Addendum No.2

Issue Date: Monday, October 23, 2015

ARCHITECTS
WM2A.COM

To the Contract Documents for:

Project Number:	2014-112
Facility Name:	Rosa Jackson Community Center
Project Title:	Addition & Site Work to Rosa Jackson Community Center
Client:	Macon / Bibb County Recreation Department
Facility Address:	1211 Maynard St. Macon, GA 31217

This Addendum supplements and amends the original Bidding Documents, shall be taken into account in preparing bids, and shall become a part of the Contract Documents.

The following documents are attached and are a part of and issued with this Addendum. If attachments are not as stipulated below, please notify the transmitting party promptly.

Drawings:

1. SHEET A1-1 – FLOOR PLAN – NEW WORK

In ROOM 108 MECH:
Add Note 12 in recess on north wall.

2. SHEET C3-1 – SITE LAYOUT AND PAVING PLAN
    a. Delete this sheet in its entirety and replace with Sheet C3-1, revised 10-26-15, included herewith.
3. SHEET C5-1 – SITE WATER AND SANITARY SEWER PLAN
    a. Delete this sheet in its entirety and replace with Sheet C5-1, revised 10-26-15, included herewith.
4. Sheet M101 - Mechanical New Work Plan
    a. Delete this sheet in its entirety and replace with Sheet M101, revised 10/23/2015, included herewith.
5. Sheet M102 - Mechanical New Work Roof Plan
    a. Delete this sheet in its entirety and replace with Sheet M102, revised 10/23/2015, included herewith.
6. Sheet M503 - Mechanical Details
    a. Delete this sheet in its entirety and replace with Sheet M503, revised 10/23/2015, included herewith.
7. Sheet M601 - Mechanical Legend and Schedules
    a. Delete this sheet in its entirety and replace with Sheet M601, revised 10/23/2015, included herewith.

8. Sheet E301 - Electrical New Work Low Voltage Plan

    a. Delete this sheet in its entirety and replace with Sheet E301, revised 10/23/2015, included herewith.

    b. Contractor shall submit two sets of fire alarm shop drawings/plans to Bibb County for review and approval before installing.

9. Sheet E801 - Electrical Schedules and Legend

    a. Lighting Fixture Schedule:

    "The following manufacturers are tentatively approved for the lighting fixtures: It should be noted that in the list of approvals where a manufacturer has been approved for a certain product, it is understood that the manufacturer has been approved as being capable of producing this product. This does not necessarily constitute approval of his standard product. His product must still comply with all requirements and standards of the specification and not necessarily his standard specifications.

Type	Manufacturer
F	Peerless Lighting
G	Precision Architectural Lighting

    Contractor shall note that the specific fixture furnished by each manufacturer above must conform to all requirements of the Contract Documents (drawings and specifications) and must contain all the features of the specific lighting fixtures listed on the original lighting fixture schedule. Specific fixture review and final approval will be made during the submittal review process."

    b. At Panel Schedule LGA (Section 1 of 2), Circuit HP-3, LGA-60:

        i. Change “40A/2P” circuit breaker to “50A/2P” circuit breaker.

Specifications:

1. SECTION 07 4213 – METAL WALL PANELS

Add attached “SECTION 07 4213 – METAL WALL PANELS” in its entirety.

2. SECTION 11 6623 – GYMNASIUM EQUIPMENT

Para. 2.5, D.
Delete “(9) sections” and “and (2) corner sections 12”x72” w/8” return at corners”
Substitute “(14) sections, 7 at each end”
Para. 2.5, G, 1.
Delete “Black”
Substitute “Red to mimic adjacent wall paint color.”

3. Section 23 3300 - Air Duct Accessories

On page 233300-2, paragraph 2.1.B., add "Nailor" as an acceptable manufacturer.

On page 233300-3, paragraph 2.3.B., add "Jer-Air" as an acceptable manufacturer.

4. Section 26 0500 - Common Work Results for Electrical

   On page 260500-4, paragraph 1.4.A.1., change "2011" to "2014".

5. Section 26 4113 - Lightning Protection for Structures

   On page 264113-2, add the following to paragraph 2.2.A.:

   "4. Robins Lightning, Inc.
   5. Thompson Lightning Protection Systems, Inc."

6. Section 27 0500 - Common Work Results for Communication

7. On page 270500-3, paragraph 1.4.A.1., change "2011" to "2014".

8. Section 27 5125 - Public Address System

9. On page 275125-2, paragraph 2.1.A., in the last sentence change the word "commons" to "gym".

   On page 275125-2, paragraph 2.1.F., change the model number from "SP820A-WH" to "SP860A-WH".

10. Section 28 0500 - Common Work Results for Electronic Safety and Security

    On page 280500-3, paragraph 1.4.A.1., change "2011" to "2014".

11. Section 28 1601 - Security System

    On page 281601-2, paragraph 1.4.A., in the last sentence change the word "Government's" to "Owner's".

    On page 281601-3, paragraph 1.5.E., in the last sentence change the word "Government" to "Owner".

    On page 281601-4, paragraph 2.1.H., in the first sentence change the word "Government" to "Owner".

    On page 281601-8, paragraph 3.3.D., change the word "Government" to "Owner".

a. On page 281601-9, paragraph 3.5.A.3., change the word “Government” to “Owner” in both sentences of this paragraph.

END OF ADDENDUM

SECTION 074213 - METAL WALL PANELS

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. Section Includes:

1. Concealed-fastener, lap-seam metal wall panels.
2. Metal liner panels.
3. Metal soffit panels.

1.3 DEFINITION

A. Metal Wall Panel Assembly: Metal wall panels, attachment system components, miscellaneous metal framing, thermal insulation, and accessories necessary for a complete weathertight wall system.

1.4 PERFORMANCE REQUIREMENTS

A. General Performance: Metal wall panel assemblies shall comply with performance requirements without failure due to defective manufacture, fabrication, installation, or other defects in construction.

B. Delegated Design: Design metal wall panel assembly, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

C. Air Infiltration: Air leakage through assembly of not more than **0.06 cfm/sq. ft.** of wall area when tested according to ASTM E 283 at the following test-pressure difference:

1. Test-Pressure Difference: **1.57 lbf/sq. ft**.

D. Water Penetration under Static Pressure: No water penetration when tested according to ASTM E 331 at the following test-pressure difference:

1. Test-Pressure Difference: **6.24 lbf/sq. ft**.

E. Water Penetration under Dynamic Pressure: No evidence of water leakage when tested according to AAMA 501.1 under dynamic pressure equal to 20 percent of inward-acting, wind-load design pressure of not less than **6.24 lbf/sq. ft.** and not more than 12 lbf/sq. ft. (575 Pa).

1. Water Leakage: As defined according to AAMA 501.1.
2. Water Leakage: Uncontrolled water infiltrating the system or appearing on system's normally exposed interior surfaces from sources other than condensation. Water controlled by flashing and gutters that is drained back to the exterior and cannot damage adjacent materials or finishes is not water leakage.

F. Structural Performance: Provide metal wall panel assemblies capable of withstanding the effects the following loads and stresses within limits and under conditions indicated, based on testing according to ASTM E 1592:

1. Wind Loads: Determine loads based on the following minimum design wind pressures:

   a. Uniform pressure of **20 lbf/sq. ft.**, acting inward or outward.
   b. Uniform pressure as indicated on Drawings.

2. Deflection Limits: Metal wall panel assemblies shall withstand wind loads with horizontal deflections no greater than **1/180** of the span.

G. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change (Range): **120 deg F, ambient; 180 deg F**, material surfaces.

1.5 SUBMITTALS

A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of wall panel and accessory.

B. Shop Drawings: Show fabrication and installation layouts of metal wall panels; details of edge conditions, joints, panel profiles, corners, anchorages, attachment system, trim, flashings, closures, and accessories; and special details. Distinguish between factory-, shop- and field-assembled work.

1. Accessories: Include details of the following items, at a scale of not less than 1-1/2 inches per 12 inches (1:10):

   a. Flashing and trim.
   b. Anchorage systems.

C. Samples for Initial Selection: For each type of metal wall panel indicated with factory-applied color finishes.

1. Include similar Samples of trim and accessories involving color selection.

2. Include manufacturer's color charts consisting of strips of cured sealants showing the full range of colors available for each sealant exposed to view.

D. Samples for Verification: For each type of exposed finish required, prepared on Samples of size indicated below.

1. Metal **Wall and Soffit** Panels: 12 inches (305 mm) long by actual panel width. Include fasteners, closures, and other metal wall panel accessories.
2. Trim and Closures: 12 inches (305 mm) long. Include fasteners and other exposed accessories.
3. Accessories: 12-inch- (305-mm-) long Samples for each type of accessory.

E. Delegated-Design Submittal: For metal wall panel assembly indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

F. Coordination Drawings: Exterior elevations drawn to scale and coordinating penetrations and wall-mounted items. Show the following:

1. Wall panels and attachments.
2. **Stud framing**.
3. Wall-mounted items including doors, windows, louvers, and lighting fixtures.
4. Penetrations of wall by pipes and utilities.

G. Qualification Data: For **Installer**.

H. Material Certificates: For **thermal insulation and vapor retarders**, signed by manufacturers.

I. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each product.

J. Field quality-control reports.

K. Maintenance Data: For metal wall panels to include in maintenance manuals.

L. Warranties: Sample of special warranties.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: An employer of workers trained and approved by manufacturer.

B. Testing Agency Qualifications: Qualified according to ASTM E 329 for testing indicated.

C. Source Limitations: Obtain each type of metal wall panel from single source from single manufacturer.

D. Fire-Resistance Ratings: Where indicated, provide metal wall panels identical to those of assemblies tested for fire resistance per ASTM E 119 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Indicate design designations from UL's "Fire Resistance Directory" or from the listings of another qualified testing agency.

E. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for fabrication and installation.

1. Build mockup of typical **wall** paneL**, including soffit,** as shown on Drawings; approximately 4'X8' by full thickness, including insulation, supports, attachments, and accessories.
2. Conduct water spray test of mockup of metal wall panel assembly, testing for water penetration according to AAMA 501.2.
3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
4. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver components, sheets, metal wall panels, and other manufactured items so as not to be damaged or deformed. Package metal wall panels for protection during transportation and handling.

B. Unload, store, and erect metal wall panels in a manner to prevent bending, warping, twisting, and surface damage.

C. Stack metal wall panels horizontally on platforms or pallets, covered with suitable weathertight and ventilated covering. Store metal wall panels to ensure dryness, with positive slope for drainage of water. Do not store metal wall panels in contact with other materials that might cause staining, denting, or other surface damage.

D. Retain strippable protective covering on metal wall panel for period of metal wall panel installation.

E. Protect foam-plastic insulation as follows:

1. Do not expose to sunlight, except to extent necessary for period of installation and concealment.
2. Protect against ignition at all times. Do not deliver foam-plastic insulation materials to Project site before installation time.
3. Complete installation and concealment of plastic materials as rapidly as possible in each area of construction.

1.8 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit assembly of metal wall panels to be performed according to manufacturers' written instructions and warranty requirements.

B. Field Measurements: Verify locations of structural members and wall opening dimensions by field measurements before metal wall panel fabrication, and indicate measurements on Shop Drawings.

1.9 COORDINATION

A. Coordinate metal wall panel assemblies with rain drainage work, flashing, trim, and construction of **girts, studs,** soffits, and other adjoining work to provide a leakproof, secure, and noncorrosive installation.

1.10 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal wall panel assemblies that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

   a. Structural failures including rupturing, cracking, or puncturing.
   b. Deterioration of metals and other materials beyond normal weathering.

2. Warranty Period: **Two** years from date of Substantial Completion.

B. Special Warranty on Panel Finishes: Manufacturer's standard form in which manufacturer agrees to repair finish or replace metal wall panels that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:

   a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
   b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
   c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.

2. Finish Warranty Period: **20** years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PANEL MATERIALS

A. Metallic-Coated Steel Sheet: Restricted flatness steel sheet metallic coated by the hot-dip process and prepainted by the coil-coating process to comply with ASTM A 755/A 755M.

1. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating designation; structural quality.
2. Aluminum-Zinc Alloy-Coated Steel Sheet: ASTM A 792/A 792M, Class AZ50 coating designation, Grade 40 (Class AZM150 coating designation, Grade 275); structural quality.
3. Surface: **Embossed** finish.

4. Exposed Coil-Coated Finish:

    a. 2-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    b. 3-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    c. 4-Coat Fluoropolymer: AAMA 621. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat and clear coats. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    d. Mica Fluoropolymer: AAMA 621. 2-coat fluoropolymer finish with suspended mica flakes containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    e. Metallic Fluoropolymer: AAMA 621. 3-coat fluoropolymer finish with suspended metallic flakes containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    f. FEVE Fluoropolymer: AAMA 621. 2-coat fluoropolymer finish containing 100 percent fluorinated ethylene vinyl ether resin in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    g. Siliconized-Polyester: Epoxy primer and silicone-modified, polyester-enamel topcoat; with a dry film thickness of not less than 0.2 mil (0.005 mm) for primer and 0.8 mil (0.02 mm) for topcoat.
    h. Plastisol: Epoxy primer and vinyl plastisol topcoat; with a dry film thickness of not less than 0.2 mil (0.005 mm) for primer and 3.8 mil (0.97 mm) for topcoat.

5. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).

B. Aluminum Sheet: Coil-coated sheet, ASTM B 209 (ASTM B 209M), alloy as standard with manufacturer, with temper as required to suit forming operations and structural performance required.

1. Surface: **Embossed** finish.
2. Exposed Coil-Coated Finish:

    a. 2-Coat Fluoropolymer: AAMA 620. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
    b. 3-Coat Fluoropolymer: AAMA 620. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat.

Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

c. 4-Coat Fluoropolymer: AAMA 620. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat and clear coats. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

d. Mica Fluoropolymer: AAMA 620. 2-coat fluoropolymer finish with suspended mica flakes containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

e. Metallic Fluoropolymer: AAMA 620. 3-coat fluoropolymer finish with suspended metallic flakes containing not less than 70 percent PVDF resin by weight in both color coat and clear topcoat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

f. FEVE Fluoropolymer: AAMA 620. 2-coat fluoropolymer finish containing 100 percent fluorinated ethylene vinyl ether resin in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.

g. Siliconized-Polyester: Epoxy primer and silicone-modified, polyester-enamel topcoat; with a dry film thickness of not less than 0.2 mil (0.005 mm) for primer and 0.8 mil (0.02 mm) for topcoat.

h. Plastisol: Epoxy primer and vinyl plastisol topcoat; with a dry film thickness of not less than 0.2 mil (0.005 mm) for primer and 3.8 mil (0.97 mm) for topcoat.

3. Exposed Anodized Finish:

a. Clear Anodic Finish: AAMA 611, **AA-M12C22A31, Class II, 0.010 mm** or thicker.

4. Concealed Finish: Apply pretreatment and manufacturer's standard white or light-colored acrylic or polyester backer finish consisting of prime coat and wash coat with a minimum total dry film thickness of 0.5 mil (0.013 mm).

C. Copper Sheet: ASTM B 370, cold-rolled copper sheet, H00 temper.

1. Exposed Finish: Apply the following finish, as specified or indicated on Drawings.

a. Natural finish.

b. Brushed Satin: CDA M32-06x (Mechanical Finish: directionally textured, medium satin; Coating: clear organic, air drying, as specified below):

c. Mirror Polished: CDA M22-06x (Mechanical Finish: buffed, specular; Coating: clear organic, air drying, as specified below):

1) Clear, Organic Coating: Clear, air-drying, acrylic lacquer specially developed for coating copper-alloy products, applied by air spray in two coats per manufacturer's written instructions, with interim drying, to a total thickness of 1 mil (0.025 mm).

d. Pre-patinated: ASTM B 882. Copper sheets artificially aged by chemical reaction to convert surface to inorganic crystalline structure with color range and durability of naturally-formed patina.

D. Stainless-Steel Sheet: ASTM A 240/A 240M, Type **304**, fully annealed.

1. Surface Preparation: Remove tool and die marks and stretch lines, or blend into finish.
2. Polished Finish: Grind and polish surfaces to produce uniform finish, free of cross scratches.

a. Run grain of directional finishes with long dimension of each piece.
b. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.
c. Directional Satin Finish: No. 4.

3. Bright, Cold-Rolled, Unpolished Finish: No. 2B.

E. Panel Sealants:

1. Sealant Tape: Pressure-sensitive, 100 percent solids, gray polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, nonsag, nontoxic, nonstaining tape 1/2 inch (13 mm) wide and 1/8 inch (3 mm) thick.
2. Joint Sealant: ASTM C 920; elastomeric polyurethane, polysulfide, or silicone sealant; of type, grade, class, and use classifications required to seal joints in metal wall panels and remain weathertight; and as recommended in writing by metal wall panel manufacturer.
3. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C 1311.

