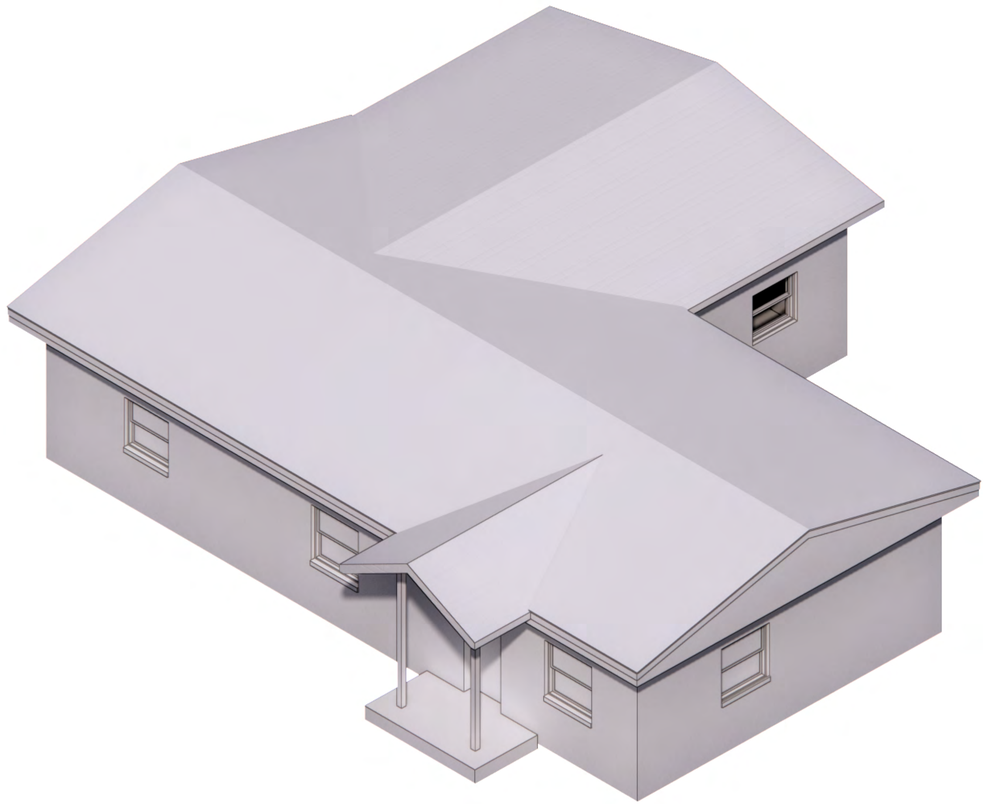
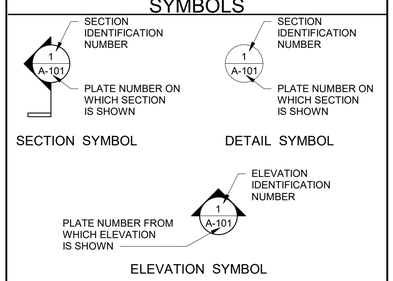
CITY OF GEORGETOWN
PUBLIC WORKS BUILDING

125 N. KAMINSKI STREET



DRAWING SHEET INDEX ON G-002

SECTION, DETAIL, AND ELEVATION SYMBOLS



Georgetown SOUTH CAROLINA

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
1	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DESIGNED BY: PER
DRAWN BY: PER
CHECKED BY: BAW
DATE: SEPTEMBER 17, 2021
PROJECT CODE: CHS1001.001
SCALE: 12" = 1'-0"
0 SIZE ANSI BORDER
COVER SHEET
PLOT DATE:
PLOT TIME:
FILE NAME: 1361001 PLANS AND DETAILS - ARCHITECTURAL.DWG

RAYMOND SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

COVER SHEET

PLATE NUMBER:

G-001

SHEET OF

9/20/2021 4:58:20 PM

SCOPE OF WORK

RENOVATIONS OF THE INTERIOR SPACE AND EXPANDING THE INTERIOR SPACE AREA TO ACCOMODATE A STAFF OF FIVE (5) EMPLOYEES. THE CURRENT INTERIOR OFFICE SPACE IS APPROXIMATELY 1000 SQUARE FEET (SF) AND THE DEPARTMENT IS CURRENTLY OPERATING IN CRAMMED QUARTERS. THE RENOVATED SPACE SHALL CONSIST OF:

1) THREE OFFICES FOR THE DEPARTMENT OF PUBLIC WORKS MANAGEMENT
2) TWO WORKSTATIONS FOR THE KGB PROGRAM ADMINISTRATOR AND A MAINTENANCE TECHNICIAN.
3) ONE CONFERENCE ROOM WITH A CAPACITY FOR 8 SEATS.
4) ONE KITCHENETTE AREA
5) TWO ADA COMPLIANT RESTROOMS FOR MALES AND FEMALES
6) ONE FILE STORAGE ROOM
7) ON COPY MACHINE AREA
8) ONE ENTRANCE VESTIBULE
9) ONE BACK ENTRANCE FOR EMPLOYEES

PROJECT NOTES:

1. ALL WORK SHALL MEET THE MINIMUM REQUIREMENTS OF THE LATEST ADOPTED EDITIONS OF THE APPLICABLE CODES, AS INDICTED ON THIS SHEET AND ALL OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS HAVING JURISDICTION.
2. DO NOT SCALE DRAWINGS. CLARIFY ANY DIMENSIONAL DISCREPANCIES WITH THE ARCHITECT PRIOR TO CONTINUING WITH THE WORK.
3. CLARIFY ANY COORDINATION DISCREPANCIES BETWEEN ENGINEER DRAWINGS AND ARCHITECTURAL DRAWINGS WITH THE ARCHITECT PRIOR TO CONTINUING WITH THE WORK.
4. ALL WORK LISTED, SHOWN OR IMPLIED ON THE CONSTRUCTION DOCUMENTS SHALL BE SUPPLIED AND INSTALLED BY THE GENERAL CONTRACTOR EXCEPT WHERE OTHERWISE NOTED.
5. G.C. TO COORDINATE INSTALL OF FIRE ALARM SYSTEM W/ LICENSED VENDOR

GENERAL DEDUCTIVE ALTERNATE NOTES:

1. A DEDUCTIVE ALTERNATE IS AN AMOUNT PROPOSED BY GC AND STATED ON THE BID FORM FOR CERTAIN WORK DEFINED IN THE BIDDING REQUIREMENTS THAT MAY BE ADDED TO OR DEDUCTED FROM THE BASE BID AMOUNT IF CITY DECIDES TO ACCEPT A CORRESPONDING CHANGE EITHER IN THE AMOUNT OF CONSTRUCTION TO BE COMPLETED OR IN THE PRODUCTS, MATERIALS, EQUIPMENT, SYSTEMS, OR INSTALLATION METHODS DESCRIBED IN THE CONTRACT DOCUMENTS.
2. COORDINATION: MODIFY OR ADJUST AFFECTED ADJACENT WORK AS NECESSARY TO COMPLETELY INTEGRATE WORK OF THE BID OPTION INTO PROJECT. INCLUDE AS PART OF EACH DEDUCTIVE ALTERNATE MISCELLANEOUS DEVICES, ACCESSORY OBJECTS, AND SIMILAR ITEMS INCIDENTAL TO OR REQUIRED FOR A COMPLETE INSTALLATION WHETHER OR NOT INDICATED AS PART OF DEDUCTIVE ALTERNATE.
3. EXECUTE ACCEPTED DEDUCTIVE ALTERNATE UNDER THE SAME CONDITIONS AS OTHER WORK OF THE CONTRACT.

DEDUCTIVE ALTERNATES:

PROVIDE SEPARATE PRICING FOR THE FOLLOWING ITEMS:

- DEDUCT #1 - TBD

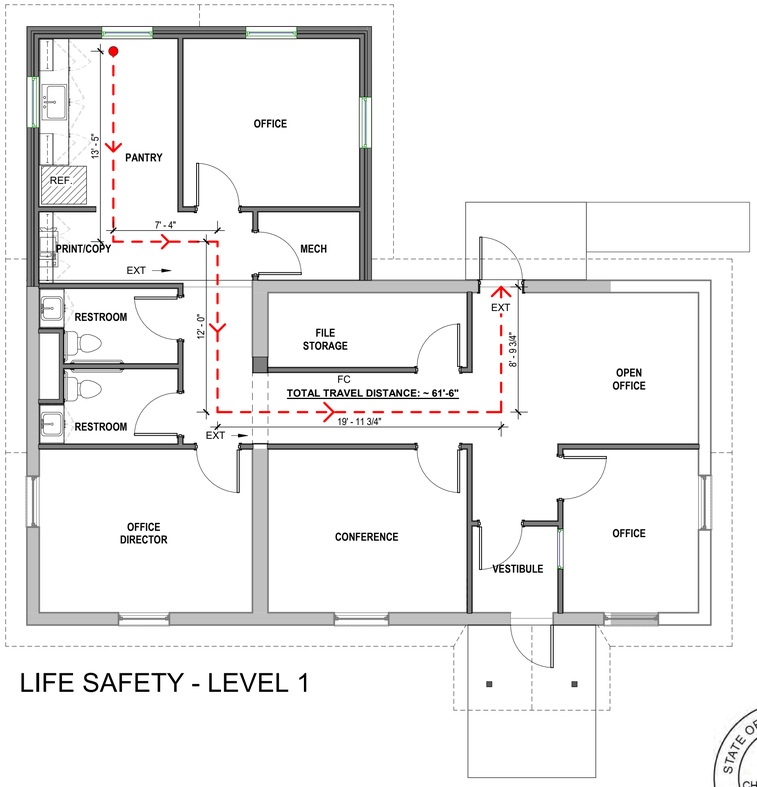
CODE CRITERIA:

- INTERNATIONAL BUILDING CODE (IBC) 2018
- NFPA 101 LIFE SAFETY CODE (SEE NOTES BELOW) 2018
- NFPA NATIONAL FIRE CODES WITH THE EXCEPTION OF NFPA 5000 AND NFPA 900
- OCCUPATIONAL, SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS.
- NATIONAL ELECTRICAL CODE (NEC) 2020
- INTERNATIONAL PLUMBING CODE (IPC) 2018
- BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, AMERICAN CONCRETE INSTITUTE AND COMMENTARY (ACI 318)
- VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY – ASHRAE STANDARD 62.1-2019
- SAFETY STANDARD FOR REFRIGERATION SYSTEMS – ASHRAE STANDARD 15

LOCAL CODES:
GC TO FOLLOW ANY AND ALL LOCAL BUILDING CODES AS ASSOCIATED WITH THIS PROJECT AND PROJECT JURISDICTION.

NOTES:
1. NFPA 101 PRIMARILY ADDRESSES LIFE SAFETY AND FIRE PROTECTION FEATURES WHILE THE IBC ADDRESSES A WIDE RANGE OF CONSIDERATIONS, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL STRENGTH, SEISMIC STABILITY, SANITATION, ADEQUATE LIGHT AND VENTILATION, AND ENERGY CONSERVATION. DESIGNS SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF NFPA 101 AND DOCUMENTS REFERENCED THEREIN. DESIGN FEATURES NOT ADDRESSED BY NFPA 101 OR DOCUMENTS REFERENCED THEREIN SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE IBC OR AS OTHERWISE ADDRESSED ABOVE IN THIS PROGRAM GUIDE. FOR DESIGN FEATURES THAT ARE ADDRESSED BY BOTH THE IBC AS WELL AS NFPA 101 OR A DOCUMENT REFERENCED BY NFPA 101, THE REQUIREMENTS OF NFPA 101 OR THE DOCUMENT REFERENCED BY NFPA 101 SHALL BE USED EXCLUSIVELY (THIS APPLIES EVEN IF THE IBC REQUIREMENTS ARE DIFFERENT).

DRAWING INDEX



LIFE SAFETY - LEVEL 1

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10851
REGISTERED ARCHITECT
7/14/2021

Georgetown SOUTH CAROLINA

DATE	DESCRIPTION OF REVISION	#	BY	CHKD
9/17/2021	CONSTRUCTION BID SET		PER	BAW

DESIGNED BY: PER
DRAWN BY: SCJD
CHECKED BY: MLK/GR
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SCALE: As indicated
D SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1363.001 PLANS AND DETAILS - ARCHITECTURAL.DWG

CODE SUMMARY & SHEET INDEX

RAYMOND SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

CODE SUMMARY & SHEET INDEX

PLATE NUMBER:
G-002
SHEET OF

9/20/2021 4:58:20 PM

010000 - GENERAL REQUIREMENTS

1. The Construction Documents are to include AIA document A201 "General Conditions of the Contract for Construction". City of Georgetown shall be designated as "The Owner," Raymond LLC shall be designated as "The Architect." . The AIA document shall also include the Agreement, Performance and Payment Bonds, General Conditions, Supplementary Conditions, the Specifications, the Drawings Addendum, and Contract Modifications, Building Rules and Regulations & any other documents required by the Owner

2. The General Contractor shall be both licensed and bonded in this jurisdiction and shall provide documents upon the Architect's request.

3. The Work shall be done in accordance with all rules and regulations of all applicable safety and building codes. The General Contractor is responsible for securing and paying for all permits required for the Work and for the scheduling of all required inspections during the course of the Work.

4. The General Contractor shall review the existing conditions, Landlord Rules & Regulations & Base Building Construction Documents from the Landlord and shall comply with all base building requirements and design criteria. The Contractor shall notify the Architect of all discrepancies, errors, inconsistencies or ambiguities discovered.

5. The General Contractor shall provide protection and be responsible for any existing finishes to remain and shall repair or replace any damaged areas as a result of the work. All existing finishes to remain shall be cleaned at the completion of construction.

6. All materials and systems shall be installed as per manufacturer's instructions or specifications and all construction shall be of industry standard or better. The Architect shall be ultimate judge of quality.

7. Only new items of recent manufacture, of standard quality, free from defects, will be permitted in the Work, unless otherwise noted. Rejected items shall be removed immediately form the Work and replaced with items of the quality specified. Failure to remove rejected materials and equipment shall not relieve the General Contractor from the responsibility for quality of items used nor from any other obligation imposed on him by the Contract.

8. Do not scale drawings. Stated & written dimensions govern. The General Contractor shall verify all dimensions in the field and shall be responsible for their accuracy. No extra charge or compensation shall be allowed because of difference between actual dimensions and those indicated on the drawings, unless they contribute to a change in the scope of the Work. Any difference which may be found shall be submitted to the Architect for decision prior to ordering, manufacturing, or proceeding with the Work. Horizontal dimensions indicated are to/from face of GWB, unless noted otherwise. Vertical dimensions are from top of floor slab except where noted to be above finished floor (AFF). Dimensions are not adjustable without approval of Architect unless noted +/-.

9. In the event of conflict between data shown on drawings and data shown on the specification, the specification shall govern. Detail drawings take precedent over drawings of larger scope. Should the General Contractor at any time discover an error in a drawing or specification, or any discrepancy, or variation between dimensions on the drawings and measurements at site, or lack of dimensions or other information, the Contractor shall not proceed with the work affected until clarification has been made by the Architect. In case of an inconsistency between Drawings and Specifications or within either Document, not clarified by addendum, the more specific provision will take precedence over less specific; more specific will take precedence over less stringent; more expensive item will take precedence over less expensive. Better quality or greater quantity of Work shall be provided in accordance with Architect's interpretation. On Drawings, figures take precedence over scaled dimensions. Scaling of dimensions, if done, is done at the Contractor's own risk.

10. General Contractor shall verify that no conflicts exist in locations of any and all mechanical, telephone, electrical, plumbing and sprinkler equipment (to include all piping, duct work, sprinklers structural members and conduit) and that clearances for installation and maintenance of above equipment is provided. Elements in conflict shall be determined and reviewed with the Architect prior to work proceeding. Contractor to coordinate new work with existing conditions.

11. The General Contractor shall provide shop drawings for the Architect's review and approval for the following: Millwork; Flooring; Carpet Seaming; Fire Alarm; Sprinkler; Wallcovering.

12. The General Contractor shall provide the Architect with manufacturer's cut sheets and specifications for all equipment including but not limited to: light fixtures, plumbing equipment, electrical equipment, fans, supplementary heating and cooling elements, all hardware and security equipment.

13. The General Contractor shall not proceed with work for which he expects additional compensation beyond the contract amount with out written authorization from the Architect and Owner. Failure to obtain such authorization shall invalidate a claim for extra compensation. The Contractor shall not proceed with work which, if completed in strict conformance with the Construction Documents, will result in additional work beyond the scope of the Contract without written authorization from the Architect and Owner. Any field conditions that significantly vary from the Contract Documents or will result in additional work, shall be brought to the attention of the Architect prior to proceeding with work.

14. Contractor shall include all x-ray and core drill costs. All core drilling of the slab shall be approved by the Landlord Structural Engineer prior to proceeding with the Work. Contractor shall submit proposed locations to Architect and Structural Engineer for review prior to proceeding with the work.

15. Patch, repair and install all fireproofing as required by code. Fireproof any new penetrations required by the work.

16. General Contractor to coordinate and review size and location of all slab penetrations. All required penetrations shall be made in accordance with the Owner's standard approval procedures and methods. All penetrations shall be properly sealed according to the Architect and the Owner's requirements and applicable codes.

17. The General Contractor shall continuously check architectural and structural clearances for accessibility of equipment and mechanical and electrical systems. No allowances of any kind will be made for the General Contractor's negligence to foresee means of installing equipment into position.

18. The finished work shall be firm, well-anchored, in true alignment, plumb, level, with smooth, clean, uniform, appearance without waves, distortions, holes, marks cracks, stains, or discoloration. Jointing shall be close fitting, neat and well scribed. The finished work shall have no exposed unsightly anchors or fasteners and shall not present hazardous, unsafe corners. All work shall have the provision for expansion, contraction and shrinkage as necessary to prevent cracks, buckling, and warping due to temperature and humidity conditions.

19. Attachments, connections or fasteners of any nature are to be properly and permanently secured in conformance with best practice and the General Contractor is responsible for improving them accordingly. The drawings highlight special conditions only and by no means illustrate every connection. Start of installation shall imply acceptance of substrate.

20. General Contractor shall waive "Common Practice" and "Common Usage" as construction criteria wherever details and Contract Documents or governing codes, ordinances, etc. require quantity or better quality than common practice or common usage would require.

21. The General Contractor shall submit shop drawings and submittals order and schedule delivery of materials in ample time to avoid delays in construction. If an item is found to be unavailable or to have a long lead time, the General Contractor shall notify Architect immediately with a proposed alternative.

22. The General Contractor shall notify the Owner, the Landlord, and the Architect in writing of any deficiencies in base building new work prior to the commencement of the work. Any unreported deficiencies will become the responsibility of the General Contractor to correct.

23. The General Contractor shall exercise extreme care and precaution during the construction of the Work, and schedule work, to minimize disturbances to adjacent spaces and /or structures and their occupants, property, public thoroughfares, etc. The General Contractor shall take precautions and be responsible for the safety of all building occupants from construction procedures. The General Contractor shall be responsible for any overtime costs incurred thereby.

24. All debris shall be removed from the site on a daily basis when possible. Upon completion of the work, remove all debris from the building created by the work provided under this Contract and leave all areas clean. Trash is not permitted to be burned on site.

25. All abandoned miscellaneous nails, hangers, staples, wires and conduits shall be removed from the walls and areas of exposed ceilings. Remove all abandoned pipe sleeves in floor slabs. Patch existing slab as req. to maintain UL fire rating of floor slab where pipes and conduits have been removed.

26. Slab penetrations less than 2" around new and existing piping, conduit, ductwork, etc. shall be filled with acoustic foam and/or sealant to ensure acoustical separation between floor slabs. Slab penetrations greater than 2" around new and exiting piping, conduit, ductwork, etc. shall be filled with concrete. All piping, conduit, ductwork, etc. shall be wrapped with expansion material prior to filling with concrete. Expansion material shall be approved by the MEP Engineer. Slab penetrations to meet 2 hour fire rating.

27. Notify Architect of any access panels which may be required before proceeding with the work. No access panels shall be provided in GWB ceilings. Contractor shall be responsible for coordinating all trades. Required access panels shall be included in the Contractor's scope.

28. Contractor shall provide the Team with a construction schedule showing the proposed phasing. Any long lead items that will affect the Substantial Completion date shall be brought to the Architect's attention immediately.

29. Provide protection for existing finishes to remain, including restrooms, lobbies and corridors and repair damages as a result of construction. Document any existing conditions or damages prior to the start of construction.

30. The Contractor shall be solely responsible for, and have control over, all construction means, methods, techniques, sequences, and procedures for coordinationg and constructing all portions of the work.

016000 - PRODUCT REQUIREMENTS

A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
B. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.
C. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.
D. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Insert specific requirements if a single warranty must cover work by several contractors. Prepare draft of such warranty with advice of
E. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
F. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

002113 - INSTRUCTION TO BIDDERS

1. Bid Format: Pricing shall be provided in standard CSI format with a breakdown by trades including quantities and unit prices where applicable. Owner and Architect shall review proposed substitutions following receipt of Bids and shall accept or reject at Owner's sole discretion.

2. Contractor shall, at the Owner's request, provide full back-up for bids from subcontractors, including actual bid documents provided to Contractor. It is the responsibility of the General Contractor to distribute complete bids packages to all trades.

3. Substitutions and Qualifications: All pricing shall be based on the Contract Documents without substitution or alteration. However, the General Contractor may offer product or construction method substitutions wherever substantive savings may be available to the Owner by submitting with bid. It is the responsibility of the General Contractor to call out and clearly identify all proposed substitutions as an add or deduct alternate to the base bid and attach to the bid for the review by the Architect and Owner. It is the Contractor's responsibility to verify that the proposed substitutions comply with all specifications. Owner and Architect shall review proposed substitutions following receipt of Bids and shall accept or reject at Tenant/Architect/Owner sole discretion.

4. All proposed substitutions shall be reviewed by the Architect, who shall have the final authority to accept or reject substitutions as "equal" to the specified item or assembly. If the General Contractor does not identify and receive Architect/Tenant approval for substitutions, then the Architect retains the right to demand that the product or construction method originally specified be installed without additional cost to the Tenant.

5. Prior to submitting bid, the General Contractor and all appropriate subcontractors shall thoroughly examine the site and the Construction Documents to ensure his knowledge of all relevant field conditions and requirements affecting the Work. Any items which may conflict with the proposed work shall be brought to the Architect's attention prior to the submission of the bid. The Contractor shall be familiar with all building rules and regulations. No claim for extra compensation will be allowed for General Contractor's or Subcontractors' failure to comply with this requirement.

6. General Contractor shall submit a complete list of all proposed subcontractors to the Architect, Mechanical/Electrical/Plumbing (MEP) Engineer, Tenant, and Owner. All subcontractors shall, at the discretion of the Architect, MEP Engineer, Tenant, or Owner submit qualifications for the type of work specified.

7. The General Contractor shall provide a proposed construction schedule showing the phasing of the work and the time required for each element of each phase with the bid. The General Contractor shall also provide a schedule for required shop drawings and submittals with the bid. The General Contractor shall notify the Architect of any long lead items that will affect the date of substantial completion and provide alternate sources prior to beginning work.

SECTION 033000 - CAST-IN-PLACE CONCRETE

Revise this Section by deleting and inserting text to meet Project-specific requirements.
This Section uses the term "Architect." Change this term to match that used to identify the design professional as defined in the General and Supplementary Conditions.
Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.
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 cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.

