

ADDENDUM NO. 6 ADDITIONS AND ALTERATIONS TO HOMER SMILES STADIUM Architect Job No. 23-125 September 27, 2024 DCM # 20240208

BIDS DUE:

Tuesday, October 1, 2024, until 2:00 p.m., local time, held at Leeds City Board of Education 1517 Hurst Ave. NE Leeds, AL 35094

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. <u>Section 01020 – Allowances REVISE</u> as follows:

3.3 <u>Schedule of Allowances</u>

<u>Allowance No. 1:</u> Include a contingency allowance of \$250,000.00 for the Owner's use throughout the project for unforeseen conditions as directed by the Architect.

<u>Allowance No. 2</u>: Include a contingency allowance of \$600.00 per thousand for the purchase of brick. Brick masonry installation and all associated materials shall be included under Base Bid. Premium cost above \$600.00 per thousand for special shape brick, solid brick, and accent brick shall not be provided through this allowance and shall be included in the Base Bid.

<u>Allowance No. 3:</u> Include a quantity allowance of 2,500 cubic yards of replacement of unsuitable soils with compacted structural fill. This Base Bid grading shall include the required cutting and filling of the existing grade to the proposed subgrade elevation. Onsite Geotechnical engineer shall determine if unsuitable soils are present. Unit price is provided for the addition to or deletion from this assumed amount. Refer to Section 02300.

<u>Allowance No. 4</u>: Include a contingency allowance of \$20,000.00 to provide Fire Department Radio Transponder.

REVISE: <u>Allowance No. 5:</u> Include a contingency allowance of <u>\$100,000.00</u> as an AID -to-Construction for utility fees. The aid to construction allowance shall be used to convert the current overhead power service to underground as indicated on architectural and electrical drawing.

<u>Allowance No. 6</u>: Include a quantity allowance under Base Bid for providing an additional 2 ton of in-place medium – heavy structural steel system construction, not otherwise indicated, to be shop fabricated, primed, and installed at the direction of the architect. This steel may be used throughout the project at multiple locations of any divisible quantity denomination or location, including but not limited to lintels, beams, columns, shelf angles, edge angles, bent plates, rebar, joists, etc.

<u>Allowance No. 7</u>: Include a quantity allowance under Base Bid for providing an additional 1 ton of in-place miscellaneous steel system construction, not otherwise indicated, to be fabricated, primed, and installed at the direction of the architect. This steel may be used throughout the project at multiple locations of any divisible quantity denomination or location, including but not limited to finished railings, clip angles, embeds, stair components, etc.

<u>Allowance No. 8:</u> Include a \$400,000.00 allowance for the jumbotron installation, structure, and electrical/ data as indicated on sheet A1.0. The Owner will purchase the board by separate contract. The contractor cost to install the unit will be covered under this allowance.

Allowance No. 9: Include a \$25,000.00 allowance for graphics.

2. ADD <u>Section 07110 – Membrane Waterproofing</u> in its entirety.

3. ADD Section 07141 – Cold Fluid-Applied Waterproofing in its entirety.

DRAWINGS

- 1. See Sheet <u>C5.1</u> Revised plan per Jefferson County Environmental Services comments.
- 2. See Sheet <u>A10.5</u> Revised General Base Bid TPO Roof Scope of Work.
- 3. See Sheet <u>M3.1</u> Revised Lower and Upper Level HVAC Plans.
- 3. Reference Sheets M1.3/M2.4/M3.1/M4.1: Add ceiling cassette CS 1-6 to Nutrition 104 with associated refrigerant piping, controls, etc. Unit shall be same size (PLFY-P18) as CS 2-2. Unit shall be part of HRU- 1 system. Refrigerant piping path shall follow same path as adjacent CS 1-2 to branch controller BC-1. Coordinate addition of ceiling cassette with electrical subcontractor. Schedule notes 1-10 apply to new unit. Reference attached revised Sheet M3.1 for unit location.
- Reference Sheet <u>P4.1:</u> Add condensate for ceiling cassette CS 1-6 in Nutrition 104. Route 1-1/2" condensate piping from ceiling cassette to 2" condensate main above Toilet 103. Reference attached revised Sheet M3.1 for unit location.
- 3. Reference Sheet **SP2.2**: Attic construction is non-combustible and is not required to be sprinkled.

CLARIFICATIONS

1. The soldier and brick courses noted on elevations and sections are to be \$915 per

thousand. Field brick cost per thousand shall remain as specified in allowance #2.

- 2. Sheet A4.2.1 was replaced with Sheet A4.2 and all details referencing A4.2.1 should instead reference A4.2.
- 3. Reference Specification 08420: 2.7 Aluminum Finishes: Factory Finishing shall be Kawneer Permafluor™ (70% PVDF), AAMA 2605, Fluoropolymer Coating Color to be selected by the Architect, from standard colors.
- 4. Stub empty conduit indicated on E2.1 5' outside of the hardscape toward the Jumbotron location as part of Base Bid. All other work associated with the Jumbotron shall be part of the alternate / allowance.
- 5. The specification Section 02715 Aluminum Ornamental Fence System incorrectly lists two different designs for the ornamental fencing. THE ORNAMENTAL FENCE SYSTEM IS TO BE AMERISTAR ECHELON PLUS® MAJESTIC DESIGN. Disregard any reference to Ameristar's Echelon Plus aluminum ornamental fencing

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

11480 Protective Netting

In Line Net System w/ #36 Netting

<u>Manufacturer</u> Unlimited Sports Solutions

MEMBRANE WATERPROOFING - SECTION 07110 (Below Grade)

1.0 - GENERAL

1.1 <u>Summary</u> A Section

Śection Includes:

- 1. Provide a complete vapor-protective, composite sheet membrane waterproofing system.
- 2. Work includes all applicable sealants, waterstops and waterproofing flashings needed to ensure a complete waterproof and vapor-protective membrane system for buried concrete and masonry components.
- B. Related Work: Documents affecting work of the Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions and Sections in Division 1.

