at the subject property. This scope is based on available information and assumptions and will be refined as we prepare the Phase I report of preliminary findings.

The exploration will be performed in accordance with sound engineering practice and state/local regulations to evaluate subsurface conditions as they relate to potential remediation options. After the site conditions are confirmed through Phase I, a refined scope and fee for Phase II will be provided.

We will perform a follow-up geotechnical exploration in accordance with sound engineering practice and state/local regulations to evaluate subsurface conditions for the subject property. We understand that the site will be accessible to truck-mounted drilling equipment.

1. We will provide a subcontractor to mobilize drilling equipment to perform Standard Penetration Test (SPT) borings in accessible areas to visually classify the subsurface soils, evaluate groundwater conditions, and obtain soil samples for specialty laboratory testing. The quantity and locations of the test boring for this phase will consist of test borings and depth following our Phase I findings. We have assumed two **(2) days** for Phase II exploratory work. It is noted that the borings are planned to be backfilled with soil cuttings.
    a. The number of days proposed to conduct test borings for Phase II are based on current assumptions and subject to refinement as the final site layout, grading, and structural loading details are developed.

2. The subsurface exploration program will be performed under the full-time supervision of a geotechnical specialist who will observe and log the explorations, collect soil samples, and will be acting under the direction of a licensed geotechnical engineer. Explorations will be field located by our representative using hand-held GPS equipment and/or by measuring from existing site features using conventional taping methods.

3. Representative samples obtained from the explorations will be subjected to laboratory testing to evaluate general engineering characteristics. General lab testing will likely include, but not be limited to, natural moisture content, grain-size distribution, and Atterberg limits. Specialty laboratory testing for Phase II may also be necessary, and may include the following:
    a. Soluble sulfate content, consolidated undrained testing, one-dimensional consolidation testing, California Bearing Ratios, standard proctor, shear strength triaxial test;
    b. Lime treated soil amendment program – General lab testing, soluble Sulfate content, pH estimation for Lime stabilization, Atterberg Lime treated Series Testing, shrinkage factor testing, Lime treated California Bearing Ratios, and Lime treated standard proctor;

4. We will prepare a report that contains the results of the field and laboratory testing and our geotechnical recommendations for the remediation and construction of the subject project, including:
    a. Updated individual soil profile logs, including groundwater levels.
    b. Laboratory test results.
    c. Earthwork recommendations, including the suitability of encountered on-site materials for re-use as structural fill or backfill and compaction requirements.
    d. Remedial options and associated considerations.
    e. Pavement design recommendations.
    f. Control of surface water and groundwater during construction.
    g. Seismic design considerations.
    h. Lateral earth pressure parameters.

    (*This list of topics may be adjusted pending results of the Phase I preliminary exploration program.*)

General Geotechnical Procedures

The client shall be responsible for providing us with available information for private on-site utilities. Regardless of the level of effort to identify and locate existing utilities, we cannot be held responsible for damage to utilities that are not marked, incorrectly marked, or otherwise not physically exposed by Level 'A' locating techniques.

Due to the nature of the work, some disturbance and settlement should be anticipated at and between the exploration locations. It will be the option of the client to maintain the grade at each test location should settlement occur. In particular, the drilling equipment may leave track marks and ruts in unvegetated areas. Repair of these areas is not included in the cost of this proposal and will need to be provided by others.

The Client will provide any available project information as it relates to the services provided herein. The client agrees to indemnify, hold harmless, and defend Colliers Engineering & Design and any of Colliers Engineering & Design's employees from and against all loss, injury, damage, and legal liability, including attorney's fees and other costs of defense arising out of any structural damage, utility damage, or boring settlement.

