LATHAN · McKEE
ARCHITECTS

300 CHASE PARK SOUTH • SUITE 200 • HOOVER, ALABAMA 35244
205-988-9112

ADDENDUM NO. 2

NEW GYMNASIUM ADDITION TO MONTEVALLO HIGH SCHOOL
Architect Job No. 25-33
December 8, 2025
DCM #2025354

BIDS DUE:
Thursday, December 11, 2025, until 2:00 p.m., local time, held at Shelby County Board of Education, Facilities and Maintenance Building 125 Industrial Parkway, Columbiana, AL 35051

The Plans and Specifications are here by amended. The following supersedes all contrary and/or conflicting information and is made part of the contract documents.

SPECIFICATIONS

1. **Section 01030 – Special Projects Requirements**: ADD attached report in its entirety.
   - **Classroom and Gymnasium Addition**
     Montevallo High School
     Geotechnical Engineering Report
     Terracon Project No. E1245188

2. **Section 01220 – Unit Prices**: REVISE Unit Price Schedule.
   - 3.1 Unit Price Schedule, (to be quoted on the Proposal Form Attachment)
     - A. Unit Price No. 1 – Earth Excavation – General Site Conditions
       1. Description: Removal, including all materials and labor, of in-place below grade materials, in accordance with the Contract Documents.
       2. Unit of Measurement: Cubic Yard (CY).
     - B. Unit Price No. 2 – Earth Excavation – Trench Materials
       1. Description: Removal, including all materials and labor, of in-place trench materials, in accordance with the Contract Documents.
       2. Unit of Measurement: Cubic Yard (CY).
     - C. Unit Price No. 3 – Unsuitable Soils – Remove/Replace
       1. Description: Undercutting and replacement of unsuitable soils, including all materials and labor, quantified/verified in the field, and in accordance with the Contract Documents.
       2. Refer to Section 02300 for additional information.
       3. Unit of Measurement: Cubic Yard (CY).

D. Unit Price No. 4 – Stabilization Fabric

1. Description: Placement of heavy-duty stabilization fabric (Mirafi 600X or Equal), including all materials and labor, in accordance with the Contract Documents.

REVISE: 2. Unit of Measurement: Square Yard (SY).

E. Unit Price No. 5 – Lean Concrete

1. Description: Placement of Lean concrete, including all materials and labor, of in-place trench materials, in accordance with the Contract Documents.
2. Unit of Measurement: Cubic Yard (CY).

ADD: F. Unit Price No. 6 – ALDOT No. 57 Stone

1. Description: Placement of ALDOT No. 57 stone, including all materials and labor, quantified/verified in the field, as needed for stabilization in accordance with the Contract Documents.
2. Unit of Measurement: Ton

ADD: G. Unit Price No. 7 – ALDO 825B

1. Description: Placement of ALDOT 825B, including all materials and labor, quantified/verified in the field, as needed for stabilization in accordance with the Contract Documents.
2. Unit of Measurement: Ton

END OF SECTION

3. **Section 07410 – Performed Metal Soffit Panels:** DELETE in its entirety.

4. **Section 08335 – Tornado Resistant Window Systems:** DELETE in its entirety.

5. **Section 08885 – Laminate Glazing Film:** DELETE in its entirety.

6. **Section 09658 – Luxury Vinyl Tile Flooring:** DELETE in its entirety.

7. **Section 09800 – Acoustical Panel Treatment:** DELETE in its entirety.

8. **Section 10110 – Markerboards and Tackboards:** DELETE in its entirety.

9. **Section 10720 – Roof Screens:** DELETE in its entirety.

10. **Section 10900 – First Aid Kit:** DELETE in its entirety.

11. **Section 11150 – Metal Bollards:** DELETE in its entirety.

12. **Section 14240 – Machine Room-Less Hydraulic Passenger Elevators:** DELETE in its entirety.

DRAWINGS

1. **Sheet A3.1.1** – Clarified the type of letters on the building.

2. **Sheet A3.3.3** – Added dimensions to the columns on sections 1 and 3.

3. **Sheet A5.1** – Revised Interior Elevations 6, 7, 8, & 9 – Ceramic Tile on Walls Stops at 6'-4".

4. **Sheet A6.4** – Revised Detail 8 – Tackable surface applied directly to plywood, as shown in Details 9 & 10.

5. **Sheet A8.1** – Revised Finish Floor Plan 1 – Wood gym floor types clarified.

6. **Sheet M1.0** – Added keyed note 5, showed access door locations in grease duct. Removed section of 12x12 ductwork near Women A107 that is not required. Revised note about dryer exhaust. Adjusted size of concrete pad for DOAS-1 and MUA-1 to align with Architectural & Civil.

7. **Sheet M1.1** – Added keyed note 4 and showed access door locations in grease duct.

8. **Sheet M2.0** – Adjusted size of concrete pad for DOAS-1 and MUA-1 to align with Architectural & Civil. Adjusted condensate drain for DOAS-1. Added note about insulation for refrigerant piping.

9. **Sheet FP1.0** – Revised sprinkler head locations.

10. **Sheet P0.1** – Revised washing machine specifications.

11. **Sheet P0.1** – Revised water heater and gas connection details.

12. **Sheet P1.0** – Revised piping and sizes on risers.

13. **Sheet P1.1** – Added shock arrestors to risers.

14. **Sheet P2.0** – Added storm piping and roof drains to plans.

15. **Sheet P2.0** – Added storm piping specifications.

16. **Sheet P2.0** – Revised vent piping.

17. **Sheet P3.0** – Added backflow preventer to ice machine in Trainer A115.

18. **Sheet P3.0** – Revised pipe sizes in Men A101.

19. **Sheet P4.0** – Revised vent piping.

20. **Sheet P5.0** – Revised vent piping and piping sizes.

21. **Sheet P5.0** – Revised waste riser accordingly.

CLARIFICATIONS

1. Due to the long span steel trusses it is NOT structurally acceptable to waive the AISC certification for the erector.

2. There is an ongoing classroom addition under construction at this time that this project will be tying into. The existing site contractor and successful bid contractor for this project will be required to share lay down space. The division of lay down space and use of site will be determined during the pre-construction conference.

3. The Proposal Form attachment – Unit Prices is correct, the Schedule of Unit Prices as been revised to match.

4. Delete lettering indicated in the main entrance concrete walk on Sheet A8.2.

5. The “WB” at both Coaches’ Offices is for “WINDOW BLINDS” installed inside the offices. WB are at Window Type A, inside the Coaches’ Offices: A114 and A120.

6. Section 09651 includes Floor Base, use as directed by Finish Schedule. 09658 for LVT is not used in this project.

7. The general contractor is responsible for the vinyl graphic of the Bulldog Head on 1/A6.4.

8. A103 and A108 shall both be ERF-1 Floor and Base. Lobby A125 shall be VCT-1 only with no pattern. At Trophy A104 and A106, the floor shall be VCT-1.
9. The Vape Sensors and Camera shall be owner provided.

10. There is no EIFS on this project, disregard any reference in Section 07240.

11. All non-load bearing CMU walls will terminate 8” above finished ceiling.

12. Tool-scored concrete sidewalks shall be the basis of bid.

13. Reference Section 11481, The Four-Face Model 2665 is NOT utilized, ONLY two (2) of the Single-Faced Scoreboards are required.

14. No chemical toilets shall be needed as this project does NOT have a storm shelter, disregard any reference in Section 12150.

15. The washer and dryer units voltage required is 480-3 for A118 Laundry Room.

16. Both Handsinks shown on P5.0 Food Service Equipment Schedule shall be provided by KEC.

APPROVED MANUFACTURERS

The following manufacturers have submitted data for prior approval and have been approved by our office, **contingent upon the stipulation that their products must meet or exceed the contract specifications**.

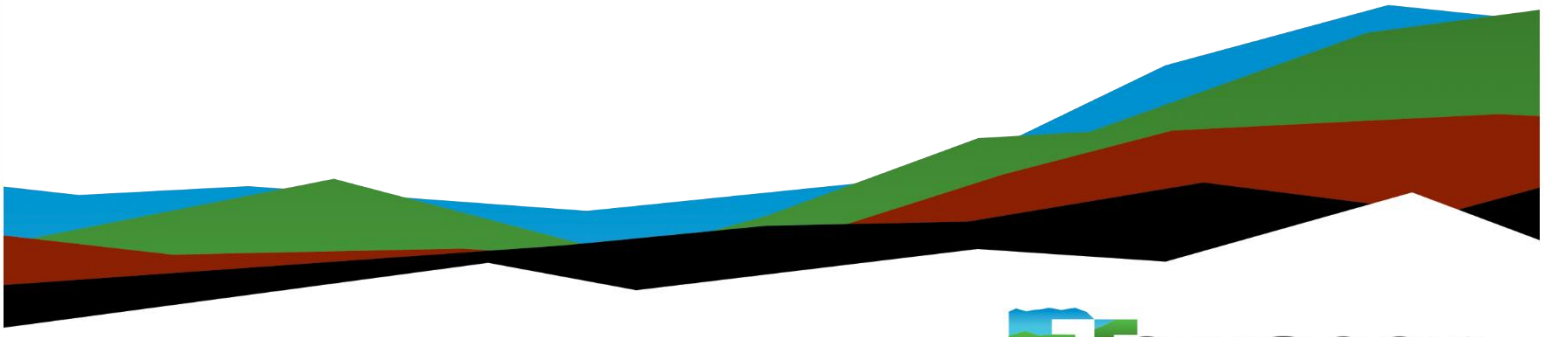
Product		Manufacturer
06412 Architectural Fiberglass Columns	CL-109-1816	Decoro Building Products
07610 Standing Seam Metal Roof System	Fabral Powerseam	Fabral Metal Wall&Roof Systems
09551 Wood Gym Flooring	Action Cush I	Action Floor Systems

Classrooms And Gymnasium Addition
Montevallo High School
Geotechnical Engineering Report

December 04, 2024 | Terracon Project No. E1245188

Prepared for:

Shelby County Board of Education
410 East College Street
PO Box 1910
Columbiana, Alabama 35051



Terracon
Explore with us

Nationwide
Terracon.com

- Facilities
- Environmental
- Geotechnical
- Materials

2147 Riverchase Office Road
Birmingham, Alabama 35244
P (205) 942-1289
Terracon.com

December 4, 2024

Shelby County Board of Education
410 East College Street
PO Box 1910
Columbiana, Alabama 35051

Attn: Mr. David Calhoun
Assistant Superintendent of Operations/Chief of Staff

Re: Geotechnical Engineering Report
Classrooms And Gymnasium Addition
Montevallo High School
Montevallo, Alabama
Terracon Project No. E1245188

Dear Mr. Calhoun:

We have completed the scope of Geotechnical Engineering services for the above referenced project in general accordance with Terracon Proposal No. PE1245188 dated October 14, 2024. This report presents the findings of the subsurface exploration and provides geotechnical recommendations concerning earthwork and the design and construction of foundations for the proposed classrooms and gymnasium addition at Montevallo High School.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,
Terracon

ALABAMA LICENSED No. 17908 PROFESSIONAL ENGINEER BRYAN C. RITENOUR

Bryan Ritenour, P.E.
Senior Engineer

Matt McCullough, P.E.
Geotechnical Department Manager

CC: Mr. Howard Rasco

Table of Contents

Figures

Attachments

Note: This report was originally delivered in a web-based format. **Blue Bold** text in the report indicates a referenced section heading. The PDF version also includes hyperlinks which direct the reader to that section and clicking on the Terracon logo will bring you back to this page. For more interactive features, please view your project online at **client.terracon.com**.

Refer to each individual Attachment for a listing of contents.

Introduction

This report presents the results of our subsurface exploration and Geotechnical Engineering services performed for the proposed classrooms and gymnasium additions at Montevallo High School in Montevallo, Alabama. The purpose of these services was to provide information and geotechnical engineering recommendations relative to:

- Subsurface soil conditions
- Groundwater conditions
- Seismic site classification per IBC
- Site preparation and earthwork
- Lateral earth pressures
- Foundation design and construction

The geotechnical engineering Scope of Services for this project included 5 test borings, laboratory testing, engineering analysis, and preparation of this report.

Exhibits showing the site and boring locations are shown on the **Site Location** and **Exploration Plan**, respectively. The results of the laboratory testing performed on soil samples obtained from the site during our field exploration are included on the boring logs in the **Exploration Results** section.

Project Description

Our initial understanding of the project was provided in our proposal and was discussed during project planning. A period of collaboration has transpired since the project was initiated, and our final understanding of the project conditions is as follows:

Item	Description
Information Provided	A floor plan layout was provided by Mr. Howard Rasco via email.
Project Description	The project will consist of an addition to the existing gymnasium and an adjoining classroom addition.
Proposed Structures	Gymnasium addition and new classrooms
Building Construction	Masonry with slab on grade

Item	Description
Finished Floor Elevation	Assumed to match existing building
Maximum Loads	▪ Columns: 100 - 200 kips (assumed) ▪ Walls: 3-5 kips per linear foot (klf) (assumed) ▪ Floor Slabs: 100 pounds per square foot (psf) (assumed)
Grading/Slopes	No grading plans for this project have been provided. We anticipate cuts and fills of less than 3 feet will be required.
Below-Grade Structures	Possible foundation wall along north side
Free-Standing Retaining Walls	None anticipated
Pavements	None anticipated

Terracon should be notified if any of the above information is inconsistent with the planned construction, especially the grading limits, as modifications to our recommendations may be necessary.

Site Conditions

The following description of site conditions is derived from our site visit in association with the field exploration and our review of publicly available geologic and topographic maps.

Item	Description
Parcel Information	The project is located on the east side of the existing Montevallo High School in Montevallo, AL. (See Exhibit D) Latitude/Longitude (approximate): 33.1045° N, 86.8600° W
Existing Improvements	Grassed practice field
Current Ground Cover	Grass and some asphalt
Existing Topography	The site is relatively level except for some slope along the north side.

Geotechnical Characterization

We have developed a general characterization of the subsurface conditions based upon our review of the subsurface exploration, laboratory data, geologic setting and our understanding of the project. This characterization, termed GeoModel, forms the basis of our geotechnical calculations and evaluation of the site. Conditions observed at each exploration point are indicated on the individual logs. The individual logs can be found in the **Exploration Results** and the GeoModel can be found in the **Figures** attachment of this report.

As part of our analyses, we identified the following model layers within the subsurface profile. For a more detailed view of the model layer depths at each boring location, refer to the GeoModel.

Model Layer	Layer Name	General Description
1	Surface Layer	Topsoil (3" to 4") or Asphalt (4" to 9" over 1" crushed stone base)
2	Native Lean Clay	Lean Clay (CL), reddish brown to yellowish brown, varying amounts of sand and chert, stiff to hard

The borings were advanced in the dry using a solid stem auger drilling technique that allows short term groundwater observations to be made while drilling. Groundwater was not encountered within the maximum drilling depth at the time of our field exploration. Groundwater conditions may be different at the time of construction. Groundwater conditions may change because of seasonal variations in rainfall, runoff, and other conditions not apparent at the time of drilling. Long-term groundwater monitoring was outside the scope of services for this project.

Site Geology

Published maps from the United States Geological Survey (USGS) and the Geological Survey of Alabama (GSA) indicate that the project site is underlain by the Brierfield Dolomite geologic formation. The Brierfield Dolomite consists of Medium to dark-bluish-gray thick-bedded siliceous dolomite; characterized by locally abundant chert with irregular cavities.

The dolomite bedrock beneath the site is a carbonate rock and thus, is susceptible to dissolution as groundwater moves through cracks and fissures in the rock. As dissolution progresses, cavities are formed within the rock mass. Sinkholes are formed as overburden soils filter into the solution cavities. During our field reconnaissance of the proposed site, we did not observe evidence of sinkhole occurrence at the ground surface. However, as with any site underlain by a carbonate bedrock formation, there is always

the risk of future sinkhole development. Prediction of future sinkhole occurrence is very difficult and even an extensive subsurface exploration would not likely rule out the possibility of sinkhole activity. Therefore, owners of developments over carbonate rock geology must accept some risk of future sinkhole activity

Seismic Site Class

The seismic design requirements for buildings and other structures are based on Seismic Design Category. Site Classification is required to determine the Seismic Design Category for a structure. The Site Classification is based on the upper 100 feet of the site profile defined by a weighted average value of either shear wave velocity, standard penetration resistance, or undrained shear strength in accordance with Section 20.4 of ASCE 7 and the International Building Code (IBC). Based on the soil/bedrock properties observed at the site and as described on the exploration logs and results, our professional opinion is for that a **Seismic Site Classification of D** be considered for the project. Subsurface explorations at this site were extended to a maximum depth of 15 feet. The site properties below the boring depth to 100 feet were estimated based on our experience and knowledge of geologic conditions of the general area. Additional deeper borings or geophysical testing may be performed to confirm the conditions below the current boring depth.

Geotechnical Overview

The site appears suitable for the proposed construction based upon geotechnical conditions encountered in the test borings, provided that the recommendations provided in this report are implemented in the design and construction phases of this project.

Borings B-1 and B-2 initially penetrated an existing pavement section consisting of about 4 to 9 inches of topsoil underlain by about 1 inch of crushed stone base. Borings B-3 through B-5 initially penetrated about 6 inches of topsoil. Beneath the topsoil or pavement section, the borings encountered native soils. The native soils consist of Lean Clay (CL) with varying amounts of sand and chert. The recorded N-values indicate the encountered native soils to range from stiff to hard in consistency. The borings were terminated in the native soil layer at depth ranging from about 13.6 to 15 feet below the ground surface.

After the stripping of the site and performing the planned cuts and in areas to receive fill, the exposed subgrade in areas receiving fill should be compacted and then proof-rolled under the observation of the Geotechnical Engineer as further discussed in the **Earthwork** section of this report. Any soft, loose, or otherwise unstable soils excessively deflecting during the proof-roll should be undercut and replaced with structural fill or stabilized as discussed in the **Earthwork** section of this report.

Based on the conditions encountered, the proposed structure can be supported on conventional continuous or spread footing foundations bearing on stiff to hard native soils or new engineered fill. The proposed floor slab can bear on the stiff to hard native soils or new engineered fill.

The recommendations contained in this report are based upon the results of field and laboratory testing (presented in the **Exploration Results**), engineering analyses, and our current understanding of the proposed project. The **General Comments** section provides an understanding of the report limitations.

Earthwork

Earthwork is anticipated to include clearing and grubbing, excavations, and engineered fill placement. The following sections provide recommendations for use in the preparation of specifications for the work. Recommendations include critical quality criteria, as necessary, to render the site in the state considered in our geotechnical engineering evaluation for foundations and floor slabs.

Subgrade Preparation

Prior to placing fill, any planted vegetation, topsoil, root mats, and existing asphalt should be removed from the proposed building and fill areas. After stripping the site and making the necessary cuts to finish subgrade, but prior to fill placement, the exposed subgrade should be densified using a heavy vibratory roller having a maximum static weight of 12,000 lbs. and capable of exerting a minimum impact energy of 20,000 lbs.

After densification/compaction as described above, the subgrade should be proofrolled with an adequately loaded vehicle such as a fully-loaded tandem-axle dump truck. The proofrolling should be performed under the observation of the Geotechnical Engineer or representative. Areas excessively deflecting under the proofroll should be delineated and subsequently addressed by the Geotechnical Engineer. Such areas should either be removed, further densified in place, or stabilized by other methods discussed in the following sections, depending on site and weather conditions. Excessively wet or dry material should either be removed or moisture conditioned and recompacted. Compacted structural fill soils should then be placed to the proposed design grade and the moisture content and compaction of subgrade soils should be maintained until foundation or pavement construction.

The workability of the subgrade may be affected by precipitation, repetitive construction traffic or other factors. If unworkable conditions develop, workability may be improved by scarifying and drying. Some moisture conditioning (i.e., drying) of the existing soils should be anticipated for onsite soils to be reused as fill. Furthermore, soils failing the

proofroll test may require additional reworking and drying to be stabilized in place, especially if earthwork is performed during the winter months.

Fill Material Types

Fill required to achieve design grade should be classified as structural fill. Structural fill is material used below, or within 10 feet of structures, pavements or constructed slopes.

Reuse of On-Site Soil: Excavated on-site soil may be reused as fill. Material property requirements for on-site soil for use as structural fill are noted in the table below:

Property	Structural Fill
Composition	Free of deleterious material
Maximum particle size	4 inches
Fines content	Not limited
Plasticity	Liquid Limit less than 50 Plasticity index less than 30
GeoModel Layer Expected to be Suitable[1,2]	2

1. Based on subsurface exploration.
2. Some moisture conditioning (i.e., drying) may be necessary.

Imported Fill Materials: Imported fill materials should meet the following material property requirements. Regardless of its source, compacted fill should consist of approved materials that are free of organic matter and debris. Frozen material should not be used, and fill should not be placed on a frozen subgrade.

Soil Type [1]	USCS Classification	Acceptable Parameters (for Structural Fill)
Low Plasticity Cohesive	CL, CL-ML ML, SM, SC	Liquid Limit less than 50 Plasticity index less than 25
Granular	GW, GP, GM, GC, SW, SP, SM, SC	Less than 50% passing No. 200 sieve

1. Structural fill should consist of approved materials free of organic matter and debris. Frozen material should not be used, and fill should not be placed on a frozen subgrade. A sample of each material type should be submitted to the Geotechnical Engineer for evaluation prior to use on this site. Additional geotechnical consultation should be provided prior to use of uniformly graded gravel on the site.

Fill Placement and Compaction Requirements

Structural fill should meet the following compaction requirements.

Item	Structural Fill
Soil Fill Lift Thickness	8 inches or less in loose thickness when heavy, self-propelled compaction equipment is used 4 to 6 inches in loose thickness when hand-guided equipment (i.e. jumping jack or plate compactor) is used
Minimum Compaction Requirements [1]	98% of max.
Water Content Range [1]	Low to Moderate Plasticity Cohesive: -2% to +2% of optimum Granular: -3% to +4% of optimum

1. Maximum density and optimum water content as determined by the standard Proctor test (ASTM D 698).

Excavation

We anticipate that excavations for the proposed foundations can be accomplished with conventional earthmoving equipment. The bottom of excavations should be thoroughly cleaned of loose soils and disturbed materials prior to backfill placement and/or construction.

Utility Trench Backfill

Any soft or unsuitable materials encountered at the bottom of utility trench excavations should be removed and replaced with structural fill or bedding material in accordance with public works specifications for the utility be supported. This recommendation is particularly applicable to utility work requiring grade control and/or in areas where subsequent grade raising could cause settlement in the subgrade supporting the utility. Trench excavation should not be conducted below a downward 1:1 projection from existing foundations without engineering review of shoring requirements and geotechnical observation during construction.

On-site materials are considered suitable for backfill of utility and pipe trenches, provided the material is free of organic matter and deleterious substances. However, material used as trench backfill should comply with the pipe manufacturer or governing municipality's requirements.

Trench backfill should be mechanically placed and compacted as discussed earlier in this report. Compaction of initial lifts should be accomplished with hand-operated tampers or other lightweight compactors. Where trenches are placed beneath slabs, footings, or pavements, the backfill should satisfy the gradation requirements of engineered fill discussed in this report. Flooding or jetting for placement and compaction of backfill is not recommended.

Grading and Drainage

All grades must provide effective drainage away from the structure during and after construction and should be maintained throughout the life of the structure. Water retained next to the structure can result in soil movements greater than those discussed in this report. Greater movements can result in unacceptable differential movements.

Exposed ground should be sloped and maintained at a minimum 5% away from the structure for at least 10 feet beyond the perimeter of the structure. Locally, flatter grades may be necessary to transition ADA access requirements for flatwork. After construction and landscaping have been completed, final grades should be verified to document effective drainage has been achieved. Grades around the structure should also be periodically inspected and adjusted, as necessary, as part of the structure's maintenance program.

Earthwork Construction Considerations

Shallow excavations for the proposed structure are anticipated to be accomplished with conventional construction equipment. The site should also be graded to prevent ponding of surface water on the prepared subgrades or in excavations. Water collecting over or adjacent to construction areas should be removed. If the subgrade freezes, desiccates, saturates, or is disturbed, the affected material should be removed, or the materials should be scarified, moisture conditioned, and recompacted.

As a minimum, excavations should be performed in accordance with OSHA 29 CFR, Part 1926, Subpart P, "Excavations" and its appendices, and in accordance with any applicable local and/or state regulations.

Construction site safety is the sole responsibility of the contractor who controls the means, methods, and sequencing of construction operations. Under no circumstances shall the information provided herein be interpreted to mean Terracon is assuming responsibility for construction site safety or the contractor's activities; such responsibility shall neither be implied nor inferred.

Construction Observation and Testing

The foundation installation efforts should be observed by the Geotechnical Engineer (or others under their direction). Observation should include documentation of adequate bearing material exposed at the design bearing elevation and evaluation of the Fat Clay exposure.

In areas of foundation excavations, the bearing subgrade should be evaluated by the Geotechnical Engineer. If unanticipated conditions are observed, the Geotechnical Engineer should prescribe mitigation options.

In addition to the documentation of the essential parameters necessary for construction, the continuation of the Geotechnical Engineer into the construction phase of the project provides the continuity to maintain the Geotechnical Engineer's evaluation of subsurface conditions, including assessing variations and associated design changes.

Shallow Foundations

If the site has been prepared in accordance with the requirements noted in **Earthwork**, the following design parameters are applicable for shallow foundations.

Design Parameters – Compressive Loads

Item	Description
Maximum Net Allowable Bearing Pressure [1, 2]	2,500 psf
Required Bearing Stratum [3]	Stiff to hard low plasticity native soils or new engineered fill
Minimum Foundation Dimensions	Per IBC 1809.7
Ultimate Passive Resistance [4] **(equivalent fluid pressures)**	330 pcf (cohesive backfill)
Sliding Resistance [5]	0.30 ultimate coefficient of friction
Minimum Embedment below Finished Grade [6]	18 inches
Estimated Total Settlement from Structural Loads [2]	Less than about 1 inch
Estimated Differential Settlement [2, 7]	About 1/2 of total settlement

1. The maximum net allowable bearing pressure is the pressure in excess of the minimum surrounding overburden pressure at the footing base elevation. Values assume that exterior grades are no steeper than 20% within 10 feet of structure.
2. Values provided are for maximum loads noted in **Project Description**. Additional geotechnical consultation will be necessary if higher loads are anticipated.
3. Unsuitable or soft soils should be overexcavated and replaced per the recommendations presented earlier in this report.
4. Use of passive earth pressures require the sides of the excavation for the spread footing foundation to be nearly vertical and the concrete placed neat against these vertical faces or that the footing forms be removed and compacted structural fill be placed against the vertical footing face. Assumes no hydrostatic pressure. Apply a factor of safety of at least 1.5 when designing for lateral force resistance.
5. Can be used to compute sliding resistance where foundations are placed on suitable soil/materials. Frictional resistance for granular materials is dependent on the bearing pressure which may vary due to load combinations.
6. Embedment necessary to minimize the effects of frost and/or seasonal water content variations.
7. Differential settlements are noted for equivalent-loaded foundations and bearing elevation as measured over a span of 50 feet.