1.2 Submittals

A. Comply with Specification Section 01350.

- B. Product Data:
 - 1. Materials list of items proposed to be provided under this Section.
 - 2. Manufacturer's specifications and other date needed to provide compliance with the specified requirements.
 - 3. Shop drawings and/or catalog illustrations in sufficient detail to show installation and interface of the work of this Section with the work of adjacent trades.
 - 4. Manufacturer's current recommended installation procedures which, when reviewed by Architect, will become the basis for accepting or rejecting actual installation procedures used on the Work.
 - 5. Written documentation of applicator's qualifications, including reference projects of similar scope and complexity, with current phone contacts of Architects and Owners for verification.
- C. Mock-Up:
 - 1. Prior to installation, prepare a sample panel of the work of this Section at a location on the job site where approved by the Architect.
 - 2. Make the sample panel in dimensions approved by the Architect and with one panel for each of the various types of installation.
 - 3. Show all aspects of the work of this Section to the quality specified.
 - 4. Make necessary adjustments in the sample panel(s) and secure the Architect's approval.
 - 5. The sample panel(s), when approved by the Architect, will be used as a datum point for comparison with the remainder of the work of this Section for the purpose of acceptance or rejection.
 - 6. Upon approval of the Architect, the sample panel(s) may become actual part of the installation required for this Work.
- 1.3 Quality Assurance

Α.

Use adequate numbers of skilled workmen thoroughly trained and experienced in the necessary crafts and completely familiar with the specified requirements and methods needed for proper performance of the work of this Section.

- B. Application qualifications:
 - 1. Applicator shall have at least three years' experience in installing materials of types specified and shall have successfully completed at least three projects of similar scope and complexity.
 - 2. Applicator shall designate a single individual as project foreman who shall be on site at all times during installation.
- C. Convene a pre-installation job site conference three weeks prior to commencing work of this Section:
 - 1. Secure attendance by the Architect, Contractor, Applicator and authorized representatives of the vapor-protective waterproofing system manufacturer and interfacing trades.
 - 2. Examine drawings and specifications affecting work of this Section, verify all conditions, review installation procedures and coordinate scheduling with interfacing portions of the Work.
- 1.4 <u>Delivery, Storage and Handling</u> A. Deliver materials to job
 - Deliver materials to job site in manufacturer's unopened containers with all labels intact and legible at all times.
 - B. Maintain the products in a dry condition during delivery, storage, handling, installation and concealment.
- 1.5 <u>Substrate Conditions</u>
 - A. Provide applicator with substrates that are free of standing water, dirt and debris, loose material, voids and protrusions or deformations which may inhibit application or performance of waterproofing.
 - 1. Where work of this Section will be installed on earth retaining system, fill gaps and voids in earth retaining system to conform with waterproofing manufacturer's requirements; remove nails in wood lagging.
 - 2. Where work of this Section will be installed on concrete and/or masonry, provide substrates that are free of voids deeper then 3/8" and free of surface protrusions more than 1/4" above the surface.
 - 3. Where work of this Section will be installed on concrete footings or mud slab, provide smooth finish to surfaces scheduled to receive the vapor-protective waterproofing.
 - 4. Where work of this Section will include bentonite waterstop strips, provide smooth concrete surfaces as required for installation.
 - 5. Rigidly install penetrations of vapor-protective waterproofing for detailing procedures.
 - B. Groundwater:
 - 1. Where work of this Section will encounter groundwater, provide waterproofing manufacturer with sufficient groundwater samples taken from Project at logged locations for manufacturer's laboratory analysis.
 - 2. Manufacturer shall provide written report confirming laboratory testing with regard to suitability of waterproofing system for installation in Project conditions.
- 1.6 <u>Warranty</u> A. D
 - Deliver to the Architect signed copies of the following written warranties against defective materials and workmanship for a period of Five Years following date of completion. Warrant that installed waterproofing system shall be free of defects

including waterproofing failure resulting from substrate cracking up to 1/8 inch.

- B. Warranties shall include:
 - 1. Manufacturer's standard five-year warranty covering materials.
 - 2. Applicator's standard five-year warranty covering workmanship.

2.0 - PRODUCTS

- 2.1 <u>General</u>
 - A. General: 1. Pro
 - Provide a complete envelope from finish grade to below of dualwaterproofing, vapor-protective, composite sheet membrane system composed of high-density polyethylene having a sodium-bentonite face with a protective laminate layer of spun polypropylene designed for buried concrete or masonry construction having the following attributes.
 - a. Acceptable products:
 - 1. Paramount Paraseal LG
 - 2. Paramount Paraseal GM
 - 2. Clay-Tite Waterproofing Membrane System by W.R. Meadows Sealtite is also a pre-approved Waterproofing System. Use as recommended by Manufacturer.
 - B. Membrane Properties: Equal to Paramount Paraseal LG for use on buried vertical and horizontal surfaces such as backfilled foundation and retaining walls and below slab or mud slab with bentonite-side down:
 - 1. Puncture resistance 169 lbs. ASTM E 154
 - 2 Tensile strength 4,000 psi ASTM D412
 - 3. Water vapor permanence 0.03 perms ASTM E96
 - 4. Percent elongation 700 percent ASTM D638, Type 4 Dumbbell
 - 5. Resistance to hydrostatic head 150 feet ASTM D751
 - 6. Warranted crack-bridging capability 1/8 inch
 - C. Membrane Waterproofing required at substrate surfaces at areas of stone masonry provide Fluid-Applied, Elastomeric Coal-Tar Free Waterproofing such as TREMproof 201/60R or pre-approved equal.
- 2.2 <u>Accessories</u>

1

- A. For installation at horizontal-to-vertical junctures, provide Paramount Paragranular loose bentonite granules in weatherproof 50 lb. bags and capable of swelling to occupy a minimum volume of 17 ml when 2 grams are dispersed into deionized water.
- B. For detailing vertical junctures and penetrations, provide Paramount Paramastic non-hydrated expandable mastic of trowelable consistency containing not less than 55 percent high swelling Wyoming sodium-bentonite.
- C. Provide the following fasteners as needed:
 - Case-hardened steel nail with fluted shank having a minimum 1" length and a minimum 1" diameter cap for use on green concrete and masonry substrates.