1.3 DEFINITIONS

Retain terms that remain after this Section has been edited for a project.
Definition in "Cementitious Materials" Paragraph below refers to those materials that make up the cementitious component of the w/c ratio.
A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, other pozzolans, and silica fume; materials subject to compliance with requirements.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.
Design mixtures in "Design Mixtures" Paragraph below are usually considered to be an action submittal.
B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
1. Indicate amounts of mixing water to be withheld for later addition at Project site.
C. Steel Reinforcement Shop Drawings: Placing Drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.

1.5 INFORMATIONAL SUBMITTALS

Coordinate "Qualification Data" Paragraph below with qualification requirements in Section 014000 "Quality Requirements" and as supplemented in "Quality Assurance" Article.
Retain "Material Certificates" Paragraph below to require submittal of material certificates from manufacturers.
A. Material Certificates: For each of the following, signed by manufacturers:
Revise fourteen subparagraphs below to suit Project.
1. Cementitious materials.
2. Admixtures.
3. Form materials and form-release agents.
4. Steel reinforcement and accessories.
5. Curing compounds.
6. Vapor retarders.
7. Semirigid joint filler.
8. Joint-filler strips.
9. Repair materials.

Retain "Material Test Reports" Paragraph below for material test reports that are Contractor's responsibility.
B. Material Test Reports: For the following, from a qualified testing agency:
Retain option in "Aggregates" Subparagraph below if retaining service record data with "Normal-Weight Aggregates" Paragraph in Part 2 "Concrete Materials" Article.
1. Aggregates.
C. Formwork Shop Drawings: Prepared by or under the supervision of a qualified professional engineer, detailing fabrication, assembly, and support of formwork.
Retain first paragraph below if Contractor engages testing agency for measuring floor surface flatness and levelness.
D. Floor surface flatness and levelness measurements indicating compliance with specified tolerances.
Retain "Field quality-control reports" Paragraph below if Contractor is responsible for field quality-control testing and inspecting.
E. Field quality-control reports.
Retain paragraph below if preinstallation conference is held.

1.6 QUALITY ASSURANCE

Retain "Installer Qualifications" Paragraph below if required. See Section 014000 "Quality Requirements" for general installer qualifications. Verify availability of qualified personnel with a local ACI chapter or concrete contractors. These desirable programs may have limited grass-roots penetration.
Retain "Testing Agency Qualifications" Paragraph below if Contractor retains testing agency for concrete mixture design, material test reports, or field quality control. Retain option if field quality-control testing agency employed by Contractor must be approved by authorities having jurisdiction.
A. Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
Retain first subparagraph below, required by ACI 301 (ACI 301M) and ASTM C 31/C 31M, if emphasis is needed. ASTM C 1077 notes relevant field or laboratory technician certification by ACI, NRMCA, and Portland Cement Association; or the National Institute for Certification in Engineering Technologies may demonstrate evidence of competence.
1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.
Retain subparagraph below if requiring minimum qualifications for laboratory personnel performing testing and for laboratory supervisor.
2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician, Grade I. Testing agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician, Grade II.
Retain "Welding Qualifications" Paragraph below if shop or field welding is required. If retaining, also retain "Welding certificates" Paragraph in "Informational Submittals" Article. AWS states that welding qualifications remain in effect indefinitely unless welding personnel have not welded for more than six months or there is a specific reason to question their ability.

1.7 DELIVERY, STORAGE, AND HANDLING

Retain option in "Steel Reinforcement" Paragraph below if zinc- or epoxy-coated steel reinforcement is required.
A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.

1.8 FIELD CONDITIONS

A. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
1. When average high and low temperature is expected to fall below 40 deg F (4.4 deg C) for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301 (ACI 301M).
2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
B. Hot-Weather Placement: Comply with ACI 301 (ACI 301M) and ACI 305.1 (ACI 305.1M), and as follows:
1. Maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

Manufacturers and products listed in SpecAgent and MasterWorks Paragraph Builder are neither recommended nor endorsed by the AIA or ARCOM. Before inserting names, verify that manufacturers and products listed there comply with requirements retained or revised in descriptions and are both available and suitable for the intended applications. For definitions of terms and requirements for Contractor's product selection, see Section 016000 "Product Requirements."

2.1 CONCRETE, GENERAL

A. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
1. ACI 301 (ACI 301M).
2. ACI 117 (ACI 117M).

2.2 FORM-FACING MATERIALS

A. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.
Forms in "Forms for Cylindrical Columns, Pedestals, and Supports" Paragraph below leave joint impressions in spiral or straight lines. Limit types of forms if a particular pattern of joint is required. Different release treatments of forms also affect appearance of as-cast surfaces.
Retain "Chamfer Strips" Paragraph below if chamfering is permitted.
B. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch (19 by 19 mm), minimum.
C. Form-Release Agent: Commercially formulated form-release agent that does not bond with, stain, or adversely affect concrete surfaces and does not impair subsequent treatments of concrete surfaces.
1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
D. Form Ties: Factory-fabricated, removable or snap-off glass-fiber-reinforced plastic or metal form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
Revise three subparagraphs below to suit Project; delete if not required.
1. Furnish units that leave no corrodible metal closer than 1 inch (25 mm) to the plane of exposed concrete surface.
2. Furnish ties that, when removed, leave holes no larger than 1 inch (25 mm) in diameter in concrete surface.
3. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.

2.3 STEEL REINFORCEMENT

Revise this article to suit steel reinforcement requirements; delete if not required.
A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
Retain "Low-Alloy-Steel Reinforcing Bars" Paragraph below for reinforcement that is welded or if added ductility is sought.
B. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, plain, fabricated from as-drawn steel wire into flat sheets.

2.4 REINFORCEMENT ACCESSORIES

Insert other products for dowels or dowel sleeves if required. These include circular and rectangular plastic dowel sleeves, square dowels, and plastic-surfaced or reinforced-paper-covered dowels.
A. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:
Retain one or more of three subparagraphs below; revise to suit Project.
B. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
C. Cementitious Materials:
Retain type and color of portland cement from options in "Portland Cement" Subparagraph below.
1. Portland Cement: ASTM C 150/C 150M, Type I or Type II.
Retain supplementary cementing materials in "Fly Ash" and "Slag Cement" subparagraphs below if permitted. Ready-mix-concrete manufacturer blends these materials with portland cement. Fly ash, slag cement, or pozzolanic materials may slow rate of concrete strengthening and affect color uniformity. Class F fly ash is more readily available than Class C fly ash.
2. Fly Ash: ASTM C 618, Class F or C.
Retain class of aggregate from options in "Normal-Weight Aggregates" Paragraph below or revise to suit Project. ASTM C 33/C 33M limits deleterious substances in coarse aggregate, depending on climate severity and in-service location of concrete. Classes in first set of options are ASTM C 33/C 33M default classes for concrete exposed to weather for Severe, Moderate, and Negligible weathering regions, respectively. Revise first two options to Class 4S or 4M if concrete is exposed to frequent wetting. Retain last option if damage caused by concrete expansion from alkali silica or alkali carbonate reactions is anticipated.
D. Normal-Weight Aggregates: ASTM C 33/C 33M, Class 3S coarse aggregate or better, graded. Provide aggregates from a single source.
Retain coarse-aggregate size from three options in "Maximum Coarse-Aggregate Size" Subparagraph below; insert gradation requirements if preferred. Aggregate size limits relate to spacing of steel reinforcement, depth of slab, or thickness of concrete member.
1. Maximum Coarse-Aggregate Size: 3/4 inch (19 mm) nominal.
Retain "Fine Aggregate" Subparagraph below if optional restriction for fine aggregate in ASTM C 33/C 33M is required.
2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
Retain "Lightweight Aggregate" Paragraph below if using lightweight aggregate for structural lightweight concrete. Retain size limit from four options below.
E. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete.
Do not use calcium chloride or admixtures containing calcium chloride.
Retain one or more chemical admixtures from "Water-Reducing Admixture," "Retarding Admixture," "Water-Reducing and Retarding Admixture," "High-Range, Water-Reducing Admixture," "High-Range, Water-Reducing and Retarding Admixture," and "Plasticizing and Retarding Admixture" subparagraphs below.
1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
Retain "Set-Accelerating Corrosion-Inhibiting Admixture" Paragraph below if set-accelerating corrosion inhibitors are required. Set-accelerating products are usually calcium nitrite-based admixtures and comply with ASTM C 494/C 494M, Type C.
Insert other admixtures, such as integral waterproofing admixtures, in "Water" Paragraph below if required.
F. Water: ASTM C 94/C 94M and potable.

2.5 VAPOR RETARDERS

Retain one "Sheet Vapor Retarder" Paragraph below if a nonbituminous water vapor retarder is required.
Retain option and insert water-vapor permeance in first "Sheet Vapor Retarder" Paragraph below if requiring less than the 0.3 perms permitted by ASTM E 1745. See the Evaluations.
Retain option and insert water-vapor permeance in first "Sheet Vapor Retarder" Paragraph below if requiring less than the 0.3 perms permitted by ASTM E 1745. See the Evaluations.
A. Sheet Vapor Retarder: ASTM E 1745, Class B. Include manufacturer's recommended adhesive or pressure-sensitive tape.
Retain option and insert water-vapor permeance in first "Sheet Vapor Retarder" Paragraph below if requiring less than the 0.3 perms permitted by ASTM E 1745. See the Evaluations.

2.6 CURING MATERIALS

Evaporation retarders temporarily reduce moisture loss from concrete surfaces awaiting finishing in hot, dry, and windy conditions. Evaporation retarders are not curing compounds.
A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
Retain curing aids and materials from remaining paragraphs.
B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) when dry.
C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
D. Water: Potable.
Retain "Clear, Waterborne, Membrane-Forming Curing Compound" Paragraph below if a dissipating-type, waterborne, membrane-forming curing compound is required. Although the EPA mandates maximum VOC emissions of 350 g/L for curing compounds, verify VOC emission limits of authorities having jurisdiction. If slow breakdown of curing membrane could interfere with bonding of floor coverings, retain "Removal" Subparagraph in "Concrete Protecting and Curing" Article in Part 3.
Retain "Clear, Waterborne, Membrane-Forming Curing Compound" Paragraph below if a nondissipating-type, waterborne, membrane-forming curing compound with minimal solids content is required. Although the EPA mandates maximum VOC emissions of 350 g/L for curing compounds, verify VOC emission limits of authorities having jurisdiction. Retain option if applicable.
E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, nondissipating, certified by curing compound manufacturer to not interfere with bonding of floor covering.
Verify with manufacturer that retained products have been tested against interference with bonding of floor covering.

2.7 RELATED MATERIALS

Retain one or all options in "Expansion- and Isolation-Joint-Filler Strips" Paragraph below. Joint-filler strips are used in floor isolation joints.
A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self-expanding cork.
Retain one of two options in "Semirigid Joint Filler" Paragraph below if semirigid joint filler is required to fill joints and support edges of trafficked contraction and construction joints.
B. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade to suit requirements, and as follows:
Retain types from two options in subparagraph below based on service loadings.
1. Types I and II, nonload bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
Retain "Reglets" Paragraph below if reglets are not specified elsewhere. Coordinate product requirements with Section 076200 "Sheet Metal Flashing and Trim" or Section 077100 "Roof Specialties" or in other Sections where reglets are supplied as auxiliary products with waterproofing or roofing membrane flashings.

2.8 REPAIR MATERIALS

Retain "Repair Underlayment" Paragraph below as a repair material for floor and slab areas beneath floor coverings.
A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch (3.2 mm) and that can be feathered at edges to match adjacent floor elevations.
1. Cement Binder: ASTM C 150/C 150M, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3.2 to 6 mm) or coarse sand as recommended by underlayment manufacturer.
4. Compressive Strength: Not less than 4100 psi (29 MPa) at 28 days when tested according to ASTM C 109/C 109M.
Retain "Repair Overlayment" Paragraph below as a repair material for floor or slab areas remaining exposed and not receiving floor coverings.
B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch (6.4 mm) and that can be filled in over a scarified surface to match adjacent floor elevations.
1. Cement Binder: ASTM C 150/C 150M, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.
3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3.2 to 6 mm) or coarse sand as recommended by topping manufacturer.
4. Compressive Strength: Not less than 5000 psi (34.5 MPa) at 28 days when tested according to ASTM C 109/C 109M.

2.9 CONCRETE MIXTURES, GENERAL

A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301 (ACI 301M).
1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.
Retain first option in "Cementitious Materials" Paragraph below if required for replacing part of the portland cement, which would otherwise be used in concrete, with other cementitious materials. Retain second option if limiting percentage of cementitious materials that can replace portland cement. Neither ACI 301 (ACI 301M) nor ACI 318 (ACI 318M) limit amount of cementitious materials that can replace portland cement unless concrete is exposed to deicing chemicals. Identify parts of building or structure affected by these limits unless extending them to all concrete.
B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
Percentages in six subparagraphs below repeat ACI 301 (ACI 301M) limits for concrete exposed to deicing chemicals. Revise to suit Project.
1. Fly Ash: 25 percent.
Retain appropriate option in first paragraph below for chloride limits. Identify portions of building with different limits if required. Percentages below repeat ACI 301 (ACI 301M) limits, respectively, for prestressed (post-tensioned) concrete, reinforced concrete exposed to chloride, reinforced concrete that is not dry or protected from moisture, and reinforced concrete that is dry or protected from moisture. ACI 301 (ACI 301M) and ACI 318 (ACI 318M) express this percentage by weight of cement, not cementitious material.
C. Limit water-soluble, chloride-ion content in hardened concrete to 0.30percent by weight of cement.
D. Admixtures: Use admixtures according to manufacturer's written instructions.
Revise four subparagraphs below to suit Project; delete if not required.
1. Use water-reducing admixture in concrete, as required, for placement and workability.
2. Use water-reducing and -retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a w/c ratio below 0.50.
Insert locations and dosage of corrosion-inhibiting admixture to subparagraph below if required.
Retain "Color Pigment" Paragraph below if integrally colored concrete is required, and indicate locations here or on Drawings.
E. Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

2.10 CONCRETE MIXTURES FOR BUILDING ELEMENTS

This article contains examples of building elements that often need different concrete mixtures. Revise, consolidate, or add other building elements if more concrete mixtures are required. Consider inserting minimum cementitious material content for mix designs.
A. Slabs-on-Grade: Normal-weight concrete.
Retain strength from five options in "Minimum Compressive Strength" Subparagraph below or revise to suit Project.
1. Minimum Compressive Strength: 4000 psi (27.6 MPa) at 28 days.
Retain w/c ratio from three options in "Maximum W/C Ratio" Subparagraph below, revise to suit Project, or delete if in-service durability conditions are benign and limits on w/c ratio are not required. Coordinate w/c ratio with compressive strength. See the Evaluations for discussion.
Retain one of three options in "Minimum Cementitious Materials Content" Subparagraph below or revise to suit Project. Options are based on minimum requirements set by ACI 301 (ACI 301M) for floors and relate to nominal maximum aggregate sizes 1-1/2 inches, 1 inch, and 3/4 inch (38, 25, and 19 mm), respectively.
2. Minimum Cementitious Materials Content: 540 lb/cu. yd. (320 kg/cu. m).
Retain slump limit from two options in "Slump Limit" Subparagraph below or revise to suit Project.
3. Slump Limit: 4 inches (100 mm), plus or minus 1 inch (25 mm).
Retain one or more "Air Content" subparagraphs below. Percentages in options in first two subparagraphs are default air contents required by ACI 301 (ACI 301M) for severe exposure. Air content in "Air Content" Subparagraph below is maximum recommended by ACI 302.1R for trowel-finished floors.
4. Air Content: Do not allow air content of trowel-finished floors to exceed 3 percent.
Insert w/c ratio here if slab-on-grade is subject to special exposure conditions or injurious sulfate exposure.
Retain "Steel-Fiber Reinforcement" Subparagraph below if steel-fiber reinforcement is used. Indicate location, on Drawings, of concrete using steel fiber. Revise application rate to suit Project.

2.11 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.12 CONCRETE MIXING

Retain option in "Ready-Mixed Concrete" Paragraph below if steel or synthetic fibers are required.
A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M, and furnish batch ticket information.
1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.
Retain "Project-Site Mixing" Paragraph below if Project-site mixing is permitted. ACI 301 (ACI 301M) applies measuring, batching, and mixing requirements from ASTM C 94/C 94M to Project-site mixing.
B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.
1. For mixer capacity of 1 cu. yd. (0.76 cu. m) or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
2. For mixer capacity larger than 1 cu. yd. (0.76 cu. m), increase mixing time by 15 seconds for each additional 1 cu. yd. (0.76 cu. m).
3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

PART 3 - EXECUTION

3.1 FORMWORK INSTALLATION

A. Design, erect, shore, brace, and maintain formwork, according to ACI 301 (ACI 301M), to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117 (ACI 117M).
C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
Retain surface classes, usually two or more, in two subparagraphs below. See discussion in "Formwork" Article in the Evaluations. Coordinate with rough- and smooth-formed finishes in "Finishing Formed Surfaces" Article.
1. Class B, 1/4 inch (6 mm) for rough-formed finished surfaces.
D. Construct forms tight enough to prevent loss of concrete mortar.
E. Construct forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast-concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
1. Do not use rust-stained steel form-facing material.
F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
Retain one of two options in first paragraph below. ACI 301 (ACI 301M) requires chamfers unless otherwise specified.
H. Do not chamfer exterior corners and edges of permanently exposed concrete.
I. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
J. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
K. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.2 EMBEDDED ITEM INSTALLATION

Specify embedded items and anchorage devices for other work attached to or supported by cast-in-place concrete. Insert specific requirements for installing embedded items, if any, that are part of the Work.
A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
1. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC 303.
Retain applicable subparagraphs below and insert others if required. Revise to suit Project.

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10051
REGISTERED ARCHITECT
7.14.2021

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
DESIGNED BY: PER
DRAWN BY: SCJD
CHECKED BY: MLK/GR
SHEET SPECIFICATIONS
SCALE: 1" = 1'-0"
PLOT DATE:
PLOT TIME:
D SIZE ANSI BORDER
FILE NAME: 1363.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

RAYMOND
SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

SHEET SPECIFICATIONS

PLATE NUMBER:
G-003
SHEET OF

9/20/2021 4:58:21 PM

SECTION 061000 - ROUGH CARPENTRY

Revise this Section by deleting and inserting text to meet Project-specific requirements.
Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

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. Framing with dimension lumber.

Retain first subparagraph below for timber incidental to conventional framing. For extensive timber framing, use Section 061300 "Heavy Timber Construction."

2. Framing with timber.
3. Wood blocking and nailers.
4. Wood furring.
5. Wood sleepers.

Delete first subparagraph below if specified as finish carpentry.

B. Related Requirements:

Retain subparagraphs below to cross-reference requirements Contractor might expect to find in this Section but are specified in other Sections.

1.3 DEFINITIONS

Retain terms that remain after this Section has been edited for a project.

A. Boards or Strips: Lumber of less than 2 inches nominal (38 mm actual) size in least dimension.
B. Dimension Lumber: Lumber of 2 inches nominal (38 mm actual) size or greater but less than 5 inches nominal (114 mm actual) size in least dimension.
C. Exposed Framing: Framing not concealed by other construction.
D. Timber: Lumber of 5 inches nominal (114 mm actual) size or greater in least dimension.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained.
2. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.

Retain "Fastener Patterns" Paragraph below for exposed framing if fastener locations are critical to appearance and fastener patterns are not indicated on Drawings.

B. Fastener Patterns: Full-size templates for fasteners in exposed framing.

1.5 INFORMATIONAL SUBMITTALS

Retain "Material Certificates" Paragraph below if applicable; delete if species and grade are indicated for each use.

A. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.
B. Evaluation Reports: For the following, from ICC-ES:
1. Wood-preservative-treated wood.
2. Post-installed anchors.
3. Metal framing anchors.

1.6 QUALITY ASSURANCE

A. Testing Agency Qualifications: For testing agency providing classification marking for fire-retardant treated material, an inspection agency acceptable to authorities having jurisdiction that periodically performs inspections to verify that the material bearing the classification marking is representative of the material tested.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Stack wood products flat with spacers beneath and between each bundle to provide air circulation. Protect wood products from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

Manufacturers and products listed in SpecAgent and Masterworks Paragraph Builder are neither recommended nor endorsed by the AIA or ARCOM. Before inserting names, verify that manufacturers and products listed there comply with requirements retained or revised in descriptions and are both available and suitable for the intended applications. For definitions of terms and requirements for Contractor's product selection, see Section 016000 "Product Requirements."

2.1 WOOD PRODUCTS, GENERAL

A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Grade lumber by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
1. Factory mark each piece of lumber with grade stamp of grading agency.

Retain only first option in first subparagraph below if authorities having jurisdiction require grade stamps on all materials.

Retain one of five options in "Maximum Moisture Content of Lumber" Paragraph below, or delete paragraph if green lumber is acceptable in all thicknesses. Verify availability of lumber with 15 percent maximum moisture content before retaining. Lumber more than 2 inches nominal (38 mm actual) in thickness is often shipped green. See the Evaluations.

B. Maximum Moisture Content of Lumber: 19 percent unless otherwise indicated.

2.2 WOOD-PRESERVATIVE-TREATED LUMBER

A. Preservative Treatment by Pressure Process: AWPA U1; Use Category UC2 for interior construction not in contact with ground, Use Category UC3b for exterior construction not in contact with ground, and Use Category UC4a for items in contact with ground.

See the Evaluations for information about treatment chemicals.

1. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium. Do not use inorganic boron (SBX) for sill plates.

Retain subparagraph below for exposed framing if considered necessary.

2. For exposed items indicated to receive a stained or natural finish, chemical formulations shall not require incising, contain colorants, bleed through, or otherwise adversely affect finishes.

B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or that does not comply with requirements for untreated material.
C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.

Retain only first option in subparagraph below if authorities having jurisdiction require quality mark on all materials.

Retain first option in "Application" Paragraph below and delete list that follows if all rough carpentry must be treated with wood preservative. Coordinate paragraph and list with requirements for fire-retardant-treated materials; wood cannot be both preservative treated and fire-retardant treated.

D. Application: Treat items indicated on Drawings, and the following:

Retain first subparagraph below if Project includes wood adjacent to roofing or waterproofing.

1. Wood cants, nailers, curbs, equipment support bases, blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
2. Wood sills, sleepers, blocking, furring, stripping, and similar concealed members in contact with masonry or concrete.
3. Wood framing and furring attached directly to the interior of below-grade exterior masonry or concrete walls.
4. Wood framing members that are less than 18 inches (460 mm) above the ground in crawlspaces or unexcavated areas.
5. Wood floor plates that are installed over concrete slabs-on-grade.

Insert other items that require treatment but are not likely to be indicated on Drawings.
Insert other items that require treatment but are not likely to be indicated on Drawings.

2.3 DIMENSION LUMBER FRAMING

"Non-Load-Bearing Interior Partitions," "Load-Bearing Partitions," "Ceiling Joists," and "Joists, Rafters, and Other Framing Not Listed Above" paragraphs in this article provide choices for specifying different categories of framing. Retain one paragraph for each category of framing required. In each paragraph where grade designations are used, grades are listed in order of decreasing quality (and cost).

A. All Walls and Partitions: No. 2 grade.
1. Application: Exterior walls and interior partitions.
2. Species:

Usually retain all species below that meet requirements except those unavailable in Project's location. Species groups are listed in order of decreasing strength (extreme fiber in bending).

a. Hem-fir (north); NLGA.
b. Southern pine; SPIB.
c. Douglas fir-larch; WCLIB or WWPA.

Delete "Southern pine; SPIB" Subparagraph above if retaining first subparagraph below.

d. Southern pine or mixed southern pine; SPIB.
e. Spruce-pine-fir; NLGA.
f. Douglas fir-south; WWPA.
g. Hem-fir; WCLIB or WWPA.
h. Douglas fir-larch (north); NLGA.
i. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.