Design Parameters – Overturning and Uplift Loads

Shallow foundations subjected to overturning loads should be proportioned such that the resultant eccentricity is maintained in the center-third of the foundation (e.g., e < b/6, where b is the foundation width). This requirement is intended to keep the entire foundation area in compression during the extreme lateral/overturning load event. Foundation oversizing may be required to satisfy this condition.

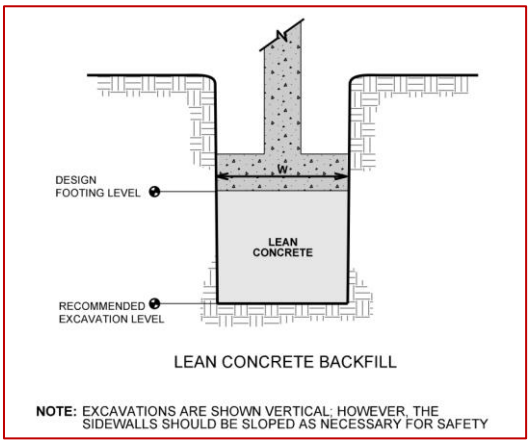
Uplift resistance of spread footings can be developed from the effective weight of the footing and the overlying soils with consideration to the IBC basic load combinations.

Item	Description
Soil Moist Unit Weight	120 pcf
Soil Effective Unit Weight[1]	60 pcf
Soil weight included in uplift resistance	Soil included within the prism extending up from the top perimeter of the footing at an angle of 20 degrees from vertical to ground surface

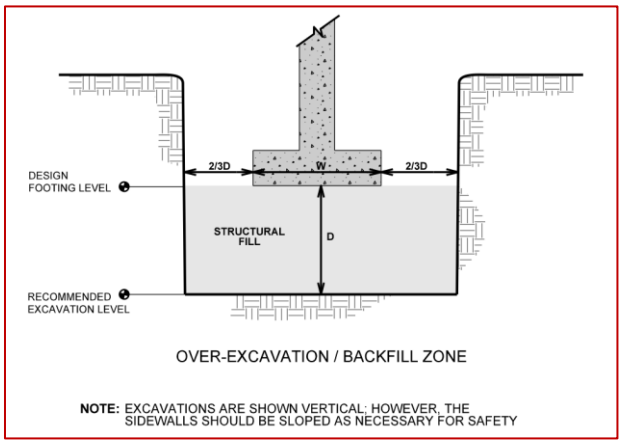
1. Effective (or buoyant) unit weight should be used for soil above the foundation level and below a water level. The high groundwater level should be used in uplift design as applicable.

Foundation Construction Considerations

If the unstable native soils are exposed at the bearing elevations determined by the Geotechnical Engineer, the footings should be excavated completely through the unstable native soils. The overexcavation can be backfilled to the design bearing elevation with lean concrete, flowable fill, or engineered fill. The lean concrete or flowable fill replacement zone is illustrated on the sketch below.



Overexcavation for structural fill placement below footings should be conducted as shown below. The overexcavation should be backfilled up to the footing base elevation, with structural fill placed, as recommended in the **Earthwork** section.



As noted in **Earthwork**, the footing excavations should be evaluated under the observation of the Geotechnical Engineer. The base of all foundation excavations should be free of water and loose soil, prior to placing concrete. Concrete should be placed soon after excavating to reduce bearing soil disturbance. Care should be taken to prevent wetting or drying of the bearing materials during construction. Excessively wet or dry material or any loose/disturbed material in the bottom of the footing excavations should be removed/reconditioned before foundation concrete is placed.

Sensitive soils exposed at the surface of footing excavations may require surficial compaction with hand-held dynamic compaction equipment prior to placing structural fill, steel, and/or concrete. Should surficial compaction not be adequate, construction of a working surface consisting of a lean concrete mud mat may be required prior to the placement of reinforcing steel and construction of foundations.

Floor Slabs

Design parameters for floor slabs assume the requirements for **Earthwork** have been followed. Specific attention should be given to positive drainage away from the structure and positive drainage of the aggregate base beneath the floor slab.

Depending upon the site and weather conditions at the time of construction, unsuitable, weak, and/or loose soils may be observed at the floor slab subgrade level. These soils should be densified in place or undercut and replaced with structural fill meeting the requirements in the **Earthwork** section.

Floor Slab Design Parameters

Item	Description
Floor Slab Support[1]	Minimum 4 inches base course meeting material specifications of ACI 302 Subgrade compacted to recommendations in **Earthwork**
Estimated Modulus of Subgrade Reaction [2]	100 pounds per square inch per inch (psi/in) for point loads

1. Floor slabs should be structurally independent of building footings or walls to reduce the possibility of floor slab cracking caused by differential movements between the slab and foundation.
2. Modulus of subgrade reaction is an estimated value based upon our experience with the subgrade condition, the requirements noted in **Earthwork**, and the floor slab support as noted in this table. It is provided for point loads. For large area loads the modulus of subgrade reaction would be lower.

The use of a vapor retarder should be considered beneath concrete slabs on grade covered with wood, tile, carpet, or other moisture sensitive or impervious coverings, when the project includes humidity-controlled areas, or when the slab will support equipment sensitive to moisture. When conditions warrant the use of a vapor retarder, the slab designer should refer to ACI 302 and/or ACI 360 for procedures and cautions regarding the use and placement of a vapor retarder.

Saw-cut contraction joints should be placed in the slab to help control the location and extent of cracking. For additional recommendations, refer to the ACI Design Manual. Joints or cracks should be sealed with a waterproof, non-extruding compressible compound specifically recommended for heavy duty concrete pavement and wet environments.

Where floor slabs are tied to perimeter walls or turn-down slabs to meet structural or other construction objectives, our experience indicates differential movement between the walls and slabs will likely be observed in adjacent slab expansion joints or floor slab cracks beyond the length of the structural dowels. The Structural Engineer should account for potential differential settlement through use of sufficient control joints, appropriate reinforcing or other means.

Floor Slab Construction Considerations

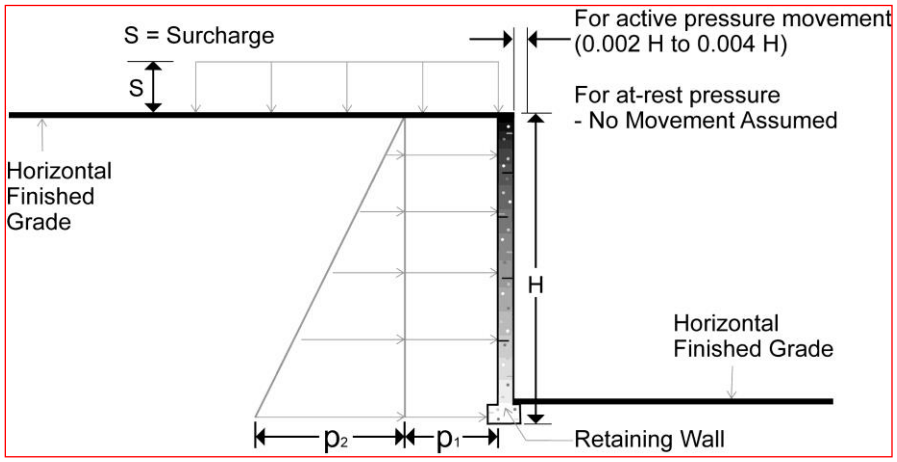
Finished subgrade, within and for at least 10 feet beyond the floor slab, should be protected from traffic, rutting, or other disturbance and maintained in a relatively moist condition until floor slabs are constructed. If the subgrade should become damaged or desiccated prior to construction of floor slabs, the affected material should be removed, and structural fill should be added to replace the resulting excavation. Final conditioning of the finished subgrade should be performed immediately prior to placement of the floor slab support course.

The Geotechnical Engineer should observe the condition of the floor slab subgrades immediately prior to placement of the floor slab support course, reinforcing steel, and concrete. Attention should be paid to high traffic areas that were rutted and disturbed earlier, and to areas where backfilled trenches are located.

Lateral Earth Pressures

Design Parameters

Structures with unbalanced backfill levels on opposite sides should be designed for earth pressures at least equal to values indicated in the following table. Earth pressures will be influenced by structural design of the walls, conditions of wall restraint, methods of construction, and/or compaction and the strength of the materials being restrained. Two wall restraint conditions are shown in the diagram below. Active earth pressure is commonly used for design of free-standing cantilever retaining walls and assumes wall movement. The “at-rest” condition assumes no wall movement and is commonly used for basement walls, loading dock walls, or other walls restrained at the top. The recommended design lateral earth pressures do not include a factor of safety and do not provide for possible hydrostatic pressure on the walls (unless stated).



Lateral Earth Pressure Design Parameters

Earth Pressure Condition [1]	Coefficient for Backfill Type [2]	Surcharge Pressure [3] p_1 (psf)	Equivalent Fluid Pressures (psf) [2,4]	
			Unsaturated [5]	Submerged [5]
Active (Ka)	Crushed Stone - 0.24 Fine Grained - 0.42	(0.24)S (0.42)S	(25)H (50)H	(75)H (85)H
At-Rest (Ko)	Crushed Stone - 0.38 Fine Grained - 0.59	(0.38)S (0.59)S	(40)H (70)H	(80)H (95)H
Passive	Crushed Stone – 3.85 Fine Grained – 2.77	--- ---	(420)H (330)H	--- ---

1. For active earth pressure, wall must rotate about base, with top lateral movements 0.002 H to 0.004 H, where H is wall height. For passive earth pressure, wall must move horizontally to mobilize resistance. Fat clay or other expansive soils should not be used as backfill behind the wall.
2. Uniform, horizontal backfill, with a maximum unit weight of 120 pcf for cohesive soils and 110 pcf for open graded crushed stone (ALDOT #57).
3. Uniform surcharge, where S is surcharge pressure.
4. Loading from heavy compaction equipment is not included.
5. To achieve "Unsaturated" conditions, follow guidelines in **Subsurface Drainage for Below-Grade Walls** below. "Submerged" conditions are recommended when water cannot be evacuated from behind the walls using positive drainage or a permanent sump pump.

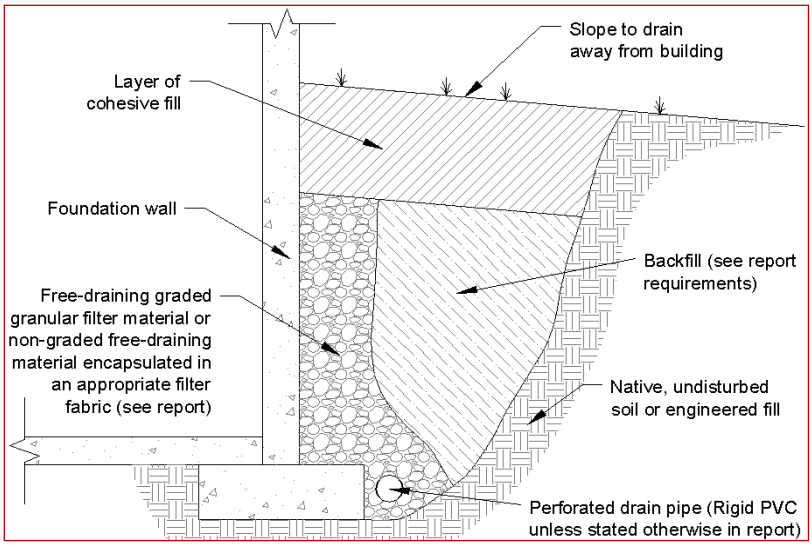
Backfill placed against structures should consist of open-graded crushed stone or low plasticity cohesive soils. For the crushed stone values to be valid, the stone backfill must extend out and up from the base of the wall at an angle of at least 45 degrees from vertical for the active case.

Footings, floor slabs or other loads bearing on backfill behind walls may have a significant influence on the lateral earth pressure. Placing footings within wall backfill and in the zone of active soil influence on the wall should be avoided unless structural analyses indicate the wall can safely withstand the increased pressure.

The lateral earth pressure recommendations given in this section are applicable to the design of rigid retaining walls subject to slight rotation, such as cantilever, or gravity type concrete walls. These recommendations are not applicable to the design of modular block - geogrid reinforced backfill walls (also termed MSE walls) or temporary shoring systems. Recommendations covering these types of wall systems are beyond the scope of services for this assignment.

Subsurface Drainage for Below-Grade Walls

A perforated rigid plastic drain line installed behind the base of walls and extends below adjacent grade is recommended to prevent hydrostatic loading on the walls. The invert of a drain line around a below-grade building area or exterior retaining wall should be placed near foundation bearing level. The drain line should be sloped to provide positive gravity drainage to daylight or to a sump pit and pump. The drain line should be surrounded by clean, free-draining granular material having less than 5% passing the No. 200 sieve, such as ALDOT No. 57 stone. The free-draining aggregate should be encapsulated in a filter fabric. The granular fill should extend to within 2 feet of final grade, where it should be capped with compacted cohesive fill to reduce infiltration of surface water into the drain system.



As an alternative to free-draining granular fill, a prefabricated drainage structure may be used. A prefabricated drainage structure is a plastic drainage core or mesh which is covered with filter fabric to prevent soil intrusion and is fastened to the wall prior to placing backfill.

The use of a permanent dewatering system is recommended to control long term hydrostatic uplift and lateral pressures beneath and around the below-grade walls. Typically, this system would consist of a retaining wall drainage layer and piping network which drains discharges by positive drainage.

General Comments

Our analysis and opinions are based upon our understanding of the project, the geotechnical conditions in the area, and the data obtained from our site exploration. Variations will occur between exploration point locations or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until during or after construction. Terracon should be retained as the Geotechnical Engineer, where noted in this report, to provide observation and testing services during pertinent construction phases. If variations appear, we can provide further evaluation and supplemental recommendations. If variations are noted in the absence of our observation and testing services on-site, we should be immediately notified so that we can provide evaluation and supplemental recommendations.

Our Scope of Services does not include either specifically or by implication any environmental or biological (e.g., mold, fungi, bacteria) assessment of the site or identification or prevention of pollutants, hazardous materials or conditions. If the owner is concerned about the potential for such contamination or pollution, other studies should be undertaken.

Our services and any correspondence are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Site characteristics as provided are for design purposes and not to estimate excavation cost. Any use of our report in that regard is done at the sole risk of the excavating cost estimator as there may be variations on the site that are not apparent in the data that could significantly effect excavation cost. Any parties charged with estimating excavation costs should seek their own site characterization for specific purposes to obtain the specific level of detail necessary for costing. Site safety and cost estimating including excavation support and dewatering requirements/design are the responsibility of others. Construction and site development have the potential to affect adjacent properties. Such impacts can include damages due to vibration, modification of groundwater/surface

water flow during construction, foundation movement due to undermining or subsidence from excavation, as well as noise or air quality concerns. Evaluation of these items on nearby properties are commonly associated with contractor means and methods and are not addressed in this report. The owner and contractor should consider a preconstruction/precondition survey of surrounding development. If changes in the nature, design, or location of the project are planned, our conclusions and recommendations shall not be considered valid unless we review the changes and either verify or modify our conclusions in writing.

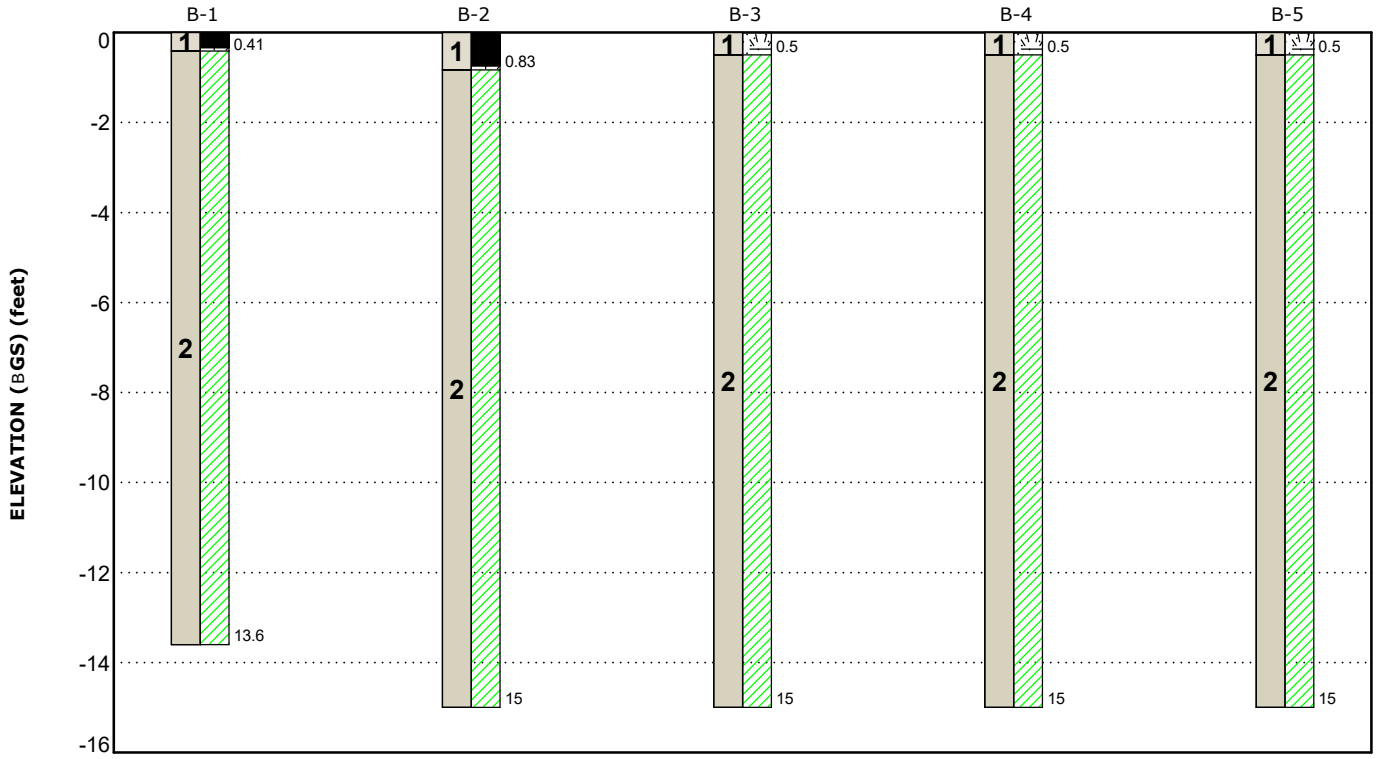
Figures

Contents:

Gym and Classroom Addition - Montevallo High School
980 Oak St | Montevallo, AL
Terracon Project No. E1245188

Terracon
2147 Riverchase Office Rd
Hoover, AL

GeoModel



This is not a cross section. This is intended to display the Geotechnical Model only. See individual logs for more detailed conditions.

Model Layer	Layer Name	General Description
1	Surface Layer	Topsoil (3" to 4") or Asphalt (4" to 9" over 1" crushed stone base)
2	Native Lean Clay	Lean Clay (CL), reddish brown to yellowish brown, varying amounts of sand and chert, stiff to hard

Legend

Asphalt
Base
Lean Clay
Topsoil

NOTES:
Layering shown on this figure has been developed by the geotechnical engineer for purposes of modeling the subsurface conditions as required for the subsequent geotechnical engineering for this project. Numbers adjacent to soil column indicate depth below ground surface.

Attachments

Exploration and Testing Procedures

Field Exploration

Number of Borings	Approximate Boring Depth (feet)	Location
5	15	Near Building Corners And Center

Boring Layout and Elevations: Terracon personnel provided the boring layout using the existing site features. If a more precise boring layout is desired, we recommend borings be surveyed.

Subsurface Exploration Procedures: We advanced the borings with a truck-mounted, rotary drill rig using continuous flight augers (solid stem and/or hollow stem, as necessary, depending on soil conditions). Four samples were obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. In the split-barrel sampling procedure, a standard 2-inch outer diameter split-barrel sampling spoon was driven into the ground by a 140-pound safety hammer hoisted by a rope and cathead falling a distance of 30 inches. The number of blows required to advance the sampling spoon the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values, are indicated on the boring logs at the test depths. For safety purposes, all borings were backfilled with auger cuttings after their completion and the upper portion of the borehole was plugged with a cement mixture.

We also observed the boreholes while drilling and at the completion of drilling for the presence of groundwater. Groundwater was not encountered during drilling.

The sampling depths, penetration distances, and other sampling information was recorded on the field boring logs. The samples were placed in appropriate containers and taken to our soil laboratory for testing and classification by a Geotechnical Engineer. Our exploration team prepared field boring logs as part of the drilling operations. These field logs included visual classifications of the materials observed during drilling and our interpretation of the subsurface conditions between samples. Final boring logs were prepared from the field logs. The final boring logs represent the Geotechnical Engineer's interpretation of the field logs and include modifications based on observations and tests of the samples in our laboratory.

Laboratory Testing

The project engineer reviewed the field data and assigned laboratory tests. The laboratory testing program included the following types of tests:

- Moisture Content
- Atterberg Limits

The laboratory testing program often included examination of soil samples by an engineer. Based on the results of our field and laboratory programs, we described and classified the soil samples in accordance with the Unified Soil Classification System.

Site Location and Exploration Plans

Contents:

Site Location Plan
Exploration Plan

Note: All attachments are one page unless noted above.

Site Location

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES MAP PROVIDED BY MICROSOFT BING MAPS

Exploration Plan

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOS FLOOR PLAN PROVIDED BY LATHAN ARCHITECTS

Exploration and Laboratory Results

Contents:

Boring Logs (B-1 through B-5)

Note: All attachments are one page unless noted above.

Terracon
2147 Riverchase Office Rd
Hoover, AL

Boring Log No. B-1

Location: See Exploration Plan

Latitude: 33.1045° Longitude: -86.8601°

Model Layer	Depth (Ft.)	Description	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	Water Content (%)	Atterberg Limits LL-PL-PI
1	0.3	**ASPHALT (4")**						
	0.4	**BASE (1")**						
2		**LEAN CLAY (CL)**, with fine sand, reddish brown, stiff						
						4-6-7 N=13	21.8	45-18-27
		becomes very stiff				7-11-13 N=24	23.9	
		becomes hard and yellowish brown, contains friable chert fragments	5			10-16-21 N=37	22.2	
		becomes very stiff				10-12-16 N=28		
		becomes hard	10					
	13.6	***Boring Terminated at 13.6 Feet***				50/1" N=50+		

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No water observed during drilling

Drill Rig
CME 45

Driller
Smith Drilling

Notes

Advancement Method
Continuous flight auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Logged by
BCR

Boring Started
11-15-2024

Boring Completed
11-15-2024

Terracon
2147 Riverchase Office Rd
Hoover, AL

Boring Log No. B-2

Location: See Exploration Plan

Latitude: 33.1044° Longitude: -86.8600°

Model Layer	Graphic Log	Depth (Ft.)	Description	Water Level Observations	Sample Type	Field Test Results	Water Content (%)	Atterberg Limits LL-PL-PI
1		0.0	**ASPHALT (9")**					
		0.8	**BASE (1")**					
2		0.8	**LEAN CLAY (CL)**, with sand and chert fragments, yellowish brown, stiff					
						4-5-6 N=11	23.6	
			becomes hard			10-20-25 N=45	24.8	
		5						
			becomes very stiff			7-12-15 N=27	32.0	
			becomes hard			7-14-17 N=31		
		10						
			becomes stiff			6-7-7 N=14		
		15.0	***Boring Terminated at 15 Feet***					
		15						

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No water observed during drilling

Drill Rig
CME 45

Driller
Smith Drilling

Notes

Advancement Method
Continuous flight auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Logged by
BCR

Boring Started
11-15-2024

Boring Completed
11-15-2024

Terracon
2147 Riverchase Office Rd
Hoover, AL

Boring Log No. B-3

Location: See Exploration Plan

Latitude: 33.1047° Longitude: -86.8598°

Model Layer	Graphic Log	Depth (Ft.)	Material Description	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	Water Content (%)	Atterberg Limits LL-PL-PI
1		0.5	**TOPSOIL (6")**						
2			**LEAN CLAY (CL)**, some fine sand, reddish brown, hard, with chert lenses						
							11-19-16 N=35	17.1	
							17-24-32 N=56	22.2	
				5					
			becomes yellowish brown and contains friable chert fragments				16-18-18 N=36	25.0	
			becomes very stiff				16-12-10 N=22		
				10					
							6-8-9 N=17		
		15.0		15					
			Boring Terminated at 15 Feet						

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No water observed during drilling

Drill Rig
CME 45

Driller
Smith Drilling

Notes

Advancement Method
Continuous flight auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Logged by
BCR

Boring Started
11-15-2024

Boring Completed
11-15-2024

Terracon
2147 Riverchase Office Rd
Hoover, AL

Boring Log No. B-4

Location: See Exploration Plan

Latitude: 33.1046° Longitude: -86.8597°

Model Layer	Graphic Log	Depth (Ft.)	Material Description	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	Water Content (%)	Atterberg Limits LL-PL-PI
1		0.5	**TOPSOIL (6")**						
2			**LEAN CLAY (CL)**, some fine sand, reddish brown, stiff						
							4-6-6 N=12	22.3	
			becomes very stiff				6-10-11 N=21	21.9	
				5					
			becomes yellowish brown and hard				9-15-15 N=30	23.2	
			becomes very stiff and contains some friable chert fragments				7-12-13 N=25		
				10					
							6-13-13 N=26		
		15.0		15					
			Boring Terminated at 15 Feet						

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No water observed during drilling

Drill Rig
CME 45

Driller
Smith Drilling

Notes

Advancement Method
Continuous flight auger

Logged by
BCR

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Boring Started
11-15-2024

Boring Completed
11-15-2024

Terracon
2147 Riverchase Office Rd
Hoover, AL

Boring Log No. B-5

Location: See Exploration Plan

Latitude: 33.1045° Longitude: -86.8599°

Model Layer	Graphic Log	Depth (Ft.)	Material Description	Depth (Ft.)	Water Level Observations	Sample Type	Field Test Results	Water Content (%)	Atterberg Limits LL-PL-PI
1		0.5	**TOPSOIL (6")**						
2			**LEAN CLAY (CL)**, some fine sand, reddish brown, stiff						
							3-4-4 N=8	25.1	
			becomes very stiff				4-8-9 N=17	24.2	
				5					
			becomes yellowish brown				6-9-11 N=20	21.0	
							5-9-12 N=21		
				10					
							7-9-11 N=20		
		15.0	***Boring Terminated at 15 Feet***	15					

See Exploration and Testing Procedures for a description of field and laboratory procedures used and additional data (If any).

