

PROJECT: Mt. Zion High School Athletic Fields Improvements **County Public Schools**

ADDENDUM NO.:

01

PROJECT NUMBER: 022-01063-00

DATE OF ISSUE: 12.20.2023

This addendum modifies the Contract Documents only in the manner and to the extent stated herein and shown on any accompanying drawings and will become a part of the Contract Documents. Except as specified or otherwise indicated by this addendum, all work shall be in accordance with the basic requirements of the Contract Documents.

PROPOSER SHALL ACKNOWLEDGE RECEIPT OF ADDENDUM IN THE SPACE PROVIDED ON THE

BID PROPOSAL FORM; FAILURE TO DO SO MAY CONSTITUTE AN INFORMALITY IN THE PROPOSAL.

The following clarifications, amendments, additions, revisions, changes and/or modifications shall take precedence over the drawings and specifications for the above-named project only in the amount and to the extent hereinafter specified in this addendum. Where any item called for in the specifications or indicated on the drawings is not supplemented hereby, the original requirements shall remain in effect. Where any original item is amended, voided or superseded hereby, the provision of such item not specifically amended, voided or superseded shall remain in effect.

ITEM NO. 1: Reference the **PROJECT MANUAL**

- Α. The following Specifications are hereby issued and madepart of the Proposal Documents. A copy of each is attached herewith to this Addendum:
 - 1. 321215 FULL DEPTH ASPHALT RECLAMATION
 - 2. 321813 ARTIFICIAL GRASS FIELD TURF
 - 3. 329100 SYNTHETIC TRACK SURFACING SYSTEM
 - 4. 114100 FOOD STORAGE EQUIPMENT
- ITEM NO. 2: Reference the **DRAWINGS**
 - Α. The following Drawings, dated 12.20.2023, have been revised and are hereby reissued and made part of the Proposal Documents. A copy of each is attached herewith to this Addendum:
 - 1. A0.01
 - 2. A1.12
 - 3. A1.13
 - 4. E1.00
 - 5. E6.01
 - Β. The following Drawings, dated 12.20.2023, are hereby issued and made part of the Proposal Documents. A copy of each is attached herewith to this Addendum:
 - 1. P1.14
 - 2. QF000
 - 3. QF100
 - 4. QF101
 - 5. QF102

ITEM NO. 3: QUESTIONS from Bidders:

- A. Question: Please provide a spec for track surfacing. Response: See attached section 329100.
- B. Question: Please provide a spec for metal lockers.
 Response: See attached sheet A1.12 for basis-of-design product.
- C. Question: We do not see any of the required SLBE forms in the specifications for this project.
 - Response: SLBE requirements are not included in this project.
- D. Queston: Please provide a spec for the aluminum bleachers. Response: See attached sheet A0.01 for basis-of-design product.

END OF ADDENDUM NO. 01

SECTION 114100 - FOOD STORAGE EQUIPMENT

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
 - All work included under this section is subject to Architect's provisions covering: A. Invitation to Bid, Proposal Form, Instructions to Bidders, General Conditions, and all other Supplementary General Conditions as may be added.
- 1.2 SCOPE OF WORK
 - All equipment specified to be delivered to job site, uncrated, freight prepaid, assembled Α. and set in proper area, where shown on Drawings; ready for final connections, where required, as specified in Divisions 22 0000 and 26 0000 and in this Section of Contract Documents.
- 1.3 DESCRIPTION
 - The extent of the Walk-In Cold Storage and Refrigeration Systems is shown on the Α. Drawings, Equipment Schedule, and Specifications of this Section of Contract Documents.
 - Β. The plans indicate the location of the equipment. Slight changes due to the varying dimensions of equipment and wall construction will be permitted with approval by Architect.
 - C. This typed Specification will be closely correlated with the Drawings and Schedule. Each complements the other and cross reference will be necessary to fulfill the requirements of the Specifications. All information shown on Drawings and listed in Schedules will be incorporated as part of the written Specifications.
 - D. Conflict in Plans and Specifications where changes, alterations, additions, or deductions are necessary, or where exceptions are taken, with regard to sizes, locations and other details shown on Plans shall be reported in writing for decision by the Architect.
 - E. Responsible for seeing that the equipment can be entered through openings before doors and walls are finished.
 - A competent Walk-In Equipment foreman shall be on the premises to assist in furnishing F. information to proper trades-persons on project and supervising of Walk-In Unit installation under this section.

1.4 QUALITY ASSURANCE

Permits and Certificates: All laws, codes, ordinances and regulations bearing on the Α. conduct of the work as drawn and specified to be complied, and will give all notices required. Any work upon which an Inspection Certificate by local authorities, and any governing body is required, such Inspections Certificate or certificates will be obtained and be paid for.

All accessories shall be provided, whether specified or not, with equipment in order to Β. SSOE. Inc. 11 41 00 - 1 FOODSERVICE EQUIPMENT

comply with all governing codes.

- C. Class I Panel: Manufacturer of pre-fabricated Walk-In Unit shall provide unit with approved Class I Panels. Approved manufacturer complying with Class 1 panel construction is Imperial Brown. Compliance with this test includes a full corner testing of manufacture's constructed panels.
- D. Walk-In Unit manufacturer complying with Paragraph 1.4, C, will submit Sample of Panel certification with submittals for verification.
- E. Walk-In manufacturer will have received UL Seal of Approval and Factory Mutual's test approval for low CFC foam construction, and manufacturer will submit sample of approved Certificates for verification.

1.5 REFERENCES

- A. The Drawings indicate the desired basic arrangement and dimensions of the equipment. Minor deviations may be substituted for approval provided basic requirements are met and no major rearrangement of service to the equipment is required to affect the proposed alteration; such deviations will be made without expense to the Owner.
- B. At no expense to the Architect or Owner, Operational and functional tests of the installed equipment is required. Defects or deficiencies noted as a result of tests will be corrected to the satisfaction. Consult the Mechanical and Electrical connections Drawings and their accompanying specifications to determine additional requirements for the installation of the specified Unit.
- C. Verify with Mechanical and Electrical plans for electrical voltages, cycles, phases, and special requirements before ordering equipment.

1.6 SUBMITTALS

- A. General: Refer to General Conditions, Section 01 3300 Submittal Procedures.
- B. Shop Drawings: Submit shop Drawings to the Architect for approval. Shop Drawings will show details and dimensions for installing unit on floor, where shown on Drawings. At the same time, submit data on all accessories and special items that will be provided with Walk-In Unit.
- C. Plans are generally diagrammatic, and do not show every fitting and detail. Install lines, piping, and equipment in accord with recognized good practice for an approved installation. Avoid conflict with other work and make adequate provisions for the prevention of excessive noise or vibration.
- D. Arrange and fit equipment into the available spaces to assure that working parts are accessible for service and repair.
- 1.7 HANDLING AND STORAGE
 - A. Protect metal finishes from damage during shipping, storage, handling, installation and construction of other work in the same spaces. Wrap and crate each item of equipment as needed for protection from damage.

B. Cover exposed stainless steel surfaces with self-adhesive protective paper, of a type recommended by the metal manufacturer; and do not remove until work is installed and ready for cleaning and start-up.

1.8 SCHEDULING

A. Schedules and Reports: Establish earliest and latest job site delivery dates of Owner furnished and Contractor installed items.

1.9 WARRANTIES

- A. Walk-In Cooler/Freezer Unit will be guaranteed for a period of ten years after final approval of Architect, against poor workmanship and defective materials. Any defect within this period will be corrected at no charge to Owner.
- B. Compressors and coils will have a 1 year free service on parts and labor warranty and guarantee, and an additional 4 year warranty on the compressors.
 - 1. On extended compressor warranty, only labor charges after first year shall be paid.
- C. Assign extended warranties to Owners at the end of first year, on all equipment having more than 1 year warranty from Manufacturer.

PART 2 - PRODUCTS

2.1 WALK-IN COOLER/FREEZER UNIT

- A. Furnish pre-fabricated, NSF approved metal clad Walk-In Cooler/Freezer Units. Size and shape as shown on Drawings. Unit to be 9 feet-6 inches high.
- B. Products manufactured by Thermokool, American Panel, and Bally, modified to comply with specifications, are acceptable
- C. As shown on Drawings, the Cooler/Freezer Unit shall be partitioned into compartments, size and shape as designed.

2.2 MATERIALS

- A. Walk-In floors:
 - 1. Walk-in Cooler/Freezer floor is to be installed in recess of floor in kitchen, as detailed on Drawings. Supply a vapor barrier between slab and prefab floor. Entrance doors shall be adjusted for tile and grout. Floor to be aluminum diamond tread plate.
- B. Insulation shall be of 4 inch, all-urethane foamed-in-place (Class 1) Door will have same type of insulation.
- C. Exterior shall be of stucco white aluminum. Where units are adjacent to walls or columns, there shall be provided a matching trim to close spaces between wall(s) and unit. All crevices are to be sealed with clear polysulfide sealant. Furnish a matching panel to close area between top of unit and ceiling with removable access panel for required maintenance service on top of unit.

- D. Interior walls and ceiling will be of stucco white aluminum and floor to be of aluminum diamond tread plate with radius coved corner." Ceiling to be finished with baked white polyester on panels.
- E. Door:
 - 1. Door to be 36 inches by 80-inches-high, as required to meet ADA. Doors to be hinged as shown on drawings.
 - 2. Door will be in-fitting type or flush mounted. Door to be metal clad, finished to match adjacent walls, with smooth corner seams. The bottom edge to contain an adjustable rubber wiper gasket. Door will have heater cables in door jamb to prevent condensation and frost formation. Door hinge will be self-closing type with lift-cam hinges. Door will be provided with safety release inside latch. Door to be provided with hardware for locking with padlock. Doorjamb and outer door edge surfaces shall be constructed of stainless steel. Plastic composition material shall not be accepted. Provide a minimum of three (3) hinges per door.
 - 3. Provide at each Door, 1 set of polyester reinforced swinging doors, Model No. PP-C-080-3678, manufactured of clear extruded vinyl with rounded edges, manufactured by Curtron Products a Division of TMI, LLC. Products manufactured by Kason, modified to comply with specifications are acceptable. The curtains shall be suitable for applications with temperatures as low as -40 degree F, and shall be made to properly fit over entrance door opening. Swinging doors shall be supported on sides of door opening with mounting hardware on inside of sections.
 - 4. Provide 14 inch by 14 inch heated triple pane observation window type with sealed air spaces between panes. Windows shall be removable for easy replacement. Each door shall be provided with an observation window.
 - 5. Provide door with an adjustable hydraulic door closer. Mount door closer on exterior side of door. Adjust closing speed at installation as required.
- F. Gaskets: All panel sections to be furnished with PVC compression gaskets. Tape or plain sealant not acceptable.
- G. Lights:
 - 1. Each compartment to be furnished complete with LED globe type light fixture at the door, having a shatterproof protective cover, and mounted and pre-wired to switch with pilot light in door section.
 - 2. Provide occupancy sensor that turns off lights after 15 minutes of inactivity.
 - 3. Light fixtures shall be UL listed for wet and /or damp areas and capable of withstanding temperatures as low as -40 degrees F.
 - 4. Provide additional 48-inch-long flush-mounted LED light fixtures in the quantities needed to achieve a minimum of 10-foot-candles at 30-inches above the finished floor.
 - 5. Light bulbs to be furnished and installed by the Food Service Equipment Contractor.
 - 6. Light fixtures manufactured by Component Hardware, Lithonia Lighting, Hubbell Lighting, and Kason, modified to comply with specifications, are acceptable.
- H. Provide a flush-mounted digital thermometer near the entry door on the exterior of each section. Thermometer to be a minimum of 2-1/2-inch diameter and have a rust-resistant case. Mount at eye level.

2.3 REMOTE REFRIGERATION SYSTEM

- A. Remote refrigeration system to be provided by the same manufacturer providing walk-in refrigeration units. Products manufactured by RDT, Cooltec, and Coldzone, modified to comply with specifications, are acceptable
- B. The balanced remote refrigeration system for the specified walk-in units will be capable of maintaining the required temperature for each section as follows:
 - 1. Cooler:34 degree F to 38 degrees F
 - 2. Freezer: -10 degree F to 0 degrees F
- C. Remote refrigeration system locations shown on foodservice drawings are for informational purposes only. Actual location to be coordinated and verified with architectural and/or structural drawings and site conditions.
- D. Refrigeration Piping:
 - 1. FSEC shall verify and confirm the length of refrigeration line runs between each condensing unit and evaporator coil with actual field conditions and refrigeration manufacturer prior to installation. Basis of design assumes a refrigeration line run (horizontal plus vertical) of no more than 100-feet.
 - Piping shall be dehydrated refrigeration hard copper tubing conforming to ASTM Specification B-280-83. Piping shall be brazed with silicone solder only. Connections must be brazed using silver-alloy type filler metals meeting AWS A5 8-81 classification BCuP5.
 - 3. Dry nitrogen must be purged through piping at very low pressure to prevent oxidation and scaling during brazing.
 - 4. Fittings shall be used for all ells and tees and shall conform to ANSI Standard B18.22.
 - 5. Suction lines shall be sized for a velocity of 500-700 FPM on horizontal runs. Vertical runs shall be sized for a velocity of 1,000-1,500 FPM with properly installed (shallow) "P" traps not spaced over 8'-0" apart on all tubing risers.
 - 6. Liquid lines shall be sized for a maximum 2 PSIG pressure drop.
 - 7. Pressurize and leak test entire system at not less than 100 PSIG, clean and dehydrate by maintaining a vacuum of 50 microns, or lower, for a five hour period. Add required charge of refrigerant, and oil if necessary, and test entire system for performance. Mark each system clearly as to refrigerant type usedSafety controls will include:
- E. Condensing Units:
 - 1. Provide air-cooled condensers with direct driven condenser fan arranged for horizontal airflow.
 - 2. Scroll motor compressors with built-in overload protection shall be provided.
 - 3. Provide heavy-gauge housing for outside use.
 - 4. Provide refrigerant receiver with inlet, outlet, purge, relief and charging valves.
 - 5. Provide suction and discharge line vibration eliminators.
 - 6. Provide defrost, low-ambient pressure, starting, as well as safety operating controls. Safety controls shall include:
 - a. High-pressure cut-out with manual reset.
 - b. Magnetic control for the motor-compressor with ambient compensated manual reset overloads.

