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April 18, 2025

Golightly & Long Properties, LLC
5280 Cairo Road
Paducah, KY 42001

BIDDING ADDENDUM 1

For work titled:
Acee's Neighborhood Market & Deli
1000 Holiday Lane
Fulton, KY 42041
Project Number: ***23-7038***

TO ALL BIDDERS

GENERAL NOTES

This addendum is issued for the purpose of clarifying the intent of the contract documents or for making necessary corrections, deletions, and/or additions to the documents on all items of discrepancy raised up to the time of the issuance of this addendum.

Each bidder is hereby instructed and authorized to incorporate into his proposal the instructions contained in this addendum. This addendum forms a part of the bidding and contract documents and modifies the original bidding documents, dated March 17, 2025 . Acknowledge receipt of this addendum in space provided on Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

This addendum consists of (thirty-two) (32) – 8-1/2" x 11" pages including this cover sheet

PROJECT MANUAL

1. 011100	**ADD** the attached Geotechnical Report to the end of Section 011100 "Summary of Work" ,This information is being provided for the contractors use and reference only.
2. 123456 Spec Name, 3.3,B	**REPLACE** the following sentence "Old description." with "New description." (Hit Tab to start a new line.)

DRAWINGS

3. Sheet E100	**CLARIFICATION:** conduits are noted as galvanized steel conduits, this is a requirement of the utility company; PVC SCH80 conduits are permissible if approved by the Utility Company.
4. Sheet C101	**CLARIFICATION:** as noted in the pavement legend there are alternate bids to change the Heavy Asphalt paving to Heavy Duty Concrete paving; and to change the Standard Duty Asphalt Paving to Standard Concrete Paving. These separate alternate bids and only apply to the areas as shown on the plans; that is heavy duty paving is always heavy duty (asphalt or concrete) and standard duty paving is always standard duty (asphalt or concrete).

INFORMATION ITEMS & ANSWERS TO QUESTIONS

5.	**See RFI #1 questions and responses.**
6.	**Prevailing Wage Requirements –** this project is not subject to prevailing wage requirements, but is subject to Kentucky Labor Laws and associated requirements.

ATTACHMENTS

Geotechnical Report (26 pages, 8.5 X 11)
Addenda 1 - RFI Responses (4 pages, 8.5x11)

All other terms and conditions of the Project Manual and Drawings shall remain unchanged.

END OF ADDENDUM 1

SUBSURFACE EXPLORATION
AND FOUNDATION RECOMMENDATIONS
PROPOSED ACEE'S STORE
FULTON, KENTUCKY

Prepared for:
Klingner & Associates, P.C.
2150 West Main Street
Carbondale, IL 62901

Prepared by:

HFE
Holcomb Foundation Engineering
Carbondale, Illinois

June 3, 2024

File H-24076

TABLE OF CONTENTS

SUBSURFACE EXPLORATION AND FOUNDATION RECOMMENDATIONS
PROPOSED ACEE'S STORE
FULTON, KENTUCKY

1.0 Introduction

Klingner & Associates, P.C. is designing a new Acee's store at 1000 Holiday Lane in Fulton, Kentucky. This report provides a summary of the subsurface exploration and engineering recommendations for foundation and pavement design of the proposed facility. This project was authorized by Mr. Sean Henry, Regional Manager of Klingner & Associates, P.C. on March 28, 2024.

2.0 Scope and Purpose of Report

The purpose of this geotechnical exploration is to explore subsurface conditions at the specific locations of six soil borings, conduct field and laboratory tests to gather data necessary to perform an evaluation of the subsurface conditions, and prepare engineering recommendations relative to the following items:

- Subsurface conditions encountered in the soil borings, including material types to be expected at existing grades and their impact on the construction scheme.
- Site preparation considerations relative to the subsurface conditions.
- Foundation support of the proposed building, including acceptable bearing pressures, anticipated bearing levels, and settlement estimates.
- Floor slab support and construction.
- Design recommendations for light and heavy-duty pavements.
- Anticipation and management of ground water during construction.
- Soil material and compaction requirements for support of the proposed structure.
- Seismic design recommendations for the proposed foundations.

- Presence of mining activity as indicated on the Kentucky Mine Mapping Information System underground mine maps.

3.0 Site Description

The proposed site lies at 1000 Holiday Lane in Fulton, Kentucky. The site consists of a level parking lot paved with gravel, where a hotel building had been demolished. The Boring Location Diagram indicates the boring locations in relation to the existing and proposed structures.

4.0 Project Description

This project consists of construction of a new convenience store with plan dimensions of approximately 60 by 105 feet configured as indicated on the enclosed Boring Location Diagram. We estimate maximum column loadings of approximately 80 kips, and wall loadings of about 3 kips per lineal foot. Multiple drives/aprons will be located between the new building and Holiday Lane.

5.0 Field Exploration

On May 20, 2024, we drilled six soil borings at this site. Boring locations were staked by the Holcomb Foundation Engineering Drill Crew using a drawing provided by Klingner & Associates, P.C.

5.1 Drilling and Sampling Procedures

The soil borings were drilled with a CME-550 all-terrain mounted drilling rig. Conventional 3.25 inch inside diameter hollow stem augers were used to advance the boreholes. Representative soil samples were obtained on 2.5- and 5.0-foot intervals employing split barrel sampling procedures in accordance with ASTM D-1586. Upon completion of drilling, the boreholes were backfilled with the soil cuttings.

5.2 Field Tests and Measurements

The following field tests and measurements were performed during the course of exploration activities at the site:

- Ground water readings were obtained during and upon completion of drilling at all soil boring locations.
- Standard penetration tests were performed, and penetration resistances recorded during the recovery of all split barrel samples.
- Approximate measurements of undrained shear strength were taken on all cohesive soil samples with a calibrated hand penetrometer.

- Bag samples of the predominant subgrade soils were taken off the augers at Borings #5 and #6 for pavement design tests.

- All samples were visually classified according to the Unified Classification System by the boring technician in preparation of the field boring logs. The samples were then placed into glass jars for transport to our laboratory.

The field test data and measurements are summarized in the Boring Logs located in the appendix to this report.

6.0 Laboratory Tests

In addition to the field exploration, a laboratory testing program was conducted to determine additional engineering characteristics of the foundation subsoils. All tests were performed in accordance with applicable ASTM specifications. The laboratory testing program included the following tests:

6.1 Natural Moisture Content

Natural moisture content determinations were performed on all samples. Moisture content determinations aid in estimating the settlement potential of a soil strata. The in-situ moistures also yield information as to the workability of a soil type. Moisture content results are graphically presented on the Boring Logs.

6.2 Visual Classifications

All soil samples were visually classified by the laboratory technician in accordance with the Unified Classification System. The visual classifications are noted on the Boring Logs.

6.3 Unconfined Compressive Strengths

Cohesive soil samples were subjected to unconfined compressive strength tests. Unconfined compressive strengths are used to determine the undrained shear strength of a soil. Results of the compressive strength tests are plotted on the Boring Logs.

6.4 Standard Proctor and California Bearing Ratio Tests

Standard Proctor and California Bearing Ratio tests were performed on the predominant subsoils encountered in the upper five feet of Borings #5 and #6. The Proctor test is used to obtain the maximum dry density and optimum moisture content of the subsoils. A California Bearing Ratio (CBR) test was performed on the typical pavement subsoils encountered at this site. The CBR is used to design paving thicknesses for the proposed parking lots and drives. The CBR and Proctor tests are enclosed in the Appendix to this report.

6.5 Sample Disposal

The soil samples are stored in our laboratory for further analysis, if desired. Unless notified to the contrary, the samples will be disposed of six months after the date of this report.

7.0 Subsurface Conditions

The types of subsurface materials encountered in the soil borings are briefly described on the Boring Logs in the appendix to this report. The general characteristics are described in the following paragraphs. The conditions represented by these test borings should be considered applicable only at the test boring locations on the dates shown. It is possible the conditions encountered may be different at other locations or at other times.

7.1 Subsurface Profile

Surface materials vary from 2 to 10 inches of gravel and grass mix in Borings #1, #2, #3, #4 and #6. Boring #5 had 5 inches of topsoil at the surface. Below the surface materials lies 13.5 to 23.5 feet of brown to reddish brown silty clay (CL classification). Underlying the silty clay is brown sandy clay (CL) that extends down to 23.5 feet deep. Brown sand (SP) was encountered below the sandy clay and extends down to at least the bottom of the soil borings.

7.2 Silty Clay

The upper silty clay is firm to stiff with unconfined compressive strength values ranging from 0.9 to 2.4 tons per square foot, averaging 1.6 tsf. Standard penetration test values of 4 to 11 blows per foot were encountered, averaging 7 bpf. Moisture contents vary from 21 to 29 percent, averaging 25 percent. The upper silty clay has a moderate settlement potential.

When subjected to a standard moisture density relationship the upper five feet of silty clay has a maximum dry density of 107.5 pounds per cubic foot at an optimum moisture content of 17.2 percent. The California Bearing Ratio of these soils is 5.1 percent.

7.3 Sandy Clay

The sandy clay encountered 13.5 to 23.5 feet deep is firm to stiff, with unconfined compressive strengths of 0.7 to 1.7 tons per square foot, averaging 1.1 tsf. Standard penetration test values range from 4 to 6 blows per foot, averaging 5 bpf. Moisture contents vary from 17 to 25 percent averaging 22 percent. These soils have a moderate to low settlement potential.