See Supporting Information for explanation of symbols and abbreviations.

Water Level Observations
No water observed during drilling

Drill Rig
CME 45

Driller
Smith Drilling

Notes

Advancement Method
Continuous flight auger

Abandonment Method
Boring backfilled with auger cuttings upon completion.

Logged by
BCR

Boring Started
11-15-2024

Boring Completed
11-15-2024

Supporting Information

Contents:

Note: All attachments are one page unless noted above.

Terracon
2147 Riverchase Office Rd
Hoover, AL

General Notes

Sampling	Water Level	Field Tests
Standard Penetration Test	Water Initially Encountered Water Level After a Specified Period of Time Water Level After a Specified Period of Time Cave In Encountered Water levels indicated on the soil boring logs are the levels measured in the borehole at the times indicated. Groundwater level variations will occur over time. In low permeability soils, accurate determination of groundwater levels is not possible with short term water level observations.	N Standard Penetration Test Resistance (Blows/Ft.) (HP) Hand Penetrometer (T) Torvane (DCP) Dynamic Cone Penetrometer UC Unconfined Compressive Strength (PID) Photo-Ionization Detector (OVA) Organic Vapor Analyzer

Descriptive Soil Classification

Soil classification as noted on the soil boring logs is based Unified Soil Classification System. Where sufficient laboratory data exist to classify the soils consistent with ASTM D2487 "Classification of Soils for Engineering Purposes" this procedure is used. ASTM D2488 "Description and Identification of Soils (Visual-Manual Procedure)" is also used to classify the soils, particularly where insufficient laboratory data exist to classify the soils in accordance with ASTM D2487. In addition to USCS classification, coarse grained soils are classified on the basis of their in-place relative density, and fine-grained soils are classified on the basis of their consistency. See "Strength Terms" table below for details. The ASTM standards noted above are for reference to methodology in general. In some cases, variations to methods are applied as a result of local practice or professional judgment.

Location And Elevation Notes

Exploration point locations as shown on the Exploration Plan and as noted on the soil boring logs in the form of Latitude and Longitude are approximate. See Exploration and Testing Procedures in the report for the methods used to locate the exploration points for this project. Surface elevation data annotated with +/- indicates that no actual topographical survey was conducted to confirm the surface elevation. Instead, the surface elevation was approximately determined from topographic maps of the area.

Strength Terms

Relative Density of Coarse-Grained Soils
(More than 50% retained on No. 200 sieve.)
Density determined by Standard Penetration Resistance

Relative Density	Standard Penetration or N-Value (Blows/Ft.)
Very Loose	0 - 3
Loose	4 - 9
Medium Dense	10 - 29
Dense	30 - 50
Very Dense	> 50

Consistency of Fine-Grained Soils
(50% or more passing the No. 200 sieve.)
Consistency determined by laboratory shear strength testing, field visual-manual procedures or standard penetration resistance

Consistency	Unconfined Compressive Strength Qu (tsf)	Standard Penetration or N-Value (Blows/Ft.)
Very Soft	less than 0.25	0 - 1
Soft	0.25 to 0.50	2 - 4
Medium Stiff	0.50 to 1.00	4 - 8
Stiff	1.00 to 2.00	8 - 15
Very Stiff	2.00 to 4.00	15 - 30
Hard	> 4.00	> 30

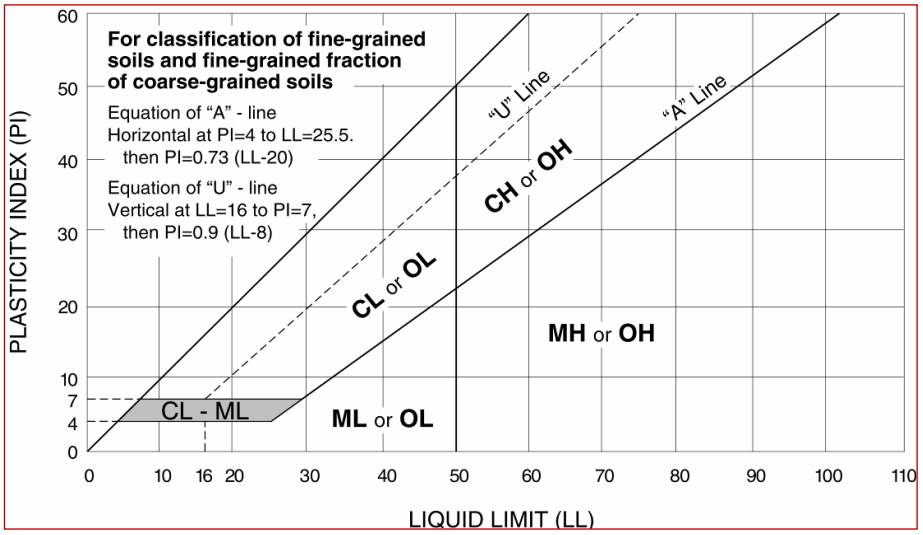
Relevance of Exploration and Laboratory Test Results

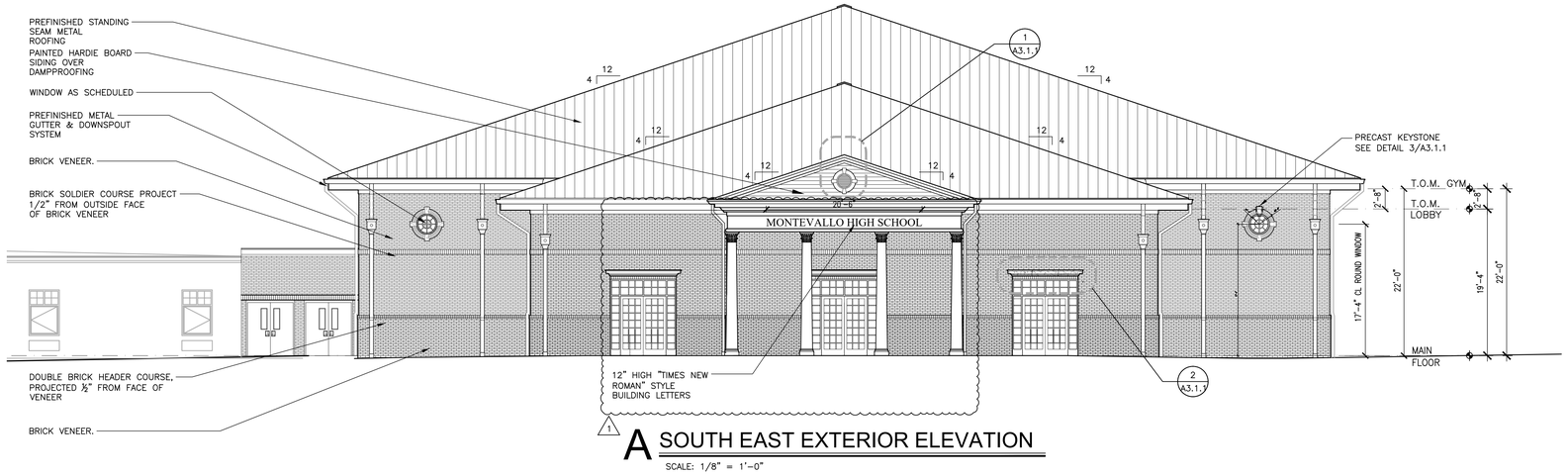
Exploration/field results and/or laboratory test data contained within this document are intended for application to the project as described in this document. Use of such exploration/field results and/or laboratory test data should not be used independently of this document.

Unified Soil Classification System

Criteria for Assigning Group Symbols and Group Names Using Laboratory Tests [A]				Soil Classification	
				Group Symbol	Group Name [B]
Coarse-Grained Soils: More than 50% retained on No. 4 sieve	**Gravels:** More than 50% of coarse fraction retained on No. 4 sieve	**Clean Gravels:** Less than 5% fines [C]	Cu≥4 and 1≤Cc≤3 [E]	GW	Well-graded gravel [F]
			Cu<4 and/or [Cc<1 or Cc>3.0] [E]	GP	Poorly graded gravel [F]
		Gravels with Fines: More than 12% fines [C]	Fines classify as ML or MH	GM	Silty gravel [F, G, H]
			Fines classify as CL or CH	GC	Clayey gravel [F, G, H]
	Sands: 50% or more of coarse fraction passes No. 4 sieve	**Clean Sands:** Less than 5% fines [D]	Cu≥6 and 1≤Cc≤3 [E]	SW	Well-graded sand [I]
			Cu<6 and/or [Cc<1 or Cc>3.0] [E]	SP	Poorly graded sand [I]
		Sands with Fines: More than 12% fines [D]	Fines classify as ML or MH	SM	Silty sand [G, H, I]
			Fines classify as CL or CH	SC	Clayey sand [G, H, I]
Fine-Grained Soils: 50% or more passes the No. 200 sieve	**Silts and Clays:** Liquid limit less than 50	**Inorganic:**	PI > 7 and plots above "A" line [J]	CL	Lean clay [K, L, M]
			PI < 4 or plots below "A" line [J]	ML	Silt [K, L, M]
		Organic:	$\frac{LL\ oven\ dried}{LL\ not\ dried} < 0.75$	OL	Organic clay [K, L, M, N]
					Organic silt [K, L, M, O]
	Silts and Clays: Liquid limit 50 or more	**Inorganic:**	PI plots on or above "A" line	CH	Fat clay [K, L, M]
			PI plots below "A" line	MH	Elastic silt [K, L, M]
		Organic:	$\frac{LL\ oven\ dried}{LL\ not\ dried} < 0.75$	OH	Organic clay [K, L, M, P]
					Organic silt [K, L, M, Q]
Highly organic soils:	Primarily organic matter, dark in color, and organic odor			PT	Peat

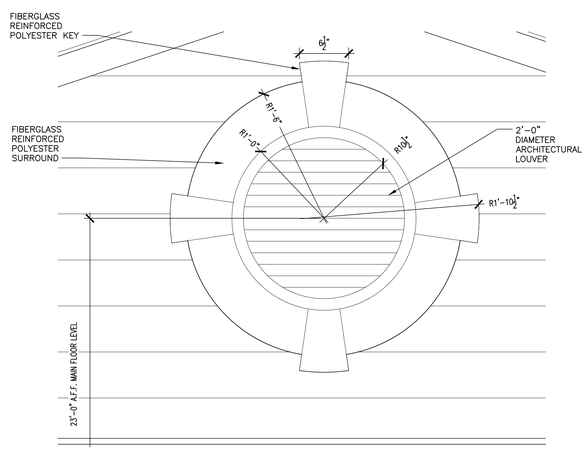
[A] Based on the material passing the 3-inch (75-mm) sieve.
[B] If field sample contained cobbles or boulders, or both, add "with cobbles or boulders, or both" to group name.
[C] Gravels with 5 to 12% fines require dual symbols: GW-GM well-graded gravel with silt, GW-GC well-graded gravel with clay, GP-GM poorly graded gravel with silt, GP-GC poorly graded gravel with clay.
[D] Sands with 5 to 12% fines require dual symbols: SW-SM well-graded sand with silt, SW-SC well-graded sand with clay, SP-SM poorly graded sand with silt, SP-SC poorly graded sand with clay.
[E] $Cu = D_{60}/D_{10}$ $Cc = \frac{(D_{30})^2}{D_{10} \times D_{60}}$
[F] If soil contains ≥ 15% sand, add "with sand" to group name.
[G] If fines classify as CL-ML, use dual symbol GC-GM, or SC-SM.
[H] If fines are organic, add "with organic fines" to group name.
[I] If soil contains ≥ 15% gravel, add "with gravel" to group name.
[J] If Atterberg limits plot in shaded area, soil is a CL-ML, silty clay.
[K] If soil contains 15 to 29% plus No. 200, add "with sand" or "with gravel," whichever is predominant.
[L] If soil contains ≥ 30% plus No. 200 predominantly sand, add "sandy" to group name.
[M] If soil contains ≥ 30% plus No. 200, predominantly gravel, add "gravelly" to group name.
[N] PI ≥ 4 and plots on or above "A" line.
[O] PI < 4 or plots below "A" line.
[P] PI plots on or above "A" line.
[Q] PI plots below "A" line.





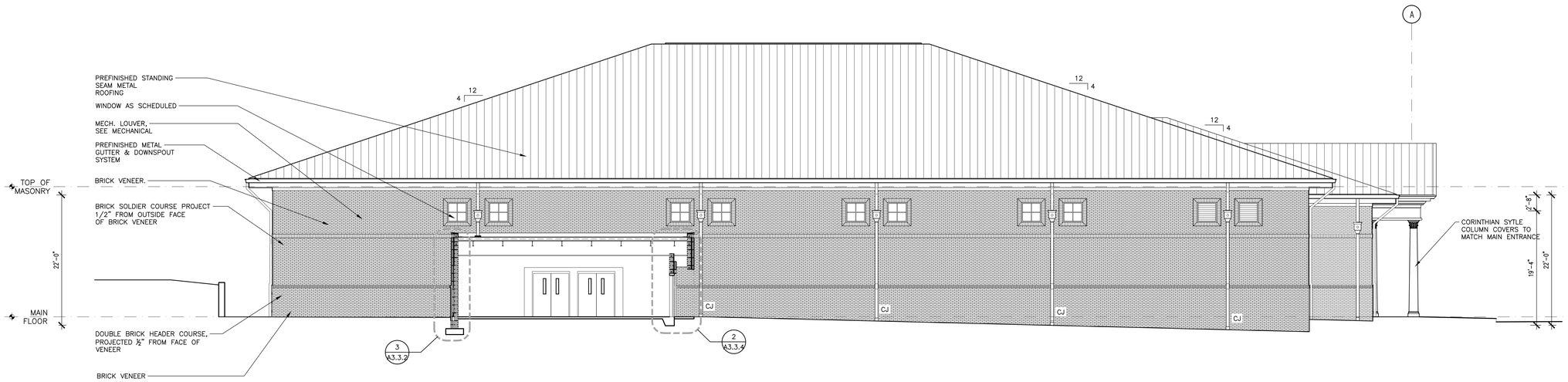
A SOUTH EAST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"



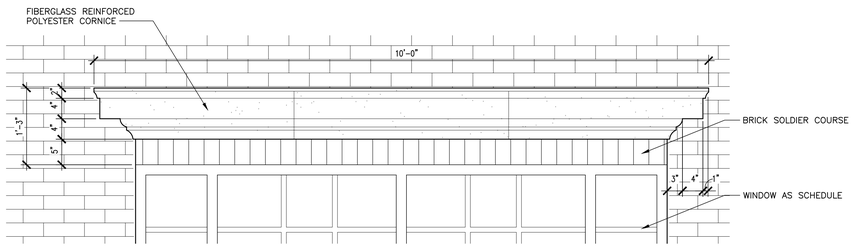
1 FRP LOUVER SURROUND DETAIL

SCALE: 1 1/2" = 1'-0"



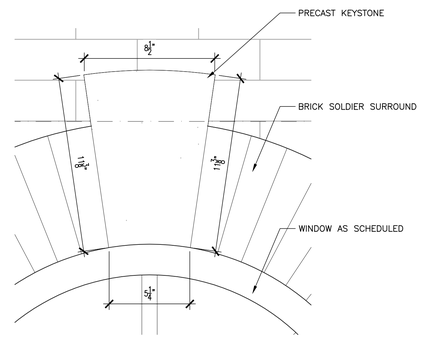
B SOUTH WEST EXTERIOR ELEVATION

SCALE: 1/8" = 1'-0"



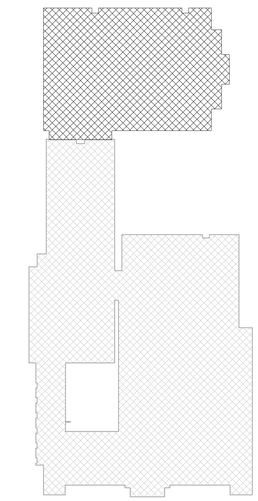
2 FRP DETAIL

SCALE: 1" = 1'-0"



3 PRECAST DETAIL

SCALE: 3" = 1'-0"



KEY PLAN

SCALE: N.T.S.

LATHAN McKEE ARCHITECTS

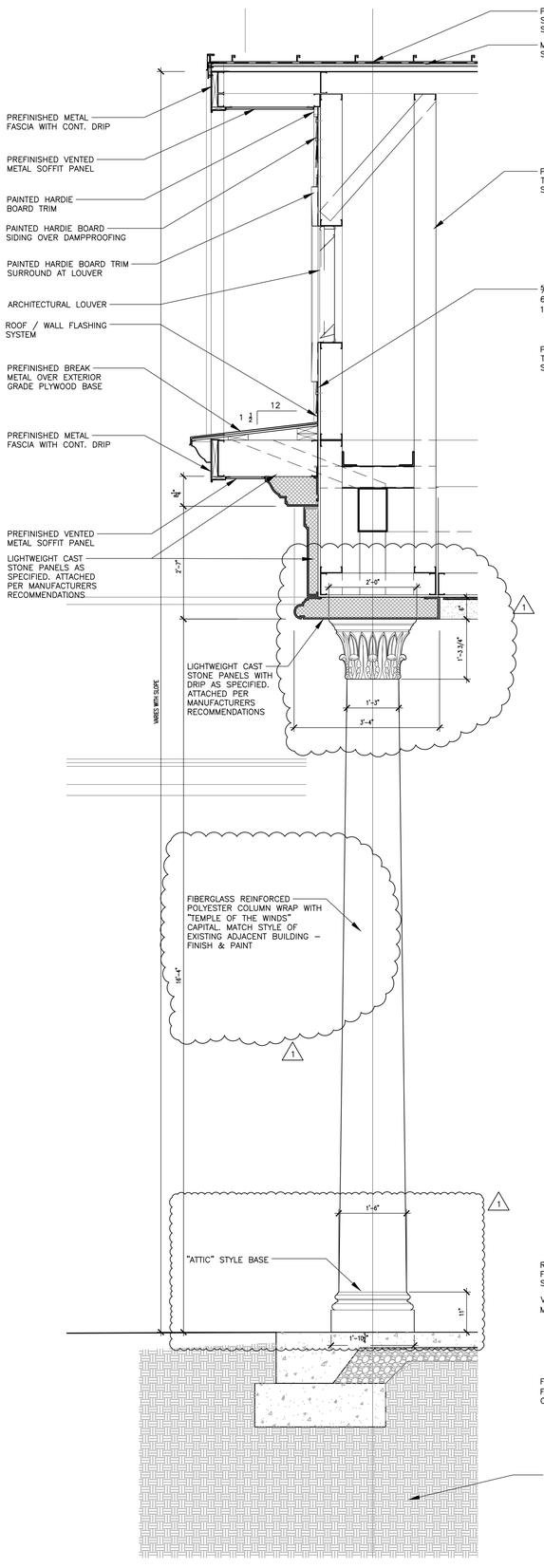
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE: EXTERIOR ELEVATIONS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

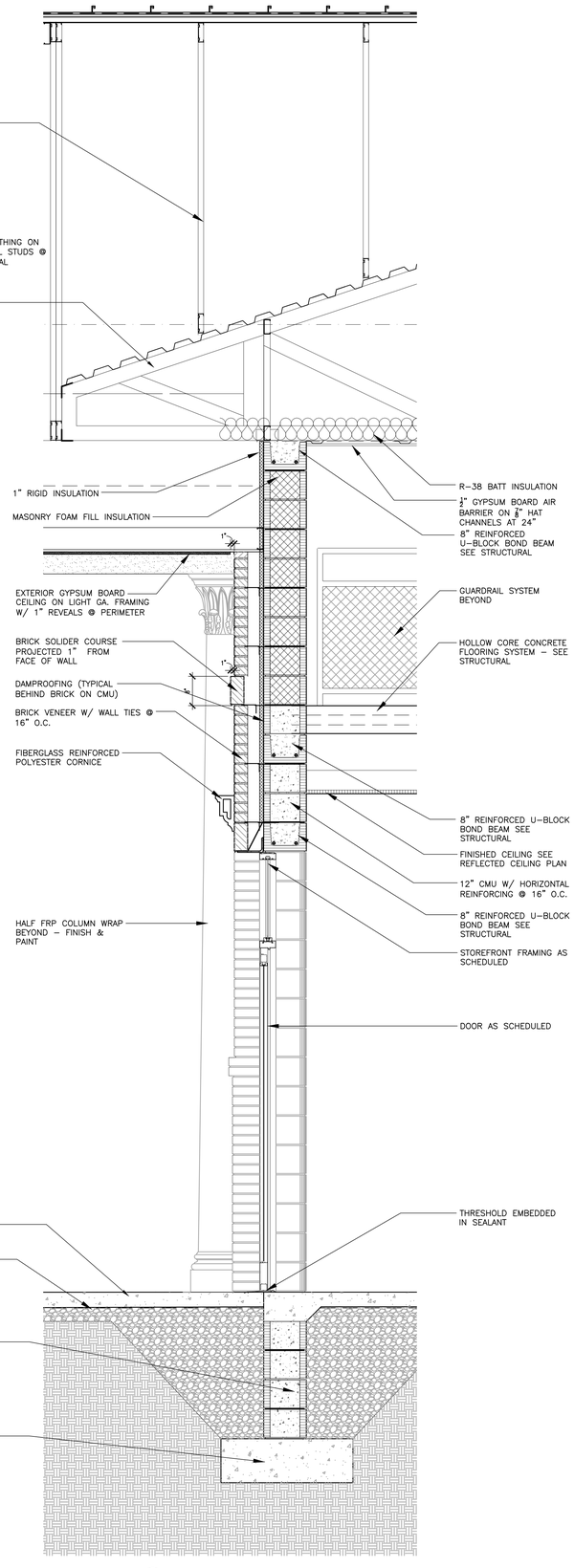
PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	
1	12.04.2025

JOB NO. 25-33
SHEET NO: A3.1.1
11 OF 29



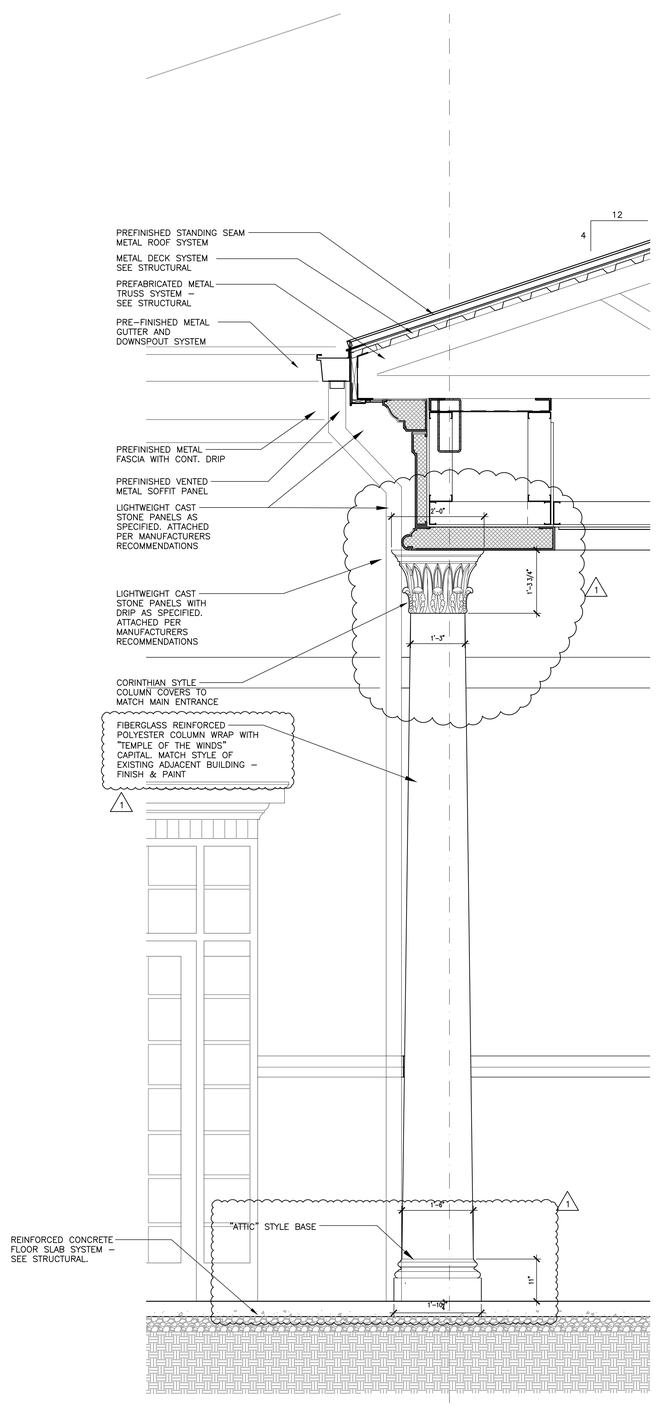
1 WALL SECTION

SCALE: 3/4" = 1'-0"



2 WALL SECTION

SCALE: 3/4" = 1'-0"



3 WALL SECTION

SCALE: 3/4" = 1'-0"

LATHAN ▪ McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
WALL SECTIONS

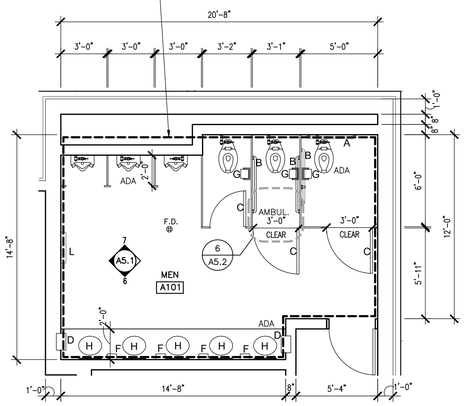
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H. RASCO
DRAWN: ELM
DATE: 10–23–2025
REVISIONS
1 12.04.25

JOB NO. 25-33
SHEET NO:
A3.3.3
16 of 29

0 1" 2"

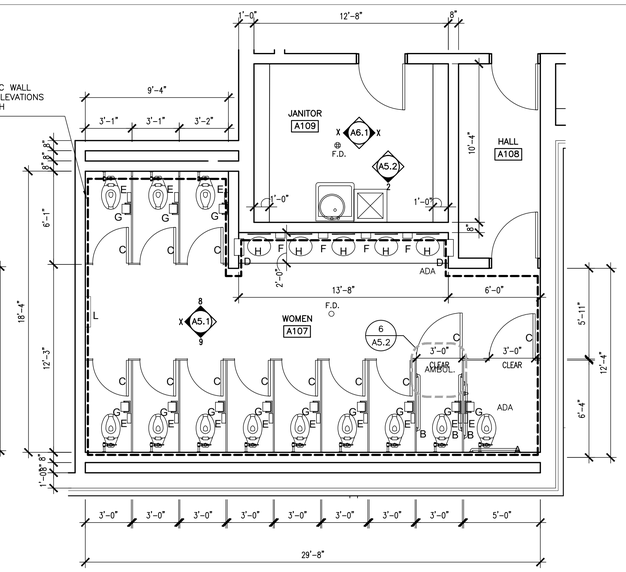
DASHED LINE INDICATES CERAMIC WALL TILE,CWT. REFER TO INTERIOR ELEVATIONS FOR EXTENT OF TILE AND FINISH SCHEDULE FOR COLORS.