- c. Automatic recycling, low-pressure cut-out switch. The low ambient control system will be fully automatic and will not require auxiliary heat or heated receivers.
- d. High temperature alarm. Each alarm is to have a dry contact for wiring to a central or remote control point.
- 7. Each condensing unit is to be supported on a metal angle iron frame constructed as part of condensing unit. Furnish a two-tier metal angle iron compressor rack sized to suit compressors and located to provide full access for maintenance.
- F. Evaporator Coils:
 - 1. Each evaporator coil will be of copper tube, aluminum-finned constructions housed in a heavy-gauge aluminum casing. Provide high efficiency and high strength fan guard. Evaporator coils to be accessed for maintenance from the front.
 - 2. Fan blades shall be one piece construction. There shall be no noticeable vibration.
 - 3. Evaporators to be compatible with refrigerant provided.
 - 4. Provide positively sloped, hinged drain pan and universal drain fitting.
 - 5. Defrost of freezer evaporator coil surfaces, drain pans, and drain lines will be accomplished by electric defrost systems. Off-cycle will be the default defrost method for coolers. Defrost to be controlled by timer mounted at each condensing unit
- G. Refrigeration systems to be provided with all required refrigerant piping, insulation, vibration eliminator, solenoid(s), dryer, suction line filter, expansion valve(s), thermostat(s), heat exchangers, and defrost timers, etc. as necessary for complete installation. Provide pump down control circuit consisting of thermostat and solenoid valve. All components including piping and insulation to be installed using accepted industry standards, manufacturer's instructions, and first-class workmanship
- H. Specialty Items:

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- Provide system with the following Specialty Items:
 - a. Refrigerant sight glass and moisture indicator.
 - b. Hermetically-sealed refrigerant-filter dehydrator.
 - c. Liquid solenoid valve.
 - d. Thermostatic expansion valve.
 - e. Heat exchanger.
 - f. Suction strainer and Armaflex insulation for suction line complete.
- 2. Condensate drain lines shall be of Type "L" copper tubing in Walk-In Unit, and directed to outside of unit, into Floor Drain, where shown on Drawings. Provide condensate drain lines directed to lowest possible level. Wrap all condensate drain lines in freezer section with electric heated cable tape.
- 3. Run pipes through walls and ceiling panels in sleeves. All refrigerator sleeves shall be furnished as part of the installation. All plugs and cut-outs shall be fully resealed.
- 4. Temperatures in refrigerated rooms will be controlled by a thermostat mounted at each evaporator unit to close the liquid solenoid valve on a fall in room temperature, for automatic recycling pumpdown and shut off of the condensing unit. The thermostat and solenoid valve circuit shall be connected to terminals in evaporator unit casing.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Provide on-site operational and functional testing of specified equipment. Testing and initial operation of this equipment will be supervised by a qualified representative of the balanced refrigeration system manufacturer. Defects or deficiencies will be corrected to the satisfaction of the Architect or Owner at the expense of the Contractor.
 - 1. Certificate shall be filed with Architects certifying that equipment is operating based on manufacturer's recommendations. Coordinate the performance of these services, and both the manufacturer's representative and Contractor shall sign certificate.
- B. On completion of installation and testing, remove all packaging and debris from site, clean all items of equipment as recommended by manufacturer and leave equipment ready for use by Owner.
- C. Refrigeration Systems package shall be set on pad located where shown on Architectural Drawings. Verify location from Drawings.
- D. Provide junction boxes, 1 for each unit section, as shown on Drawings to connect service for lights and heater cable. Project Electrician will make connections from electric panels to control panel on compressors and to respective junction boxes.
- E. Project Electrician to provide control wiring between evaporator units, compressor units, and related control items. All wiring shall be run in EMT (Electric Metallic Tubing). All wiring will be of type TW copper. Wiring and conduits sizing shall conform to the requirement of The State of Georgia Electric Code. All conduits inside of units shall be of "Seal-Tite" type.
- F. Conduits, wiring and refrigerant lines will be concealed within walls, ceilings, and floors of building.

END OF SECTION 114100

SECTION 321215 – FULL DEPTH ASPHALT RECLAMATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes
 - 1. Base course reconditioning of existing asphalt, aggregate, sand, and other materials and stabilized with Portland cement.
- B. Related Sections:
 - 1. 32 05 00 "COMMON WORKS FOR EXTERIOR IMPROVEMENTS" for graded aggregate base (GAB) construction.
 - 2. 32 12 00 "FLEXIBLE PAVING" for asphalt pavement courses, striping and pavement markings.

1.2 REFERENCE SPECIFICATIONS AND DOCUMENTS

- A. Georgia Department of Transportation (GDOT)
 - 1. Department of Transportation, State of Georgia Standard Specifications, Construction of Roads and Bridges, 2013 Edition. Unless otherwise noted, conform with GDOT Standard Specifications for testing, materials, and methods for bases and hot mix asphalt pavement. All of the provisions of GDOT Section 300 and 328 apply to this section.
- B. American Society for Testing Materials (ASTM)
 - 1. ASTM C150- Portland Cement.
 - 2. ASTM 4867- Effect of Moisture on Asphalt Concrete Paving Mixtures.

1.3 QUALITY ASSURANCE

- A. Testing Services: The Contractor will engage a qualified independent testing agency to perform material evaluation tests described in this Section.
- B. Contractor shall have a minimum of 3 years of experience with FDAR projects. Provide contact names and telephone numbers for projects used to document experience.

1.4 SITE CONDITIONS

- A. Weather Limitations:
 - 1. While pre-pulverizing may be performed at any temperature, the FDAR Portland cement amended base mixing shall not occur until insitu base temperatures are at least 46°F and rising. Air temperature shall be 41°F and rising including adjustments for windchill.

PART 2 - PRODUCTS

- 2.1 PORTLAND CEMENT
 - A. Type 1 or Type 2 Portland Cement per ASTM C150.
- 2.2 ASPHALT CEMENT
 - A. Performance graded asphalt cement: PG 67-22 in accordance with GDOT Standard Specification 820.2.01.

2.3 QUICK LIME

A. Provide pelletized quick lime per GDOT Standard Specification 882.02 when shown on the Plans or when required by the Owner's Geotechnical Engineer.

2.4 FDAR BASE COURSE MIX

- A. As the existing asphalt surface and portions of its base provide the aggregate for this procedure, their physical properties will differ depending on their location and insitu gradation. In general, the completed mix shall reasonably comply with the following:
 - 1. All pulverized material shall be thoroughly ground and pre-pulverized prior to addition of portland cement amendment,
 - 2. Addition of new materials conform to their respective areas of Georgia Standard Specification Section 800.
 - 3. The mix shall have a maximum of 5 percent retained on the 1-1/2 inch sieve size.

2.5 WATER

- A. Mix water and water used for moisture control / compaction shall be free from deleterious substances and acquired from a hydrant, stream, or lake.
- B. If hydrant water is utilized, Contractor shall secure necessary approvals and pay applicable meter fees for water useage.

2.6 EQUIPMENT

- A. All equipment necessary for the proper construction of the FDAR base course shall be on the Project and in satisfactory condition before construction will be permitted to begin. Under no circumstances will the contractor have less than the following minimum pieces of equipment for the FDAR Portland cement amended base construction:
 - 1. Pulverizer shall be a CMI RS 650 or approved equivalent with a minimum 8 ft. cutting width, 650 hp, Spreading of water, lime or cement on the pavement surface ahead of the machine may be utilized.
 - 2. Motor graders shall be of a sufficient horsepower to handle a windrow of the FDAR material, amendment distribution and its respective grading.
 - 3. At minimum, the contractor shall supply a 25 ton pneumatic roller (also sheepsfoot when mix material is > 6" in depth) and a 10 ton smooth drum roller.

- 4. A water truck having no less than 2,000 gallon capacity shall be on site at all times to provide compaction water and to maintain moist curing and handling conditions.
- 5. Flag persons and pilot vehicles shall be employed to control the flow of traffic and to provide adequate worker protection on the construction site.

PART 3 - EXECUTION

3.1 METHODS:

- A. This Specification is based on the traveling mix method. The plow and harrow mixing will not be permitted.
- B. The Geotechnical Engineer will determine whether the materials in the delineated FDAR area are suitable for use, and all materials must be approved before mixing be means of proper asphalt mix design. Supplementary aggregate and/or recycled asphalt paving (RAP) can be added if required for widening or strengthening the FDAR area if mix design permits.
- C. Materials in the FDAR area shall be used without additional measurement for payment, except the payment per square yard provided herein. If supplementary aggregate, RAP or other additives (beyond the specified Portland cement identified herein) are required for the FDAR base.

3.2 PREPARATION OF THE PAVEMENT BASE:

A. The base shall be prepared as specified in Georgia Department of Transportation Standard Specification section 300. Any remedial work required to provide a suitable pavement base per Georgia Department of Transportation section 300.04 will be determined by the Geotechnical Engineer.

3.3 PROCESSING (IN-PLACE MIXING):

- A. Supplementary Materials: Any additional materials as specified shall be placed on the FDAR area and spread uniformly to the proper width and depth to obtain the specified thickness of the finished base. No base material shall be placed on muddy or frozen subbase.
- B. Pulverization: The materials in the FDAR area shall be pulverized for the width and depth of the material to be stabilized, but this work shall be done without disturbing or damaging the underlying subgrade. During pulverization, water may be added if necessary, to assist in the process. All roots, sod and rock more than 3 inches in diameter, and all other harmful products shall be removed.
- C. Moisture Content: The moisture content of the pulverized base material shall be adjusted under the direction of the Owners Materials and Testing Engineer. The final control moisture content will be that content which produces a uniformly blended FDAR Portland cement amended base mixture with the proper amount of Total Fluids Level as per the FDAR Portland cement amended base mix design. The Contractor will maintain the proper control moisture by aeration or addition of water as necessary prior to stabilization. No separate payment will be made for adding water nor for aerating or rolling for this purpose.

D. Application of Portland Cement Amendment: After the FDAR area material has been prepulverized, provide and distribute 50 pounds of Portland cement amendment per square yard and the area re-pulverized, with moisture being added, during operation. This cement amendment amount per square yard is subject to adjustment as determined by the "Mix Design" from the testing laboratory.

3.4 PLACING:

- A. Preparing Mixture for Compaction: After FDAR, cement stabilized material has been uniformly clipped and windrowed by motor grader, it shall be laid down and shaped to the pre-determined proper line, grade and cross section for positive drainage within limits of FDAR areas. Contractor shall haul off excess FDAR material where edges are trimmed/clipped to match curb and gutter or concrete paved area elevations.
- B. Aeration: Aeration may be allowed if satisfactory compaction of the FDAR base cannot be obtained due to the moisture content of the mixture at a time of compaction. This work shall consist of loosening and turning the mixture with the motor grader, pulverizer or other equivalent equipment until the moisture content is reduced to a level that does not impede the compactive effort.
- C. Thickness of Course: The full depth of base specified shall be stabilized in one pass of the mixing equipment up to a maximum of 10 inches in depth.

3.5 COMPACTION AND FINISHING:

- A. Compaction shall begin immediately after mixing with a sheeps foot roller, or 25 ton traffic roller as necessary for initial compactive effort. The base shall be brought to line, grade and cross slope and rolled until the full thickness of the course has been compacted to a minimum of 96 percent of the laboratory compacted density as noted in the laboratory prepared mix design.
- B. Once the FDAR base has been compacted to final grades with rubber tire traffic roller, the surface shall be compacted with a steel wheel roller, beginning at the edges and working towards the center, until the surface is smooth, closely knit, free from cracks, conforming to the proper line, grade, and cross-section, within the limits specified. Defects, if there are any, shall be corrected per GA DOT Standard Specification Section 300.
- C. At all places not accessible to the roller, the required compaction shall be secured by means of mechanical tampers, as approved by the Owner's geotechnical engineer. The same density requirements as stated above apply. A prime coat is not required with FDAR cement amended base stabilization.

3.6 FINISHED SURFACE:

A. It shall be the contractor's responsibility to conduct operations in such a manner that the finished grade lines and cross sectional profile provide positive slope (drainage) to curb and gutter.

3.7 CURING:

- A. Finished portions of the FDAR base that are traveled on by equipment used in constructing an adjoining section shall be protected in such a manner as to prevent equipment or traffic from marring or damaging completed work.
- B. After completion of final finishing, the surface shall be cured by application of a bituminous or other approved sealing membrane, or by being kept continuously moist for a period of 7 days with a water spray that will not erode the surface of the FDAR base.
- C. If curing material is used, it shall be applied as soon as possible, but not later than 24 hours after completing finishing operations. The surface shall be kept continuously moist prior to application of curing material.
- D. For bituminous curing material, the FDAR base surface shall be dense, free of all loose and extraneous materials, and shall contain sufficient moisture to prevent excessive penetration of the bituminous material. The bituminous material shall be uniformly applied to the surface of the completed cement treated material. The exact rate and temperature of application for complete coverage, without undue runoff, shall be specified by the engineer.
- E. Should it be necessary for construction equipment or other traffic to use the bituminous-covered surface before the bituminous material has dried sufficiently to prevent pickup, sufficient sand cover shall be applied before such use.
- F. Sufficient protection from freezing shall be given the cement-treated material for 7 days after its construction or as approved by the engineer. Contractor assumes all materials and costs to keep FDAR base moist for a period of (7) seven days, or until the base course is applied.

3.8 TOLERANCES

A. Depth: The depth of the FDAR cement amended base for this project shall be a minimum of 6 inches. To check that the automatic sensor system on the pulverizer is functioning correctly, the actual depth of cut shall be physically measured at both ends of the pulverizing drum at least once every 500 feet along the cut length.