7.4 Sand

The sand has a loose to dense relative consistency, with standard penetration test values vary from 6 to 60 blows per foot, averaging 30 bpf. Moisture contents vary from 8 to 17 percent, averaging 11 percent. These soils have a relatively low settlement potential.

7.5 Ground Water

Ground water was not encountered during drilling operations. Upon completion of drilling, the deeper borings were plugged from 18 to 40 feet below existing ground line.

7.6 Undermining

Maps available from the Kentucky Coal Mine Mapping Information System indicate this site has not been undermined. Therefore, mine subsidence is not a concern at this location.

8.0 Grading Considerations

8.1 Site Preparation

Prior to site grading operations, the topsoil should be stripped from the building pad and areas to be paved.

After the topsoil is stripped, it is recommended the exposed soil or gravel subgrade is proofrolled with a loaded tandem dump truck. Any areas that rut or pump should be processed and recompacted, or undercut and replaced with a select fill material.

Due to the high silt content of the soils encountered in the borings, if possible the site grading should be performed during hot, dry months of the year. If site grading is performed when the soils are wet, the subgrade may pump to such a degree that it may have to be removed and replaced, or require the addition of hydrated lime for drying prior to compaction.

8.2 Fill Placement

After stripping the topsoil and proofroll of the subgrade, fill soils may be placed to grade the site. Lean silty clay or sandy clay soils may be used as fill material. It is recommended the fill soils are placed in maximum eight-inch loose lifts, with each lift compacted to a minimum of 95% of the maximum standard laboratory dry density in parking areas or above any proposed footing depths; and 98% compaction below any shallow footing elevations.

An engineering technician should perform a sufficient number of in-place field density tests to evaluate the contractor's performance during fill soil placement and compaction. The tests will also aid in determining whether project specifications are being met. A minimum of four compaction tests per every lift are recommended, with not less than one test per 5,000 square feet of fill soil placed.

8.3 Subgrade Preparation of Floor Slabs

Environmental conditions and construction traffic often disturb even a well prepared soil surface at the final grade elevation. Provisions should be made in the construction specifications for the contractor to restore the subgrade soils to a stable condition prior to placing the granular mat. Backfilling of utility trenches is often accomplished in an uncontrolled manner, leading to cracking of floor slabs and pavements. We recommend the utility trenches are backfilled with acceptable fill in 8-inch lifts and compacted with piston tampers to the project requirements.

The concrete floor slabs may be supported upon a 4-inch layer of free draining granular material. Generally, clean crushed limestone is used for this purpose. This is to provide a capillary break and a uniform leveling course beneath the slab.

8.4 Ground Water Control

During footing excavations, ground water should not be encountered. If free water is encountered in the excavations or any undercut areas, the contractor should make provisions for temporary drainage through the use of sumps and/or interceptor ditches.

9.0 Engineering Recommendations

9.1 Building Foundations

Based upon results of the field and laboratory tests, the proposed structure may be supported upon shallow foundations consisting of isolated column and continuous wall footings. A maximum allowable soil bearing pressure of up to 2500 pounds per square foot may be used to dimension the building foundations if founded on the stiff silty clay or well compacted fill soil. Any exterior footings should be founded at a minimum depth of 2.5 feet for frost protection. It is also recommended all footings have a minimum width of 18 inches for continuous footings, and 24 inches for isolated column footings to avoid a punching type failure of the foundation soils.

The borings indicate that these soils are in good condition however, we recommend all foundation excavations are tested for bearing pressure with a static cone penetrometer prior to placement of concrete. Should soils with less than the specified bearing pressure be encountered, it is recommended they are excavated and replaced with a properly compacted granular fill soil or lean concrete.

Total settlements of an 80-kip footing dimensioned using 2500 psf are estimated to range from approximately 0.5 to 1.0 inch, with about 0.5 inch of differential settlement.

9.2 Seismic Design

Based upon the seismic design criteria provided by ASCE 7-22, this site has a site classification type "D" profile. Based upon this profile, the spectral response acceleration coefficients have been determined as follows:

0.2 Second Period: S_{MS} = 1.30 g

1.0 Second Period: S_{M1} = 0.85 g

The recommended design spectral response factors are as follows:

S_{DS} = 0.86 g S_{D1} = 0.57 g

These values were obtained from the IBC Section 1615 and the USGS Earthquake Hazards Program based upon the latitude and longitude of this site.

The subsoils at this site are considered non-liquefiable due to their high clay content.

9.3 Retaining Wall Design

Coefficients for active and passive pressures acting upon retaining walls in the upper elevations of the site are estimated as follows:

Coefficient of Active Pressure:	0.36
Coefficient of Passive Pressure:	2.77
Coefficient of At-Rest Pressure:	0.53

The soils encountered on this site have a wet soil density of approximately 125 pounds per cubic foot. It is recommended the retaining walls are backfilled with a free draining sand or crushed stone up to within one foot of the final ground line, with perforated PVC pipe at the base of the wall sloped to gravity drain or drain to a sump.

The recommended coefficient of friction between the concrete and soils that may be used for design is 0.33.

9.4 Floor Slab Design

The proposed concrete slab on grade may be designed using a modulus of subgrade reaction estimated at approximately 100 psi per inch based upon the IBR test results. The soil subgrade beneath the slab should be properly proofrolled or compacted per the recommendations in Section 8 of this report.

10.0 Pavement Design

The following pavement designs are based upon the CBR value of 5.1 percent for the soil subgrade, and the subgrade being compacted to a minimum of 95% of the maximum standard laboratory dry density. Recommended pavement designs are as follows:

10.1 Automobile Parking Lot Pavement

Traffic Loadings:	1000 Passenger Cars/Day
Design Life:	20 Years
California Bearing Ratio:	5.1

Pavement Design - Automobile Parking Lots

Portland Cement Concrete:	5.0"
Dense Grade Aggregate Basecourse:	4.0"
Or	
Bituminous Concrete Surface:	2.5"
Dense Grade Aggregate Basecourse:	8.0"

10.2 Pavement Design - Heavy Duty Pavement

Traffic Loadings:	1000 Passenger Cars/Trucks
	20 Single Unit Trucks
	100 Semi or Trash Trucks
Design Life:	20 Years
California Bearing Ratio:	5.1

Bituminous Concrete Surface:	2.5"
Bituminous Concrete Binder:	2.5"
Dense Grade Aggregate Basecourse:	12.0"
Or	
Portland Cement Concrete:	8.0"
Dense Grade Aggregate Basecourse:	4.0"

Due to the heavy point loadings of steel dumpster wheels, the dumpster storage areas should be paved with Portland Cement Concrete.

All paving should be performed in accordance with the current Kentucky Transportation Cabinet Standard Specifications for Road and Bridge Construction.

11.0 Summary

This subsurface exploration has been conducted at the site of a new Acee's Store in Fulton, Kentucky. This report has been prepared for the exclusive use of Klingner & Associates, P.C. for the specific application to this project.

Design and construction criteria have been suggested and potential problems have been discussed.

The following information has been discussed in this report:

- Subsoils encountered in the borings consist of 2 to 10 inches of gravel and grass mix in Borings #1, #2, #3, #4 and #6. Boring #5 encountered 5 inches of topsoil at the surface. Below the gravel lies 13.5 to 23.5 feet of brown to reddish brown silty clay. Underlying the silty clay is brown sandy clay that extends down to 23.5 feet deep. Brown sand was encountered below the sandy clay and extends down to at least the bottom of the soil borings.

- Site grading will include stripping the topsoil, proofrolling the exposed subgrade and placement and compaction of fill to provide a level building pad and parking area.

- Foundation design criteria have been discussed, and allowable soil bearing pressures have been recommended for shallow foundations.

- Shallow foundations used for support of the structure may be dimensioned using a maximum allowable soil bearing pressure of up to 2500 pounds per square foot.

- ASCE 7-22 indicates this site has a type "D" site classification, based upon the soil borings. The recommended design spectral response factors for this site are S_{DS} = 0.86 g and S_{D1} = 0.57 g. The subsoils at this site are considered non-liquefiable; therefore, liquefaction is not a concern at this site during a seismic event.

- Pavement design recommendations have been submitted for light and heavy-duty pavement loadings.

The analyses, conclusions, and recommendations contained in this report are professional opinions based on the site conditions and project scope described herein. It is assumed the conditions observed in the exploratory borings are representative of subsurface conditions throughout the site. If during construction, subsurface conditions differ from those encountered in the exploratory borings are observed or appear to be present beneath excavations, we should be advised at once so that we can review these conditions and reconsider our recommendations where necessary. Unless specifically noted, the scope of our services did not include an assessment of the effects of flooding and natural erosion of creeks or rivers adjacent to the project site.

If there is a substantial lapse in time between the submittal of this report and the start of work at this site, or if site conditions are changed due to natural causes or construction operations, we recommend that this report be reviewed to determine the applicability of conclusions and recommendations considering the changed conditions and time lapse.

In order for us to provide a complete professional geotechnical engineering service, we should be retained to observe construction, particularly site grading, earthwork and foundation construction.