2.2 FIELD-INSTALLED THERMAL INSULATION

A. Refer to Division 07 Section "Thermal Insulation."

B. Unfaced, Polyisocyanurate Board Insulation: ASTM C 591, Type II, compressive strength of 35 psi (241 kPa), with maximum flame-spread index of 75 and smoke-developed index of 450.

C. Faced, Polyisocyanurate Board Insulation: ASTM C 1289, **Type II (asphalt felt or glass-fiber mat facing), Class 2 or 3, Grade 3**, with maximum flame-spread index of 75 and smoke-developed index of 450, based on tests performed on unfaced core.

D. Extruded-Polystyrene Board Insulation: ASTM C 578, Type IV, 1.60-lb/cu. ft. (26-kg/cu. m), with maximum flame-spread index of 75 and smoke-developed index of 450.

E. Molded-Polystyrene Board Insulation: ASTM C 578, **Type II, 1.35 lb/cu. ft. (22 kg/cu. m)**, with maximum flame-spread index of 75 and smoke-developed index of 450.

F. Unfaced, Glass-Fiber Board Insulation: ASTM C 612, Type IA or Types IA and IB; with maximum flame-spread index of 25 and smoke-developed index of 50, and with a nominal density of 3 lb/cu. ft. (48 kg/cu. m).

G. Mineral-Fiber-Blanket Insulation: ASTM C 665, type indicated below; consisting of fibers manufactured from **glass, slag wool, or rock wool**.

1. Type I (blankets without membrane covering), passing ASTM E 136 for combustion characteristics.
2. Type II (blankets with nonreflective membrane covering), Category 1 (membrane is a vapor retarder), Class A (membrane-faced surface with a flame-spread index of 25 or less).
3. Type III (blankets with reflective membrane covering), Category 1 (membrane is a vapor retarder), Class A (membrane-faced surface with a flame-spread index of 25 or less).

H. Metal Building Insulation: **ASTM C 991, Type II**, glass-fiber-blanket insulation; 0.5-lb/cu. ft. (8-kg/cu. m) density; 2-inch- (50-mm-) wide, continuous, vapor-tight edge tabs; and with a flame-spread index of 25 or less.

1. Vapor-Retarder Facing: ASTM C 1136, with permeance not greater than 0.02 perm (1.15 ng/Pa x s x sq. m) when tested according to ASTM E 96, Desiccant Method:

   a. Composition: **Vinyl faced, scrim reinforced, and polyester backing**.

2. Insulation Retainer Strips: 0.019-inch- (0.48-mm-) thick, formed galvanized steel or PVC retainer clips colored to match insulation facing.

2.3 MISCELLANEOUS METAL FRAMING

A. Miscellaneous Metal Framing, General: ASTM C 645, cold-formed metallic-coated steel sheet, **ASTM A 653/A 653M, G40 (Z120) hot-dip galvanized** or coating with equivalent corrosion resistance unless otherwise indicated.

B. Subgirts: Manufacturer's standard C- or Z-shaped sections, 0.064-inch (1.63-mm) nominal thickness.

C. Zee Clips: 0.079-inch (2.01-mm) nominal thickness.

D. Base or Sill **Channels**: 0.079-inch (2.01-mm) nominal thickness.

E. Hat-Shaped, Rigid Furring Channels:

1. Nominal Thickness: **0.040 inch**.
2. Depth: **1-1/2 inches**.

F. Cold-Rolled Furring Channels: Minimum 1/2-inch- (13-mm-) wide flange.

1. Nominal Thickness: **As indicated**.
2. Depth: **3/4 inch** .
3. Furring Brackets: Adjustable, corrugated-edge type of steel sheet with 0.040-inch (1.02-mm) nominal thickness.
4. Tie Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.062-inch- (1.57-mm-) diameter wire, or double strand of 0.048-inch- (1.22-mm-) diameter wire.

G. Z-Shaped Furring: With slotted or nonslotted web, face flange of 1-1/4 inches (32 mm), wall attachment flange of 7/8 inch (22 mm), and depth required to fit insulation thickness indicated.

1. Nominal Thickness: **0.025 inch (0.64 mm)**.

H. Fasteners for Miscellaneous Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten miscellaneous metal framing members to substrates.

2.4 MISCELLANEOUS MATERIALS

A. Panel Fasteners: Self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs, and other suitable fasteners designed to withstand design loads. Provide exposed fasteners with heads matching color of metal wall panels by means of plastic caps or factory-applied coating. Provide EPDM, PVC, or neoprene sealing washers.

2.5 EXPOSED-FASTENER, LAP-SEAM METAL WALL PANELS

A. General: Provide factory-formed metal wall panels designed to be field assembled by lapping side edges of adjacent panels and mechanically attaching panels to supports using exposed fasteners in side laps. Include accessories required for weathertight installation.

B. Corrugated-Profile, Exposed-Fastener Metal Wall Panels <**Insert drawing designation**>: Formed with alternating curved ribs spaced at 2.67 inches (68 mm) o.c. across width of panel.

1. Manufacturers: Subject to compliance with requirements, **provide products by one of the following**:
2. Basis-of-Design Product: Subject to compliance with requirements, provide **product indicated on Drawings** or comparable product by one of the following:

a. AEP-Span.
b. Alcoa Architectural Products (USA).
c. MBCI; Div. of NCI Building Systems.
d. Metal Sales Manufacturing Corporation.

3. Material: Zinc-coated (galvanized) steel sheet, **0.040-inch** nominal thickness.

a. Exterior Finish: **3-coat fluoropolymer**.
b. Color: **As indicated by manufacturer's designations**.

4. Material: Aluminum-zinc alloy-coated steel sheet, **0.040-inch** nominal thickness.

a. Exterior Finish: **3-coat fluoropolymer**.
b. Color: **As indicated by manufacturer's designations**.

5. Material: Aluminum sheet, **0.040 inch** thick.

a. Exterior Finish: **3-coat fluoropolymer**.
b. Color: **As indicated by manufacturer's designations**.

6. Panel Coverage: **45.3 inches**.
7. Panel Height: **0.875 inch**.

C. Vee-Rib-Profile, Exposed-Fastener Metal Wall Panels <**Insert drawing designation**>: Formed with raised, V-shaped ribs and recesses that are approximately same size, evenly spaced across panel width, and with rib/recess sides angled at approximately 45 degrees.

1. Manufacturers: Subject to compliance with requirements, [**provide products by one of the following**] [**available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following**]:
2. Basis-of-Design Product: Subject to compliance with requirements, provide [**product indicated on Drawings**] <**Insert manufacturer's name; product name or designation**> or comparable product by one of the following:

    a. AEP-Span.
    b. Alcoa Architectural Products (USA)
    c. MBCI; Div. of NCI Building Systems
    d. Metal Sales Manufacturing Corporation.

3. Material: Zinc-coated (galvanized) steel sheet, **0.064-inch** nominal thickness.

    a. Exterior Finish: **3-coat fluoropolymer**.
    b. Color: **As indicated by manufacturer's designations**] [**Match Architect's samples**.

4. Material: Aluminum-zinc alloy-coated steel sheet, **0.064-inch** nominal thickness.

    a. Exterior Finish: **3-coat fluoropolymer**.
    b. Color: **As indicated by manufacturer's designations**.

5. Material: Aluminum sheet, **0.050 inch** thick.

    a. Exterior Finish: **3-coat fluoropolymer**.
    b. Color: **As indicated by manufacturer's designations**.

6. Rib Spacing: **5.3 inches (135 mm)** o.c.
7. Panel Coverage: **40 inches**.
8. Panel Height: **3.0 inches**.

D. Box-Rib-Profile, Exposed-Fastener Metal Wall Panels <**Insert drawing designation**>: Formed with raised, box-shaped ribs, evenly spaced across panel width, and with rib/recess sides angled 60 degrees or more.

1. Manufacturers: Subject to compliance with requirements, **provide products by one of the following**:
2. Basis-of-Design Product: Subject to compliance with requirements, provide **product indicated on Drawings** or comparable product by one of the following:

    a. AEP-Span.
    b. Alcoa Architectural Products (USA
    c. MBCI; Div. of NCI Building Systems.

d. Metal Sales Manufacturing Corporation.

3. Material: Zinc-coated (galvanized) steel sheet, [**0.022-inch (0.56-mm)**] [**0.028-inch (0.71-mm)**] [**0.034-inch (0.86-mm)**] [**0.040-inch (1.02-mm)**] [**0.052-inch (1.32-mm)**] nominal thickness.

   a. Exterior Finish**3-coat fluoropolymer**.
   b. Color: **As indicated by manufacturer's designations**.

4. Material: Aluminum-zinc alloy-coated steel sheet, **0.052-inch (1.32-mm)**]nominal thickness.

   a. Exterior Finish: **3-coat fluoropolymer**.
   b. Color: **As indicated by manufacturer's designations**.

5. Rib Spacing: **6.0 inches** o.c.
6. Panel Coverage: **36 inches**.
7. Panel Height: **2.0 inches**.

2.6 CONCEALED-FASTENER, LAP-SEAM METAL WALL PANELS

A. General: Provide factory-formed metal wall panels designed to be field assembled by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners **and factory-applied sealant** in side laps. Include accessories required for weathertight installation.

B. Flush-Profile, Concealed-Fastener Metal Wall Panel: Formed with vertical panel edges and **intermediate stiffening ribs symmetrically spaced** between panel edges; with flush joint between panels.

1. Manufacturers: Subject to compliance with requirements, **provide products by one of the following**:

   a. AEP-Span.
   b. Alcoa Architectural Products (USA).
   c. MBCI; Div. of NCI Building Systems.
   d. Petersen Aluminum Corporation.

2. Material: Zinc-coated (galvanized) steel sheet: **0.052-inch** nominal thickness.

   a. Exterior Finish: **3-coat fluoropolymer**.
   b. Color: **As indicated by manufacturer's designations**.

3. Material: Aluminum-zinc alloy-coated steel sheet, [**0.052-inch** nominal thickness.

   a. Exterior Finish: **3-coat fluoropolymer**.
   b. Color: **As indicated by manufacturer's designations**.

4. Material: Aluminum sheet, **0.050 inch** thick.

   a. Exterior Finish: **3-coat fluoropolymer** >.

b. Color: **As indicated by manufacturer's designations**.

5. Panel Coverage: **12 inches (305 mm)**.
6. Panel Height: **1.5 inches**.

C. Curved-Rib-Profile, Concealed-Fastener Metal Wall Panels <**Insert drawing designation**>: Formed with raised, curved-side major ribs and flat pan between major ribs; with reveal joint between panels.

1. Manufacturers: Subject to compliance with requirements, **provide products by one of the following**:
2. Basis-of-Design Product: Subject to compliance with requirements, provide **product indicated on Drawings** or comparable product by one of the following:

a. Alcoa Architectural Products (USA).
b. ATAS International, Inc.
c. Metecno-Morin.

3. Material: Zinc-coated (galvanized) steel sheet, **0.052-in** nominal thickness.

a. Exterior Finish: **3-coat fluoropolymer**.
b. Color: **As indicated by manufacturer's designations**.

2.7 METAL SOFFIT PANELS

A. General: Provide factory-formed metal soffit panels designed to be installed by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners **and factory-applied sealant** in side laps. Include accessories required for weathertight installation.

B. Metal Soffit Panels: Match profile and material of metal wall panels.

1. Finish: **As indicated on Drawings**.
2. Sealant: Factory applied within interlocking joint. Not all manufacturers offer perforated panels; verify availability.

3. Material: Aluminum sheet, **0.032 inch** thick.

a. Exterior Finish: **3-coat fluoropolymer**
b. Color: **Match finish and color of metal wall panels**.

4. Panel Coverage: **14 inches**.
5. Panel Height: **0.625 inch**.

2.8 ACCESSORIES

A. Wall Panel Accessories: Provide components required for a complete metal wall panel assembly including trim, copings, fasciae, mullions, sills, corner units, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal wall panels, unless otherwise indicated.

1. Closures: Provide closures at eaves and rakes, fabricated of same metal as metal wall panels.
2. Backing Plates: Provide metal backing plates at panel end splices, fabricated from material recommended by manufacturer.
3. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch- (25-mm-) thick, flexible closure strips; cut or premolded to match metal wall panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

B. Flashing and Trim: Formed from 0.018-inch (0.46-mm) minimum thickness, zinc-coated (galvanized) steel sheet or aluminum-zinc alloy-coated steel sheet prepainted with coil coating. Provide flashing and trim as required to seal against weather and to provide finished appearance. Locations include, but are not limited to, bases, drips, sills, jambs, corners, endwalls, framed openings, rakes, fasciae, parapet caps, soffits, reveals, and fillers. Finish flashing and trim with same finish system as adjacent metal wall panels.

2.9 FABRICATION

A. General: Fabricate and finish metal wall panels and accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.

B. Fabricate metal wall panels in a manner that eliminates condensation on interior side of panel and with joints between panels designed to form weathertight seals.

C. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.

D. Fabricate metal wall panel joints with factory-installed captive gaskets or separator strips that provide a tight seal and prevent metal-to-metal contact, and that will minimize noise from movements within panel assembly.

E. Sheet Metal Accessories: Fabricate flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of item indicated.

1. Form exposed sheet metal accessories that are without excessive oil canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.
2. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints for additional strength.
3. Seams for Other Than Aluminum: Fabricate nonmoving seams in accessories with flat-lock seams. Tin edges to be seamed, form seams, and solder.
4. Sealed Joints: Form nonexpansion but movable joints in metal to accommodate elastomeric sealant to comply with SMACNA standards.
5. Conceal fasteners and expansion provisions where possible. Exposed fasteners are not allowed on faces of accessories exposed to view.
6. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal recommended by metal wall panel manufacturer.

a. Size: As recommended by SMACNA's "Architectural Sheet Metal Manual" or metal wall panel manufacturer for application but not less than thickness of metal being secured.

2.10 GENERAL FINISH REQUIREMENTS

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, metal wall panel supports, and other conditions affecting performance of work.

1. Examine wall framing to verify that girts, angles, channels, studs, and other structural panel support members and anchorage have been installed within alignment tolerances required by metal wall panel manufacturer.
2. Examine wall sheathing to verify that sheathing joints are supported by framing or blocking and that installation is within flatness tolerances required by metal wall panel manufacturer.
3. Verify that weather-resistant sheathing paper has been installed over sheathing or backing substrate to prevent air infiltration or water penetration.
4. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of work.

B. Examine roughing-in for components and systems penetrating metal wall panels to verify actual locations of penetrations relative to seam locations of metal wall panels before metal wall panel installation.

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

3.2 PREPARATION

A. Miscellaneous Framing: Install subgirts, base angles, sills, furring, and other miscellaneous wall panel support members and anchorages according to ASTM C 754 and metal wall panel manufacturer's written recommendations.

1. Soffit Framing: Wire-tie **or clip** furring channels to supports**, as required to comply with requirements for assemblies indicated**.

3.3 THERMAL INSULATION INSTALLATION

A. Board Insulation: Extend insulation in thickness indicated to cover entire wall. Comply with installation requirements in Division 07 Section "Thermal Insulation."

1. Erect insulation horizontally and hold in place with Z-shaped furring members spaced 24 inches (610 mm) o.c. Attach furring members to substrate with screws spaced 24 inches (610 mm) o.c.
2. Retain insulation in place by metal clips and straps or integral pockets within panels, spaced at intervals according to insulation manufacturer's instructions. Maintain cavity width between insulation and metal liner panel of dimension indicated.

B. Blanket Insulation: Install insulation concurrently with metal wall panel installation, in thickness indicated to cover entire wall, according to manufacturer's written instructions and as follows:

1. Set vapor-retarder-faced insulation with vapor-retarder facing **as indicated on Drawings**. Do not obstruct ventilation spaces, except for firestopping.
2. Tape joints and ruptures in vapor retarder, and seal each continuous area of insulation to surrounding construction to ensure airtight installation.
3. Install insulation straight and true in one-piece lengths. Comply with the following installation method:

    a. Over-Framing Installation: Extend insulation over and perpendicular to top flange of framing members.

4. Retainer Strips: Install retainer strips at each longitudinal insulation joint, straight and taut, nesting with framing to hold insulation in place.

3.4 METAL WALL PANEL INSTALLATION

A. General: Install metal wall panels according to manufacturer's written instructions in orientation, sizes, and locations indicated on Drawings. Install panels perpendicular to girts and subgirts unless otherwise indicated. Anchor metal wall panels and other components of the Work securely in place, with provisions for thermal and structural movement.

1. Commence metal wall panel installation and install minimum of **300 sq. ft.** in presence of factory-authorized representative.
2. Shim or otherwise plumb substrates receiving metal wall panels.
3. Flash and seal metal wall panels at perimeter of all openings. Fasten with self-tapping screws. Do not begin installation until weather barrier and flashings that will be concealed by metal wall panels are installed.
4. Install screw fasteners in predrilled holes.
5. Locate and space fastenings in uniform vertical and horizontal alignment.
6. Install flashing and trim as metal wall panel work proceeds.

7. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
8. Apply elastomeric sealant continuously between metal base channel (sill angle) and concrete and elsewhere as indicated or, if not indicated, as necessary for waterproofing.
9. Align bottom of metal wall panels and fasten with blind rivets, bolts, or self-tapping screws. Fasten flashings and trim around openings and similar elements with self-tapping screws.
10. Provide weathertight escutcheons for pipe and conduit penetrating exterior walls.

B. Fasteners:

1. Steel Wall Panels: Use stainless-steel fasteners for surfaces exposed to the exterior; use galvanized steel fasteners for surfaces exposed to the interior.
2. Aluminum Wall Panels: Use aluminum or stainless-steel fasteners for surfaces exposed to the exterior; use aluminum or galvanized steel fasteners for surfaces exposed to the interior.
3. Copper Wall Panels: Use copper, stainless-steel or hardware-bronze fasteners.
4. Stainless-Steel Wall Panels: Use stainless-steel fasteners.

C. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action as recommended by metal wall panel manufacturer.

D. Joint Sealers: Install gaskets, joint fillers, and sealants where indicated and where required for weathertight performance of metal wall panel assemblies. Provide types of gaskets, fillers, and sealants indicated or, if not indicated, types recommended by metal wall panel manufacturer.

1. Seal metal wall panel end laps with double beads of tape or sealant, full width of panel. Seal side joints where recommended by metal wall panel manufacturer.
2. Prepare joints and apply sealants to comply with requirements in Division 07 Section "Joint Sealants."

E. Lap-Seam Metal Wall Panels: Fasten metal wall panels to supports with fasteners at each lapped joint at location and spacing recommended by manufacturer.

1. Lap ribbed or fluted sheets one full rib corrugation. Apply panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line.
2. Provide metal-backed washers under heads of exposed fasteners bearing on weather side of metal wall panels.
3. Locate and space exposed fasteners in uniform vertical and horizontal alignment. Use proper tools to obtain controlled uniform compression for positive seal without rupture of washer.
4. Install screw fasteners with power tools having controlled torque adjusted to compress washer tightly without damage to washer, screw threads, or panels. Install screws in predrilled holes.
5. Provide sealant tape at lapped joints of metal wall panels and between panels and protruding equipment, vents, and accessories.
6. Apply a continuous ribbon of sealant tape to weather-side surface of fastenings on end laps; on side laps of nesting-type panels; on side laps of corrugated nesting-type, ribbed, or fluted panels; and elsewhere as needed to make panels weathertight.
7. At panel splices, nest panels with minimum 6-inch (152-mm) end lap, sealed with butyl-rubber sealant and fastened together by interlocking clamping plates.

F. Zee Clips: Provide Zee clips of size indicated or, if not indicated, as required to act as standoff from subgirts for thickness of insulation indicated. Attach to subgirts with fasteners. Substrate boards in paragraph below are specified in Division 06 Section "Sheathing."

G. Fire-Rated Metal Wall Panel Assemblies: Install metal liner panels on exterior side of girts, fastening through faces of panels, with girts exposed to the interior. Install subgirts horizontally, fastened to legs of metal liner panels. Install substrate board as indicated in Division 06 Section "Sheathing," in number of layers required for fire rating, over subgirts, attached with board fasteners. Install second set of subgirts horizontally, fastened through substrate board into first set of subgirts. Install exterior metal wall panels, fastened to second set of subgirts.

1. Comply with **UL** requirements for fire-rated construction.

3.5 METAL SOFFIT PANEL INSTALLATION

A. In addition to complying with requirements of "Metal Wall Panel Installation, General" Article, install metal soffit panels to comply with the requirements of this article.

B. Metal Soffit Panels: Provide metal soffit panels full width of soffits. Install panels perpendicular to support framing.

1. Flash and seal panels with weather closures where metal soffit panels meet walls and at perimeter of all openings.

3.6 ACCESSORY INSTALLATION

A. General: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal wall panel assembly including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.

B. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

1. Install exposed flashing and trim that is without excessive oil canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance.
2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (605 mm) of corner or intersection. Where lapped expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).

3.7 FIELD QUALITY CONTROL

A. Testing Agency: **Engage** a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.

B. Water Penetration: Test areas of installed system indicated on Drawings for compliance with system performance requirements according to ASTM E 1105 at minimum differential pressure of 20 percent of inward-acting, wind-load design pressure as defined by SEI/ASCE 7, but not less than 6.24 lbf/sq. ft. (300 Pa).

C. Water-Spray Test: After completing the installation of 75-foot- (23-m-) by-2-story minimum area of metal wall panel assembly, test assembly for water penetration according to AAMA 501.2 in a 2-bay area directed by Architect.

D. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect and test completed metal wall panel installation, including accessories.

E. Remove and replace metal wall panels where tests and inspections indicate that they do not comply with specified requirements.

F. Additional tests and inspections, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

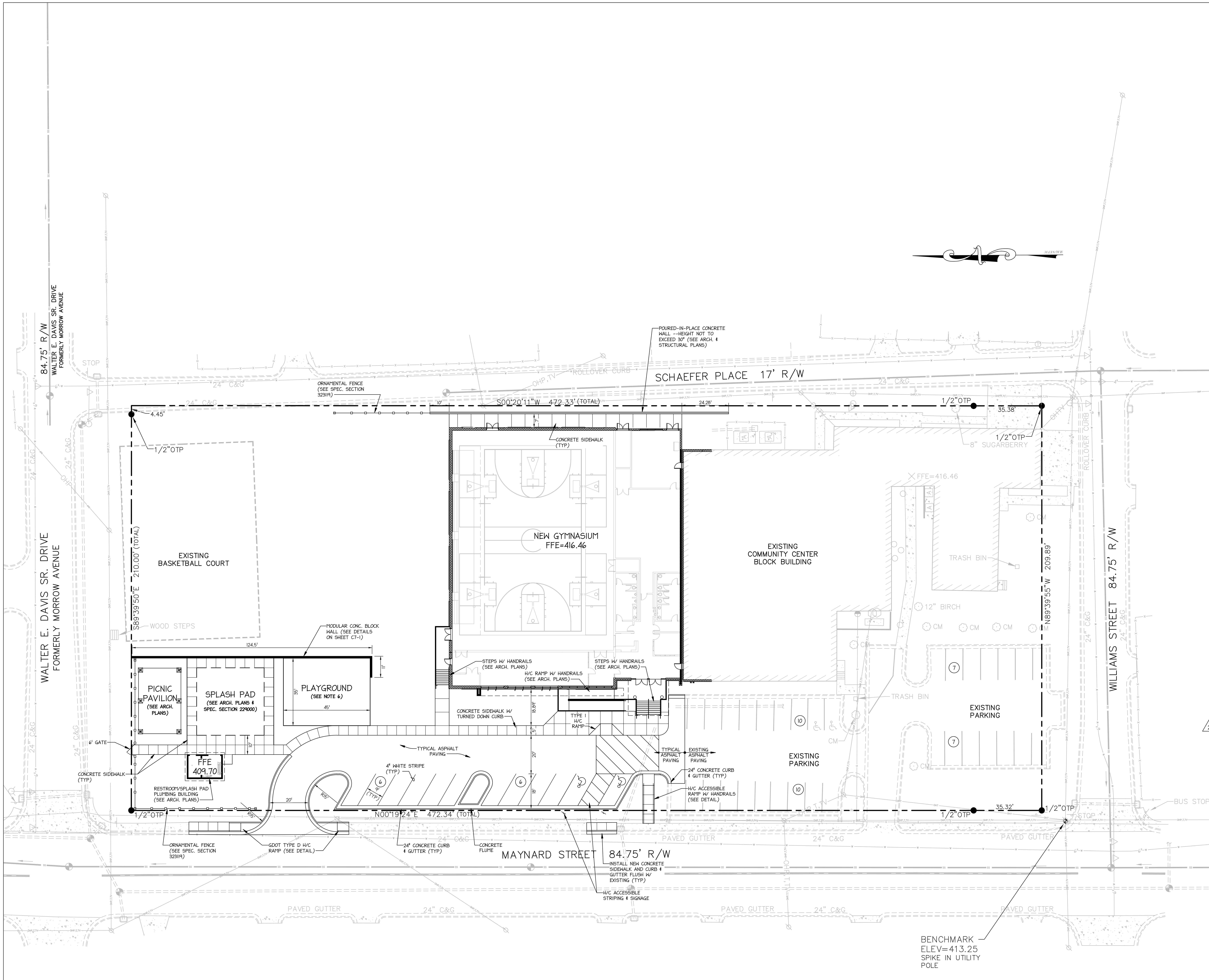
3.8 CLEANING AND PROTECTION

A. Remove temporary protective coverings and strippable films, if any, as metal wall panels are installed, unless otherwise indicated in manufacturer's written installation instructions. On completion of metal wall panel installation, clean finished surfaces as recommended by metal wall panel manufacturer. Maintain in a clean condition during construction.

B. After metal wall panel installation, clear weep holes and drainage channels of obstructions, dirt, and sealant.

C. Replace metal wall panels that have been damaged or have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION 074213



SITE ACCESSIBILITY NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT HANDICAP PARKING AREAS, ACCESS AISLES, HANDICAP RAMPS AND ALL SIDEWALKS ARE CONSTRUCTED TO MEET THE DEPARTMENT OF JUSTICE PUBLISHED REVISED REGULATIONS FOR TITLE II AND III OF THE AMERICAN WITH DIABILITIES ACT OF 1990 "ADA" IN THE FEDERAL REGISTER ON SEPTEMBER 15, 2010.
2. CONTRACTOR SHALL CHECK ELEVATIONS, LONGITUDINAL SLOPES, AND CROSS-SLOPES OF ALL FORM WORK PRIOR TO PLACING CONCRETE AND/OR ASPHALT FOR CURB AND GUTTERS, HANDICAP RAMPS, AND PARKING AREAS, WALKS, ETC.
   A. CROSS-SLOPES OF PARKING AREAS AND RAMPS SHALL NOT EXCEED SLOPES OF 1:48.
   B. RUNNING SLOPES OF HANDICAP RAMPS SHALL NOT EXCEED 1" IN 12" OR HAVE A VERTICAL HEIGHT GREATER THAN 6 INCHES.
   C. RUNNING SLOPE OF SIDEWALKS SHALL NOT EXCEED 1:20.
   D. CROSS-SLOPES OF SIDEWALKS SHALL NOT EXCEED 1:48.

LAYOUT NOTES:

1. DIMENSIONS SHOWN ARE TO FACE OF CURB, OUTSIDE FACE OF BUILDING, EDGE OF SIDEWALK OR EDGE OF PAVEMENT.
2. RADII NOT SHOWN ARE 5'.
3. ANGLES NOT SHOWN ARE 90 DEGREES.
4. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS.
5. DO NOT SCALE DRAWING FOR DIMENSIONS.
6. PLAYGROUND AREA SHALL CONSIST OF EXISTING PLAY EQUIPMENT ON SITE. EQUIPMENT SHALL BE DISASSEMBLED FROM EXISTING LOCATION & REASSEMBLED WITHIN NEW PLAYGROUND AREA. OUTER BORDER SHALL BE 3" WIDE x 12" TALL, INTERLOCKING BLACK PLASTIC PLAYGROUND BORDER, EMBEDDED IN FINISHED GRADE 9". EXCAVATE ENTIRE AREA WITHIN BORDER & FURNISH AND INSTALL MIN. 12" SHREDDED HARDWOOD MULCH OVER LANDSCAPE FABRIC. ALL WORK SHALL BE ACCOMPLISHED BY NPCAI CERTIFIED PERSONNEL.
7. BENCHES SHALL BE MODEL RB-28 AS MANUFACTURED BY VICTOR STANLEY. BENCHES SHALL BE SURFACE-MOUNT, 6' IN LENGTH, POWDER-COATED STEEL, COLOR BLACK
8. PVC IRRIGATION SLEEVES SHALL BE INSTALLED WITH 18" COVER AND EXTEND 18" BEYOND BACK OF CURB. PVC SLEEVES SHALL BE 4" SDR 35, ASTM D3034 PVC. MARK LOCATION OF ALL SLEEVES WITH AN "X" CUT ¼" DEEP INTO TOP OF CURB AT BOTH SIDES OF DRIVEWAY.
9. SPLASH PAD SHALL BE 4" THICK, 3000 PSI CONCRETE (SEE CONCRETE SIDEWALK DETAIL). FURNISH AND INSTALL MI-MT SHEET FLOORING ON ENTIRE SPLASH PAD AREA. PRODUCT SHALL BE AS MANUFACTURED BY MATS INC. (1-800-628-7462). ARCHITECT SHALL SELECT COLOR FROM SUBMITTED SAMPLE. (2)

PROJECT INFORMATION

PROPERTY LOCATION:	ROSA JACKSON COMMUNITY CENTER 1211 MAYNARD ST MACON, GA 31217
OWNER/DEVELOPER: 24 HR CONTACT:	MR. REGGIE MOORE, INTERIM DIRECTOR MACON-BIBB RECREATION DEPARTMENT 150 WILLIE SMOKIE GLOVER DRIVE MACON, GA 31201 PHONE: 478-751-9280 FAX: 478-751-9290 EMAIL: rmoore@maconbibb.us
SURVEY INFORMATION PREPARED BY:	DONALDSON, GARRETT, & ASSOCIATES 4875 RIVERSIDE DRIVE MACON, GEORGIA 31210 TEL: (478) 474-5350 FAX: (478) 477-2534

LEGEND

DESCRIPTION	EXISTING	NEW
PROPERTY LINE		
CONTOUR LINE	450	450
POWER POLE		
LIGHT POLE		
OVERHEAD POWER	OHP	
HIGH VOLTAGE LINE	HVL	
UNDERGROUND ELECTRICAL	E	
UNDERGROUND TELEPHONE	T	
UNDERGROUND FIBER OPTIC	FOC	
GAS LINE	G	G
WATER LINE	W	W
FIRE PROTECTION MAIN		FM
DOMESTIC WATER		DW
IRRIGATION MAIN		IRR
FIRE HYDRANT		
WATER VALVE		
SAN. SEWER W/ MANHOLE	SAN	
CLEANOUT		
DRAIN INLET		
CATCH BASIN D.O.T. STD. 1033D		
STORM DRAIN		
SILT FENCE & TYPE		
SPOT ELEVATION		
CONCRETE PAVING		
CONCRETE SIDEWALKS		
PVC IRRIGATION SLEEVE		
SOIL BOUNDARY LINE		
SOIL TYPE		
FENCE		
FENCE W/ 3 STRANDS OF BARBED WIRE		
NOT IN CONTRACT		N.I.C.
TREES TO BE REMOVED		

GRAPHIC SCALE IN FEET

20 0 20 40 60

W/M/2 ARCHITECTS
348 COTTON AVE. #500
P.O. BOX 110
MACON, GEORGIA 31021

LEVEL II CERTIFIED
DESIGN PROFESSIONAL # 2061
ISSUED: 11/2/2014 EXPIRES: 11/2/2017

Carter & Sloope
CONSULTING ENGINEERS
MACON ◆ ALBANY ◆ ATHENS ◆ CANTON
6310 PEAKE ROAD . MACON, GA 31210
478.477.3923 TEL . 478.477.4691 FAX

ROSA JACKSON COMMUNITY CENTER

MACON / BIBB COUNTY RECREATION DEPARTMENT

1211 MAYNARD ST
MACON, GA 31217

REVISIONS

#	DATE	DESCRIPTION
2	10-26-15	PER ADDENDUM #2

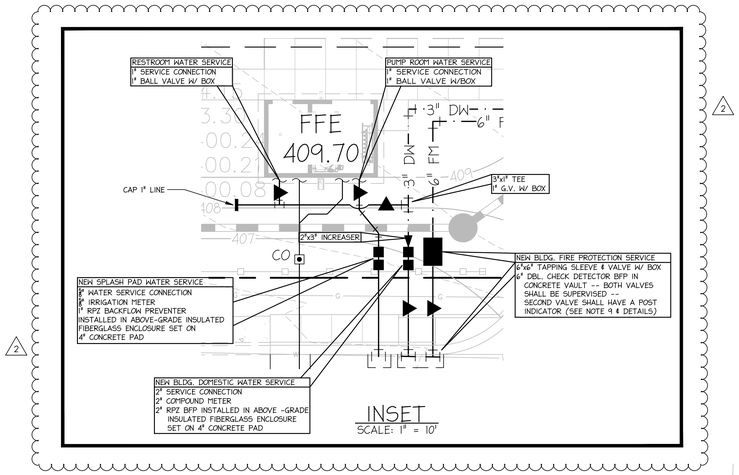
GEORGIA 811 Utilities Protection Center, Inc.
Know what's below. Call before you dig.