3.9 TESTING- QUALITY ACCEPTANCE

- A. Samples of existing pavement materials (pre-pulverized) and FDAR treatment (post pulverized) shall be taken by the Contractor and be laboratory tested for Total Asphalt Cement Content, Total Cement Content, Aggregate Gradation and Compacted Bulk Density.
- B. Pre-Testing and Mix Design: Prior to commencing the work, the Contractor shall engage an AASHTO certified (AMRL) laboratory familiar with the FDAR cement amended base stabilization process. This laboratory shall obtain representative samples of the material that will be produced during the reclamation operation to carry out the necessary testing to establish the proper "Mix Design" for the FDAR cement amended base stabilization.
- C. These tests shall include at least one sample per 1,000 square yards, randomly spaced of the following:
 - 1. Site investigation
 - 2. Existing pavement core samples and testing

- 3. Granular base samples and testing
- 4. Gradation and sieve analysis
- 5. Insitu Portland cement % content
- 6. Propose new Portland cement testing and "Job Mix Design"
- 7. Marshall Stability
- 8. At least one sample for each FDAR shall include the following tests:
- 9. Wet and Dry Tensile Strength in accordance with ASTM 4867
- 10. Tensile Strength Ratio (TSR minimum 50%)
- 3.10 MAINTENANCE AND PRESERVATION
 - A. The Contractor shall maintain the FDAR base in a smooth and acceptable condition until it is covered by other construction. Repairs shall be made whenever defects appear, as specified in GDOT Standard Specification Section 300.
 - B. The Contractor shall maintain and preserve the base until the work is completed and accepted.

END OF SECTION 321215

SECTION 321813 - ARTIFICIAL GRASS FIELD TURF

PART 1 – GENERAL

1.1 WORK INCLUDED

- A. Furnish all labor, materials, tools and equipment necessary to install all artificial grass field turf as indicated on the plans and as specified herein. The installation of all new materials shall be performed in strict accordance with the manufacturer's installation instructions and in accordance with all approved shop drawings.
- B. Perimeter edge details required for the system shall be as detailed and recommended by the Manufacturer, and as approved by the Owner. Supply and installation of these details will be under the scope of work of the artificial grass field turf Installer/Manufacturer.

1.2 REFERENCES

- A. FM P7825 Approval Guide; Factory Mutual Research Corporation; current edition
- B. ASTM Standard Test Methods:
 - 1. D1577 Standard Test Method for Linear Density of Textile Fiber
 - 2. D5848 Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Covering
 - 3. D418 Standard Test Method for Testing Pile Yarn Floor Covering Construction
 - 4. D1338 Standard Test Method for Tuft Bind of Pile Yarn Floor Coverings
 - 5. D1682 Standard Method of Test for Breaking Load and Elongation of Textile Fabrics
 - 6. D5034 Standard Test Method of Breaking Strength and Elongation of Textile Fabrics (Grab Test)
 - 7. F1015 Standard Test Method for Relative Abrasiveness of Synthetic Turf Playing Surfaces
 - 8. D4491 Standard Test Methods for Water Permeability of Geotextiles by Permittivity
 - 9. D2859 Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials
 - 10. F355 Standard Test Method for Shock-Absorbing Properties of Playing Surfaces.
 - 11. F1936 Standard Test Method for Shock-Absorbing Properties of North American Football Field Playing Systems as Measured in the Field
 - 12. D1557 Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.
- C. 2001 NCAA Football Rules and Interpretations / National High School Federation Rules and Standards

1.3 SUBMITTALS

A. Prior to the Architect approval of a specified artificial turf system, the Manufacturer shall specify in writing that their turf system does not violate any other manufacturer's patents, patents allowed or patents pending.

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- B. Submit the following with the Bid/Proposal:
 - 1. Submit two samples, 6x6 inch in size, illustrating details of finished product.
 - 2. A letter and specification sheet certifying that the products of this section meet or exceed specified requirements.
 - 3. Certified copies of independent (third-party) laboratory reports on ASTM tests as follows:
 - a. Pile Height, Face Width & Total Fabric Weight, ASTM D418 or D5848
 - b. Primary & Secondary Backing Weights, ASTM D418 or D5848
 - c. Tuft Bind, ASTM D1335
 - d. Grab Tear Strength, ASTM D1682 or D5034
 - e. Pill Burn Test ASTM D2859
 - 4. List of existing installations, including Owner representative and telephone number.
 - 5. Lists providing specific contacts and telephone numbers of the following existing installations:

a. A softball or baseball field of the exact specified material, including the infill material and fiber, in play for at least 5 years. These installations must have used the same manufacturer, product and company they are proposing for this field.

b. A list of NCAA division 1 baseball or softball fields in play for at least four seasons.

e. A list of high school football, baseball, softball, and soccer fields in play for at least four seasons

d. A list of at least of 10 fields of 65,000 sq. ft or more in the United States in the past two years with the same manufacturer, product and company, including the exact same infill system, fiber and fiber manufacturer being proposed for this field.

e. A sand/rubber infill field in play for at least 5 years in the United States. This installation must have used the same manufacturer, product and company being proposed for this field.

- 6. Resumé of Installation Supervisor who will be present on site during installation.
- 7. The Turf Contractor and the turf Manufacturer (if different from the company) shall provide a current audited company financial statement
- 8. <u>The Turf Contractor and turf Manufacturer (if different from the company) shall provide</u> <u>evidence that their turf system does not violate any other manufacturer's patents, patents</u> <u>allowed or patents pending.</u>
- 9. The Turf Contractor and the turf Manufacturer (if different from the company) shall provide a sample copy of insured, non-prorated warranty and insurance policy information.
- C. Prior to ordering of materials:
 - 1. The Contractor shall submit Shop Drawings indicating:
 - a. Field Layout to include school/district logo
 - b. Field Marking Plan and details for the specified sports; (i.e., NHF Football).
 - c. Roll/Seaming Layout
 - d. Methods of attachment, field openings and perimeter conditions.
 - 2. The turf Manufacturer must submit the fiber manufacturer's name, type of fiber and composition of

SSOE | Stevens & Wilkinson Project Number 022-01063-00 fiber.

- D. Prior to Final Acceptance, the Contractor shall submit to the Owner:
 - 1. Three (3) copies of Maintenance Manuals, which will include all necessary instructions for the proper care and preventative maintenance of the synthetic turf system, including painting and markings.
 - 2. Project Record Documents: Record actual locations of seams, drains or other pertinent information. Submit electronic documentation in latest AutoCad format.
 - 3. Warranty: Submit Manufacturer Warranty and ensure that forms have been completed in Owner's name and registered with Manufacturer.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section. The Turf Contractor and/or the turf Manufacturer:
 - 1. Must be experienced in the manufacture and installation of this specific type of synthetic infill grass system for at least 5 years with the same manufacturer, product and company they are proposing for this field. This

includes the tuft fiber, the backing, the backing coating, and the installation method

2. Must have a NCAA division 1/high school softball or baseball field in play for at least four seasons.

4. Must have a softball or baseball field of the exact specified material, including the infill material and fiber, in play for at least 5 years with the same manufacturer and company they are proposing for this field.

5. Must have a sand/rubber infill field in play for at least 5 years in the United States.

6. Must have installed a minimum of 10 fields of 65,000 sq. ft or more in the United States in the past two years with the same manufacturer, product and company, including the exact same infill system, fiber and fiber manufacturer that is being proposed for this field

- B. Installer Qualifications: Company specializing in performing the work of this section.
 - 1. The Turf Contractor must provide competent workmen skilled in this specific type of synthetic grass installation.
 - 2. The designated Supervisory Personnel on the project must be certified, in writing by the turf Manufacturer, as competent in the installation of this material, including sewing seams and proper installation of the infill mixture.
 - 3. The Manufacturer shall have a representative on site to certify the installation and Warranty compliance.
- C. Prior to the beginning of installation, the Installer of the synthetic turf shall inspect the sub-base and accept in writing the sub-base surface planarity and compaction. The Installer shall have the dimensions of the field and locations for markings measured by a registered surveyor to verify conformity to the specifications and applicable standards. A record of the finished field as-built measurements shall be made.
- D. The Turf Contractor shall provide the necessary testing data to the owner that the finished field meets the required shock attenuation, as per ASTMF1936.
- 1.5 PRE-INSTALLATION MEETING

- A. Convene two weeks before starting work of this section.
- 1.6 DELIVERY, STORAGE, AND PROTECTION
 - A. Deliver products to project site in wrapped condition.
 - B. Store products under cover and elevated above grade.

1.7 WARRANTIES

- A. See Section 01 78 00 Closeout Submittals, for additional warranty requirements.
- B. The turf Manufacturer shall provide a Warranty to the owner that covers defects in materials and workmanship of the turf for a period of 8 years from the date of Substantial Completion. The turf manufacturer must verify that their onsite representative has inspected the installation and that the work conforms to the manufacturer's requirements.
- C. The Manufacturer's Warranty shall include general wear and damage caused from UV degradation. The warranty shall specifically exclude vandalism, and acts of God beyond the control of the owner or the manufacturer.
- D. The turf Manufacturer's Warranty must be supported by a pre-paid in advance insurance policy for the full eight (8) year period.
- E. The Turf Contractor shall provide a Warranty to the owner that covers defects in the installation workmanship, and further warrant that the installation was done in accordance with both the Manufacturer's recommendations and any written directives of the Manufacturer's onsite representative.
- F. All turf warranties shall be non-prorated, limited to repair or replacement of the affected areas, at the option of the Manufacturer, and shall include all necessary materials, labor, transportation costs, etc. to complete said repairs. All warranties are contingent on the full payment by the Owner of all pertinent invoices.
- G. The artificial grass field turf must maintain an ASTM 355 G-max of between 125- 200 for the life of the Warranty.

1.8 MAINTENANCE SERVICE

A. The Turf Contractor will train the Owner's facility maintenance staff in the use of the turf Manufacturer's recommended groomer.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Approved manufacturers are as follows:
 - 1. FieldTurf International Inc.; 5211 Mitchell Bridge Road; Dalton, GA 30721;

USA; Tel: (800)724-2969

- a. Model: FieldTurf Double Play Classic for Baseball and Softball Field
- Shaw Sports Turf.; 185 South Industrial Boulevard, Calhoun, GA 30701; USA; Tel: (866)703-4004
 a. Model: Truhop 46 for Baseball and Softball Field
- AstroTurf.; 2680 Abutment Rd, Dalton, GA 30721; USA; Tel: (800)723-8873

 Model: Diamond Series RBI for Baseball and SoftballField
- 4. SporTurf.; 200 Howell Drive, Dalton, GA 30721; USA; Tel: (800)798-1056
 a. Model: Fielder's Choice for Baseball and Softball Field
- 5. Hellas.; 12710 Research Boulevard Suite 240, Austin Texas 78759; USA; Tel: (800)798-1056
 - a. Model: Major Play for Baseball and Softball Field

2.2 MATERIALS

- A. The component materials of the artificial grass field turf System consist of:
 - 1. A Carpet made of polyethylene fibers tufted into a fibrous, non-perforated, porous backing.
 - 2. An Infill that is a controlled mixture of graded sand and rubber crumb that partially covers the carpet.
 - 3. Glue, thread, paint, seaming fabric and other materials used to install and mark the artificial grass field turf.
- B. The installed artificial grass field turf shall have the following properties: <u>Standard Property</u>

Specification		
ASTM D1577	Fiber Denier	8000 nominal
ASTM D418/D5848	Pile Height	2" nominal
ASTM D418/D5848	Pile Weight	33 oz./sq. yd.
ASTM D1335	Tuft Bind	7 lbs. (without infill)
ASTM D1335	Tuft Bind	12 lbs. (with
infill) ASTM D1682/D5034	Grab Tear (width)	207 lbs/force
ASTM D1682/D5034	Grab Tear (length)	297 lbs/force ASTM
F1015	Relative Abrasiveness Index	20.2
ASTM D4491	Carpet Permeability	>30
inches/hour ASTM D2859	Flammability (Pill Burn) Pass	
ASTM F355/F1936	Impact Attenuation, Gmax	=<135 at installation
		=<200 over field life

- C. The Carpet shall consist of fibers tufted into a primary backing with a secondary backing.
 - 1. The Carpet shall be furnished in 15' wide rolls. Rolls shall be long enough to go from sideline to sideline without splicing. The perimeter white line shall be tufted into the individual sideline

SSOE | Stevens & Wilkinson Project Number 022-01063-00 rolls. Head seams, other than at sidelines, will not be acceptable

- 2. The Carpet's primary backing shall be a double-layered polypropylene fabric treated with UV inhibitors. The secondary backing shall consist of an application of porous, heat-activated urethane to permanently lock the fiber tufts in place. Perforated (with punched holes), backed carpet shall not be acceptable
- 3. The fiber shall be 8,000 denier, low friction, UV-resistant fiber measuring not less than 2 ½ inches high. The same fiber from the above listed projects (Section 1.04, art. C. 5) must be used on this project. Systems with less than a 2 ½ inch fiber and/or shock pad enhancements will not be accepted as equivalent.
- 4. The fiber tufts shall be fanned or unfolded prior to installation, rolling or spiraling is not acceptable.
- D. The Infill materials shall be approved by the Manufacturer. The Infill shall consist of a resilient layered granular system, comprising selected and graded dust-free silica sand and cryogenically hammer-milled SBR rubber crumb. Artificial Grass products without cryogenically processed rubber or a finish application of straight rubber cryogenically processed will not be acceptable. The sand component of the infill must represent a minimum of 51% or more of the total infill, by weight.
- E. Non-tufted or inlaid lines and markings shall be in laid and must be approved by the synthetic turf Manufacturer.
- F. Thread for sewing seams of turf shall be as recommended by the synthetic turf Manufacturer.
- G. Glue and seaming fabric for inlaying lines and markings shall be as recommended by the synthetic turf Manufacturer.

2.3 FIELD GROOMER

- A. Supply a field groomer, which shall include a towing mechanism compatible with a field utility vehicle.
- B. The field groomer shall be provided by turf manufacturer

PART 3 - EXECUTION

3.1 GENERAL

- A. The installation shall be performed in full compliance with approved Shop Drawings.
- B. Only trained technicians, skilled in the installation of athletic caliber synthetic turf systems working under the direct supervision of the approved installer supervisors, shall undertake any cutting, sewing, gluing, shearing, topdressing or brushing operations.
- C. The designated Supervisory personnel on the project must be certified, in writing by the turf Manufacturer, as competent in the installation of this material, including sewing seams and proper installation of the Infill mixture.
- D. All designs, markings, layouts, and materials shall conform to all currently applicable National High school federation rules and other standards that may apply to this type of synthetic grass installation.