First "Load-Bearing Partitions" Paragraph below is an example for machine stress-rated lumber that can be used instead of "Load-Bearing Partitions" Paragraph above. Three grades listed below are most commonly available.

B. Ceiling Joists: No. 2 grade.
1. Species:

Usually retain all species below that meet requirements except those unavailable in Project's location. Species groups are listed in order of decreasing modulus of elasticity. Some species groups below overlap others; delete subparagraphs as necessary to eliminate duplication.

a. Hem-fir (north); NLGA.
b. Southern pine; SPIB.
c. Douglas fir-larch; WCLIB or WWPA.
d. Douglas fir-larch (north); NLGA.

Delete "Southern pine; SPIB" Subparagraph above if retaining first subparagraph below.

e. Southern pine or mixed southern pine; SPIB.
f. Spruce-pine-fir; NLGA.
g. Hem-fir; WCLIB or WWPA.
h. Douglas fir-south; WWPA.
i. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.

Northern species includes hem-fir (north), spruce-pine-fir, and Douglas fir-larch (north).

j. Northern species; NLGA.

Eastern softwoods includes spruce-pine-fir (south).

k. Eastern softwoods; NeLMA.

Western woods includes hem-fir, Douglas fir-larch, spruce-pine-fir (south), and Douglas fir-south.

l. Western woods; WCLIB or WWPA.

If retaining first "Joists, Rafters, and Other Framing Not Listed Above" Paragraph below, retain one of five options for grade; verify with structural requirements. Generally, retain "No. 2" or "Construction or No. 2" option for best economy if grades suit structural requirements.

C. Joists, Rafters, and Other Framing Not Listed Above: No. 2 grade.
1. Species:

Revise list below; usually retain all species that meet requirements except those unavailable in Project's location. Species groups are listed in order of decreasing strength (extreme fiber in bending).

a. Hem-fir (north); NLGA.
b. Southern pine; SPIB.
c. Douglas fir-larch; WCLIB or WWPA.

Delete "Southern pine; SPIB" Subparagraph above if retaining first subparagraph below.

d. Southern pine or mixed southern pine; SPIB.
e. Spruce-pine-fir; NLGA.
f. Douglas fir-south; WWPA.
g. Hem-fir; WCLIB or WWPA.
h. Douglas fir-larch (north); NLGA.
i. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.

First "Joists, Rafters, and Other Framing Not Listed Above" Paragraph below is an example for machine stress-rated lumber that can be used instead of last paragraph above or performance requirement in second paragraph below. Three grades listed are most commonly available.

2.4 MISCELLANEOUS LUMBER

A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
1. Blocking.
2. Nailers.
3. Rooftop equipment bases and support curbs.
4. Cants.
5. Furring.
6. Grounds.
7. Utility shelving.

B. Dimension Lumber Items: Construction or No. 2 grade lumber of any of the following species:

Usually retain all species below that meet requirements except those unavailable in Project's location. Species groups are listed in order of decreasing strength (extreme fiber stress in bending). Some species groups below overlap others; delete subparagraphs as necessary to eliminate duplication.

1. Hem-fir (north); NLGA.
2. Mixed southern pine or southern pine; SPIB.
3. Spruce-pine-fir; NLGA.
4. Hem-fir; WCLIB or WWPA.
5. Spruce-pine-fir (south); NeLMA, WCLIB, or WWPA.

Western woods includes hem-fir and spruce-pine-fir (south).

6. Western woods; WCLIB or WWPA.

Northern species includes hem-fir (north) and spruce-pine-fir.

7. Northern species; NLGA.

Eastern softwoods includes spruce-pine-fir (south).

8. Eastern softwoods; NeLMA.

C. For blocking not used for attachment of other construction, Utility, Stud, or No. 3 grade lumber of any species may be used provided that it is cut and selected to eliminate defects that will interfere with its attachment and purpose.
D. For blocking and nailers used for attachment of other construction, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.
E. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.

2.5 FASTENERS

A. General: Fasteners shall be of size and type indicated and shall comply with requirements specified in this article for material and manufacture.
1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.

B. Nails, Brads, and Staples: ASTM F 1667.
C. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.

ICC-ES AC01 and ICC-ES AC193 are for mechanical anchors in masonry and concrete respectively, ICC-ES AC58 and ICC-ES AC308 are for adhesive anchors in masonry and concrete.

D. Post-Installed Anchors: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC0,1 ICC-ES AC58, ICC-ES AC193, or ICC-ES AC308 as appropriate for the substrate.

Two "Material" subparagraphs below are examples only. First subparagraph protects against corrosion in an indoor atmosphere; revise to suit other service conditions after verifying availability of thicker coatings.

1. Material: Carbon-steel components, zinc plated to comply with ASTM B 633, Class Fe/Zn 5.
2. Material: Stainless steel with bolts and nuts complying with ASTM F 593 and ASTM F 594, Alloy Group 1 or 2 (ASTM F 738M and ASTM F 836M, Grade A1 or A4).

2.6 METAL FRAMING ANCHORS

A. Allowable design loads, as published by manufacturer, shall meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency. Framing anchors shall be punched for fasteners adequate to withstand same loads as framing anchors.

Galvanized steel is typical for most manufacturers and is suitable for most applications.

B. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, G60 (Z180) coating designation.
1. Use for interior locations unless otherwise indicated.

C. Hot-Dip, Heavy-Galvanized Steel Sheet: ASTM A 653/A 653M; structural steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); G185 (Z550) coating designation; and not less than 0.036 inch (0.9 mm) thick.
1. Use for wood-preservative-treated lumber and where indicated.

Type 304 is usually standard for stainless steel; Type 316 gives better corrosion resistance for exposed applications in coastal environments.

First 11 paragraphs below are examples only. Revise to suit Project or delete all if "Basis-of-Design Product" Paragraph is used and below are not needed to provide salient characteristics for products.

D. Joist Hangers: U-shaped joist hangers with 2-inch- (50-mm-) long seat and 1-1/4-inch- (32-mm-) wide nailing flanges at least 85 percent of joist depth.
1. Thickness: 0.050 inch (1.3 mm) minimum.

E. I-Joist Hangers: U-shaped joist hangers with 2-inch- (50-mm-) long seat and 1-1/4-inch- (32-mm-) wide nailing flanges full depth of joist. Nailing flanges provide lateral support at joist top chord.
1. Thickness: 0.050 inch (1.3 mm) minimum.

F. Top Flange Hangers: U-shaped joist hangers, full depth of joist, formed from metal strap with tabs bent to extend over and be fastened to supporting member.
1. Strap Width: 1-1/2 inches (38 mm) minimum.
2. Thickness: 0.050 inch (1.3 mm) minimum.

G. Bridging: Rigid, V-section, nailless type, 0.050 inch (1.3 mm) thick, length to suit joist size and spacing.
H. Post Bases: Adjustable-socket type for bolting in place with standoff plate to raise post 1 inch (25 mm) above base and with 2-inch- (50-mm-) minimum side cover, socket 0.062 inch (1.6 mm) thick, and standoff and adjustment plates 0.108 inch (2.8 mm) thick.
I. Joist Ties: Flat straps, with holes for fasteners, for tying joists together over supports.
1. Width: 3/4 inch (19 mm) minimum.
2. Thickness: 0.050 inch (1.3 mm) minimum.
3. Length: As indicated

J. Rafter Tie-Downs: Bent strap tie for fastening rafters or roof trusses to wall studs below, 1-1/2 inches (38 mm) wide by 0.050 inch (1.3 mm) thick. Tie fastens to side of rafter or truss, face of top plates, and side of stud below.
K. Rafter Tie-Downs (Hurricane or Seismic Ties): Bent strap tie for fastening rafters or roof trusses to wall studs below, 2-1/4 inches (57 mm) wide by 0.062 inch (1.6 mm) thick. Tie fits over top of rafter or truss and fastens to both sides of rafter or truss, face of top plates, and side of stud below.
L. Hold-Downs: Brackets for bolting to wall studs and securing to thickened slabs with anchor bolts or to other hold-downs with threaded rods and designed with first of two bolts placed seven bolt diameters from reinforced base.
1. Bolt Diameter: 5/8 inch (15.8 mm).
2. Width: 2-1/2 inches (64 mm).
3. Body Thickness: 0.108 inch (2.8 mm).
4. Base Reinforcement Thickness: 0.108 inch (2.8 mm).

2.7 MISCELLANEOUS MATERIALS

Retain one of two "Sill-Sealer Gaskets" paragraphs below if required. First paragraph is suitable for dry masonry. Second paragraph is more suitable for applications close to the ground or likely to remain damp.

A. Sill-Sealer Gaskets: Glass-fiber-resilient insulation, fabricated in strip form, for use as a sill sealer; 1-inch (25-mm) nominal thickness, compressible to 1/32 inch (0.8 mm); selected from manufacturer's standard widths to suit width of sill members indicated.
B. Sill-Sealer Gaskets: Closed-cell neoprene foam, 1/4 inch (6.4 mm) thick, selected from manufacturer's standard widths to suit width of sill members indicated.

Retain "Flexible Flashing" Paragraph below if required as a separator between preservative-treated wood and metal decking.

C. Flexible Flashing: Composite, self-adhesive, flashing product consisting of a pliable, butyl rubber or rubberized-asphalt compound, bonded to a high-density polyethylene film, aluminum foil, or spunbonded polyolefin to produce an overall thickness of not less than 0.025 inch (0.6 mm).

Treatment in "Water-Repellent Preservative" Paragraph below is for exposed ends of posts and beams, not for treating cuts in preservative-treated lumber.

D. Water-Repellent Preservative: NWWDA-tested and -accepted formulation containing 3-iodo-2-propynyl butyl carbamate, combined with an insecticide containing chloropyrifos as its active ingredient.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
B. Framing with Engineered Wood Products: Install engineered wood products to comply with manufacturer's written instructions.
C. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry accurately to other construction. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
D. Install plywood backing panels by fastening to studs; coordinate locations with utilities requiring backing panels.
E. Install shear wall panels to comply with manufacturer's written instructions.
F. Install metal framing anchors to comply with manufacturer's written instructions. Install fasteners through each fastener hole.
G. Install sill sealer gasket to form continuous seal between sill plates and foundation walls.
H. Do not splice structural members between supports unless otherwise indicated.
I. Provide blocking and framing as indicated and as required to support facing materials, fixtures, specialty items, and trim.
1. Provide metal clips for fastening gypsum board or lath at corners and intersections where framing or blocking does not provide a surface for fastening edges of panels. Space clips not more than 16 inches (406 mm) o.c.

J. Provide fire blocking in furred spaces, stud spaces, and other concealed cavities as indicated and as follows:
1. Fire block furred spaces of walls, at each floor level, at ceiling, and at not more than 96 inches (2438 mm) o.c. with solid wood blocking or noncombustible materials accurately fitted to close furred spaces.
2. Fire block concealed spaces of wood-framed walls and partitions at each floor level, at ceiling line of top story, and at not more than 96 inches (2438 mm) o.c. Where fire blocking is not inherent in framing system used, provide closely fitted solid wood blocks of same width as framing members and 2-inch nominal (38-mm actual) thickness.
3. Fire block concealed spaces between floor sleepers with same material as sleepers to limit concealed spaces to not more than 100 sq. ft. (9.3 sq. m) and to solidly fill space below partitions.

Usually indicate and describe fire blocking for cornices and trim on Drawings.

4. Fire block concealed spaces behind combustible cornices and exterior trim at not more than 20 feet (6 m) o.c.

K. Sort and select lumber so that natural characteristics do not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
L. Comply with AWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
1. Use inorganic boron for items that are continuously protected from liquid water.
2. Use copper naphthenate for items not continuously protected from liquid water.

M. Where wood-preservative-treated lumber is installed adjacent to metal decking, install continuous flexible flashing separator between wood and metal decking.
N. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:

Retain one of first two subparagraphs below, as required to comply with requirements of Project and local codes.

1. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code (IBC).

Revise first paragraph below to include other kinds of nails if required.

O. Use steel common nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood. Drive nails snug but do not countersink nail heads unless otherwise indicated.

Delete paragraph below if no exposed framing.

P. For exposed work, arrange fasteners in straight rows parallel with edges of members, with fasteners evenly spaced, and with adjacent rows staggered.

Retain first option in first subparagraph below if Contractor is required to submit fastener patterns for approval; retain second option if fastener patterns are indicated on Drawings. Fastener patterns help ensure a good appearance.

1. Comply with approved fastener patterns where applicable.

Retain one of two subparagraphs below. Retain second if finishing nails do not comply with structural requirements or if appearance of common nails is needed.

2. Use finishing nails unless otherwise indicated. Countersink nail heads and fill holes with wood filler.
3. Use common nails unless otherwise indicated. Drive nails snug but do not countersink nail heads.

Indicate locations of other fasteners, such as wood screws, bolts, and lag screws, on Drawings.

3.2 WOOD BLOCKING, AND NAILER INSTALLATION

A. Install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces unless otherwise indicated.

Retain paragraph below for conventional, not veneer, plaster.

C. Provide permanent grounds of dressed, pressure-preservative-treated, key-beveled lumber not less than 1-1/2 inches (38 mm) wide and of thickness required to bring face of ground to exact thickness of finish material. Remove temporary grounds when no longer required.

Insert other specific requirements as needed for work.

If framing is minor in scope and importance, delete remaining framing installation articles. Review framing requirements for compliance with local building code.

3.3 WALL AND PARTITION FRAMING INSTALLATION

A. General: Provide single bottom plate and double top plates using members of 2-inch nominal (38-mm actual) thickness whose widths equal that of studs, except single top plate may be used for non-load-bearing partitions and for load-bearing partitions where framing members bearing on partition are located directly over studs. Fasten plates to supporting construction unless otherwise indicated.

Retain one of two stud sizes and one of four spacings in first subparagraph below; third and fourth stud spacings are for SI (metric) module.

1. For exterior walls, provide 2-by-4-inch nominal- (38-by-89-mm actual-) size wood studs spaced 16 inches (406 mm) o.c. unless otherwise indicated.

Retain one of three stud sizes and one of four spacings in first subparagraph below; third and fourth stud spacings are for SI (metric) module.

2. For interior partitions and walls, provide 2-by-4-inch nominal- (38-by-89-mm actual-) 16 inches (406 mm) o.c. unless otherwise indicated.
3. Provide continuous horizontal blocking at midheight of partitions more than 96 inches (2438 mm) high, using members of 2-inch nominal (38-mm actual) thickness and of same width as wall or partitions.

B. Construct corners and intersections with three or more studs.
C. Frame openings with multiple studs and headers. Provide nailed header members of thickness equal to width of studs. Support headers on jamb studs.

Two subparagraphs below refer to load-bearing and non-load-bearing construction. Designate load-bearing walls on Drawings if retaining this distinction. Revise either subparagraph, or both, if single-jamb studs are acceptable.

1. For non-load-bearing partitions, provide double-jamb studs and headers not less than 4-inch nominal (89-mm actual) depth for openings 48 inches (1200 mm) and less in width, 6-inch nominal (140-mm actual) depth for openings 48 to 72 inches (1200 to 1800 mm) in width, 8-inch nominal (184-mm actual) depth for openings 72 to 120 inches (1800 to 3000 mm) in width, and not less than 10-inch nominal (235-mm actual) depth for openings 10 to 12 feet (3 to 3.6 m) in width.
2. For load-bearing walls, provide double-jamb studs for openings 60 inches (1500 mm) and less in width, and triple-jamb studs for wider openings. Provide headers of depth indicated.

Retain paragraph below unless sheathing provides required bracing. If retaining second option below, indicate locations on Drawings. Change "bracing" to "wind bracing," "seismic bracing," and so forth, to match term used in code, where applicable.

Insert requirements for framing gables, bays, and other special conditions or indicate on Drawings.

3.4 CEILING JOIST AND RAFTER FRAMING INSTALLATION

A. Ceiling Joists: Install with crown edge up and complying with requirements specified above for floor joists. Face nail to ends of parallel rafters.

Delete subparagraph below if not applicable. This condition requires subflooring or stringers, as specified, to provide cross-tie.

1. Where ceiling joists are at right angles to rafters, provide additional short joists parallel to rafters from wall plate to first joist; nail to ends of rafters and to top plate, and nail to first joist or anchor with framing anchors or metal straps. Provide 1-by-8-inch nominal- (19-by-184-mm actual-) size or 2-by-4-inch nominal- (38-by-89-mm actual-) size stringers spaced 48 inches (1200 mm) o.c. crosswise over main ceiling joists.

B. Rafters: Notch to fit exterior wall plates and toe nail or use metal framing anchors. Double rafters to form headers and trimmers at openings in roof framing, if any, and support with metal hangers. Where rafters abut at ridge, place directly opposite each other and nail to ridge member or use metal ridge hangers.
1. At valleys, provide double-valley rafters of size indicated or, if not indicated, of same thickness as regular rafters and 2 inches (50 mm) deeper. Bevel ends of jack rafters for full bearing against valley rafters.
2. At hips, provide hip rafter of size indicated or, if not indicated, of same thickness as regular rafters and 2 inches (50 mm) deeper. Bevel ends of jack rafters for full bearing against hip rafter.

First paragraph below is recommended. Delete if not required.

C. Provide collar beams (ties) as indicated or, if not indicated, provide 1-by-6-inch nominal- (19-by-140-mm actual-) size boards between every third pair of rafters, but not more than 48 inches (1219 mm) o.c. Locate below ridge member, at third point of rafter span. Cut ends to fit roof slope and nail to rafters.
D. Provide special framing as indicated for eaves, overhangs, dormers, and similar conditions if any.

3.5 TIMBER FRAMING INSTALLATION

A. Install timber beams with crown edge up and provide not less than 4 inches (102 mm) of bearing on supports. Provide continuous members unless otherwise indicated; tie together over supports as indicated if not continuous.
B. Where beams or girders are framed into pockets of exterior concrete or masonry walls, provide 1/2-inch (13-mm) airspace at sides and ends of wood members.
C. Install wood posts using metal anchors indicated.
D. Treat ends of timber beams and posts exposed to weather by dipping in water-repellent preservative for 15 minutes.

3.6 PROTECTION

Delete this article if site-applied boron treatment is specified in Section 313116 "Termite Control."

A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

Retain paragraph below if borate treatment of wood that has become wet is used to help prevent mold and mildew.

B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes wet enough that moisture content exceeds that specified, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

061053 - MISCELLANEOUS ROUGH CARPENTRY

A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
B. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
C. Maximum Moisture Content of Lumber: 15 percent unless otherwise indicated.
D. Preservative Treatment by Pressure Process: AWPA U1; Use Category UC2 for interior construction not in contact with the ground.
E. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or does not comply with requirements for untreated material.
F. Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet beyond the centerline of the burners at any time during the test. Application: Treat items indicated on Drawings.
G. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent.
H. Equipment Backing Panels: DOC PS 1, Exterior, AC (fire-retardant treated if noted on drawings) in thickness indicated or, if not indicated, not less than 5/8-inch nominal thickness.
I. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacturer.
J. Power-Driven Fasteners: NES NER-272.
K. Screws for Fastening to Metal Framing: ASTM C 1002, length as recommended by screw manufacturer for material being fastened.
L. Set carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit carpentry to other construction; scribe and cope as needed for accurate fit.
M. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
N. Install plywood backing panels by fastening to studs; coordinate locations with utilities requiring backing panels.
O. Do not splice structural members between supports unless otherwise indicated.
P. Securely attach carpentry work to substrate by anchoring and fastening as indicated, complying with the following: Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.

062023 - INTERIOR FINISH CARPENTRY

A. Samples: For each type of paneling, trim or veneers.
B. Lumber: DOC PS 20.
1. Factory mark each piece of lumber with grade stamp (not exposed to view)of inspection agency indicating grade, species, moisture content at time of surfacing, and mill.
2. Softwood Plywood: DOC PS 1.
3. Hardboard: AHA A135.4.

C. Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame-spread index of 25 or less when tested according to ASTM E 84. Kiln dry lumber and plywood after treatment to a maximum moisture content of 19 and 15 percent respectively. Identify fire-retardant-treated wood with marking (conceal for exposed)
D. Softwood Lumber Trim : Species and Grade to Douglas fir-larch or Douglas fir south or as indicated on drawings, Superior or C & Btr finish; NLGA, WCLIB, or WWPA. Maximum Moisture Content: 19 percent.
E. Hardwood Lumber Trim: Species and Grade: Red oak or as indicated on drawings; NHLA.
1. Softwood Moldings: WMMPA WM 4, P grade.
2. Hardwood Moldings: WMMPA HWM 2, P-grade.

F. Molding Patterns: As indicated on drawings.
G. Hardwood Veneer Plywood Paneling: Manufacturer's stock hardwood plywood panels complying with HPVA HP-1, made without urea-formaldehyde adhesive.
1. Face Veneer Species and Cut: Rotary-cut white birch or as indicated.
2. Veneer Matching: Selected for similar color and grain.
3. Thickness: As indicated on drawings.
4. Finish and Pattern: As selected by Architect from manufacturer's full range.

H. Glue: Aliphatic-resin, polyurethane, or resorcinol wood glue as recommended.
I. Before installing interior finish carpentry, condition materials to ave. prevailing humidity. Install interior finish carpentry level, plumb, true, and aligned with adjacent materials. Use concealed shims where necessary for alignment.
1. Scribe and cut interior finish carpentry to fit adjoining work. Finish to match.
2. Countersink fasteners, fill surface flush, and sand unless otherwise indicated.
3. Install to tolerance of 1/8 inch in 96 inches for level and plumb. Install adjoining interior finish carpentry with 1/32-inch maximum offset for flush installation and 1/16-inch maximum offset for reveal installation.

J. Trim Installation: Install with minimum number of joints practical, using full-length pieces of lumber available. Miter at returns, outside corners, and cope at inside corners to produce tight joints with full-surface contact throughout length of joint. .
K. Plywood Veneer Paneling: Select and arrange panels on each wall to minimize noticeable variations in grain character and color between adjacent panels. Leave 1/8-inch gap to be covered with trim at top, bottom, and openings. Install with uniform tight joints between panels. Conceal fasteners to greatest practical extent.

081113 - HOLLOW METAL DOORS AND FRAMES

A. Product Data: Include construction details, material descriptions, core descriptions, label compliance, fire-resistance rating, and finishes for each type of steel door and frame specified.
B. Fire-Rated Door Frame Assemblies: Assemblies complying with NFPA 80.
C. Materials: Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B; suitable for exposed applications. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, Commercial Steel (CS), Type B; free of scale, pitting, or surface defects; pickled and oiled. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum A40 zinc-iron-alloy (galvannealed) coating designation. Electrolytic Zinc-Coated Steel Sheet: ASTM A 591/A 591M, Commercial Steel (CS), Class B coating; mill phosphatized.
D. Supports and Anchors: After fabricating, galvanize units to be built into exterior walls according to ASTM A 153/A 153M, Class B.
E. Mineral-Fiber Insulation: ASTM C 665, Type I (blankets without membrane facing); passing ASTM E 136 for combustion characteristics.
F. Fabrication: Fabricate standard steel doors and frames to be rigid and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Factory prepare standard steel doors and frames to eceive templated mortised hardware; include cutouts, reinforcement, mortising, drilling, and tapping to comply with applicable requirements in ANSI A250.6 and ANSI/DHI A115.
G. Installation: Provide doors and frames of sizes, thicknesses, and designs indicated. Install standard steel doors and frames plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.Comply with SDI 105. Check and readjust operating hardware items immediately before final inspection. Prime-coat touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible ir-drying primer.