Date:	09/23/2015
Drawn By:	MWH
Checked By:	DLC
Project Number:	2014-112

Sheet Name:
SITE LAYOUT AND PAVING PLAN

Sheet Number:
C3-1

W7600.018MASTER.DWG



SITE LOCATION MAP

ARCHITECTS
348 COTTON AVE. #500
P.O. BOX 110
MACON, GEORGIA 31021

GEORGIA REGISTERED PROFESSIONAL ENGINEER — JOHN L. CARTER

LEVEL II CERTIFIED
DESIGN PROFESSIONAL # 206
ISSUED: 11/2/2014 EXPIRES: 11/2/2017

Carter & Sloope
CONSULTING ENGINEERS
MACON ◆ ALBANY ◆ ATHENS ◆ CANTON
6310 PEAKE ROAD . MACON, GA 31210
478.477.3923 TEL . 478.477.4691 FAX

ROSA JACKSON COMMUNITY CENTER

MACON / BIBB COUNTY RECREATION DEPARTMENT

1211 MAYNARD ST
MACON, GA 31217

REVISIONS

#	DATE	DESCRIPTION
2	10-26-15	PER ADDENDUM #2

GEORGIA 811 Utilities Protection Center, Inc. Know what's below. Call before you dig.

Date:	09/23/2015
Drawn By:	MWH
Checked By:	DLC
Project Number:	2014-112
Sheet Name:	SITE WATER AND SANITARY SEWER PLAN
Sheet Number:	C5-1

WATER & SANITARY SEWER CONSTRUCTION NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS, INVERT ELEVATIONS, AND SIZES OF ALL UTILITY MAINS AND LINES PRIOR TO INSTALLATION OF UTILITY MAINS (1-800-282-7411).
2. ALL WATER AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH MACON WATER AUTHORITY STANDARDS LISTED AS FOLLOWS:
   SANITARY SEWER:
   PVC ASTM D3034 SDR26 (2)
   WATER MAINS & SERVICES:
   3" & SMALLER: IPS GASKETED PVC, SDR 13.5
   4": C-900 PVC (DR 18) OR PRESSURE CLASS 350 DUCTILE IRON PIPE
   6"-8": C-900 PVC (DR 18) OR PRESSURE CLASS 350 DUCTILE IRON PIPE
   REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. THE CONTRACTOR SHALL NOTIFY THE MACON WATER AUTHORITY INSPECTIONS DEPARTMENT 72 HOURS PRIOR TO BEGINNING CONSTRUCTION. CONTACT CHIEF INSPECTOR JOEL HERNDON (478) 464-5634.
4. CONTRACTOR TO COORDINATE WATER AND SEWER CONNECTIONS WITH PLUMBING DRAWINGS.
5. CONTRACTOR SHALL PLACE BLACK PLASTIC BAGS OVER TOPS OF ALL OUT-OF-SERVICE FIRE HYDRANTS UNTIL THE HYDRANTS ARE IN SERVICE.
6. ALL HYDRANTS AND FITTINGS SHALL HAVE THRUST BLOCKS OR APPROVED EQUAL.
7. METALLIC TAPE LOCATOR SHALL BE USED ON ALL SANITARY SEWER LATERALS.
8. CONTRACTOR SHALL FURNISH AND INSTALL SIGNAGE ALONG ROADWAY TO ALERT MOTORIST OF CONSTRUCTION ACTIVITY. SIGNAGE AND PLACEMENT SHALL MEET MUTCD / GA. DOT / BIBB COUNTY AND MACON WATER AUTHORITY STANDARDS.
9. CONTRACTOR SHALL FURNISH AND INSTALL TAMPER SWITCHES FOR BACKFLOW PREVENTER VALVE AND FOR NEW POST INDICATOR VALVE. FURNISH AND INSTALL A 1" PVC CONDUIT W/ PULLSTRING FROM EACH OF THESE TO BUILDING FIRE RISER ROOM.

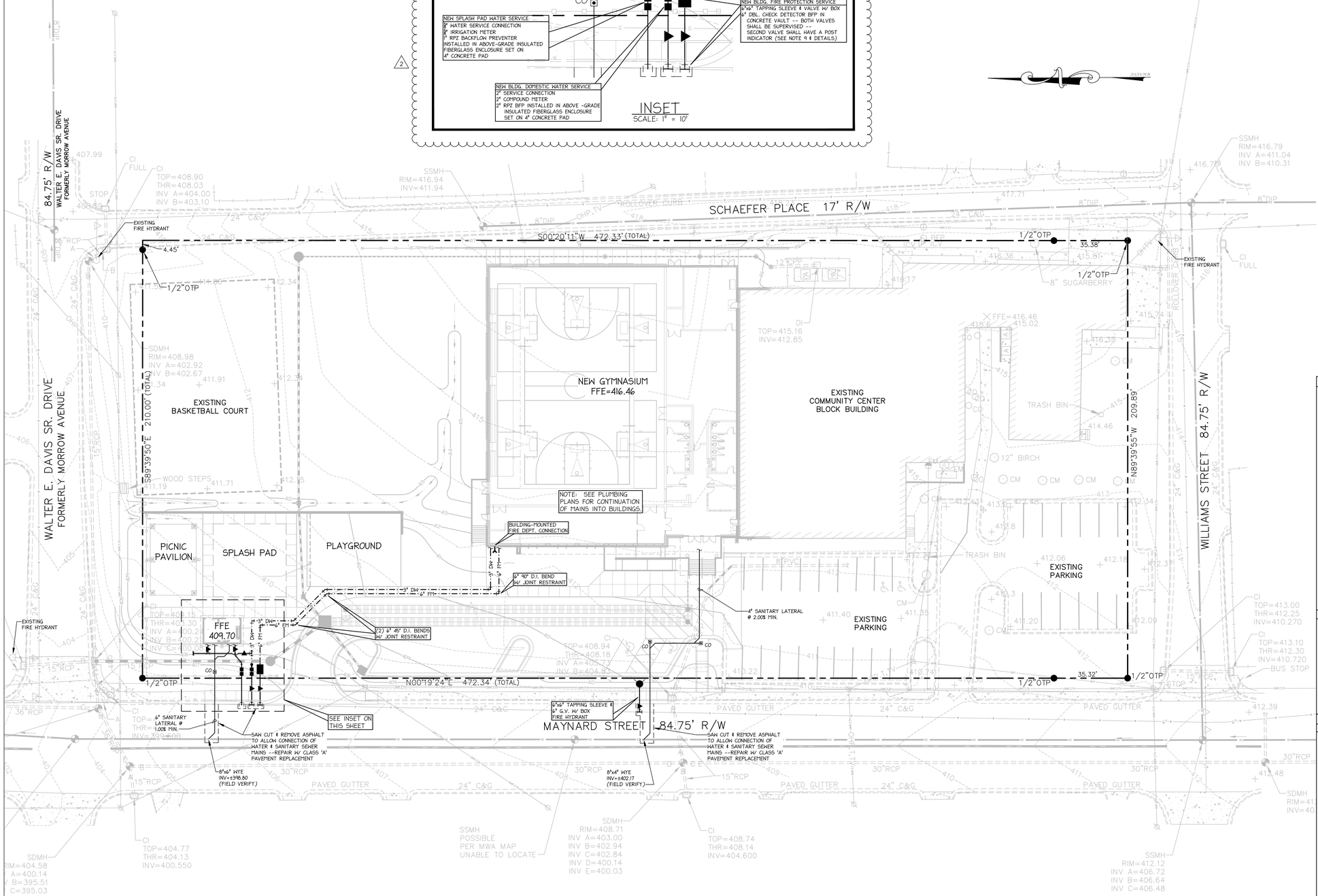
PROJECT INFORMATION

PROPERTY LOCATION:	ROSA JACKSON COMMUNITY CENTER 1211 MAYNARD ST MACON, GA 31217
OWNER/DEVELOPER: 24 HR CONTACT:	MR. REGGIE MOORE, INTERIM DIRECTOR MACON-BIBB RECREATION DEPARTMENT 150 WILLIE SMOKIE GLOVER DRIVE MACON, GA 31201 PHONE: 478-751-9280 FAX: 478-751-9290 EMAIL: rmoore@maconbibb.us
SURVEY INFORMATION PREPARED BY:	DONALDSON, GARRETT, & ASSOCIATES 4875 RIVERSIDE DRIVE MACON, GEORGIA 31210 TEL: (478) 474-5350 FAX: (478) 477-2534

LEGEND

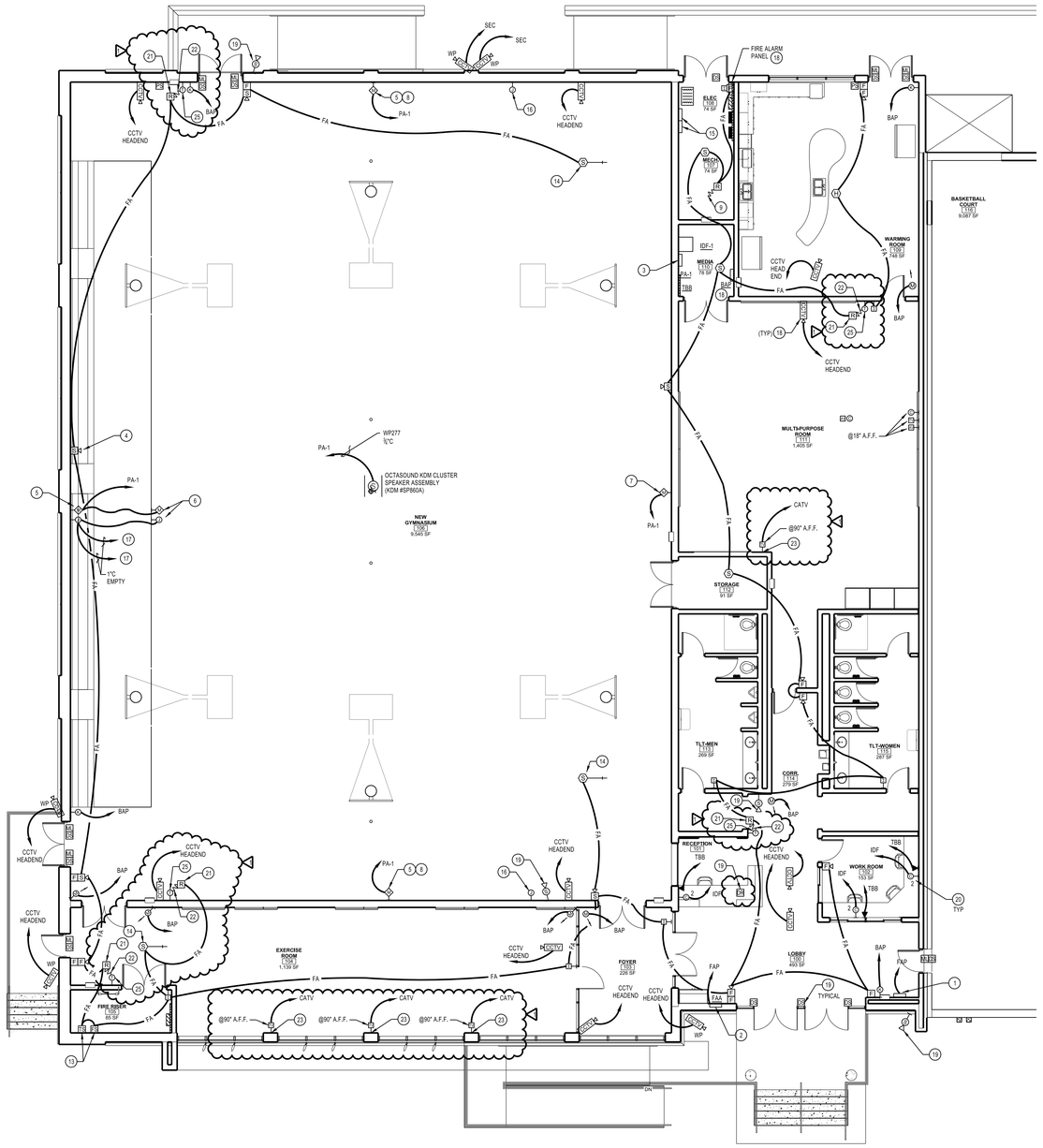
DESCRIPTION	EXISTING	NEW
PROPERTY LINE		
CONTOUR LINE	450	450
POWER POLE		
LIGHT POLE		
OVERHEAD POWER	OHP	
HIGH VOLTAGE LINE	HVL	
UNDERGROUND ELECTRICAL	E	
UNDERGROUND TELEPHONE	T	
UNDERGROUND FIBER OPTIC	FOC	
GAS LINE	G	G
WATER LINE	W	W
FIRE PROTECTION MAIN		FM
DOMESTIC WATER		DW
IRRIGATION MAIN		IRR
FIRE HYDRANT		
WATER VALVE		
SAN. SEWER W/ MANHOLE	SAN	
CLEANOUT		
DRAIN INLET		
CATCH BASIN D.O.T. STD. 1033D		
STORM DRAIN		
SILT FENCE & TYPE		SF-1
SPOT ELEVATION		
CONCRETE PAVING		CONC
CONCRETE SIDEWALKS		
PVC IRRIGATION SLEEVE		
SOIL BOUNDARY LINE		
SOIL TYPE		HSB
FENCE		
FENCE W/ 3 STRANDS OF BARBED WIRE		
NOT IN CONTRACT		N.I.C.
TREES TO BE REMOVED		

GRAPHIC SCALE IN FEET
20 0 20 40 60



P:\W7600 - VMA ARCHITECTS INC\W7600.018 Rosa Jackson Community Center\CADD\W7600.018master.dwg, C5-1 at 20in, 10/22/2015 9:07:44 AM, smuble, DWG To PDF.pc3, ARCH full sheet E1 (30.00 x 42.00 Inches), 1:1

W7600.018MASTER.DWG



ELECTRICAL NEW WORK LOW VOLTAGE PLAN

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

GENERAL NOTE:

PROVIDE WIRE GUARD FOR ALL WALL MOUNTED DEVICES IN GYM.

NOTES: (THIS SHEET ONLY)

1. VOICE EVAC REMOTE PHONE STATION.
2. INSTALL FIRE ALARM ANNUNCIATOR PANEL AT 48" A.F.F.
3. MUTE AUDIO WHEN FIRE ALARM IS ACTIVATED.
4. MOUNT SPEAKER STROBES @ 7' ABOVE TOP OF BLEACHERS.
5. INSTALL NEW MICROPHONE OUTLET AT 16" A.F.F. COORDINATE INSTALLATION WITH BLEACHER SUPPORTS.
6. ROUTE MICROPHONE AND SCOREBOARD CONTROL CABLES IN ¾" FLEXIBLE CONDUITS TO OUTLETS AT THE FACE OF FIRST BLEACHER ROW. SECURE FLEX CONDUITS TO UNDERSIDE OF BLEACHERS.
7. SPECIAL MICROPHONE AND AUX INPUT WALL BOX FOR PA SYSTEM.
8. STANDARD MICROPHONE ONLY INPUT WALL BOX.
9. HVAC SHUT DOWN RELAY PROVIDED BY DIVISION 26.
10. GENERAL: CONTRACTOR SHALL UTILIZE J-HOOKS FOR SUPPORT OF DATA AND VOICE CABLING ABOVE CEILINGS. J-HOOKS SHALL BE INSTALLED ON 3 FT. CENTERS.
11. ROUTE ALL COMPUTER OUTLETS TO EXISTING "MDF", PER SPECIFICATION 271301 - VOICE & DATA COMMUNICATIONS.
12. TV TRUNK CABLING SHALL BE ROUTED VIA CONDUIT TO CATV CABINET IN EXISTING TV HEAD END ROOM WITH TAPS BEING MADE AND ROUTED TO ROOM OUTLETS. PROVIDE PLENUM RATED CABLE.
13. MAKE CONNECTION TO SPRINKLER FLOW AND TAMPER SWITCH BY OTHERS.
14. DUCT MOUNTED SMOKE DETECTOR PROVIDE BY DIVISION 26 AS PART OF FIRE ALARM SYSTEM AND INSTALLED BY DIVISION 23.
15. REMOTE RESET FOR RTAC-1 AND RTAC-2.
16. COORDINATE EXACT LOCATION OF SCORE BOARD JUNCTION BOX/CONTROLS WITH ARCHITECT/OWNER.
17. ROUTE TO SCOREBOARD LOCATION (ONE CONDUIT TO EACH SCOREBOARD).
18. SEE SHEET E401 FOR LOCATION OF EXISTING CCTV HEADEND, FAP AND SECURITY PANELS.
19. ROUTE TO SECURITY DOOR CONTROL SYSTEM. SEE LEGEND FOR MODEL NUMBERS.
20. NUMBER BESIDE COMPUTER OUTLET IS NUMBER OF CAT 6 DROPS REQUIRED.
21. PROVIDE AN AUXILIARY FIRE ALARM RELAY, ABOVE ACCESSIBLE CEILING, PER SPECIFICATION 283110, IN GYMNASIUM, PROVIDE RECESSED JUNCTION BOX FOR RELAY.
22. DIVISION 23 SHALL MAKE LOW VOLTAGE CONNECTION TO THERMOSTAT 24 VOLT POWER TO SHUT DOWN HVAC WHEN FIRE ALARM SYSTEM IS ACTIVATED.
23. PROVIDE A DUPLEX OUTLET AT 90° A.F.F. FOR EACH TV OUTLET AND ROUTE TO NEAREST CONVENIENCE POWER CIRCUIT WITH #12, #12G; ¾"C. ROUTE TV OUTLETS TO CATV HEAD END.
24. GENERAL NOTE: CATV HEAD END IS LOCATED IN EXISTING ROOM #6 - MEDIA ROOM.
25. PROVIDE A LOW VOLTAGE MONITOR MODULE PER SPECIFICATION 283110. CONNECT INPUT OF MODULE TO THERMOSTAT UNSWITCHED 24V SIGNAL. ROUTE OUTPUT OF MONITOR MODULE TO SECURITY ALARM SYSTEM. MESSAGE SHALL STATE "ROOFTOP UNIT POWER HAS BEEN COMPROMISED".