3.2 EXAMINATION

- A. Verify that all sub-base, drainage and leveling is complete prior to installation.
- B. The surface to receive the synthetic turf shall be inspected by the Installer, and prior to the beginning of installation, the Installer must accept in writing the sub- base surface planarity and compaction. The surface must be perfectly clean as installation commences and shall be maintained in that condition throughout the process.
- C. The compaction of the aggregate base shall be 95%, according to the Modified Proctor procedure (ASTM D1557), and the surface tolerance shall not exceed 0- 1/4 inch over 10 feet and 0-1/2" from design grade.

3.3 INSTALLATION

- A. Install in accordance with Manufacturer's instructions. The Turf contractor shall strictly adhere to the installation procedures outlined under this section. Any variance from these requirements must be accepted in writing, by the Manufacturer's onsite representative, and submitted to the Architect/Owner, verifying that the changes do not in any way affect the warranty. Infill materials shall be approved by the Manufacturer and installed in accordance with the Manufacturer's standard procedures.
- B. The carpet rolls are to be installed directly over the properly prepared aggregate base. Extreme care should be taken to avoid disturbing the aggregate base, both in regard to compaction and planarity. It is suggested that a 2-5 ton static roller is on site and available to repair and properly compact any disturbed areas of the aggregate base.
- C. The full width rolls shall be laid out across the field. Turf shall be of sufficient length to permit full crossfield installation from sideline to sideline. No head or cross seams will be allowed in the main playing area between the sidelines. Utilizing standard state of the art sewing procedures each roll shall be attached to the next. When all of the rolls of the playing surface have been installed, the sideline areas shall be installed at right angles to the playing field turf.
- D. This is a 99% sewn installation. Gluing of rolls shall not be acceptable. Minimum gluing will only be permitted to repair problem areas, corner completions, and to cut in any logos or inlaid lines as required by the specifications. All seams shall be sewn using double bagger stitches and polyester thread or adhered using seaming tape and high grade adhesive (per the manufacturer's standard procedures). Seams shall be flat, tight, and permanent with no separation or fraying.
- E. Infill materials shall be applied in numerous thin lifts. The turf shall be brushed as the mixture is applied. The infill material shall be installed to a depth determined by the Manufacturer.
- F. The Infill materials shall be installed to fill the voids between the fibers and allow the fibers to remain vertical and non-directional. The Infill installation consists of a base layer of sand followed by a homogenous mixture of the sand and the cryogenically processed rubber. A final application of specifically sized cryogenically processed rubber completes the system. The Infill shall be installed to the depth of 1 ³/₄". Infill density shall consist of no more than 7 pounds of sand and at least 3 pounds of rubber per square foot. The Infill shall be placed so that there is a void of ³/₄" to the top of the fibers.
- G. Prior to the application of any line painting the turf shall be fibrillated by means of a nylon rotary brush to provide the look, feel, and safety of optimally maintained natural grass, including subtle undulations normally associated with natural grass athletic fields.
- H. Non-tufted or inlaid lines and markings shall be painted according to the recommendations of the turf Manufacturer and of the paint manufacturer. Several applications may be required.
- I. Synthetic turf shall be attached to the perimeter edge detail in accordance with the Manufacturer's standard procedures.

3.4 FIELD MARKINGS

- A. The field will have the following lines tufted or inlaid according to NCAA and/or HFHS standards:
 - 1. Baseball/Softball: as shown on the contract drawings. Color shall be white, except where noted.
 - a. Foul Lines
- B. Standards
 - 1. Standards; all lines and markings shall be to NCAA and/or NFHSS tandards.
 - 2. Team logo as determined by Owner.

3.5 CLEANING

- A. Protect installed turf from subsequent construction operations.
- B. Do not permit traffic over unprotected floor surface.
- C. Contractor shall provide the labor, supplies, and equipment as necessary for final cleaning of surfaces and installed items.
- D. All usable remnants of new material shall become the property of the Owner.
- E. The Contractor shall keep the area clean throughout the project and clear of debris.
- F. Surfaces, recesses, enclosures, etc., shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by the Owner.

END OF SECTION 321813

SECTION 32 91 00 – SYNTHETIC TRACK SURFACING SYSTEM

PART 1 – GENERAL

- 1.1 RELATED DOCUMENTS
 - A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Provide all labor, materials, equipment, supervision, and services necessary for the proper completion of all synthetic track surfacing and related work indicated on the drawings and specified herein.
- B. Contractor shall refer to the drawings for the required locations of synthetic track surfacing to be installed. All quantities and dimensions shall be field verified by the synthetic surfacing contractor.
- C. Install a porous latex and rubber synthetic track system comprised of a base layer of black latex bound SBR rubber granules topped with a colored EPDM and latex, UV resistant top coat.
- D. Layout and paint all track lines and event markings as required and specified by appropriate governing body, IAAF, NCAA or NFHS.
- E. The contractor shall coordinate the work specified with an authorized and appointed representative of the owner so as to perform the work during a period and in a manner acceptable to the owner,

1.3 CODES AND STANDARDS

- A. Applicable Publications
 - Codes and standards follow the current guidelines set forth by International Associate of Athletics Federations, (IAAF), National Collegiate Athletic Association (NCAA), or the National Federation of State High School Association (NFHS), along with the current material testing guidelines as published by the American Society of Testing and Materials (ASTM).
- B. Performance Standards
 - 1. The new synthetic track surfacing system shall exhibit the following minimum performance standards (ASTM)
 - 2. Thickness: (12-13mm) or as specified
 - 3. Shore A Hardness: 45-60 (ASTM D-2240)
 - 4. Elongation at Break: -75% (ASTM D-412)
 - 5. Compression Set Recovery: 85%-90% over 24hr period (ASTM 395-89)
 - Abrasion Resistance: 0.25 grams loss after 1000 cycles (ASTM D-501) Coefficient of Friction: Dry: 0.75-0.85, Wet: 0.70-0.75 (ASTM D-1984) Resilience : 35%-41% (ASTM D-2632)
 - 7. Tear Resistance: 45psi (ASTM D-624)

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C. BASIS of DESIGN is Sport Track ST-55

1.4 SUBMITTALS

The following submittals must be received with bid:

- 1. Standard printed specifications of the synthetic track surfacing system to be installed on this project.
- 2. An affidavit attesting that the synthetic track surfacing material to be installed meets the requirements defined by the manufacturers currently published specifications and nay modifications outlined in those technical specifications.
- 3. A synthetic track surfacing system sample, 4" x 4" in size, of the same synthetic surfacing system to be installed on this project.
- 4. An installation list of outdoor track facilities installed in the last two years using the exact synthetic track surfacing system specified herein.
- 5. Test results from an approved IAAF Testing Laboratory confirming compliance to the performance of athletic tracks test according to the IAAF.

1.5 QUALITY ASSURANCE

- A. Synthetic Track Surface construction shall be performed only by Sports Field Contractors that have had the education, experience and training along with the following qualifications will be considered:
 - 1. The synthetic surfacing contractor must be in business for five years in the installation of elastomeric latex and rubber synthetic track surfacing.
 - 2. The synthetic surfacing contractor must have installed a minimum of five outdoor track facilities using the specified system, within the last two years.
 - 3. The synthetic surfacing contractor shall be a builder member of the American Sports Builders Association.
 - 4. The contractor is required to provide documentation that shows the selected specified and installed product meets IAAF Performance Specification for Synthetic Surfaced Athletics Tracks (Outdoor) and is certified in terms of the IAAF certification system as updated to present day.
 - 5. The contractor shall also be required to have a full-time employee on staff with a "Certified Track Builder (CBT)" designation as awarded by the American Sports Builder's Association. A current CTB certification shall be included with the bid package for this project.
 - 6. The manufacturer must offer a minimum of four (4) IAAF Certified Tacks Systems.

PART 2 – PRODUCTS

2.1 PRIMERS

A. Primers shall be water-based SBR latex, specifically formulated to be compatible with the paved asphalt/concrete base and track surfacing material.

2.2 BLACK SBR GRANULES

A. The rubber granules for the base course shall be recycled SBR rubber, processed and chopped to 1-5 mm size, midcourse 1-4mm in size, containing less than 4% dust.

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2.3 COLORED EPDM GRANULES

A. The rubber granules for the structural wearing coats shall be EPDM peroxide cured, synthetic rubber containing a minimum 20% EPDM resin (1-3mm) with a specific gravity of 1.50+/- 1 g/cubic centimeters. The EPDM rubber shall be the same color as chosen by the owner for the track surface. Track surface color shall be RED

2.4 LATEX BINDER

A. A minimum 50% solids SBR latex resin used for latex track construction.

2.5 PIGMENTS

- A. Shall be ultra violet stabilized water based pigments.
- 2.6 LINE MARKING PAINT
 - A. All line and event markings shall be applied by experienced personnel utilizing an acrylic paint compatible with the synthetic track surfacing

PART 3 - EXECUTION

3.1 SUBBASE

- A. The synthetic track surfacing system shall be laid on an approved subbase. The general contractor shall provide compaction test results of 95% or greater for the installed subbase.
- B. For NCAA and IAAF certification the following criteria must be followed. The track surface, i.e. Asphalt substrate, shall have a maximum lateral slope outside to inside of 1.0% and a maximum slope of 0.1% in the running direction. The finished asphalt shall not vary under a 10' straight edge more than 1/8".
- C. It shall be the responsibility of the asphalt-paving contractor to flood the surface immediately after the asphalt is capable of handling traffic, but within 24 hours. If, after 20 minutes of drying time, there are birdbaths evident, it shall be the responsibility of the general contractor, in conjunction with the surfacing contractor, to determine the method of correction. No cold tar patching, skin patching or sand mix patching will be acceptable.
- D. Any oil spills (hydraulic, diesel, motor oil, etc) must be completely removed either by chipping out or removing and replacing with new, keyed in asphalt. The minimum depth of any asphalt replacement shall be 1 inch. The curing time for the asphalt base is 28 days. It shall be the responsibility of the surfacing contractor to determine if the asphalt substrate has cured sufficiently prior to the application of latex and rubber surfacing system.
- E. It shall be the responsibility of the general contractor to determine if the asphalt substrate meets all design specifications, i.e. Cross slopes, planarity and specific project criteria. After all the above conditions are met, the synthetic surfacing contractor must, in writing, accept the planarity of the

SSOE I Stevens & Wilkinson Project Number 022-01063-00 SYNTHETIC TRACK SURFACING SYSTEM 329100 – 3 asphalt receiving base before work can commence.

- 3.2 THICKNESS
 - A. The thickness of the Synthetic Track Surfacing System shall be 13mm, or as specified.
- 3.3 EQUIPMENT
 - A. The Synthetic Track Surfacing System components shall be processed and installed in specially designed machinery and equipment. An approved mixer tank with mechanical agitation and the capability to maintain the required pressure for spraying.
- 3.4 INSTALLATION (.92 gallons of undiluted latex, 8.5lbs SBR rubber and 6lbs EPDM colored rubber)
 - A. Prime coat of diluted latex applied at .07 gallons per square yard.
 - B. Base rubber applied and oversprayed with .15 gallons of latex per square yard
 - C. Mid course rubber applied and oversprayed with .15 gallons of latex per square yard
 - D. Mid Course rubber applied and oversprayed with .15 gallons of latex per square yard
 - E. EPDM rubber applied and oversprayed with .15 gallons of latex per square yard
 - F. EPDM rubber applied and oversprayed with .15 gallons of latex per square yard

- G. Spray applied pigmented U.V. stabilized coat with .1 gallons of latex per square yard
- H. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

3.5 SITE CONDITIONS

- A. Installation shall not take place if adjacent or concurrent construction generates excessive dust, abrasives or any other by-product that, in the opinion of the installer, would be harmful to the track material, until completion of such works.
- B. If, in the opinion of the installer of the synthetic material, the weather and/or climatic conditions are detrimental to the proper installation of the surfacing materials, work shall be delayed until conditions are acceptable. Preferred installation temperature is fifty degrees Fahrenheit and rising. Installation shall be executed only in dry conditions.
- 3.6 LINE STRIPING AND EVENT MARKING
 - A. Layout
 - 1. Line striping and event markings shall be laid out in accordance with current IAAF, NCAA or NFHS rules
 - B. Certification
 - 1. Upon completion of the installation, the owner shall be supplied with all necessary computations and drawings, as well as a letter of certification attesting to the accuracy of the markings.
- 3.7 GUARANTEE
 - A. Synthetic track surfacing system shall be fully guaranteed against faulty workmanship and material failure for a period of 3 years from the date of acceptance.
 - B. Synthetic surfacing material found to be defective as a result of faulty workmanship and/or material failure shall be replaced or repaired at not charge upon written notification within the guarantee period.

END OF SECTION 32 92 00





















TOILET ACCESSORIES SCHEDULE

SANITARY NAPKIN DISPOSAL

ADA GRAB BARS (3'-0" & 3'-6")

PAPER TOWEL DISPENSER

SOAP DISPENSER, OFCI

ELEC. HAND DRYER BABY CHANGING STATION

PIPE INSULATION

TILT MIRROR

DESCRIPTION

DOUBLE ROLL TOILET TISSUE DISPENSER

FINISH	SCHEDULE
FINISHES FO	OR ALL ATHLETIC FIELD BUILDIN
FLOOR BASE WALLS CEILING	SEALED CONCRETE RUBBER BASE EPOXY PAINT EXPOSED TO STRUCTURE, I

A1.13



4 FIELD HOUSE FIELD ELEVATION 1/8" = 1'-0"

7 FIELD HOUSE SIDE ELEVATION 1/8" = 1'-0"

ITEM #

TA-7/8

TA-9

TA-10



NGS, UNO EXPOSED TO STRUCTURE, PAINT (DRY FOG)

5



















1 SITE PLAN - ELECTRICAL E1.00 1" = 40'-0"

<u>GENERAL NOTES - SITE</u>

- COORDINATE WITH LOCAL UTILITY FOR ALL SITE SERVICE REQUIREMENTS AND EXISTING UNDERGROUND UTILITIES.
- B. ALL LIGHTING AND POWER CONDUCTORS SHALL BE INSTALLED BETWEEN 24" MINIMUM AND 36" MAXIMUM BELOW FINISHED GRADE.
- C. ALL COMMUNICATIONS CONDUIT AND CABLES SHALL BE INSTALLED 36" MINIMUM BELOW FINISHED GRADE.
- D. ALL CONDUCTORS FOR EXTERIOR LIGHTING AND POWER CIRCUITS SHALL BE #10 AWG MINIMUM.