The test borings will each be advanced utilizing solid-stem drilling techniques. Representative soil samples will be obtained continuously from the surface to a depth of 10 feet and then at standard intervals of five feet, with additional samples taken as necessary. Soil samples will be obtained from within the borehole by means of a standard two-inch outside-diameter split spoon sampler advanced in accordance with ASTM Designation D-1586 for the Standard Penetration Test. Undisturbed thin-walled tube sampling of fine-grained soils may also be obtained in general accordance with ASTM D1587 by means of a 3-inch OD thin-walled steel tube.

If conditions encountered differ significantly from those anticipated and, as a result, would increase the scope of our work, we will notify you immediately and provide a new scope of work for your authorization so as to continue with work.

Soil samples will be classified in the field and transported to our office for further review and evaluation, as necessary. The samples will be stored for a period of 60 days from the date of our report, unless otherwise negotiated with the Client.

Task 5: Post Report Geotechnical Consultation and Meetings

This section of the proposal will be to provide additional engineering consultation beyond the scope of Phase I and Phase II of this proposal. This includes, but is not necessarily limited to, providing report revisions, additional engineering input, and participation in meetings and teleconferences, as ownership decides future courses of action.

Because it is impossible to anticipate the amount of time necessary for these services, this Task will be billed on an hourly basis in accordance with our Fee Schedule. A recommended initial budget allowance is provided below.

Civil Services:

Task 6: Site and Civil Assessment

This task includes the preparation of a Preliminary Engineering Assessment to address the site and civil issues affecting the property.
This report includes the following:

- Perform an onsite visit to observe special site conditions that are visible;
- Review known existing information available on the site such as survey, topography, site plan, and aerial photographs;
- Verify the functionality of utilities including water, sanitary sewer, gas, electric, telephone, and cable television;
- Review driveway access and internal site drives;
- Identify reconstruction of curb and sidewalks recommended on the property;
- Provide site drainage review to determine impacts of existing drainage patterns;
- Report on impact of proposed site upgrades on existing landscaping;
- Perform civil assessment of under slab utilities, grading, and drainage;
- Review existing construction plans for possible engineering upgrades;
- Review proposed utility connections/crossings for possible conflicts with existing utilities.

The deliverable will be a summary memo with applicable exhibits.

Task 7: Schematic Design

This task includes the following:

- Review existing site plan and as-built survey data for general conformance of site to original design intent and current development guidelines;
- Calculate site plan upgrades and input the layout into Auto CAD;
- With the on-the-ground topography completed, CED will assess the existing topography and provide preliminary grading plans;
- Prepare a schematic utility design as necessary;
- Prepare a preliminary grading and drainage plan.

Note: This task includes four (4) areas as noted under the civil plan preparation task.

Task 8: Civil Plan Preparation

This task will initially be divided into four (4) areas: Courtyard and Entries, Storm Drains and Parking areas, Access Drives, and Underfloor. Civil Plans will be submitted for each area for Client review prior to finalization for bidding.

Demolition Plan

- Prepare a demolition plan as necessary for the existing building/paving/improvements on the property.

Dimensional Control/Fire Protection Site Plan

- Compute the proposed site plan and prepare a plan dimensioning the proposed site including building grid location, drive aisles, parking field, roads, curbs, driveways, etc.;
- Set points to identify the face of the curbs.

Grading Plan

- Prepare a grading plan to identify the proposed elevations of the recommended site improvements;
- This plan shall include the existing and proposed spot elevations and contour lines (1-foot intervals);
- Determine the location and elevation of retaining walls, if required. The structural design of retaining walls is not included in the scope of this proposal;
- Identify known site benchmarks;
- Prepare a storm water drainage plan indicating the required storm drainage structures as well as inverts and slopes for proposed storm drainage piping.

Utility Plan

- Prepare a plan showing the proposed onsite utility layout for the domestic water, gas, gravity sanitary sewer, fire, telephone, and electric service to the building;
- Exact points of connection to the building are to be provided by the MEP Engineer.

Paving Plan

CED will prepare a plan view showing the different pavement types recommended for the project. The actual pavement design will be done by the project Geotechnical Engineer.