081216 – ALUMINUM FRAMES

A. Interior aluminum frames; Aluminum Framing and Trim: Extruded aluminum, not less than 0.062 inch thick.
B. Doors: Specified in Section 081416 "Flush Wood Doors."
C. Frame and Trim Finish: As selected by architect

081416 - FLUSH WOOD DOORS

A. Section Includes: Solid-core doors with wood-veneer faces.
B. Product Data: For each type of door. Include factory-finishing specifications and samples.
C. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. Algoma Hardwoods, Inc.
2. Chappell Door Co.
3. General Veneer Manufacturing Co.
4. Graham Wood Doors; an Assa Abloy Group company.
5. Lambton Doors..
6. Mohawk Doors; a Masonite company.
7. Oshkosh Door Company.

D. Quality Standard: In addition to requirements specified, comply with ARCHITECTURAL WOODWORK INSTITUTE'S "Architectural Woodwork Standards". Heavy Duty CUSTOM GRADE unless otherwise indicated.
E. Particleboard-Core Doors: ANSI A208.1, Grade LD-2.Provide wood blocking in particleboard-core doors as needed to secure hardware. Provide doors with glued-wood-stave or structural-composite-lumber cores instead of particleboard cores for doors to receive exit devices.
F. Structural-Composite-Lumber-Core Doors: WDMA I.S.10.
G. Interior Solid-Core Doors(Veneer faced for transparent finish):Grade: Premium, with Grade A faces. Species: Finish to match existing.Cut: Rotary cut. Match as indicated on drawings.
1. Core: Particleboard, Glued wood stave or Structural composite lumber.
2. Construction: Seven plies, either bonded or nonbonded construction.

H. Light frames / louvers: As indicated on drawings with manufacturer compatible to door selected.
I. Fabrication/Finishes: Factory fit doors to suit frame-opening sizes indicated. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated. Comply with referenced quality standard for factory finishing. Factory finish doors that are indicated to receive transparent finish. Transparent Finish: As selected by Architect from manufacturer's full range. FINISH SHALL BE ASI SYSTEM 9.
J. Hardware installation Instructions: Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.
K. Job-Fitted Doors: Align and fit doors in frames with uniform clearances and bevels as indicated by manufacturer. Machine doors for hardware. Seal edges of doors, cutouts, and mortises after fitting and machining.
L. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.
M. Factory-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10651
7.14.2021
REGISTERED ARCHITECT

Georgetown SOUTH CAROLINA

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DESIGNED BY: PER
DRAWN BY: Author
CHECKED BY: Checker
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SHEET SPECIFICATIONS
SCALE: 1" = 1'-0"
PLOT DATE:
PLOT TIME:
D SIZE ANSI BORDER
FILE NAME: 1363.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

RAYMOND SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

SHEET SPECIFICATIONS

PLATE NUMBER:
G-004
SHEET OF

9/20/2021 4:58:22 PM

092900 - GYPSUM BOARD

A. Product Data: For each type of product.
B. Fire-Resistance-Rated Assemblies: For fire-resistance-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.
C. Gypsum Wallboard: ASTM C 1396/C 1396M. Thickness: 5/8 inch, unless noted otherwise.. Taper long edges unless noted otherwise.
D. Gypsum Board, Type X: ASTM C 1396/C 1396M. Thickness: 5/8 inch, unless noted otherwise.. Taper long edges unless noted otherwise.
E. Gypsum Ceiling Board: ASTM C 1396/C 1396M. Thickness: ½ inch, unless noted otherwise.. Taper long edges unless noted otherwise.
F. Moisture and Mold-Resistant Gypsum Board: ASTM C 1396/C 1396M. With moisture- and mold-resistant core and paper surfaces. ASTM D 3273, score of 10 as rated according to ASTM D 3274
G. Interior Trim: ASTM C 1047. Material: Galvanized or aluminum-coated steel sheet, rolled zinc, plastic, or paper-faced galvanized steel sheet. Aluminum : ASTM B 221 Alloy 6063-T5.
H. Joint Treatment: Comply with ASTM C 475/C 475M. Joint Compound for Interior Gypsum Board: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.
Installation: Comply with ASTM C 840. Reject panels that are wet, moldy or damaged. Place panels, apply trim and tape joints as per manufactures recommendations. Apply joint finish compound in accordance with manufacturer's recommendations and established standards. Install control joints according to ASTM C 840 and in specific locations approved by Architect for visual effect.
I. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
1. Level 1: Ceiling plenum areas, concealed areas, and where indicated.
2. Level 2: Panels that are substrate for tile
3. Level 3: Where indicated on Drawings
4. Level 4: At panel surfaces that will be exposed to view unless otherwise indicated.
5. Level5: All GWB ceilings, walls covered in wallcovering or writable surfaces.

088000 - GLAZING

A. Product Data/Samples/Shop Drawings: For all storefront members and glazing panels, all products must comply with IBC Section 2406 - Safety glazing.
B. Basis of Design manufacturer and product: Wilson Partitions Series 487.
C. Glazing: all glazing units shall be 1/4" tempered safetly glass panes, all glazing shall be identified as such in accordance with IBC Section 2406.3.
D. All glazing areas in hazardous locations as defined in IBC Section2406.4 shall comply with Section 2406.1.1 through 2406.1.4.

Georgetown SOUTH CAROLINA

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DESIGNED BY: PER
DRAWN BY: Author
CHECKED BY: Checker
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SCALE:
D SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1301.01 PLANS AND DETAILS - ARCHITECTURAL.DWG

SHEET SPECIFICATIONS

RAYMOND SINCE 1992

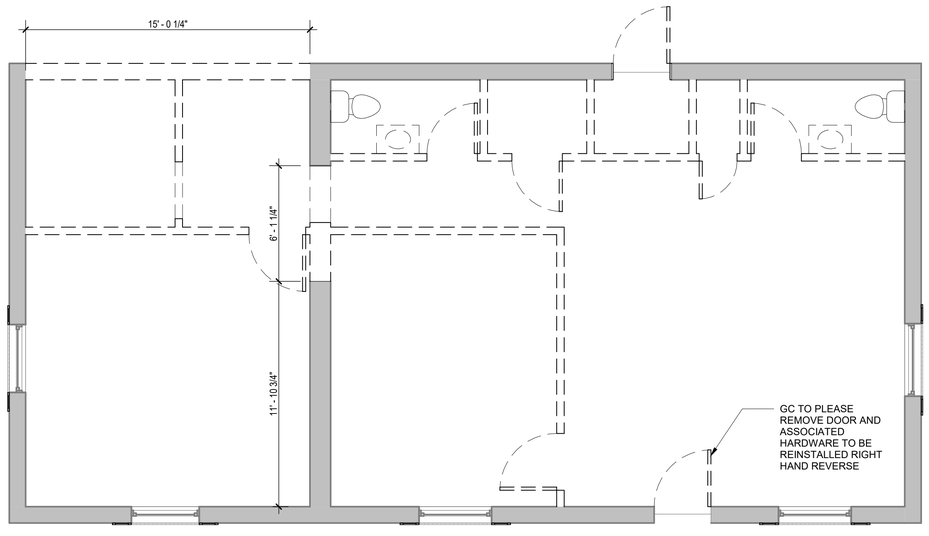
CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

SHEET SPECIFICATIONS

PLATE NUMBER:
G-005
SHEET OF

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10651
7/14/2021
REGISTERED ARCHITECT

9/20/2021 4:58:22 PM



1 PLAN - DEMO
1/4" = 1'-0"

Georgetown SOUTH CAROLINA

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DESIGNED BY: PER
DRAWN BY: SCJD
CHECKED BY: MLK/GR
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SCALE: 1/4" = 1'-0" 0 SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1363.001 PLANS AND DETAILS - ARCHITECTURAL.DWG

ARCHITECTURAL DEMO PLAN - LEVEL 1

RAYMOND SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

ARCHITECTURAL DEMO PLAN - LEVEL 1

PLATE NUMBER:
AD-101
SHEET OF

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10051
7/14/2021
REGISTERED ARCHITECT

9/20/2021 4:58:19 PM

ARCHITECTURAL ABBREVIATIONS

A.F.	ACCESS FLOORING
A.F.F.	ABOVE FINISHED FLOOR
ACC. DR.	ACCESS DOOR / PANEL
ADAAG	AMERICAN WITH DISABILITIES ACCESSIBILITY GUIDELINES
ACCESS.	ACCESSORIES
ADJ.	ADJUST/ ADJUSTABLE
ACOUST.	ACOUSTICAL
A.B.	ANCHOR BOLT
ACT	ACOUSTICAL CEILING TILE
ANOD.	ANODIZED
A.C.	AIR CONDITIONING
AL / ALUM.	ALUMINUM
&	AND
L	ANGLE
APP.	APPROVED
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
@	AT
AT / FP	ANTI TERRORISM / FORCE PROTECTION
AVG.	AVERAGE
A.W.I.	ARCHITECTURAL WOODWORK INSTITUTE
B.H.M.I.	BUILDER'S HARDWARE MANUFACTURER'S ASSOCIATION, INC.
BM.	BEAM
BLKG.	BLOCKING
BD.	BOARD
BTM.	BOTTOM
BLDG.	BUILDING
B.U.R.	BUILT-UP ROOFING
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CH.	CHANNEL
CPT.	CARPET
CLG.	CEILING
CLG. HT.	CEILING HEIGHT
CTR.	CENTER
℄	CENTER LINE
C. TO C.	CENTER TO CENTER
C.T.	CERAMIC TILE
CLR.	CLEAR
C.O.	CLEANOUT
CLOS.	CLOSET
CO.	COMPANY
COL.	COLUMN
CONC.	CONCRETE
CORR.	CORRIDOR
COTR	CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE
CMU	CONCRETE MASONRY UNIT
CONF.	CONFERENCE
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
C.J.	CONTROL JOINT
C.Y.	CUBIC YARD
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DISP.	DISPENSER
DR.	DOOR
DN.	DOWN
D.S.	DOWNSPOUT
DESC.	DESCRIPTION
DWG.	DRAWING
EA.	EACH
ELEC.	ELECTRICAL OR ELECTRIC
EL.	ELEVATION
E.W.C.	ELECTRIC WATER COOLER
E.R.D.	EMERGENCY ROOF DRAIN
E.P.	EPOXY PAINT
ENGR.	ENGINEER
EQUIP.	EQUIPMENT
EQ.	EQUAL
EXIST.	EXISTING
EXP.	EXPANSION / EXPOSED
E.J. (EXP. JT.)	EXPANSION JOINT
EXP. TO STRUCT.	EXPOSED TO STRUCTURE
EXT.	EXTERIOR
ETD	ESTIMATED TRAVEL DISTANCE
FAC.	FACTORY
FDC	FIRE DEPARTMENT CONNECTION
FT.	FEET
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
F.H.C.	FIRE HOSE CABINET
FIN.	FINISH
F.P.	FLAT PAINT
F.F.	FINISHED FLOOR
FLR.	FLOOR
F.D.	FLOOR DRAIN
FLUOR.	FLUORESCENT
F.O.G.	FACE OF GIRT
FTG.	FOOTING
FDN.	FOUNDATION
FV.	FIELD VERIFY
GA.	GAGE OR GAUGE
GALV.	GALVANIZED
G.B.F.	GYPSUM BOARD FURRING
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED
GFGI	GOVERNMENT FURNISHED GOVERNMENT INSTALLED
G.L.	GIRT LINE
G.P.	GLOSSY PAINT
GL.	GLASS
GOVT.	GOVERNMENT
GYP.	GYPSUM
GYP. BD. (GWB)	GYPSUM BOARD
HKS	HOOKS
HR.	HANDRAIL
HDW.	HARDWARE
HGT.	HEIGHT
H.	HIGH
H.P.	HIGH POINT
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
HB	HOSE BIBB
H.V.A.C.	HEATING VENTILATION & AIR CONDITIONING
IN.	INCH
I.D.	INSIDE DIAMETER
INSUL.	INSULATION
INT.	INTERIOR
JAN.	JANITOR
J.C.	JANITOR'S CLOSET
JT.	JOINT
JST.	JOIST
K.P.	KICK PLATE
LAM.	LAMINATE
LDG.	LANDING
LAV.	LAVATORY
L.H.	LEFT HAND
LHR	LEFT HAND REVERSE
LT.	LIGHT
LTG.	LIGHTING
LONG.	LONGITUDINAL
LVR.	LOUVER
L.P.	LOW POINT
MAS.	MASONRY
M.O.	MASONRY OPENING
MGR.	MANAGER
MANUF.	MANUFACTURER
MATL.	MATERIAL
MAX.	MAXIMUM
MECH.	MECHANICAL
MTL.	METAL
M.W.P.	METAL WALL PANEL
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N.I.C.	NOT IN CONTRACT
NO. (#)	NUMBER
NTS	NOT TO SCALE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
O.C.	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFGI	OWNER FURNISHED GOVERNMENT INSTALLED
O.H.	OPPOSITE HAND
OPNG.	OPENING
O.W.	OPEN WEB
OPP.	OPPOSITE
O.D.	OUTSIDE DIAMETER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ACT
OVHD	OVERHEAD
PDU	POWER DISTRIBUTION UNIT
PT	PAINT
PR.	PAIR
PNL.	PANEL
PART.	PARTITION
PLAS.	PLASTER OR PLASTIC
PL	PLATE
PLYWD.	PLYWOOD
LBS. OR #	POUNDS
PSF	POUNDS / SQUARE FOOT
PSI	POUNDS / SQUARE INCH
P.M.J.F.	PRE-MOLDED JOINT FILLER
PRE-FAB.	PREFABRICATED
Q.T.	QUARRY TILE
RAF	RAISED ACCESS FLOOR
RECEP.	RECEPTIONIST
REF.	REFERENCE
REINF.	REINFORCEMENT
REQ'D.	REQUIRED
REV.	REVISIONS / REVISED
R.D.	ROOF DRAIN
RH	RIGHT HAND
RHR	RIGHT HAND REVERSE
RM.	ROOM
R.O.	ROUGH OPENING
RB	RUBBER BASE
SC	SEALED CONCRETE
SCW	SOLID CORE WOOD
SCHED.	SCHEDULE
SECT.	SECTION
S.G.P.	SEMI-GLOSS PAINT
SSK	SERVICE SINK
SHT. MET.	SHEET METAL
SIM.	SIMILAR
STC	SOUND TRANSMISSION CLASS
SPEC(S)	SPECIFICATION
SFRM	SPRAYED FIRE RESISTIVE MATERIAL
SQ.	SQUARE
ST.	STAIN
S.S.	STAINLESS STEEL
STD.	STANDARD
STL.	STEEL
STOR.	STORAGE
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
TOIL. / TLT	TOILET
TEL.	TELEPHONE
THK.	THICK
T'HOLD	THRESHOLD
TG	TEMPERED GLASS
T/	TOP OF
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
T/C	TOP OF CURB
TOS	TOP OF STEEL
T/W	TOP OF WALL
TU	TOUCH-UP
TYP.	TYPICAL
U.L.	UNDERWRITERS LABORATORIES
UNFIN	UNFINISHED
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
VEST.	VESTIBULE
VCT	VINYL COMPOSITION TILE
VCB	VINYL COVE BASE
V.T.R.	VENT THRU ROOF
W.	WIDTH
W/	WITH
W.C.	WATER CLOSET
WCO	WALL CLEAN OUT
WD.	WOOD
WDW.	WINDOW
W.M.P.	WIRE MESH PARTITION
W/O	WITHOUT
W.R.G.B.	WATER RESISTANT GYPSUM BOARD
W.S.	WEATHERSTRIPPING
W.R.O.	WINDOW ROUGH OPENING
YD.	YARD

GENERAL NOTES:

1. THE DRAWINGS INDICATE THE GENERAL EXTENT OF WORK. THE DRAWINGS ARE NOT INTENDED TO INDICATE OR DESCRIBE ALL WORK REQUIRED FOR THE FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
2. THE ENUMERATION OF PARTICULAR ITEMS OF WORK IN ONE PORTION OF THE CONTRACT DOCUMENTS SHALL NOT BE CONSTRUED TO EXCLUDE OTHER ITEMS NECESSARY OR IMPLIED THEREFROM.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL PARTS OF THE WORK SO THAT NO WORK SHALL BE LEFT IN AN UNFINISHED OR INCOMPLETE CONDITION.
4. ALL WORK SHALL CONFORM TO APPLICABLE INDUSTRY AND MANUFACTURER'S PUBLISHED STANDARDS FOR QUALITY OF MATERIALS AND WORKMANSHIP, AS WELL AS, ALL REQUIREMENTS IN THESE DRAWINGS AND SPECIFICATIONS. ANY CONFLICTING REQUIREMENTS OF THE SOURCES LISTED ABOVE SHALL BE BROUGHT TO THE **OWNERS** ATTENTION PRIOR TO PROCEEDING WITH THE WORK.
5. THE CONTRACTOR SHALL PROTECT ANY EXISTING, IN-PLACE, AND NEW WORK.
6. ALL WORK NOTED "N.I.C." IS NOT MEANT TO BE PART OF THE CONSTRUCTION SCOPE OF WORK AGREEMENT.
7. THE CONTRACTOR SHALL PAY FOR AND COORDINATE THE REMOVAL AND LEGAL DISPOSAL OF MATERIALS AND RUBBISH.
8. ONCE ON SITE, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SHALL VERIFY ALL NEW AND EXISTING CONDITIONS, SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE **OWNER** IN WRITING OF ANY DIFFERING CONDITIONS BEFORE COMMENCEMENT OF WORK.
9. DO NOT SCALE DRAWINGS; DIMENSIONS GOVERN, LARGE SCALE DETAILS GOVERN OVER SMALL SCALE DETAILS. THE CONTRACTOR SHALL NOTIFY THE **OWNER** IN WRITING OF ANY DIFFERING CONDITIONS BEFORE COMMENCEMENT OF WORK.
10. UNLESS NOTED OTHERWISE, ALL GYPSUM BOARD SURFACES ARE TO RECEIVE ONE PRIMER COAT AND TWO COATS OF PAINT.
11. DIMENSIONS NOTED AS 'HOLD' SHALL NOT VARY BY MORE THAN 1/8" FROM SIDE TO SIDE OR FROM FRONT TO BACK, FINISHED SURFACE TO FINISHED SURFACE.
12. NFPA 241, STANDARD FOR SAFEGUARDING CONSTRUCTION, AND ALTERATION OPERATIONS SHALL BE APPLIED.
13. WALL AND/OR CEILING ASSEMBLIES THAT ARE IDENTIFIED WITH A FIRE RESISTIVE RATING SHALL BE CONSTRUCTED AS DETAILED HEREIN.
14. DIMENSIONS SHOWN ARE TO FACE OF STUD OR CMU (U.N.O.).
15. PROVIDE EXPANSION AND CONTROL JOINTS IN ALL WORK AS PER PRODUCT MANUFACTURER'S STANDARDS.
16. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES AND REGULATORY AGENCIES AND SHALL OBTAIN NECESSARY BUILDING AND FIRE PERMITS FROM ALL AUTHORITIES HAVING JURISDICTION.
17. ALL INTERIOR FINISH MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE CODES, ORDINANCES AND REGULATORY AGENCIES.
18. ALL DISSIMILAR METALS SHALL BE ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
19. NOTES APPEAR ON VARIOUS SHEETS FOR DIFFERENT SYSTEMS AND MATERIALS. SHEETS ARE TO BE REVIEWED AND NOTES ON INDIVIDUAL SHEETS SHALL BE APPLIED TO RELATED DRAWINGS AND DETAILS.
20. A FINISH INDICATION ON A WALL SHALL MEAN THE ENTIRE LENGTH AND HEIGHT OF WALL IS TO BE FINISHED OR FIRE-RATED AS INDICATED.
21. WHEN NON-DIMENSIONED PARTITIONS APPEAR IN CONJUNCTION WITH DOOR OPENINGS, THE DOOR WIDTH AND THE DOOR FRAME DETAILS DETERMINE THE LOCATION OF ADJACENT WALLS AND FRAMES.
22. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, CONSULT THE **OWNER** BEFORE PROCEEDING WITH THE WORK.
23. THE CONTRACTOR SHALL COORDINATE ALL MECHANICAL AND ELECTRICAL FLOOR AND WALL SLEEVES INCLUDING CONDUITS WITH ALL MECHANICAL, ELECTRICAL, PLUMBING, FIRE PROTECTION, STRUCTURAL AND ARCHITECTURAL DRAWINGS.
24. PROVIDE ACCESS PANELS AS REQUIRED BY APPLICABLE CODES AND AS REQUIRED FOR MECHANICAL EQUIPMENT AND PLUMBING WORK. ALL ACCESS PANELS SHALL BE CONCEALED AND LOCATIONS SHALL BE REVIEWED WITH THE ARCHITECT PRIOR TO PROCEEDING.
25. ALL PIPE DUCTS AND BUS DUCTS THAT PENETRATE FLOOR SLABS OR WALL PARTITIONS SHALL BE INSTALLED IN A MANNER THAT WILL PRESERVE THE MOISTURE RESISTIVENESS, FIRE RATING, AND STRUCTURAL INTEGRITY OF THE BUILDING.
26. DO NOT CUT INTO, REMOVE OR ALTER ANY STRUCTURAL MEMBER OR PORTION OF THE FLOOR SYSTEM UNLESS IT IS SPECIFICALLY NOTED OR SHOWN ON THE STRUCTURAL DRAWINGS.
27. INTERIOR PARTITION MOVEMENT CONTROL:
    A. VERTICAL CONTROL JOINTS FOR ANY WALL LENGTH ARE TO OCCUR AT NOT MORE THAN 30'-0" O.C. IN THE HORIZONTAL DIRECTION, UNLESS NOTED OTHERWISE.
    B. PROVISIONS SHALL BE MADE IN THE DESIGN, FABRICATION, AND INSTALLATION OF INTERIOR PARTIONS FOR TYPICAL FLOOR DEFLECTIONS OF THE STRUCTURE UNDER SUPERIMPOSED LOADS AS FOLLOWS:
        a. TYPICAL ROOF/FLOOR MEMBERS: SPAN/360 BUT NOT LESS THAN 1/2".
28. THE CONTRACTOR SHALL PLAN HIS/HER WORK TO PROVIDE ADEQUATE PROTECTION FOR PERSONS AND PROPERTY AT ALL TIMES, AND EXECUTE THE WORK IN SUCH A MANNER TO AVOID ANY HAZARD TO PERSONS AND PROPERTY AS NECESSARY.
29. THE CONTRACTOR SHALL COORDINATE THE PHASING OF THE WORK TO BE PERFORMED IN OR ABOUT EXISTING FACILITIES, IF APPLICABLE, WITH THE **OWNER** PRIOR TO START OF SUCH WORK.