PLAN NOTES - SITE

- 1. ROUTE OF NEW UNDERGROUND SPORTS LIGHTING CIRCUITS.
- 2. NEW LOCATION OF SPORTS LIGHTING POLE. SEE ENLARGED PLAN, SHEET E1.02, FOR ADDITIONAL INFORMATION.
- 3. DISCONNECT AND DEMOLISH EXISTING SCOREBOARD AND CIRCUITING. PROVIDE NEW CIRCUITING AS INDICATED ON PLAN.
- NEW LOCATION OF SPORTS LIGHTING POLE. SEE ENLARGED PLAN, SHEET E1.01, FOR ADDITIONAL INFORMATION.

												B	OD		
E	LAMPS _ED, 4000K	LUMENS 1829 lm	VOLTAGE 120 V	MAX VA	LED BUILDING I		DE	SCRIPTIC	N USING. F	RONZE POW	DER COAT	KENALI	ACTURER	BOD MC S711D P DB 16L40K DV	DEL
	, 100011				FINISH, EMERG	ENCY BATT	ERY BACKU	P. UL LIST	ED FOR	WET LOCATI	N.	INCON COMPAS	S	328 9 3B 8LED 4CCT CUWZ PC	
5	_ED, 4000K	4100 lm	120 V	31 VA	LED STRIP FIXT HOUSING, WHI COORDINATE N	URE, ROUN TE POWDER 10UNTING F	ID DIFFUSE / R COAT FINIS REQUIREMEN	ACRYLIC L 6H. UL LIST NTS WITH	ENS, 22- FED FOR ARCHITE	GAUGE DIE-I DAMP LOCA CTURAL PLA	Formed CRS Tion. NS.	METALUX DAYBRIT COLUMB	X E IA	4SNLED LD5 41SL LN U FSSEZ 4 40L 840 UNV E MPS4 40LW CN EDU CS	NV L840 CD1 U DIM SHC
	Project Im Energy Code Project Title: Project Type: Construction 2335 Mt Z Jonesboro,	formation Site: GA 30236	Acheck erior I	Softwa Light 2015 IECC Mt Zion Hi New Cons Owner/ Clayt 1058 Jones	are Versic ing Cor gh School Athletic truction Agent: on County Public S 5th Avenue boro. GA 30236	on 4.1.! nplia Fields chools	5.5 nce C	ontractor: oup chtree St NV	[∞]	e		Project II Energy Cod Project Title Project Type Exterior Ligh Construction 2335 Mt 2	formatio e: hting Zone	Mcheck Softw xterior Ligi n 2015 IE Mt Zion New Co 2 (Resid	CC High School At nstruction lential mixed us er/Agent: yton County Pu
	Additiona	l Efficiency	Package(s)	jones			Atlanta,	GA 30303				Jonesbord), GA 30230	o 10: Jon	esboro, GA 302
	Reduced L Allowed Ir	Required 1.01 Lighting Power,	Proposed 1.0 credit ting Power									Allowed	Exterior L	ighting Power	
			A Area Ca	tegory		Flo	B or Area (ft2)	C Allowec Watts / ff	I Allo	D owed Watts (B X C)			Area/S	Surface Category	
	1-Concession 2-Restroom A 3-Restroom A 4-Storage A1 5-Stair A101F 6-Storage A1 7-Stair A101E	ns A401 (Comm A402 (Common A403 (Common 02F (Common F (Common Spa 02B (Common Spa 3 (Common Spa	non Space Type Space Types:R Space Types:St Space Types:Stain Space Types:Stain Space Types:Stain	s:Food Prepar Restrooms) Rorage >=50 - well) torage >=50 - well)	ration) <=1000 sq.ft.) <=1000 sq.ft.)		198 164 164 81 178 81 178	1.09 0.88 0.88 0.57 0.62 0.57 0.62		216 144 144 46 110 46 110		Door A401 Door A402 Walkway N Concession Door A1016 Door A1016	(Main entry) (Other door (orth of Conce is South Wal ⁻ (Other door 3 (Other door	(not main entry)) essions (Walkway < 10 feet wic I (Illuminated area of facade wa r (not main entry)) r (not main entry))	le) Ill or surface)
	 8-Pressbox A 9-Pressbox A 10-Storage A 11-Changing 12-Dugout A2 13-Dugout A3 	103F (Commo 302 (Commo A202 (Commo 201 (Commo 301 (Common \$	n Space Types:(Space Types:St Space Types:St Space Types:Ge Space Types:Ge	Office - Enclos Office - Enclos corage >=50 - Locker Room) eneral Seating eneral Seating	ea) sed) <=1000 sq.ft.) Area) Area)		133 133 91 176 327 328	1.00 1.00 0.57 0.68 0.49 0.49		133 133 52 120 160 161		(a) Watta (b) A sup Proposec	age tradeoffs oplemental a d Exterior	s are only allowed between trad llowance equal to 600 watts ma Lighting Power A	able areas/surfac ay be applied tow
	Proposed	Interior Lig	hting Powe	r			To	tal Allowed V	Vatts =	1576		Door A401	(Main ent	ry 1 ft of door width): Tradat	ble Wattage
		Fixture ID : [Description / L	A Lamp / Watt	age Per Lamp / Ba	allast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)		LED 1: A <u>Door A402</u> LED 2: A	B4E: WALL I <u>(Other do</u> B4E: WALL I	PACK: Other: <u>or (not main entry) 1 ft of dc</u> PACK: Other:	or width): Trad
	1-Concession LED 1: SC	ons A401 (Co 45: 4FT STRIP	mmon Space [·] ² : Other:	Types:Food	Preparation)		1	3	31	93		<u>Walkway N</u> LED 3: A Concessio	lorth of Cor B4E: WALL I ps South W	ncessions (Walkway < 10 fe PACK: Other: /all (Illuminated area of fac:	eet wide 31 ft o
	LED 2: SC	45: 4FT STRIP	P: Other:	bes:Restroon	<u>ns)</u>		1	3	31	93		LED 4: A	B4E: WALL I F (Other d	PACK: Other: oor (not main entry) 1 ft of c	loor width): Tra
	LED 3: SC <u>4-Storage A</u> LED 4: SC	:45: 4FT STRIP : <u>\102F (Comm</u> :45: 4FT STRIP	?: Other: <u>on Space Typ</u> ?: Other:	es:Storage >	•=50 - <=1000 sq.f	<u>t.)</u>	1	3	31 31	93 31		LED 5: A <u>Door A101</u> LED 6: A	B4E: WALL I <u>B (Other d</u> B4E: WALL I	PACK: Other: loor (not main entry) 1 ft of c PACK: Other:	loor width): Tra
	<u>5-Stair A10</u> LED 5: SC	<u>1F (Common</u> :45: 4FT STRIP	<u>Space Types::</u> : Other:	<u>Stairwell)</u>			1	3	31	93		F	l :		- 44 41
	<u>6-Storage A</u> LED 6: SC	102B (Comm 45: 4FT STRIP	on Space Typ ?: Other:	es:Storage >	•=50 - <=1000 sq.f	<u>t.)</u>	1	1	31	31		Exterior	Lighting F	Compliance Statement	etter than co
	LED 7: SC <u>8-Pressbox</u>	245: 4FT STRIP	: Other: mon Space Ty	vpes:Office -	Enclosed)		1	1	31	31		specification designed t requireme	ons, and ot ons end ot o meet the nts listed ir	her calculations submitted 2015 IECC requirements in the Inspection Checklist.	with this permi COM <i>check</i> Ve
	LED 8: SC <u>9-Pressbox</u> LED 9: SC	245: 4FT STRIP <u>A103B (Com</u> 245: 4FT STRIP	?: Other: <u>mon Space Ty</u> ?: Other:	vpes:Office -	Enclosed)		1	2 2	31 31	62 62		Johnny Name - Tit	E. Cargo	o - Electrical Designe	er John Signature
	<u>10-Storage</u> LED 10: S	A302 (Comm C45: 4FT STRI	on Space Type P: Other:	es:Storage >	- <u>=50 - <=1000 sq.f</u> i	<u>)</u>	1	1	31	31					ŗ
	LED 11: S	<u>g A202 (Com</u> C45: 4FT STRI A201 (Commo	mon Space Ty P: Other: on Space Type	es:General S	<u>Room)</u> eating Area)		1	2	31	62					
	LED 12: S <u>13-Dugout /</u> LED 13: S	C45: 4FT STRI <u>A301 (Commo</u> C45: 4FT STRI	P: Other: on Space Type P: Other:	es:General S	eating Area)		1	3	31 31	93 93		Section # & Reg.ID	Rough	-In Electrical Inspection	Complie
	Interior Li	ahtina PAS	SES: Desig	n 45% bett	er than code			Total Propos	sed Watts =	= 868		C405.2.1 [EL15] ¹	Lighting c reduce th 50%.	controls installed to uniform e lighting load by at least	ly Complies
	Interior Li Compliance specificatio designed to	ghting Com Statement: ns, and other meet the 20	pliance Sta The proposed calculations s 15 IECC requir	tement interior light ubmitted wit rements in C	ing design represe th this permit appl OMcheck Version 4	ented in this o cation. The p 4.1.5.5 and to	document is co proposed interi comply with	onsistent wi or lighting s any applica	ith the bui systems h ble mand	lding plans, ave been atory		C405.2.1 [EL18] ¹	Occupanc required s	y sensors installed in spaces.	□Not Obse □Not Appli □Complies □Does Not □Not Obse
	requiremen Johnny I Name - Title	its listed in th E. Cargo - e	e Inspection C Electrical	Designer	- John C Signature	. Cary-			1/2023			C405.2.1, C405.2.2. 3 [EL23] ²	Independe per appro manual co visible to	ent lighting controls installe ved lighting plans and all ontrols readily accessible ar occupants.	□Not Appli □Complies □Does Not □Not Obse □Not Appli
	•		Acheck	Softw	are Versid	on 4 1	5 5					C405.2.2. 1 [EL22] ²	Automatic building li buildings.	c controls to shut off all ghting installed in all	Complies
		ln: Ener	Spec gy Code:	tion 2015 IEC	Check	list						C405.2.3 [EL16] ²	Primary si	idelighted areas are	Complies
	Requirem Text in the requireme is being cl	ents: 94.0 e "Comment ent, the user aimed. Whe	% were add s/Assumptio certifies that re compliance	aressed din ns" columr at a code re ce is itemiz	ectly in the CC is provided by t quirement will b ed in a separate	Mcheck so he user in t e met and h table, a ref	DITWARE he COMchec now that is do erence to tha	k Requirer ocumenter at table is	ments sc d, or that providec	reen. For eac an exceptio I.	h n	1, C405.2.3. 2 [EL20] ¹	controls.	spaces with day it is	
	# & Req.ID C103.2 [PR4] ¹	Plans, specifi calculations r with which co determined f	Plan Review cations, and/o provide all info propliance can or the interior	r prmation be lighting	Complies?	Requiremen	Comme t will be met. n plans/spec	ents/Assun	nptions			C405.2.3, C405.2.3. 1, C405.2.3. 3 [EL21] ¹	are equip controls.	lights and rooftop monitors ped with required lighting	
		and electrica and documer the standard provided sho lighting power bulbs and ba	I systems and ht where excep are claimed. I uld include int calculations, llasts, transfor es	equipment ptions to nformation erior , wattage of mers and	பால் Applicable							C405.2.4 [EL4] ¹	Separate specific us lighting pl	lighting control devices for ses installed per approved lans.	Complies
	C103.2 [PR8] ¹	Plans, specifi calculations p with which co	cations, and/o provide all info pmpliance can	r ormation be	Complies Does Not	Requiremen	t will be met. n plans/spec	: E1.03. F6	01			[EL8] ¹	allowed fo approved automatic	r special functions per the lighting plans and is cally controlled and	
		determined f and electrica and documer the standard provided sho lighting power	or the exterior l systems and nt where excep are claimed. I uld include ex er calculations	r lighting equipment ptions to nformation terior	□Not Observable □Not Applicable		יישיאי, אישיאי, אישייי, אישייי	1.03, EO.	~-			C405.2.5 [EL25] ^{null}	separated Automatic lighting in daylight c business of	I from general lighting. c lighting controls for exteri- istalled. Controls will be controlled, set based on operation time-of-day, or unpected lighting > 2000	UNot Appli or Complies Does Not Not Obse
	C406	bulbs and ba control devic Plans, specifi	llasts, transfor es. cations. and/o	, wailage of mers and r							_	C405.3 [EL6] ¹	Exit signs face.	do not exceed 5 watts per	Complies
		calculations r	provide all info	rmation		1									∐Not Obse