Civil Details

CED will assemble the necessary details and specifications for the onsite civil upgrades.

Task 9: Storm Water Management Plan

A Storm Water Management Plan (SWMP) was previously prepared by others and submitted with the original permit and construction drawings. CED will determine impact caused by the proposed civil upgrades. The design of onsite detention basins, if required, is not covered within the scope of this task.

Task 10: TPDES Storm Water Pollution Prevention Plan

CED will prepare a Storm Water Pollution Prevention Plan and Report to comply with the Texas Commission on Environmental Quality's Texas Pollution Discharge Elimination System (TPDES) regulations for storm water runoff from construction sites.

Task 11: Opinion of Probable Costs

CED will prepare an Engineer's Opinion of Probable Cost (OPC) for the civil improvements. These improvements will include grading, drainage, resurfacing, and necessary utility improvements, and will be broken down per the overall phased land plan. The task will be performed for each area described in Task 8, Civil Plan Preparation.

Task 12: Bid Preparation and Processing

CED will prepare a bid package and assist the client in advertising the project for award to a contractor. CED will prepare the bid documents and attend a pre-bid conference. CED will answer questions from the contractors and issue addenda where needed. CED will evaluate the submitted bids for completion and accuracy. CED will also identify any bid items that appear to be significantly higher or lower than anticipated and evaluate potential rational for these bid items. CED will then prepare a bid tabulation summarizing the bid results and provide a recommendation to award to the lowest bidder whose bid package was deemed responsive.

Task 13: Permitting Services

CED will provide permitting assistance through the City of Converse permit process. This task will include necessary plan revisions to address permit comments, and if necessary, meetings with City Staff.

Task 14: Utility Coordination

CED will assist the client with utility coordination between local utility providers if necessary during proposed upgrades. This task includes planning meetings and requests for utility availability and necessary temporary shutdowns with appropriate agencies. The Engineer will assist the Client with utility coordination between local utility providers for plan distribution, coordination of design, and coordination of preconstruction meetings, if required due to proposed civil/site upgrades.

Task 15: Construction Phase Services

If requested, CED will perform the following construction phase services:

- Attend site meetings to review progress of work as requested by the developer or general contractor;
- Make timely modifications and adjustments to site improvement plan as determined necessary by site conditions;
- Provide clarification to Contractors/Client pertaining to construction documents and design intent on construction documents;
- Provide electronic data as requested by construction survey crew;
- Provide other miscellaneous services that may be required during construction phase.

All work under this task will be billed on a time and materials basis. If additional hours are required, the Client will be made aware of the situation and an additional budget will be requested at that time. This task assumes eight (8) hours per week and a twenty-four (24) week construction period.

Task 16: Project Management and Team Coordination

During the course of the project, CED will answer questions and attend meetings/conference calls that do not fall within the scope of the listed task items. We will bill this time hourly. If more time is required than the budget allows, we will ask for additional services ahead of time. CED will coordinate with the Client and Sub-Consultants to oversee the completion of the project and compliance with regulatory agency guidelines. We shall attend regular coordination meetings with the Client and Sub-Consultants. We will assist client in preparing and coordinating the bid and construction sets as needed. Services will include addressing bid questions and RFI's during the bidding process. The overall budget assumes approximately eight (8) hours per week and a twenty-four (24) week design and permitting process.

Task 17: Reimbursable Expenses

This cost is associated with reproduction costs, mileage, delivery services, and other day-to-day reimbursable expense. The budget does not include any local, state, or federal fees which are required for the upgrades and are to be paid directly by the client.

Landscape Services:

Task 18: Landscape Planting Plan

A Landscape Plan will be prepared for the proposed development for code minimum in accordance with the requirements of the City of Converse, general design from the previous approved plans, and client's request. However, waivers and exceptions to the standards may be required based on the client's approval of the landscape design.

