

June 9, 2022



Iowa City Community School District
1137 South Riverside Drive
ICCSD Physical Plant
Iowa City, Iowa 52246

Attn: Jeff Barnes
E: Barnes.Jeff@iowacityschools.org

Re: Proposal for Geotechnical Engineering Services
Shimek Elementary Multi-Purpose Room Addition
1400 Grissel Pl
Iowa City, Iowa
Terracon Proposal No. P06225090

Dear Mr. Barnes:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to Iowa City Community School District (ICCSD) to provide geotechnical engineering services for the referenced project. The following are exhibits to the attached Master Services Agreement – Task Order.

Exhibit A	Project Understanding
Exhibit B	Scope of Services
Exhibit C	Compensation and Project Schedule
Exhibit D	Site Location
Exhibit E	Anticipated Exploration Plan

Terracon (previously Soil Testing Services of Iowa) performed geotechnical engineering services for the original construction of Shimek Elementary School in 1969 and for the gymnasium addition on the east side of the school in 2019. Approximate locations of some of the past borings in the vicinity of the proposed addition are shown on Exhibit E. The results from the previous geotechnical services were reviewed in preparing our scope of services for the proposed addition.

Your authorization for Terracon to proceed in accordance with this proposal can be issued by signing and returning a copy of the attached Master Services Agreement – Task Order to our office.

Sincerely,
Terracon Consultants, Inc.

for

Prapti Giri, Ph.D., E.I.
Staff Engineer

Justin D. Widdel, P.E.
Department Manager

Terracon Consultants, Inc. 2640 12th Street SW Cedar Rapids, Iowa
P (319) 366 8321 F (319) 366 0032 terracon.com

Environmental

Facilities

Geotechnical

Materials

MASTER SERVICES AGREEMENT

TASK ORDER

This TASK ORDER is issued under the MASTER SERVICES AGREEMENT dated 10/17/2013 between Iowa City Community School District ("Client") and Terracon Consultants, Inc. ("Consultant") for Services to be provided by Consultant for Client on the Shimek Elementary Multi-Purpose Room Addition project ("Project"), as described in the Project Information section of the Consultant's Task Order Proposal dated 06/09/2022 ("Task Order Proposal") unless the Project is otherwise described below or in Exhibit A to this Task Order (which section or Exhibit are incorporated into this Task Order). This Task Order is incorporated into and part of the Master Services Agreement.

1. Project Information

See Exhibit A from Terracon Proposal P06225090.

2. Scope of Services The scope of Services to be provided under this Task Order are described in the Scope of Services section of the Consultant's Task Order Proposal, unless Services are otherwise described below or in Exhibit B to this Task Order.

See Exhibit B from Terracon Proposal P06225090.

3. Compensation Client shall pay compensation for the Services performed at the fees stated in the Task Order Proposal unless fees are otherwise stated below or in Exhibit C to this Task Order.

See Exhibit C from Terracon Proposal P06225090.

All terms and conditions of the Master Services Agreement shall continue in full force and effect. This Task Order is accepted and Consultant is authorized to proceed.

Consultant: Terracon Consultants, Inc.
By: _____ Date: 6/9/2022
Name/Title: Justin D Widdel / Department Manager I
Address: 2640 12th St SW
Cedar Rapids, IA 52404-3440
Phone: (319) 366-8321 Fax: (319) 366-0032
Email: Justin.Widdel@terracon.com

Client: Iowa City Community School District
By: _____ Date: _____
Name/Title: Jeff Barnes
Address: 1137 South Riverside Drive ICCSD Physical
Plant
Iowa City, IA 52246-5714
Phone: _____ Fax: _____
Email: Barnes.Jeff@iowacityschools.org

EXHIBIT A - PROJECT UNDERSTANDING

Our scope of services is based on our understanding of the project as per our review of the *First Floor Plan* drawing provided by Farnsworth Group, Inc., additional information regarding the proposed construction and site grading provided by Farnsworth Group and KPFF during our pre-proposal meeting on June 8, 2022, and the expected subsurface conditions as described below. Aspects of the project, undefined or assumed, are highlighted as shown below. We request the design team verify all information prior to our initiation of field exploration activities.