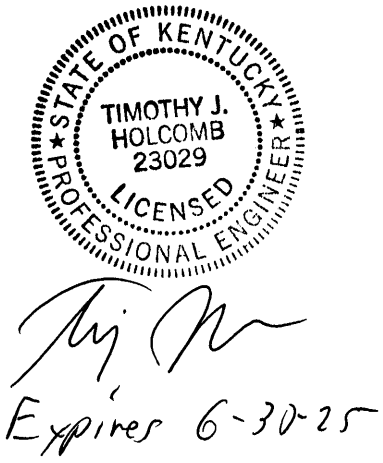
The scope of our services for this phase of the project does not include any environmental assessment or investigation for the presence or absence of wetlands or hazardous or toxic material in the soil, surface or ground water or air, on or below this site. Any statements in this report or on the boring logs regarding any odors or unusual or suspicious items or conditions observed are strictly for the information of our client.

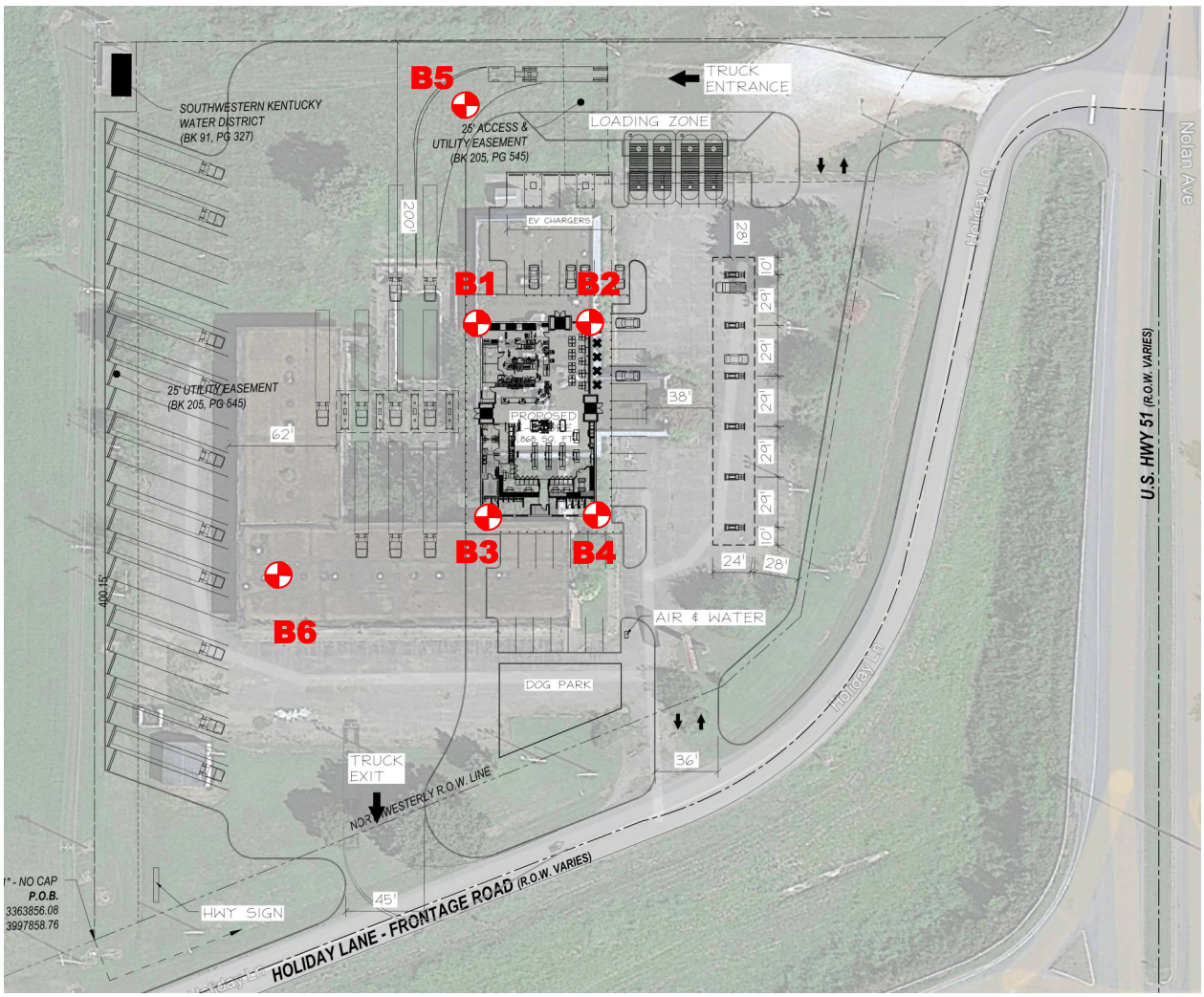
This report was prepared for the exclusive use of the owner, architect, or engineer for evaluating the design of the project as it relates to the geotechnical aspects discussed herein. It should be made available to prospective contractors for information on factual data only and not as a warranty of subsurface conditions included in this report. Unanticipated soil conditions or rock may require that additional expense be made to attain a properly constructed project. Therefore, some contingency fund is recommended to accommodate such potential extra costs.

It is recommended that we be retained to review final project layout and those portions of plans and specifications which pertain to foundations and earthwork to determine if they are consistent with our findings and recommendations.

Tristan W. Hudgens, P.E. (Illinois)

Timothy J. Holcomb, P.E.

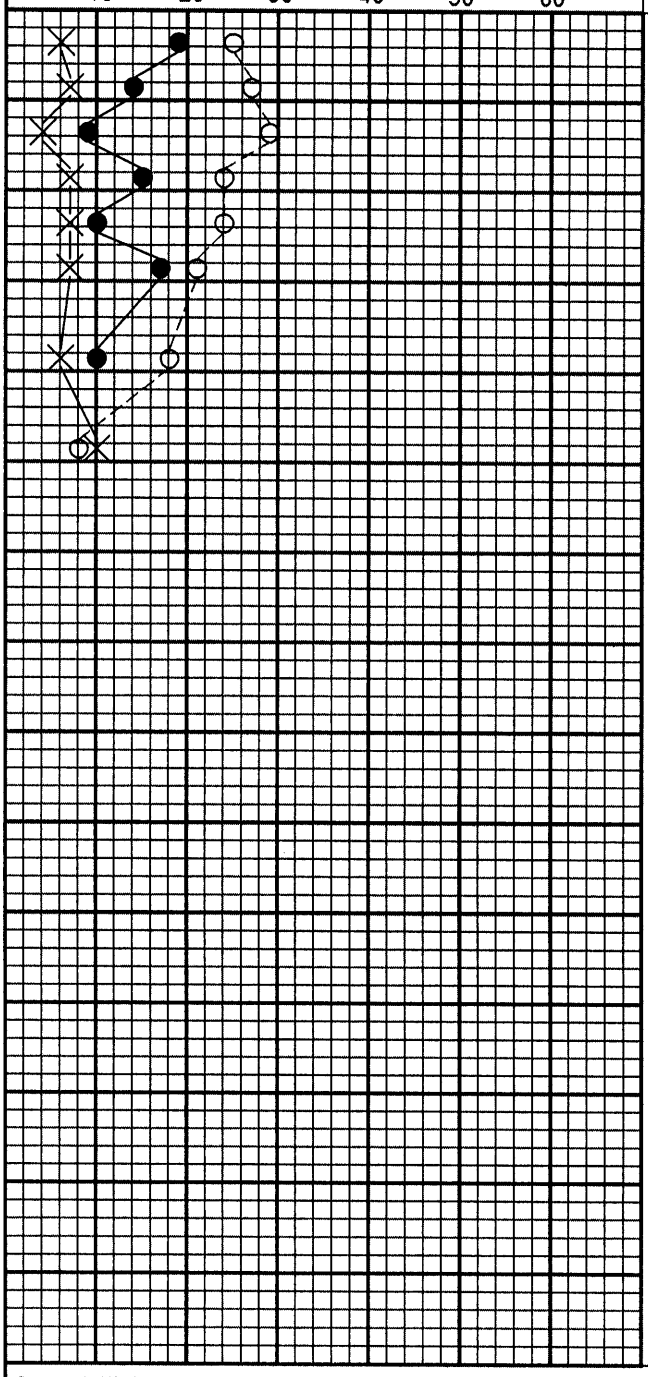




Project: **Acee's Store** **Fulton, Kentucky** ***Client:*** **Klingner & Associates, P.C.** **Carbondale, Illinois**	**Boring Location Diagram**	**North** **Project No. H-24076** **Not to Scale** **May 20, 2024**