The Landscape Plan will indicate the existing plant material to remain and proposed plant material for the proposed site work shown in the civil plans. The plan will locate and specify the proposed plant material for the immediate areas within the medians of the proposed roadways. Planting details along with the general planting notes will be included with the Landscape Plan. A plant

schedule indicating the plant material species, quantity, size, and root condition will be shown on the plan.

The Planting Plans will be based on site orientation, site layout, utility locations and proposed grading. (This information will provide data necessary for bidding purposes.) This will be a single submission plan set based on the previous approved design plans.

Task 19: Hardscape Plan and Details (Courtyards)

A plan identifying specialty paving treatments such as scoring, staining and stamping per client's request for only the courtyard area to be replaced.

This plan will indicate paving types, pattern design, and construction details for Client selected and high interest areas. Grading will be handled by civil.

Task 20: Irrigation Plan

An Irrigation Plan will also be prepared for the approved landscape plan in accordance with industry standards, needs of the final planting plan, the city development codes, and client's request.

The Irrigation Plan will indicate the areas and plant material to be irrigated, pipe sizes, heads, and all other materials needed for bidding and construction. Irrigation design/layout, details, and calculations along with general notes will be included with the Irrigation Plan. A schedule indicating materials, specifications, quantity, and locations will be shown on the plans.

The Irrigation Plan will be based on the site layout, sidewalk locations, utility locations, proposed grading, and the client approved landscape plan.

Architecture Services:

Task 21: Architecture Services

CED shall utilize a subconsultant for Architectural Services. These services include:

- Documentation of specific architectural elements that require removal and replacement;
- Performing an assessment of the existing conditions and recommendations of specific work required to be removed and replaced, as needed;
- Drawings with required details of specific architectural elements determined to be recommended for removal and replacement. These drawings shall supplement the work included by Colliers Engineering and Design and can be used for both bidding and construction of the specific work required to be repaired;
- Construction administration of the specific repair work during the construction phase.

Structural Services:

CED will utilize a subconsultant to perform these services. Basic Design Services will be performed in three phases: Preliminary Phase, Design Phase, and Construction Phase.

Task 22: Preliminary Structural Phase

This phase of the project development will establish the general size and scope of the project. The feasibility of various structural systems to meet the functional requirements of the project will be determined. The basic services in this phase will include the following:

a. Perform field surveys to collect information required of design, including photography and related office computations and drafting.
b. Participation in Concept Conferences. Conferences with the owner's representatives, other engineers, building officials and regulatory agencies to establish the scope of the project and requirements of the structural layout.
c. Selection of Systems. Determination of the layout of the structural systems best suited to meet the Owner's requirements.
d. Preparation of Preliminary Designs. Preparation of preliminary designs required for defining the basic requirements of the structural system, including the essential physical dimensions and features.
e. Preparation of Outline Specifications. Preparation of design criteria and outlining specifications for the structural system elements of the project.
f. Consulting on Construction Methods. Counseling on methods of construction as related to the structural costs, suitability to the site and building code requirements.
g. Preparation of Probable Cost Opinion. Preparation of probable structural construction costs opinion for budgeting purposes, expressed in dollars per square foot of area.

Task 23: Structural Design Phase

This phase of the design development will be undertaken after the Owner approves the preliminary design, and the Design Phase has been authorized. The Basic Services in this phase will include the following:

a. Participation in Design Conferences. Conferences with the Owner and others to plan and coordinate the required engineering systems into the building project.
b. Preparation of Engineering Calculations. Preparation of design calculations for previously established design loads.
c. Preparation of Contract Drawings. Preparation of contract drawings in sufficient detail to define the construction work explicitly, and to keep the professional responsibility of the design, including details, with the consulting engineer.
d. Preparation of Specifications. Preparation of specifications in our format for incorporation in the project specifications.
e. Provide Coordination Prints. Provide a reasonable number of prints of the engineering work in progress for coordination of the project design.
f. Update Probable Structural Cost Opinion. Update probable structural construction cost opinion prepared during the preliminary phase.
g. Preparation in Addenda. Preparation of Addenda as may be required during the bidding period, and answer questions raised by bidders during the procurement of bids.