Site Location and Anticipated Conditions

Item	Description
Parcel Information	<ul style="list-style-type: none"> ■ The project is located at 1400 Grissel Pl in Iowa City, Iowa. ■ Latitude: 41.6797; Longitude: - 91.5265 (approximate) ■ See Exhibit D
Existing Improvements	Existing school building, parking areas, sidewalks, and landscaping around the proposed addition
Current Ground Cover	Earthen
Existing Topography	We understand the site had relatively level terrain with about 3 feet of elevation difference across the proposed footprint.
Site Access	We expect the site, and all exploration locations, to be accessible with our ATV- or track-mounted drilling equipment.
Expected Subsurface Conditions	Our experience in the existing school building indicates subsurface conditions will most likely consist of lower strength silt and clay soil layers overlying relatively shallow glacial till (~20-25 feet below grade)

Planned Construction

Item	Description
Project Description	<ul style="list-style-type: none"> ■ The size of the proposed addition is approximately 1,925 sq.ft. ■ The proposed addition consists of a multi-purpose room, table storage and outdoor storage rooms, a kitchen, and a connector space between the existing building and addition.
Building Construction	<ul style="list-style-type: none"> ■ Precast panels for exterior walls ■ Load-bearing masonry interior walls ■ Slab-on-grade
Finished Floor Elevation	We understand the finished floor elevation of the proposed addition is planned to match that of the existing school building on the east side and adjacent gymnasium on the north of about 778 feet .

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Item	Description
Maximum Loads (Terracon assumed)	<ul style="list-style-type: none">■ Columns: 100 kips■ Walls: 3 kips per linear foot (klf)■ Slabs: 100 pounds per square foot (psf)
Grading	Cuts of up to 3 feet are anticipated on the east end of the addition and minimal cut/fill is anticipated in the majority of the addition's footprint to develop a final grade.
Below-Grade Structures	None

EXHIBIT B - SCOPE OF SERVICES

Our proposed scope of services consists of field exploration, laboratory testing, and engineering/project delivery. These services are described in the following sections.

Field Exploration

Utility Locate: Terracon will contact the local Iowa One Call service to request location of utilities owned by member companies. Locating private lines on private property is not part of the Iowa One Call member companies or Terracon's scope. All private lines should be marked by ICCSD prior to commencement of our field exploration.

Site Access: Terracon must be granted access to the site by the property owner. By acceptance of this proposal, without information to the contrary, we consider this as authorization to access the property for conducting field exploration in accordance with the scope of services.

Subsurface Exploration: Based on the proposed project and our familiarity with soil conditions on the site, we propose to perform the following subsurface explorations.

Boring ID ¹	Planned Boring Depth (feet) ²
B-101 and B-102	30

1. See **Exhibit E** for anticipated boring locations.

2. Below ground surface

Boring Layout and Elevations: Field measurements from the existing gymnasium will be utilized to layout the borings. Approximate coordinates will be obtained by plotting the borings on our GIS map. Approximate surface elevations will be obtained by using a level and grade rod referencing the finished floor of the gymnasium as a benchmark.

Subsurface Exploration Procedures: We will advance soil borings with an ATV or track-mounted drill rig using continuous flight augers. Samples will be obtained at 2½ foot interval in the upper 15 feet of each boring and at intervals of 5 feet thereafter. Soil sampling will be performed using thin-wall tube and split-barrel sampling procedures. The split-barrel samplers are driven in accordance with the standard penetration test (SPT). The samples will be containerized and transported to our laboratory for testing and classification. We will observe and record groundwater levels during drilling/sampling and after the completion of drilling. We will backfill our boreholes with auger cuttings after their completion.

Our exploration team will prepare field boring logs as part of standard drilling operations including sampling depths, penetration resistances, and other relevant sampling information. Field logs include visual classifications of materials encountered during drilling, and our interpretation of subsurface conditions between samples.