- 2. Powder shot steel pin having a minimum 3/4" diameter washer for use on concrete substrates.
- 3. Steel staples approved by membrane manufacturer for use according to Project conditions.
- D. Provide the following seam tapes as needed:
 - 1. Paramount Permanent Seam Tape reinforced, rubberized-asphaltic waterproofing seam tape 4" wide by 60 mils thick for simple lap sealing of membrane.
 - 2. Paramount Para JT Tape non-reinforced, adhesive tape of partially cross-linked polymeric elastomers 2" wide by 1/8" thick for molding form-fit seals around difficult contours and for integral seam seals within overlaps.
- E. Provide Paramount Paraterm Bar extruded aluminum bar with upper flange to receive sealant for terminations at grade line and on parapet walls.
- F. Provide Vulkem 116/227 Sealant one- or two-part, gun-grade polyurethane sealant for completing termination seals and other sealing recommended by manufacturer.
- G. Provide Vulkem 101/102 Elastomeric Flashing 100 percent solids polyurethane, liquid-applied, elastomeric waterproofng flashing.
- H. Provide Paramount Parastick 'N' Dry pressure sensitive, double-sided tape laminate of bentonite sandwiched between a netting and non-woven fabric for wrapping through-concrete imbeds and other detailing.
- I. Provide Paramount Superstop flexible, reinforced, bentonite-laminate waterstop strips 1/2 " by 1" by 20'-0" with pressure-sensitive adhesive backing for sealing static cold joints in concrete.
- J. Provide Paramount Paraprimer versatile adhesive bonding agent formulated for use with tapes and pressure-sensitive waterproofing accessories.
- K. Provide Paramount Paradrain composite drainage mats composed of rot resistant non-woven filter fabric on high-density polyethylene drainage core.
- L. Provide base sheet of minimum 6 mil polyethylene sheet for use as hydration barrier.
- M. Provide protection course as recommended by the waterproofing system manufacturer.
- 2.3 <u>Other Materials</u> Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor and approved by the vapor-protective waterproofing system manufacturer as compatible, subject to review of the Architect.

3.0 - EXECUTION

- 3.1 Surface Conditions
 - A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section and to prevent damage to installed waterproofing.
 - B. Applicator shall examine the areas and conditions under which work of this Section will be performed.
 - 1. Verify conformance with manufacturer's requirements.
 - 2. Report unsatisfactory conditions in writing to the Architect.

- 3. Do not proceed until unsatisfactory conditions are corrected.
- 3.2 <u>Preparation</u> A. Gen
 - General: Surface preparation and detailing procedures shall be in accordance with this Specification and Drawings. Comply with waterproofing system manufacturer's instructions except where more stringent requirements are indicated or specified.
 - B. Lay out project to determine and anticipate conditions prior to start of work.
 - C. Note termination and penetration conditions to determine methods for creating a waterproof and vapor-protective envelope. Verify that where below-grade waterproofing extends to grade, other waterproofing provides for substrate continuing above grade.
- 3.3 Installation
 - A. General: Install waterproofing system in accordance with manufacturer's instructions, recommendations and specific project instructions as applies to the Work.
 - 1. Coves: Form 2" coves with granular bentonite at horizontal-to-vertical junctures such as footings and horizontal shelves; form 2" coves with sealant, elastomeric flashing or non-reinforced tape at vertical inside corners, under ledges and at penetrations.
 - 2. Place membrane in manner that assures minimum handling; fit closely to and seal around inlets, outlets and other penetrations; press membrane tight to corner surfaces and securely fasten.
 - 3. Priming: Prime concrete, masonry and metal surfaces with substrate primer immediately prior to application of tapes and pressure-sensitive waterproofing accessories. Prime membrane surfaces immediately prior to application of tapes as required for a tight seal.
 - 4. Taping: Tape seams closely following membrane placement and immediately roll-press using 2" wide hand-held seam roller to affect a tight seal.
 - 5. Gradeline terminations: Terminate membrane system with termination bar finished off with bead of sealant or terminate to elastomeric flashing using reinforced seam tape.
 - 6. Construction joints: Protect static construction joints in concrete with flexible, reinforced, bentonite-laminate waterstop strips; install to suitable hardened concrete surface prior to subsequent concrete placement.
 - 7. All shingles shall be hand nailed. Installation with a Nail gun shall not be permitted.
 - 8. Coordinate with gymnasium equipment for floor sleeves and electrical control boxes and provide waterproofing membrane system to encompass thickened slab areas for such equipment as required.
 - B. Below Slab Installation: Bentonite-side down use Paraseal LG Membrane:
 1. Install polyethylene base sheets with edges lapped 5" over stable, smoothed and compacted subgrade or mud slab; trim base sheet away from penetrations and terminations.
 - 2. Install membrane bentonite-side down with edges lapped 3" minimum over polyethylene base sheets; position membrane sheets to stagger end laps 12"; tape seams with reinforced seam tape and roll-press to affect a vapor tight seal.

- 3. Install vapor-protective waterproofing to wrap footings and grade beams where shown on Drawings.
- 4. Turn membrane up 6" minimum along bottom edges of slabs, wrapped footings and wrapped grade beams. Install double layer of membrane along bottom edges of slabs, wrapped footings and wrapped grade beams extending 6" minimum from edges in each direction. Avoid overlaps coinciding between layers. Provide for tie-in of subsequent membrane installation.
- 5. Install membrane across top surfaces of unwrapped footings or mud slab and turn up 4" minimum onto vertical faces of concrete walls and columns. Terminate leading edges with continuous seam tape and continuous waterstop strip in accordance with manufacturer's recommendations to affect a vapor tight seal.
- 6. Install vapor-protective waterproofing to overlap 4" minimum onto top surfaces of unwrapped grade beams and carry to extend indicated on Drawings. Terminate leading edges with continuous seam tape and continuous waterstop strip in accordance with manufacturer's recommendations to affect a vapor tight seal.
- 7. Waterproof penetrations in accordance with manufacturer's recommendations.
- 8. Verify membrane is protected from damage caused by rebar and support chairs.
- 9. Inspect and repair damaged material immediately; before concrete placement, manufacturer's representative must inspect the system and issue to the Architect a report of acceptable installation.
- C. Backfilled Wall Installation: Paraseal LG Membrane:
 - 1. Install membrane sheets in vertical or horizontal lifts with HDPE-side facing applicator to prepared surfaces conforming to manufacturer's requirements.
 - a. Vertical orientation: Securely fasten membrane 12" on center along top edge with sheet extending onto footing surfaces and overlapping below-slab membrane 6"; install subsequent membrane sheets to overlap previous sheets 1-1/2" minimum; securely fasten membrane 24" on center through both sheets at overlaps; securely fasten 18" on center to tops of footing surfaces and horizontal shelves; tape seams with reinforced seam tape and roll-press to affect a vapor tight seal.
 - b. Horizontal orientation: Start membrane at lowest portion of wall; securely fasten membrane 24" on center along top edge with sheet extending onto footing surfaces and overlapping under slab membrane 6"; install subsequent membrane sheets to overlap previous sheets minimum 1-1/2" in shingle fashion with staggered end laps; securely fasten membrane 24" on center through both sheets at overlaps; securely fasten 18" on center to tops of footing surfaces and horizontal shelves; tape seams with reinforced seam tape and roll-press to effect a vapor tight seal.
 - 2. Waterproof penetrations in accordance with manufacturer's recommendations.
- D. Blindside Wall Installation: Paraseal GM-LG Membrane:
 1. Ensure that vertical surfaces to receive waterproofing system conform to

manufacturer's requirements as applicable to the earth retaining system employed prior to commencing installation.