Task 24: Structural Construction Phase

When the construction contract is awarded, this action completes the Design Phase of the project. The Basic Services in this phase will include the following:

a. Analyzing Bids. Analysis of the structural construction bids and proposals.
b. Participating in Pre-Construction Conferences. Provide consultation and advice to client and contractors during pre-construction conferences and during construction phase.
c. Review Structural Shop Drawings. Review of structural shop drawings and endeavor to assure that the quality of the material that the contractor proposes to place into the work meets the minimum specification requirements. Such review is not intended to relieve the contractor of his responsibility for compliance with the contract documents.
d. Clarification of Plans, If Necessary. Clarify questions regarding the engineering plans and specifications. Preparation of additional plans for purposes other than clarification is not included.
e. Periodic Observation of Work. Periodic observation of work that the Consulting Engineer has designed and/or meetings with the construction team. Provide reports of observations made with sufficient detail to allow the Owner to be currently appraised of the progress and quality of work.
f. Final Observation. Final observation of the completed construction of the work designed by the Engineer and to assist the Owner and Contractor in obtaining the appropriate governing authority or authorities final approval and acceptance of the project.

MEP Services:

CED will utilize a subconsultant to provide these services. The scope of work is understood to consist of replacing plumbing and mechanical components located in the crawlspace, exterior of the building and mechanical room as follows:

The crawlspace scope of work will consist of replacing plumbing piping and sump pump, hydronic piping, and ventilation fans. All work within the crawlspace shall extend to 6 inches below slab only. All piping within and above slab is excluded. As part of the crawlspace work, flexible joints will be required between the crawlspace and the building exterior. The building exterior scope of work will consist of replacing gutters. The mechanical room scope of work will consist of replacing the fire sprinkler riser.

Task 25: MEP Design

CED's subconsultant shall perform calculations, equipment selections and system design in accordance with applicable building codes, appropriate national standards, and commonly accepted engineering practice. These services shall be rendered for the following building systems in the project:

- Mechanical
  - Hydronic Piping
  - Crawlspace ventilation
- Plumbing

- Domestic water
- Sanitary waste and vent
- Wet pipe fire sprinklers

Deliverables:

One (1) set of preliminary construction drawings and specifications at 50% and 90% are included; and one (1) set of final sealed construction drawings and specifications upon completion. All deliverables will be in digital PDF format.

Task 26: MEP Meeting

Two (2) meetings (in-person or teleconference) are included. These meetings are intended to coincide with interim design reviews, but may be utilized for review, coordination, budgeting, or any other design phase purpose.

Meetings with municipal authorities having jurisdiction (AHJs; for preliminary plan review, etc.) and utility companies (design coordination, etc.) will be billed on an hourly basis per the Hourly Rate Schedule.

Any other additional meetings will be billed on an hourly basis per the Hourly Rate Schedule.

Task 27: MEP Construction Phase Services

Submittals and Supplemental Information

During construction of the project, CED's subconsultant will review the contractor's material and equipment submittals and provide compliance comments; review and respond to RFI's, and prepare ASI's when necessary.

Site Visits

CED's subconsultant will make regular visits to the project site as requested during substantial activity by trades applicable to services rendered; generally, this standard of care will not exceed one (1) visit per week. Visits will include an observation of construction progress compared to the contract schedule and a general assessment of performance as compared to the requirements in the construction documents. Findings will be documented in a written Field Report and submitted to your team.