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Property Disturbance: Terracon will take reasonable efforts to reduce damage to the property. However, it should be understood that in the normal course of our work, disturbance could occur (e.g., rutting from tires, muddying of the ground surface, etc.). Our services do not include repair of the site beyond backfilling our boreholes. Excess auger cuttings will be dispersed in the general vicinity of the borehole or disposed of in an area designated by ICCSD. Because backfill material often settles below the surface after a period, we recommend boreholes are checked periodically and backfilled, if necessary. We can provide this service, or grout the boreholes, for additional fees at your request.

Safety

Terracon will be responsible for supervision and site safety measures for its own employees but shall not be responsible for the supervision or health and safety precautions for any third parties, including Client's contractors, subcontractors, or other parties present at the site.

Terracon is not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Our scope of services does not include environmental site assessment services, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs.

Employee safety is a core value of Terracon, and we are committed to an Incident and Injury-Free (IIF) workplace. This commitment is at all levels of our company to ensure that everyone goes home safe to their family every day. All employees are expected to perform their job assignments with safety as a primary objective. Field work will be performed following Terracon-performed Pre-Task Planning and Tailgate meetings to discuss the potential safety hazards and reinforce project objectives and procedures.

Our field crew will make excavations into the ground, and as such, these excavations could encounter subsurface utilities and/or environmental hazards that could be harmful to our field crew. Terracon has dedicated significant time, resources, and training necessary for an IIF environment, and all employees are authorized to 'stop work' if unsafe conditions are identified during the field exploration. If there is potential to encounter unknown or unmarked underground hazards, Terracon will reevaluate site conditions and propose alternative methods to proceed with the excavations to ensure the safety of our field crew. ICCSD will be consulted regarding possible alternative methods and authorization will be received from ICCSD prior to proceeding with the field work.

Laboratory Testing

Water content test will be performed on recovered samples. Dry unit weight and unconfined compressive strength tests will be performed on tube samples with sufficient recovery required to perform these tests.

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Our laboratory testing program includes examination of soil samples by an engineer or geologist. Based on the material's texture and plasticity, we will describe and classify soil samples in general accordance with the Unified Soil Classification System (USCS).

Engineering and Project Delivery

Results of our field and laboratory programs will be evaluated by a professional engineer. The engineer will develop a geotechnical site characterization and develop appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our **GeoReport®** system. Upon initiation, we will provide you and your design team the necessary link to access the website. Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. The typical delivery process includes the following:

- Project Planning – Proposal information, schedule and anticipated exploration plan will be posted for review and verification
- Site Characterization – Findings of the site exploration
- Geotechnical Engineering – Recommendations and geotechnical engineering report

When our services are complete, we will upload a printable version of our geotechnical engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration, and the report will be maintained in our system. This will allow future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil classification
- Groundwater levels observed during and after the completion of drilling
- Site Location and Exploration Plan
- Subsurface exploration procedures
- Description of subsurface conditions
- Earthwork recommendations, including site preparation
- Recommended foundation options and engineering design parameters
- Estimated settlement of foundations
- Recommendations for design and construction of interior floor slabs
- Frost considerations

EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE

Compensation

Based upon our understanding of the site, the project as summarized in **Exhibit A** and our planned scope of services outlined in **Exhibit B**, our fees range from \$4,450 to \$4,850, as shown on the attached Budget Estimate – Fee Schedule. We will not exceed the maximum estimated fee without prior written approval.

Our scope of services does not include services associated with site clearing, wet ground conditions, tree or shrub clearing, or repair of/damage to existing landscape. If such services are desired by the owner/client, we should be notified so we can adjust our scope of services.

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this proposal. If conditions are encountered that require scope of services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental proposal stating the modified scope of services as well as its effect on our fee will be prepared. We will not proceed without your written authorization.