Georgetown SOUTH CAROLINA

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
CHECKED BY: MLK/GR
DESIGNED BY: PER
DRAWN BY: SCJD
GENERAL NOTES & ABBREVIATIONS
SCALE: 12" = 1'-0" D SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1363.001 PLANS AND DETAILS - ARCHITECTURAL.DWG

RAYMOND SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

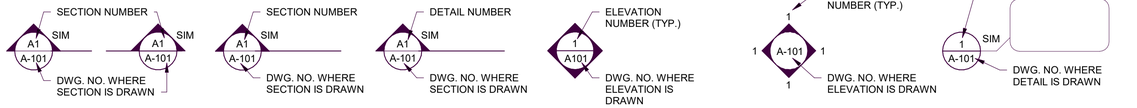
GENERAL NOTES & ABBREVIATIONS

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10851
REGISTERED ARCHITECT
9/20/2021

PLATE NUMBER:
A-001
SHEET OF

9/20/2021 4:58:13 PM

SYMBOLS:



BUILDING SECTION MARK | WALL SECTION MARK | DETAIL SECTION MARK | EXTERIOR ELEVATION MARK | INTERIOR ELEVATION MARK | CALLOUT HEAD

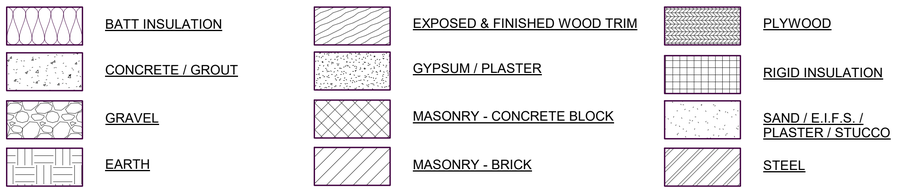
PLAN SYMBOLS:

ROOM TAG | DOOR TAG | WINDOW & LOUVER TAG | PARTITION TYPE | KEYNOTE TAG | DEMOLITION KEYNOTE TAG (NAVFAC) | CEILING TAG (HEIGHT) | CEILING TAG (TYPE & HEIGHT) | EQUIPMENT TAG | REVISION TAG | NORTH ARROWS

VIEW TITLES:

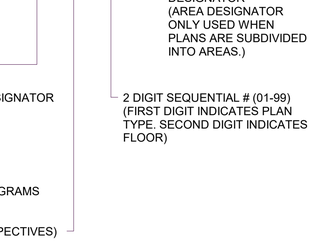
FLOOR PLANS, ELEVATIONS OR DETAIL VIEWS TITLE

MATERIALS IN SECTION - FILL PATTERNS:



BATT INSULATION
CONCRETE / GROUT
GRAVEL
EARTH
EXPOSED & FINISHED WOOD TRIM
GYPSUM / PLASTER
MASONRY - CONCRETE BLOCK
MASONRY - BRICK
PLYWOOD
RIGID INSULATION
SAND / E.I.F.S. / PLASTER / STUCCO
STEEL

SHEET NAMING CONVENTION



REFLECTED CEILING PLAN LEGEND

- DOWNLIGHT- CENTER IN ACOUST. CEILING PANELS, TYP., U.N.O.
- EMERGENCY DOWNLIGHT- CENTER IN ACOUST. CEILING PANELS, TYP., U.N.O.
- 1' X 4' PENDANT LIGHT FIXTURE
- 1' X 4' EMERGENCY PENDANT LIGHT FIXTURE
- 1' X 4' LAY-IN LIGHT FIXTURE
- 1' X 4' EMERGENCY LAY-IN LIGHT FIXTURE
- 2' X 4' FLUORESCENT LIGHT FIXTURE
- 2' X 4' EMERGENCY LIGHT FIXTURE
- 2' X 2' LAY-IN LIGHT FIXTURE
- 2' X 2' EMERGENCY LAY-IN LIGHT FIXTURE
- 24" X 24" MECH. DIFFUSERS
- 24" X 24" MECH. RETURN AIR GRILLES
- SCONCE LIGHTS
- EXT. WALL MOUNTED FIXTURE
- WALL MOUNTED EXIT SIGN
- CEILING MOUNTED EXIT SIGN
- AP — RATED OR NON-RATED, LOCKABLE, STEEL ACCESS PANEL 2'-0" W. X 3'-0" DP.- PROVIDE ACCESS PANELS AS REQUIRED TO ALLOW ACCESS TO EQUIPMENT, SHUT-OFF VALVES, FIXTURES, MECH. LOUVERS, FIRE DAMPERS AND OTHER ITEMS ABOVE THE CEILING. PAINT TO MATCH THE ADJACENT SURFACE'S COLOR, U.N.O.
- OS — OCCUPANCY SENSOR
- S — CEILING MOUNTED MASS NOTIFICATION SPEAKER, ONE WAY TYPE
- P — CEILING MOUNTED PUBLIC ADDRESS SPEAKER, ONE WAY TYPE
- A — 2'-0" x 2'-0" ACOUSTICAL CEILING SYSTEM
- B — 2'-0" x 4'-0" ACOUSTICAL CEILING SYSTEM
- C — INSTALL 5/8" WATER- RESISTANT GYPSUM BOARD AT THE CEILINGS OF RESTROOMS ONLY. ALL OTHER ROOMS INDICATED AS SUCH WILL BE STANDARD 5/8" GYPSUM BOARD.
- D,E — EIFS CEILING SYSTEM
- F — EXTERIOR METAL PANEL SOFFIT

Georgetown SOUTH CAROLINA

#	DESCRIPTION OF REVISION	DATE	BY	CHKD
	CONSTRUCTION BID SET	9/17/2021	PER	BAW

DESIGNED BY: PER
DRAWN BY: SCJD
CHECKED BY: MLK/GR
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SCALE: 12" = 1'-0" (D SIZE ANSI BORDER)
PLOT DATE:
PLOT TIME:
FILE NAME: 1363.001 PLANS AND DETAILS - ARCHITECTURAL.DWG

ARCHITECTURAL SYMBOLS

RAYMOND SINCE 1992

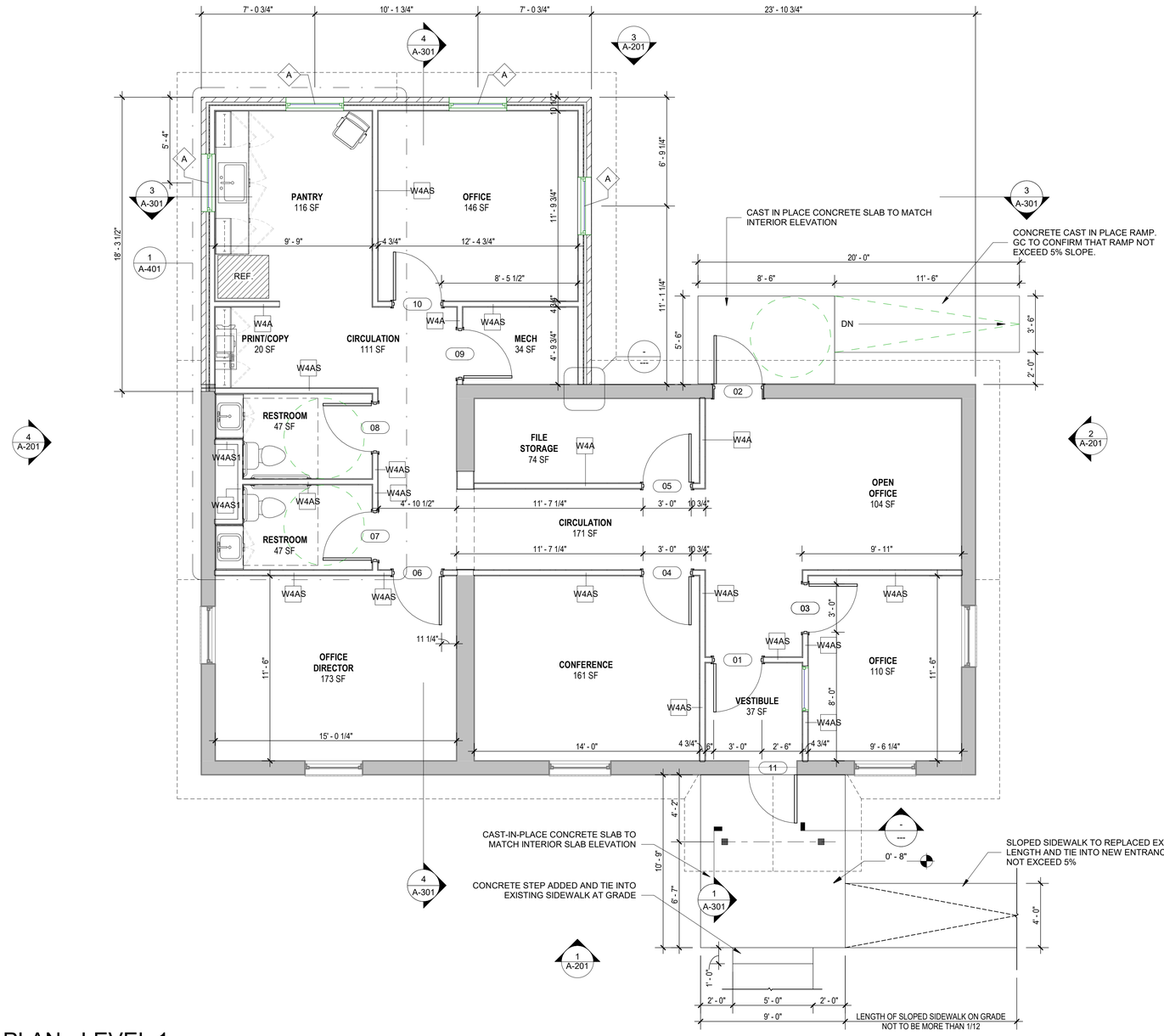
CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

ARCHITECTURAL SYMBOLS

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10051
9/20/2021
REGISTERED ARCHITECT

PLATE NUMBER:
A-002
SHEET OF

9/20/2021 4:58:13 PM



1 PLAN - LEVEL 1

1/4" = 1'-0"

GENERAL FLOOR PLAN NOTES:

1. ALL DIMENSIONS TO BE VERIFIED IN FIELD.
2. WHEN FLOOR, WALL, AND CEILING ARE REQUIRED TO BE PATCHED, THE CONTRACTOR SHALL PATCH WITH NEW LIKE MATERIALS TO MATCH WITH THE EXISTING ADJACENT SURFACES, U.N.O.
3. ALL NEW WORK SHALL BE COMPLETE AND OPERATIONAL.
4. CONTRACTOR IS RESPONSIBLE FOR REROUTING ANY CONDUITS, WIRING, PLUMBING, OR PIPING AS REQUIRED TO ACHIEVE THE DESIRED LAYOUT SHOWN. NEW REROUTING LOCATIONS SHALL BE CONCEALED WITHIN WALL. WHEN IT IS IMPOSSIBLE TO CONCEAL ITEMS, LOCATE ITEMS TIGHT AGAINST WALLS-ENCLOSE ITEMS WITH GWB WITHOUT DISRUPTION OF SERVICE TO OTHER AREAS.
5. TYPICAL WALL JAMB TO BE 6" FROM WALL AT HINGE SIDE OF DOOR U.N.O.
6. ALL PENETRATIONS/HOLES IN EXISTING OR NEW WALLS & FLOORS SHALL BE PROPERLY PATCHED TO MATCH ADJACENT AREA OR FIRESTOPPED AS REQUIRED, EVEN IF PENETRATIONS/HOLES ARE COVERED BY NEW MILLWORK.
7. SUPPORT ALL WALL AND CEILING MOUNTED ITEMS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. COORDINATE WITH WALL AND CEILING TYPES, TYPICAL.
8. WHERE WALL, FLOOR, CEILING ARE SCHEDULED TO REMAIN OR PARTS OF WALLS ARE DAMAGED OR OPEN DUE TO CONSTRUCTION, CONTRACTOR SHALL PATCH AND REPAIR AS REQUIRED FOR A CLEAN FINISH LOOK AND SAME PREVIOUS CONDITION. PRE ALL SURFACES WHERE ARE SCHEDULED TO RECEIVE NEW FINISHES AS REQUIRED.
9. PROVIDE BLOCKING IN ALL WALLS WHERE CABINETRY, SPECIALTY SHELVING OR A/V EQUIPMENT IS TO BE LOCATED.
10. PROVIDE ALL NONCOMBUSTIBLE TYPE BACKING AND BLOCKING IN WALLS AND CEILINGS AS REQ'D. TO RIGIDLY SECURE ALL WALL & CEILING MOUNTED ITEMS WITH ALL WOOD BLOCKING TO BE FIRE RETARDANT TYPE. COORD. W/OWNER AND OWNER'S SPECIAL EQUIPMENT CONTRACTOR FOR LOCATION OF ALL WALL & CEILING MOUNTED ITEMS OTHER THAN THOSE SCHEDULED.
11. SEE MATERIAL, FINISH SCHEDULES, AND FLOORING PLANS FOR ADDITIONAL FINISH INFORMATION AND LOCATIONS.
12. PREPARE WALLS TO RECEIVE FINISH AS INDICATED ON THE FINISH SCHEDULE AND APPROPRIATE SPEC. SECTION IN ACCORDANCE WITH MANF. RECOMMENDATIONS (U.N.O.). IF OTHERWISE NOTED INSTALLATION METHOD CONFLICTS WITH MANF. RECOMMENDATIONS NOTIFY ARCHITECT IN WRITING PRIOR TO MATERIAL ORDER, FABRICATION OR INSTALLATION.
13. PROVIDE UL APPROVED PENETRATION PROTECTION AT ALL RATED WALL ASSEMBLIES, RATED HORIZONTAL ASSEMBLIES AND ALL WALL DOUBLE TOP PLATE PENETRATIONS AS PER FBC CHAPTER AND ALL FED., STATE AND LOCAL CODES - TYP.

KEYNOTES: (KEYNOTE NUMBERS ARE UNIFORM ACROSS ALL SHEETS AND SOME MAY NOT BE REQUIRED ON THIS SHEET)

KEYNOTES - FLOOR PLAN	
NO.	DESCRIPTION

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

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10851
7/14/2021
REGISTERED ARCHITECT

Georgetown SOUTH CAROLINA

#	DESCRIPTION OF REVISION	DATE	CONSTRUCTION BID SET	PER	BAW	CHKD
		9/17/2021				BY

DESIGNED BY: PER
DRAWN BY: SC/JD
CHECKED BY: MLK/GR
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SCALE: As indicated
D SIZE ANSI BORDER
ARCHITECTURAL FLOOR PLAN - LEVEL 1
PLOT DATE:
PLOT TIME:
FILE NAME: 1363.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

RAYMOND SINCE 1992

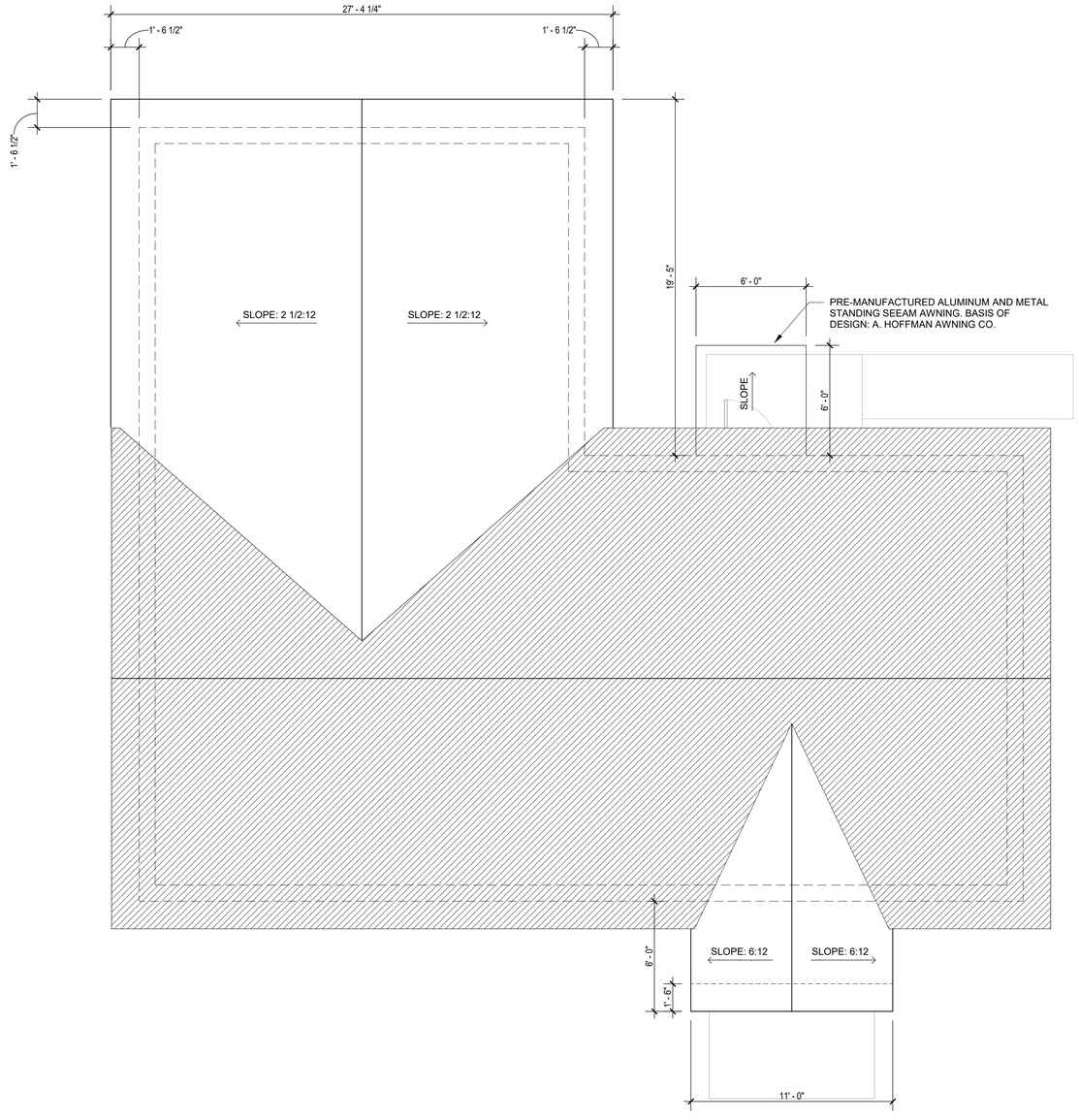
CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

ARCHITECTURAL FLOOR PLAN - LEVEL 1

PLATE NUMBER: A-101

SHEET OF

9/20/2021 4:58:14 PM



1 PLAN - ROOF
1/4" = 1'-0"

ROOF PLAN SHEET NOTES:

1. ALL WORK SHALL BE COMPLETE AND OPERATIONAL.

2. ALL DIMENSIONS TO BE VERIFIED IN FIELD.

3. DEMOLITION WORK SHALL BE AS REQUIRED TO ACHIEVE CLEAN, SMOOTH, AND PLUMB NEW WORK.

4. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS PRIOR TO STARTING WORK.

METAL PANEL ROOF SYSTEM
BASIS OF DESIGN: "DOUBLE- LOK ROOFING SYSTEM" BY MBCI

NEW TRAPEZOIDAL METAL PANEL ROOF SYSTEM, GUTTERS, TRANSITION FLASHING, AND DOWNSPOUTS.
NEW 360 DEGREE MECHANICALLY SEEMED METAL TRAPEZOIDAL ROOF PANEL SYSTEM WITH R-25 INSULATION AND CONCEALED FASTENERS. THE NEW ROOF SYSTEM SHALL BE SECURED AS REQUIRED FOR THE WIND UPLIFT LOADS PRESCRIBED IN ASCE 7-16 WITH ALL NECESSARY PERIMETER AND CORNER ENHANCEMENTS. CONCEALED CLIPS AND METAL CLOSURES SHALL BE USED TO INSURE A WATERTIGHT ASSEMBLY. NEW GUTTER SHALL BE 24 GA. PAINTED METAL INSTALLED IN ACCORDANCE WITH DESIGN BASIS MANUFACTURER'S INSTALLATION INSTRUCTIONS WITH MATCHING DOWNSPOUTS. ROOF COLOR TO BE SELECTED BY GOVERNMENT FROM MANUFACTURES PREMIUM PAINT COLOR CHART.

PVC ROOF SYSTEM
BASIS OF DESIGN: "COOL ZONE – COOL ROOFING SYSTEM" BY DURO-LAST

NEW 60MIL PVC ROOF SYSTEM, METAL GUTTERS, TRANSITION FLASHING, AND DOWNSPOUTS.
NEW MECHANICALLY FASTENED 60MIL PVC ROOF MEMBRANE SYSTEM OVER HI DENSITY POLYISO-PROTECTION BOARD WITH TAPERED R-25 MIN. RIGID INSULATION. THE NEW ROOF SYSTEM SHALL BE SECURED AS REQUIRED FOR THE WIND UPLIFT LOADS PRESCRIBED IN ASCE 7-16 WITH ALL NECESSARY PERIMETER AND CORNER ENHANCEMENTS. NEW GUTTER SHALL BE 24 GA. PAINTED METAL INSTALLED IN ACCORDANCE WITH DESIGN BASIS MANUFACTURER'S INSTALLATION INSTRUCTIONS WITH MATCHING DOWNSPOUTS. ROOF COLOR TO BE SELECTED BY GOVERNMENT FROM MANUFACTURES PREMIUM PAINT COLOR CHART.

G.C. TO PROVIDE DUST AND NOISE PROOF CONSTRUCTION BARRIER AS REQUIRED TO SEPARATE CONSTRUCTION AREAS FROM ADJACENT OFFICE AREAS. MAINTAIN 2 MEANS OF EGRESS OUT OF CONSTRUCTION AREA AT ALL TIMES.