WWA/2 ARCHITECTS
348 COTTON AVE.#500
P.O. BOX 110
MACON, GEORGIA 31021

GEORGIA REGISTERED ARCHITECT ENGINEER

AH&P CONSULTING ENGINEERS
ANDREWS, HAMMOCK & POWELL, INC.
250 Charter Lane
Suite 100
Macon, Georgia 31210
Phone: (478)405-8301
Fax: (478)405-8210
WWW.AHPENGR.COM

ROSA JACKSON COMMUNITY CENTER

MACON / BIBB COUNTY RECREATION DEPARTMENT

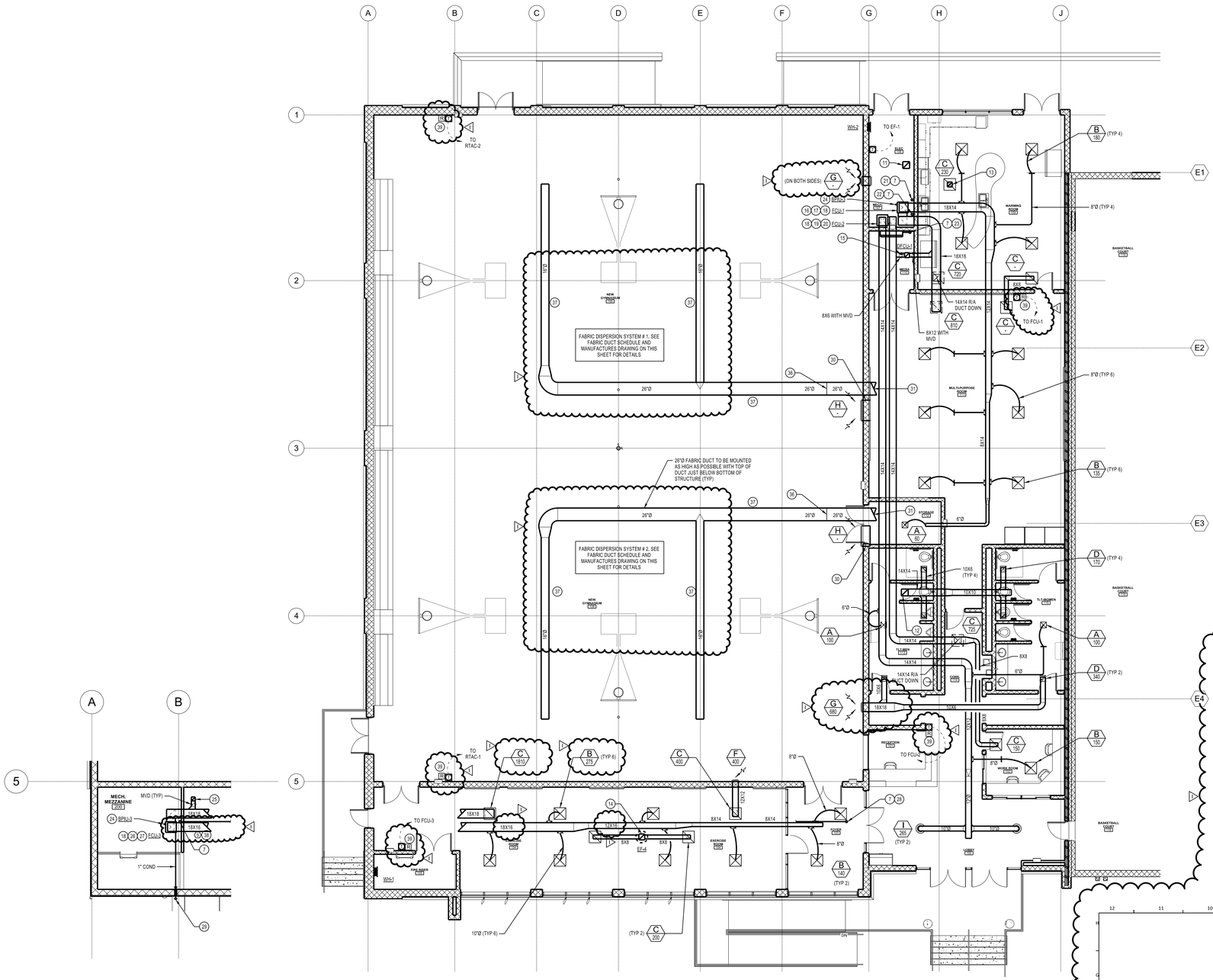
1211 MAYNARD ST
MACON, GA 31217

ADDENDUM #2 - 10/23/2015

Date:	09/23/2015
Drawn By:	CTS
Checked By:	EDM
Project Number:	2014-112

Sheet Name:
ELECTRICAL NEW WORK LOW VOLTAGE PLAN

Sheet Number:
E301

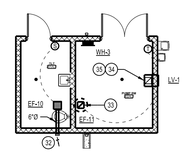


MECHANICAL NEW WORK PLAN - MEZZ. PLAN

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

MECHANICAL NEW WORK PLAN - FLOOR PLAN

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



MECHANICAL NEW WORK - TOILET BUILDING

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

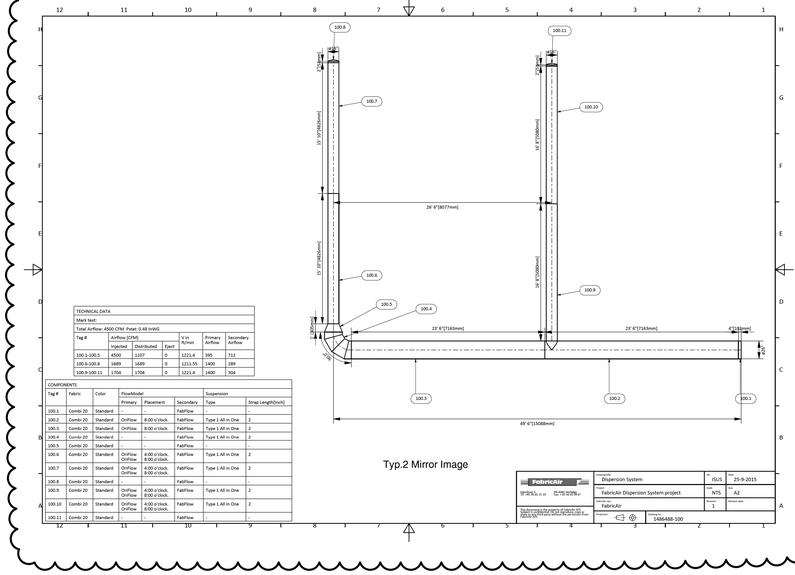
NEW WORK KEY NOTES: (THIS SHEET ONLY)

1. GENERAL: DRAWINGS SHOW GENERAL ARRANGEMENT, LAYOUT AND LOCATION OF DUCTWORK APPURTENANCES AND OFFSETS THAT MAY BE NECESSARY TO RUN DUCTWORK AND CONNECT TO EQUIPMENT ETC. OFFSET DUCTWORK AROUND ALL OBSTRUCTIONS. FABRICATE AND INSTALL DUCTWORK, FITTINGS AND OFFSETS BASED ON FIELD MEASUREMENTS AND AT NO ADDITIONAL COST TO THE OWNER. DUCT ROUTING SHOWN ON DRAWINGS SHALL BE ALTERED BY CONTRACTOR WHERE REQUIRED TO AVOID INTERFERENCE AND CLEARANCE DIFFICULTIES. CAREFULLY COORDINATE DUCT ROUTING WITH ELECTRICAL TO AVOID CONFLICTS WITH ELECTRICAL CONDUIT, CABLE TRAY, LIGHTS, ETC. COORDINATE DUCT ROUTING WITH PLUMBING PIPES (E.G. SPRINKLER VENT PIPING, STORM DRAIN, DOMESTIC WATER, PROCESS PIPING, ETC.) TO AVOID CONFLICTS.
2. GENERAL: REFER TO THE ELECTRICAL NOTES FOR VOLTAGE, PHASE, MAXIMUM ALLOWABLE CURRENT DRAW AMPERAGE AND CONNECTION ARRANGEMENT (SINGLE OR MULTI-POINT CONNECTION, ETC.) OF ALL MECHANICAL EQUIPMENT PRIOR TO ORDERING/INSTALLING EQUIPMENT.
3. GENERAL: DUCT SIZES INDICATED ON THE PLANS ARE CLEAR INSIDE DIMENSIONS REQUIRED.
4. GENERAL: SUPPORT ALL DUCTS, PIPING AND EQUIPMENT FROM PRIMARY BUILDING STRUCTURAL MEMBERS AND PROVIDE SUPPLEMENTAL STRUCTURAL FRAMING AS REQUIRED BETWEEN PRIMARY BUILDING STRUCTURAL MEMBERS TO SUPPORT ALL SYSTEMS INSIDE THE BUILDING.
5. GENERAL: PROVIDE NEW PIPE HANGERS FOR ALL SUSPENDED PIPING AS SHOWN IN HANGER DETAIL
6. GENERAL: PROVIDE PIPE SLEEVE WHERE REFRIGERANT PIPING PENETRATES WALL (TYP). SEE PIPE SLEEVE DETAIL - REFRIGERATE PIPE THRU WALL.
7. GENERAL: PROVIDE NEW REFRIGERANT LINES AND ACCESSORIES INSTALLED AND SIZED PER MANUFACTURERS RECOMMENDATION AND AS SPECIFIED.
8. GENERAL: ANY WORK WHICH INTERFERES WITH THE OWNERS OPERATIONS OF THE SURROUNDING AREA AND ANY INTERRUPTION OF SERVICES, INCLUDING THE SHUTDOWN OF UTILITIES, SHALL BE PERFORMED AT A TIME APPROVED BY THE OWNER.
9. GENERAL: COORDINATE LOCATION OF GRILLS, REGISTERS, AND DIFFUSERS WITH LIGHTING LAYOUT, SPRINKLER HEADS AND CEILING GRID SYSTEMS AND APPURTENANCES.
10. GENERAL: NOTIFY ENGINEERS IF ANY EXISTING ITEM THAT CONFLICTS WITH THE INTENDED FINAL PRODUCT IS NOT SPECIFICALLY CALLED OUT HERE. CONTRACTOR TO NOTIFY ENGINEERS OF ANY DISCREPANCIES IN THE DOCUMENTS AND FIELD CONDITIONS BEFORE PROCEEDING WITH DEMOLITION AND/OR CONSTRUCTION.
11. 14X14 EXHAUST AIR DUCT DOWN FROM EF-1. TRANSITION AS REQUIRED FROM FAN INATKE. TERMINATE DUCT 12" BELOW BOTTOM OF STRUCTURE.
12. 14X14 EXHAUST AIR DUCT DOWN FROM EF-3. TRANSITION AS REQUIRED FROM FAN INTAKE.
13. 10X10 EXHAUST AIR DUCT DOWN FROM EF-2. TRANSITION AS REQUIRED FROM FAN INTAKE.
14. 12X12 EXHAUST AIR DUCT DOWN FROM EF-4. TRANSITION AS REQUIRED FROM FAN INTAKE.
15. 10X10 OUTSIDE AIR INTAKE DUCT UP THROUGH ROOF TO IH-1.
16. 18X18 RETURN DUCT DOWN INTO FCU-1 RETURN AIR PLENUM. SEE RETURN AIR PLENUM STAND DETAIL.
17. LINED SUPPLY DUCT RISES FROM CONNECTION TO FCU-1 AND TRANSITIONS TO 18X14.
18. ROUTE 1" CONDENSATE DRAIN FROM UNIT TO NEAREST FLOOR DRAIN.
19. 14X14 RETURN DUCT DOWN INTO FCU-2 RETURN AIR PLENUM. SEE RETURN AIR PLENUM STAND DETAIL.
20. LINED SUPPLY DUCT RISES FROM CONNECTION TO FCU-2 AND TRANSITIONS TO 14X14.
21. REFRIGERANT LINES FROM FCU-1 UP THROUGH PIPE BOX ON ROOF TO HP-1 LOCATED ON ROOF. SEE M102 FOR CONTINUATION.
22. REFRIGERANT LINES FROM FCU-2 UP THROUGH PIPE BOX ON ROOF TO HP-2 LOCATED ON ROOF. SEE M102 FOR CONTINUATION.
23. REFRIGERANT LINES FROM DFCU UP THROUGH PIPE BOX ON ROOF TO DCU-1 LOCATED ON ROOF. SEE M102 FOR CONTINUATION.
24. PROVIDE NEW BI-POLAR IONIZATION UNIT INSIDE NEW FCU OR RTAC CASING IN MANUFACTURER APPROVED LOCATION. SEE BI-POLAR IONIZATION UNIT DETAIL.
25. EX8 OUTSIDE AIR INTAKE DUCT UP THROUGH ROOF TO IH-2.
26. 18X18 RETURN DUCT DOWN INTO FCU-3 RETURN AIR PLENUM. SEE RETURN AIR PLENUM STAND DETAIL.
27. LINED SUPPLY DUCT RISES FROM CONNECTION TO FCU-3 AND TRANSITIONS TO 18X16.
28. REFRIGERANT LINES FROM FCU-3 UP THROUGH PIPE BOX ON ROOF TO HP-3 LOCATED ON ROOF. SEE M102 FOR CONTINUATION.
29. ROUTE 1" CONDENSATE PIPE FROM FCU-3 TO EXTERIOR WALL. PROVIDE NEW PIPE SLEEVE WHERE PIPING PENETRATES WALL.
30. PROVIDE 42X42 INTERNALLY LINED 16 GAUGE GALV-GRIP SHEET METAL PLENUM FROM REAR OF RETURN GRILLE AND FLUSH WITH EXTERIOR WALL.
31. SEE M102 FOR CONTINUATION.
32. 6"Ø ALUMINUM HOODED WALL CAP WITH BUILT IN BIRD SCREEN AND DAMPER.
33. 10X10 ALUMINUM EXHAUST AIR DUCT DOWN FROM EF-11. TRANSITION AS REQUIRED FROM FAN INTAKE. TERMINATE DUCT 4" AFF WITH WIRE MESH SCREEN.
34. PROVIDE 12" DEEP ALUMINUM PLENUM BOX EQUAL TO FULL SIZE OF LOUVER.
35. 10X10 ALUMINUM DUCT DOWN FROM PLENUM BOX. TERMINATE DUCT 4" AFF WITH WIRE MESH SCREEN.
36. 26" DIAMETER FABRIC DUCT CONNECTS TO 26" DIAMETER DOUBLE-WALL SPIRAL DUCT AT THIS LOCATION.
37. FABRIC DUCT SYSTEM. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
38. DUCT MOUNTED SMOKE DETECTOR INSTALLED BY MECHANICAL CONTRACTOR. SMOKE DETECTOR SHALL BE PROVIDED AND WIRED BY DIVISION 26. FCU SHALL BE SUBJECT TO SHUT DOWN BY ACTIVATION OF DUCT SMOUNTED SMOKE DETECTOR.
39. AUXILLARY FIRE ALARM RELAY INTERLOCKED TO THERMOSTAT BY MECHANICAL CONTRACTOR. RELAY SHALL BE PROVIDED AND WIRED TO FIRE ALARM PANEL BY DIVISION 26. UPON WARNING SIGNAL FROM THE FIRE ALARM PANEL, THE FIRE ALARM RELAY WILL BREAK THE 24 V POWER FEED TO THE THERMOSTAT, PROVIDING A GLOBAL SHUT DOWN OF ASSOCIATED FAN COIL UNIT OR ROOFTOP UNIT.