- 2. Install waterproofing membrane starter-strip with bentonite-side facing applicator to vertical surfaces of earth retaining system prior to placement of concrete footings or foundation mat slab.
- 3. Prepare all vertical inside corners that occur along the earth retaining system by fastening a minimum 12" wide strip of membrane with bentonite-side facing applicator pressed tight into corner; securely fasten along both edges 24" on center.
- 4. Remove bentonite from face of membrane inside overlaps, extending 2" in from lap leading edges, by removing factory installed edge tape or by scraping; install membrane sheets vertically with bentonite-side facing installer and mechanically fasten along lap edges cleaned of bentonite at 24" on center; restrict fasteners to lap edges cleaned of bentonite.
- 5. Wipe clean HDPE surfaces inside overlaps just prior to contacting with tape using lint free white cloths soaked in solvent; install non-reinforced integral seam tape to HDPE surfaces cleaned of bentonite along lap edges strictly aligning the adhesive mass on membrane leading edge, not behind it, covering completely all mechanical fasteners; roll-press seam tape into place prior to removal of the release-paper backing.
- 6. Install subsequent membrane sheets to overlap previous sheets 4"; remove release-paper backing from seam tape within overlaps and rollpress membrane sheets together to affect a vapor tight seal.
- 7. Verify which penetrations must be accessed after concrete placement for completion of waterproofing detail treatment and ensure that sufficient access to membrane is provided within a formed boxout; verify which penetrations will not be accessed after concrete placement for completion of waterproofing detail treatment and effect final detailing procedures prior to erection of concrete formwork or shotcreting/guniting; seal all penetrations in accordance with manufacturer's current procedures as required to seal against both water and vapor.
- 8. Protect vapor-protective waterproofing system from excessive rain.
- 9. Inspect and repair damages to vapor-protective waterproofing system immediately prior to erection of concrete formwork or shotcreting/guniting; ensure that concrete directly contacts membrane.
- 10. Complete waterproofing details and terminations at gradeline coordinating with other trades.
- E. Drainage Mat Installation: Install drainage mat units where finish floor is below grade according to manufacturer's installation instructions as shown in installation manuals. Extend drainage to brake grade with positive fall.

END OF SECTION

PART 1 - GENERAL

- 1.1 SUMMARY
 - A. Section Includes:
 - 1. Cold fluid-applied waterproofing, dual waterproofing system for vertical and horizontal applications.
 - 2. Waterproofing membrane, primer, protective waterproofing courese, and drainage.

1.2 RELATED REQUIREMENTS

- 1. Section 033100 "Cast-in-Place Concrete" for moisture curing of concrete waterproofing substrate.
- 2. Section 042000 "Unit Masonry" for compatibility with flashing components.
- 3. Division 07 air barrier section for wall waterproofing and interface coordination.
- 4. Section 079200 "Joint Sealants" for joint sealants and accessories and joint preparation.

1.3 REFERENCES

- A. References, General: Versions of the following standards current as of the date of issue of the project apply to the Work of this Section.
- B. ASTM International (ASTM): <u>www.astm.org</u>:
 - 1. ASTM C 836 Standard Specification for High-Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane for Use with Separate Wearing Course
 - 2. ASTM C 920 Standard Specification for Elastomeric Joint Sealants
 - 3. ASTM D 4258 Standard Practice for Surface Cleaning Concrete for Coating
 - 4. ASTM D 4263 Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method
 - 5. ASTM D 4716 Standard Test Method for Determining the (In-plane) Flow Rate per Unit Width and Hydraulic Transmissivity of a Geosynthetic Using a Constant Head
 - 6. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials
 - 7. ASTM E 96/E 96M Standard Test Methods for Water Vapor Transmission of Materials
- C. UL Environment Greenguard Certification: <u>www.greenguard.org</u>
 - 1. Greenguard Certification Product Guide
- D. U. S. Environmental Protection Agency (EPA): <u>www.epa.gov</u>:
 - 1. 40 CFR 59, Subpart D National Volatile Organic Compound Emission Standards for Architectural Coatings

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Conference: Conduct conference at Project Site.
 - 1. Review requirements for waterproofing products and installation, including surface preparation, substrate conditions, project and manufacturer's details, installation procedures, mockups, testing and inspection requirements, protection and repairs, and coordination and sequencing of waterproofing work with work of other Sections.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of waterproofing product specified, including:
 - 1. Technical data indicating compliance with requirements.
 - 2. Substrate preparation instructions and recommendations.
- B. Shop Drawings: Show locations for waterproofing system components. Show details for each type of substrate, joints, corners, and edge conditions, including flashings, counterflashings, penetrations, transitions, and terminations.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer, manufacturer[, and waterproofing Inspector].
 - 1. Certification of manufacturer's approval of Installer.
- B. Low-Emitting Product Certificate: For waterproofing products specified to meet volatile organic emissions standards, submit Greenguard Children and Schools Certification or comparable certification acceptable to Architect.
- C. Product Test Reports: Test data for waterproofing products and waterproofing system, by qualified testing agency, indicating proposed waterproofing meets performance requirements, when requested by Architect.
- D. Warranty: Sample of unexecuted manufacturer and installer special warranties.
- E. Field quality control reports.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: A manufacturer-approved firm with minimum [three] years experience in installation of specified products in successful use on similar projects, employing workers trained by manufacturer.
- B. Manufacturer Qualifications: A qualified manufacturer [listed in this Section] with minimum five years experience in manufacture of waterproofing as one of its principal products.
 - 1. Manufacturer's product submitted has been in satisfactory operation on five similar installations for at least five years.
 - 2. Approval of Manufacturers and Comparable Products: the following in accordance with project substitution requirements, within time allowed for substitution review:

- a. Completed and signed Substitution Request form.
- b. Product data, including certified independent test data indicating compliance with requirements.
- c. Sample shop drawings from similar project.
- d. Project references: Minimum of five installations of similar system not less than five years old, with Owner and Architect contact information.
- e. Name and resume of proposed qualified Inspector.
- f. Sample warranty.
- C. Waterproofing Inspector Qualifications: A technical representative of manufacturer not engaged in the sale of products and experienced in the installation and maintenance of the specified waterproofing system, qualified to perform observation and inspection specified in Field Quality Control Article, to determine Installer's compliance with the requirements of this Project, and approved by the manufacturer to issue warranty certification. The Inspector shall be one of the following:
 - 1. An authorized full-time technical employee of the manufacturer.
- D. Testing Agent Qualifications: Qualified agent experienced in the installation of the specified waterproofing system, and qualified to perform observation and inspection specified in Field Quality Control Article to determine Installer's compliance with the requirements of this Project, acceptable to Architect, retained by the Contractor.
- E. Mockups: Provide waterproofing mockup application within mockups required in other sections, or if not specified, in an area of not less than 150 sq. ft. (14 sq. m) of surface where directed by Architect for each type of substrate condition. Include examples of surface preparation, crack and joint treatment, waterproofing application, and flashing, transition, and termination conditions, to set quality standards for execution.
 - 1. Include intersection of deck waterproofing with adjacent vertical waterproofing and moisture control systems, including Air Barrier Membrane(s)

1.8 DELIVERY, STORAGE AND HANDLING

- A. Accept materials on site in manufacturer's unopened original packaging.
- B. Store products in weather protected environment, clear of ground and moisture, within temperature ranges recommended by waterproofing manufacturer.
- C. Construction Waste: Store and dispose of packaging materials and construction waste in accordance with requirements of Division 01 Section

1.9 ENVIRONMENTAL REQUIREMENTS

- A. Environmental Limitations: Apply waterproofing within the range of ambient and substrate temperatures recommended by air-barrier manufacturer.
 - 1. Protect substrates from environmental conditions that affect air-barrier performance.

2. Do not apply waterproofing to a damp or wet substrate or during snow, rain, fog, or mist.

1.10 SCHEDULING

- A. Coordinate installation of waterproofing with completion of air barrier installation, coatings, roofing and other work requiring interface with waterproofing.
- B. Schedule work so waterproofing applications may be inspected prior to concealment.
- C. Ensure waterproofing materials are cured before covering with other materials.

1.11 WARRANTY

- A. Special Manufacturer's Warranty: Manufacturer's standard form in which waterproofing manufacturer agrees to furnish and install waterproofing material to repair or replace those materials installed according to manufacturer's written instructions that exhibit material defects or otherwise fail to perform as specified under normal use within warranty period specified.
 - 1. Access for Repair: Owner shall provide unimpeded access to the Project and the waterproofing system for purposes of testing, leak investigation, and repair, and shall reinstall removed cladding and overburden materials upon completion of repair.
 - 2. Cost Limitation: Manufacturer's obligation for repair or replacement shall be limited to the original installed cost of the work.
 - 3. Warranty Period: **[5]** years date of Substantial Completion.
- B. Special warranties specified in this article exclude deterioration or failure of waterproofing materials from the following:
 - 1. Movement of the structure caused by structural settlement or stresses on the waterproofing exceeding manufacturer's written specifications for elongation.
 - 2. Mechanical damage caused by outside agents.

PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
 - A. Basis-of-Design Products: Provide waterproofing products manufactured by Tremco, Inc., Commercial Sealants and Waterproofing Division, An RPM Company, Beachwood OH; (866) 321-6357; email: techresources@tremcoinc.com; www.tremcosealants.com, [or comparable products of other manufacturer approved by Architect in accordance with Instructions to Bidders and Division 01 General Requirements].
 - B. Source Limitations: Provide waterproofing system materials and accessory products from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. General: Waterproofing system shall be capable of performing as a continuous watertight installation and as a moisture drainage plane transitioned to adjacent

flashings and discharging water to the building exterior. Waterproofing shall accommodate normal substrate movement and seal expansion and control joints, construction material transitions, opening transitions, penetrations, and perimeter conditions without resultant moisture deterioration.

- B. VOC Content: 250 g/L maximum per 40 CFR 59, Subpart D (EPA Method 24) and complying with requirements of authorities having jurisdiction.
- C. Compatibility: Provide waterproofing system materials that are compatible with one another and with adjacent materials under conditions of service and application required, as demonstrated by waterproofing manufacturer based on testing and field experience.

2.3 WATERPROOFING MEMBRANE SYSTEM

- A. Cold Fluid-Applied Dual Waterproofing System.
 - 1. Basis of Design Product: Tremco, Inc., TREMproof Platinum Waterproofing System
 - a. Waterproofing membrane
 - b. Accessory Materials
 - c. Protective Waterproofing Course
 - d. Drainage

2.4 WATERPROOFING MEMBRANE

- 2. Waterproofing Membrane:
 - a. Basis of Design Product: **Tremco, Inc., TREMproof 250GC**
 - b. VOC Content: Less than 100 g/L, roller and self-leveling grades.
 - c. VOC Content: Less than 160 g/L, trowel detailing grade.
 - d. Hardness, ASTM D 2240: 80 90.
 - e. Low Temperature Flexibility and Crack Bridging, ASTM C 1305: Pass.
 - f. Adhesion in Peel, ASTM C 794: 26 lbf/in. (4553 N/m).

2.4 ACCESSORY MATERIALS

- A. General: Accessory materials as described in manufacturer's written installation instructions, recommended to produce complete waterproofing system meeting performance requirements, and compatible with waterproofing material and adjacent materials.
- B. Substrate Patching Material: Waterproofing manufacturer's standard trowel-grade filler material.
 - 1. Basis of Design Product: **Tremco, Inc., TREMproof 250GC T**
- C. Primer: Tremco approved primer meeting VOC limitations and recommended for substrate by waterproofing manufacturer.
 - 1. Basis of Design Product: **Tremco, Inc., Vulkem 191 QD**.
- D. Elastomeric Detail Sheet: Blended thermoset elastomeric sheet reinforced with polyester woven scrim.