KEYNOTES: (KEYNOTE NUMBERS ARE UNIFORM ACROSS ALL SHEETS AND SOME MAY NOT BE REQUIRED ON THIS SHEET)

KEYNOTES - ELEVATIONS	
NO.	DESCRIPTION

Georgetown SOUTH CAROLINA

BY	DESCRIPTION OF REVISION	DATE	#
PER	CONSTRUCTION BID SET	9/17/2021	
BAW			
CHKD			

DESIGNED BY: PER
DRAWN BY: SC.JD
CHECKED BY: MLK/GR
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SCALE: As indicated
D SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1363.001 PLANS AND DETAILS - ARCHITECTURAL.DWG

ARCHITECTURAL ROOF PLAN

RAYMOND SINCE 1992

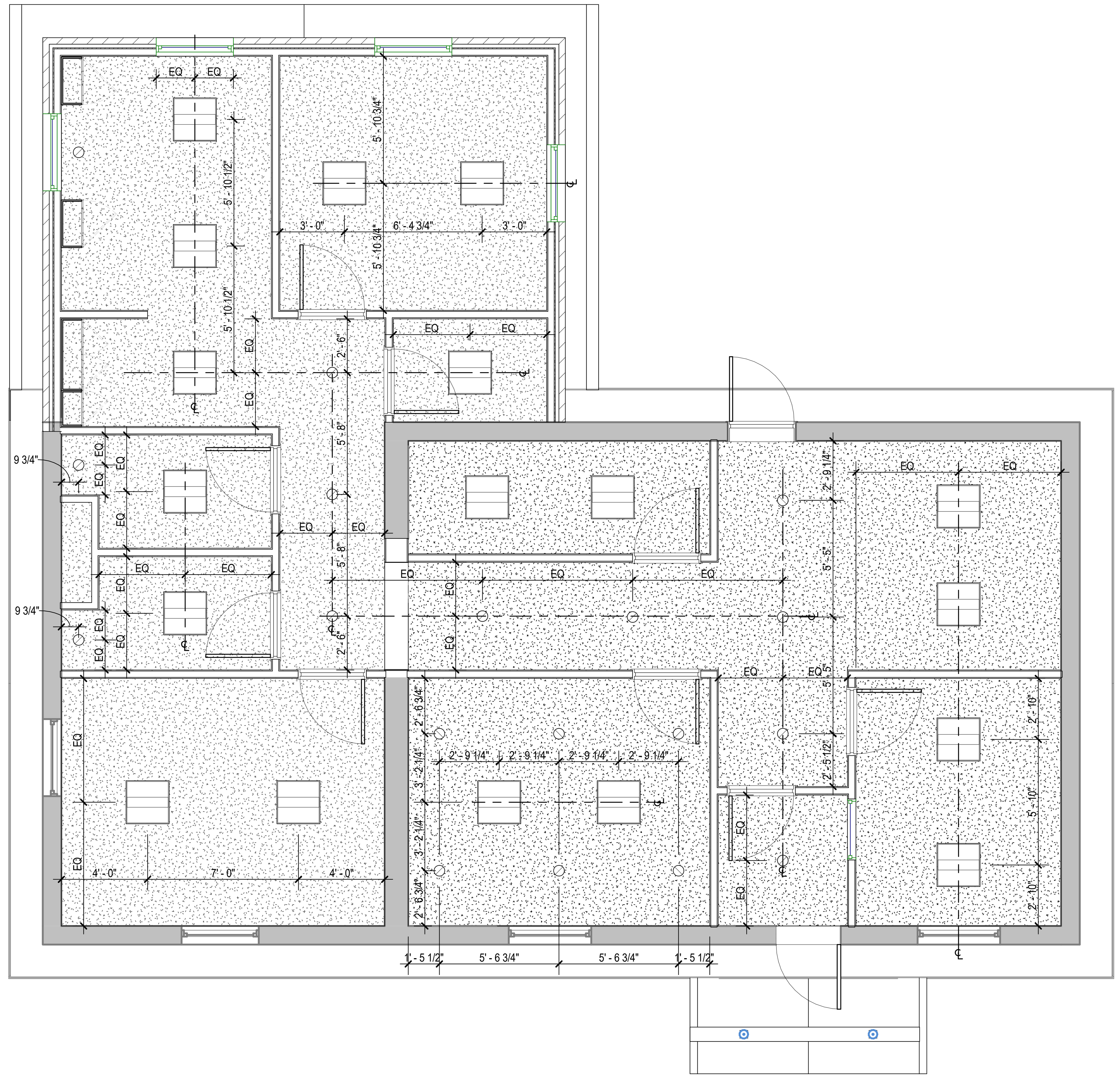
CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

ARCHITECTURAL ROOF PLAN

PLATE NUMBER:
A-102
SHEET OF

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10851
7/14/2021
REGISTERED ARCHITECT

9/20/2021 4:58:14 PM



1 REFLECTED CEILING PLAN

1/4" = 1'-0"

REFLECTED CEILING PLAN LEGEND

○	DOWNLIGHT- CENTER IN ACOUST. CEILING PANELS, TYP., U.N.O.
⊘	EMERGENCY DOWNLIGHT- CENTER IN ACOUST. CEILING PANELS, TYP., U.N.O.
	1' X 4' PENDANT LIGHT FIXTURE
	1' X 4' EMERGENCY PENDANT LIGHT FIXTURE
▭	1' X 4' LAY-IN LIGHT FIXTURE
	1' X 4' EMERGENCY LAY-IN LIGHT FIXTURE
▭	2' X 4' FLUORESCENT LIGHT FIXTURE
◩	2' X 4' EMERGENCY LIGHT FIXTURE
□	2' X 2' LAY-IN LIGHT FIXTURE
◩	2' X 2' EMERGENCY LAY-IN LIGHT FIXTURE
☒	24" X 24" MECH. DIFFUSERS
⧄	24" X 24" MECH. RETURN AIR GRILLES
⊙	SCONCE LIGHTS
	EXT. WALL MOUNTED FIXTURE
⊗	WALL MOUNTED EXIT SIGN
⊗	CEILING MOUNTED EXIT SIGN
AP	RATED OR NON-RATED, LOCKABLE, STEEL ACCESS PANEL 2'-0" W. X 3'-0" DP.- PROVIDE ACCESS PANELS AS REQUIRED TO ALLOW ACCESS TO EQUIPMENT, SHUT-OFF VALVES, FIXTURES, MECH. LOUVERS, FIRE DAMPERS AND OTHER ITEMS ABOVE THE CEILING. PAINT TO MATCH THE ADJACENT SURFACE'S COLOR, U.N.O.
OS	OCCUPANCY SENSOR
S	CEILING MOUNTED MASS NOTIFICATION SPEAKER, ONE WAY TYPE
P	CEILING MOUNTED PUBLIC ADDRESS SPEAKER, ONE WAY TYPE
A	2'-0" x 2'-0" ACOUSTICAL CEILING SYSTEM
B	2'-0" x 4'-0" ACOUSTICAL CEILING SYSTEM
C	INSTALL 5/8" WATER- RESISTANT GYPSUM BOARD.
D	EXTERIOR METAL PANEL SOFFIT

GENERAL RCP SHEET NOTES:

1. ALL MATERIAL EXPOSED WITHIN A RETURN AIR CEILING PLENUM SHALL BE NONCOMBUSTIBLE OR SHALL BE LIMITED IN COMBUSTIBILITY AND HAVE A FLAME SPREAD INDEX OF 25 MAX. AND A SMOKE- DEVELOPMENT INDEX OF 50 MAX., PER ASTM E84.

2. IN LATRINES, TOILETS, LOCKER ROOMS AND JANITOR CLOSETS ALL GYPSUM BOARD CEILINGS SHALL BE WATER RESISTANT GYPSUM BOARD.

3. ALL CEILING MOUNTED DEVICES SHALL BE CENTERED IN BOTH DIRECTIONS IN ACOUSTICAL CEILING PANELS U.N.O. CENTER SPRINKLER HEADS IN ACOUST. CEILING PANELS WHERE THEY OCCUR - COORDINATE THE LOCATION OF THE SPRINKLER HEADS WITH OTHER CEILING FIXTURES AND EQUIPMENT IN ALL CEILING. ENSURE THAT A SYMMETRICAL AND BALANCED ARRANGEMENT IS INSTALLED. CONTRACTING OFFICER IS TO REVIEW INSTANCE OF NON-EQUAL SPACING PRIOR TO INSTALLATION.

4. CEILING HEIGHTS INDICATED (I.E. 9'-0") ARE RELATIVE TO THE FINISH FLOOR ELEVATION OF THE ROOM FOR WHICH THEY ARE INDICATED.

5. CEILING GRIDS SHALL BE ORIENTED WITHIN SPACES AS SHOWN, U.N.O. FULL TILE (FT) WHERE INDICATED, SHALL ABUT DESIGNATED WALL. LIMIT PARTIAL PANELS TO NO LESS THAN 6".

6. DEVICES HAVE BEEN SHOWN FOR COORDINATION PURPOSES. ALL DEVICES MAY NOT BE SHOWN.

7. THE CONTRACTOR SHALL ENSURE THE INSTALLATION OF ALL DEVICES INDICATED ON THE ENGR. DWG. SEE MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION DRAWINGS FOR ITEMS NOT SHOWN ON REFLECTED CEILING PLANS. CONTACT THE ARCHITECT IF ANY CONFLICTS OCCUR.

8. AT WALLS WITH SOUND ATTENUATION BLANKETS PROVIDE SOUND ATTENUATION BLANKETS ON CEILING TO 2'-0" ON BOTH SIDES OF WALL EXCEPT AT WALLS WITH SOUND ATTENUATION BLANKETS EXTENDING TO STRUCTURE.

9. REFER TO MECH, ELEC, AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. PROVIDE ALL ITEMS AS REQUIRED BY FED, STATE AND LOCAL CODE.

10. SEE GENERAL NOTES ON SHEET A-001 FOR ADDITIONAL INFORMATION.

11. SPACE CEILING GRID MAIN RUNNERS NOT MORE THAN 4'-0" O.C. AND SPACE HANGERS AT NOT MORE THAN 4'-0" O.C. COORDINATE CEILING FRAMING WITH STRUCTURE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE ADDITIONAL HANGERS AND RUNNERS TO SUPPORT ELECTRICAL, MECHANICAL AND OTHER WORK INDICATED AND REQUIRED.

12. THE CONTRACTOR SHALL VERIFY ACCESS PANELS OF APPROPRIATE SIZE, TYPE AND RATING ARE INSTALLED IN GYP CEILINGS, SOFFITS AND IN OTHER NON-ACCESSIBLE TYPE CEILINGS OR SOFFITS WHERE ACCESS, SERVICE OR ADJUSTMENT TO MECHANICAL, PLUMBING OR ELECTRICAL ITEMS MAY BE REQUIRED AND/OR NECESSARY. ACCESS PANELS SHALL BE THE FIRE RATED TYPE EQUAL TO THE RATING OF THE CEILING OR SOFFIT IN WHICH THEY OCCUR. COORDINATE ACCESS PANELS WITH MECHANICAL BALANCING DAMPER LOCATIONS.

KEYNOTES: (KEYNOTE NUMBERS ARE UNIFORM ACROSS ALL SHEETS AND SOME MAY NOT BE REQUIRED ON THIS SHEET)

KEYNOTES - NEW RCP	
NO.	DESCRIPTION

Georgetown SOUTH CAROLINA

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
ARCHITECTURAL REFLECTED CEILING PLAN - LEVEL 1
SCALE: As indicated
D SIZE ANSI BORDER
DESIGNED BY: PER
DRAWN BY: SCJD
CHECKED BY: MLK/GR
PLOT DATE:
PLOT TIME:

RAYMOND SINCE 1992

FILE NAME: 1363.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

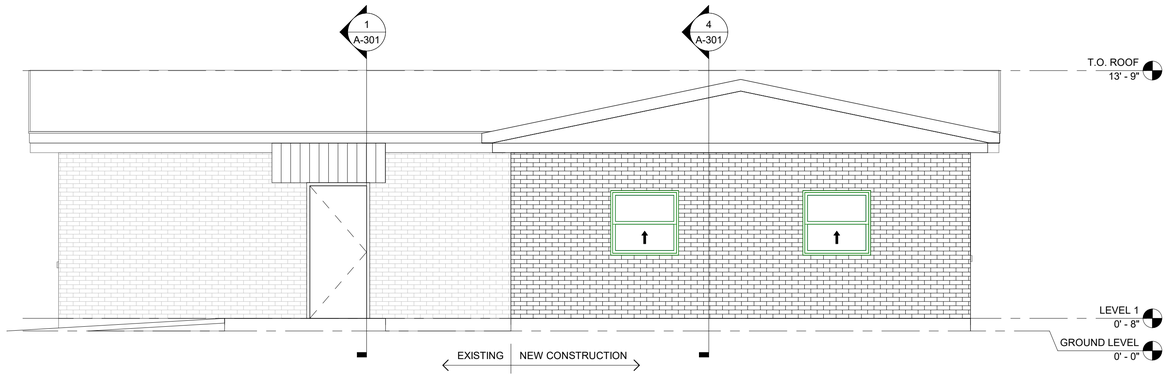
CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

ARCHITECTURAL REFLECTED CEILING PLAN - LEVEL 1

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10851
7.14.2021
REGISTERED ARCHITECT

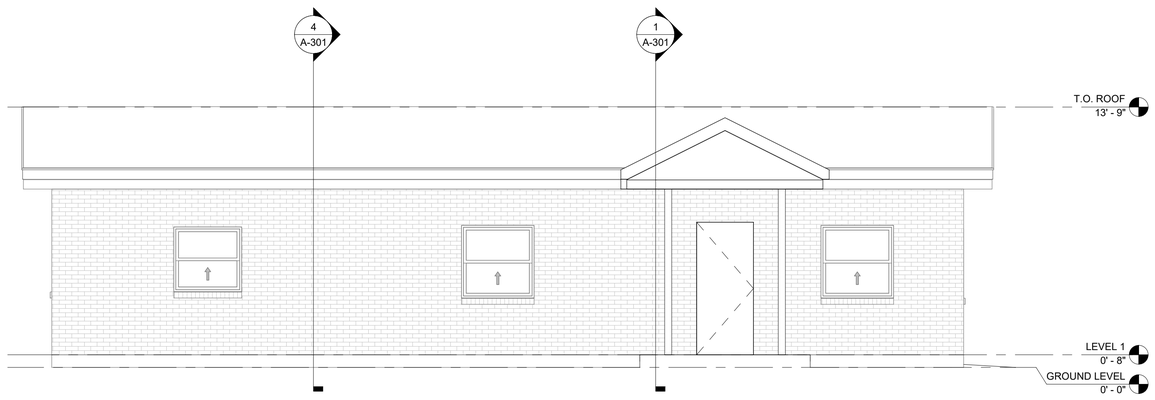
PLATE NUMBER:
A-103
SHEET OF

9/20/2021 4:58:15 PM



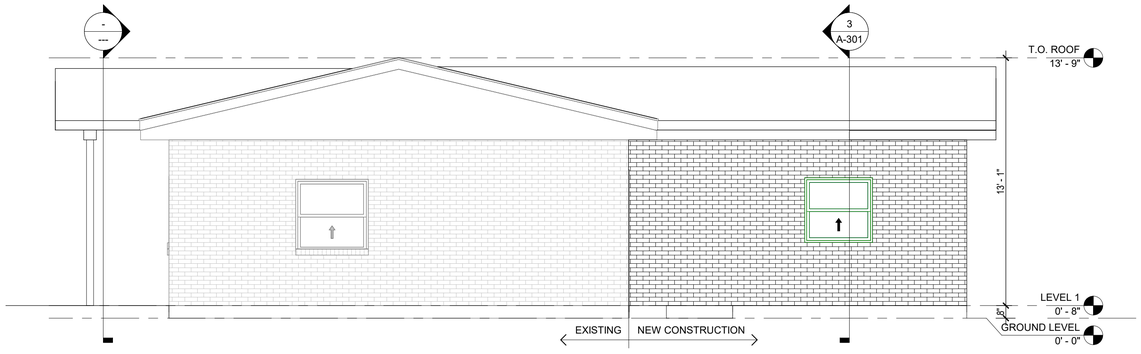
3 ELEVATION - NORTH

1/4" = 1'-0"



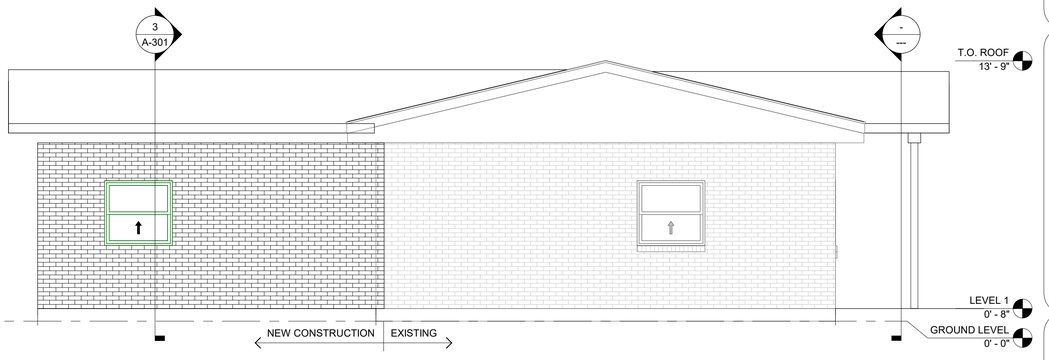
1 ELEVATION - SOUTH

1/4" = 1'-0"



2 ELEVATION - EAST

1/4" = 1'-0"



4 ELEVATION - WEST

1/4" = 1'-0"

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10851
REGISTERED ARCHITECT
9TH, 2021

ELEVATION PLAN SHEET NOTES:

1. REFER TO FINISH SCHEDULE FOR EXTERIOR FINISH PANEL, STAIR RAIL, WALL TYPES AND COLOR.

2. REFER TO M.E.P. AND STRUCTURAL FOR ANY EXPOSED PIPE WORK, LOCATION, COLOR AND TYPE.

3. ALL EXTERIOR FINISHES TO MATCH EXISTING.

KEYNOTES: (KEYNOTE NUMBERS ARE UNIFORM ACROSS ALL SHEETS AND SOME MAY NOT BE REQUIRED ON THIS SHEET)

KEYNOTES - ELEVATIONS

NO.	DESCRIPTION

Georgetown SOUTH CAROLINA

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
1	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DESIGNED BY: PER
DRAWN BY: SC/JD
CHECKED BY: MLK/GR
PROJECT CODE: CHS1001.001
DATE: SEPTEMBER 17, 2021
SCALE: As indicated
0' SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1363.001 PLANS AND DETAILS - ARCHITECTURAL.DWG

ARCHITECTURAL ELEVATIONS

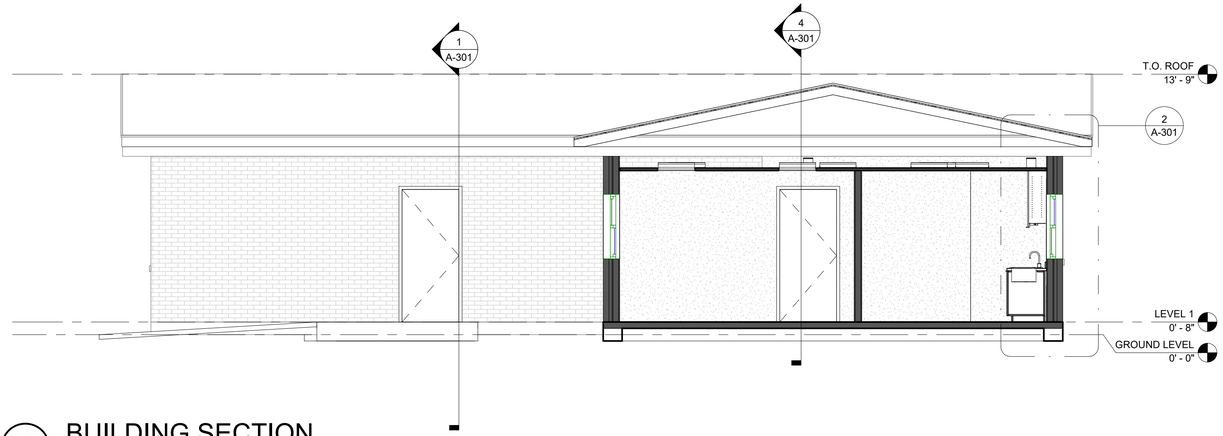
RAYMOND SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

ARCHITECTURAL ELEVATIONS

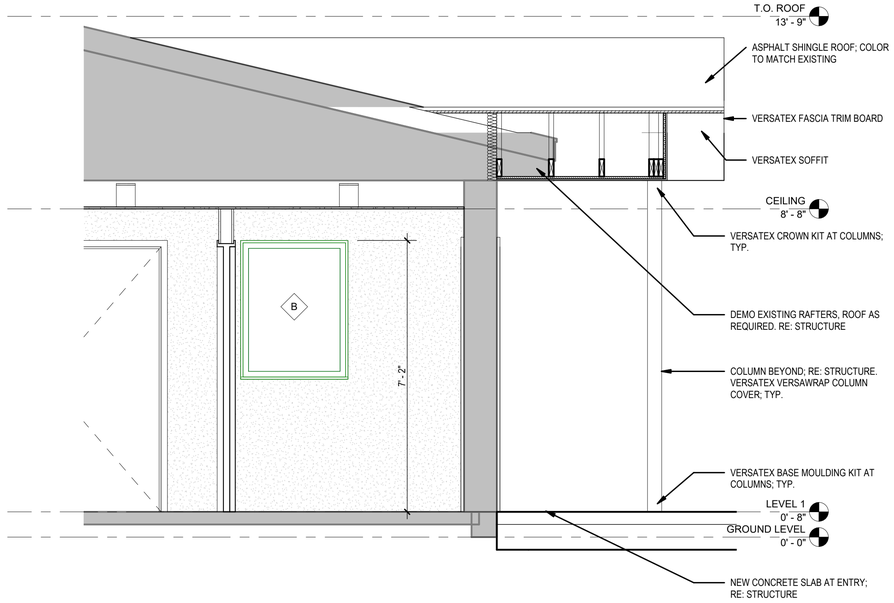
PLATE NUMBER:
A-201
SHEET OF

9/20/2021 4:58:16 PM



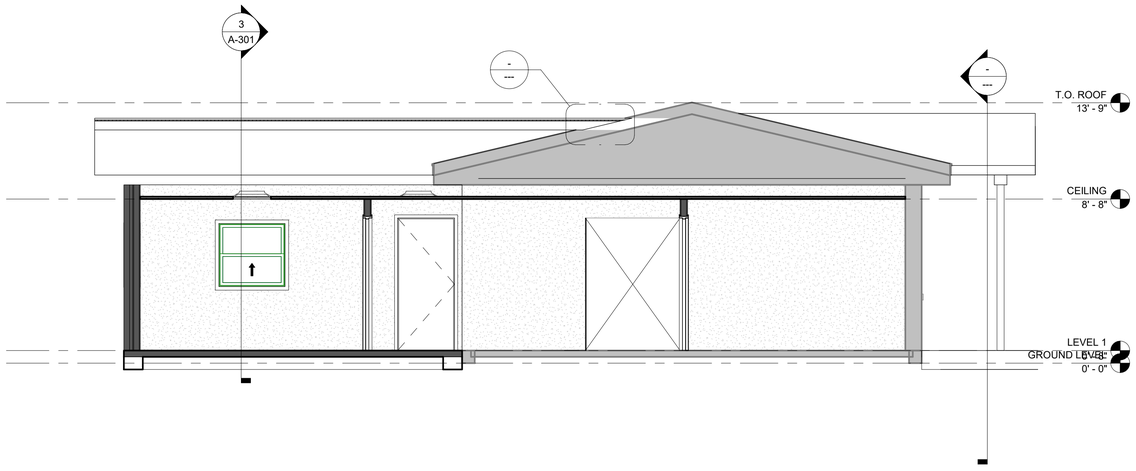
3 BUILDING SECTION

1/4" = 1'-0"



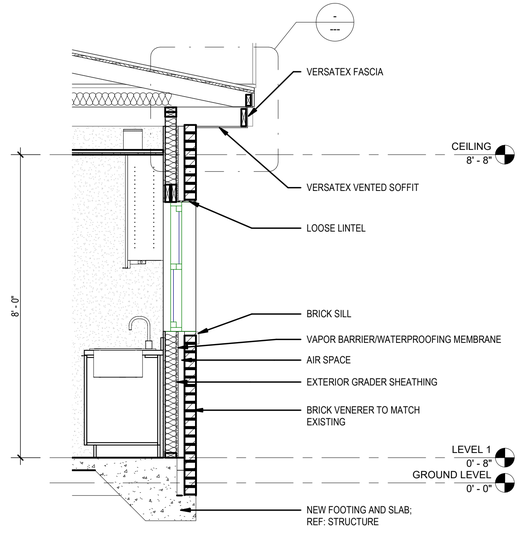
1 Section 4

1/2" = 1'-0"



4 BUILDING SECTION

1/4" = 1'-0"



2 Wall Section 1

1/2" = 1'-0"

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10851
REGISTERED ARCHITECT
7/14/2021

Georgetown SOUTH CAROLINA

#	DESCRIPTION OF REVISION	DATE	BY	CHKD
	CONSTRUCTION BID SET	9/17/2021	PER	BAW

DESIGNED BY: PER
DRAWN BY: SCJD
CHECKED BY: MLK/GR
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SCALE: As indicated
0 SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1301201 PLANS AND DETAILS - ARCHITECTURAL.DWG

ARCHITECTURAL BUILDING & WALL SECTIONS

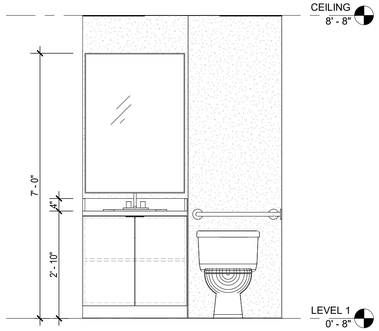
RAYMOND SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