- Visits to observe and assess conditions prior to permanent concealment (burial, concrete placement, wall cavities, hard ceilings) will be coincident to Regular Site Visits; if additional separately scheduled standalone visits are necessary, such visits will be billed on an hourly basis per the Hourly Rate Schedule.
- Construction meetings will be coincident to Regular Site Visits; if additional separately scheduled standalone meetings are necessary, such meetings will be billed on an hourly basis per the Hourly Rate Schedule.

Substantial Completion Site Visit

CED's subconsultant will make a final visit to the project site when construction is substantially complete. During the visit, CED's subconsultant will prepare a punch list of incomplete items as compared to the requirements of the construction documents. If additional visits are necessary for final observations verifying that the punch list items have been completed, such visits will be billed on an hourly basis per the Hourly Rate Schedule.

Colliers
Engineering & Design

Schedule of Fees

For your convenience, we have broken down the total estimated cost of the project into the categories identified within the scope of services.

Task Name	Fee
Survey Services:	
1. As-Built Plans	
Courtyard and Entries	$5,600
Storm Drains and Parking	$3,800
Access Drives	$3,500
Underfloor	$19,500
Survey Subtotal:	*$32,400*
Geotechnical Services:	
2. Subsurface Utility Investigation Services	$5,200
3. Phase I - Preliminary Geotechnical Exploration and Report	$22,000
4. Phase II - Final Geotechnical Exploration and Report (Estimated Lump Sum)	$50,000
5. Post Report Geotechnical Consultation and Meetings (Allowance)	$4,000
Geotechnical Subtotal:	*$81,200*
Civil Services:	
6. Site and Civil Assessment	$4,500
7. Schematic Design	$15,000
8. Civil Plan Preparation	
Courtyard Entries	$55,000
Parking Areas and Storm Drains	$28,000
Access Drives	$19,000
Underfloor	$20,000
9. Storm Water Management Plan	$6,800
10. TPDES Storm Water Pollution Prevention Plan	$5,000
11. Opinion of Probable Costs	$18,000
12. Bid Preparation and Processing	$24,000
13. Permitting Services (Allowance)	$8,000
14. Utility Coordination	$8,000
15. Construction Phase Services (Allowance)	$40,000
16. Project Management and Team Coordination	$40,000
17. Reimbursable Expenses (Allowance)	$5,000
Civil Subtotal:	*$296,300*

Landscape Services:	
18. Landscape Planting Plan	$15,500
19. Hardscape Plan and Details (Courtyard)	$12,250
20. Irrigation Plan	$8,500
Landscape Subtotal:	*$36,250*
Architecture Services:	
21. Architectural Services (Allowance)	$18,000
Structural Services:	
22. Preliminary Structural Phase	$13,200
23. Structural Design Phase	$39,600
24. Structural Construction Phase	$13,200
Structural Subtotal:	*$66,000*
MEP Services:	
25. MEP Design	$198,000
26. MEP Meetings	Included
27. MEP Construction Phase Service	$4,000
MEP Subtotal:	*$202,000*
Total Lump Sum Fee:	$732,150

This Contract and Fee Schedule are based upon the acceptance of Colliers Engineering & Design's Business Terms and Conditions contained in Section II of this Contract. Delivery, mileage, printing and reproduction, overnight mail service and postage costs are not included in the lump sum fees and will be added to each monthly invoice. **Payment terms are NET30 of receipt of invoice.**

Civil Exclusions and Understandings

Services relating to the following items are not anticipated for the project or cannot be quantified at this time. Therefore, any service associated with the following items is specifically excluded from the scope of professional services within this agreement.