- 1. Basis of Design Product: **Tremco, Inc., TREMproof TRA Sheeting**.
- E. Metal Termination Bars: Waterproofing manufacturer's standard aluminum or stainless steel termination bar, with stainless steel fasteners.
- F. Joint Sealant: ASTM C 920, single-component urethane, approved by waterproofing manufacturer for adhesion and compatibility with waterproofing and accessories.
 - 1. Basis of Design Product: **Tremco, Inc., Dymonic 100**.

2.5 PROTECTION COURSE

- A. Protective Waterproofing Course: [Provide the following:]
 - 1. Basis of Design Product: **Tremco, Inc., TREMproof TRA Sheeting**.
- B. Protection Course: [Provide the following:]
 - 1. For vertical applications:
 - a. Basis of Design Product: Tremco, Inc., TREMproof TRA Sheeting
 - 2. For horizontal slab applications:
 - a. Basis of Design Product: **Tremco, Inc., Tremco 2450 Protection Board**, or 6 mil polyethylene

2.6 DRAINAGE PANELS

- A. Drainage Mat: Composite mat with drainage core, filter fabric, and protective polymeric film. [Provide the following:]
 - 1. Basis of Desing Product: Tremco, Inc., TREMDrain Series Drainage Mats.

PART 3 - EXECUTION

- 3.1 EXAMINATION
 - A. Surface Condition: Before applying waterproofing materials, examine substrate and conditions to ensure substrates are fully cured, smooth, clean, dry, and free from high spots, depressions, loose and foreign particles and other deterrents to adhesion, and conditions comply with manufacturer's written recommendations.
 - 1. Verify concrete and masonry surfaces are visibly dry, have cured for time period recommended by waterproofing manufacturer, and are free from release agents, curing agents, laitance, and other contaminates. Test for waterproofing adhesion per manufacturer's recommended method. Notify Architect of unsatisfactory conditions.
 - 2. Test for capillary moisture per manufacturer's recommended method.
 - 3. Verify masonry joints are filled with mortar and struck flush.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INTERFACE WITH OTHER WORK

- A. Sequencing of Work: Coordinate sequencing of waterproofing work with work of other sections that form portions of building envelope moisture control to ensure that flashings and transition materials can be properly installed and inspected.
- B. Subsequent Work: Coordinate waterproofing work with work of other sections installed subsequent to waterproofing to ensure complete inspection of installed waterproofing and sealing of waterproofing penetrations necessitated by subsequent work.

3.3 PREPARATION

- A. Clean, prepare, and treat substrates in accordance with waterproofing manufacturer's written instructions.
 - 1. Mask adjacent finished surfaces.
 - 2. Remove contaminants and film-forming coatings from substrates.
 - 3. Remove projections and excess materials and fill voids with substrate patching material.
 - 4. Prepare and treat joints and cracks in substrate per ASTM D 4258 and waterproofing manufacturer's written instructions.
- B. Detail Preparation: Prepare non-moving shrinkage cracks, large cracks, construction joints, expansion joints, projections and protrusions, penetrations, drains, and changes in plane in accordance with waterproofing manufacturer's written instructions and details, using accessory materials specified.
 - 1. Adhere strips of elastomeric sheet to moving joints and large cracks by embedding in a layer of cold fluid-applied waterproofing and overlay with coat of cold fluid-applied waterproofing.
- C. Transitions to Adjacent Materials: Install elastomeric and composite reinforced flashing to form connect and seal waterproofing material to adjacent components of building waterproofing system, including, but not limited to, roofing system waterproofing, exterior fenestration systems, door framing, and other openings
 - 1. Seal top of through-wall flashings to waterproofing with continuous transition strips of type recommended by waterproofing manufacturer for application.
 - 2. Install elastomeric sheets at terminations of waterproofing membrane according to manufacturer's written instructions.
 - 3. Install termination bars and mechanically fasten to top of elastomeric flashing sheet at terminations and perimeter of waterproofing.

3.4 WATERPROOFING INSTALLATION

A. General: Apply dual waterproofing system with detailing sealants, waterproofing membrane, primer, protective waterproofing course and drainage according to manufacturer's written instructions. Apply waterproofing material within manufacturer's recommended application temperature ranges.

- B. Start application with manufacturer's authorized representative present.
- C. Cold Fluid-Applied Platinum WaterproofingSystem, for installation specifics please refer to the TREMproof Platinum Waterproofing System Application Instructions.
 - 1. Apply TREMproof 250GC using roller or squeegee as a single lift of 90 mils and allow to cure.
 - 2. Prime all existing TREMproof 250GC with Vulkem 191QD Primer Allow to dry to a tacky non-transferrable flim.
 - 3. Install an additional 30 wet mil lift of TREMproof 250GC membrane.
 - 4. Embed TREMproof TRA Sheeting into the wet membrane immediately.
- D. Terminations: Install terminations of waterproofing membrane in accordance with ASTM C 898 and ASTM C 1471, as applicable to application, at not less than minimum height recommended by waterproofing manufacturer. Overlap waterproofing on to intersecting construction a minimum of 24 inches (600 mm).
- E. Correct deficiencies in or remove waterproofing that does not comply with requirements; repair substrates and reapply waterproofing components.

3.5 PROTECTION INSTALLATION

- A. Protection Course: Cover waterproofing with protection course following the written instructions prior to backfilling or subjecting installation to traffic. Overlap protection course joints.
- B. Drainage Panel: Place and secure drainage panels using methods that do not penetrate waterproofing. Face geotextile away from deck substrate. Lap edges and ends of geotextile.

3.6 FIELD QUALITY CONTROL

- A. Contractor's Inspector: Contractor shall engage manufacturer's qualified Inspector full-time during the Work to perform tests and inspections, including documenting of waterproofing prior to concealment.
 - 1. Contractor's Inspector shall measure membrane thickness with pin tester at least once for every 100 sq. ft. (10 sq. m).
 - 2. Provide written report of tests and inspections.
- B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- C. Testing Agent: [**Engage**] a qualified testing agent to inspect substrate conditions, surface preparation, waterproofing application, protection, and drainage components, and to furnish reports to Architect.
 - 1. Testing includes EFVM inspection prior to concealing deck waterproof membrane as specified in Section 07 72 73 "Membrane Leak Detection System."
- D. Coordination of Inspection: Cooperate with testing agent. Allow access to work areas and staging. Notify testing agency in writing of schedule for Work of this Section to allow sufficient time for testing and inspection.