Mcheck Software Version 4.1.5.5 terior Lighting Compliance Certificate

2015 IECC Mt Zion High School Athl New Construction 2 (Residential mixed use	etic Fields area (LZ2))				
Owner/Agent: Clayton County Pub 1058 5th Avenue Jonesboro, GA 3023	lic Schools 6	Designer/Co SSOE Gro 100 Peac Ste 2500 Atlanta, C	ontractor: oup htree St NW GA 30303	I	
hting Power					
A rface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	Allowe (B)	E d Watts X C)
ot main entry)) sions (Walkway < 10 feet wide) Illuminated area of facade wall or surface) not main entry)) not main entry))	1 ft of door 1 ft of door 31 ft of 72 ft2 1 ft of door 1 ft of door	20 20 0.7 0.1 20 20	Yes Yes Yes No Yes Yes		20 20 22 7 20 20
re only allowed between tradable areas/surface wance equal to 600 watts may be applied towar .ighting Power	Total Allo s. d compliance of bo	Total Allowed Supplement	owed Watts = al Watts (b) = nd tradable a	areas/surfac	109 600 es.
A Description / Lamp / Wattage Per Lamp) / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
<u>1 ft of door width): Tradable Wattage</u> ACK: Other:		1	1	19	19
<u>(not main entry) 1 ft of door width): Tradat</u> CK: Other:	<u>ole Wattage</u>	1	1	19	19
essions (Walkway < 10 feet wide 31 ft of v ACK: Other:	valkway length):	Tradable Watta	<u>ge</u> 1	19	19
II (Illuminated area of facade wall or surfac ACK: Other:	ce 72 ft2): Non-tr	<u>adable Wattage</u> 1	1	19	19
ACK: Other:	able Wattage	1	1	19	19
ACK: Other:		1 Total Trac	1 dable Propos	19 ed Watts =	19 95
ASSES: Design 86% better than code	e				
The proposed exterior lighting design reper calculations submitted with this permit a 015 IECC requirements in COM <i>check</i> Vers	presented in this application. The ion 4.1.5.5 and t	document is co proposed exteri o comply with a	onsistent wi or lighting s ny applicat	th the build systems ha	ding plans, ive been ory

		V
n Electrical Inspection	Complies?	Comments/Assumptions
ntrols installed to uniformly lighting load by at least	□Complies □Does Not	Exception: Lighting that is related to means of egress in stairways, ramps, corridors, or emergency routes.
	□Not Observable □Not Applicable	Location on plans/spec: E1.03
sensors installed in aces.	□Complies □Does Not	Exception: Lighting that is related to means of egress in stairways, ramps, corridorsRequirement does not apply.
	□Not Observable □Not Applicable	Location on plans/spec: E1.03
It lighting controls installed ad lighting plans and all trols readily accessible and	□Complies □Does Not	Exception: Lighting that is related to means of egress in stairways, ramps, corridors, or emergency routes.
cupants.	□Not Observable □Not Applicable	Location on plans/spec: E1.03
controls to shut off all nting installed in all	□Complies □Does Not	Exception: Lighting controlled by occupancy sensors.
	□Not Observable □Not Applicable	Location on plans/spec: E1.03
nes provided with ontrols that control the ondept of general area	□Complies □Does Not	Exception: Requirement does not apply.
	□Not Observable □Not Applicable	
elighted areas are ith required lighting	□Complies □Does Not	Exception: Requirement does not apply.
	□Not Observable □Not Applicable	
aces with daylight area ghts and rooftop monitors ed with required lighting	□Complies □Does Not	Exception: Requirement does not apply.
	□Not Observable □Not Applicable	
Inting control devices for s installed per approved ns.		Requirement will be met.
	□Not Observable □Not Applicable	
nterior lighting power special functions per the phting plans and is	□Complies □Does Not	Requirement will be met.
rom general lighting.	□Not Observable □Not Applicable	
ighting controls for exterior alled. Controls will be	□Complies □Does Not	Exception: Emergency lighting normally auto controlled to of during building operation, safety requirements, or decorative as lighting
heration time-of-day, or hected lighting > 30%.	□Not Observable □Not Applicable	Location on plans/spec: E1.03
o not exceed 5 watts per	□Complies □Does Not	Exception: Requirement does not apply.
	□Not Observable	Location on plans/spec: E6.01

9/11/2023

GENERAL NOTES - LUMINAIRE SCHEDULE

- A. ALL PENDANT CABLE FEED COLOR SHALL BE SELECTED BY THE ARCHITECT. B. PROVIDE PROPER REFLECTOR ASSEMBLY SPECIFIED AND AS RECOMMENDED
- BY LUMINAIRE MANUFACTURER. C. PROVIDE LUMINAIRES WITH JOINING PLATES, END CAPS, CANOPIES,
- D. EXIT LIGHTS SHALL BE PROVIDED WITH COLOR OF LETTERS REQUIRED BY LOCAL CODE AUTHORITY. FURNISH WITH CHEVRON DIRECTIONAL INDICATORS AS INDICATED AND REQUIRED.

MOUNTING HARDWARE, ETC., AS REQUIRED FOR COMPLETE INSTALLATION.

- E. VERIFY CONSTRUCTION OF CEILINGS BEING INSTALLED AND PROVIDE THE LUMINAIRES SPECIFIED IN APPROPRIATE CONFIGURATION WITH ALL HARDWARE AND ACCESSORIES REQUIRED FOR COMPATIBLE INSTALLATION.
- F. PROVIDE DEVICES FOR SECURING LAY-IN TYPE LUMINAIRES TO CEILING GRID TO COMPLY WITH ARTICLE 410 OF THE NATIONAL ELECTRICAL CODE.
- G. FURNISH WALL/SLOT LUMINAIRE WITH NECESSARY CORNERS AND END PLATES, MOUNTING HARDWARE, ETC., FOR A COMPLETE INSTALLATION OF CONTINUOUS LIGHTED SLOT FITTING WALL TO WALL OR RUN CONTINUOUS AS SHOWN ON DRAWINGS.
- H. FURNISH LINEAR LUMINAIRES IN CONTINUOUS ROWS OR PATTERNS AS INDICATED ON DRAWINGS. PROVIDE WITH CORNER, ANGLE, AND END PIECES AS REQUIRED FOR A COMPLETE FINISHED INSTALLATION.
- I. FURNISH LUMINAIRES IN MECHANICAL SPACES COMPLETE WITH PENDANT STEMS OR CHAIN HANGERS AS REQUIRED TO MOUNT BELOW PIPING, DUCT, CONDUIT, ETC., MAINTAIN MINIMUM 7'-6"H. UNIFORM MOUNTING HEIGHT FOR ALL LUMINAIRES THROUGHOUT EACH AREA.
- J. PENDANT MOUNTED LUMINAIRES WITH AIRCRAFT CABLE SUSPENSION SYSTEMS SHALL BE FURNISHED WITH ADJUSTABLE CABLE GRIP HARDWARE. CABLE SIZE SHALL BE SELECTED BY MANUFACTURER TO PROVIDE ADEQUATE SUPPORT OF LUMINAIRE SPECIFIED.
- K. BATTERY EMERGENCY UNITS SHALL BE U.L. 924 LISTED AND PRODUCE 90 MINUTES MINIMUM ILLUMINATION.

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5. 2 [FI17] ³	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C405.4.1 [FI18] ¹	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	□Complies □Does Not □Not Observable □Not Applicable	<i>See the Interior Lighting fixture schedule for values.</i>
C405.5.1 [FI19] ¹	Exterior lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	□Complies □Does Not □Not Observable □Not Applicable	See the Exterior Lighting fixture schedule for values.
C408.2.5. 1 [FI16] ³	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.
C408.3 [FI33] ¹	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	□Complies □Does Not □Not Observable □Not Applicable	Requirement will be met.

5	

			ME	ECHANIC	AL EQU	IPMENT CO	NNECTION SCH	IEDULE	
MARK	FLA	MCA	MOCP	VOLTAGE	PHASE	CIRCUIT	WIRE & CONDUIT	DISCONNECT SIZE/TYPE	NOTES
DSR-1-1	8.8 A	11.0 A	15	208 V	1	LFA-2,4	2#12, #12G, 1/2"C	F.W.E.	
DSR-1-2	8.8 A	11.0 A	15	208 V	1	LCB-24,26	2#12, #12G, 1/2"C	F.W.E.	
DSR-1-3	8.8 A	11.0 A	15	208 V	1	LCB-8,10	2#12, #12G, 1/2"C	F.W.E.	
DSR-1-4	7.2 A	9.0 A	15	208 V	1	LDP-4,6	2#12, #12G, 1/2"C	F.W.E.	
DSS-1-1	0.8 A	1.0 A	15	208 V	1	LFA-2,4	2#12, #12G, 1/2"C	THERMAL RATED MOTOR SWITCH	
DSS-1-2	0.8 A	1.0 A	15	208 V	1	LCB-24,26	2#12, #12G, 1/2"C	THERMAL RATED MOTOR SWITCH	
DSS-1-3	0.8 A	1.0 A	15	208 V	1	LCB-8,10	2#12, #12G, 1/2"C	THERMAL RATED MOTOR SWITCH	
DSS-1-4	0.8 A	1.0 A	15	208 V	1	LDP-4,6	2#12, #12G, 1/2"C	THERMAL RATED MOTOR SWITCH	

	HEATING EQUIPMENT CONNECTION SCHEDULE												
MARK	KW	FLA	MCA	MOCP	VOLTAGE	PHASE	CIRCUIT	WIRE & CONDUIT	DISCONNECT SIZE/TYPE	NOTES			
UH-1-01	3	14.5 A	18.1 A	20	208 V	1	LFA-6,8	2#12, #12G, 1/2"C	F.W.E.				
UH-1-02	3	14.5 A	18.1 A	20	208 V	1	LCB-16,18	2#12, #12G, 1/2"C					
UH-1-03	3	14.5 A	18.1 A	20	208 V	1	LCB-12,14	2#12, #12G, 1/2"C					

	FAN EQUIPMENT CONNECTION SCHEDULE												
MARK	HP	FLA	MCA	MOCP	VOLTAGE	PHASE	CIRCUIT	WIRE & CONDUIT	DISCONNECT SIZE/TYPE	NOTES			
EF-1	1/25	0.5 A	0.6 A	15	120 V	1	LCB-1	2#12, #12G, 1/2"C					
	•		•	•									
			WA ⁻	rer hi	EATING E	EQUIPM	ENT CONNE	ECTION SCHEDU	JLE				
			1	1	1	1	1	1					
MARK	KW	FLA	MCA	MOCP	VOLTAGE	PHASE	CIRCUIT	WIRE & CONDUIT	DISCONNECT SIZE/TYPE	NOTES			
TEWH-1	4	19 A	24 A	25	208 V	1	LCB-20,22	2#10, #10G, 1/2"C	30/2/1 NONFUSED				

MECHANICAL EQUIPMENT CONNECTION SCHEDULE NOTES:

- 1. PROVIDE 120V CONNECTION FOR FACTORY MOUNTED MAINTENANCE RECEPTACLE. REFER TO ELECTRICAL POWER PLANS FOR ADDITIONAL INFORMATION. RECEPTACLE SHALL BE GFCI TYPE AND LOCATED WITHIN A WEATHERPROOF ENCLOSURE.
- 2. PROVIDE CONDUIT FROM OUTDOOR HVAC UNIT TO ASSOCIATED INDOOR HVAC UNIT WITH WIRING PER MANUFACTURER REQUIREMENTS. REFER TO SCHEDULE FOR SIZE OF CONDUIT.
- 3. PROVIDE SWITCH MATCHING ELECTRICAL CHARACTERISTICS OF EQUIPMENT. SWITCH SHALL SERVE AS DISCONNECTING MEANS AND SHALL BE MOUNTED WITHIN SIGHT OF EQUIPMENT IN ORDER TO COMPLY WITH CODE.
- 4. DISCONNECT FURNISHED WITH EQUIPMENT MFR. EC SHALL BE RESPONSIBLE FOR PROVIDING WIRE AND CONDUIT FROM THE EQUIPMENT TO THE DISCONNECT AND DISCONNECT TO THE PANELBOARD.
- 5. FAN CIRCUITRY SHALL BE ROUTED THROUGH SWITCH LOCATED IN SPACE BEING EXHAUSTED. SEE MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.

	KITCHEN EQUIPMENT CONNECTION SCHEDULE											
	MARK	DESCRIPTION	H.P.	FLA	MCA	MOCP	VOLTAGE	PHASE	CIRCUIT	WIRE & CONDUIT	DISCONNECT SIZE/TYPE	NOTES
1LL	39	WALK-IN COOLER LTS	-	12.0 A	15.0 A	15	120 V	1	(EX)L12K-1	2#12, #12G, 3/4"C	F.W.E.	
UIT C.	40	COOLER CONDENSING UNIT		7.7 A	9.6 A	15	208 V	3	(EX)L12K-4,6,8	3#12, #12G, 3/4"C	15/30/3/3R	
	40.1	COOLER EVAPORATOR COIL		1.9 A	2.4 A	15	120 V	1	(EX)L12K-3	2#12, #12G, 3/4"C	15/30/2/3R	
	41	WALK-IN FREEZER LTS	-	12.0 A	15.0 A	15	120 V	1	(EX)L12K-2	2#12, #12G, 3/4"C	F.W.E.	
	42	FREEZER CONDENSING UNIT		27.8 A	34.8 A	45	208 V	3	(EX)L12K-10,12,14	3#8, #10G, 3/4"C	45/60/3/3R	
UII'5, 	42.1a	FREEZER EVAPORATOR COIL		8.6 A	10.8 A	15	208 V	1	(EX)L12K-5,7	2#12, #12G, 3/4"C	15/30/2/3R	
	42.1b	FREEZER EVAPORATOR COIL		8.6 A	10.8 A	15	208 V	1	(EX)L12K-9,11	2#12, #12G, 3/4"C	15/30/2/3R	