1 ENLARGED TOILET PLAN @ MEN A101

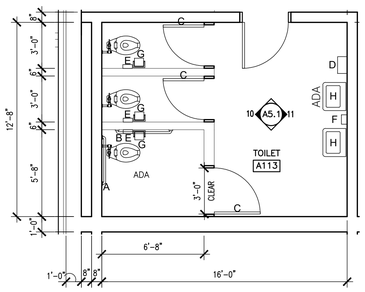
SCALE: 1/4" = 1'-0"

DASHED LINE INDICATES CERAMIC WALL TILE,CWT. REFER TO INTERIOR ELEVATIONS FOR EXTENT OF TILE AND FINISH SCHEDULE FOR COLORS.



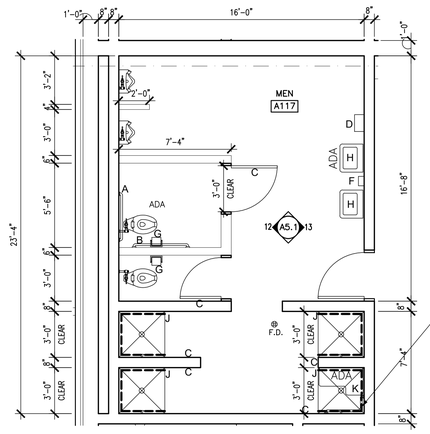
2 ENLARGED TOILET PLAN @ WOMEN A107

SCALE: 1/4" = 1'-0"



3 ENLARGED TOILET PLAN @ TOILET A113

SCALE: 1/4" = 1'-0"

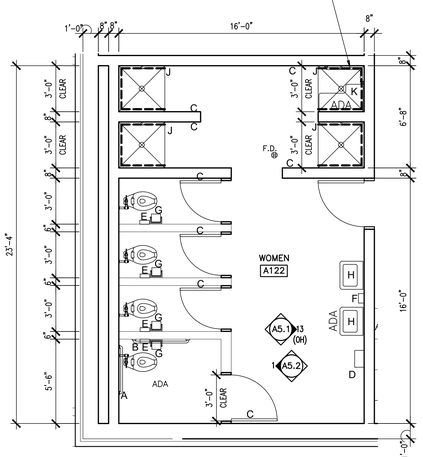


DASHED LINE INDICATES CERAMIC WALL TILE,CWT. REFER TO INTERIOR ELEVATIONS FOR EXTENT OF TILE AND FINISH SCHEDULE FOR COLORS.

4 ENLARGED TOILET PLAN @ MEN A117

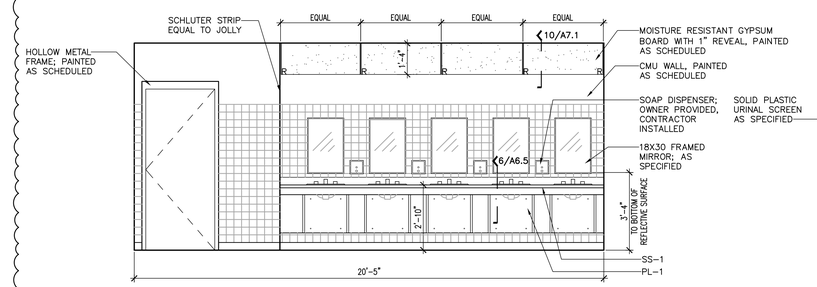
SCALE: 1/4" = 1'-0"

DASHED LINE INDICATES CERAMIC WALL TILE,CWT. REFER TO INTERIOR ELEVATIONS FOR EXTENT OF TILE AND FINISH SCHEDULE FOR COLORS.



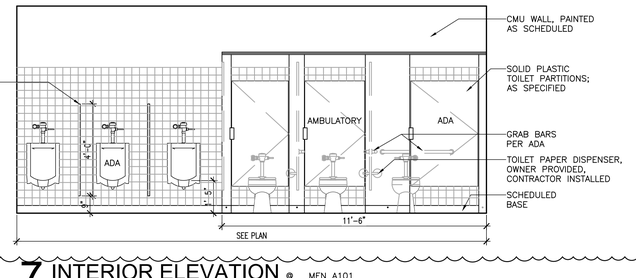
5 ENLARGED TOILET PLAN @ WOMEN A122

SCALE: 1/4" = 1'-0"



6 INTERIOR ELEVATION @ MEN A101

SCALE: 3/8" = 1'-0"

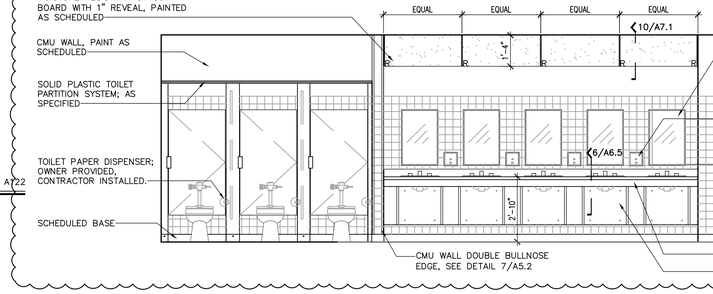


7 INTERIOR ELEVATION @ MEN A101

SCALE: 3/8" = 1'-0"

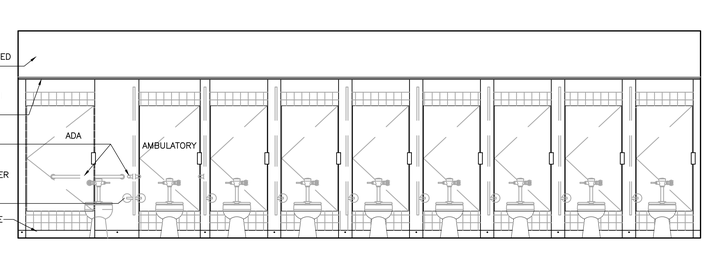
TOILET ACCESSORY LEGEND	
A	36" S.S. GRAB BAR
B	42" S.S. GRAB BAR
C	COAT HOOK (MOUNTED ON INTERIOR STALL DOOR)
D	PAPER TOWEL DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)
E	FEMININE NAPKIN DISPOSAL
F	SOAP DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)
G	TOILET TISSUE DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)
H	FRAMED MIRROR 18" X 30"
J	SHOWER CURTAIN AND ROD
K	SHOWER SEAT PER ADA
L	BABY CHANGING TABLE

NOTE: AT ALL OUTSIDE WALL CORNERS AND EDGES PROVIDE A SCHULTER STRIP EQUAL TO JOLLY, AS SPECIFIED



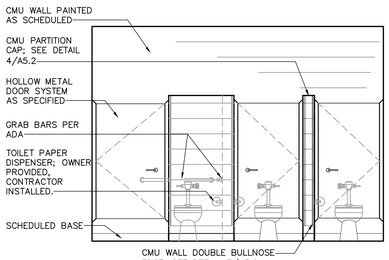
8 INTERIOR ELEVATION @ WOMEN A107

SCALE: 3/8" = 1'-0"



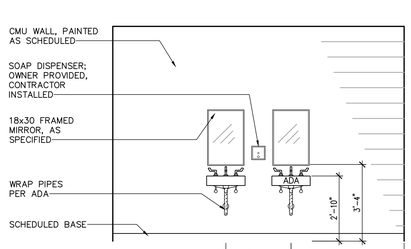
9 INTERIOR ELEVATION @ WOMEN A107

SCALE: 3/8" = 1'-0"



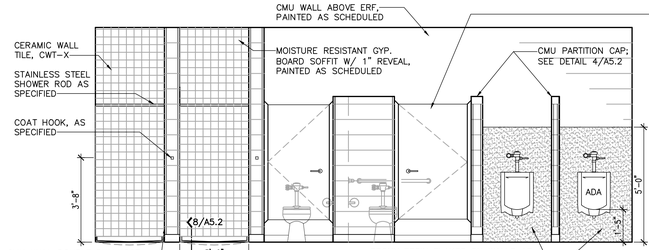
10 INTERIOR ELEVATION @ TOILET A113

SCALE: 3/8" = 1'-0"



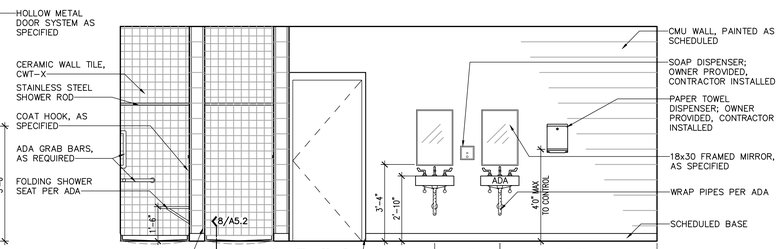
11 INTERIOR ELEVATION @ TOILET A113

SCALE: 3/8" = 1'-0"



12 INTERIOR ELEVATION @ MEN A117

SCALE: 3/8" = 1'-0"



13 INTERIOR ELEVATION @ WOMENS A122 AND MEN A117 (OH)

SCALE: 3/8" = 1'-0"

LATHAN ▪ McKEE ARCHITECTS

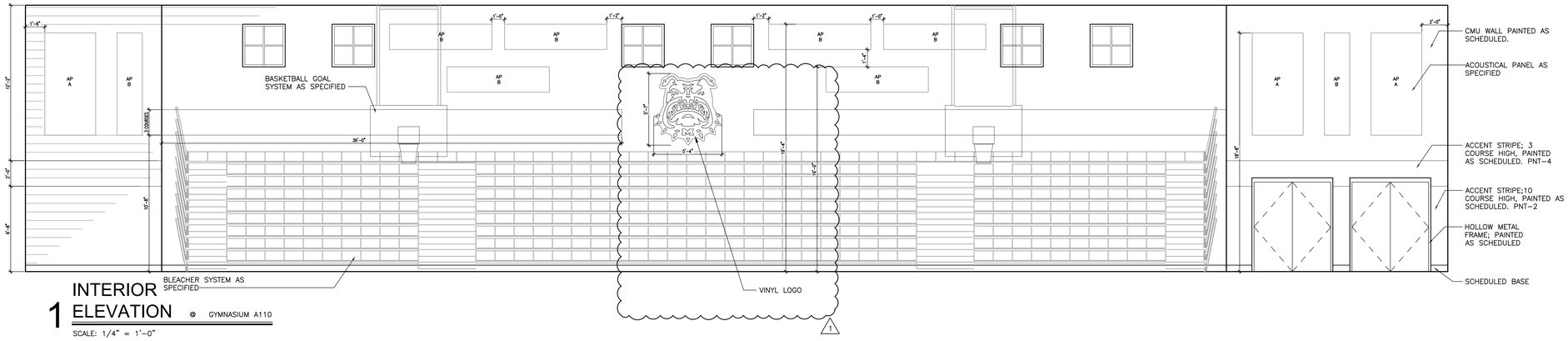
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
ENLARGED TOILET PLANS AND TOILET ELEVATIONS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

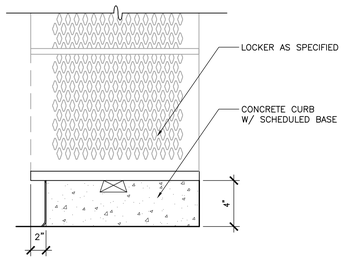
PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS
1 12.03.25 ADD #2

JOB NO. 25-33
SHEET NO:
A5.1
18 OF 29



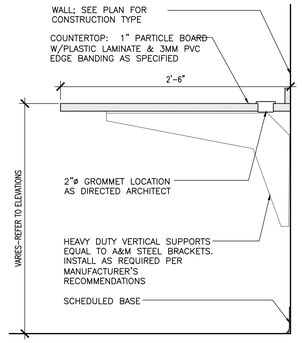
1 INTERIOR ELEVATION @ GYMNASIUM A110

SCALE: 1/4" = 1'-0"



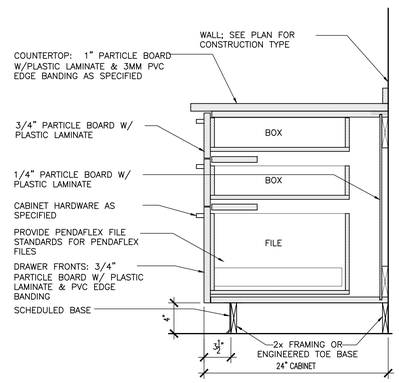
2 DETAIL @ LOCKER W/ CONCRETE CURB

SCALE: 1-1/2" = 1'-0"



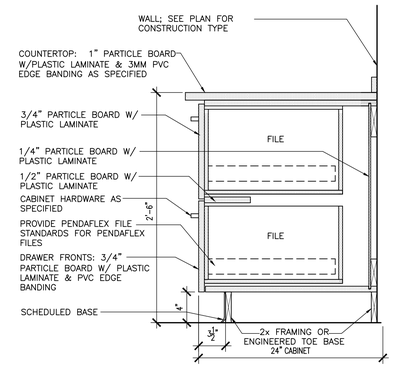
3 DETAIL @ TYPICAL COUNTER SECTION

SCALE: 1-1/2" = 1'-0"



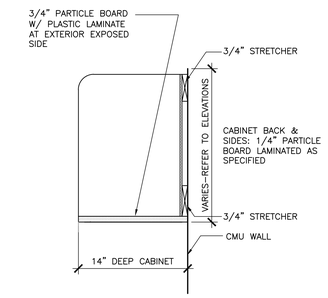
4 DETAIL @ TYPICAL BOX/BOX/FILE

SCALE: 1-1/2" = 1'-0"



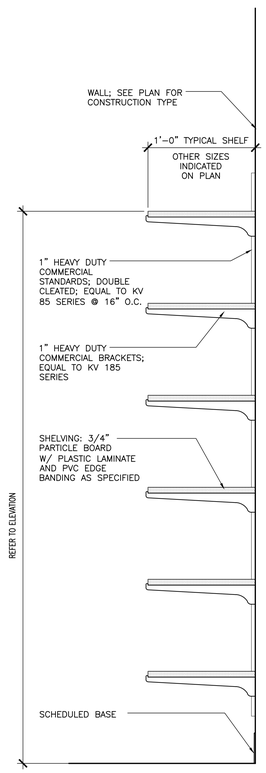
5 DETAIL @ TYPICAL FILE/FILE

SCALE: 1-1/2" = 1'-0"



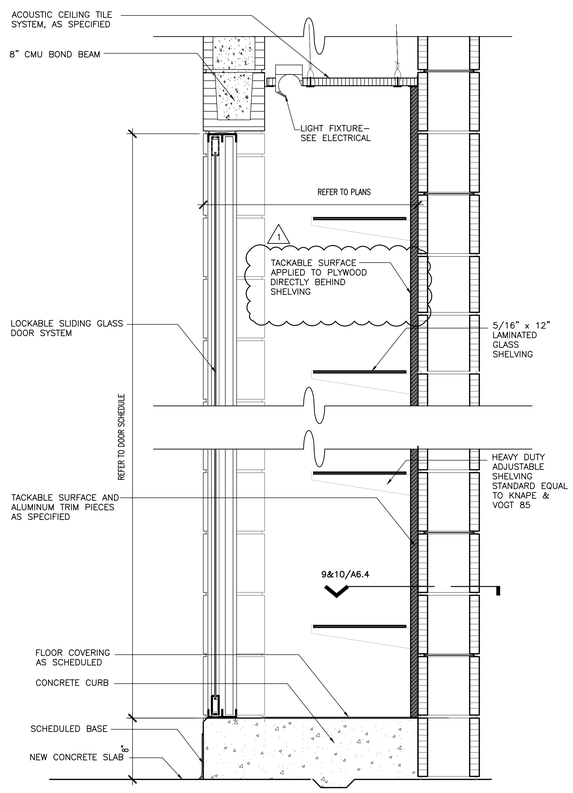
6 DETAIL @ TYPICAL OPEN BOOKSHELF

SCALE: 1-1/2" = 1'-0"



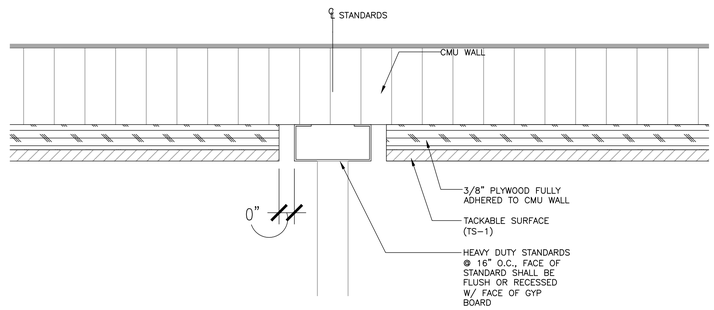
7 DETAIL @ ADJUSTABLE SHELVING

SCALE: 1-1/2" = 1'-0"



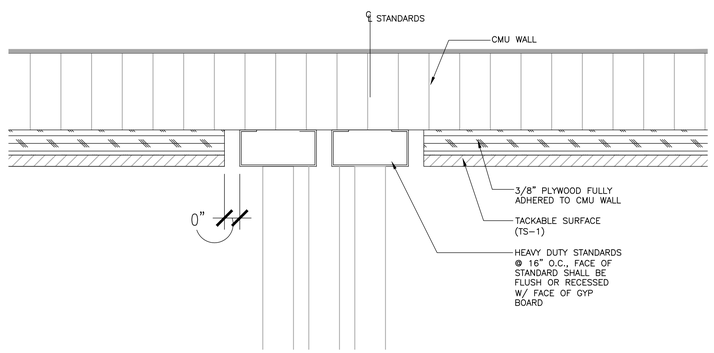
8 DETAIL @ TROPHY CASE

SCALE: 1-1/2" = 1'-0"



9 DETAIL @ DISPLAY CASE DETAIL AT SINGLE STANDARD

SCALE: 12" = 1'-0"



10 DETAIL @ DISPLAY CASE DETAIL AT DOUBLE STANDARD

SCALE: 12" = 1'-0"

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
INTERIOR ELEVATIONS AND DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

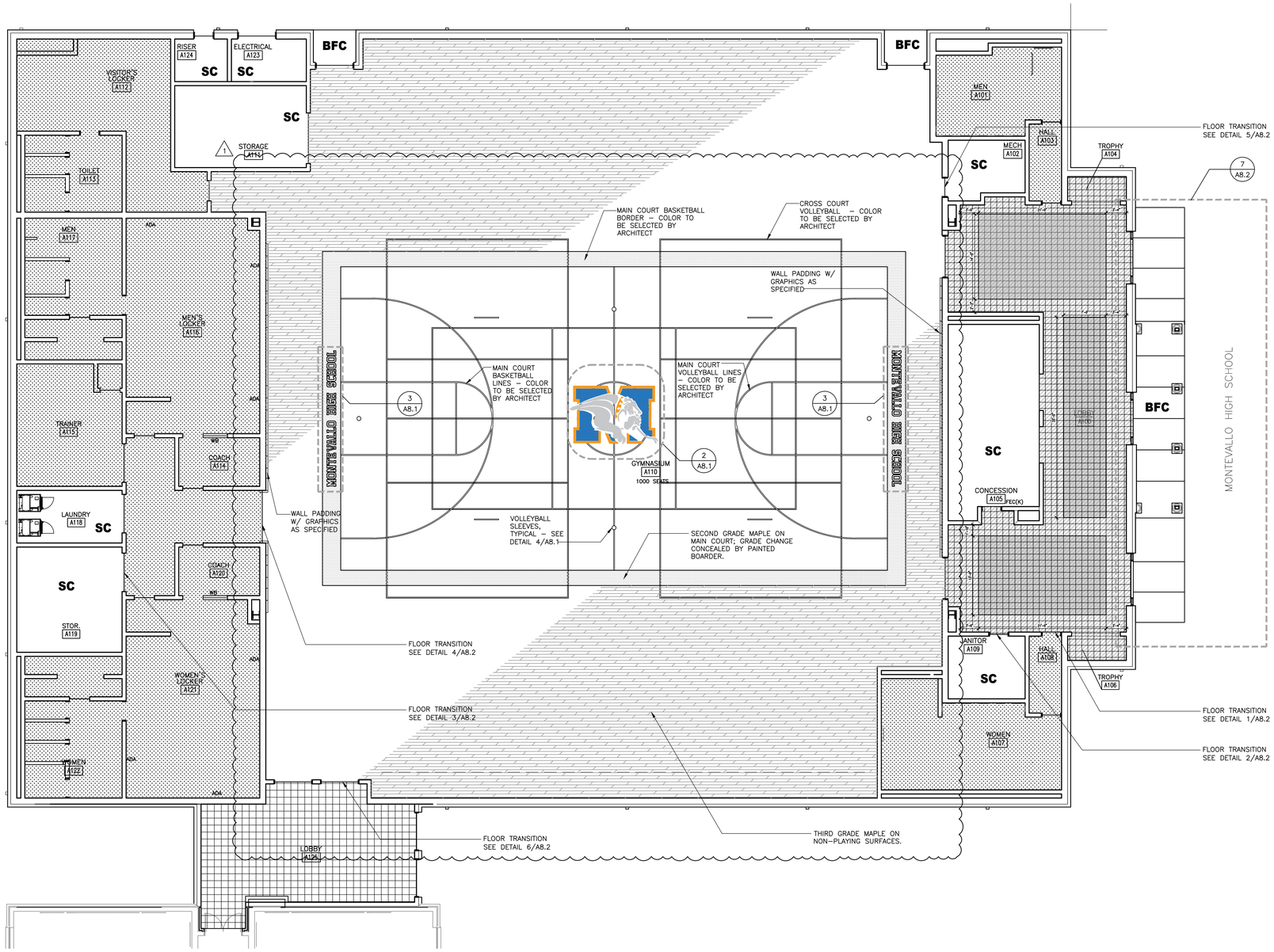
PROJ. MGR.:	H. RASCO
DRAWN:	BFL
DATE:	10-23-2025
REVISIONS	
1	12.03.25 ADD #2

JOB NO. 25-33

SHEET NO:

A6.4

24 OF 29

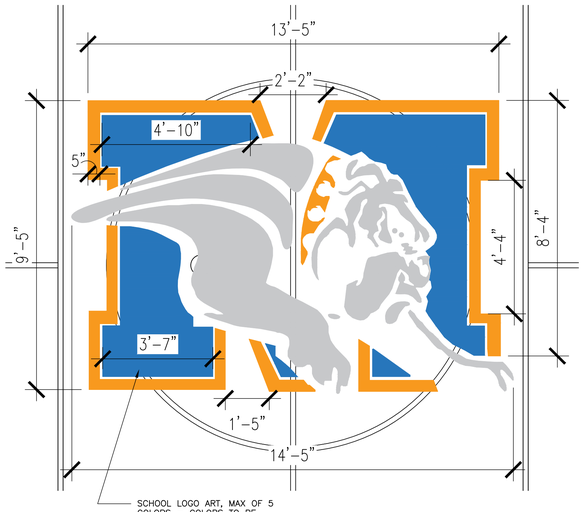


1 FINISH FLOOR PLAN

SCALE: 1/8" = 1'–0"

FINISH PATTERN LEGEND

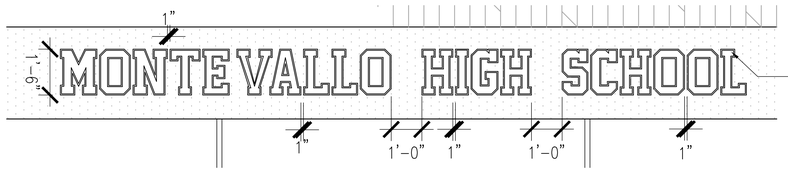
EBF–1 EPOXY RESIN FLOOR	VCT–2 VINYL COMPOSITION TILE
WD–1 WOOD FLOOR	BFC BFC–1 BROOM FINISH CONCRETE
VCT–1 VINYL COMPOSITION TILE	SC SC–1 SEALED CONCRETE



SCHOOL LOGO ART, MAX OF 5 COLORS – COLORS TO BE SELECTED BY ARCHITECT – GENERAL CONTRACTOR TO OBTAIN ARTWORK FILE (CAD OR VECTOR FORMAT) AND SUBMIT SHOP DRAWINGS TO ARCHITECT FOR FINAL REVIEW AND APPROVAL

2 PARTIAL ENLARGED PLAN @GYMNASIUM A110

1/2" = 1'–0"

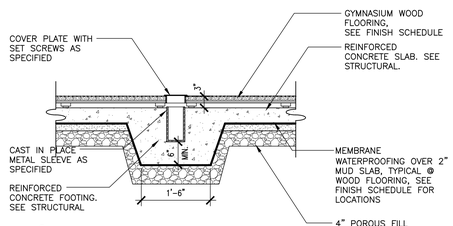


SCHOOL LOGO ART, MAX OF 5 COLORS – COLORS TO BE SELECTED BY ARCHITECT – GENERAL CONTRACTOR TO OBTAIN ARTWORK FILE (CAD OR VECTOR FORMAT) AND SUBMIT SHOP DRAWINGS TO ARCHITECT FOR FINAL REVIEW AND APPROVAL

3 PARTIAL ENLARGED PLAN @GYMNASIUM A110

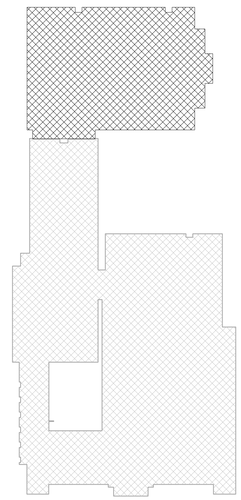
SCALE: 1/2" = 1'–0"

ENLARGED ARTWORK ROTATED FOR CLARITY – SEE OVERALL FINISH PLAN FOR PLACEMENT AND LAYOUT



4 DETAIL @ VOLLEYBALL SLEEVE

3/4 = 1'–0"



KEY PLAN

SCALE: N.T.S.