Project Schedule

We developed a schedule to complete the scope of services based upon our existing availability. However, this does not account for delays in field exploration beyond our control, such as weather conditions, or lack of permission to access the boring locations. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

Project Milestones	GeoReport® Delivery Time Frame ¹
Notice to Proceed (NTP)	---
Project Planning	Posted within 2 business days after NTP
Field Exploration	Field exploration date and time will be coordinated with ICCSD Anticipate one day on-site
Site Characterization	Posted within 7 to 10 business days after completing Field Exploration services
Geotechnical Engineering	Report posted within 5 to 10 business days after Site Characterization

1. Upon receipt of your notice to proceed we will activate the schedule component of our **GeoReport®** website with specific, anticipated calendar dates for the delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc. We will maintain a current calendar of activities within our **GeoReport®** website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.

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BUDGET ESTIMATE - FEE SCHEDULE

DESCRIPTION	QUANTITY	UNIT	UNIT PRICES	TOTAL FEE
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FIELD EXPLORATION SERVICES

Anticipate 2 soil borings to 30 feet depth below ground surface.

Drill Rig Mobilization	1 - 1	L.S.	\$300.00	\$ 300.00 - 300.00
Boring Access/Movement/Standby	-	hour	\$200.00	\$ - - -
All-Terrain Drill Rig	-	day	\$725.00	\$ - - -
Track-Mounted Drill Rig	0.5 - 0.5	day	\$850.00	\$ 425.00 - 425.00
Drilling Support Truck	0.5 - 0.5	day	\$95.00	\$ 47.50 - 47.50
Auger Drilling & Sampling (0-20ft.)	40 - 40	foot	\$13.50	\$ 540.00 - 540.00
Auger Drilling & Sampling (20-40ft.)	20 - 20	foot	\$14.50	\$ 290.00 - 290.00
Hollow-Stem Augers/Mud Rotary Surcharge	60 - 60	foot	\$3.00	\$ 180.00 - 180.00
Drilling Supervisor	1 - 1	hour	\$130.00	\$ 130.00 - 130.00
Total				\$ 1,912.50 - 1,912.50

ESTIMATED FIELD EXPLORATION SERVICES

\$ 1,900.00 to \$ 1,900.00

SOIL LABORATORY SERVICES

Anticipate obtaining about 18 samples.

Stratification of Boring Logs	1 - 2	hour	\$80.00	\$ 80.00 - 160.00
Moisture Content & Visual Classification	18 - 18	each	\$10.00	\$ 180.00 - 180.00
Dry Density (Thin-Wall Tube Sample)	6 - 8	each	\$7.50	\$ 45.00 - 60.00
Unconfined Compressive Strength Test	6 - 8	each	\$17.50	\$ 105.00 - 140.00
Hand Penetrometer Test	10 - 15	each	\$3.00	\$ 30.00 - 45.00
Organic Content - Loss on Ignition	-	each	\$55.00	\$ - - -
Total				\$ 440.00 - 585.00

ESTIMATED SOIL LABORATORY SERVICES

\$ 450.00 to \$ 600.00

GEOTECHNICAL ENGINEERING SERVICES

Project Direction, Sample Review, Coordination, Data Reduction, and Report Preparation

Senior Principal Engineer, P.E.	-	hour	\$195.00	\$ - - -
Department/Senior Project Manager	3.0 - 4.0	hour	\$160.00	\$ 480.00 - 640.00
Project Engineer/Manager	-	hour	\$130.00	\$ - - -
Staff Engineer	14.0 - 15.0	hour	\$115.00	\$ 1,610.00 - 1,725.00
Total				\$ 2,090.00 - \$ 2,365.00