	E F G	H J
FOODSERVICE PLUMBING NOTES		FOODSERVICE SPECIAL CONDITIONS NOTES
HEIGHTS, CONNECTION TYPES, POSITIONS, FIXTURE TYPES, AND LOAD FOR FOODSERVICE EQUIPMENT SPECIFIED AND SCHEDULED FOR REUSE. THIS IS INTENDED TO SHOW PLUMBING REQUIREMENTS AND APPROXIMATE ROUGH-IN Y. DO NOT USE FOR ACTUAL ROUGHING-IN. FOR FINAL ROUGH-IN LOCATIONS, ED PLANS PROVIDED BY FOODSERVICE EQUIPMENT CONTRACTOR. EMENTS INDICATED ARE TO SERVE AS A REFERENCE TO THE LICENSED ARCHITECT AND/OR ENGINEERS IN THE PREPARATION OF THEIR RESPECTIVE BID TION DOCUMENTS. NO ARCHITECTURAL OR ENGINEERING DESIGN SERVICES ARE SSUMED. SEE PLUMBING ENGINEER/ARCHITECT'S DRAWINGS FOR ADDITIONAL MENT INSTALLATION, THE FOODSERVICE EQUIPMENT CONTRACTOR SHALL CHECK IN LOCATIONS, COORDINATE FIELD CONDITIONS, AND CALL TO THE ATTENTION OF ONTRACTOR ANY DISCREPANCIES BETWEEN THE FOODSERVICE UTILITY PLANS, SPECIFIED, AND THE ROUGH-INS AS THEY OCCUR IN THE FIELD. PANCIES OCCUR, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE	 THIS ELECTRICAL PLAN AND COORDINATING SCHEDULE IS INTENDED TO SHOW ROUGH-IN LOCATIONS AND HEIGHTS, CONNECTION TYPES, POSITIONS, FIXTURE TYPES, AND LOAD REQUIREMENTS FOR FOODSERVICE EQUIPMENT SPECIFIED AND SCHEDULED FOR REUSE. THIS ELECTRICAL PLAN IS INTENDED TO SHOW ELECTRICAL REQUIREMENTS AND APPROXIMATE ROUGH-IN LOCATIONS ONLY. DO NOT USE FOR ACTUAL ROUGHING-IN. FOR FINAL ROUGH-IN LOCATIONS, SEE DIMENSIONED PLANS PROVIDED BY FOODSERVICE EQUIPMENT CONTRACTOR. UTILITY REQUIREMENTS INDICATED ARE TO SERVE AS A REFERENCE TO THE LICENSED PROFESSIONAL ARCHITECT AND/OR ENGINEERS IN THE PREPARATION OF THEIR RESPECTIVE BID AND CONSTRUCTION DOCUMENTS. NO ARCHITECTURAL OR ENGINEERING DESIGN SERVICES ARE INTENDED OR ASSUMED. SEE ELECTRICAL ENGINEER/ARCHITECT'S DRAWINGS FOR ADDITIONAL INFORMATION. PRIOR TO EQUIPMENT INSTALLATION, THE FOODSERVICE EQUIPMENT CONTRACTOR SHALL CHECK UTILITY ROUGH-IN LOCATIONS, COORDINATE FIELD CONDITIONS, AND CALL TO THE ATTENTION OF THE GENERAL CONTRACTOR ANY DISCREPANCIES BETWEEN THE FOODSERVICE UTILITY PLANS, THE EQUIPMENT SPECIFIED, AND THE ROUGH-INS AS THEY OCCUR IN THE FIELD. SHOULD DISCREPANCIES OCCUR, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE 	 THIS SPECIAL CONDITIONS PLAN AND COORDINATING INFORMATION IS INTENDED TO HIGHLIGHT ARCHITECTURAL REQUIREMENTS FOR THE KITCHEN, THE FOODSERVICE EQUIPMENT SPECIFIED, AND THE EQUIPMENT SCHEDULED FOR REUSE. THIS SPECIAL CONDITIONS PLAN IS INTENDED TO SHOW ARCHITECTURAL REQUIREMENTS AND APPROXIMATE LOCATIONS ONLY. SPECIAL REQUIREMENTS INDICATED ARE TO SERVE AS A REFERENCE TO THE LICENSED PROFESSIONAL ARCHITECT AND/OR ENGINEERS IN THE PREPARATION OF THEIR RESPECTIVE BID AND CONSTRUCTION DOCUMENTS. NO ARCHITECTURAL OR ENGINEERING DESIGN SERVICES ARE INTENDED OR ASSUMED. SEE ARCHITECT'S DRAWINGS FOR ADDITIONAL INFORMATION. PRIOR TO EQUIPMENT INSTALLATION, THE FOODSERVICE EQUIPMENT CONTRACTOR SHALL COORDINATE FIELD CONDITIONS, AND CALL TO THE ATTENTION OF THE GENERAL CONTRACTOR ANY DISCREPANCIES BETWEEN THE FOODSERVICE PLANS, THE EQUIPMENT SPECIFIED, AND THE ROUGH-INS AS THEY OCCUR IN THE FIELD. SHOULD DISCREPANCIES OCCUR, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE FOODSERVICE CONSULTANT AND/OR PROJECT ARCHITECT/ENGINEER FOR THE CONFLICT TO BE CLARIFIED IN AN OFFICIAL REQUEST FOR INFORMATION. WALL BLOCKING TO BE 3/4" FIRE RETARDANT PLYWOOD OR 16 GA. GALVANIZED METAL BY
ONSULTANT AND/OR PROJECT ARCHITECT/ENGINEER FOR THE CONFLICT TO BE OFFICIAL REQUEST FOR INFORMATION. ASED ON MANUFACTURER'S INFORMATION. ACTUAL ROUGHING-IN TO BE CODE REQUIREMENTS AND/OR MANUFACTURER'S DIRECTIONS. Y LINES AND PIPES SHALL BE INSTALLED IN A WAY THAT DOES NOT OBSTRUCT OR EANING OF FLOORS, WALLS, AND CEILING AREAS (2 INCHES OFF WALLS AND 6	 FOODSERVICE CONSULTANT AND/OR PROJECT ARCHITECT/ENGINEER FOR THE CONFLICT TO BE CLARIFIED IN AN OFFICIAL REQUEST FOR INFORMATION. ELECTRICAL LOADS ARE BASED ON MANUFACTURER'S INFORMATION. MINIMUM CIRCUIT AMPACITY AND OVERCURRENT PROTECTION TO BE DETERMINED BY CODE REQUIREMENTS AND/OR MANUFACTURER'S DIRECTIONS. EXPOSED UTILITY LINES AND PIPES SHALL BE INSTALLED IN A WAY THAT DOES NOT OBSTRUCT OR 	GENERAL CONTRACTOR.
QUIPMENT SHALL BE AGA APPROVED AND FURNISHED BY FOODSERVICE ITRACTOR WITH GAS PRESSURE REGULATORS DESIGNED TO OPERATE WITH 14" GAS PRESSURE OR LESS.	 PREVENT THE CLEANING OF FLOORS, WALLS, AND CEILING AREAS (2 INCHES OFF WALLS AND 6 INCHES MINIMUM OFF FLOORS). ELECTRICAL ENGINEER TO BE RESPONSIBLE FOR ALL CONCERNS AND ARRANGEMENTS REGARDING PENETRATIONS INTO THE FLOOR AND WALL. BUILDING OWNER TO APPROVE PRIOR TO CONCERNS AND ARRANGEMENTS 	
CONTRACTOR TO FORMISH MECHANICAL GAS SOLENOID VALVE LOOSE CONTRACTOR TO INSTALL IN GAS SUPPLY LINE, LOCATED SO AS TO SHUT OFF GAS UIPMENT WHEN ACTIVATED. NEER TO BE RESPONSIBLE FOR ALL CONCERNS AND ARRANGEMENTS REGARDING INTO THE FLOOR AND WALL. BUILDING OWNER TO APPROVE PRIOR TO	 ELECTRICAL ENGINEER TO LOCATE RECEPTACLES IN STORAGE AREA AS REQUIRED BY LOCAL BUILDING CODE. ELECTRICAL COMPONENTS MUST NOT INTERFERE WITH THE OPERATION OF FOODSERVICE EQUIPMENT IT IS THE RESPONSIBILITY OF THE ELECTRICIAN TO REVIEW THE MANUEACTURERS' INSTALLATION 	
NEER TO LOCATE AREA DRAINS AS REQUIRED FOR GENERAL CLEANING OF THE PONENTS MUST NOT INTERFERE WITH THE OPERATION OF FOODSERVICE	 THIS THE RESPONSIBILITY OF THE ELECTRICIAN TO REVIEW THE MANUFACTURERS' INSTALLATION INSTRUCTIONS FOR ALL FOODSERVICE EQUIPMENT REQUIREMENT ELECTRICAL CONNECTIONS. SOME MAY REQUIRE MULTIPLE CONNECTIONS. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING: 	
EE, PLOMBING CONTRACTOR TO INTERCONNECT DISHMACHINE WITH BOOSTER ECLAIMER AS PER MANUFACTURER'S INSTRUCTIONS. E, UTILITIES SHALL BE CONCEALED WITHIN BUILDING WALLS OR COLUMN CHASES, WALL FACE. DO NOT STUB OUT OF FLOOR AND RUN ON THE FACE OF THE WALL. POSED PIPING OR FITTINGS TO BE STAINLESS STEEL, CHROME PLATED, OR CONCEALED, MOUNTED STAINLESS STEEL CHASE. . PIPING RUNS EXTENDED TO AND CONNECTED TO EQUIPMENT ITEMS SHALL BE AT ACTICAL ELEVATION AND NOT LESS THAN 6" ABOVE THE FINISHED FLOOR (TO ANCE FOR CLEANING).	 ELECTRICAL ROUGH-IN ALL ELECTRICAL WORK, LABOR, AND MATERIAL REQUIRED TO CONNECT THIS EQUIPMENT IS TO BE FURNISHED BY ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY CALLED FOR IN FOODSERVICE DOCUMENTS. ELECTRICAL CONTRACTOR SHALL INCLUDE ROUGHING-IN TO POINTS INDICATED ON ROUGHING-IN PLANS, FINAL CONNECTIONS FROM ROUGH-IN POINTS TO EQUIPMENT REQUIRING THOSE CONNECTIONS, AND THE SUPPLYING OF ALL NECESSARY MATERIALS AND LABOR FOR THIS WORK EXCEPT AS HEREINAFTER NOTED. ELECTRICAL BUILDING SERVICES INCLUDING BUT NOT LIMITED TO CONDUIT, WIRING, LINE AND DISCONNECT SWITCHES, SAFETY CUTOFFS AND FITTINGS, CONTROL PANELS, FUSES. BOXES AND 	
BE CONCEALED IN WALLS OR COLUMN CHASES. USE LOOP VENTS FOR ISLAND LOWED BY LOCAL CODES. HROUGH EQUIPMENT SHALL NOT INTERFERE WITH THE INTENDED USE OF OR QUIPMENT. TAINS ARE BY PLUMBING TRADES. VERIFY UTILITY REQUIREMENTS WITH NEER. FUNNEL FLOOR DRAINS, FLOOR SINKS, ETC. LOCATED AT FOOD PREP SINKS, POT , AND DISHMACHINES MUST HAVE REMOVABLE BASKETS TO CATCH FOOD	 FITTINGS REQUIRED FOR COMPLETE INSTALLATION (EXCEPT INTERNAL WIRING AS SPECIFIED OR INDICATED OTHERWISE ON DRAWINGS). FINAL ELECTRICAL CONNECTIONS TO EQUIPMENT SHALL BE BY THE ELECTRICAL CONTRACTOR, INCLUDING ALL REQUIRED MATERIALS (SUCH AS LINE AND DISCONNECT SWITCHES, SAFETY CUTOUTS, CONTROL PANELS, FUSE BOXES OR OTHER ELECTRICAL CONTROLS, FITTINGS, CONDUITS AND CONNECTIONS). ITEMS NOT FURNISHED AS A STANDARD PART OF THE EQUIPMENT BY THE MANUFACTURER ARE TO BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. STARTING SWITCHES PROVIDED BY FOODSERVICE EQUIPMENT CONTRACTOR AND 	
OR TROUGH DRAINS MUST ALSO BE PROVIDED WITH REMOVABLE BASKETS AND D FLUSH WITH THE FINISHED FLOOR. NO RAISED FLOOR SINKS SHALL BE DRAINS IN FOODSERVICE AREAS TO BE RUN THROUGH GREASE TRAP UNLESS OWED BY LOCAL CODE.	 FURNISHED LOOSE AS A STANDARD BY THE EQUIPMENT MANUFACTURER ARE TO BE MOUNTED AND WIRED COMPLETE UNDER THE ELECTRICAL CONTRACT. FINAL CONNECTIONS, INCLUDING MOUNTING AND WIRING OF STARTERS AND SWITCHES FURNISHED AS PART OF THE FOODSERVICE EQUIPMENT (UNLESS OTHERWISE INDICATED ON DRAWINGS). JUNCTION BOXES, ELECTRICAL OUTLETS, COVER PLATES, SWITCHES, ETC. NOT BUILT INTO 	
ORK, LABOR, AND MATERIAL REQUIRED TO CONNECT THIS EQUIPMENT IS TO BE LUMBING CONTRACTOR UNLESS SPECIFICALLY CALLED FOR IN FOODSERVICE UMBING CONTRACTOR SHALL INCLUDE ROUGHING-IN TO POINTS INDICATED ON ANS, FINAL CONNECTIONS FROM ROUGH-IN POINTS TO EQUIPMENT REQUIRING FIONS, AND THE SUPPLYING OF ALL NECESSARY MATERIALS AND LABOR FOR THIS IS HEREINAFTER NOTED.	 FIXTURES OR EQUIPMENT. ALL RECEPTACLES, COVER PLATES, ETC. IN FOODSERVICE AREAS SHALL BE MOISTURE PROOF. ELECTRICIAN TO PROVIDE BRUSHED STAINLESS STEEL COVER PLATES AT ALL SERVICE AND CONVENIENCE OUTLETS. PLUGS AND CORDS THAT ARE NEMA RATED AND UL APPROVED FOR MANUFACTURER AND FABRICATED EQUIPMENT. SHUNT-TRIP CIRCUIT BREAKERS OR DISCONNECTS FOR FIRE SUPPRESSION SYSTEM SHUT-OFF FOR FOULPMENT BENEATH VENTULATORS AS REQUIRED BY NEPA-96 AND LOCAL STATE AND 	ABBREVIATIONS AFF ABOVE FINISHED FLOOR
JB 4" OUT OF WALLS AT HEIGHT INDICATED FROM FINISHED FLOOR TO SERVICE LINE. FLOOR ROUGH-INS TO STUB UP 3" ABOVE FINISHED FLOOR OR OR OPENINGS OR PENETRATIONS TO BE SEALED WATERTIGHT. ONS TO EQUIPMENT, INCLUDING ALL MATERIALS (STOPS, LINE STRAINERS, VES, FILTERS, TRAPS, CHECK VALVES, PIPING OF SUPPLY AND WASTE LINES SERVICE TO ROUGH-IN. TUBING, ETC.) REQUIRED FOR A COMPLETE INSTALLATION.	 NATIONAL CODES. GFI RECEPTACLES AS REQUIRED BY LOCAL, STATE, AND NATIONAL CODES. DISCONNECTS OR OTHER DEVICES AS MAY BE REQUIRED BY LOCAL, STATE, AND NATIONAL CODES. ELECTRICIAN TO PROVIDE "TOMB STONE" STYLE HIGH IMPACT POLYCARBONATE OUTLET COVER WITH HINGED BASE AND WATER PROOF GASKET AT +2" AFE PROVIDE TYPE OF OUTLET AS 	C.O. CONVENIENCE OUTLET CONN. CONNECTION CW COLD WATER
JCING AND/OR REGULATING VALVES FOR DISHWASHERS, BOOSTER HEATERS, OR NOTED IN ALL FOODSERVICE AREAS. H INDIVIDUAL SHUT-OFF VALVES AND INTERMEDIATE REGULATORS AS REQUIRED OMING BUILDING PRESSURE TO LEVEL SUITABLE FOR EQUIPMENT. OMPLETE WITH TOP GRATES AND REMOVABLE SEDIMENT BUCKETS. FIXTURES TO	SHOWN ON PLAN. UNIT SHALL HAVE A MINIMUM OF TWO 3/4" CONDUITS ENTER THROUGH THE BOTTOM OF EACH BOX. ALIGN CONDUITS PARALLEL WITH TABLE OR CABINET. WHEN APPLICABLE, THE ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT AND WIRING, INSTALL ELECTRICAL COMPONENTS (PROVIDED BY THE FOODSERVICE EQUIPMENT CONTRACTOR), AND	DIA. DIAMETER DW DIRECT WASTE
ITERINISHED FLOOR, EXCEPT AS OTHERWISE NOTED. IRECT OR INDIRECT, EXCEPT AS OTHERWISE NOTED. MINIMUM DIAMETER OF LINE DICATED ON PLAN REGARDLESS OF CONNECTION, AND SHALL BE PITCHED AINTAIN DRAIN LINES AS HIGH AS POSSIBLE (MINIMUM 6" CLEAR ABOVE FINISHED ITATION AND CLEANING. WASTE LINES SHALL HAVE ADEQUATE CLEAN-OUT R LOCAL CODES.	 INTERWIRE BETWEEN THE FOLLOWING: EXHAUST HOODS FURNISHED BY MECHANICAL CONTRACTOR WITH LIGHT FIXTURES, EMPTY CONDUIT TO JUNCTION BOX, AND PRE-WIRE PACKAGE. ELECTRICAL CONTRACTOR TO INTERCONNECT TO SWITCHES AND MAKE ALL FINAL CONNECTIONS. FIRE SUPPRESSION SYSTEM FURNISHED BY MECHANICAL CONTRACTOR WITH APPLIANCE SHUT- OFF FEATURE. ELECTRICAL CONTRACTOR TO INTERCONNECT TO SHUNT TRIPS PER 	ELEC. ELECTRICAL FD FLOOR DRAIN
N AND TERMINATING IN A P-TRAP OVER A FLOOR SINK. ALL DRAINLINES WITHIN FREEZER COMPARTMENTS. ASE INTERCEPTORS, OUTSIDE THE BUILDING WHERE POSSIBLE. INDOOR GREASE ARE TO BE RECESSED, FLUSH WITH THE TOP OF THE FINISHED FLOOR (UNLESS RWISE) AND REMOVAL OF COVER SHALL NOT INTERFERE WITH THE OPERATION E FOLUEMENT. STRICT COORDINATION WITH FOLUEMENT AND LOCAL CODES	 MANUFACTURER'S DIAGRAM SO AS TO SHUT OFF ALL EQUIPMENT UNDER HOODS WITH ACTIVATED. POWER TO ALL ELECTRICALLY OPERATED COOKING EQUIPMENT UNDER HOODS TO BE FROM PANEL WHERE MAIN BREAKER IS INTERWIRED WITH THE FIRE SUPPRESSION SYSTEM AND/OR FIRE TERMINAL BLOCK IN THE UTILITY DISTRIBUTION SYSTEM SO THAT THE POWER SHUT-OFF IS ACHIEVED UPON EITHER MANUAL OR AUTOMATIC OPERATION OF THE FIRE SUPPRESSION 	FS FLOOR SINK GPH GALLONS PER HOUR HW HOT WATER
EASE INTERCEPTOR IS TO BE SET ABOVE THE FLOOR OR UNDER EQUIPMENT. ON GAS SHUT-OFF VALVE (SOLENOID, EITHER MANUAL OR ELECTRIC) AS RE SUPPRESSION SYSTEM CONTRACTOR. ERS AS REQUIRED BY LOCAL, STATE, AND NATIONAL CODES. HOT WATER AND CONDENSATE RETURN LINES WITHIN THE FOODSERVICE AREAS.	 YSTEM. ALL INTERWIRING BY ELECTRICAL CONTRACTOR. HOOD CONTROLS AND FIRE SUPPRESSION SYSTEMS EACH REQUIRE 24-HOUR EMERGENCY ELECTRICAL SERVICE. ELECTRICAL CONTRACTOR TO PROVIDE CIRCUITS ON ROOF FOR EXHAUST/SUPPLY FANS. VERIFY UTILITIES REQUIRED WITH MECHANICAL CONTRACTOR AND LOCATION OF UNITS WITH GENERAL CONTRACTOR. FINAL CONNECTIONS BY ELECTRICAL CONTRACTOR. 	IW INDIRECT WASTE NO. NUMBER
TO BE COLOR-CODED ACCORDING TO LOCAL CODES. /ES FOR CONDENSATE RETURN LINES. IISHED AS A STANDARD PART OF THE EQUIPMENT BY THE MANUFACTURER. DED BY FOODSERVICE EQUIPMENT CONTRACTOR AND FURNISHED LOOSE AS QUIPMENT MANUFACTURERS ARE TO BE MOUNTED AND PLUMBED COMPLETE	 DISHMACHINE SHALL BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR PRE-WIRED TO INTEGRAL CONTROL PANEL AND READY FOR FINAL CONNECTION BY ELECTRICAL CONTRACTOR. DISHMACHINE SHALL BE FURNISHED WITH EXHAUST FAN CONTROL SWITCH BY FOODSERVICE EQUIPMENT CONTRACTOR. ELECTRICAL CONTRACTOR TO INTERCONNECT TO EXHAUST FAN SO THAT FAN OPERATES WHEN DISHMACHINE IS TURNED ON. 	QTYQUANTITYS.P.STATIC PRESSURE
	 DISHMACHINE SHALL BE FORNISHED WITH LIMIT SWITCH BY FOODSERVICE EQUIPMENT CONTRACTOR. ELECTRICAL CONTRACTOR TO INTERCONNECT AND MAKE FINAL CONNECTIONS. COLD STORAGE ROOMS SHALL BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR WITH PRE-WIRED LIGHT AND SWITCH AT DOOR PANEL. ELECTRICAL CONTRACTOR TO PROVIDE INTERCONNECTING WIRING TO EXTRA LIGHT FIXTURES AND MAKE FINAL CONNECTIONS. REFRIGERATION SYSTEMS SHALL BE FURNISHED AND INSTALLED BY FOODSERVICE EQUIPMENT CONTRACTOR. DEFROST CONTROL WIRING BETWEEN FREEZER CONDENSING UNIT AND EVAPORATOR COIL SHALL BE BY ELECTRICAL CONTRACTOR. FINAL ELECTRICAL DROPS AND DISCONNECTS FOR CONDENSING UNITS AND EVAPORATOR COILS SHALL BE FURNISHED BY ELECTRICAL CONTRACTOR. DISPOSERS SHALL BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR WITH SOLENOID 	TEMP. TEMPERATURE
	 VALVE AND AUTO-REVERSING CONTROL CENTER WITH MAGNETIC STARTER AND START/STOP BUTTONS. INTERWIRING AND FINAL CONNECTION BY ELECTRICAL CONTRACTOR. UTILITY DISTRIBUTION SYSTEM SHALL BE FURNISHED BY FOODSERVICE EQUIPMENT CONTRACTOR PRE-WIRED AND READY FOR FINAL CONNECTION BY ELECTRICAL CONTRACTOR. FOODSERVICE EQUIPMENT CONTRACTOR TO FURNISH CORD AND PLUG SETS FOR INSTALLATION TO EQUIPMENT BY ELECTRICAL CONTRACTOR. ANY NECESSARY INTERWIRING AND FINAL CONNECTIONS TO THE EQUIPMENT SHALL BE BY THE ELECTRICAL CONTRACTOR. 	FOODSERVICE SHEET LIST SHEET NO. SHEET NAME
		QF000FOODSERVICE GENERAL NOTESQF100FOODSERVICE WALK-IN DETAILSQF101FOODSERVICE WALK-IN DETAILS
		QF102 FOODSERVICE WALK-IN DETAILS