- Services not specifically outlined in Section I;
- Changes to the basic concept after the design service has commenced due to unforeseen site conditions beyond our control;
- Plan revisions, changes, or preparation of additional design support requested by regulatory agencies during the course of project review;
- Platting, Subdivision or Consolidation Plans, Legal Boundary Survey or Descriptions and/or Parcel Maps;
- Traffic Engineering Services;
- Cultural Resources services;
- Endangered species studies;
- Water system hydraulic modeling;

- Hydrant Flow testing to determine suitable water pressure;
- Fire Water System design;
- Off-site design services of any kind;
- Light pole footing, circuiting and/or electrical design of the proposed site lighting;
- Existing Lighting Illumination Study and Plan;
- Exploratory or testing work, interpretations or conclusions related to determination of potential chemical, toxic, radioactive or other type of contaminants on the site;

Geotechnical Notes, Assumptions, and Exclusions

Services relating to the following items are not anticipated for the project or cannot be quantified at this time. Therefore, any service associated with the following items is specifically excluded from the scope of professional services within this agreement.

Notes and Assumptions

- The fees for field tasks are based on 8 hours/day, non-union, non-prevailing wage. We will notify you if additional field time is required to complete the work herein;
- Unrestricted access to the subject property will be provided by the Client on the dates and times requested;
- The exploration locations are accessible to all-terrain-vehicle-mounted drilling equipment.
- Onsite water access for concrete coring, if required;
- It is assumed that exploration locations will be accessible without the need to clear trees or vegetation. Additional charges will apply should clearing and/or remobilization be required to access boring locations. We will notify the Client if this requirement is identified, as work proceeds;
- We will attempt to complete the proposed work in the anticipated time frame. Should delays prevent completion of the proposed scope of services as planned, we will contact the Client to discuss options for extending field time;

Geotechnical Exclusions

Services relating to the following items are not anticipated for the project or cannot be quantified at this time. Therefore, any service associated with the following items is specifically excluded from the scope of professional services within this agreement.

- Services not specifically outlined herein;
- Export, containerizing, and/or disposal of excess soil cuttings;
- Any restoration of exploration locations, other than backfilling with excavated spoils and capping with asphalt cold-patch;
- Delays due to site access restrictions;
- Repair of incidental site disturbances associated with performance of the services described herein;
- Laboratory testing of pavement cores is excluded from the scope of this proposal
- Repair or replacement of any membranes or vapor barriers, if encountered;

- Determination of seismic site classification via shear wave velocity profiling, site specific response spectrum, etc. If determined to be appropriate by the structural engineer, these services can be performed for an additional fee (to be determined);
- Laboratory testing beyond what is described herein, but which may be warranted due to subsurface conditions encountered. Should the need for such testing be identified, we will contact the Client to discuss options and pricing for such testing, if needed;
- Any exploratory or testing work, interpretations, or conclusions related to the determination of potential environmentally impacted materials on site; and
- Personnel on site will utilize Level D personal protective equipment (PPE) (hard hats, steel-toed boots, eye protection, etc.). Higher levels of PPE (respirators, chemical resistance, etc.), site specific training/orientation classes, and site-specific Health and Safety Plans (HASP) can be provided for an additional fee;

If an item listed herein, or otherwise not specifically mentioned within this agreement, is deemed necessary, Colliers Engineering & Design may prepare an addendum to this agreement for your review, outlining the scope of additional services and associated professional fees regarding the extra services.

SUE Exclusions and Understandings

- Services not specifically outlined above in Section I;
- Any expenses related to complying with any required permits;
- GPR will be able to be utilized only on areas within the limits that are free of obstructions/debris/vegetation;
- No specialized Traffic Control is anticipated. No Lane Closures are anticipated;
- Colliers Engineering & Design will provide standard cones and warning signs for any services performed adjacent to roadway areas;
- No security and/or flag persons will be needed for any segment of the project;
- It is assumed that our staff will have access to the project site for 10 hours a day 7 days a week;
- Ground Penetrating Radar (GPR) and Acoustic Locating Systems may be used to supplement Electromagnetic (EM) instruments at points throughout the project when and where GPR systems prove effective and can provide useable data;
- GPR effectiveness on foundations can vary depending on foundation thickness and site conditions.
- GPR is most suitable on flat terrain without any obstructions;
- Subsurface utility designating is not an exact science. Information obtained from electromagnetic frequency instruments and GPR can be affected by a variety of site conditions. Amongst these are soil conditions such as moist, dense clay and soil, material composition of the utility, depth of the utility, extent of existing utility congestion and lack of a trace wire on plastic utilities. The specific set of conditions can't be determined until the investigation begins and the time to complete is relative to these varying conditions. Colliers Engineering & Design crews will make a best faith effort to complete the requested services within the estimated time listed in this cost estimate;
- Any utilities indicated and designated as "Unknown" result from inability to correlate them with any visible surface features or termination point. Any instances of ownership we identify in the field that pertain to utilities will be documented. In cases where the corresponding above-ground