ESTIMATED GEOTECHNICAL ENGINEERING SERVICES

\$ 2,100.00 to \$ 2,350.00

TOTAL ESTIMATED SERVICES

\$ 4,450.00 to \$ 4,850.00

EXHIBIT D – SITE LOCATION

Shimek Elementary Multi-Purpose Room Addition ■ Iowa City, Iowa
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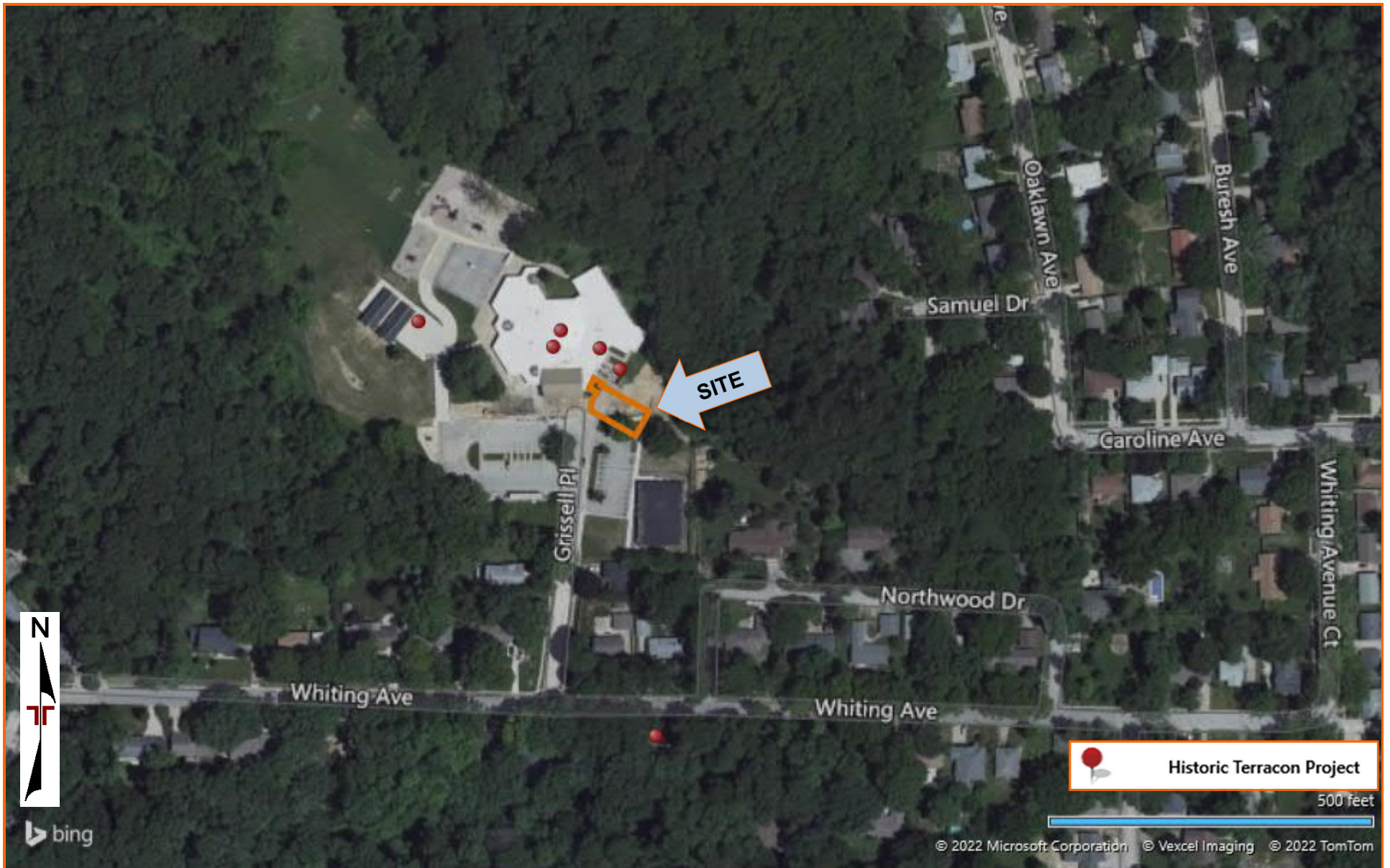


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

MAP PROVIDED BY MICROSOFT BING MAPS

EXHIBIT E – ANTICIPATED EXPLORATION PLAN

Shimek Elementary Multi-Purpose Room Addition ■ Iowa City, Iowa
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GOOGLE MAPS AND PRELIMINARY FLOOR PLAN OVERLAYS