Holcomb Foundation Engineering Co.
393 Wood Road Carbondale, Illinois

LOG of BORING 1



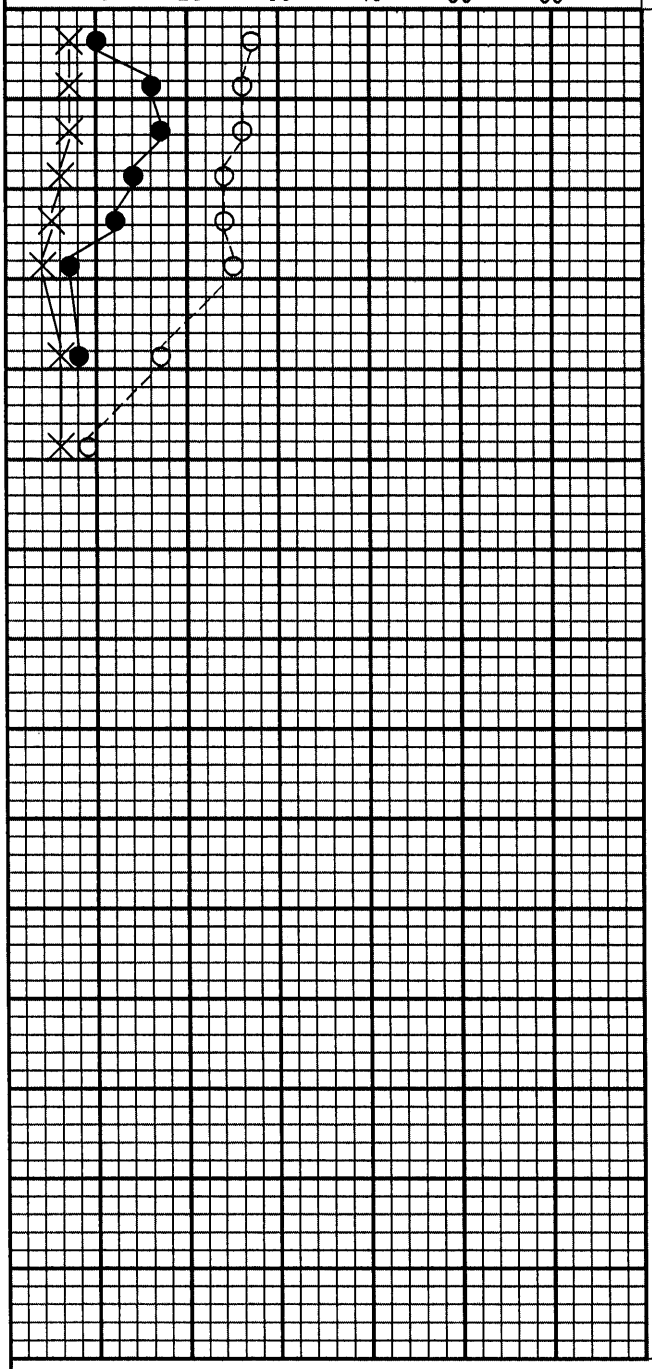
Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation
				2" Brown Gravel with Grass
	1	ss		Brown Silty CLAY (CL)
	2	ss		Brown Mottled Gray Silty CLAY (CL)
	3	ss		
10	4	ss		
	5	ss		Brown Silty CLAY (CL)
	6	ss		Reddish Brown Silty CLAY (CL)
20	7	ss		Brown Sandy CLAY (CL)
	8	ss		Brown SAND (SP) with trace clay
				End of Boring @-25'
30				
40				
50				
60				
70				

Ground Water Data
No Ground Water Encountered During Drilling and Plugged at -19.0'

Project: Acee's Store Fulton, Kentucky	Date of Boring May 20, 2024
Client: Klingner & Associates, P.C. Carbondale, Illinois	Project No. H-24076

Holcomb Foundation Engineering Co.
393 Wood Road Carbondale, Illinois

LOG of BORING 2



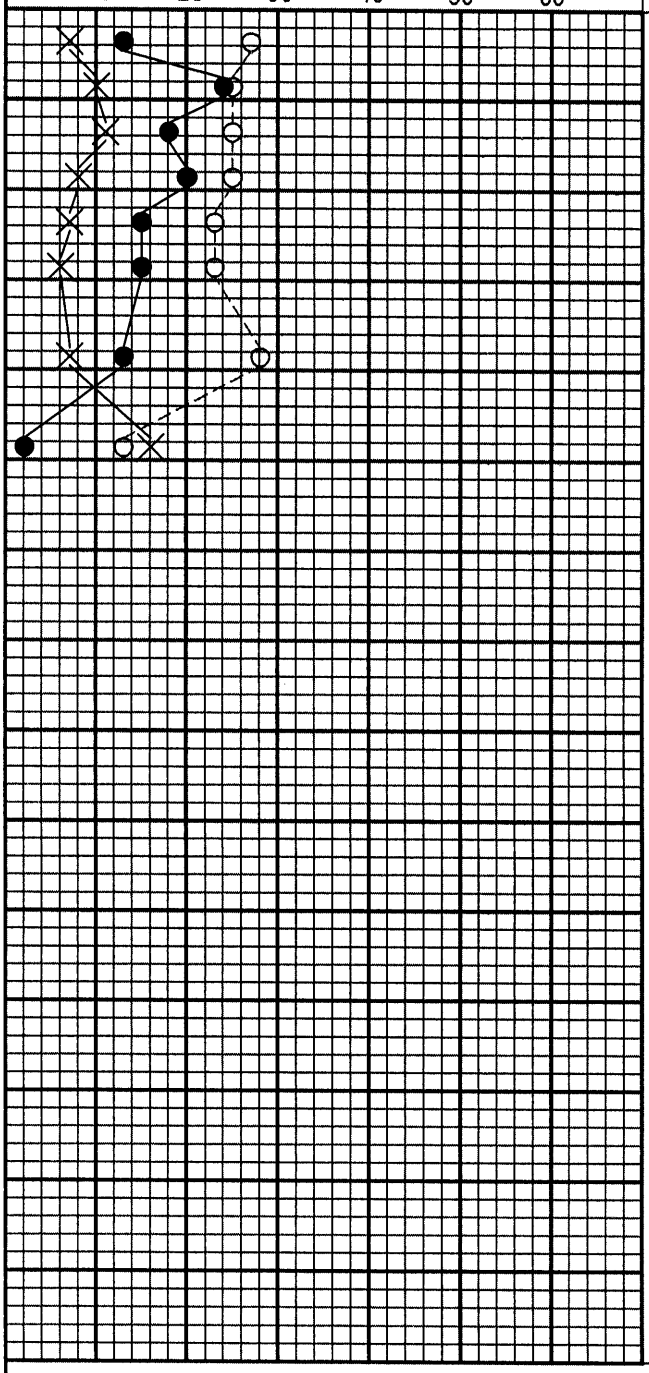
Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation
				10" Brown Gravel with Grass
	1	ss		Brown Silty CLAY (CL)
	2	ss		Brown Mottled Gray Silty CLAY (CL)
	3	ss		
10	4	ss		Brown Silty CLAY (CL)
	5	ss		Reddish Brown Silty CLAY (CL)
	6	ss		
20	7	ss		Brown Sandy CLAY (CL)
	8	ss		Brown SAND (SP) with trace clay
				End of Boring @-25'
30				
40				
50				
60				
70				

Ground Water Data
No Ground Water Encountered During Drilling and Plugged at -19.0'

Project: Acee's Store Fulton, Kentucky	Date of Boring May 20, 2024
Client: Klingner & Associates, P.C. Carbondale, Illinois	Project No. H-24076

Holcomb Foundation Engineering Co.
393 Wood Road Carbondale, Illinois

LOG of BORING 3



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation
				4" Brown Gravel with Grass
	1	ss		Brown Silty CLAY (CL)
	2	ss		Brown Mottled Gray Silty CLAY (CL)
	3	ss		
10	4	ss		
	5	ss		Brown Silty CLAY (CL)
	6	ss		Reddish Brown Silty CLAY (CL)
20	7	ss		Brown Mottled Gray Silty CLAY (CL)
	8	ss		Brown SAND (SP) with trace clay
				End of Boring @-25'
30				
40				
50				
60				
70				

Ground Water Data
No Ground Water Encountered During Drilling and Plugged at -18.0'