¹FOODSERVICE WALK-IN PLANQF1001/4" = 1'-0"

FOODSERVICE EQUIPMENT LIST					FOODSERVICE PLUMBING SCHEDULE					
ITEM NO	QTY	DESCRIPTION	MANUFACTURER	MODEL	EQUIPMENT REMARKS	ITEM NO	QTY	DESCRIPTION	INDIRECT DRAIN SIZE	PLUMBING REMARKS
1	1	WALK-IN COOLER	THERMOKOOL	CUSTOM		2.1	1	COOLER EVAPORATOR COIL	3/4"	
2	1	COOLER CONDENSING UNIT	THERMOKOOL	RFO200E4SEANT		4.1	2	FREEZER EVAPORATOR COIL	3/4"	
2.1	1	COOLER EVAPORATOR COIL	THERMOKOOL	RL6A141ADA						
3	1	WALK-IN FREEZER	THERMOKOOL	CUSTOM						
4	1	FREEZER CONDENSING UNIT	THERMOKOOL	RFOS08L4SEA						
4.1	2	FREEZER EVAPORATOR COIL	THERMOKOOL	RL6E105DDA						
5	15	COLD STORAGE SHELVING	METRO	MQ2160G				FLOPIDING LEGEN		
5.1	2	COLD STORAGE SHELVING	METRO	MQ2142G						
5.2	4	COLD STORAGE SHELVING	METRO	MQ2442G				BRAIN EINE ROOTING		
5.3	3	COLD STORAGE SHELVING	METRO	MQ2436G						
5.4	1	COLD STORAGE SHELVING	METRO	MQ2148G			\mathbb{A}	FLOOR DRAIN		
5.5	1	COLD STORAGE SHELVING	METRO	MQ2454G						
5.6	2	COLD STORAGE SHELVING	METRO	MQ2136G						
6	3	DUNNAGE RACK	CAMBRO	DRS480131	EXISTING TO BE RELOCATED					
6.1	1	DUNNAGE RACK	CAMBRO	DRS360131	EXISTING TO BE RELOCATED					
6.2	1	DUNNAGE RACK	CAMBRO	DRS300480	EXISTING TO BE RELOCATED					

	ABBREVIATIONS							
AFF	ABOVE FINISHED FLOOR	FS	FLOOR SINK					
C.O.	CONVENIENCE OUTLET	GPH	GALLONS PER HOUR					
CONN.	CONNECTION	HW	HOT WATER					
CW	COLD WATER	IW	INDIRECT WASTE					
DIA.	DIAMETER	NO.	NUMBER					
DW	DIRECT WASTE	QTY	QUANTITY					
ELEC.	ELECTRICAL	S.P.	STATIC PRESSURE					
FD	FLOOR DRAIN	TEMP.	TEMPERATURE					

2 FOODSERVICE WALK-IN PLUMBING PLAN QF100 1/4" = 1'-0"

3 FOODSERVICE WALK-IN ELECTRICAL PLAN QF100 1/4" = 1'-0"

FOODSERVICE ELECTRICAL SCHEDULE

ITEM						CONNECTION			ITEM
NO	QTY	DESCRIPTION	AMPS	VOLTS	PHASE	TYPE	ELECTRICAL AFF	ELECTRICAL REMARKS	NO
1	1	WALK-IN COOLER	15	120	1	DIRECT	120"		1
2	1	COOLER CONDENSING UNIT	9.6	208	3	DIRECT	18"		2
2.1	1	COOLER EVAPORATOR COIL	2.4	120	1	DIRECT	120"		2.1
3	1	WALK-IN FREEZER	15	120	1	DIRECT	120"		3
4	1	FREEZER CONDENSING UNIT	34.8	208	3	DIRECT	18"		4
4.1	2	FREEZER EVAPORATOR COIL	10.8	208	1	DIRECT	120"		4.1

	ELECTRICAL LEGEND							
D	JUNCTION BOX							
\$	SWITCH							
	ELECTRICAL WIRING							

IT IS THE INTENT OF THIS DRAWING TO SHOW PLUMBING CONNECTION POINTS. FOR FINAL ROUGH-IN DRAWINGS, SEE CONTRACTOR'S DETAIL SHOP DRAWINGS. ALLOWANCES SHALL BE MADE FOR TRIM, FITTINGS AND ACCESSORIES.

REMOTE REFRIGERATION CONDENSING UNITS ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY. ACTUAL LOCATION TO BE COORDINATED WITH ARCHITECTURAL PLANS AND BUILDING STRUCTURE, IN KEEPING WITH ALL REQUIREMENTS OF THE SPECIFICATIONS.

1FOODSERVICE WALK-IN SPECIAL CONDITIONS PLANQF1011/4" = 1'-0"

Α

SPECIAL CONDITIONS LEGEND

REFRIGERANT PIPING _ _ _

FLOOR DEPRESSION

2 ENLARGED WALK-IN DETAIL QF101 1/2" = 1'-0"

REFRIGERATION PIPING IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. ACTUAL LINE RUNS TO BE DETERMINED BY MANUFACTURER'S RECOMMENDATIONS, COMPRESSOR LOCATION, AND BUILDING STRUCTURE, IN KEEPING WITH ALL REQUIREMENTS OF THE SPECIFICATIONS.

4 WALK-IN DETAIL - DIAMOND ALUMINUM TREAD FLOOR QF102 NOT TO SCALE

3 CONDENSING UNIT DETAIL QF102 NOT TO SCALE

6 SHELF SPACING DETAIL QF102 NOT TO SCALE

S&W