ARCHITECTURAL BUILDING & WALL SECTIONS

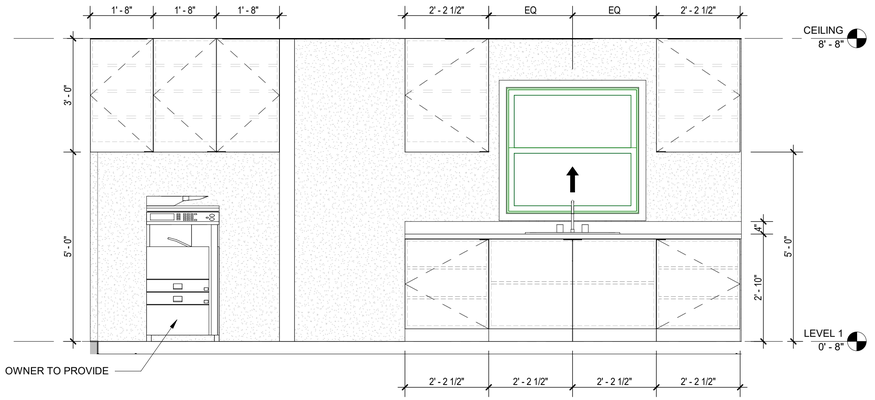
PLATE NUMBER:
A-301
SHEET OF

9/20/2021 4:58:17 PM



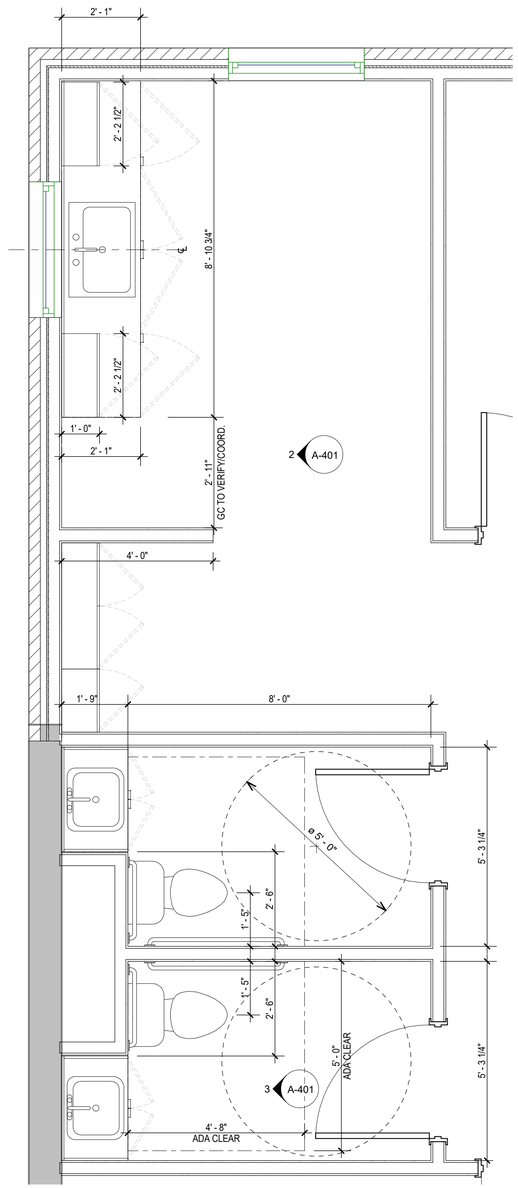
3 ELEVATION - RESTROOM

1/2" = 1'-0"



2 ELEVATION - PANTRY & COPY/PRINT

1/2" = 1'-0"



1 ENLARGED PLAN - PANTRY

1/2" = 1'-0"

Georgetown SOUTH CAROLINA

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DESIGNED BY: PER
DRAWN BY: Author
CHECKED BY: Checker
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SCALE: 1/2" = 1'-0" 0 SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:

ENLARGED PLANS, ELEVATIONS, SECTIONS

RAYMOND SINCE1992

FILE NAME: 1363.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

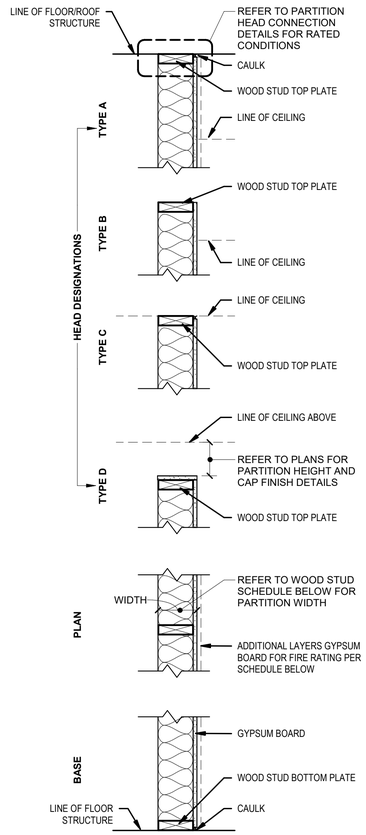
CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

ENLARGED PLANS, ELEVATIONS, SECTIONS

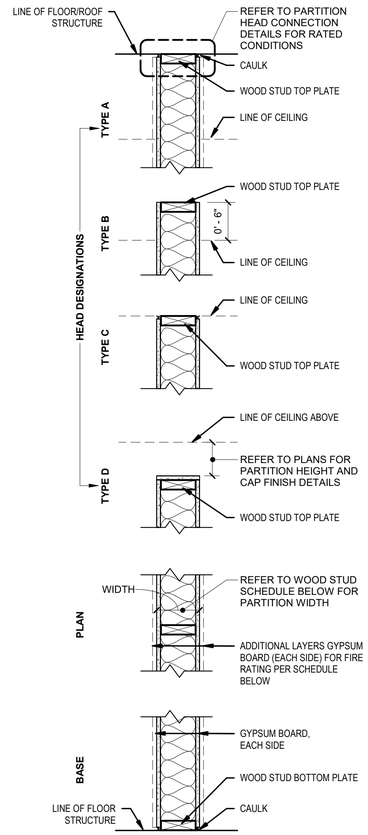
PLATE NUMBER:
A-401
SHEET OF

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10851
9/20/2021
REGISTERED ARCHITECT

9/20/2021 4:58:17 PM



PARTITION TYPE W4A1

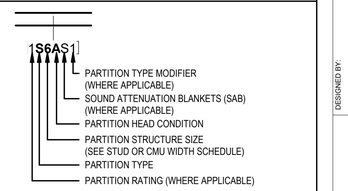


PARTITION TYPE W4A

INTERIOR PARTITION GENERAL NOTES

1. PARTITION TYPES DESCRIBE GENERAL REQUIREMENTS FOR PARTITIONS. REFER TO THE MANUFACTURER'S SPECIFICATIONS AND REQUIREMENTS OF APPLICABLE TESTING AGENCIES FOR SPECIFICS OF PARTITION CONSTRUCTION.
2. REFER TO "PARTITION TYPE NOMENCLATURE" FOR SYMBOLS USED TO IDENTIFY ADDITIONAL REQUIREMENTS AND MODIFIERS TO BASIC PARTITION TYPES.
3. "LINE OF STRUCTURE" INDICATED FOR EACH PARTITION IS DIAGRAMMATIC ONLY AND DOES NOT INDICATE EXACT CONSTRUCTION CONDITIONS OR GEOMETRY.
4. TYPICAL FLOOR PLAN DIMENSIONS OF PARTITIONS ARE TO FACE OF STUD OR CMU UNLESS NOTED OTHERWISE.
5. WHERE A CLEAR OPENING DIMENSION IS INDICATED, THE DIMENSION IS MEASURED FACE-TO-FACE BETWEEN FINISHED SURFACES.
6. REFER TO SPECIFICATIONS FOR MINIMUM STUD DESIGN CRITERIA, MAXIMUM SPACING AND ALLOWABLE LIMITING HEIGHTS DEFLECTION CRITERIA FOR GYPSUM BOARD.
7. METAL STUD GAUGE (IF NOTED) AND UL TEST NUMBERS WILL VARY DEPENDING ON THE MANUFACTURER OF COMPONENTS ACTUALLY USED.
8. REFER TO FLOOR PLANS FOR FIRE PROTECTION RATINGS.
9. ALL RATED PARTITIONS SHALL BE LABELED ABOVE CEILING WITH LABELS PER AHJ AS REQUIRED. IBC CHAPTER 7 AT MINIMUM.
10. PENETRATIONS IN RATED PARTITIONS AND CONNECTIONS OF THE PARTITIONS TO OTHER PORTIONS OF THE WORK TO BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED DETAILS AND IN COMPLIANCE WITH APPLICABLE TESTING AGENCY REQUIREMENTS.
11. INSTALLATION OF GYPSUM BOARD, BACKER BOARD AND BASE BOARD TO CONFORM TO REQUIREMENTS FOR FIRE RATINGS AND ACOUSTICAL RATINGS.
12. PROVIDE WATER RESISTANT TYPE GYPSUM BOARD AT AREAS THAT ARE NOTED IN ROOM FINISH SCHEDULE TO RECEIVE CERAMIC OR PORCELAIN TILE FINISH.
13. INSTALL BLOCKING OR BACKER MATERIAL FOR ATTACHMENT / MOUNTING OF WALL HUNG ITEMS OR EQUIPMENT DESCRIBED IN THE DOCUMENTS. ALL BLOCKING TO BE FIRE RETARDANT TREATED.
14. PARTITIONS THAT ARE REQUIRED TO EXTEND TO THE DECK ABOVE ARE TO HAVE THE GYPSUM BOARD CUT TO FIT WITHIN A 1/4" MAXIMUM TOLERANCE TO THE SHAPE OF THE DECK ABOVE. GYPSUM BOARD SHALL BE CONTINUOUSLY SEALED FOR THE FULL DEPTH OF THE GYPSUM BOARD WITH FLEXIBLE SEALANT.
15. PROVIDE METAL STRAPPING @ 24" VERT. TO HOLD BATT INSULATION FOR AREAS WITHOUT GYPSUM WALLBOARD.
16. GYPSUM BOARD IS TO BE CUT SO THAT THE CLEARANCE BETWEEN METALLIC ELECTRICAL OUTLET BOXES AND THE GYPSUM BOARD DOES NOT EXCEED 1/8".
17. THE BOTTOM OF THE GYPSUM BOARD AT INTERIOR PARTITIONS IS TO BE 1/4" MINIMUM AND 1/2" MAXIMUM ABOVE THE FLOOR STRUCTURE AND IS TO BE SEALED FOR THE FULL DEPTH OF THE GYPSUM BOARD WITH FLEXIBLE SEALANT.
18. REFER TO INTERIOR FINISH SCHEDULE FOR WALL FINISHES.
19. REFER TO PARTITION TYPE MODIFIERS FOR STC RATED PARTITIONS

PARTITION TYPE NOMENCLATURE



PARTITION TYPES

M	CONCRETE MASONRY UNIT PARTITION
G	METAL STUD PARTITION
S	SHAFTWALL PARTITION
F	METAL FURRING PARTITION
W	WOOD STUD PARTITION

PARTITION STRUCTURE WIDTH DESIGNATOR

#	METAL STUD	WOOD STUD	CMU
0	* 0-7/8"	--	--
1	*1-1/2"	--	--
2	2-1/2"	* 1-1/2"	--
3	3-5/8"	2-1/2"	--
4	4"	3-1/2"	3-5/8"
6	6"	5-1/2"	5-5/8"
8	8"	7-1/4"	7-5/8"
10	10"	9-1/4"	--
12	12"	11-1/4"	11-5/8"
*	FURRING MEMBER		

PARTITION HEAD CONDITION DESIGNATOR

A	PARTITION TO BOTTOM OF STRUCTURAL ROOF OR FLOOR DECK ABOVE
B	PARTITION TO 6" ABOVE CEILING - BRACE WALL AS NEEDED
C	PARTITION TO BOTTOM OF CEILING ABOVE
D	PARTIAL HEIGHT PARTITION - SEE PLAN FOR HEIGHT

PARTITION TYPE MODIFIER

1	SOUND BATT MINIMUM STC RATING - 42
2	RESILIENT CHANNEL AND SOUND BATT MINIMUM STC RATING - 50

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10651
9.17.2021
REGISTERED ARCHITECT

Georgetown SOUTH CAROLINA

#	DESCRIPTION OF REVISION	DATE	BY	CHKD
1	CONSTRUCTION BID SET	9/17/2021	PER	BAW

DESIGNED BY: PER
DRAWN BY: SCJD
CHECKED BY: MLK/GR
DATE: SEPTEMBER 17, 2021
PROJECT CODE: CHS1001.001
SCALE: 1" = 1'-0"
D SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1363.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

PARTITION TYPES

RAYMOND SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

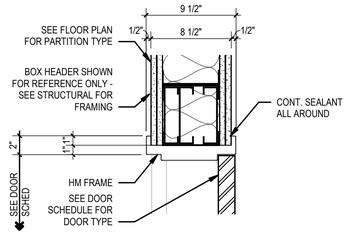
PARTITION TYPES

PLATE NUMBER:
A-601
SHEET OF

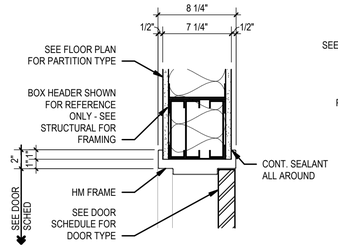
9/20/2021 4:58:18 PM

DOOR SCHEDULE

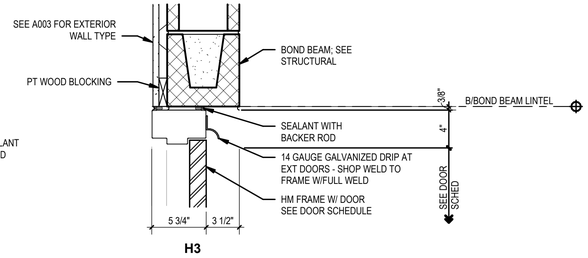
DOOR NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THK.	DOOR TYPE	FIRE RATING	DOOR MATERIAL	DOOR HARDWARE	FRAME TYPE	FRAME MATERIAL	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	REMARKS
01	3' - 0"	7' - 0"	0' - 1 3/4"	B		STAIN	5	HM	PT1	H2	J2	S4	
02	3' - 0"	7' - 0"	0' - 1 3/4"	C		PT2	1	HM	PT1	H3	J3	S1	GC TO PLEASE PERFOM EXPLORATORY DEMO AND INFOMR ARCHITECT OF EXSTG. WALL CONSTRUCTION TO VERIFY HEAD/JAMB DETAILS
03	3' - 0"	7' - 0"	0' - 1 3/4"	A		STAIN	3	HM	PT1	H2	J2	S4	
04	3' - 0"	7' - 0"	0' - 1 3/4"	B		STAIN	3	HM	PT1	H2	J2	S4	
05	3' - 0"	7' - 0"	0' - 1 3/4"	A		STAIN	4	HM	PT1	H2	J2	S4	
06	3' - 0"	7' - 0"	0' - 1 3/4"	A		STAIN	3	HM	PT1	H2	J2	S4	
07	3' - 0"	7' - 0"	0' - 1 3/4"	A		STAIN	2	HM	PT1	H2	J2	S4	
08	3' - 0"	7' - 0"	0' - 1 3/4"	A		STAIN	2	HM	PT1	H2	J2	S4	
09	3' - 0"	7' - 0"	0' - 1 3/4"	A		STAIN	3	HM	PT1	H2	J2	S4	
10	3' - 0"	7' - 0"	0' - 1 3/4"	A		STAIN	3	HM	PT1	H2	J2	S4	
11	3' - 0"	7' - 0"	0' - 2"	EXISTING			N/A			H3	J3		REMOVE DOOR AND ASSOCIATED HARDWARE. REINSTALL RIGHT HAND REVERSE.



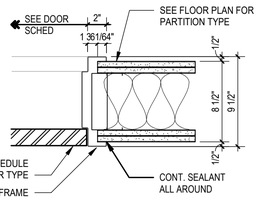
H1



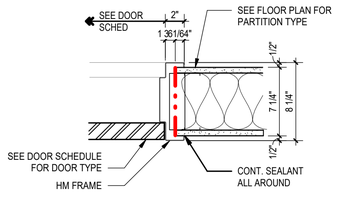
H2



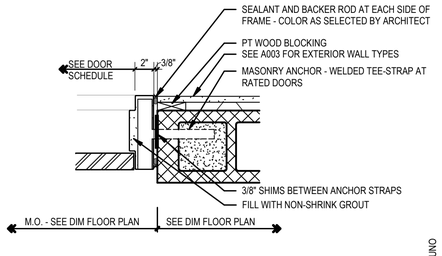
H3



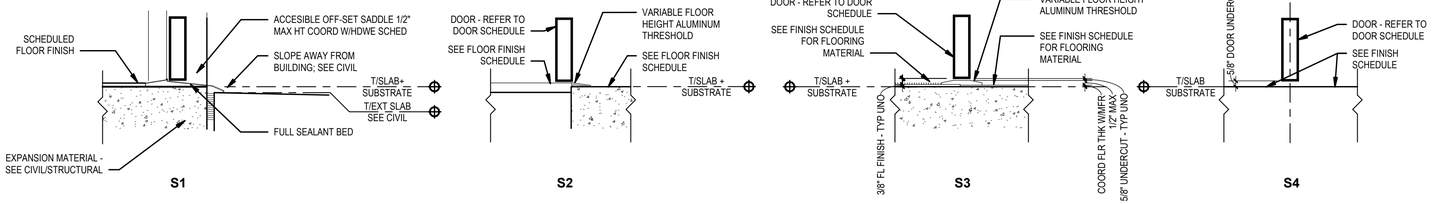
J1



J2



J3



S1 S2 S3 S4

INTERIORS HEAD/JAMB/SILL DETAILS

1 1/2" = 1'-0"

HARDWARE SCHEDULE

*FINISH TO BE SATIN CHROME; TYP.

HARDWARE No. 1

THRESHOLD	OFF-SET STYLE 1/2" MAX HEIGHT
HINGES	IVES 5BB1HW
CLOSER	STANDARD PARALLEL ARM
PUSH PLATE	XX
LOCKSET	XX
LOCK	FALCON MA SERIES ENTRY
KICKPLATE	NONE
MISC	WEATHER STRIPPING DOOR SWEEP

HARDWARE No. 2

THRESHOLD	VARIABLE FLOOR HEIGHT, ALUMINUM
HINGES	IVES 5BB1HW
CLOSER	STANDARD PARALLEL ARM
PUSH PLATE	NONE
LOCKSET	FALCON K SERIES 'DANE'
LOCK	FALCON MA SERIES PRIVACY/BATH MA311
KICKPLATE	NONE
MISC	INDICATOR THUMBTURN LOCK "OCCUPIED/VACANT"

HARDWARE No. 3

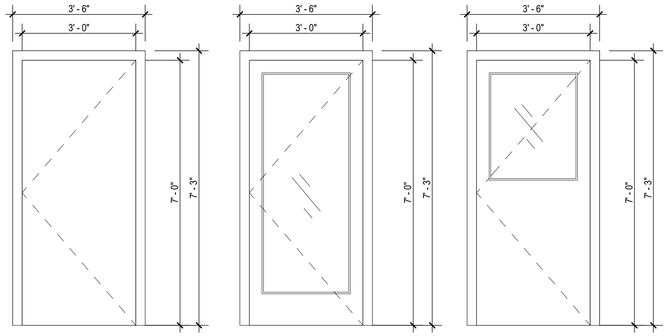
THRESHOLD	NONE
HINGES	IVES 5BB1HW
CLOSER	NONE
PUSH PLATE	NONE
LOCKSET	FALCON K SERIES 'DANE'
LOCK	FALCON MA SERIES ENTRY/OFFICE
KICKPLATE	NONE
MISC	DOME STOP IVES FS436

HARDWARE No. 4

THRESHOLD	NONE
HINGES	IVES 5BB1HW
CLOSER	NONE
PUSH PLATE	NONE
LOCKSET	FALCON K SERIES 'DANE'
LOCK	FALCON MA SERIES STOREROOM
KICKPLATE	NONE
MISC	DOME STOP IVES FS436

HARDWARE No. 5

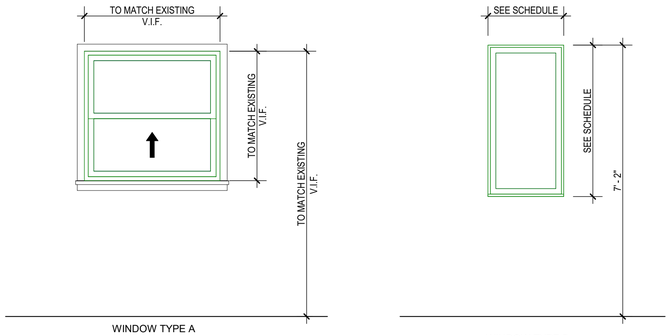
THRESHOLD	NONE
HINGES	IVES 5BB1HW
CLOSER	STANDARD PARALLEL ARM
PUSH PLATE	NONE
LOCKSET	FALCON K SERIES 'DANE'
LOCK	PASSAGE/CLOSET LATCH
KICKPLATE	NONE
MISC	NONE



DOOR TYPE A DOOR TYPE B DOOR TYPE C

Door Types

1/2" = 1'-0"



WINDOW TYPE A WINDOW TYPE B

Window Types

1/2" = 1'-0"

Window Schedule

Type Mark	Height	Width	Frame Material	Frame Finish	Comments
A	3' - 5"	3' - 7"	WD	VNYL	DIMENSION TO MATCH EXISTING; V.I.F.
B	3' - 8"	2' - 10"	WD	VNYL	

STATE OF SOUTH CAROLINA
BENJAMIN ANDREW WEST
CHARLESTON, SC
No. 10051
7-14-2021
REGISTERED ARCHITECT

Georgetown SOUTH CAROLINA

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
1	9/17/2021	CONSTRUCTION BID SET	PER	BAW

DESIGNED BY: PER
DRAWN BY: Author
CHECKED BY: Checker
DATE: JULY 14, 2021
PROJECT CODE: CHS1001.001
SCALE: As indicated
D SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1363-01 PLANS AND DETAILS - ARCHITECTURAL.DWG

DOOR SCHEDULE

RAYMOND SINCE 1992

CITY OF GEORGETOWN
PUBLIC WORKS BLDG
125 N. KAMINSKI ST

DOOR SCHEDULE

PLATE NUMBER:
A-602
SHEET OF

9/20/2021 4:58:18 PM

GENERAL STRUCTURAL NOTES:

GENERAL:

1. STRUCTURAL DRAWINGS & CONNECTIONS SHOWN ON ALL "S" SHEETS ARE BASED UPON ASSUMPTIONS REGARDING EXISTING STRUCTURAL FRAMING SPAN AND DIRECTION. CONTRACTOR SHALL OPEN CEILINGS AND SELECTED PORTIONS OF LOAD-BEARING WALLS TO EXPOSE EXISTING FRAMING PRIOR TO PERFORMING ANY LOAD-BEARING WALL OR COLUMN DEMOLITION OR INSTALLATION OF NEW MATERIAL. AFTER EXPOSING CEILING AND WALL FRAMING, CONTRACTOR SHALL LOCATE FUTURE STRUCTURE POSITIONS (COLUMNS, POSTS, BEAMS, ETC.) AND INFORM ENGINEER OF RECORD TO ALLOW OBSERVATION OF EXISTING FRAMING AND ANY MODIFICATIONS OF THESE DRAWINGS. SHOULD THE ENGINEER OF RECORD DEEM IT NECESSARY, NEW DRAWINGS OR DETAILS MAY BE ISSUED AT THAT TIME. LOAD PATHS FROM ROOF TO FOUNDATIONS SHALL BE MONITORED AND SHALL REMAIN SOUND.