Project: Acee's Store
Fulton, Kentucky

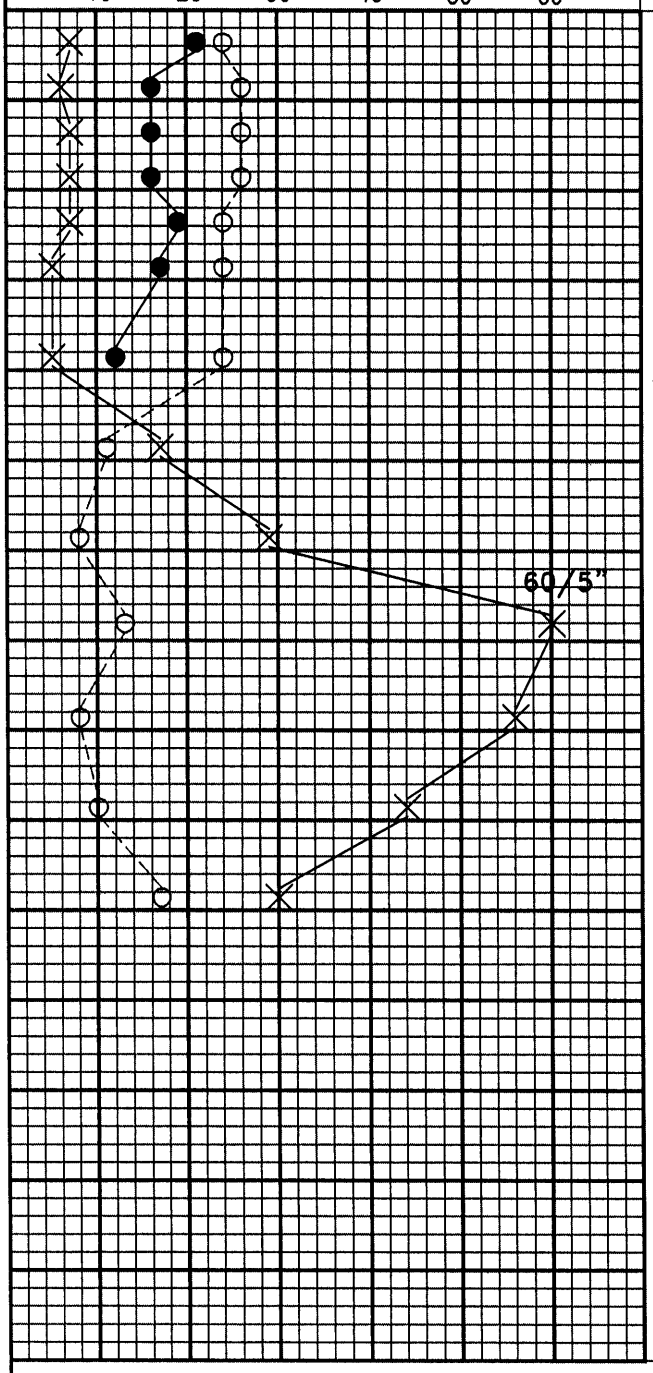
Date of Boring
May 20, 2024

Client: Klingner & Associates, P.C.
Carbondale, Illinois

Project No.
H-24076

Holcomb Foundation Engineering Co.
393 Wood Road Carbondale, Illinois

LOG of BORING 4



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation
				4" Brown Gravel with Grass
	1	ss		Brown Silty CLAY (CL)
	2	ss		Brown Mottled Gray Silty CLAY (CL)
	3	ss		
10	4	ss		
	5	ss		Brown Silty CLAY (CL)
	6	ss		Brown Silty CLAY (CL) with sand
20	7	ss		
	8	ss		Brown SAND (SP) with trace clay
30	9	ss		
	10	ss		
40	11	ss		
	12	ss		
50	13	ss		End of Boring @-50'
60				
70				

Ground Water Data
No Ground Water Encountered During Drilling and Plugged at -40.0'

Project: Acee's Store Fulton, Kentucky	Date of Boring May 20, 2024
Client: Klingner & Associates, P.C. Carbondale, Illinois	Project No. H-24076

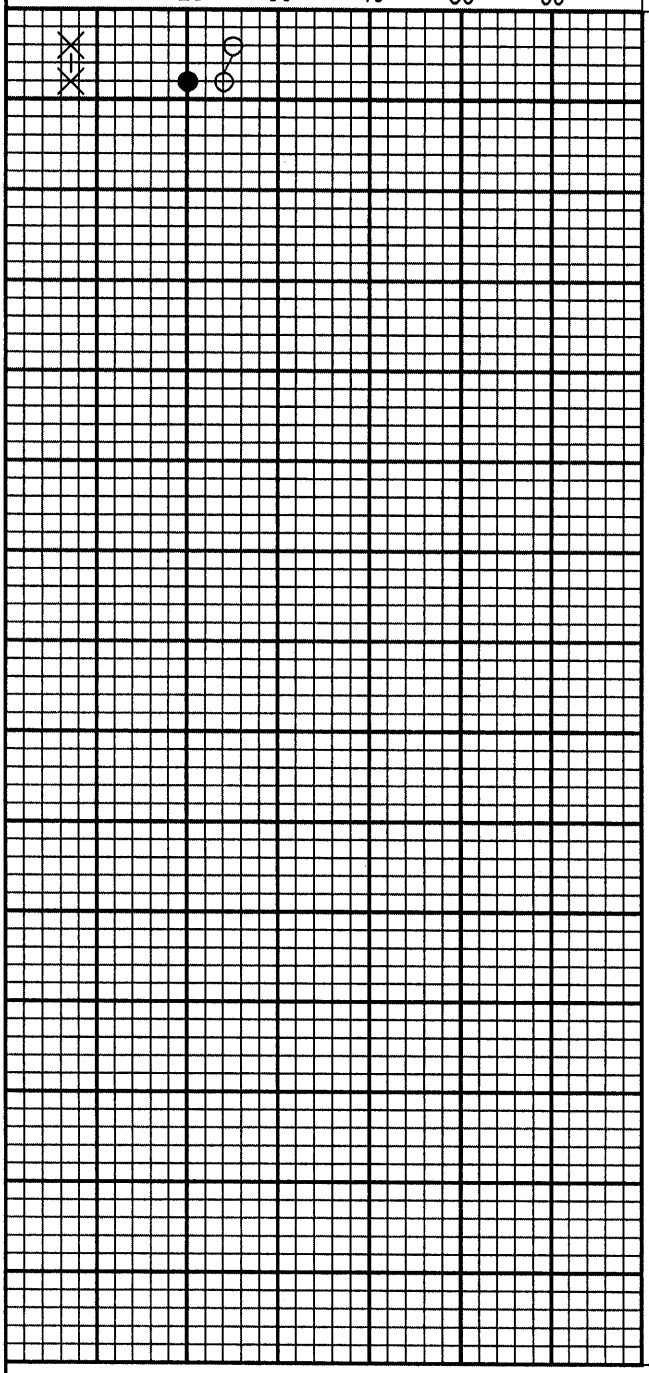
Holcomb Foundation Engineering Co.
393 Wood Road Carbondale, Illinois

LOG of BORING 5

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation
				5" Topsoil
	1	ss		Brown Mottled Gray Silty CLAY (CL)
	2	ss		
				End of Boring @-5'

Ground Water Data
No Ground Water Encountered During Drilling and Dry Upon Completion.

Project: Acee's Store
Fulton, Kentucky

Date of Boring
May 20, 2024

Client: Klingner & Associates, P.C.
Carbondale, Illinois

Project No.
H-24076

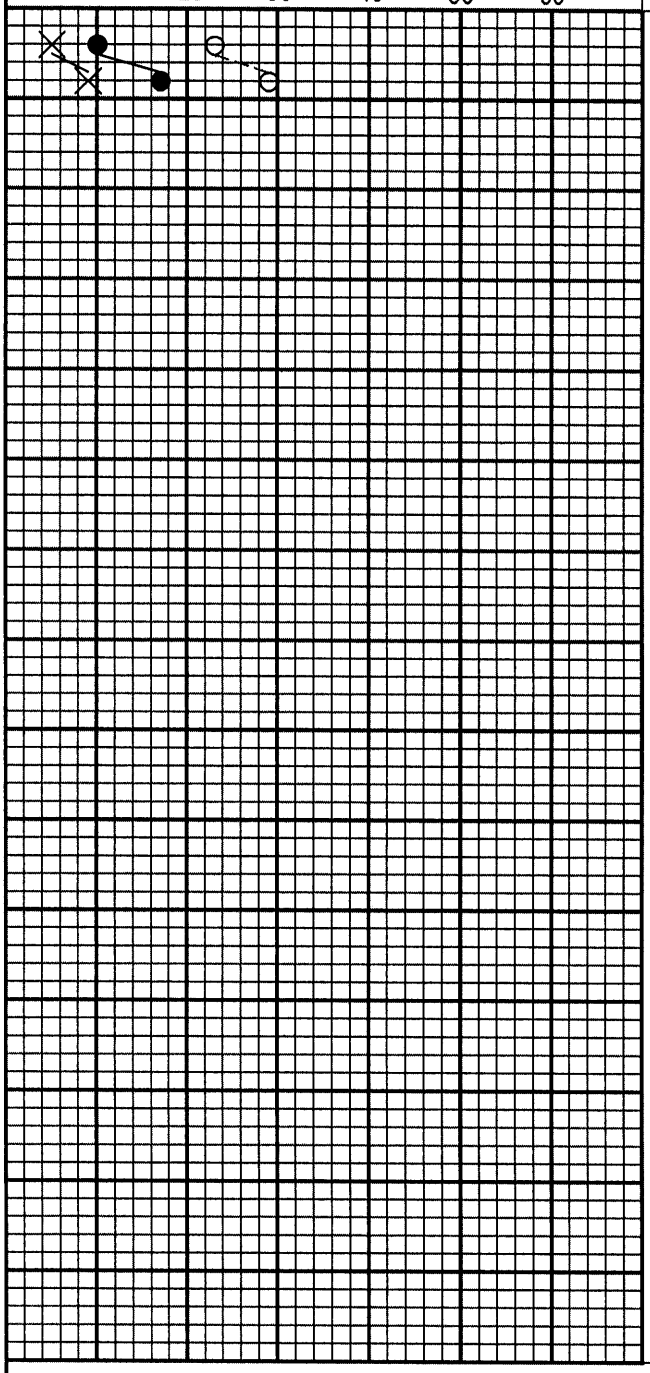
Holcomb Foundation Engineering Co.
393 Wood Road Carbondale, Illinois

LOG of BORING 6

Unconfined Compressive Strength (Tons/Sq. Ft.)
1 2 3 4 5 6

Water Content (%)

Standard N Penetration, Blows/Ft.
10 20 30 40 50 60



Depth in Feet	Sample No.	Type Sample	Sample Distance	Description of Material
				Surface Elevation
				4" Brown Gravel with Grass
	1	ss		Gray Mottled Brown Silty CLAY (CL)
	2	ss		
				End of Boring @-5'

Ground Water Data
No Ground Water Encountered During Drilling and Dry Upon Completion.