LATHAN ▪ McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FINISH FLOOR PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	H. RASCO
DRAWN:	BFL
DATE:	10–23–2025
REVISIONS	
1	12.03.25 ADD #2

JOB NO. 25-33

SHEET NO:

A8.1

27 OF 29

0 1" 2"

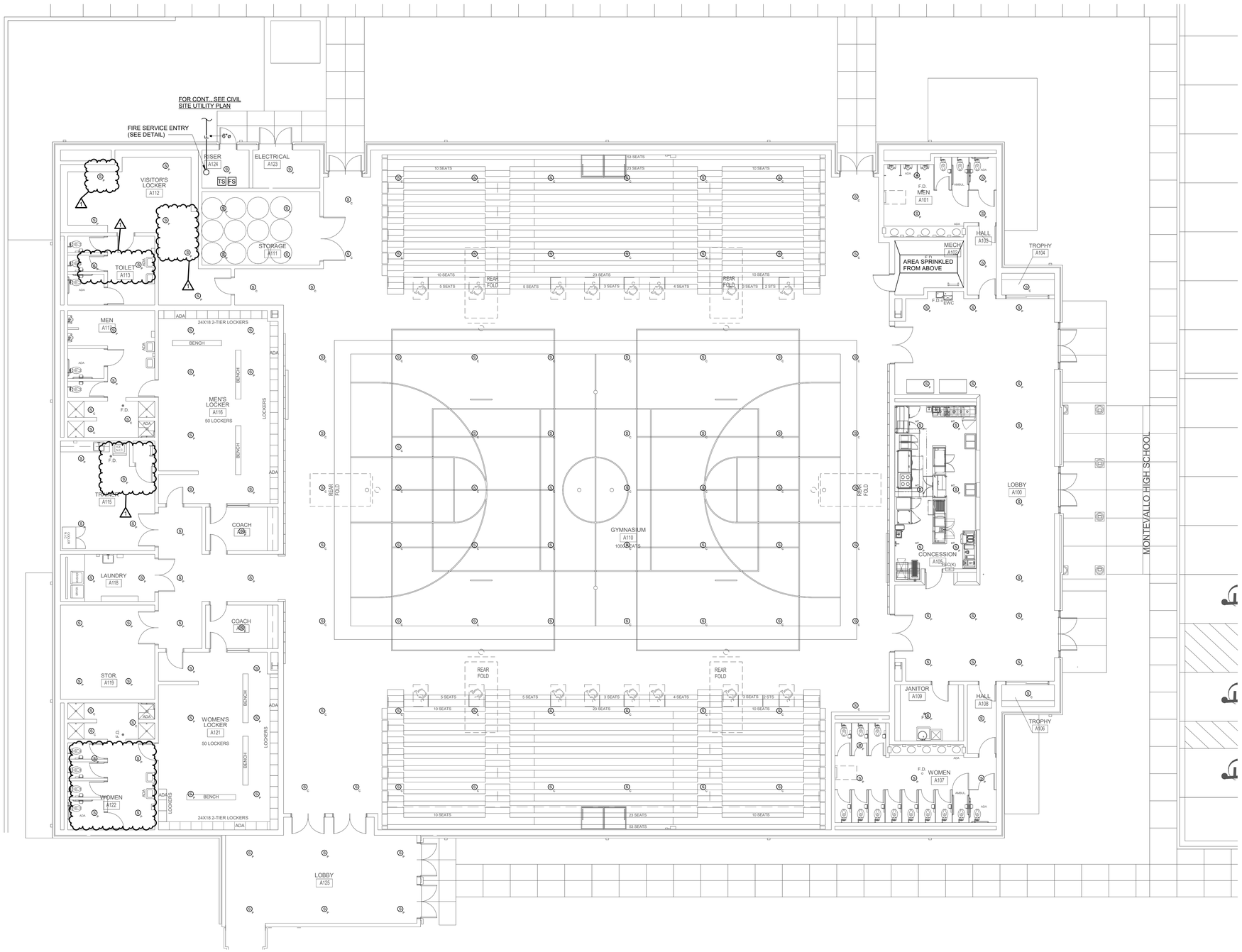
Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number :
50189905

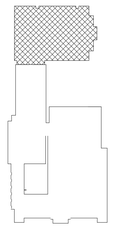
LATHAN
McKEE
ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FIRE PROTECTION - FLOOR PLAN



1 FIRE PROTECTION - FLOOR PLAN
1/8" = 1'-0"



KEY PLAN
NOT TO SCALE
NORTH

ALABAMA
No. 27475
PROFESSIONAL
12/03/2025
ENGINEER
CHRISTOPHER L. ROBINSON

PROJ. MGR.: –	WAC
DRAWN:	ZDE
DATE: –	10/23/2025

REVISIONS

1	12/3/25	Addendum #2

JOB NO. 25-33

SHEET NO:

FP1.0

GENERAL NOTES

1. LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE. VERIFY WITH LOCAL UTILITY PRIOR TO BIDDING.
2. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, AND ELEVATION OF ALL EXISTING SERVICES PRIOR TO INSTALLING ANY NEW PIPE.
3. ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT TO GRADE AND EMBEDDED IN 18" X 18" X 6" THICK CONCRETE PAD. (J.R. SMITH 4258 OR EQUAL.)
4. WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC UNION SHALL BE USED.
5. ALL HORIZONTAL WATER AND VENT PIPING SHALL BE RUN ABOVE CEILING ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
6. ALL HORIZONTAL SANITARY PIPING IS RUN BELOW FLOOR ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
7. ALL WATER PIPING BELOW SLAB ON GRADE SHALL BE BENT UP AT ENDS SO THAT NO JOINTS OCCUR BELOW FLOOR.
8. ALL WALL HYDRANTS AND HOSE BIBBS SHALL BE MOUNTED 24" ABOVE FINISH GRADE OF FINISH FLOOR UNLESS OTHERWISE NOTED.
9. ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.
10. NO VENT THRU ROOF IS TO BE LOCATED WITHIN 10 FEET OF ANY BUILDING AIR INTAKES, PER CODE. COORDINATE WITH MECHANIAL AND GENERAL CONTRACTORS.
11. DOMESTIC WATER PIPING AND FIRE PROTECTION PIPING LOCATED ABOVE THE CEILING, SHALL BE INSTALLED BELOW CEILING INSULATION.
12. CONTRACTOR SHALL COORDINATE MECHANICAL FLOOR DRAIN LOCATIONS WITH MECHANICAL EQUIPMENT PRIOR TO INSTALLATION.
13. CONTRACTOR SHALL PROVIDE SHOCK ARRESTORS ON ALL BRANCH LINES.
14. CONTRACTOR SHALL COORDINATE ALL SINKS WITH CASEWORK PRIOR TO ORDERING SINKS.
15. PROVIDE DISINFECTION OF WATER PIPING SYSTEM WITH CHLORINE SOLUTION AS PER CODE.
16. INSTALLATION OF BACKFLOW PREVENTER SHALL COMPLY WITH CURRENT INTERNATIONAL BUILDING CODE AND CURRENT INTERNATIONAL PLUMBING CODE.
17. ALL OVERHEAD WATER PIPING TO BE RUN BELOW INSULATION AT BOTTOM OF TRUSSES FOR FREEZE PROTECTION.
18. ALL WALL HYDRANTS TO BE FREEZE PROOF AND TO HAVE VACUUM BREAKERS.
19. INSULATION ON ALL PIPING SHALL MEET SMOKE/ FLAME RATING OF 25 & 50.
20. NO JOINTS IN WATER PIPING BELOW SLAB.
21. THE LOCATION OF LAVATORIES AND WATER CLOSETS RELATIVE TO THE FINISHED WALL IS CRITICAL. REFER TO ARCHITECTURAL AND THE SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WATER CLOSETS TO BE 18" FROM FINISH WALL TO CENTER OF WATER CLOSET.
22. WATER HAMMER ARRESTORS ARE REQUIRED TO PROTECT WATER PIPING SYSTEMS WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
23. THESE DRAWINGS NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE PLUMBING SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES AND CONTROLS, COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE STRICTLY CONFORMED WITH ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE PLUMBING SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT INCURRING ANY ADDITIONAL COST TO THE PROJECT, CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.
24. COORDINATE PLUMBING PIPING WITH STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL. MAKE OFFSETS AND TRANSITIONS TO COORDINATE WITH OTHER TRADES WITHOUT ANY ADDITIONAL COST TO THE PROJECT.
25. COORDINATE ALL PLUMBING IN SLAB WITH BUILDING FOOTINGS.
26. NO PIPING TO BE RUN ABOVE ELECTRICAL PANELS. MAINTAIN ALL REQUIRED CLEARANCES.
27. CONTRACTOR SHALL VISIT JOB SITE AND VERIFY EXISTING CONDITIONS BEFORE SUBMITTING A PRICE, ORDERING MATERIALS OR PERFORMING ANY WORK. NOTIFY THE ARCHITECT OF ANY DEVIATION FROM PLUMBING PLAN.
28. VENTS THRU ROOF MUST BE LOCATED A MINIMUM OF 10'-0" AWAY FROM ANY OUTSIDE AIR INTAKE.
29. SUPPORT PIPE AS REQUIRED BY THE CURRENT INTERNATIONAL PLUMBING CODE.
30. ALL FOOTINGS AT PLUMBING CHASE WALLS SHALL BE MIN 24" BELOW FINISHED GRADE TO COORDINATE WITH WASTE PIPING IN SLAB.
31. FIRESTOP ALL RATED WALL AND FLOOR PENETRATIONS. SEE ARCHITECTURAL DRAWINGS FOR RATED WALL AND FLOOR LOCATIONS.
32. OFFSET ALL VTR'S TO BACKSIDE OF ROOF RIDGE.
33. DO NOT BEGIN WORK UNTIL ELEVATION OF FINAL CONNECTION POINT IS VERIFIED AND GRADING OF ENTIRE SYSTEM CAN BE DETERMINED (EVEN IF FINAL CONNECTION IS SPECIFIED UNDER ANOTHER SECTION).

PLUMBING LEGEND

Symbol	Description	Symbol	Description
	DOMESTIC COLD WATER		BALANCE VALVE
	DOMESTIC HOT WATER SUPPLY		BALL VALVE
	DOMESTIC HOT WATER RETURN		CHECK VALVE
G	NATURAL GAS		GAS VALVE
	SANITARY		GAS PRESSURE REGULATOR
	VENT	AFF	ABOVE FINISHED FLOOR
GW	GREASE WASTE	BFF	BELOW FINISHED FLOOR
	PIPE TURNING DOWN	CW	COLD WATER
	PIPE TURNING UP	DN	DOWN
	TEE DOWN	GPM	GALLONS PER MINUTE
	TEE UP	VSTR	VENT THROUGH ROOF
	UNION	EX	EXISTING
CO	CLEANOUT		

PLUMBING FIXTURE SCHEDULE

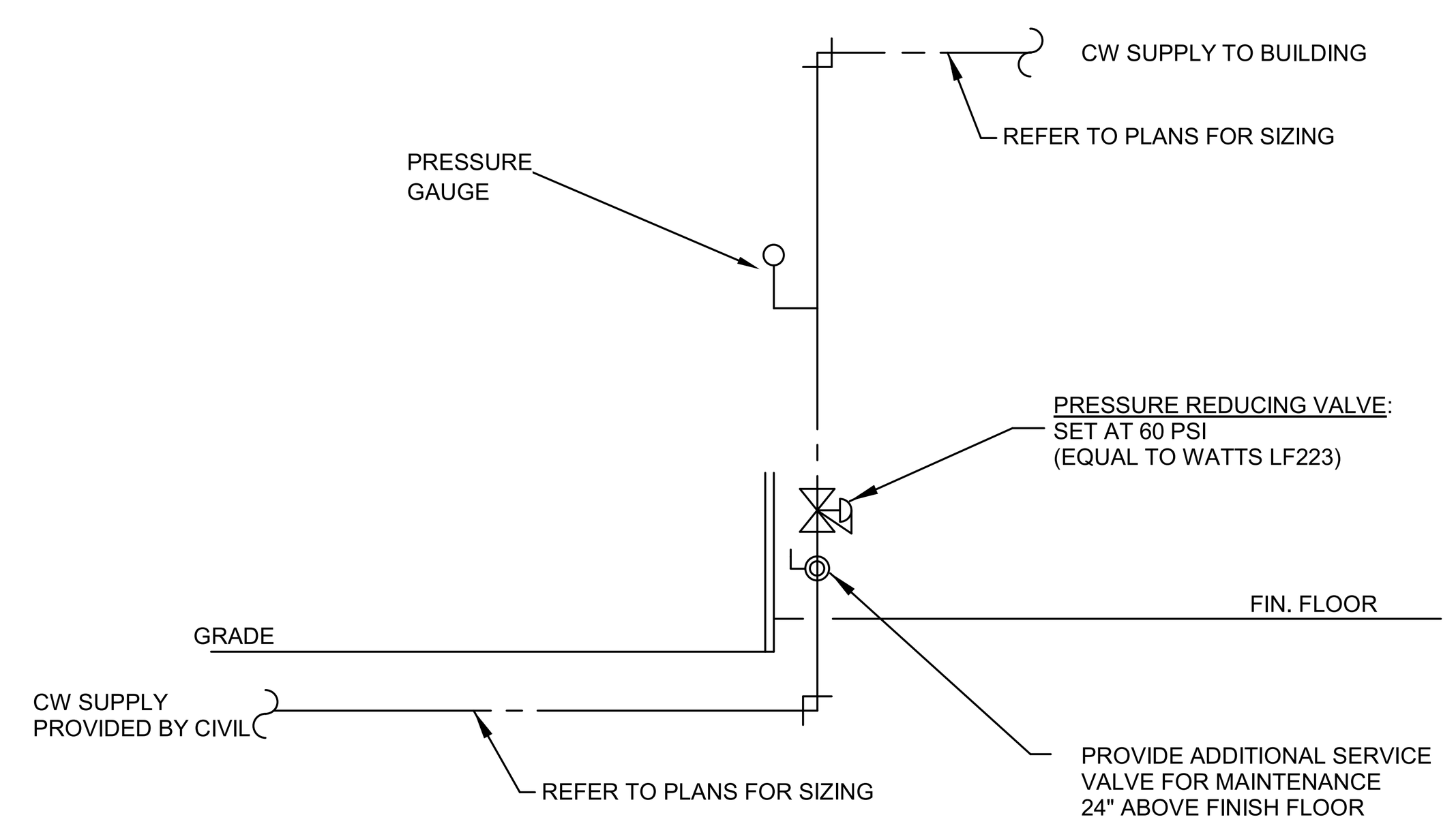
MARK	FIXTURE	WASTE	CW	HW	REMARKS
FD	FLOOR DRAIN	3"	-	-	J.R. SMITH #2010 WITH 6" ROUND NICKEL BRONZE GRATE. PROVIDE WITH J.R. SMITH TRAP INSERT.
FS-1	FLOOR SINK	4"	-	-	J.R. SMITH #3100, 8" SQUARE, PORCELAIN ENAMELED CAST IRON INTERIOR WITH 3/4 CAST IRON PORCELAIN ENAMELED GRATE AND DOME BOTTOM STRAINERS. PROVIDE WITH J.R. SMITH TRAP INSERT.
FS-2	FLOOR SINK	4"	-	-	J.R. SMITH #3200, 16" SQUARE, PORCELAIN ENAMELED CAST IRON INTERIOR WITH 3/4 CAST IRON PORCELAIN ENAMELED GRATE AND DOME BOTTOM STRAINERS. PROVIDE WITH J.R. SMITH TRAP INSERT.
HB	HOSE BIBB	-	3/4"	-	ZURN Z1321 NARROW WALL HYDRANT WITH INTEGRAL BACKFLOW PREVENTER. PROVIDE OWNER WITH ONE(1) LOOSE KEY PER HOSE BIBB. INSTALL BELOW LAVATORY WHERE SHOWN ON DRAWINGS.
LTD	TRENCH DRAIN	4"	-	-	H&M COMPANY POLYPROPYLENE DRAIN TROUGH WITH LINT FILTER. SIZE TROUGH TO MATCH LENGTH OF WASHER. TROUGH LID TO BE FLUSH WITH FINISH FLOOR.
MFD	MECHANICAL FLOOR DRAIN	3"	-	-	J.R. SMITH #2240 WITH SEDIMENT BUCKET. PROVIDE WITH J.R. SMITH TRAP INSERT.
P-1	WATER CLOSET - ADA COMPLIANT	4"	1"	-	FLOOR MOUNTED - KOHLER K-96057-SS-0 COMPLETE SLOAN #111 FLUSH VALVE WITH YJ BRACKET AND CHURCH "DURA GUARD" MODEL # 2155 SSC SEAT.
P-2	WATER CLOSET	4"	1"	-	FLOOR MOUNTED - KOHLER K-96053-SS-0 COMPLETE SLOAN #111 FLUSH VALVE WITH YJ BRACKET AND CHURCH “DURA GUARD” MODEL #2155 SSC SEAT.
P-3	URINAL - ADA COMPLIANT	3"	1"	-	WALL MOUNTED-KOHLER K-5016-ET COMPLETE, J.R. SMITH #623 FIXTURE SUPPORT, AND SLOAN #186 FLUSH VALVE WITH YJ BRACKET. SET LIP 17" AFF.
P-4	URINAL	3"	1"	-	WALL MOUNTED-KOHLER K-5016-ET COMPLETE, J.R. SMITH #623 FIXTURE SUPPORT, AND SLOAN #186 FLUSH VALVE WITH YJ BRACKET.
P-5	LAVATORY	1 1/4"	1/2"	1/2"	COUNTERTOP - KOHLER K-2196-4 COMPLETE, SYMMONS S-20-0 FAUCET, MCGUIRE #8872 P-TRAP. MCGUIRE 165 SUPPLIES WITH STOPS. INSULATE ALL WITH "PRO-WRAP" BY MCGUIRE. PROVIDE LAWLER 570 MIXING VALVE MOUNTED BELOW LAVATORY UNLESS OTHERWISE NOTED ON THE DRAWINGS.
P-6	LAVATORY - ADA COMPLIANT	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 FAUCET, K7715 OUTLET WITH TAILPIECE, J.R. SMITH #700-M31-Z FIXTURE SUPPORT, MCGUIRE #165 SUPPLIES WITH STOPS AND MCGUIRE #8872 P-TRAP. INSULATE P-TRAP, STOPS AND SUPPLIES WITH "PRO-WRAP" BY MCGUIRE. MOUNT WITH RIM MAXIMUM 34" AFF. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100° F WATER TO FAUCET. MUST MEET A.D.A. GUIDELINES.
P-7	LAVATORY	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 FAUCET, K7715 OUTLET WITH TAILPIECE, J.R. SMITH #700-M31-Z FIXTURE SUPPORT, MCGUIRE #165 SUPPLIES WITH STOPS AND MCGUIRE #8872 P-TRAP. INSULATE P-TRAP, STOPS AND SUPPLIES WITH "PRO-WRAP" BY MCGUIRE. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100° F WATER TO FAUCET.
P-8	WATER COOLER - ADA COMPLIANT	1 1/2"	1/2"	-	ELKAY # EZSTL8WSSK BI-LEVEL WATER COOLER WITH BOTTLE FILLER STATION. COMPLETE WITH STAINLESS STEEL CABINET AND WATERWAYS THAT ARE MANUFACTURED OF 100% LEAD FREE MATERIAL, J.R. SMITH #834 FIXTURE SUPPORT EBC TA150 P-TRAP AND EBC LA10 STOP WITH SUPPLY. FULLY INSULATE P-TRAP WITH EBC IK INSULATOR. INSTALL WITH LOWER SPOUT OUTLET MAXIMUM 36" AFF. MUST MEET A.D.A. INSTALL WITH BOTTLE FILLER. INSTALL COMPLETE. PROVIDE WITH ELKAY MODEL #LKAPREZL CANE APRON AS REQUIRED.
P-9	MOP SINK	3"	1/2"	1/2"	STERN WILLIAMS #SBC-1700 (24" X 24") COMPLETE, T-35 HOSE WITH WALL HOOK, STAINLESS STEEL BACKSPLASH AND CHICAGO FAUCET #897 FAUCET.
P-10	UTILITY SINK	1 1/2"	1/2"	1/2"	ADVANCE TABCO #4-41-36, K-1 FAUCET, K-5 DRAIN, MCGUIRE #8912 P-TRAP.
P-11	WASHING MACHINE BOX (COMMERCIAL)	1 1/2"	1/2"	1/2"	FURNISHED AND SET IN PLACE UNDER ANOTHER SECTION. ROUGH IN AND CONNECT COMPLETE. PROVIDE BALL VALVE CUT OFF ON HOT AND COLD WATER SUPPLY INSTALL ABOVE CEILING A LINE SIZE RPZBFP WITH STRAINER ON INLET SIDE OF BACKFLOW PREVENTER AND SHOCK ARRESTOR PDI SIZE “B” ON THE OUTLET SIDE. PIPE BACKFLOW PREVENTER WASTE THROUGH FACTORY MADE AIR GAP DOWN IN WALL TO TRENCH DRAIN.
P-12	SHOWER VALVE - ADA COMPLIANT	SD	1/2"	1/2"	CHICAGO FAUCET 1907-CP THERMOSTATIC/PRESSURE BALANCING SHOWER VALVE, 151-ACP HAND SHOWER AND GRAB BAR, 763-CP DIVERTER VALVE, FIXED SHOWER HEAD, WITH BLADE HANDLE, AND TRIM. ADJUST FOR 109°F MAXIMUM TEMP. PROVIDE BACK PLATE.
P-13	SHOWER VALVE	SD	1/2"	1/2"	CHICAGO FAUCET 1907-CP THERMOSTATIC/PRESSURE BALANCING SHOWER VALVE, FIXED SHOWER HEAD, WITH BLADE HANDLE, AND TRIM. ADJUST FOR 109°F MAXIMUM TEMP. PROVIDE BACK PLATE.
P-14	DRAIN BOX	1 1/2"	-	-	PROVIDE A SIOUX CHIEF MODEL #696-3F DRAIN BOX, #696-LC LOUVERED COVER, #696-CF SECONDARY DRAINAGE FUNNEL, AND J.R. SMITH TRAP SEAL INSERT. BOX TO COME COMPLETE WITH WALL FLANGE AND LOUVER. COORDINATE WITH MECHANICAL TO RECEIVE CONDENSATE WASTE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH ARCHITECT.
P-15	SINK	1 1/4"	1/2"	1/2"	ELKAY LRAD-2219 DRAIN OFFSET TO BACK, LK-35 STRAINER, CHICAGO FAUCET #786-FC RIGID FAUCET, MCGUIRE #1912 P-TRAP AND #165 STOPS WITH SUPPLIES.
P-16	ICE MACHINE	-	1/2"	-	FURNISHED AND INSTALLED UNDER ANOTHER SECTION, ROUGH AND CONNECT COMPLETE, PROVIDE BALL VALVE STOP ON SUPPLY AND PIPE WASTE(S) TO FLOOR DRAIN. PROVIDE WATTS LF9D ON COLD WATER SUPPLY IF REQUIRED BY LOCAL CODES. PIPE RELIEF FULL SIZE TO FS.
SD	SHOWER DRAIN	2"	-	-	J.R. SMITH #2010 WITH 4" ROUND STRAINER. PROVIDE WITH J.R. SMITH TRAP INSERT.
WH	WALL HYDRANT	-	3/4"	-	J.R. SMITH #5509-QT, WITH INTEGRAL BACKFLOW PREVENTER, LATCHING COVER, FREEZE-PROOF AND OF PROPER LENGTH FOR WALL IN WHICH INSTALLED, ALL BRONZE BOX. VALVE SEAT MUST BE ON BUILDING SIDE OF EXTERIOR WALL INSULATION. INSTALL WITH CENTER LINE 24" ABOVE FINISH GRADE. PROVIDE OWNER WITH ONE (1) LOOSE KEY FOR EACH WALL HYDRANT.

1

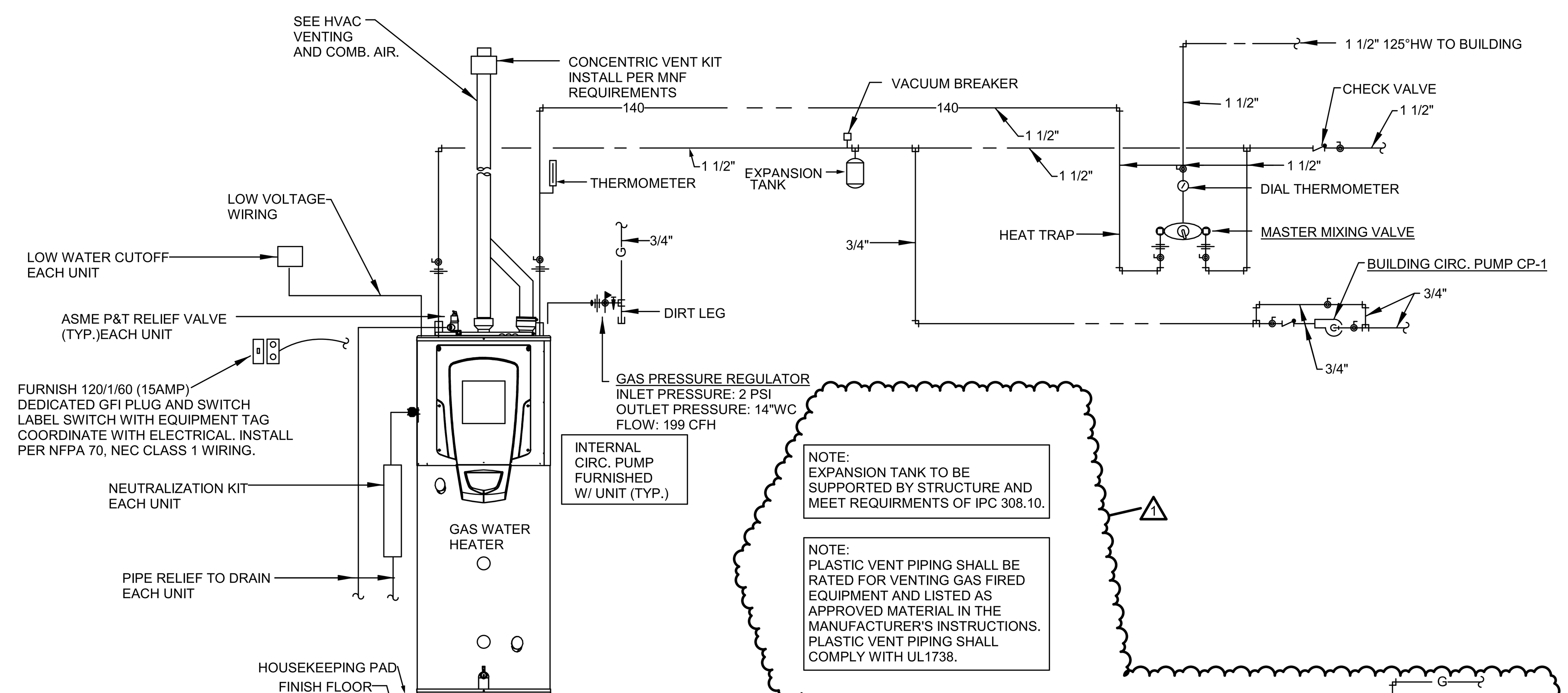
NOTE: TEMPERING VALVES ON LAVATORIES OF ALL PUBLIC LAVATORIES CONFORM TO ASSE 1070/CSA B125.3.2021 IPC 419.5 TEMPERED WATER FOR PUBLIC HAND-WASHING FACILITIES. TEMPERED WATER SHALL BE DELIVERED THROUGH AN APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070/CSA B125.3.