- 1. Do not cover Work until testing and inspection is completed and accepted.
- E. Reporting: Forward written inspection reports to the Architect within 10 working days of the inspection and test being performed.
- F. Correction of Work: Correct deficient applications not passing tests and inspections, make necessary repairs, and retest as required to demonstrate compliance with requirements.

3.7 CLEANING AND PROTECTING

- A. Clean spills, stains, and overspray resulting application utilizing cleaning agents recommended by manufacturers of affected construction. Remove masking materials.
- B. Protect waterproofing from damage from subsequent work. Protect waterproofing materials from exposure to UV light for period in excess of that acceptable to waterproofing manufacturer; replace overexposed materials and retest.

END OF SECTION



JEFFERSON COUNTY STANDARD NOTES FOR 8 INCH AND LARGER SANITARY SEWERS:

- DEPARTMENT, AND APPLICABLE O.S.H.A. REQULATIONS, AS APPLICABLE.
- 3. DUCTILE IRON PIPE SHALL BE CLASS 350 OR BETTER.

- MANUFACTURER. EACH COUPLING SHALL BEAR THE MANUFACTURER'S NAME AND REQUIRED MARKINGS
- MASTER PLUMBER AND HAVE A SEWER CONNECTION PERMIT FOR EACH LOT.

- 13. ALL EMBANKMENT FILL AREAS SHALL BE FILLED AND COMPACTED PRIOR TO EXCAVATION OF SEWER LINE TRENCHES.

Job No.: 241101225 10 Inverness Center Parkway, Suite 350

Birmingham, AL 35242 205.539.0384 | www.ttlusa.com

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF JEFFERSON COUNTY, THE LOCAL MUNICIPALITY AND/OR THE STATE HIGHWAY

2. THE CONTRACTOR SHALL NOTIFY THE JEFFERSON COUNTY ENVIRONMENTAL SERVICES DEPARTMENT AT 205/325-5127 AT LEAST 24 HOURS PRIOR TO BEGINNING CONSTRUCTION. THERE SHALL BE NO CHANGES IN DRAWINGS WITHOUT WRITTEN APPROVAL BY THE JEFFERSON COUNTY ENVIRONMENTAL SERVICES DEPARTMENT.

4. PVC PIPE SHALL BE AWWA C900, CAST IRON (CI) STANDARD DIMENSIONS. DIMENSION RATIO (DR) 18. PRESSURE CLASS (PC) 150 PSI OR BETTER.

5. IN EARTH TRENCHES, 4" OF CRUSHED STONE SHALL BE PLACED UNDER SEWER LINES OF 12" IN DIAMETER OR SMALLER AND 6" OF CRUSHED STONE SHALL BE PLACED UNDER SEWER LINES LARGER THAN 12" IN DIAMETER. IN ROCK TRENCHES, 6" OF CRUSHED STONE SHALL BE PLACED UNDER ALL SEWERS. THE DITCH SHALL BE BACKFILLED WITH CRUSHED STONE TO A DEPTH OF 12" ABOVE THE TOP OF THE PIPE. WHEN CROSSING EXISTING ROADS AND STREETS, THE TOTAL BACKFILL SHALL BE CRUSHED STONE AND PROPERLY CHOKED.

AT THE DIRECTION OF THE ESD INSPECTOR, A CONNECTION OF SANITARY SEWER PIPES (8" THROUGH 16") OF DISSIMILAR SIZES OR FOR REPAIR OF SANITARY SEWER PIPES OF SIMILAR MATERIALS MAY BE MADE BY MEANS OF AN APPROVED MECHANICAL SEAL TYPE ADJUSTABLE COUPLING. COUPLINGS WITH ANY REQUIRED ADAPTING BUSHINGS SHALL BE MANUFACTURED OF AN APPROVED PREFORMED ELASTOMERIC MATERIAL SPECIFICALLY FOR DIMENSIONS OF THE PIPE MATERIALS TO BE CONNECTED. COUPLINGS OF THE MECHANICAL SEAL TYPE SHALL HAVE NUT AND BOLT TIGHTENING CLAMPS OR DEVICES MADE OF 316 STAINLESS STEEL, WITH AN ADJUSTABLE STAINLESS STEEL SHEAR RING, AND STAINLESS STEEL HARDWARE. A CONCRETE COLLAR AS SHOWN ON APPENDIX STANDARD DRAWING SD2060 IS REQUIRED. THE ADJUSTABLE COUPLING SHALL BE INSTALLED AS RECOMMENDED AND SPECIFIED BY THE

MANHOLES SHALL MEET ASTM SPECIFICATIONS C-478. JOINTS BETWEEN THE MANHOLES SECTIONS SHALL BE OFFSET TONGUE AN GROOVE "PUSH ON" TYPE, SUPPLIED WITH TYLOX SUPPLIED WITH SEAL PRE-LUBRICATED GASKET AS MANUFACTURED BY HAMILTON KENT MEETING THE REQUIREMENTS OF ASTM C443. EACH JOINT SHALL ALSO BE SUPPLIED WITH CONSEAL CS-231 WATERSTOP SEALANT AS MANUFACTURED BY CONCRETE SEALANTS, IN WIDTHS AS RECOMMENDED BY THE MANUFACTURER. MANHOLES SHALL HAVE A MINIMUM DIAMETER OF 48" AND A MINIMUM THICKNESS OF 5". ALL MANHOLE CONES SHALL BE OF THE CONCENTRIC TYPE. MANHOLES MAY BE FINISHED TO STREET GRADE WITH BRICK AND MORTAR. THIS ADJUSTMENT

8. STUBOUTS FOR SANITARY SEWER SERVICE LINES SHALL END ON OR NEAR THE PROPERTY LINE UNLESS OTHERWISE NOTED. ON "DOWNHILL" SIDE LOTS INSTALL LATERALS ON A MINIMUM 1% GRADE. ON "UPHILL" SIDE LOTS, INSTALL SERVICE LINES TO GRADE THAT WILL TERMINATE A MAXIMUM DEPTH OF 10 FEET. THE FIRST JOINT OUT OF A MANHOLE, FOR BUILDING OR HOUSE SERVICE, SHALL BE DUCTILE IRON PIPE CLASS 350 OR BETTER (MINIMUM 8 FEET). ANY BUILDING SERVICE LINE SET OUTSIDE OF EASEMENT OR R.O.W. MUST BE INSTALLED BY A

IF THE CONTRACTOR IS INSTALLING SERVICE LINES AT THE SAME TIME AS MAIN LINE, THE SERVICE LINE SHALL BE INSTALLED IN ACCORDANCE WITH JEFFERSON COUNTY STANDARDS FOR CONSTRUCTION OF SERVICE LINES AND CONNECTIONS, AND INSPECTED/TESTED BY COUNTY INSPECTOR BEFORE IT IS BACKFILLED.