Project: Acee's Store Fulton, Kentucky	Date of Boring May 20, 2024
Client: Klingner & Associates, P.C. Carbondale, Illinois	Project No. H-24076

Holcomb Foundation Engineering

Moisture - Density Relationship

Project: Acees Store
Fulton, Kentucky

Location: B-5 and B-6
Depth 1-5'

Project No.: H-24076

Date: 5/22/24

Proctor Test Results

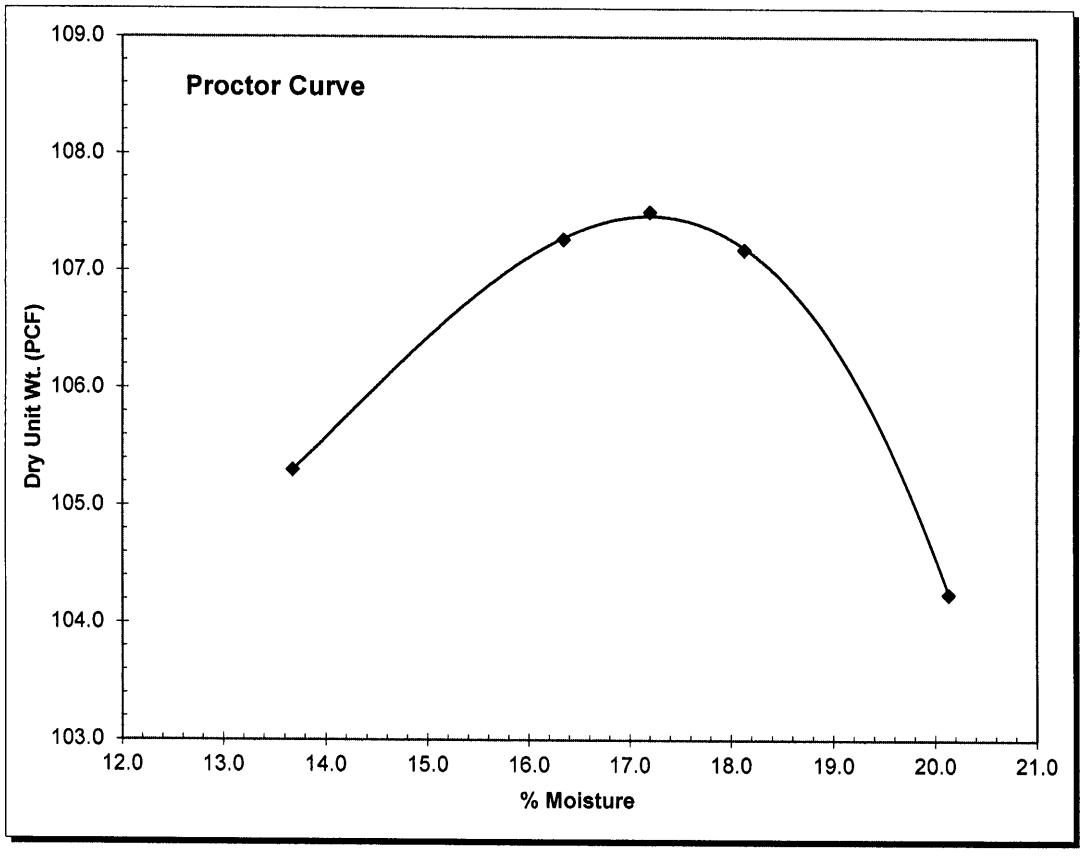
Soil Classification: Brown Mottled Gray Silty CLAY

Maximum Dry Density (PCF) 107.5

Optimum Moisture Content (%) 17.2

Test Data ASTM D-698 (standard)

Moisture Content (%)	Dry Unit Wt. (PCF)
16.3	107.3
18.1	107.2
20.1	104.2
13.7	105.3
17.2	107.5



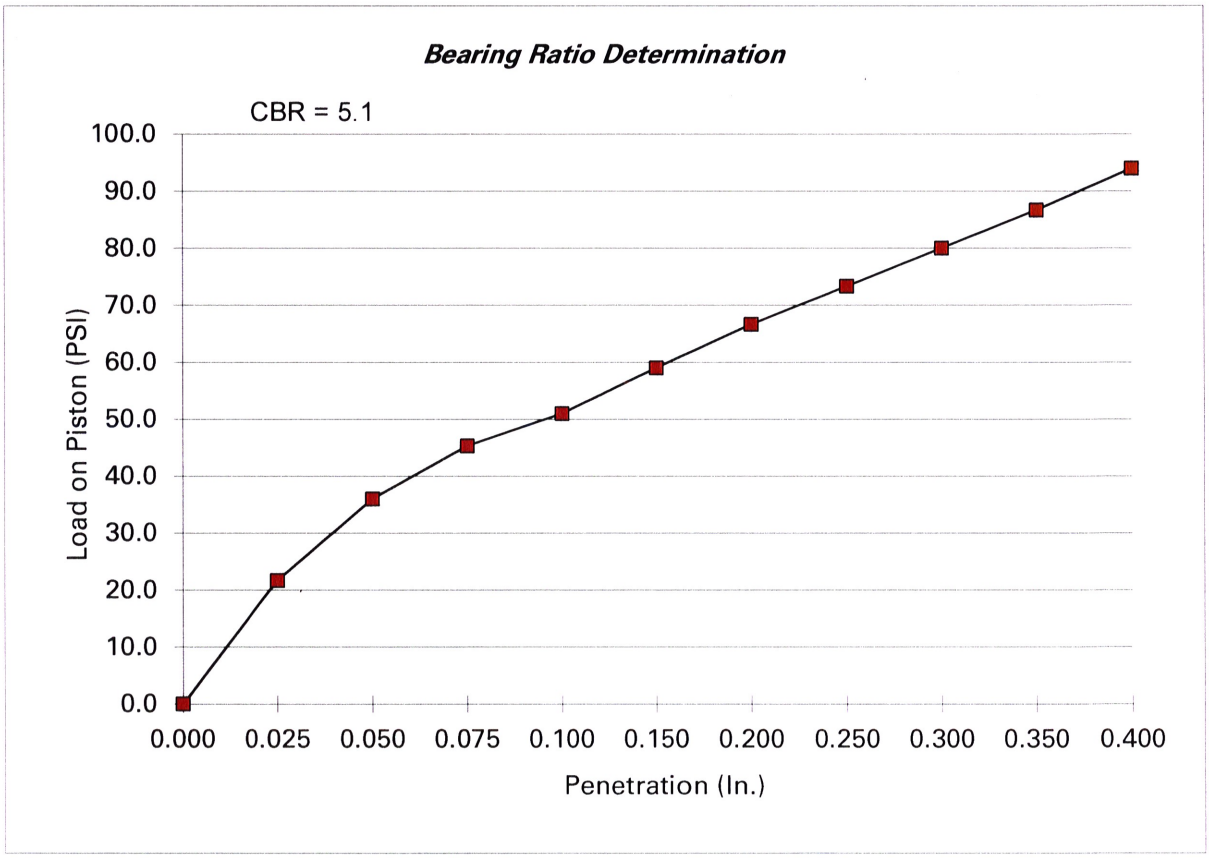
Holcomb Foundation Engineering Co.
California Bearing Ratio Test

Project:	Acee's Store	Location:	Borings 5 & 6
	Fulton, Kentucky	Depth:	1-5'
Project No.:	H-24076		

Date: 5/28/2024

Test Data

Proctor Results		**CBR Test**		
Soil Classification	Silty CLAY	Penetration	Pounds	PSI
Maximum Dry Density(PCF)	107.5	0.000	0.0	0.0
Optimum Moisture Content (%)	17.2	0.025	65.0	21.7
		0.050	108.0	36.0
Before Test		0.075	136.0	45.3
Molded Weight (PCF)	100.1	0.100	153.0	51.0
Moisture Content (%)	16.6	0.150	177.0	59.0
Percent Compaction	93.1	0.200	200.0	66.7
		0.250	220.0	73.3
After Test		0.300	240.0	80.0
Moisture Content (%)	23.3	0.350	260.0	86.7
Swell (%)	0.9	0.400	282.0	94.0

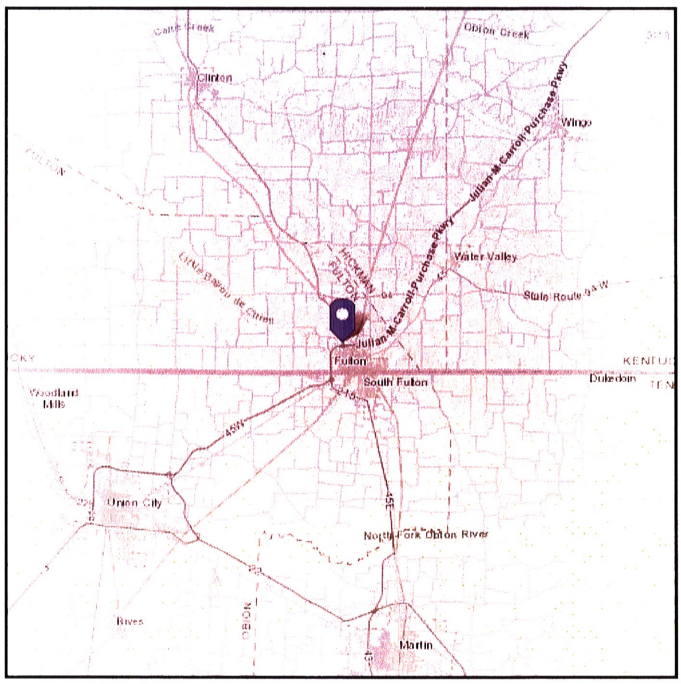


ASCE Hazards Report

Address:
1000 Holiday Ln
Fulton, Kentucky
42041

Standard: ASCE/SEI 7-22
Risk Category: III
Soil Class: D - Stiff Soil

Latitude: 36.51942
Longitude: -88.891589
Elevation: 417.5336976392931 ft (NAVD 88)



ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

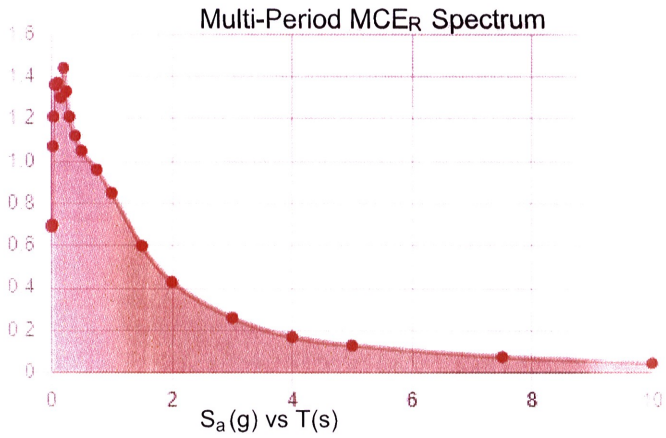
Seismic

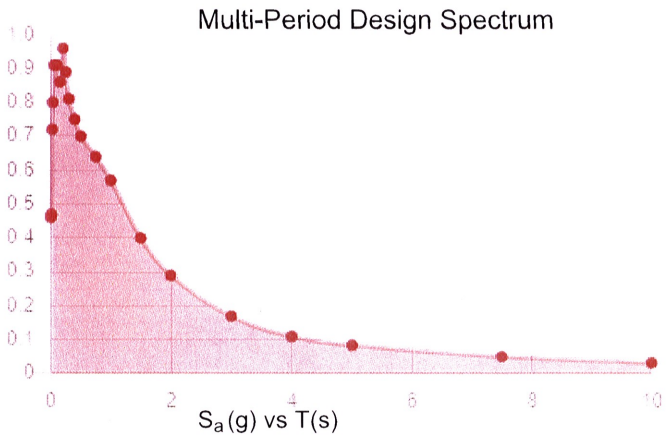
Site Soil Class: D - Stiff Soil

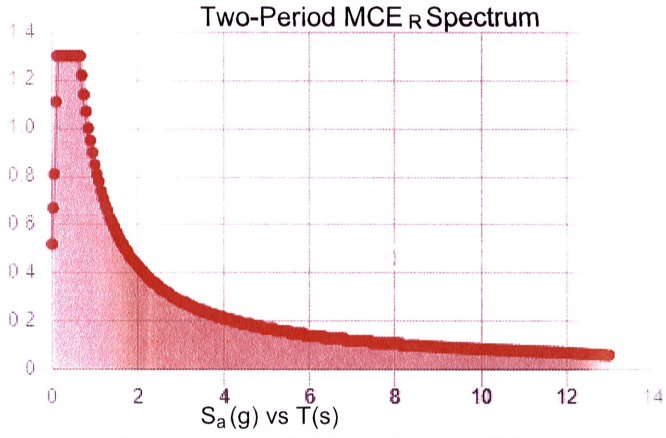
Results:

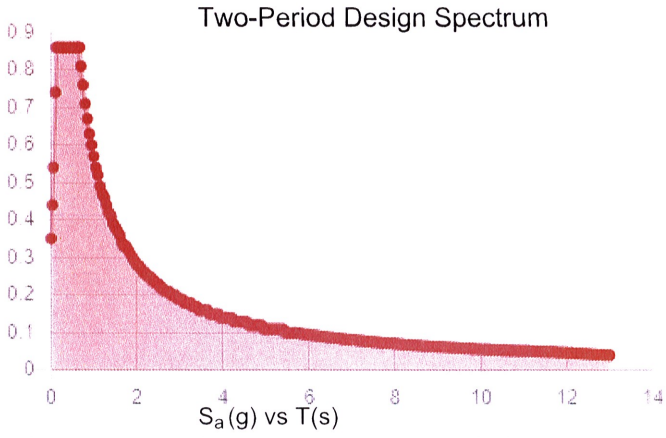
PGA_M :	0.53	T_L :	12
S_{MS} :	1.3	S_S :	1.5
S_{M1} :	0.85	S_1 :	0.42
S_{DS} :	0.86	V_{S30} :	260
S_{D1} :	0.57		

Seismic Design Category: D









MCE_R Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

Design Vertical Response Spectrum

Vertical ground motion data has not yet been made available by USGS.

GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Classification System is used to identify the soil unless otherwise noted.

RELATIVE DENSITY & CONSISTENCY CLASSIFICATION

TERM (NON-COHESIVE SOILS)	BLOWS PER FOOT
Very Loose	0 - 4
Loose	5 - 10
Firm	11 - 30
Dense	31 - 50
Very Dense	Over 50

TERM (COHESIVE SOILS)	QU (tsf)
Very Soft	0 - 0.25
Soft	0.25 - 0.50
Firm	0.50 - 1.00
Stiff	1.00 - 2.00
Very Stiff	2.00 - 4.00
Hard	4.00+

DRILLING & SAMPLING SYMBOLS

ss:	Split Spoon - 1 3/8" I.D., 2" O.D.
st:	Shelby Tube - 2.80"I.D., 3" O.D.
au:	Auger Samples
cs:	Continuous Sampling - 2.0" I.D.

SOIL PROPERTY SYMBOLS

●	Unconfined Compressive Strength, Qu, (tsf)
+	Penetrometer Value, (tsf)
	Plastic Limit (%)
O	Water Content (%)
	Liquid Limit (%)
X	Standard "N" Penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2" O.D. Split Spoon

PARTICLE SIZE

Boulders	8 in. +	Medium Sand	0.6 mm to 0.2 mm
Cobbles	8 in. to 3 in.	Fine Sand	0.2 mm to 0.74 mm
Gravel	3 in. to 5 mm	Silt	0.074 mm to 0.0005 mm
Coarse Sand	5 mm to 0.6 mm	Clay	less than 0.005 mm

UNIFIED SOIL CLASSIFICATIONS

MAJOR DIVISIONS			SYMBOL	TYPICAL DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS	GW	Well graded gravels, gravel-sand mixtures
			GP	Poorly graded gravels, gravel-sand mixtures
		GRAVELS WITH FINES	GM	Silty gravels, gravels-sand silt mixtures
			GC	Clayey gravels, gravel-sand clay mixtures
		CLEAN SANDS	SW	Well-graded sands, gravelly sands
			SP	Poorly graded sands, gravelly sands
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures
			SC	Clayey sands, clay-sand mixtures
FINE GRAINED SOILS	SILTS AND CLAYS LOW PLASTICITY		ML	Inoganic silts of clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity
	SILTS AND CLAYS HIGH PLASTICITY		OL	Organic silts and organic silty clays of low plasticity
			MH	Inorganic clays of high plasticity
			CH	Organic clays of high plasticity
HIGHLY ORGANIC SOILS			OH	Organic clays of medium to high plasticity
			PT	Peat, humus, swamp soils with high organic contents

CLH 4-17-25

Request for Information

R.F.I. No.: 1

PROJECT: Acee's Neighborhood Market & Deli
Fulton, Ky

REFERENCE TO: Questions on Acee's

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1. Spec section 075423 lists only Carlisle. Can we install an Elevate roof? If it meets or exceeds Carlisle Roof System
2. Do they want walkpads from the access to and around all units? Or only at service doors of units. service doors
3. Sheet A202 calls for downspout to match wall panels. Is each downspout to match the wall panel it is mounted to? Meaning there will be 2-3 different colors of downspouts? Verify with owner... recommend Cityscape to match metal caps.
4. Detail 3 on A509. We must have a minimum of 10" base flashing above the finish roof height. The stone can not run down to roof as shown. Stone only needs to extend below lowest parapet (approx. 6") so visible portions of high parapets are covered in stone.
5. There is no sheet metal spec. Can the coping, conductor heads, and downspouts all be shop fabricated from 24 ga. Kynar 500 coated steel? 24 ga. Kynar 500 is acceptable.
6. Is this a project that you have on hand? Not sure what is being asked?
7. What is the wind speed rating they are wanting for the roof system? 55mph is standard. 72 MPH
8. The manufacture will n warranty against unlimited wind speed and natural causes as stated in spec. They will have limits on these items. We are asking for manufactures 20 year warranty.
9. Need wall finishes in rooms 102,103, and 104. - M2 (Stainless Steel) -See diagram attached.
10. Is GC responsible for interior wall metal panels? Contractor to provide and install.
11. Plans indicate that exterior metal is provide by owner and installed by owner. Contractor to provide and install.

SECTION 07 5423
THERMOPLASTIC POLYOLEFIN (TPO) MEMBRANE ROOFING - CARLISLE

PART 1 GENERAL

1.01 SUBMITTALS

A. Product Data: Provide manufacturer's written information listed below.
   1. Product data indicating membrane materials, flashing materials, insulation, vapor retarder, surfacing, and fasteners.

B. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, and paver layout.

C. Warranty:
   1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
   2. Submit installer's certification that installation complies with all warranty conditions for the waterproof membrane.

1.02 WARRANTY

A. See Section 01 7800 - Closeout Submittals for additional warranty requirements.

B. System Warranty: Provide manufacturer's system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
   1. Warranty Term: 20 years.
   2. For repair and replacement include costs of both material and labor in warranty.
   3. Include accidental punctures according to the manufacturer's standard warranty terms.
   4. Include hail damage according to the manufacturer's standard warranty terms.

PART 2 PRODUCTS

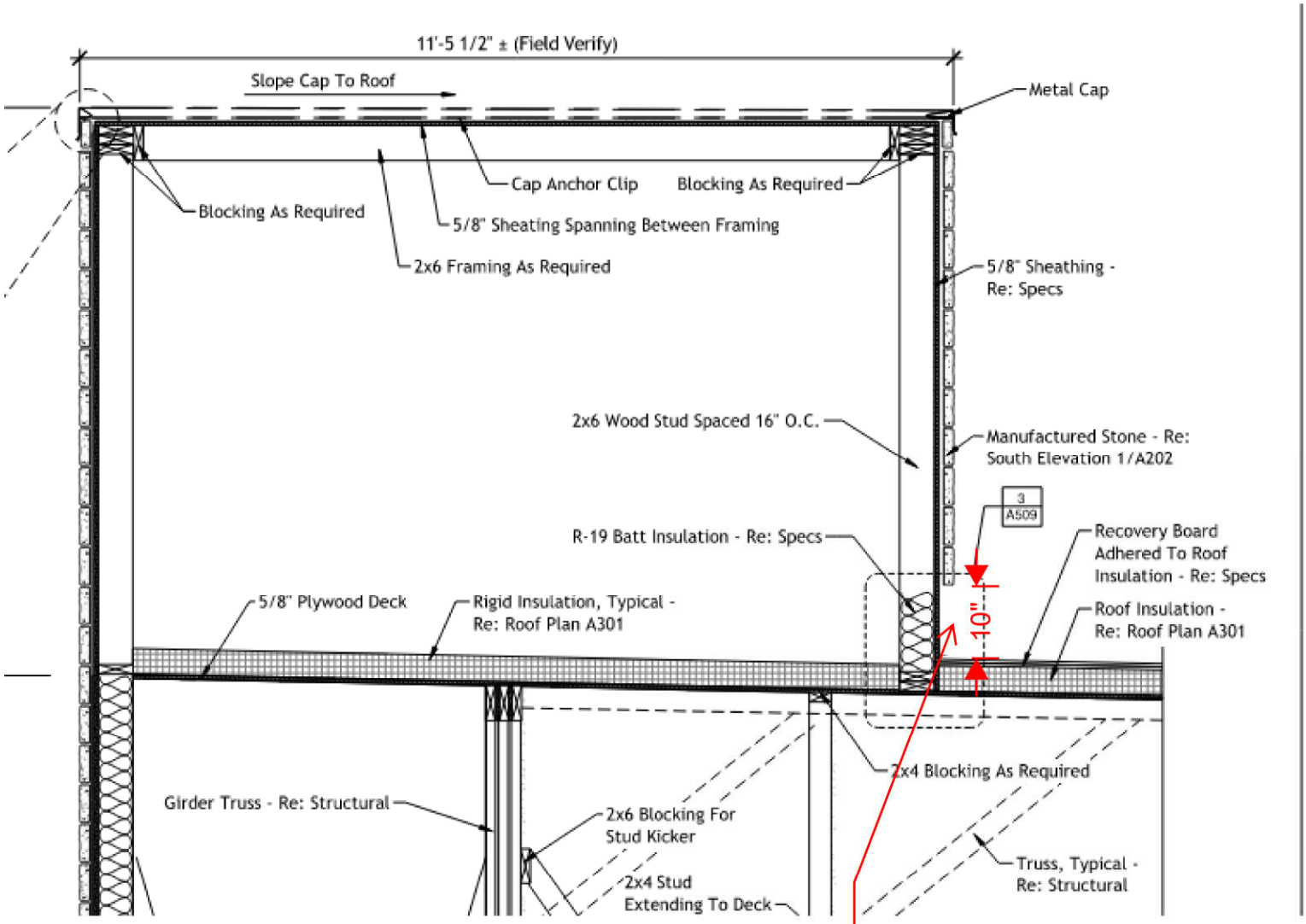
2.01 MANUFACTURER

A. Carlisle SynTec Systems: www.carlisle-syntec.com/#sle.

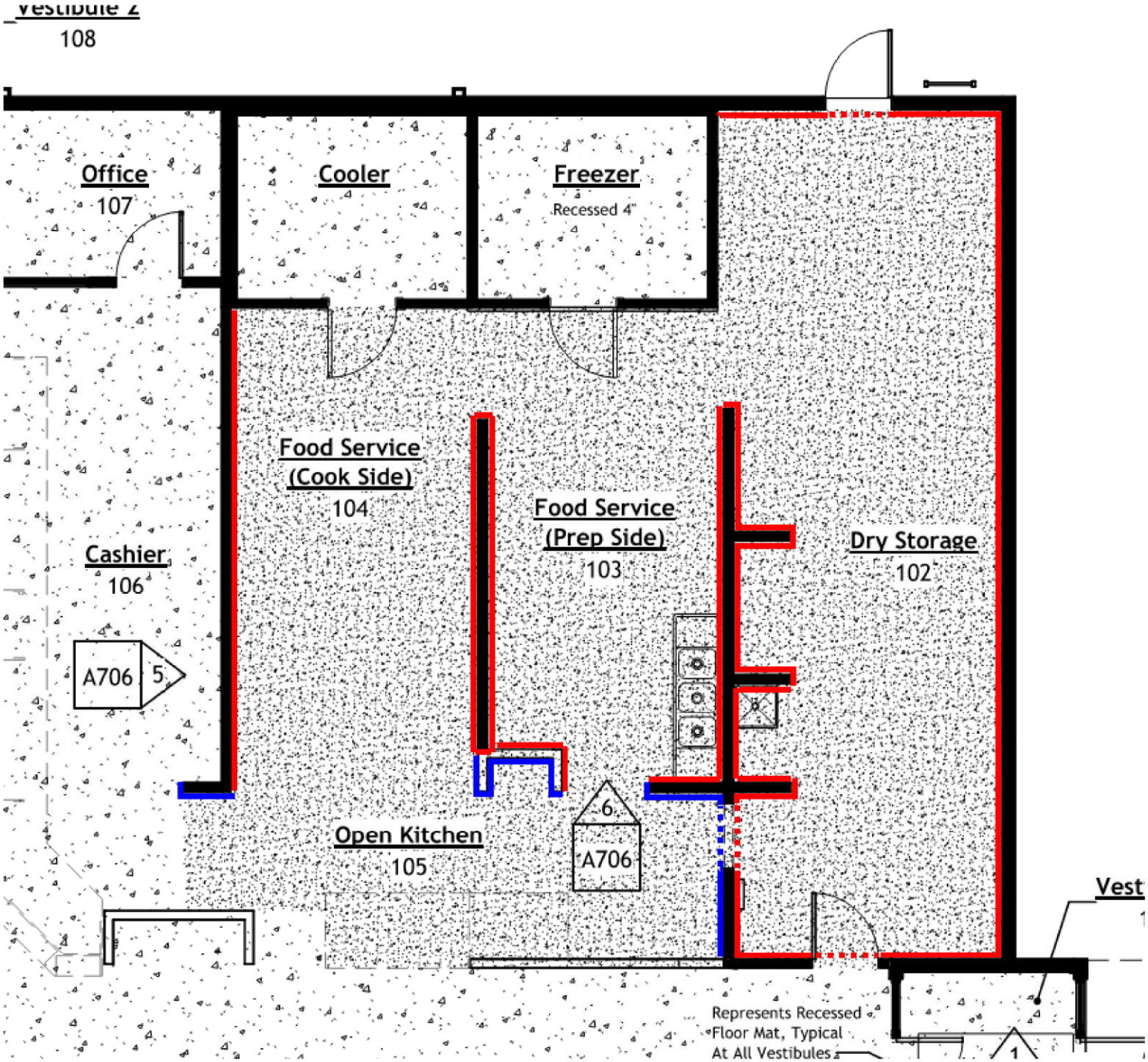
2.02 ROOFING APPLICATIONS

A. TPO Membrane Roofing: One ply membrane, fully adhered, over insulation.

B. Roofing Assembly Performance Requirements and Design Criteria:
   1. Wind Uplift:
      a. Designed to withstand wind uplift forces calculated with ASCE 7.
      b. Design Wind Speed: In accordance with local building code and authorities having jurisdiction (AHJ).
   2. Insulation Thermal Resistance (R-Value): Provide R-25, minimum, over entire roof deck.



10" min. between bottom of stone and top of roof. Stone only needs to extend below lowest parapet (approx. 6") so visible portions of high parapets are covered in stone.



M2	Commercial Grade Stainless Steel Wall Paneling

FRP1	45" X 48" Symmetrix Smartseam Frp Paneling
	3" X 6" Tile Configuration - Subway Horizontal