feature is absent, categorizing it as "Unknown" becomes necessary;

If an item listed herein, or otherwise not specifically mentioned within this agreement, is deemed necessary, Colliers Engineering & Design may prepare an addendum to this agreement for your review, outlining the scope of additional services and associated professional fees regarding the extra services.

Architectural Exclusions and Understandings

- Construction Material Testing;
- Asbestos Abatement or Monitoring;
- Third-Party code review;
- TDLR ADA review and inspections;
- Testing and Balancing;
- Commissioning;

Structural Exclusions and Understandings

- Design of non-structural elements such as non-load bearing masonry, manufactured precast concrete elements, non-load bearing metal studs, exterior cladding systems, interior architectural systems;
- Assistance to the client as expert witness in litigation arising from the development or the construction of the project;
- Review of correspondence, technical data, submittals, proposals, etc. regarding construction materials/techniques in which the Structural Engineer did not specify, perform calculations or prepare drawings;
- Design and detail of retaining walls, if required;

MEP Exclusions

- Engineering or documentation for LEED or other sustainable certification programs;
- Design of site utilities beyond a 5-ft extended perimeter around the building footprint;
- Value engineering or cost-reduction services or re-design following completion of 50% CD's;
- Services related to environmental remediation;
- Reviewing spec sheets for commercial kitchen equipment to determine utilities or options;
- Transcribing contractor's field notes into a final CAD or BIM file for the record-drawing purposes;
- Additional TDSH or other regulatory inspections necessary due to construction disapprovals (the initial inspection is included);
- Design changes after final construction documents have been submitted;
- Multiple CD packages such as a preliminary permit set or foundation package;
- Engineering and/or economic studies of alternative systems or equipment locations;
- Detailed cost estimating;
- Engineering responsibility beyond electrical circuiting for third-party lighting designs, including selections, scheduling, building and energy code compliance, and photometrics;
- Life-cycle cost analyses;
- Energy Modeling.

Section II – Business Terms and Conditions

THIS PROPOSAL IS ADDITIONALLY GOVERNED BY AND SUBJECT TO CED'S BUSINESS STANDARD TERMS AND CONDITIONS, WHICH ARE ACCESSIBLE AT CED'S WEBSITE. **By signing this Proposal, Client acknowledges receipt and acceptance of the terms of this Proposal, including all Business Terms and Conditions located here and on CED's website.** By the act of executing this Proposal, the Client specifically acknowledges receipt of, agrees to, and intends to be fully bound by, the version of CED's Business Terms and Conditions located on CED's website at https://colliersengineering.com/business-terms-conditions/ effective as of the date at the top of this Proposal. These additional terms are incorporated by reference into this Proposal. This web address includes any successor CED website. Hard copies of these additional terms and conditions can be made available to Client upon written request. Sections I-IV of this Proposal, including these terms and the Business Terms and Conditions located on CED's website, constitute the entire Agreement and supersede any previous agreement or understanding. This Agreement shall be governed by the laws in the State which the project is located. The Client shall not assign this Agreement without the written consent of CED. This Proposal and Business Terms and Conditions will be considered integrated into any subsequent contract/agreement entered by CED and Client.