10. ALL SERVICE LINE STUBOUTS INSTALLED IN ROAD ROW OR UNDER ASPHALT SHALL BE PER STANDARD SPECIFICATIONS FOR SANITARY SEWER SERVICE LINES AND CONNECTIONS SECTION

11. CONSTRUCTION SIGNS FOR WORK WITHIN AND ADJACENT TO PUBLIC ROADS, HIGHWAYS, AND ALLEYS SHALL BE IN ACCORDANCE WITH ALDOT STANDARDS.

12. CONTRACTOR WILL BE RESPONSIBLE FOR THE CONTINUOUS AND PROPER OPERATION OF ALL EXISTING UTILITIES LOCATED ON OR ADJACENT TO THE PROJECT SITE AND WITHIN THE

14. CONTRACTOR WILL BE RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS AND FOR ACQUISITION OF ALL PERMITS DURING CONSTRUCTION TO INSURE THAT DAMAGE DOES NOT OCCUR TO ADJACENT PROPERTIES, PUBLIC ROADS AND/OR DITCHES (CREEKS, STREAMS).

15. UPON COMPLETION OF ALL OR ANY PART OF A SANITARY SEWER LINE, THE CONTRACTOR WILL BE REQUIRED TO TEST SAID SEWER FOR ACCEPTABILITY. GRAVITY SEWERS WILL BE PRESSURE TESTED WITH AIR. FORCE MAIN SEWERS WILL BE PRESSURE TESTED WITH WATER. MANHOLES WILL BE VACUUM TESTED. ALL TESTS WILL BE CONDUCTED IN THE PRESENCE OF THE COUNTY SEWER CONSTRUCTION INSPECTOR IN ACCORDANCE WITH SECTION 5.00 STANDARDS FOR COMMERCIAL AND RESIDENTIAL CONSTRUCTION OF SANITARY SEWER SYSTEMS. GRAVITY SANITARY SEWERS WILL BE TELEVISION INSPECTED FOLLOWING AIR TESTING WITH THE FINAL VIDEO TAPE AND LOG FURNISHED TO THE COUNTY FOR RECORD INFORMATION.



SHEET 1 OF 1

LATHAN ARCHITECTS

 \geq

 \supseteq

 \square

 \triangleleft

ן **ע** ק

S S S

C





JOB NO. 23-125 SHEET NO:







PV PIPE VENT

RV ROOF VENT

PP PITCH POCKET

RTU ROOF TOP UNIT

EF EXHAUST FAN DS DOWNSPOUT

GUTTER

GEJ GUTTER EXPANSION JOINT

G

6

LATHAN ARCHITECTS

M \square A ö **N** ₹ S S S) ALTERATI SMIL STREET, L HOOLS HOMER 1771 WHITMIRE (LEEDS CITY SCH





SHEET TITLE: EXISTING GYM ROOF PLAN









LOWER LEVEL HVAC PLAN

DIFFUSER SCHEDULE

Size	Туре	Neck Size	Model Number	Manufacturer	Notes
24"X24"	SUPPLY	6"ø	TDC	TITUS	
4"X24"	SUPPLY	8"ø	TDC	TITUS	
4"X24"	SUPPLY	10 " ø	TDC	TITUS	
4"X24"	SUPPLY	10 " ø	TDCA	TITUS	ADJUSTABLE DISCHARGE
2"X12"	SUPPLY	6"ø	TDC-AA	TITUS	ALUMINUM
2"X12"	SUPPLY	8"ø	TDC-AA	TITUS	ALUMINUM
4"X24"	RETURN	23X23	8RF	TITUS	1"FILTER
4"X24"	TRANSFER	23X23	8F	TITUS	ALUMINUM
6"X16"	SUPPLY	14X14	8F	TITUS	ALUMINUM
4"X24"	SUPPLY	23X23	8F	TITUS	ALUMINUM
4"X24"	EXHAUST	23X23	8FF	TITUS	ALUMINUM/1" FILTER
4"X24"	EXHAUST	23X23	8FF	TITUS	ALUMINUM/1" FILTER
6"X16"	EXHAUST	14X14	8FF	TITUS	ALUMINUM/1" FILTER
4"X24"		23X23	8F	TITUS	ALUMINUM
4"X24"		23X23	8F	TITUS	ALUMINUM
18"X6"	EXHAUST		63FL	TITUS	ALUMINUM
2 " X12"	EXHAUST		63FL	TITUS	ALUMINUM
18"X6"	TRANSFER		63FL	TITUS	ALUMINUM

NOTE: FURNISH AND INSTALL AN INSULATION BLANKET ON THE BACK OF ALL CEILING MOUNTED DIFFUSERS AND GRILLES.

/-14"X14" RUSKIN NMS2 NON-METALLIC BACKDRAFT DAMPER

14"X14" RUSKIN NMS2 NON-METALLIC BACKDRAFT DAMPER

\ 3



1 SEPTEMBER 26, 2024

JOB NO. 23-125

M3.1

10 OF 14

1"

SHEET NO:

HVAC SHEET NOTES

1 HOUR WALL

FIRE WALL LEGEND

OUTSIDE AIR MOTORIZED DAMPER SHALL BE 120V. NORMALLY CLOSED AND INTERLOCKED TO OPEN WHEN THE ROOM LIGHTS ARE "ON". ALL LOUVERS SHALL INCLUDE A 18" PLENUM BOX IN INTERIOR OF LOUVER. SIZE TO MATCH LOUVER WIDTH AND HEIGHT.

REFERENCE PLUMBING PLANS FOR CONDENSATE PIPING

HVAC - PLUMBING - PROCESS CONTROL RANDALL WHORTON, P.E. 25 SUMMERALL GATE ROAD PHONE: (256) 820-9897 ANNISTON, ALABAMA 36205

WHORTON ENGINEERING PROJECT NO. 24138