WATER HEATER SCHEDULE

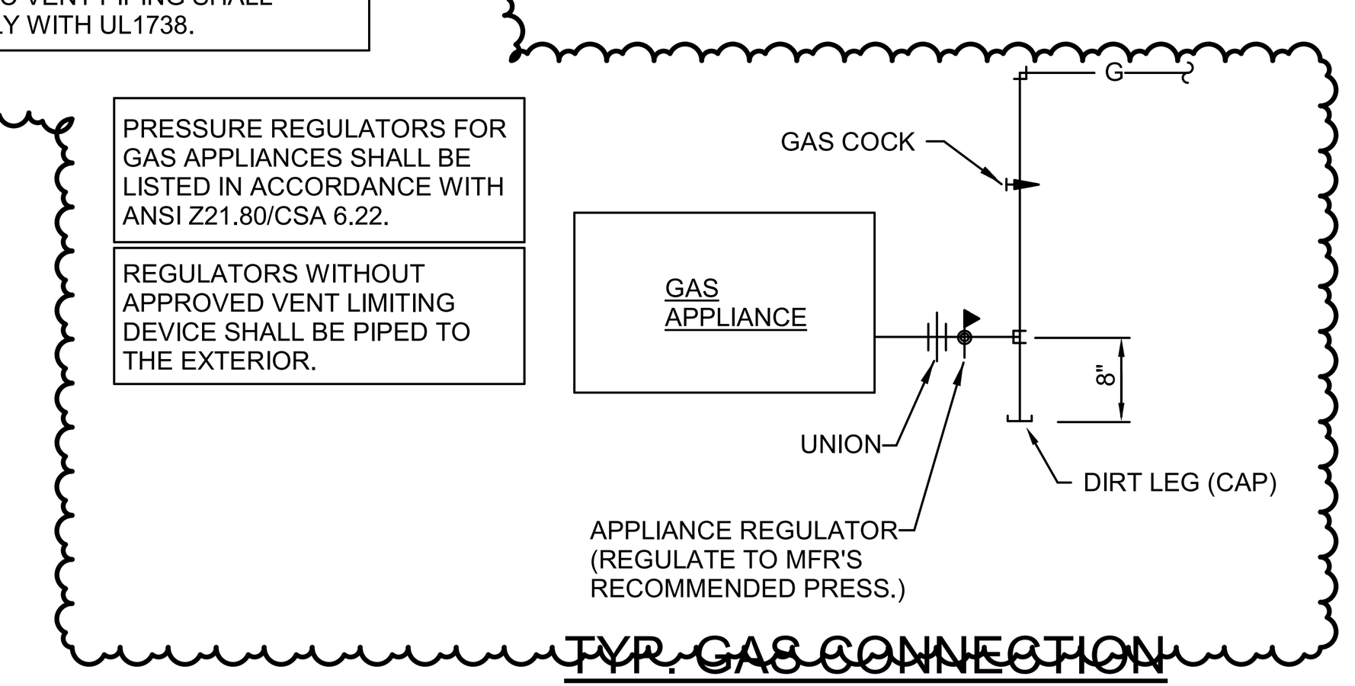
MARK	FIXTURE	ELEC INFO.	GAS INPUT	REMARKS
CP-1	CIRCULATION PUMP	1/6 HP, 115/1/60	-	ARMSTONG COMPASS. PROVIDE WITH TIMER AND AQUASTA EQUAL TO HONEYWELL L6006A.
ET-1	EXPANSION TANK	-	-	AMTROL THERM - X-TROL #ST-12 EXPANSION TANK, PRE-CHARGED, WELDED STEEL CONSTRUCTION. ISOLATION BETWEEN WATER AND AIR SHALL BE BY A BUTYL DIAPHRAM.
MMV-1	MASTER MIXING VALVE	-	-	SYMMONS TEMPCONTROL 7-500A-W COMPLETE. WALL MOUNTING BRACKET. SET OUTLET TEMPERATURE AT 125°F.
WH-1	GAS WATER HEATER	120V CONTROL PANEL	199.9 CFH	LOCHINVAR SWR200N CAPABLE OF RAISING 233 GALLONS OF WATER FROM 40°F TO 140°F PER HOUR. 199,999 CFH. PROVIDE NEW P&T RELIEF VALVE. PROVIDE COMPLETE WITH CONDENSATE NEUTRALIZATION KIT, CONCENTRIC VENT KIT, AND LOW WATER CUTOFF. INSTALL AS DETAILED ON DRAWINGS. SET TEMPERATURE CONTROLS TO MAINTAIN WATER STORAGE TEMPERATURE OF 140°F. INSTALL AS DETAILED ON DRAWINGS. ELECTRICAL REQUIREMENTS FOR CONTROL PANEL 115/1/60. COORDINATE WITH ELECTRICAL SECTION.



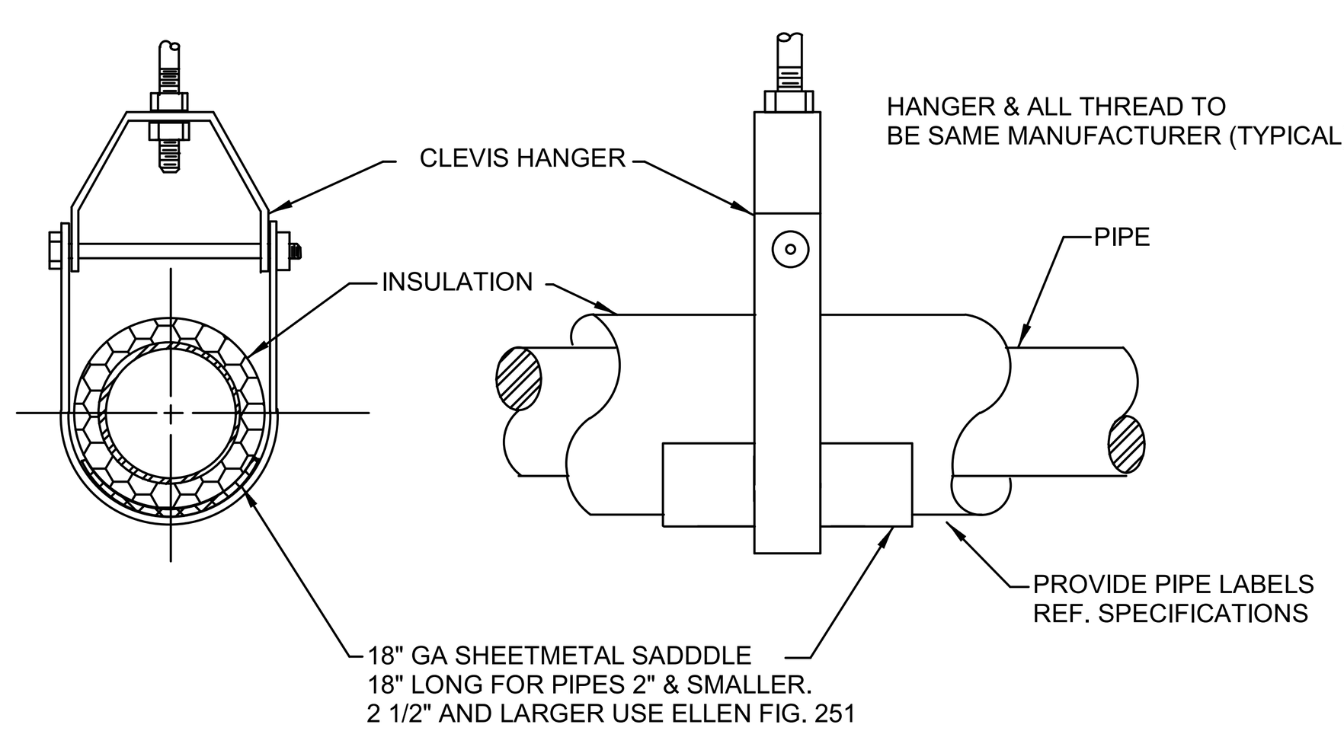
DETAIL OF WATER ENTRY
NO SCALE



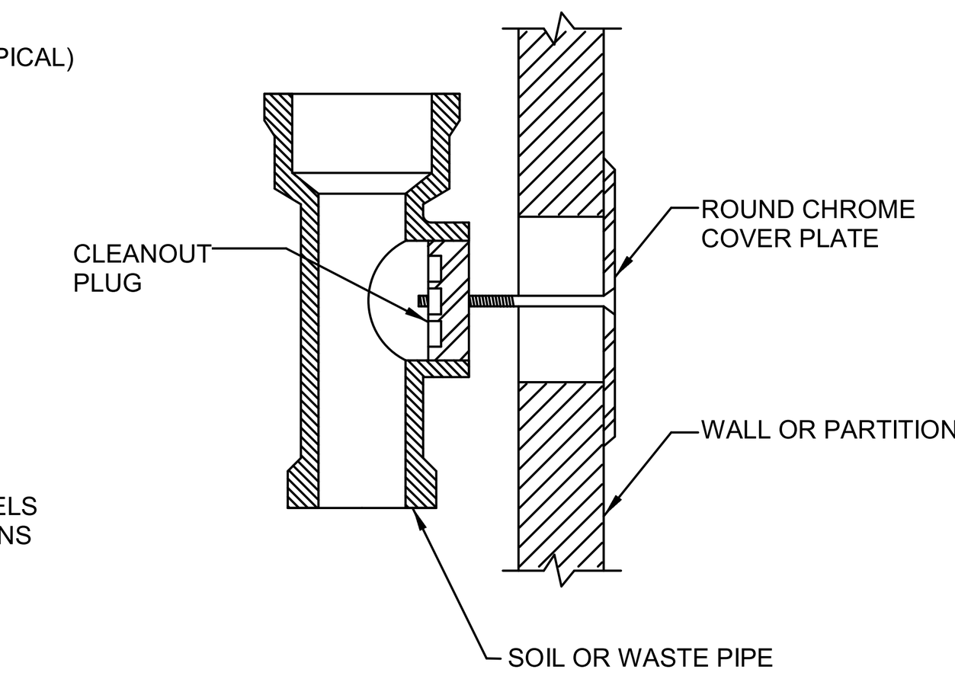
DETAIL OF WATER HEATER
NO SCALE



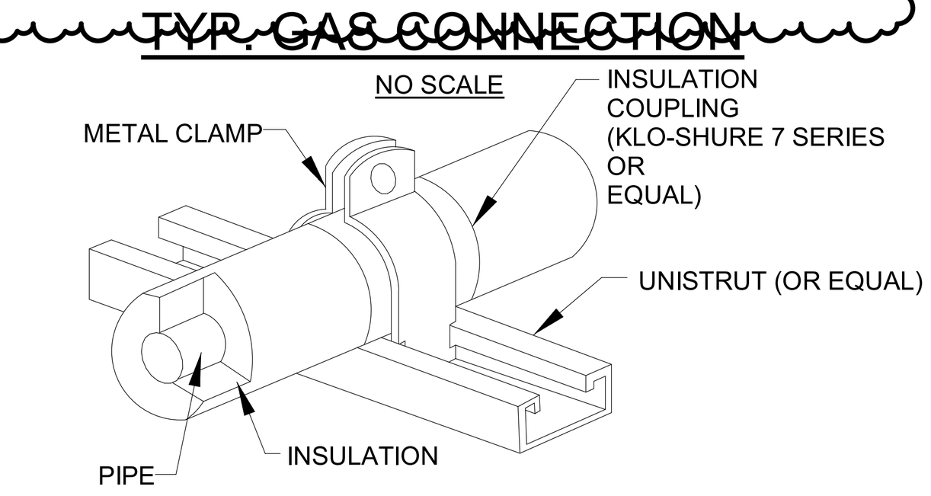
TYP. GAS CONNECTION
NO SCALE



SUSPENDED PIPE SUPPORT
NO SCALE



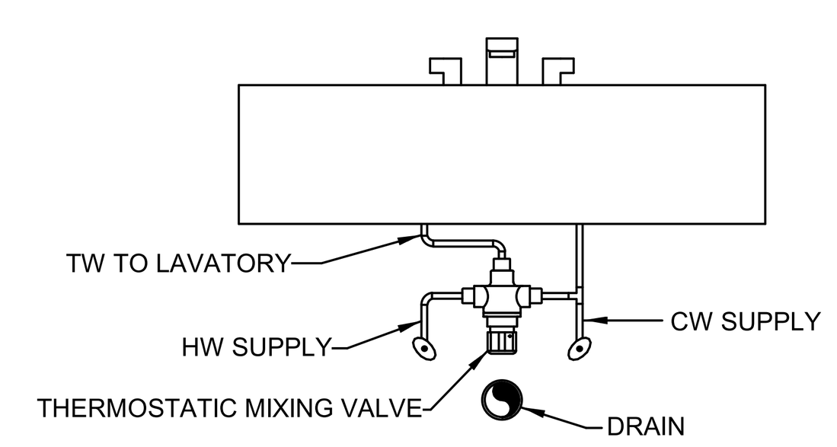
WALL CLEANOUT
NO SCALE



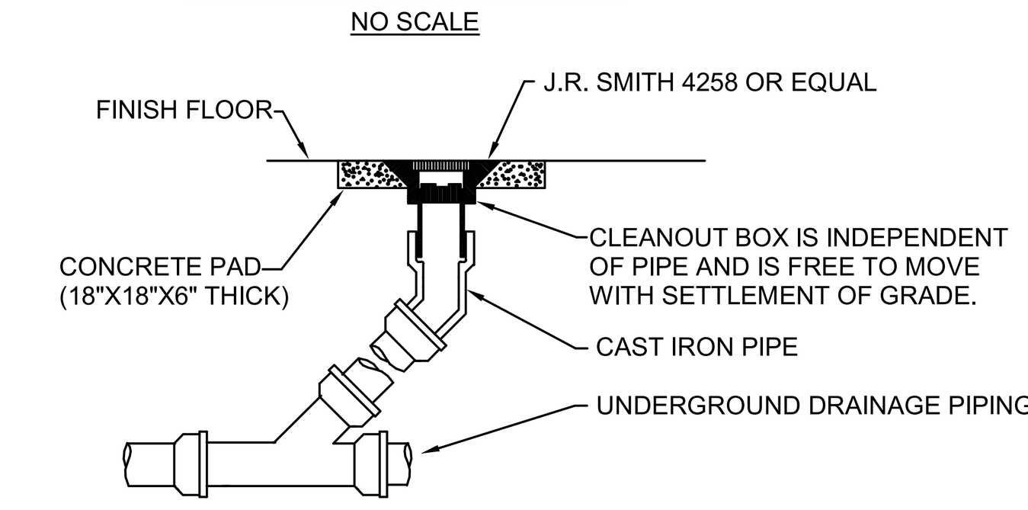
NOTES:

1. APPLICATION: FOR STRUT MOUNTED, 4 INCH AND SMALLER, COVER PIPE WITH FOAMED PLASTIC (ARMAFLEX) OR FIBERGLASS INSULATION.
2. ALLOWED FOR HORIZONTAL OR VERTICAL INSTALLATION.
3. FOR COLD PIPE APPLICATION, APPLY ADHESIVE TO END OF FOAMED PLASTIC INSULATION PRIOR TO INSERTING INTO COUPLING.

STRUT-MOUNTED PIPING SUPPORT INSULATION COUPLING DETAIL
NO SCALE



DETAIL OF TMV BELOW LAVATORY
NO SCALE



DETAIL OF CLEANOUT TO GRADE
NO SCALE

Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com
Project Number : 50189905

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

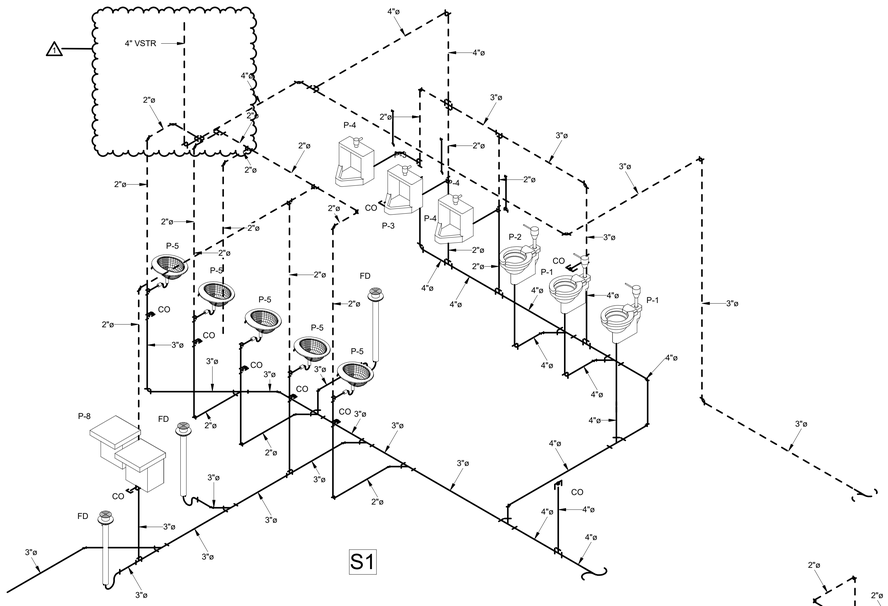
SHEET TITLE: PLUMBING SCHEDULE, DETAILS AND NOTES

ALABAMA LICENSED No. 27475 PROFESSIONAL ENGINEER 12/03/2025 CHRISTOPHER L. ROBINSON

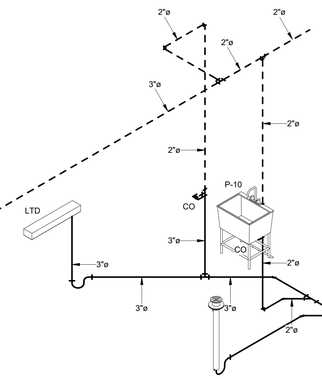
PROJ. MGR.: —	CLR
DRAWN:	ZDE
DATE: —	10/23/2025
REVISIONS	
1	12/3/25 Addendum #2

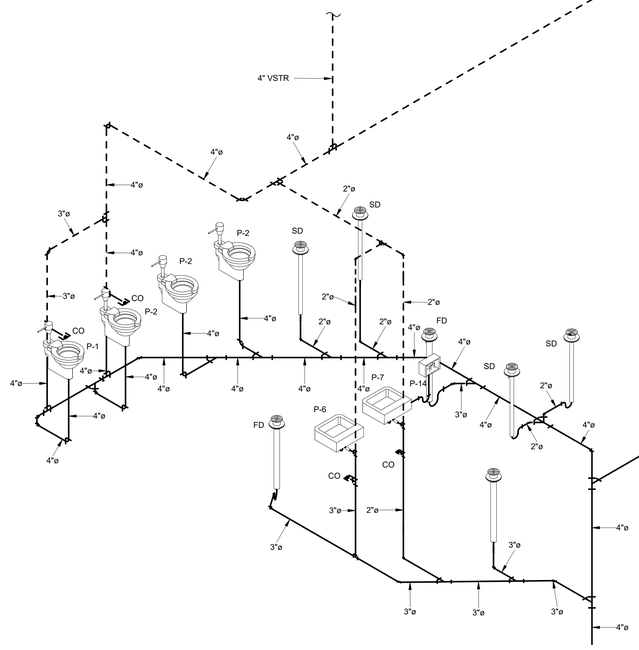
JOB NO. 25-33

SHEET NO: P0.1

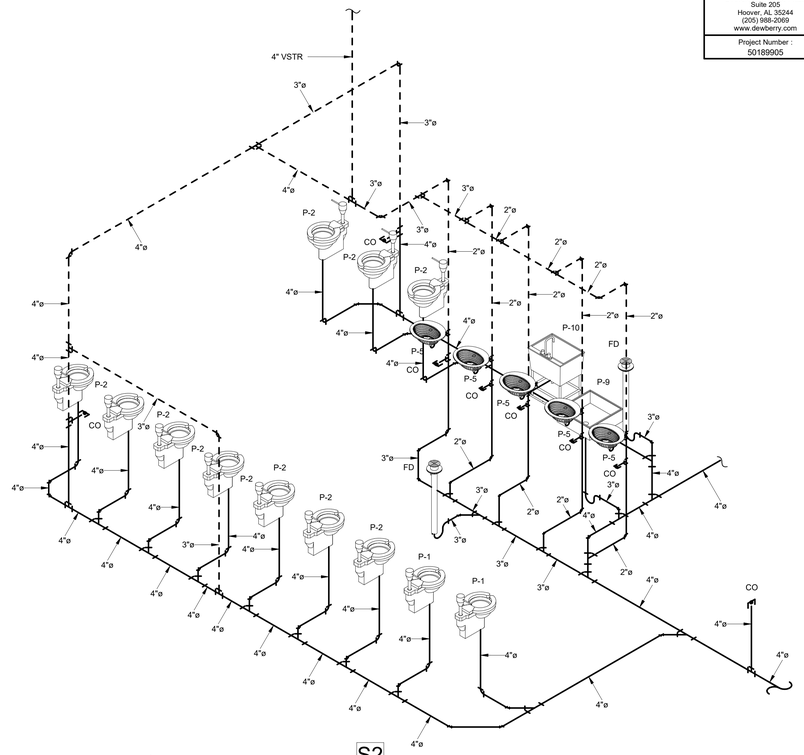


S1

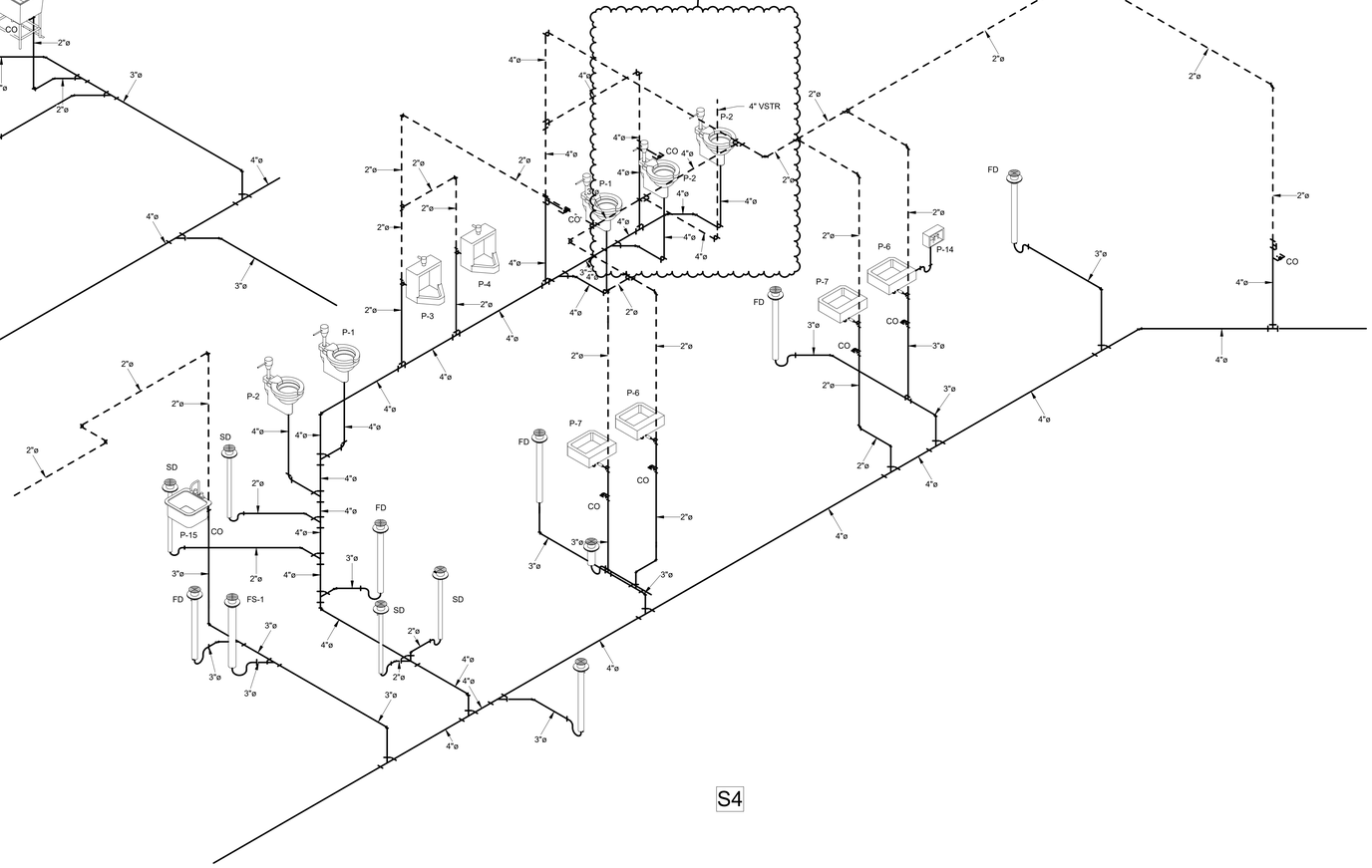




S3



S2



S4

Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number :
50189905

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
NON-PRESSURE - RISERS

ALABAMA
No. 27475
PROFESSIONAL
12/03/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025

REVISIONS

1	12/3/25 Addendum #2

JOB NO. 25-33

SHEET NO:

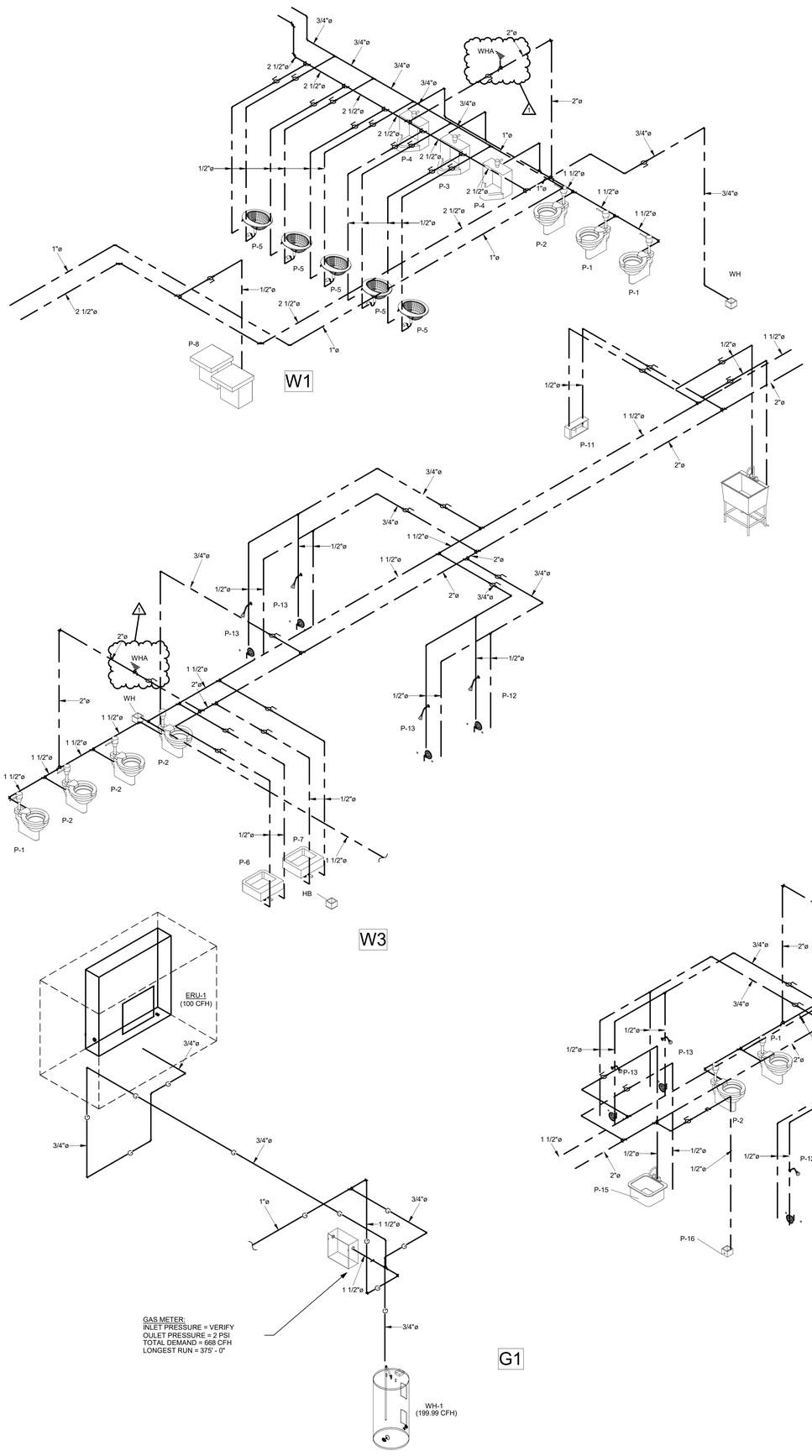
P1.0

Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com
Project Number :
50189905

LATHAN
McKEE
ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PRESSURE - RISERS



ALABAMA
LICENSED
No. 27475
PROFESSIONAL
12/03/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025

REVISIONS

1	12/3/25	Addendum #2

JOB NO. 25-33

SHEET NO:

P1.1

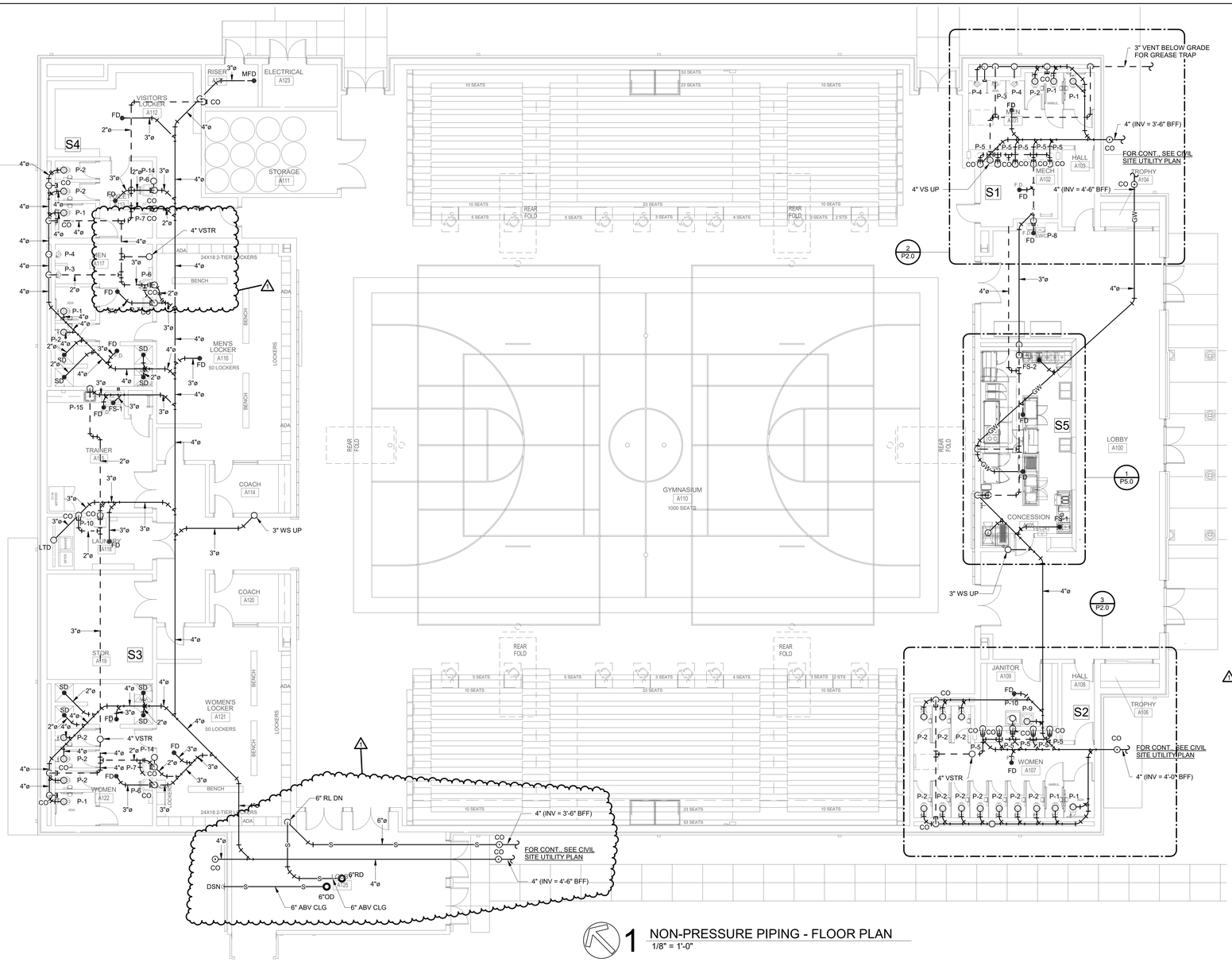
Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number :
50189905

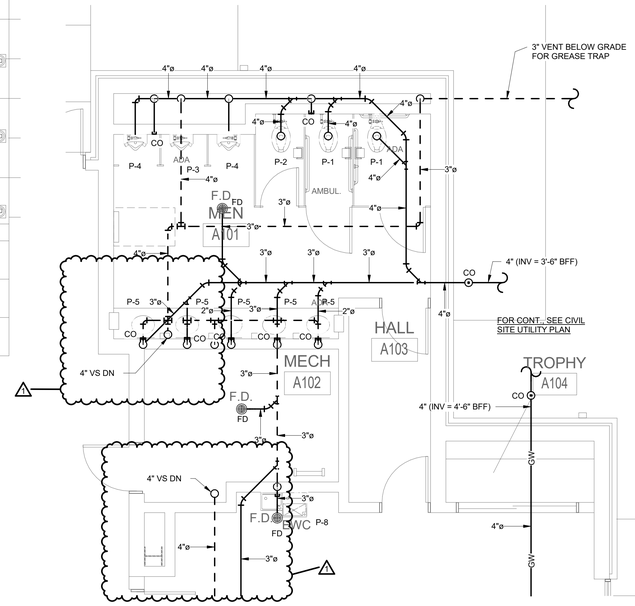
LATHAN
McKEE
ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

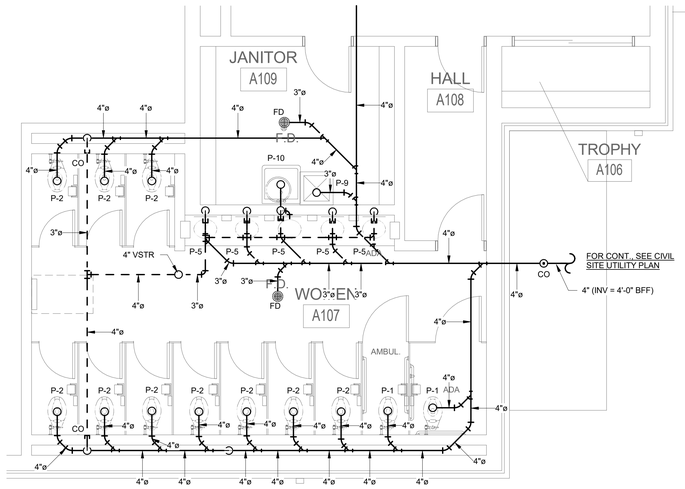
SHEET TITLE:
NON-PRESSURE PIPING - FLOOR PLAN



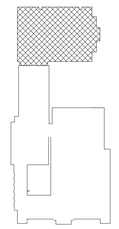
1 NON-PRESSURE PIPING - FLOOR PLAN
1/8" = 1'-0"



2 MEN A101 - ENLARGED NON-PRESSURE PIPING PLAN
1/4" = 1'-0"



3 WOMEN A107 - ENLARGED NON-PRESSURE PIPING PLAN
1/4" = 1'-0"



KEY PLAN
NOT TO SCALE
NORTH

STORM PIPING SPECIFICAITONS:

MATERIALS:

PVC PLASTIC PIPE: PVC-DWV, ASTM D-2665 TO BE INSTALLED ABOVE AND BELOW A SLAB, EXCEPT IN AREAS NOTED BELOW. "FOAM CORE" PIPING IS NOT ACCEPTABLE.

CAST IRON SOIL PIPE: CAST IRON NON-HUB PIPE AND FITTINGS. CISPI STANDARD 301 SHALL BE USED BELOW GRADE IN KITCHENS WHERE HOT WATER WILL BE DISCHARGED INTO THE WASTE SYSTEM. CAST IRON PIPING SHALL BE INSTALLED IN ALL RETURN PLENUM AREAS.

JOINTS FOR PVC PLASTIC PIPE: SOLVENT WELDED, ASTM B-2564

JOINTS BELOW GROUND FOR CAST IRON: HUB-AND-SPIGOT, CISPI HSN COMPRESSION TYPE WITH ASTM C564 NEOPRENE GASKETS.

JOINTS ABOVE GROUND FOR HUBLESS CAST IRON PIPE AND FITTINGS: HUBLESS PIPE AND FITTINGS SHALL BE JOINED BY A HEAVY-DUTY COUPLING. APPROVED MANUFACTURERS: HUSKY SD 4000, CLAMP ALL 125 OR MG COUPLINGS.

CONNECT TO SITE SANITARY 5'-0" FROM BUILDING. VERIFY WITH CIVIL SITE DRAWINGS EXACT SIZE, LOCATION AND INVERT OF SITE SEWER PRIOR TO BEGINNING WORK.

TESTING:

TEST PIPING BY STOPPING LOWER OUTLETS AND FILLING WITH WATER TO 10' HYDROSTATIC HEAD. STOP LEAKS AND REPEAT TEST UNTIL WATERTIGHT. ALL JOINTS SHALL BE EXPOSED THROUGHOUT TEST.

PROVIDE "BALL TEST" ON ALL PIPING 3" AND LARGER WITH BALL 1/2" SMALLER THAN PIPE DIAMETER.

PROVIDE VISUAL INSPECTION OF ALL BUILDING DRAIN PIPING BELOW GRADE. VISUAL INSPECTION SHALL BE BY MEANS OF A VIDEO CAMERA ROUTED THROUGH THE DRAIN SYSTEM. WHERE THE DRAIN PIPING IS CONNECTED TO EXISTING DRAIN PIPING, THE VISUAL INSPECTION SHALL INCLUDE THE EXISTING DRAIN PIPING FROM THE POINT OF CONNECTION, DOWNSTREAM TO THE POINT OF CONNECTION TO THE PUBLIC UTILITY. A VIDEO TAPE AND WRITTEN REPORT, NOTING ANY DEFECTS, ON THE FINDINGS OF THE VISUAL INSPECTION SHALL BE PROVIDED TO THE OWNER WITH THE CLOSE-OUT DOCUMENTS. THE PLUMBING CONTRACTOR SHALL PROVIDE PERSONNEL AND EQUIPMENT REQUIRED FOR THE VISUAL INSPECTION.

INSULATION:

ROOF/OVERFLOW DRAIN BODIES AND ALL STORM PIPING ABOVE CEILING: "FIBERGLASS PIPE COVERING", 1" THICK.

A.B.A.M.
LICENSED
No. 27475
PROFESSIONAL
12/03/2025
ENGINEER
CHRISTOPHER L. ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025

REVISIONS

1	12/3/25	Addendum #2

JOB NO. 25-33

SHEET NO:

P2.0

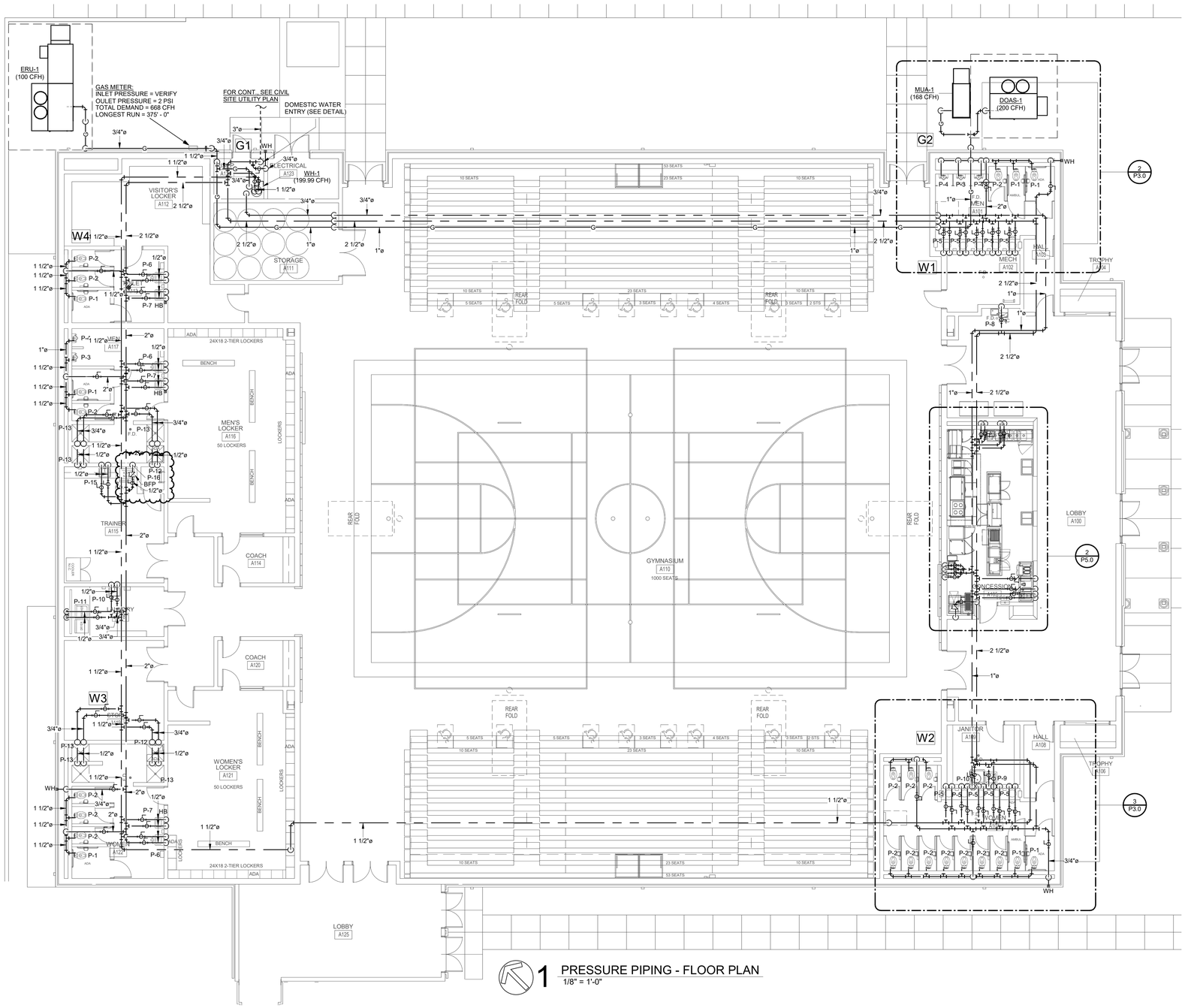
Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number :
50189905

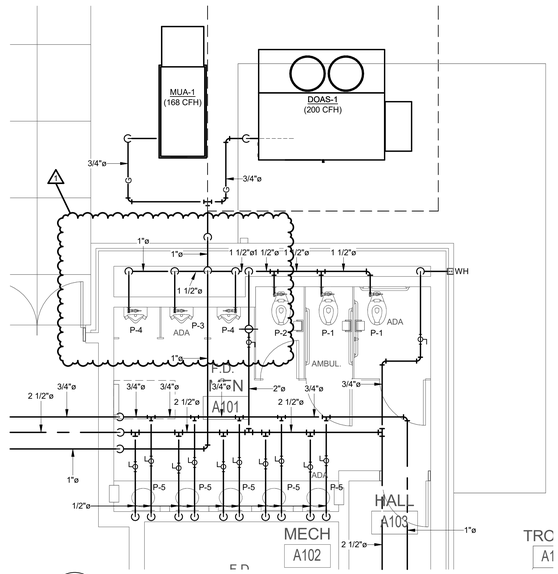
LATHAN
McKEE
ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

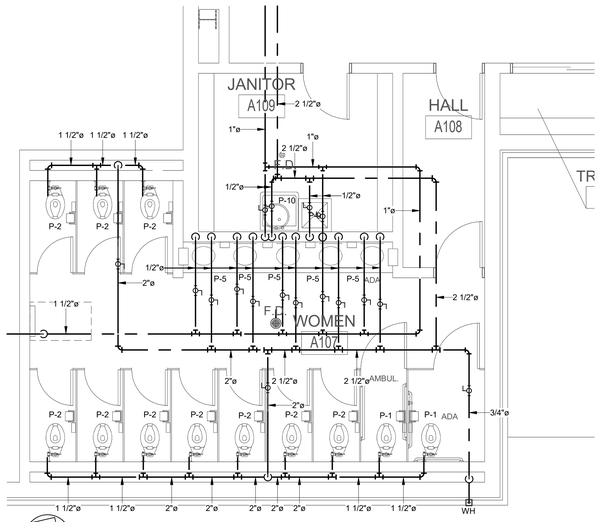
SHEET TITLE:
PRESSURE PIPING - FLOOR PLAN



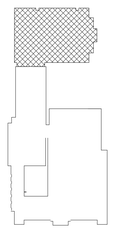
1 PRESSURE PIPING - FLOOR PLAN
1/8" = 1'-0"



2 MEN A101 - ENLARGED PRESSURE PIPING PLAN
1/4" = 1'-0"



3 WOMEN A107 - ENLARGED PRESSURE PIPING PLAN
1/4" = 1'-0"



KEY PLAN
NOT TO SCALE
NORTH

ALABAMA
INC. 27475
PROFESSIONAL
12/03/2025
ENGINEER
CHRISTOPHER L. ROBISON

PROJ. MGR.: –	WAC
DRAWN:	ZDE
DATE: –	10/23/2025

REVISIONS

1	12/3/25 Addendum #2

JOB NO. 25-33

SHEET NO:
P3.0

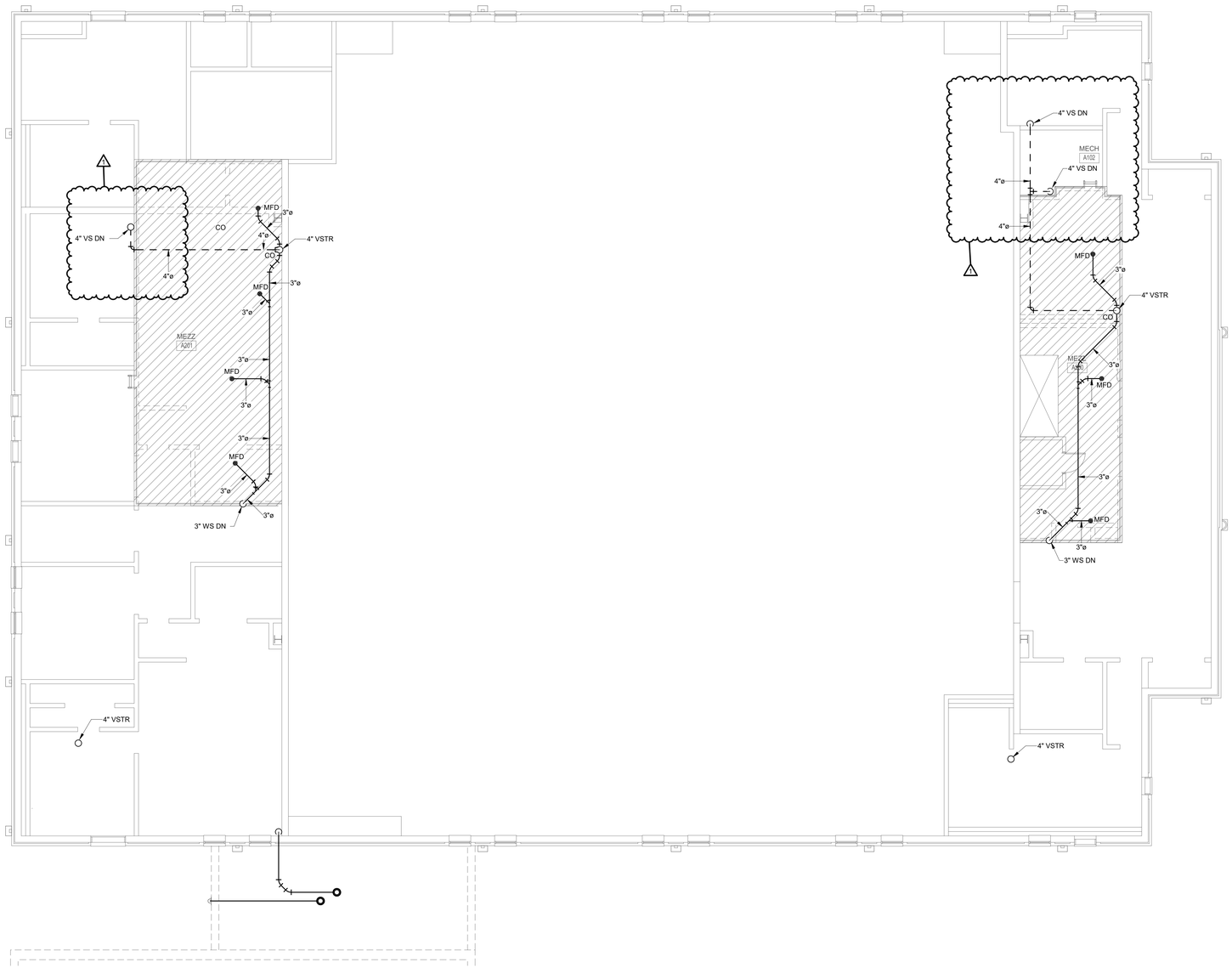
Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number :
50189905

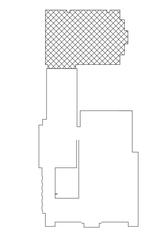
LATHAN
McKEE
ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLUMBING - MEZZANINE FLOOR PLAN



1 PLUMBING - MEZZANINE FLOOR PLAN
1/8" = 1'-0"



KEY PLAN
NOT TO SCALE
NORTH

ALABAMA
No. 27475
PROFESSIONAL
12/03/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025

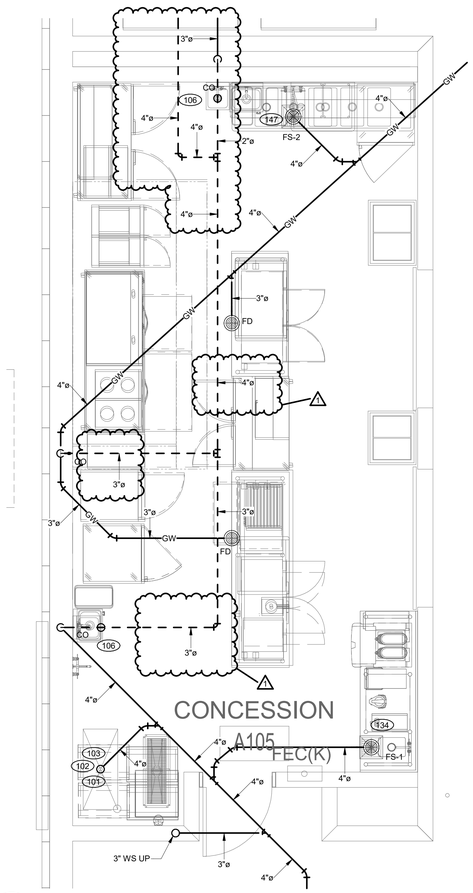
REVISIONS

1	12/3/25	Addendum #2

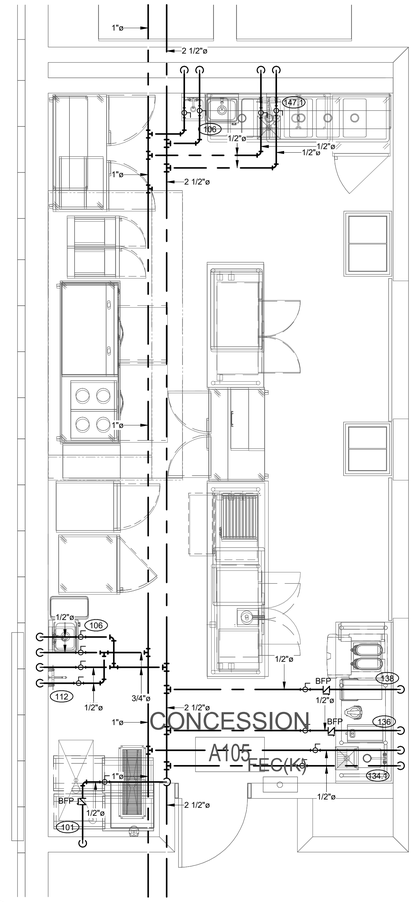
JOB NO. 25-33

SHEET NO:

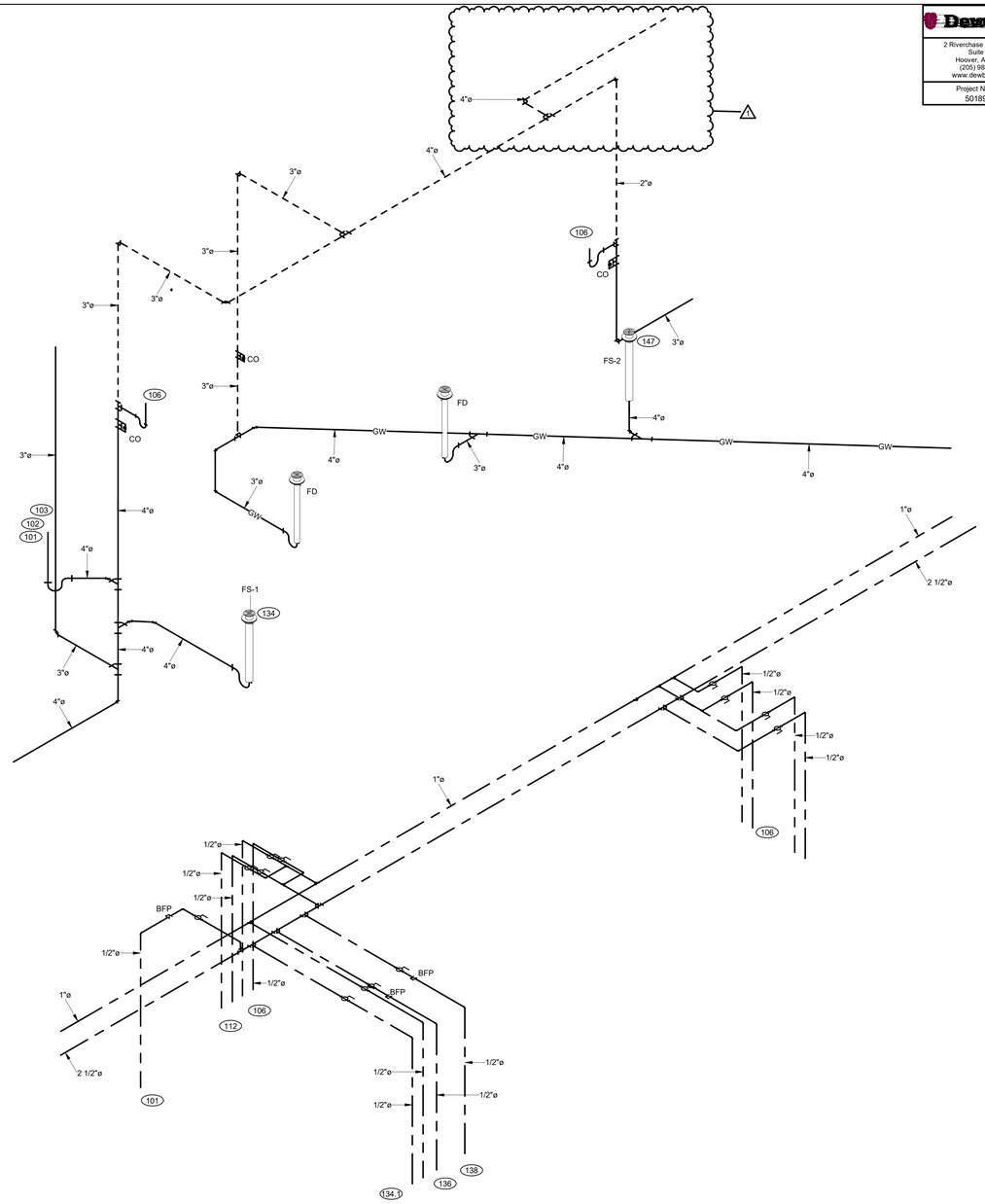
P4.0



1 NON-PRESSURE PIPING - CONCESSION ENLARGED PLAN
3/8" = 1'-0"



2 PRESSURE PIPING - CONCESSION ENLARGED PLAN
3/8" = 1'-0"



FOOD EQUIPMENT MECHANICAL SCHEDULE

ITEM NO	QTY	EQUIPMENT CATEGORY	MANUFACTURER	MODEL NUMBER	EQUIPMENT REMARKS	AMPS	KW	HP	VOLTS	PHASE	CYCLE	DIRECT	PLUG	NEMA	ELECTRICAL AFF (IN)	ELEC REMARKS	COLD WATER SIZE (IN)	COLD WATER AFF (IN)	HOT WATER SIZE (IN)	HOT WATER GPH	HOT WATER AFF (IN)	DIRECT DRAIN SIZE (IN)	DIRECT DRAIN AFF (IN)	INDIR DRAIN SIZE (IN)	GAS SIZE (IN)	MBTUH	GAS AFF (IN)	PLUMBING REMARKS	ITEM NO
101	1	ICE MAKER-SMALL CUBE (R290)	SCOTSMAN	MCO522SA 32	BY KEC	5.9			208	1	60	X			78"		3/8"	84"						3/4"				EXTEND I.W. TO NEAREST FLOOR SINK	101
102	1	ICE BIN	SCOTSMAN	B-322S	BY KEC																			3/4"				EXTEND I.W. TO NEAREST FLOOR SINK	102
103	1	FLOOR TROUGH W/FIBERGLASS GRATE	ATL. CUSTOM FAB.	CUSTOM	BY KEC																	4"						STUB UP	103
106	2	HAND SINK	KROWNE	HS-30L													1/2"	24"	1/2"	24"		1-1/2"	20"					SHUT OFF VALVES BY PROJECT PLUMBER	106
112	1	SERVICE FAUCET	KROWNE	16-127	BY KEC												1/2"	36"	1/2"	36"								HOSE& NOZZLE BY OWNER	112
116	1	GRIDDLE	GARLAND	E24-48G	BY KEC	77.0			208	1	60	X			30"														116
117	-	OPEN ITEM															1/4"	60"											117
118	2	FRYER	DEAN	SR114E	BY KEC	68.0			208	1	60	X			30"														118
134	1	BEVERAGE TABLE	ATL. CUSTOM TABLE	CUSTOM	BY KEC																			1-1/2"				EXTEND I.W. TO NEAREST FLOOR SINK	134
134.1	1	FAUCET DECK MOUNT	KROWNE	15-401L	BY KEC												1/2"	16"	1/2"	16"								SHUT OFF VALVES BY PROJECT PLUMBER	134.1
136	1	COFFEE BREWER (REFERENCE ONLY)	BUNN	41400.0000	BY OWNER/VENDER	11.4			120	1	60		X	5-15P	VER	VERIFY WITH OWNER	1/4"	VER										CONNECT THRU WATER FILTER TO BREWER	136
138	1	ICE TEA BREWER (REFERENCE ONLY)	BUNN	36700.0301	BY OWNER/VENDER	11.4			120	1	60		X	5-15P	VER	VERIFY WITH OWNER	1/4"	VER										CONNECT THRU WATER FILTER TO BREWER	138
147	1	THREE COMPARTMENT POTSINK	ADVANCE	K7-CS-32	BY KEC																			1-1/2"				EXTEND I.W. TO NEAREST FLOOR SINK	147
147.1	1	PRE-RINSE WITH ADD ON FAUCET	KROWNE	17-109WL	BY KEC												1/2"	16"	1/2"	16"								SHUT OFF VALVES BY PROJECT PLUMBER	147.1

Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com
Project Number :
50189905

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLUMBING - CONCESSION FLOOR PLAN

ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 27475
PROFESSIONAL
12/03/2025
CHRISTOPHER L. ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025

REVISIONS

1	12/3/25	Addendum #2

JOB NO. 25-33

SHEET NO:

P5.0

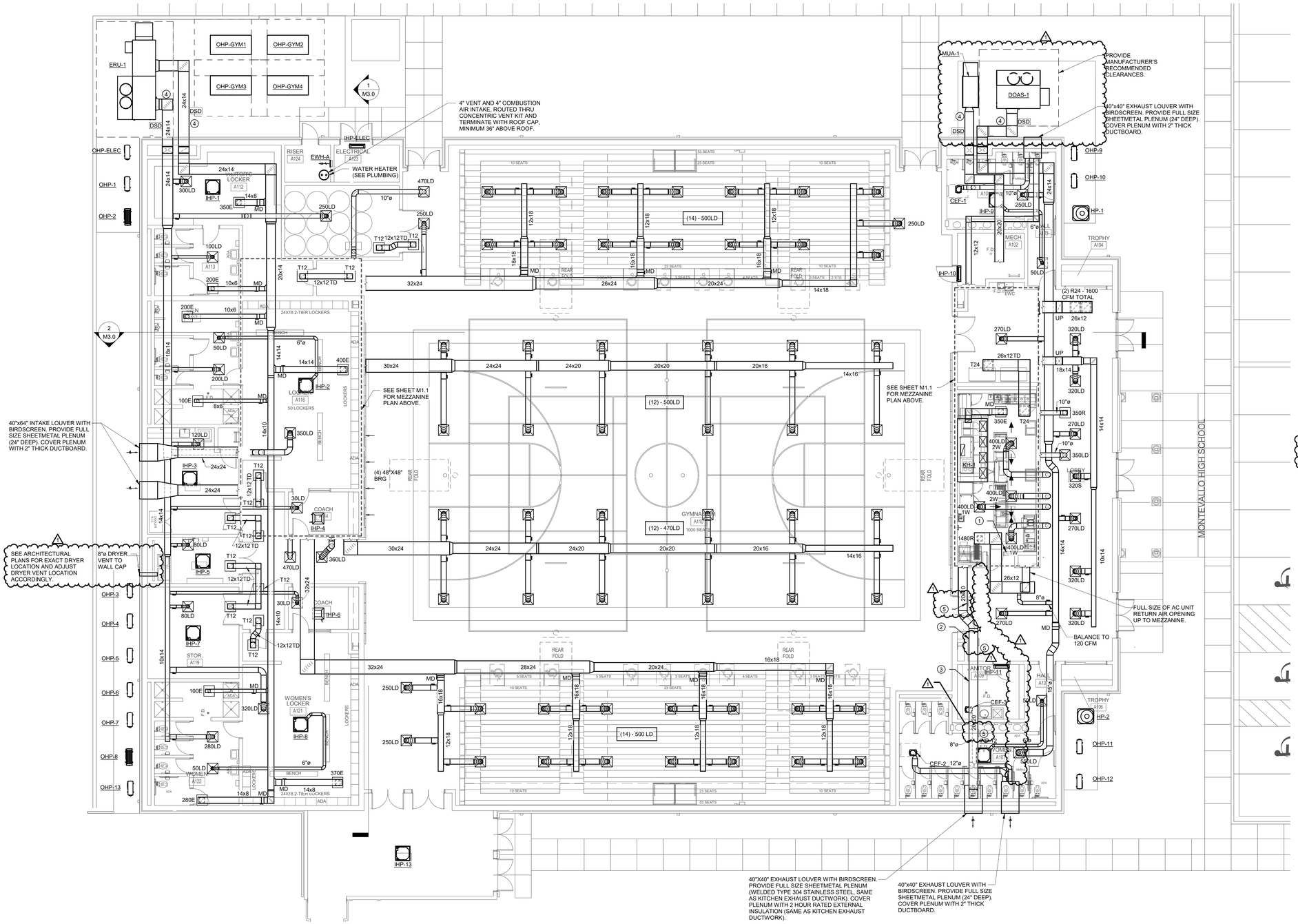
Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number :
50189905

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL - FLOOR PLAN



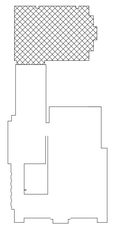
KEYED NOTES

1. KITCHEN HOOD FIRE SUPPRESSION SYSTEM MANUAL PULL STATION. LOCATE MINIMUM 10'-0" AND MAXIMUM 25'-0" FROM KITCHEN HOOD.
2. ALL GREASE EXHAUST DUCTWORK ASSOCIATED WITH THE KITCHEN HOOD SHALL BE ALL WELDED CONSTRUCTION. DUCTWORK SHALL BE TYPE 304 STAINLESS STEEL. PROVIDE 2HR FIRE RATED EXTERNAL DUCTWORK INSULATION ON ALL GREASE EXHAUST DUCTWORK. DUCTWORK SHALL BE SLOPED FROM A HIGH POINT, DOWN TO THE HOOD, AND SLOPED FROM THE HIGH POINT, DOWN TO THE EXHAUST FAN. DUCTWORK SHALL HAVE ACCESS DOORS PER THE INTERNATIONAL MECHANICAL CODE. DO NOT PROVIDE TURNING VANES IN ANY ELBOWS AND DO NOT PROVIDE MANUAL DAMPERS IN THE DUCTWORK ON ANY BRANCH DUCTS. ALL ELBOWS SHALL BE RADIUSED, NOT MITERED.
3. DUE TO ELEVATION OF KITCHEN HOOD EXHAUST FAN RELATIVE TO THE LOUVER, IT MAY REQUIRE A "HIGH POINT" LOCATED IN THE KITCHEN EXHAUST DUCT AT APPROXIMATELY THIS LOCATION. DUCTWORK SHALL SLOPE FROM THE HIGH POINT BACK TO THE KITCHEN HOOD AND FROM THE HIGH POINT OUT TO THE LOUVER.
4. ALL EXTERIOR DUCTWORK SHALL BE COVERED WITH 2" THICK DUCTBOARD AND ALUMINUM JACKET. SLOPE TOP OF DUCTWORK TO SHED WATER AND SLOPE AWAY FROM BUILDING.
5. PROVIDE 16X16 ACCESS DOOR IN SIDE OF GREASE EXHAUST DUCTWORK. INSTALL PER 2021 IMC - 506.3.8.

GENERAL NOTES

1. DUCTWORK SERVING THE GYM IS ROUTED IN THE TRUSS SPACE. COORDINATE EXACT ROUTING WITH TRUSS MANUFACTURER. ALL DUCTWORK LOCATED IN THE TRUSS SPACE SHALL BE INSULATED WITH 3" THICK EXTERNAL FIBERGLASS BLANKET INSULATION. THIS THICKNESS REQUIREMENT FOR THE DUCTWORK IN THE TRUSS SPACE SUPERCEDES THE PROJECT SPECIFICATIONS.

1 MECHANICAL - FLOOR PLAN
1/8" = 1'-0"
0' 4' 8' 16'
SCALE: 1/8" = 1' - 0"



ALABAMA
CHRISTOPHER L. ROBINSON
NO. 27475
PROFESSIONAL
12/03/2025
ENGINEER

PROJ. MGR.:	– CLR
DRAWN:	CWM
DATE:	– 10/23/2025

REVISIONS

1	12/3/25	Addendum #2

JOB NO. 25-33

SHEET NO:

M1.0

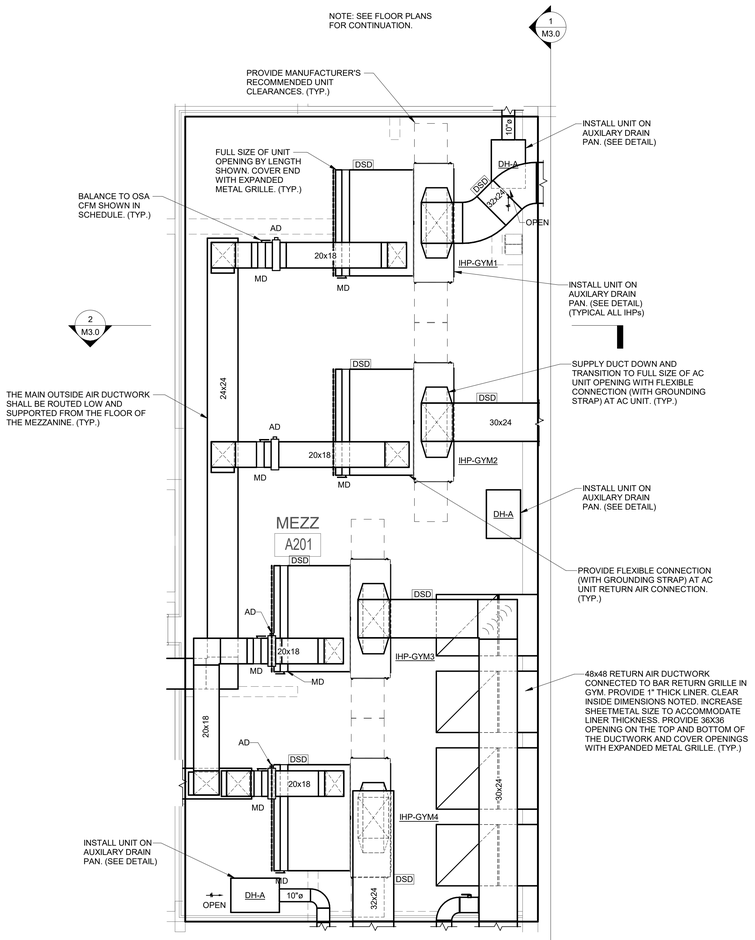
Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number :
50189905

LATHAN McKEE ARCHITECTS

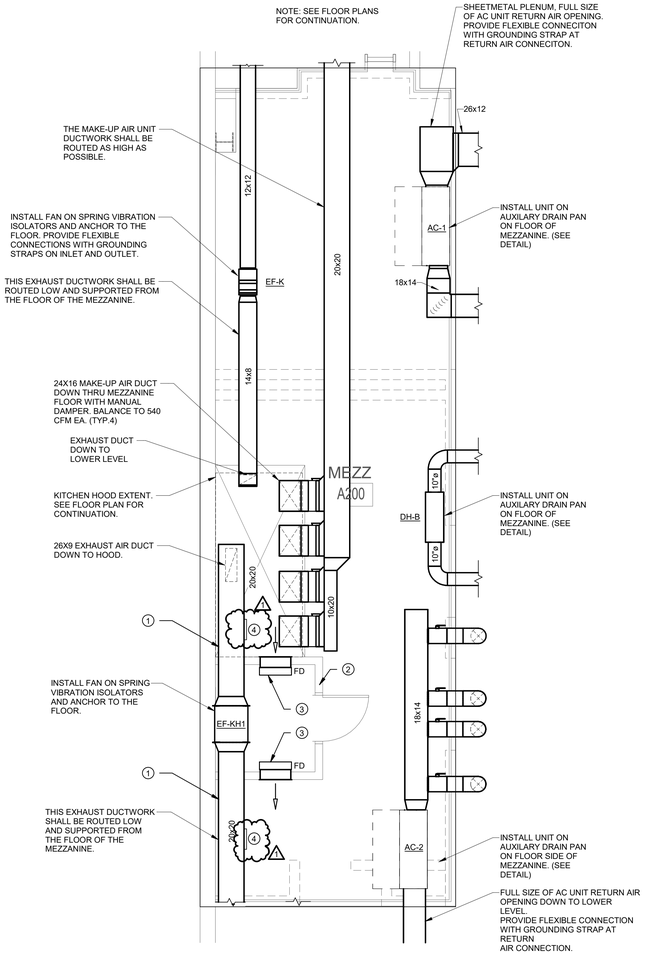
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL - MEZZANINE FLOOR PLAN



1 MECHANICAL - MEZZANINE FLOOR PLAN 1
1/4" = 1'-0"

0' 2' 4' 8'
SCALE: 1/4" = 1' - 0"

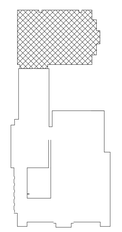


2 MECHANICAL - MEZZANINE FLOOR PLAN 2
1/4" = 1'-0"

0' 2' 4' 8'
SCALE: 1/4" = 1' - 0"

KEYED NOTES

1. ALL GREASE EXHAUST DUCTWORK ASSOCIATED WITH THE KITCHEN HOOD SHALL BE ALL WELDED CONSTRUCTION. DUCTWORK SHALL BE TYPE 304 STAINLESS STEEL. PROVIDE 2HR FIRE RATED EXTERNAL DUCTWORK INSULATION ON ALL GREASE EXHAUST DUCTWORK. DUCTWORK SHALL BE SLOPED FROM A HIGH POINT, DOWN TO THE HOOD; AND SLOPED FROM THE HIGH POINT, DOWN TO THE EXHAUST FAN. DUCTWORK SHALL HAVE ACCESS DOORS PER THE INTERNATIONAL MECHANICAL CODE. DO NOT PROVIDE TURNING VANES IN ANY ELBOWS AND DO NOT PROVIDE MANUAL DAMPERS IN THE DUCTWORK ON ANY BRANCH DUCTS. ALL ELBOWS SHALL BE RADIUSED, NOT MITERED.
2. THIS ROOM TO BE 2-HOUR RATED ENCLOSURE AROUND THE KITCHEN EXHAUST FAN TO MAINTAIN INTEGRITY OF KITCHEN GREASE EXHAUST DUCTWORK INSULATION RATING. INSTALL FAN WITHIN THE ROOM TO PROVIDE NORMAL SERVICE ACCESS.
3. 24X16 WALL TRANSFER GRILLE WITH (2 HOUR) FIRE DAMPER. NORTHERNMOST WALL GRILLE TO BE 8" A.F.F. SOUTHERNMOST WALL GRILLE TO BE 8" ABOVE CEILING. PROVIDE OPPOSITE FOR NATURAL VENTILATION OF THE ROOM.
4. PROVIDE 16X16 ACCESS DOOR IN SIDE OF GREASE EXHAUST DUCTWORK. INSTALL PER 2021 IMC - 506.3.8.



KEY PLAN
NOT TO SCALE
NORTH

ALABAMA
CHRISTOPHER L. ROBISON
NO. 27475
PROFESSIONAL
12/03/2025
ENGINEER

PROJ. MGR.: –	CLR
DRAWN:	CWM
DATE: –	10/23/2025

REVISIONS

1	12/3/25 Addendum #2

JOB NO. 25-33

SHEET NO:
M1.1

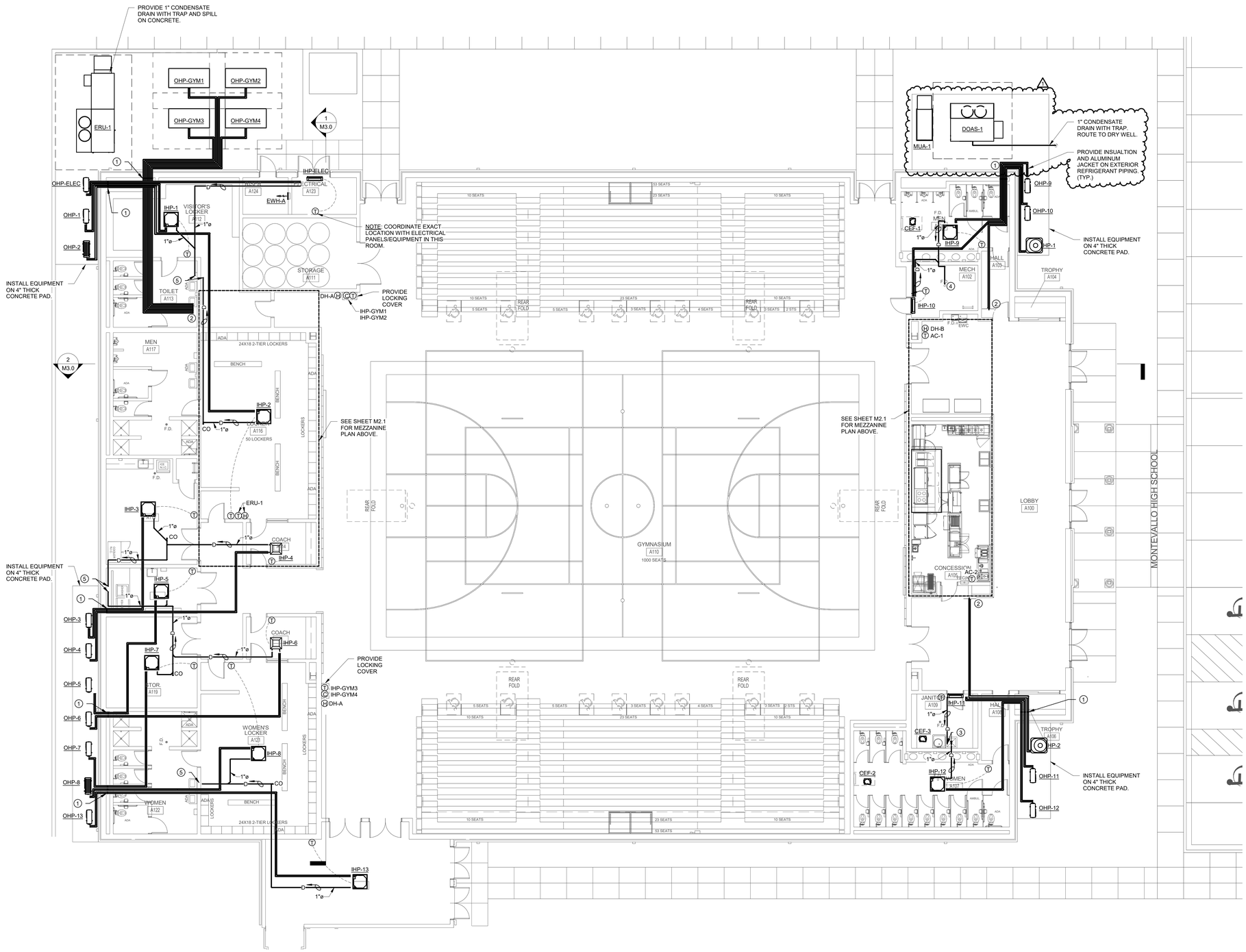
Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number :
50189905

LATHAN
McKEE
ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

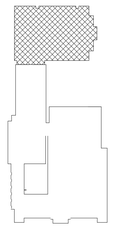
SHEET TITLE:
MECHANICAL PIPING - FLOOR PLAN



KEYED NOTES

1. SIZE AND ROUTE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS THRU WALL LOW AND UP TO ABOVE CEILING SPACE. PROVIDE PIPE SLEEVE THRU EXTERIOR WALL AND SEAL WEATHERTIGHT PER DETAIL. UTILIZE PLUMBING CHASES OR INSIDE CORNERS OF STORAGE CLOSETS, ETC. TO ROUTE REFRIGERANT PIPING VERTICAL TO ABOVE CEILING.
2. ROUTE REFRIGERANT PIPING UP TO MEZZANINE. SEE MEZZANINE FLOOR PLAN FOR CONTINUATION.
3. ROUTE 1"ø CONDENSATE DRAIN LINE DOWN TO JANITOR'S SINK (SEE PLUMBING).
4. ROUTE 1"ø CONDENSATE DRAIN LINE TO MECHANICAL FLOOR DRAIN (SEE PLUMBING).
5. ROUTE 1"ø CONDENSATE DRAIN LINE TO CONDENSATE WALL BOX (SEE PLUMBING).

1 MECHANICAL PIPING - FLOOR PLAN
1/8" = 1'-0"
0' 4' 8' 16'
SCALE: 1/8" = 1' - 0"



KEY PLAN
NOT TO SCALE
NORTH

ALABAMA
CHRISTOPHER L. ROBINSON
No. 27475
PROFESSIONAL
12/03/2025
ENGINEER

PROJ. MGR.:	– CLR
DRAWN:	CWM
DATE:	– 10/23/2025

REVISIONS

1	12/3/25 Addendum #2

JOB NO. 25-33

SHEET NO:
M2.0