FABRIC DUCT SCHEDULE

TAG	FABRIC AIR FABRIC MODEL #	OUTLET TYPE	OUTLET LOCATION ON DUCT	TOTAL LENGTH (FT)	TOTAL CFM	DIAMETER	OUTLET SIZE	NOTES:
FABRIC DISPERSION SYSTEM #1	COMBI-20	FABRIC POROSITY	ENTIRE PERIMETER	APPROX. 118' - 0"	4500	SEE BELOW	SEE BELOW	1:2:3:4:5
		ORIFLOW (ORIFICES)	SEE BELOW					
FABRIC DISPERSION SYSTEM #2	COMBI-20	FABRIC POROSITY	ENTIRE PERIMETER	APPROX. 118' + 0"	4500	SEE BELOW	SEE BELOW	1:2:3:4:5
		ORIFLOW (ORIFICES)	SEE BELOW					

1. FACTORY-FABRICATED FABRIC DUCTWORK SYSTEM WITH 100% FLAME RETARDANT AND UL LISTED POLYESTER FABRIC.
2. OUTLET LOCATIONS ARE SHOWN BELOW.
3. SUBMIT COLOR CHART TO ARCHITECT..
4. SEE SPECIFICATIONS FOR HANGER AND SUPPORT SYSTEM. SUSPENSION SYSTEM SHALL BE SINGLE CABLE. SINGLE POINT TYPE WITH FACTORY INSTALLED 180° SEWED-ON REMOVABLE "ALL-IN-ONE" HOOPS ON TOP HALF OF FABRIC DUCT TO MAINTAIN ROUND SHAPE WHEN NO AIRFLOW IS PRESENT. ALTENATE MANUFACTURER'S SYSTEMS THAT MAINTAIN DUCT SHAPE WHEN NO AIRFLOW IS PRESENT WILL BE ALLOWED AS SPECIFIED. PROVIDE PVC COATED GALVANIZED STEEL TENSIONING AND SUSPENSION CABLES. AND ASSOCIATED CABLE CLAMPS, TENSIONERS, ETC. SEE FABRIC DUCT SUPPORT DETAIL(S). INSTALL ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
5. FABRIC DUCT MANUFACTURER SHALL VERIFY DUCT LAYOUT AND ENSURE ALL AREAS OF ROOM ARE COVERED WITH SUPPLY AIR.



WM2 ARCHITECTS
348 COTTON AVE.#500
P.O. BOX 110
MACON, GEORGIA 31021

GEORGIA REGISTERED ARCHITECT

AH&P CONSULTING ENGINEERS
ANDREWS, HAMMOCK & POWELL, INC.
250 Charter Lane
Suite 100
Macon, Georgia 31210
Phone: (478)405-8301
Fax: (478)405-8210
WWW.AHPENGR.COM

ROSA JACKSON COMMUNITY CENTER

MACON / BIBB COUNTY RECREATION DEPARTMENT

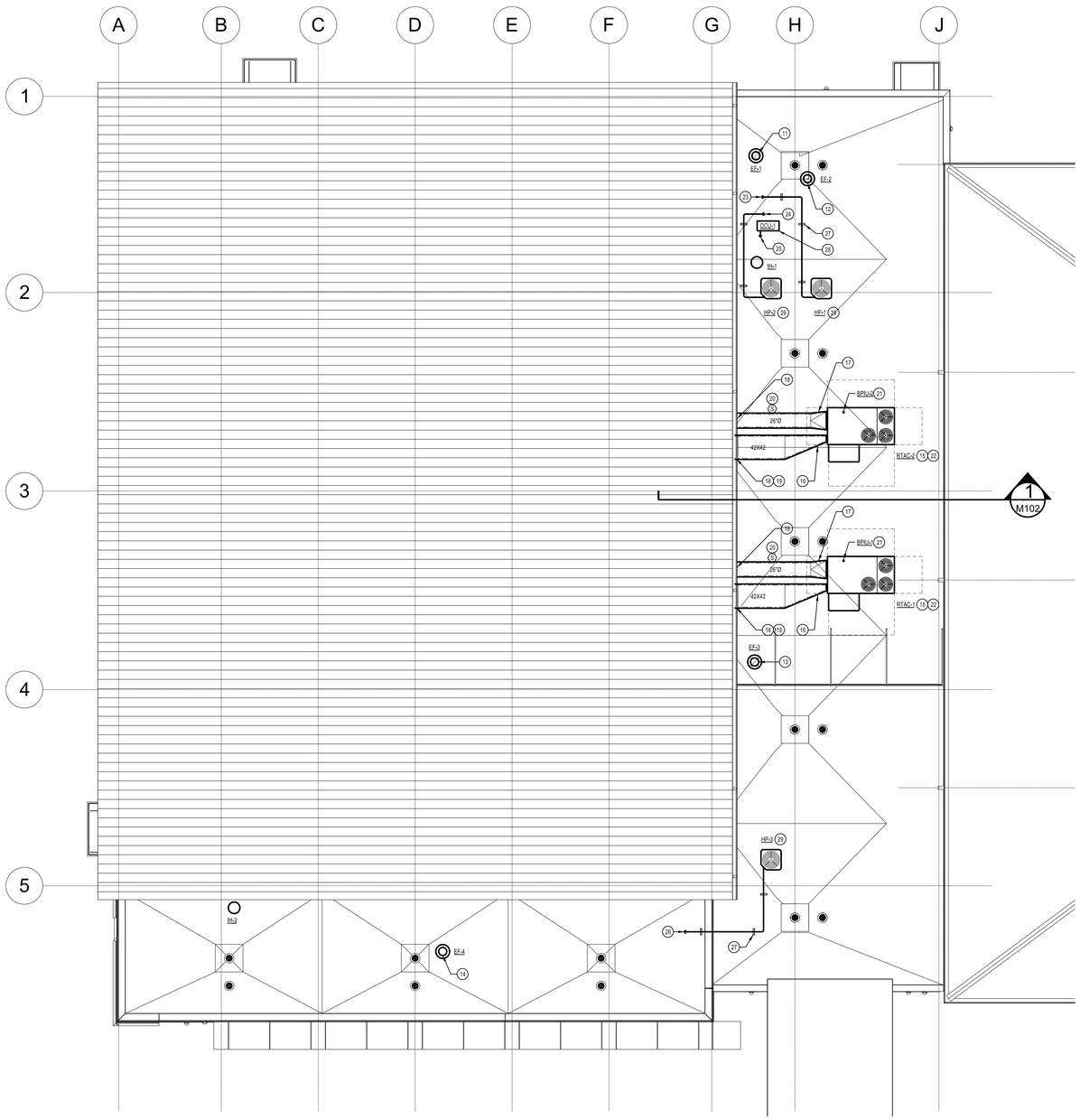
1211 MAYNARD ST
MACON, GA 31217

ADDENDUM #2	10/23/2015

Date:	09/23/2015
Drawn By:	JSS
Checked By:	WMH
Project Number:	2014-112

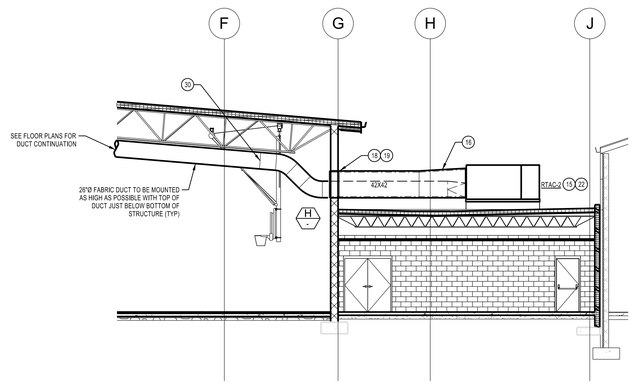
Sheet Name:
MECHANICAL NEW WORK PLAN

Sheet Number:
M101



NEW WORK KEY NOTES: (THIS SHEET ONLY)

1. GENERAL: DRAWINGS SHOW GENERAL ARRANGEMENT, LAYOUT AND LOCATION OF DUCTWORK APPURTENANCES AND OFFSETS THAT MAY BE NECESSARY TO RUN DUCTWORK AND CONNECT TO EQUIPMENT ETC. OFFSET DUCTWORK AROUND ALL OBSTRUCTIONS. FABRICATE AND INSTALL DUCTWORK, FITTINGS AND OFFSETS BASED ON FIELD MEASUREMENTS AND AT NO ADDITIONAL COST TO THE OWNER. DUCT ROUTING SHOWN ON DRAWINGS SHALL BE ALTERED BY CONTRACTOR WHERE REQUIRED TO AVOID INTERFERENCE AND CLEARANCE DIFFICULTIES. CAREFULLY COORDINATE DUCT ROUTING WITH ELECTRICAL TO AVOID CONFLICTS WITH ELECTRICAL CONDUIT, CABLE TRAY, LIGHTS, ETC. COORDINATE DUCT ROUTING WITH PLUMBING PIPES (E.G. SPRINKLER VENT PIPING, STORM DRAIN, DOMESTIC WATER, PROCESS PIPING, ETC.) TO AVOID CONFLICTS.
2. GENERAL: REFER TO THE ELECTRICAL NOTES FOR VOLTAGE, PHASE, MAXIMUM ALLOWABLE CURRENT DRAW AMPERAGE AND CONNECTION ARRANGEMENT (SINGLE OR MULTI-POINT CONNECTION, ETC.) OF ALL MECHANICAL EQUIPMENT PRIOR TO ORDERING/INSTALLING EQUIPMENT.
3. GENERAL: DUCT SIZES INDICATED ON THE PLANS ARE CLEAR INSIDE DIMENSIONS REQUIRED.
4. GENERAL: SUPPORT ALL DUCTS, PIPING AND EQUIPMENT FROM PRIMARY BUILDING STRUCTURAL MEMBERS AND PROVIDE SUPPLEMENTAL STRUCTURAL FRAMING AS REQUIRED BETWEEN PRIMARY BUILDING STRUCTURAL MEMBERS TO SUPPORT ALL SYSTEMS INSIDE THE BUILDING.
5. GENERAL: PROVIDE NEW PIPE HANGERS FOR ALL SUSPENDED PIPING AS SHOWN IN HANGER DETAIL
6. GENERAL: PROVIDE PIPE SLEEVE WHERE REFRIGERANT PIPING PENETRATES WALL (TYP). SEE PIPE SLEEVE DETAIL - REFRIGERATE PIPE THRU WALL.
7. GENERAL: PROVIDE NEW REFRIGERANT LINES AND ACCESSORIES INSTALLED AND SIZED PER MANUFACTURERS RECOMMENDATION AND AS SPECIFIED.
8. GENERAL: ANY WORK WHICH INTERFERES WITH THE OWNERS OPERATIONS OF THE SURROUNDING AREA AND ANY INTERRUPTION OF SERVICES, INCLUDING THE SHUTDOWN OF UTILITIES, SHALL BE PERFORMED AT A TIME APPROVED BY THE OWNER.
9. GENERAL: COORDINATE LOCATION OF GRILLS, REGISTERS, AND DIFFUSERS WITH LIGHTING LAYOUT, SPRINKLER HEADS AND CEILING GRID SYSTEMS AND APPURTENANCES.
10. GENERAL: NOTIFY ENGINEERS IF ANY EXISTING ITEM THAT CONFLICTS WITH THE INTENDED FINAL PRODUCT IS NOT SPECIFICALLY CALLED OUT HERE. CONTRACTOR TO NOTIFY ENGINEERS OF ANY DISCREPANCIES IN THE DOCUMENTS AND FIELD CONDITIONS BEFORE PROCEEDING WITH DEMOLITION AND/OR CONSTRUCTION.
11. 14X14 EXHAUST AIR DUCT DOWN FROM EF-1, TRANSITION AS REQUIRED FROM FAN INATKE. TERMINATE DUCT 12" BELOW BOTTOM OF STRUCTURE.
12. 10X10 EXHAUST AIR DUCT DOWN FROM EF-2, TRANSITION AS REQUIRED FROM FAN INTAKE.
13. 14X14 EXHAUST AIR DUCT DOWN FROM EF-3, TRANSITION AS REQUIRED FROM FAN INTAKE.
14. [illegible]
15. 1 1/4" CONDENSATE DRAIN FROM RTAC ROUTED TO NEAREST ROOF DRAIN. PROVIDE CONDENSATE TRAP AND PIPE SUPPORTS FOR CONDENSATE PIPING. SEE CONDENSATE TRAP SETAIL AND PIPE SUPPORT DETAIL.
16. [illegible]
17. TRANSITION FROM UNITS FULL SIZE SUPPLY AIR OPENING TO 26" Ø SUPPLY AIR DUCT.
18. DUCTWORK FROM RTAC PENETRATES EXTERIOR WALL AT THIS APPROXIMATE LOCATION. SEE EXTERIOR DUCT PENETRATION THRU WALL DETAIL.
19. PROVIDE 42X42 INTERNALLY LINED 18 GAUGE GALV-GRIP SHEET METAL PLENUM FROM REAR OF RETURN GRILLE AND FLUSH WITH EXTERIOR WALL.
20. DUCT MOUNTED SMOKE DETECTOR INSTALLED BY MECHANICAL CONTRACTOR. SMOKE DETECTOR SHALL BE PROVIDED AND WIRED BY DIVISION 26.
21. PROVIDE NEW BI-POLAR IONIZATION UNIT INSIDE NEW FCU OR RTAC CASING IN MANUFACTURER APPROVED LOCATION. SEE BI-POLAR IONIZATION UNIT DETAIL.
22. MOUNT UNIT ATOP ROOF CURB AND PROVIDE MANUFACTURERS RECOMMENDED CLEARANCES.
23. REFRIGERANT LINES FROM FCU-1 UP THROUGH PIPE BOX ON ROOF TO HP-1.
24. REFRIGERANT LINES FROM FCU-2 UP THROUGH PIPE BOX ON ROOF TO HP-2.
25. REFRIGERANT LINES FROM DFCU UP THROUGH PIPE BOX ON ROOF TO DCU-1.
26. REFRIGERANT LINES FROM FCU-3 UP THROUGH PIPE BOX ON ROOF TO HP-3.
27. GENERAL: PROVIDE PIPE SUPPORTS FOR REFRIGERANT PIPING. PROVIDE QUANTITY AND SPACING OF SUPPORTS AS SPECIFIED AND/OR AS REQUIRED BY MANUFACTURER.
28. MOUNT DUCTLESS CONDENSING UNIT ATOP DUCTLESS UNIT SUPPORT RAIL. SEE DUCTLESS HP/CU SUPPORT RAIL DETAIL.
29. MOUNT HEAT PUMP UNIT(S) ATOP HEAT PUMP SUPPORT. SEE ROOF MOUNTED HEAT PUMP SUPPORT DETAIL.
30. 26" DIAMETER FABRIC DUCT CONNECTS TO 26" DIAMETER DOUBLE-WALL SPIRAL DUCT AT THIS LOCATION.



MECHANICAL NEW WORK PLAN - ROOF PLAN
SCALE: 1/8"=1'-0"

1 / M102 MECHANICAL SECTION - RTAC-2
SCALE: 1/8"=1'-0"

WM2A ARCHITECTS
348 COTTON AVE.#500
P.O. BOX 110
MACON, GEORGIA 31021

GEORGIA REGISTERED ARCHITECT ENGINEER

AH&P CONSULTING ENGINEERS
ANDREWS, HAMMOCK & POWELL, INC.
250 Charter Lane
Suite 100
Macon, Georgia 31210
Phone: (478)405-8301
Fax: (478)405-8210
WWW.AHPENGR.COM

ROSA JACKSON COMMUNITY CENTER

MACON / BIBB COUNTY RECREATION DEPARTMENT

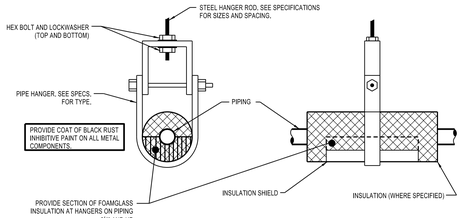
1211 MAYNARD ST
MACON, GA 31217

ADDENDUM #2	10/23/2015

Date:	09/23/2015
Drawn By:	JSS
Checked By:	WMH
Project Number:	2014-112

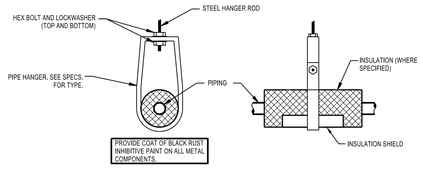
Sheet Name:
MECHANICAL NEW WORK ROOF PLAN

Sheet Number:
M102



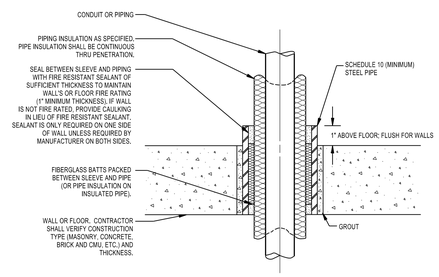
PIPE HANGER DETAIL

SCALE: NONE



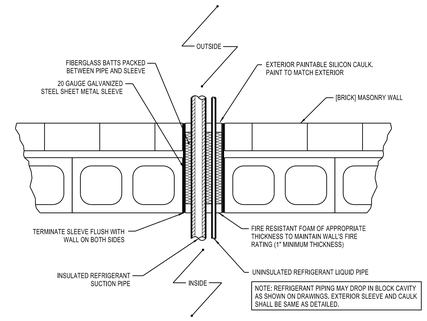
REFRIGERANT PIPE HANGER DETAIL

SCALE: NONE



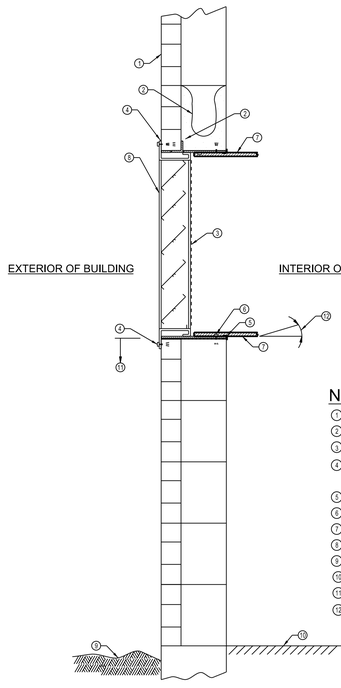
PIPE SLEEVE DETAIL

SCALE: NONE



PIPE SLEEVE DETAIL - REFRIGERANT PIPE THRU WALL

SCALE: NONE

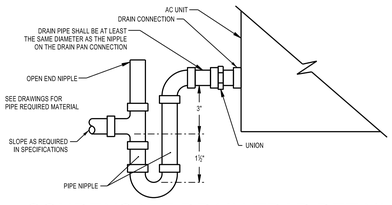


NOTES: (STATIONARY LOUVER DETAIL ONLY)

1. EXTERIOR WALL. SEE ARCHITECTURAL FOR EXACT CONSTRUCTION.
2. LINTEL BY STRUCTURAL
3. PROVIDE ½" X ½" MESH GALVANIZED BIRD SCREEN ON INTERIOR FACE OF LOUVER.
4. SEAL AND CAULK FULL PERIMETER OF LOUVER WATERTIGHT. PROVIDE PAINTABLE CAULK ON EXTERIOR SIDE OF LOUVER. SEE SCHEDULE FOR LOUVER FRAME SPECIFIED (FLANGED OR CHANNEL).
5. 2" X 1" SHEET METAL FINISHING ANGLE FRAMING AROUND OPENING PERIMETER.
6. PROVIDE 22 GAUGE GALVANIZED SLEEVE ANCHORED TO WALL AROUND PERIMETER.
7. DUCTWORK OR DUCT PLENUM AS INDICATED. SEE FLOOR PLANS.
8. LOUVER. SEE LOUVER SCHEDULE FOR ADDITIONAL INFORMATION.
9. EXTERIOR GRADE.
10. FLOOR.
11. SEE SCHEDULE FOR MOUNTING HEIGHT.
12. SLOPE DUCT OR DUCT PLENUM UPWARD AT ¼" PER FOOT FOR ONE FOOT BEYOND LOUVER TO AID IN DRAINAGE OF WIND BLOWN RAIN.

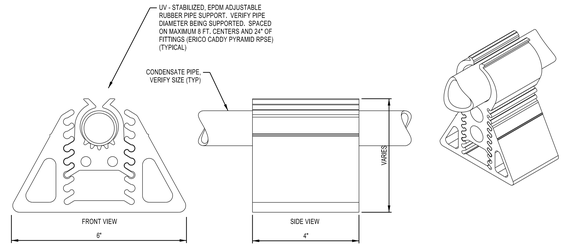
STATIONARY LOUVER DETAIL

SCALE: NONE



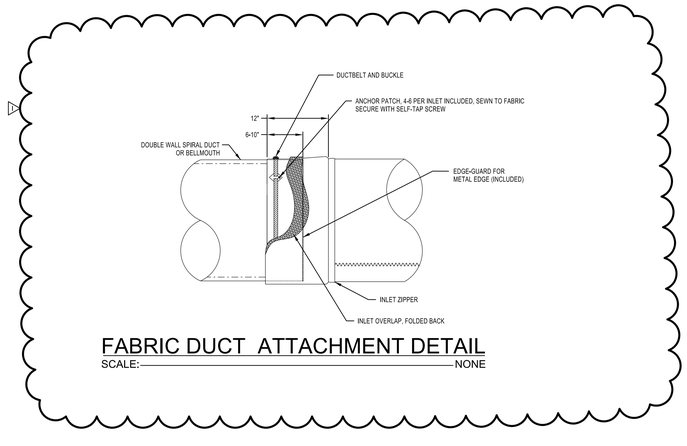
CONDENSATE DRAIN TRAP DETAIL

SCALE: NONE



CONDENSATE PIPE SUPPORT ON ROOF DETAIL

SCALE: NONE



FABRIC DUCT ATTACHMENT DETAIL

SCALE: NONE

ARCHITECTS
348 COTTON AVE.#500
P.O. BOX 110
MACON, GEORGIA 31021

GEORGIA REGISTERED ARCHITECT

AH&P CONSULTING ENGINEERS

ANDREWS, HAMMOCK & POWELL, INC.
250 Charter Lane
Suite 100
Macon, Georgia 31210
Phone: (478)405-8301
Fax: (478)405-8210
WWW.AHPENGR.COM

ROSA JACKSON COMMUNITY CENTER

MACON / BIBB COUNTY RECREATION DEPARTMENT

1211 MAYNARD ST
MACON, GA 31217

ADDENDUM #2	10/23/2015

Date:	09/23/2015
Drawn By:	JSS
Checked By:	WMH
Project Number:	2014-112

Sheet Name:
MECHANICAL DETAILS

Sheet Number:
M503

GAS UNIT HEATERS

TAG	REZNOR MODEL No.	HEATING INPUT MBH	HEATING OUTPUT MBH	MOTOR HP	MOUNTING HEIGHT B.E. AF.F.	NOTES
UH-1	F100	100.0	80.0	1/30	19'-4"	1:2:3:4
UH-2	F100	100.0	80.0	1/30	19'-4"	1:2:3:4
UH-3	F100	100.0	80.0	1/30	19'-4"	1:2:3:4
UH-4	F100	100.0	80.0	1/30	19'-4"	1:2:3:4

1. PROPELLER TYPE GAS FIRED UNIT HEATER FIRING NATURAL GAS. PROVIDE ALUMINIZED STEEL HEAT EXCHANGER. SEE GAS FIRED UNIT HEATER DETAIL.
2. OPERATE FROM WALL MOUNTED 24V SINGLE STAGETHERMOSTAT. PROVIDE POWER VENTER, COMBUSTION AIR PRESSURE SWITCH, PROVIDE CONTROL TRANSFORMER AND POWER CONTACTOR INTEGRAL WITH UNIT HEATER, SPARK IGNITED INTERMITTENT SAFETY PILOT W/ELECTRONIC FLAME SUPERVISION.
3. UNIT SHALL HAVE A MINIMUM 82% THERMAL EFFICIENCY.
4. SUSPEND UNIT FROM FOUR THREADED DROP RODS AND SUPPLEMENTAL 2 X 2 X 1#4 ANGLE FRAMING INSTALLED BETWEEN STRUCTURAL MEMBERS. PROVIDE OPTIONAL FACTORY INSTALLED FOUR POINT SUSPENSION CONNECTIONS.

GRILLES

TAG	TITUS MODEL No.	SIZE OR LENGTH	FINISH	THROW	NOTES
A	TMS-AA	12X12	WHITE	4 WAY	1:5:6
B	TMS-AA	24X24	WHITE	4 WAY	1:4:6:7
C	FAR-AA	24X24	WHITE	-	4:6:11
D	50F	10X6	WHITE	-	2:5:6:7
E	50F	10X10	WHITE	-	2:5:6:7
F	33RL	12X12	WHITE	-	5:6:10
G	33RL	18X18	WHITE	-	5:6:10
H	33RL	42X42	WHITE	-	5:6:10
I	TMR-AA	14" DIA.	ALUMINUM	-	3:6:12
J	50F	8X6	WHITE	-	2:5:6:7
K	350FLF1	SEE NOTES	WHITE	-	3:5:6:13
L	33RL	48X32	WHITE	-	5:6:10:14
M	CT-700L	10X10	WHITE	-	5:6:15

1. LOUVERED FACE HIGH CAPACITY ALUMINUM CEILING SUPPLY DIFFUSER WITH FIXED AIR DISCHARGE PATTERN AS SCHEDULED.
2. ALL ALUMINUM 1" X 1" X 1" "EGG CRATE" EXHAUST/RETURN GRILLE.
3. PROVIDE OPPOSED BLADE DAMPER.
4. IN 24 X 24 PANEL FOR LAY-IN CEILING.
5. FLANGED FRAME FOR SURFACE MOUNTING.
6. NC LEVEL NOT TO EXCEED NC 35.
7. SEE CEILING GRILLE DUCT CONNECTION DETAIL.
8. DOUBLE DEFLECTION ALUMINUM SIDEWALL SUPPLY REGISTER WITH FRONT BARS HORIZONTAL (PARALLEL TO LONG DIMENSION). PROVIDE 3/4" BLADE SPACING. PROVIDE FRONT AND REAR BLADE SETTINGS AS REQUIRED TO ACHIEVE PROPER AIR DISTRIBUTION UNLESS NOTED OTHERWISE.
9. ALUMINUM RETURN GRILLE WITH FACE BARS HORIZONTAL (PARALLEL T0 LONG DIMENSION). PROVIDE FIXED STATIONARY BLADES AT 35° TO 45° DEFLECTION, AT 3/4" SPACING.
10. STEEL HEAVY DUTY FRETURN GRILLE WITH FACE BARS HORIZONTAL (PARALLEL TO LONG DIMENSION). PROVIDE FIXED STATIONARY BLADES AT 38° DEFLECTION AT 1/2" BLADE SPACING.
11. ALUMINUM PERFORATED RETURN AIR GRILLE WITH 3/16" DIAMETER HOLES.
12. ADJUSTABLE ROUND THREE CONE ALUMINUM CEILING DIFFUSERS.
13. 24X24 (CONTRACTOR TO VERIFY AND MATCH EXISTING SIZE) ALUMINUM FILTER RETURN GRILLE WITH FACE BARS HORIZONTAL (PARALLEL TO LONG DIMENSION). PROVIDE FIXED STATIONARY BLADES AT 35° DEFLECTION, AT 3/4" SPACING.
14. CONTRACTOR TO VERIFY AND MATCH EXISTING SIZE.
15. ALUMINUM SIGHT PROOF DOOR GRILLE WITH BLADES PARALLEL TO LONG DIMENSION.

LEGEND

A / 500	GRILLE, REGISTER, DIFFUSER DESIGNATION ABOVE WITH CFM SHOWN BELOW FOR TAB AGENT TO BALANCE DEVICE AT
16 X 12	DUCT SIZE: FIRST DIMENSION IS SIDE DRAWN
	RIGID ROUND DUCTWORK OR FLUE PIPING
	FLEXIBLE ROUND DUCTWORK
	RECTANGULAR - TO - ROUND DUCT TRANSITION
	ACOUSTICAL/THERMAL DUCT LINER - ½" THICK OR 1" THICK, RESPECTIVELY
	SQUARE ELBOW WITH TURNING VANES
	45° BRANCH ENTRY FITTING
MVD MVD	MANUAL VOLUME DAMPER (OPPOSED BLADE)
	SUPPLY DUCT TO OR FROM ABOVE
	RETURN OR EXHAUST DUCT TO OR FROM ABOVE
	INDICATES EQUIPMENT ON ROOF
	DUCT OR PIPE OFFEST; ARROW HEAD INDICATES DIRECTION OF RISE
	RETURN OR EXHAUST AIR FLOW
T	WALL MOUNTED DDC TEMPERATURE SENSOR
M	POWER CONTACTOR PROVIDED BY MECHANICAL
D	CONDENSATE DRAIN PIPING
R	REFRIGERANT PIPING
	DROPPING OR RISING PIPE
	PIPE TO OR FROM ABOVE
DB, WB	DRY BULB, WET BULB
FPM	FEET PER MINUTE
CFM, ƒ	CUBIC FEET PER MINUTE
OA	OUTDOOR AIR
MBH	BTU/HR x 1000
APPROX.	APPROXIMATELY
ESP IN WG	EXTERNAL STATIC PRESSURE INCHES WATER GUAGE
HP	HORSEPOWER
RPM	REVOLUTIONS PER MINUTE
UNO	UNLESS NOTED OTHERWISE
AFF	ABOVE FINISHED FLOOR
UC	UNDERCUT DOOR ½"
KW	KILOWATTS
Δt	TEMPERATURE DIFFERENCE
B.E. T.E.	BOTTOM ELEVATION, TOP ELEVATION
LB/HR	POUNDS PER HOUR

WALL HEATERS

TAG	Q-MARK MODEL No.	CFM	B.E. A.F.F. MOUNTING HEIGHT	HEATING OUTPUT KW	NOTES
WH-1	AWH	100	16"	1.5	1:2:3
WH-2	AWH	100	16"	1.5	1:2:3
WH-3	AWH	100	16"	1.5	1:2:3

1. WALL MOUNTED FAN FORCED ELECTRIC HEATER WITH BRONZED HEAVY DUTY ARCHITECTURAL GRILLE.
2. PROVIDE INTEGRAL TAMPER PROOF THERMOSTAT, DISCONNECT AND HIGH TEMPERATURE LIMIT CUT-OFF.
3. UNIT SHALL BE SURFACE MOUNTED. PROVIDE WITH SURFACE MOUNTING FRAME.

EXHAUST FANS

TAG	GREENHECK MODEL NUMBER	CFM	FAN STATIC PRESSURE IN W.G.	FAN RPM	MOTOR HP	MAX SONES	NOTES
EF-1	G-099-A	750	0.4	1381	1/4	9.1	1:2:3:4
EF-2	G-080-D	230	0.4	1423	1/20	6.6	1:2:3:4
EF-3	G-095-D	680	0.4	1510	1/8	8.4	1:2:3:4
EF-4	G-090-D	400	0.4	1363	1/15	6.0	1:2:3:4
EF-5	SP-A290	200	0.4	979	80.7 W	2.5	2:4:5
EF-6	SP-A290	200	0.4	979	80.7 W	2.5	2:4:5
EF-7	SQ-90-D	225	0.4	1323	1/10	4.8	2:3:4:6
EF-8	SQ-90-D	300	0.4	1394	1/10	5.3	2:3:4:6
EF-9	SQ-90-D	375	0.4	1482	1/10	5.9	2:3:4:6
EF-10	SP-B90	75	.25	700	50 W	2.5	2:4:5
EF-11	G-90-G	400	0.3	1250	1/25	5.2	1:2:3:4

1. CENTRIFUGAL CURB MOUNTED EXHAUST FAN. PROVIDE BIRDSCREEN AND GRAVITY BACKDRAFT DAMPER. SEE CENTRIFUGAL ROOF EXHAUST FAN DETAIL.
2. DIRECT DRIVE.
3. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH.
4. PROVIDE SPEED CONTROLLER.
5. CENTRIFUGAL CEILING EXHAUST FAN WITH INTEGRAL GRILLE, FLAPPER BACKDRAFT DAMPER, PLUG AND CORD SET AND MOUNTING BRACKETS.
6. CENTRIFUGAL IN-LINE EXHAUST FAN WITH DISCHARGE MOUNTED BACKDRAFT DAMPER. PROVIDE MOUNTING BRACKETS AND SUPPORT FROM VERTICAL DROP RODS WITH VIBRATION ISOLATORS. SEE CENTRIFUGAL DIRECT DRIVE IN-LINE FAN DETAIL.

LOUVERS

TAG	GREENHECK MODEL No.	MINIMUM FREE AREA FT. SQ.	WIDTH INCHES	HEIGHT INCHES	DEPTH INCHES	CFM	MOUNTING HEIGHT B.E. A.F.F.	NOTES
L-1	EDJ-601	0.86	18	18	6	400	10-0	1:2:3:4:5:6

1. AMCA CERTIFIED LOUVER WITH BACK MOUNTED 1#2" MESH BIRDSCREEN.
2. SEE SPECIFICATIONS FOR FINISH COLOR SELECTED BY ARCHITECT. BASIS OF BID SHALL BE KYNAR.
3. STATIONARY LOUVER WITH DRAINABLE HEADS, AND NONDRAINABLE BLADES. SEE STATIONARY LOUVER DETAIL.
4. SEAL AND CAULK FULL PERIMETER OF LOUVER WATERTIGHT.
5. SECURE LOUVER TO WALL ON MAXIMUM 2'-0" CENTERS ON FOUR SIDES. PROVIDE 22 GAUGE GALVANIZED SLEEVE THROUGH WALL.
6. PROVIDE OPTIONAL 11#2" WIDE FLANGED FRAME AROUND PERIMETER.

DUCTLESS FAN COIL UNITS

TAG	FRIEDDRICH MODEL No.	TOTAL COOLING MBH		SENSIBLE COOLING MBH	TOTAL SUPPLY CFM	HEATING CAPACITY MBH		AUXILLARY HEATING KW	APPROX. ESP IN. WG	BLOWER MOTOR HP	NOTES
		RATED	MIN.			RATED	MIN.				
DFCU-1	PKA-A24KA6	24.0	12.0	18.5	1900	N/A	N/A	N/A	0.2	56W	2:3:5:6

1. CEILING CASETTE STYLE DUCTLESS FAN COIL UNIT. PROVIDE MANUALLY ADJUSTABLE VANES AND REMOTE HARD WIRED WALL MOUNTED THERMOSTAT. UNIT SHALL BE DESIGNED FOR MOUNTING IN 2' X 2' T-BAR GRID.
2. WALL MOUNTED STYLE DUCTLESS FAN COIL UNIT. PROVIDE WITH HARD WIRED REMOTE WALL MOUNTED THERMOSTAT.
3. COOLING CAPACITIES BASED ON AIR ENTERING EVAPORATOR AT 80°Fdb, 67°Fwb AND MATCHED WITH INDICATED HEAT PUMP.
4. HEATING CAPACITY BASED ON AIR ENTERING EVAPORATOR AT 70°Fdb, AND OUTDOOR AIR OF 17°Fdb AND MATCHED WITH INDICATED HEAT PUMP UNITS.
5. PROVIDE CONDENSATE PUMP WITH SAFETY SWITCH WITH 18 INCH LIFT.
6. PROVIDE WITH DISCONNECT SWITCH AND CONDENSATE OVERFLOW SWITCH.

DUCTLESS CONDENSING UNITS

TAG	MITSUBISHI MODEL No.	TOTAL COOLING MBH	MINIMUM STAGES CAPACITY	MINIMUM AMBIENT OPERATING TEMPERATURE	NOTES
DCU-1	PUY-A24NHA6	24.0	1	0	1:2:3:4:5:6:7

1. COOLING CAPACITIES BASED ON 95°F AMBIENT AIR TEMPERATURES.
2. ALL REFRIGERANT LINES TO BE INSTALLED AND SIZED PER MANUFACTURER'S INSTALLATION RECOMMENDATIONS.
3. SCHEDULED CAPACITIES ARE OVERALL CAPACITIES REQUIRED FOR CONDENSING UNIT AND EVAPORATOR COIL WITH 2"F SUCTION LINE LOSS.
4. PROVIDE CONTROLS TO PERMIT COOLING OPERATION TO SPECIFIED TEMPERATURE.
5. PROVIDE LIQUID AND SUCTION LINE SERVICE VALVES/GAUGE PORTS.
6. PROVIDE HIGH PRESSURE SWITCH.
7. PROVIDE WITH WALL MOUNTING BRACKET.

ROOFTOP AIR CONDITIONING UNITS

TAG	CARRIER MODEL NUMBER	TOTAL COOLING MBH	SENSIBLE COOLING MBH	TOTAL SUPPLY CFM	O.A. CFM	HEATING INPUT MBH	HEATING OUTPUT MBH	APPROX. SUPPLY ESP IN. WG	SUPPLY MOTOR HP	MINIMUM STAGES		ENTERING AIR °F		MINIMUM AMBIENT COOLING °F	NOTES
										COOL	HEAT	DB	WB		
RTAC-1	48TCDE	163.6	101.3	4500	800	180	146	1.0	3.0	2	2	79.1	65.0	30	1:2:3:4:5:6:7:8:9:10:11:12:13:14:15:16
RTAC-2	48TCDE	163.6	101.3	4500	800	180	146	1.0	3.0	2	2	79.1	65.0	30	1:2:3:4:5:6:7:8:9:10:11:12:13:14:15:16

1. COOLING CAPACITIES BASED ON AIR ENTERING EVAPORATOR AT SCHEDULED CONDITION AND 96.7° F AMBIENT AIR TEMPERATURE. UNIT SHALL PROVIDE MECHANICAL COOLING DOWN TO SCHEDULED TEMPERATURE. UNIT SHALL UTILIZE R-410a REFRIGERANT.
2. HEATING CAPACITIES BASED ON 60°F AIR ENTERING HEAT EXCHANGER AND FIRING NATURAL GAS. PROVIDE ALUMINIZED STEEL HEAT EXCHANGER.
3. PROVIDE TRAPPED CONDENSATE DRAIN. SEE CONDENSATE DRAIN TRAP DETAIL.
4. STATIC PRESSURE SCHEDULED DOES NOT INCLUDE WET COOLING COIL, FILTER, HEATING PLANT OR SYSTEM EFFECT LOSSES.
5. PROVIDE FACTORY INSTALLED NON-FUSED DISCONNECT SWITCH.
6. PROVIDE FACTORY INSTALLED 'INSIDE THE CURB' UTILITY PROVISIONS (POWER CIRCUIT, CONTROLS CIRCUIT, AND 120V CONVENIENCE OUTLET CIRCUIT) SO THAT NO ELECTRICAL UTILITIES ARE OUTSIDE UNIT CASING. GAS CONNECTION SHALL BE OUTSIDE CASING. POWER CIRCUIT, CONVENIENCE OUTLET CIRCUIT, AND CONTROL CIRCUIT SHALL ALL BE ROUTED UP INSIDE THE CURB. CONTRACTOR SHALL ROUTE UTILITIES IN FACTORY DESIGNATED LOCATION. UNDER NO CIRCUMSTANCES SHALL CONTRACTOR CUT OPENINGS IN BOTTOM OF RTAC UNIT. FIELD CUTTING OF RTAC UNIT SHALL RESULT IN REJECTION OF RTAC UNIT AND NEW UNIT SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
7. PROVIDE FACTORY INSTALLED NON-POWERED G.F.I. CONVENIENCE OUTLET.
8. PROVIDE OUTDOOR AIR INTAKE HOOD WITH MOTORIZED OUTSIDE AIR DAMPER AND BIRDSCREEN.
9. PROVIDE BAROMETRIC RELIEF DAMPERS.
10. PROVIDE FACTORY INSTALLED MANUAL RESET SUPPLY AIR SMOKE DETECTOR.
11. UNIT SHALL HAVE HORIZONTAL DISCHARGE AND HORIZONTAL RETURN DUCT CONNECTIONS. UNIT IS MOUNTED ATOP FULL PERIMETER ROOF CURB. SEE ROOF CURB DETAIL. SEE SPECIFICATION SECTION 15736 FOR REQUIREMENTS FOR HORIZONTAL CONNECTIONS.
12. OUTDOOR AIR CFM FOR THIS UNIT AND AREA HAS BEEN DETERMINED BASED ON ASHRAE 62.1 INDOOR AIR QUALITY PROCEDURE RATHER THAN THE PRESCRIPTIVE VENTILATION RATE PROCEDURE. THE OUTDOOR AIR RATES USING THIS PROCEDURE ARE LOWER THAN THE PRESCRIPTIVE PROCEDURE. THIS UNIT SHALL BE PROVIDED WITH A CONTRACTOR INSTALLED NEEDLE POINT BI-POLAR IONIZATION UNIT TO REDUCE CONTAMINENT LEVELS TO THOSE EQUAL TO OR LOWER THAN THE VENTILATION RATE PROCEDURE. SEE BI-POLAR IONIZATION CONTROL DETAIL.
13. PROVIDE INTEGRAL HOT GAS REHEAT DEHUMIDIFICATION COIL CIRCUIT. PROVIDE THERMAL EXPANSION VALVE, FROSTAT, CRANK CASE HEATER, AND ALL OTHER CONTROL AND MATERIAL OPTIONS REQUIRED TO ACCEPT INPUT FROM SPACE HUMIDITY SENSOR. RTAC SHALL PROVIDE MINIMUM 18° TEMPERATURE RISE TO DELIVER NEUTRAL DEHUMIDIFIED AIR DURING CALL FOR DEHUMIDIFICATION.
14. PROVIDE LOUVERED CONDENSER COIL HAIL GUARDS.
15. PROVIDE ELECTROMECHANICAL CONTROLLER.
16. PROVIDE DRY BULB TYPE OUTDOOR AIR ECONOMIZER .

FAN COIL UNITS

TAG	CARRIER MODEL NUMBER	TOTAL COOLING MBH	SENSIBLE COOLING MBH	TOTAL SUPPLY CFM	O.A. CFM	INT. HTG. CAP. MBH	AUX. HEATING KW	APPROX ESP IN. WG	BLOWER MOTOR HP	ENTERING AIR TEMPERATURE		NOTES
										°FDB	°FWB	
FCU-1	FV4C	50.3	35.8	1600	250	24.4	10	0.60	3/4	78.5	64.7	1:2:3:4:5:6:7:8:9:10:11:12:13
FCU-2	FV4C	50.3	35.8	1600	250	24.4	10	0.60	3/4	77.5	64.2	1:2:3:4:5:6:7:8:9:10:11:12
FCU-3	FV4C	58.5	40.3	1930	120	29.9	10	0.60	3/4	76.3	63.3	1:2:3:4:5:6:7:8:9:10:11:12:13

1. VERTICAL DRAW THRU FAN COIL UNIT WITH SINGLE WALL CONSTRUCTION AND 1" THICK R4.2 INTERIOR INSULATION. PROVIDE BAKED ENAMEL FINISH.
2. COOLING CAPACITIES BASED ON AIR ENTERING EVAPORATOR AT SCHEDULED CONDITIONS AND MATCHED WITH INDICATED HEAT PUMP UNIT.
3. HEATING CAPACITY BASED ON 70°F RETURN AIR AND OUTDOOR AIR AT 17°F, AND MATCHED WITH INDICATED HEAT PUMP UNIT.
4. PROVIDE DX COOLING COIL WITH FACTORY INSTALLED THERMOSTATIC EXPANSION VALVE FOR REFRIGERANT CONTROL.
5. SCHEDULED CAPACITIES ARE OVERALL CAPACITIES FOR MATCHED HEAT PUMP UNIT AND EVAPORATOR COIL WITH 2°F LINE LOSS.
6. EXTERNAL STATIC PRESSURE SCHEDULED DOES NOT INCLUDE WET COOLING COIL, CASING, ELECTRIC HEAT COIL OR FILTER LOSSES. BLOWER MOTOR MUST OVERCOME E.S.P. AT CONNECTED VOLTAGE.
7. PROVIDE UNIT MOUNTED FACTORY PROVIDED FIELD INSTALLED ELECTRIC STRIP HEATERS OF INDICATED KW AT CONNECTED VOLTAGE. PROVIDE SINGLE POINT UNIT POWER CONNECTION FOR ENTIRE UNIT.
8. PROVIDE FAN MOTOR CONTACTOR, TERMINAL STRIP, AND ALL CONTROLS.
9. PROVIDE INTEGRAL FILTER RACK DESIGNED TO ACCOMODATE 1" FILTERS.
10. PROVIDE DOUBLE SLOPED REMOVABLE CONDENSATE DRAIN PAN. PROVIDE TRAPPED CONDENSATE DRAIN. SEE CONDENSATE DRAIN TRAP DETAIL.
11. MOUNT UNIT ATOP RETURN AIR PLENUM STAND. SEE RETURN AIR PLENUM STAND DETAIL.
12. UNIT SHALL BE PROVIDED WITH HUMIDITY CONTROL.
13. OUTDOOR AIR CFM FOR THIS UNIT AND AREA HAS BEEN DETERMINED BASED ON ASHRAE 62.1 INDOOR AIR QUALITY PROCEDURE RATHER THAN THE PRESCRIPTIVE VENTILATION RATE PROCEDURE. THE OUTDOOR AIR RATES USING THIS PROCEDURE ARE LOWER THAN THE PRESCRIPTIVE PROCEDURE. THIS UNIT SHALL BE PROVIDED WITH A CONTRACTOR INSTALLED NEEDLE POINT BI-POLAR IONIZATION UNIT TO REDUCE CONTAMINENT LEVELS TO THOSE EQUAL TO OR LOWER THAN THE VENTILATION RATE PROCEDURE. SEE BI-POLAR IONIZATION CONTROL DETAIL.

HEAT PUMP UNITS

TAG	CARRIER MODEL No.	TOTAL COOLING MBH	MINIMUM STAGES CAPACITY	MINIMUM COOLING AMBIENT OPERATING TEMPERATURE °F	REVERSE CYCLE HEATING MBH	NOTES
HP-1	25HCE	50.3	1	40	24.4	1:2:3:4:5:6:7:8:9:10
HP-2	25HCE	50.3	1	40	24.4	1:2:3:4:5:6:7:8:9:10
HP-3	25HCE	58.5	1	40	29.9	1:2:3:4:5:6:7:8:9:10

1. COOLING CAPACITIES BASED ON 96.7°F AMBIENT AIR TEMPERATURES.
2. ALL REFRIGERANT LINES TO BE INSTALLED AND SIZED PER MANUFACTURER'S INSTALLATION RECOMMENDATIONS.
3. SCHEDULED CAPACITIES ARE OVERALL CAPACITIES REQUIRED FOR MATCHED HEAT PUMP AND EVAPORATOR COIL WITH 2°F SUCTION LINE LOSS.
4. PROVIDE INTEGRAL CONTROLS INCLUDING CONTACTORS, CRANKCASE HEATER, 5 MINUTE COMPRESSOR TIME DELAY RELAY AND COMPRESSOR OVER TEMPERATURE (OVERLOAD) PROTECTION.
5. PROVIDE ALL CONTROLS, ACCESSORIES AND SYSTEM MODIFICATIONS TO PERMIT COOLING OPERATION TO SPECIFIED TEMPERATURE.
6. PROVIDE LIQUID AND SUCTION LINE SERVICE VALVES/GAUGE PORTS.
7. PROVIDE HIGH PRESSURE SWITCH AND LOW PRESSURE SWITCH.
8. PROVIDE TIME INITIATED, TEMPERATURE TERMINATED DEFROST CONTROLS.
9. SEE HEAT PUMP/CONDENSING UNIT DETAIL.
10. UNIT SHALL UTILIZE R4104 REFRIGERANT.

BI-POLAR IONIZATION UNITS

TAG	ASSOCIATED EQUIPMENT	CFM	GLOBAL PLASMA SOLUTIONS MODEL #	NOTES
BPIU-1	RTAC-1	4500	(2) GPS-FC-3	1:2:3:4
BPIU-2	RTAC-2	4500	(2) GPS-FC-3	1:2:3:4
BPIU-3	FCU-2	1930	GPS-FC-3	1:2:3:4
BPIU-4	FCU-3	1930	GPS-FC-3	1:2:3:4

1. NEEDLE-POINT TYPE IONIZER WITH ABS PLASTIC OR POWDER-COATED STEEL HOUSING AND CARBON OR STAINLESS STEEL IONIZATION NEEDLES.
2. PROVIDE LED TO VERIFY IONIZATION.
3. PROVIDE FACTORY FURNISHED 24 VAC INPUT TERMINAL FOR POWERING BIPOLAR UNIT FROM ASSOCIATED EQUIPMENT'S 24V FAN TERMINAL.
4. UNIT SHALL BE MOUNTED INSIDE OF AIR CONDITIONING EQUIPMENT .

WWA ARCHITECTS
348 COTTON AVE.#500
P.O. BOX 110
MACON, GEORGIA 31021

GEORGIA REGISTERED ARCHITECT

AH&P CONSULTING ENGINEERS
ANDREWS, HAMMOCK & POWELL, INC.
250 Charter Lane
Suite 100
Macon, Georgia 31210
Phone: (478)405-8301
Fax: (478)405-8210
WWW.AHPENGR.COM

ROSA JACKSON COMMUNITY CENTER

MACON / BIBB COUNTY RECREATION DEPARTMENT

1211 MAYNARD ST
MACON, GA 31217

▷ ADDENDUM #2	10/23/2015

Date:	09/23/2015
Drawn By:	JSS
Checked By:	WMH
Project Number:	2014-112

Sheet Name:
MECHANICAL LEGEND AND SCHEDULES

Sheet Number:
M601