2. E CONTRACTOR TO FIELD VERIFY ALL FLOOR TO FLOOR DIMENSIONS AND ALL EXISTING PLAN DIMENSIONS, ETC., AND INFORM ENGINEER OF RECORD OF ANY DISCREPANCIES WITH DESIGN DRAWINGS OR INFORMATION NOT SHOWN ON DESIGN DRAWINGS.

3. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, AND ELECTRICAL DRAWINGS, AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER DISCIPLINES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES, PENETRATIONS, AND OTHER ADDITIONAL ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.

4. WHERE SECTION IS SHOWN AND DETAILED, OTHER SECTIONS OF SIMILAR CONDITION SHALL BE DETAILED THE SAME OR OPPOSITE HAND, WHETHER SPECIFICALLY NOTED OR NOT.

5. ENGINEER'S APPROVAL MUST BE SECURED FOR ALL SUBSTITUTIONS. SUCH APPROVAL MAY ALSO BE WITHHELD AT THE SOLE DISCRETION OF THE ENGINEER.

6. THE STRUCTURES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE INTERNATIONAL (STANDARD) BUILDING CODE, 2018 EDITION (IBC 2018) WITH 2021SOUTH CAROLINA STATE AMENDMENTS.

7. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL PERMANENT SUPPORTS AND LATERAL BRACING ARE IN PLACE.

8. DESIGN LOADS USED IN THE DESIGN OF THE STRUCTURAL SYSTEMS IN THIS PROJECT ARE AS FOLLOWS:

a. DEAD LOAD:
   BASED ON BUILDING MATERIALS

b. LIVE LOAD:

ROOF	20 psf
FLOOR	40 psf

c. ROOF SNOW LOAD:

GROUND SNOW LOAD	5 psf

d. WIND DESIGN CRITERIA:

RISK CATEGORY	II
EXPOSURE CATEGORY	B
BASIC WIND SPEED	146 mph
INTERNAL PRESSURE	± .18 (ENCLOSED STRUCTURE)
BASIC PRESSURE	26.4 psf

e. SEISMIC DESIGN CRITERIA (USING IBC 2018):

SPECTRAL RESPONSE ACCELERATION:					
S_S(SHORT PERIOD (0.2 SECOND))	=	0.483 g	S_{DS}	=	0.455 g
S_1(LONG PERIOD (1.0 SECOND))	=	0.159 g	S_{D1}	=	0.241 g
SITE CLASSIFICATION	=	CLASS D			
SEISMIC DESIGN CATEGORY		D			
RISK CATEGORY		II			
LIGHT FRAME WALLS WITH SHEAR PANELS (ALL OTHER MATERIALS):					
I	=	1.0			
R	=	2.0			
C_d	=	2.0			
ANALYSIS PROCEDURE	=	EQUIVALENT LATERAL FORCE			

7. ALL VERTICAL ELEVATIONS ARE BASED ON THE FINISHED FLOOR ELEVATION OF THE EXISTING BUILDING.

8. DESIGN BEARING PRESSURE BASED ON AN ASSUMED VALUE OF 1500 PSF PER IBC TABLE 1806.2 FOR PERSCRIPTIVE SOIL BEARING PRESSURES. CONTRACTOR TO FIELD VERIFY FOR ANY NEW FOUNDATIONS.

EPOXY ANCHORS:

1. EPOXY GROUT SHALL BE HILTI HY 200 CARTRIDGE SYSTEM AT CAST-IN-PLACE CONCRETE AND SOLID MASONRY, AND HY270 CARTRIDGE SYSTEM AT BRICK OR HOLLOW CONCRETE MASONRY UNITS OR APPROVED ALTERNATE UON. EMBEDMENT SHALL BE 12 BAR DIAMETERS MINIMUM UON. HOLES SHALL BE BRUSHED OUT WITH A BOTTLE BRUSH AND THEN BLOWN OUT WITH AIR USING A COMPRESSOR WITH AN OIL TRAP. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. USE OF SCREEN TUBE IS REQUIRED AT ALL BRICK MASONRY OR HOLLOW CONCRETE MASONRY UNITS.

CAST-IN-PLACE CONCRETE:

1. CAST-IN-PLACE CONCRETE FOR THIS PROJECT SHALL COMPLY WITH THE AMERICAN CONCRETE INSTITUTE (ACI) "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND COMMENTARY" ACI 318-19 AND ACI 318R-19.

2. REFERENCE PROJECT SPECIFICATION SECTION 033000 "CAST-IN-PLACE CONCRETE".

3. CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES:

WEIGHT	STRENGTH @ 28 DAYS	AIR CONTENT	MAX. W/C RATIO
145 pcf	4000 psi	N/A	NA

(SEE SPECIFICATION SECTION 033000 FOR ADDITIONAL REQUIREMENTS)

4. AN INTENTIONALLY ROUGHENED SURFACE MAY BE USED INSTEAD OF A CONTINUOUS SHEAR KEY AT ALL HORIZONTAL CONSTRUCTION JOINTS.

5. ALL EXPOSED CONCRETE EDGES SHALL HAVE 3/4" CHAMFER, WHETHER SPECIFICALLY NOTED OR NOT.

6. TYPICAL SLAB FINISH SHALL BE BROOM FINISH FOR EXTERIOR SLABS AND INTERIOR WET SLABS AND STEEL TROWEL FINISH FOR INTERIOR DRY SLABS.

7. ALL ANCHOR RODS SHALL BE BLACK OR HOT DIPPED GALVANIZED AS NOTED ON DESIGN DRAWINGS.

8. CONCRETE FORM WORK SHALL COMPLY WITH ACI 347, LATEST EDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL FORMWORK.

9. DURING AND IMMEDIATELY AFTER PLACING, CONCRETE SHALL BE THOROUGHLY COMPACTED BY SPADING OR MECHANICAL VIBRATING TO PROVIDE DENSE CONCRETE FREE OF HONEY COMBING.

10. DIRECTLY AFTER FORMS HAVE BEEN REMOVED, ALL EXPOSED TIE WIRES AND STAPLED ENDS SHALL BE REMOVED FROM CONCRETE SURFACES TO BE EXPOSED. CUT TIES FLUSH WITH FINISHED SURFACES FOR ALL OTHER CONCRETE. RUB SMOOTH OR CUT OFF FINS AND ROUGH PLACES. REMOVE ALL LOOSE CONCRETE AND OTHER IRREGULARITIES. PATCH AND FILL VOIDS WITH BONDING AGENT AS REQUIRED.

CONCRETE REINFORCEMENT:

1. REINFORCING STEEL SHALL CONFORM TO ASTM A615 SUPPLEMENT SI, GRADE 60, OF DOMESTIC MANUFACTURER.

2. WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A185. WELDED WIRE REINFORCEMENT SHALL BE SUPPLIED IN FLAT SHEETS ONLY. LAP 9" MINIMUM.

3. REINFORCEMENT SHALL BE FABRICATED TO SHAPES AND DIMENSIONS SHOWN AND SHALL CONFORM TO THE REQUIREMENTS OF CRSI AND ACI 318. REINFORCEMENT SHALL BE COLD BENT UNLESS OTHERWISE AUTHORIZED. BENDING MAY BE ACCOMPLISHED IN THE FIELD OR AT THE MILL. BARS SHALL NOT BE BENT AFTER EMBEDDED IN CONCRETE.

4. REINFORCEMENT SHALL BE FREE FROM LOOSE RUST AND SCALE, DIRT, OIL, OR OTHER DELETERIOUS COATING THAT COULD REDUCE BOND WITH THE CONCRETE.

5. NO SPLICES OF REINFORCEMENT SHALL BE PERMITTED EXCEPT AS DETAILED OR AUTHORIZED. MAKE BARS CONTINUOUS AROUND CORNERS WITH CORNER BARS. WHERE PERMITTED, SPLICES MADE BY CONTACT LAPS SHALL BE CLASS "B" TENSION LAPS.

6. TENSION AND COMPRESSION REINFORCEMENT SPLICES IN CONCRETE SHALL BE MADE AS FOLLOWS:
   #4 BARS - 28"
   #5 BARS - 35"
   #6 BARS - 46"
   #7 BARS - 63"

7. WHERE HOOKS ARE SHOWN, PROVIDE STANDARD 90° HOOKS IN ACCORDANCE WITH CRSI AND ACI 318, UNLESS NOTED OTHERWISE.

8. WHERE REQUIRED, PROVIDE DOWELS TO MATCH SIZE AND SPACING OF VERTICAL REINFORCING FROM FOUNDATION. DOWELS SHALL HAVE STANDARD 90° HOOKS.

9. MINIMUM CONCRETE REINFORCING COVER REQUIREMENTS:

	CAST-IN-PLACE CONCRETE COVER
a. CONCRETE CAST AGAINST EARTH:	3"
b. FORMED CONCRETE EXPOSED TO EARTH OR WEATHER:	
WALLS, SLABS:	
#6 BAR AND LARGER	2"
#5 BAR AND SMALLER	1 1/2"
c. FORMED CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
WALLS, SLABS:	
#11 BAR AND SMALLER	3/4"

10. ALL REINFORCING STEEL AND EMBEDDED ITEMS SUCH AS ANCHOR RODS AND WELD PLATES SHALL BE PLACED TO PREVENT DISPLACEMENT BEYOND PERMITTED TOLERANCES.

11. DETAIL BARS IN ACCORDANCE WITH "ACI DETAILING MANUAL-2004", PUBLICATION SP-66, ACI 318, AND ACI 315, OR LATEST EDITIONS.

12. PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AT POSITIONS SHOWN ON PLANS.

NEW WOOD FRAMING:

1. ALL WOOD HAS BEEN DESIGNED ACCORDING TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD STRUCTURES, 2018 EDITION.

2. ALL WOOD SHALL BE CONNECTED USING PRE-MANUFACTURED ATTACHMENTS AS SHOWN PROVIDING EQUAL OR GREATER STRENGTH THAN THE REFERENCE PRODUCT INDICATED IN THESE DRAWINGS.

3. TYPICAL WALL STUDS SHALL BE 2x4 AT 16" ON CENTER ATTACHED TO TOP AND BOTTOM PLATES WITH SIMPSON A34 (OR EQUAL) GALVANIZED PLATE ANGLES.

4. CLIPS, CONNECTIONS, HANGERS, HOLD-DOWNS, ETC. SHOWN ON THESE DRAWINGS ARE SIMPSON STRONG-TIE CONNECTORS, UON. FASTENERS OF OTHER MANUFACTURERS MAY BE SUBSTITUTED PROVIDED THE LOAD VALUES OF THE SUBSTITUTED FASTENER FOR GROUP II WOOD SPECIES EQUALS OR EXCEEDS THE SPECIFIED FASTENER. ALL THREADED ROD SPECIFIED FOR SIMPSON STRONG-TIE CONNECTORS SHALL BE A307 MINIMUM.

5. NAILING OF ALL MEMBERS SHALL BE IN ACCORDANCE WITH THE BUILDING CODE. SEE CODE FOR TABLE.

6. AT OPENINGS 6' OR LESS PROVIDE ONE STUD UNDER HEADER. AT OPENINGS OVER 6' PROVIDE 2 STUDS UNDER HEADER. STUDS FULL HEIGHT EACH SIDE OF EXTERIOR OPENINGS SHALL EQUAL ONE HALF THE NUMBER OF STUDS INTERRUPTED BY THE OPENING ROUNDED UP (I.E., IF 5 STUDS ARE INTERRUPTED BY THE OPENING PROVIDE 3 FULL HEIGHT STUDS EACH SIDE OF THE OPENING IN ADDITION TO THE STUDS UNDER THE HEADER).

7. AT OPENINGS, PROVIDE 1-LSTA12 SIMPSON STRAP TO STUDS EACH END OF HEADERS. PROVIDE 2 HEADER STRAPS AT OPENINGS 6' AND GREATER. MOVE REQUIRED (SEE SCHED) FLOOR TO FLOOR STRAPS BENEATH OPENING TO EACH SIDE OF OPENING (ONE HALF EACH SIDE). ALSO, PROVIDE LTT20 FOUNDATION HOLD DOWN TO STUDS EACH SIDE OF OPENINGS 6' AND GREATER.

8. ALL DOUBLE HEADERS SHALL BE NAILED TOGETHER WITH 16d NAILS STAGGERED AT 16" ON CENTERS 2" FROM TOP AND BOTTOM. HEADERS SHALL BE 2-2x12, UON.

9. HOLES AND NOTCHES MUST BE APPROVED BY THE ENGINEER. IF APPROVED THE NOTCHES ON THE ENDS OF JOISTS SHALL NOT EXCEED ONE-FOURTH THE DEPTH. HOLES BORED FOR PIPE OR CABLE SHALL NOT BE WITHIN THE TOP OR BOTTOM THIRD OF THE JOIST DEPTH AND THE DIAMETER OF SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE JOIST DEPTH NOTCHES FOR PIPES IN THE TOP OR BOTTOM OF JOISTS SHALL NOT EXCEED ONE-SIXTH THE JOIST DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE ONE-THIRD OF THE SPAN.

16. STRESS GRADE: SOUTHERN PINE NO. 2 OR ENGINEER APPROVED EQUAL. ALL DESIGN VALUES ARE UNDER NORMAL LOADING AND IN DRY CONDITIONS OF SERVICE.

17. PRESSURE-TREAT LUMBER IN ACCORDANCE WITH THE MANUAL OF RECOMMENDED PRACTICE OF THE AMERICAN WOOD PRESERVERS ASSOCIATION (AWPA).

18. ALL FASTENERS AND NAILS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE MADE OF TYPE 304 OR TYPE 316 STAINLESS STEEL UNLESS THE LUMBER IS TREATED WITH CCA-C OR SBX (DOT), BUT NOT SBX (DOT) WITH SODIUM SILICATE (NaS O).

19. POST BASE AND CAPS FOR 4x4 AND 6x6 POST SHALL BE SIMPSON CB SERIES AT BASE AND CC SERIES AT CAP.

20. INTERIOR POSTS SUPPORTING BEAMS OR HEADERS SHALL BE CONTINUOUSLY SUPPORTED TO THE GROUND. PROVIDE POSTS OR BLOCKING WITHIN FLOOR TRUSS SYSTEM AS REQUIRED.

21. JOIST HANGERS SHALL BE SIMPSON SERIES LUS, UON.

SUPPLEMENTARY NOTES

1. RAYMOND ENGINEERING OR ANY OF IT'S EMPLOYEES SHALL NOT HAVE CONTROL OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES OR SEQUENCES FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR OR ANY OTHER PERSONS PERFORMING THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

2. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS.

3. GENERAL CONTRACTOR MUST REVIEW AND APPROVE SHOP DRAWINGS PRIOR TO SUBMITTAL TO ARCHITECT/ENGINEER. SUBMITTALS WHICH DO NOT CONTAIN THE CONTRACTOR'S SHOP DRAWING STAMP OR HAVE BEEN MERELY "RUBBER STAMPED" SHALL BE RETURNED WITHOUT REVIEW.

4. CHANGES TO THE CONTRACT DOCUMENTS SHALL BE CLOUDED ON SHOP DRAWINGS OR REQUESTED IN WRITING. THE CONTRACTOR IS LIABLE FOR ANY DEVIATIONS UNLESS REVIEWED AND ACKNOWLEDGED BY THE ENGINEER. SHOP DRAWING SUBMITTALS SHALL ONLY BE CHECKED FOR CONFORMANCE WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN ON THE CONSTRUCTION DOCUMENTS.

EXISTING FOUNDATION REPAIR NOTES

1. CONTRACTOR SHALL ENGAGE A SPECIALTY FOUNDATION REPAIR CONTRACTOR TO DESIGN AND INSTALL A HELICAL ANCHOR REPAIR SYSTEM TO ADDRESS THE SETTLEMENT ISSUES THAT THE EXISTING CONCRETE GRADE SLAB IS NOW EXPERIENCING. THE FOUNDATION FIRM SHALL BE MOUNT VALLEY FOUNDATION SERVICES OR ANOTHER FIRM APPROVED BY THE CITY OF GEORGETOWN.

2. THE HELICAL ANCHORS SHALL BE INSTALLED ALONG THE PERIMETER AND IN THE INTERIOR OF THE SLAB AS NECESSARY TO ADDRESS THE SETTLEMENT ISSUES. THE HELICAL ANCHOR INSTALLATION SHALL BE COMPLETED PRIOR TO COMMENCING CONSTRUCTION OF THE NEW BUILDING ADDITIONS.

3. ALL ANCHORS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A-153.

4. ANCHOR INSTALLATION SHALL BE IN ACCORDANCE WITH ALL OSHA, STATE AND LOCAL SAFETY REQUIREMENTS.

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
1	11/10/2020	IFC 100% CONSTRUCTION DRAWINGS	JJS	BW

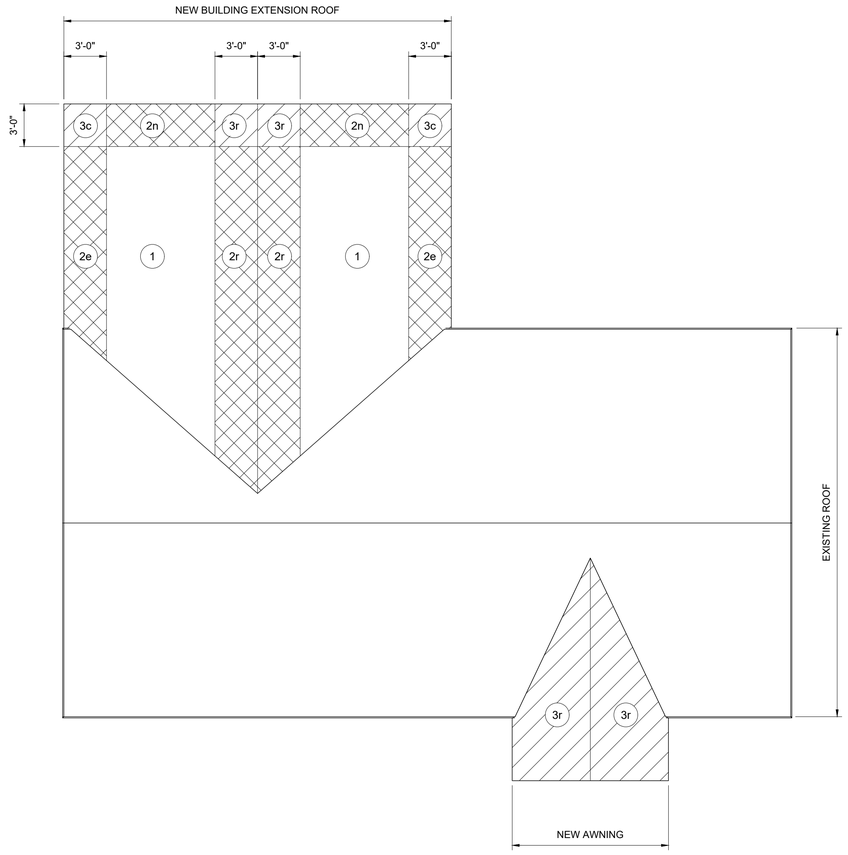
DESIGNED BY: JJS
DRAWN BY: JJS
CHECKED BY: JJS
DATE: 11 JUNE 2021
PROJECT CODE: CHS1001.100
STRUCTURAL GENERAL NOTES
SCALE: As indicated
D SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1063.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

RAYMOND ENGINEERING

CITY OF GEORGETOWN
PUBLIC WORKS BUILDING
STRUCTURAL GENERAL NOTES

PLATE NUMBER:
S-001
SHEET OF

6/4/2021 6:25:31 PM

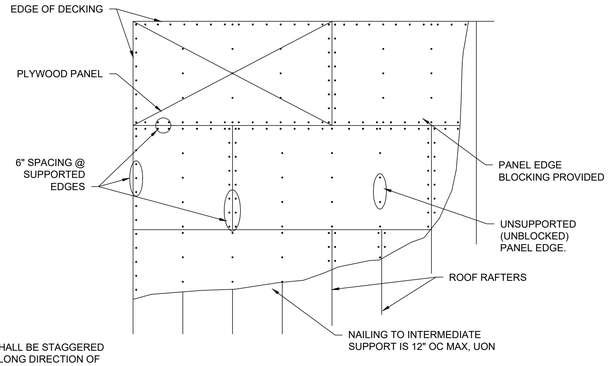


COMPONENTS AND CLADDING WIND PRESSURES (UNFACTORED)			
COMPONENT AREA	BUILDING EXTENSION ROOF: h = 11.67' ⊙ = 12'		
	ROOF ZONES		
	3r	2n, 2r, 3e	1 & 2e
10 SF	-99.8 / +18.0	-84.05 / +18.0	-57.6 / +18.0
20 SF	-86.8 / +16.6	-72.1 / +16.6	-57.6 / +16.6
50 SF	-66.8 / +14.0	-66.8 / +14.0	-33.8 / +14.0

BASIC WIND SPEED (V ULT)= 146 MPH
RISK CATEGORY II
EXPOSURE CATEGORY B
ENCLOSURE CLASSIFICATION - ENCLOSED STRUCTURE

COMPONENTS AND CLADDING WIND PRESSURES (UNFACTORED)	
COMPONENT AREA	AWNING: h = 11.67' ⊙ = 12'
	ROOF ZONES
	3r
10 SF	-99.8 / +18.0
20 SF	-86.8 / +16.6
50 SF	-66.8 / +14.0

BASIC WIND SPEED (V ULT)= 146 MPH
RISK CATEGORY II
EXPOSURE CATEGORY B
ENCLOSURE CLASSIFICATION - OVERHANG



NOTE:
ROOF DECKING SHALL BE STAGGERED AS SHOWN WITH LONG DIRECTION OF PLYWOOD TRANSVERSE TO RAFTERS OR TRUSSES

NAILING REQUIREMENTS FOR ROOF DECK & WALL PANELS

CONTRACTOR SUPPLIED TESTING AND INSPECTIONS

SOILS INSPECTION AND TESTING				
	TYPE	CONTINUOUS SPECIAL INSECTION	PERIODIC SPECIAL INSECTION	
1	VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY		X	
2	VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACH PROPER MATERIALS		X	
3	PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS		X	
4	VERIFY THE USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X		
5	PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY		X	

CONCRETE INSPECTIONS					
	TYPE	CONTINUOUS SPECIAL INSECTION	PERIODIC SPECIAL INSECTION	REFERENCED STANDARD	IBC REFERENCE
1	INSPECT REINFORCEMENT AND VERIFY PLACEMENT		X	ACI 318: Ch. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
2	INSPECT ANCHORS CAST IN CONCRETE			ACI 318: 17.8.2	
3	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS		X		
a.	ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	X		ACI 318: 17.8.2.4	
b.	MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.		X	ACI 318: 17.8.2	
4	VERIFY USE OR REQUIRED MIX DESIGN		X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
5	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR-CONTENT TESTS AND DETERMINE THE TEMPERATURE OF CONCRETE.	X		ASTM C172 ASTM C31 ACI 318: 26.5, 26.12	1908.1
6	INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X		ACI 318: 26.5	1908.6, 1908.7, 1908.8
7	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUE.		X	ACI 318: 26.5.3-26.5.5	19011.9
8	INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		X	ACI 318: 26.11.1.1(b)	

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
1	07/13/2021	IFC 100% CONSTRUCTION DRAWINGS	JJS	BW

DESIGNED BY: JJS
DRAWN BY: JJS
CHECKED BY: JJS
DATE: 11 JUNE 2021
PROJECT CODE: CHS1001.100
SCALE: As indicated
0 SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1368.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

WIND LOAD DIAGRAMS AND NAILING REQUIREMENTS

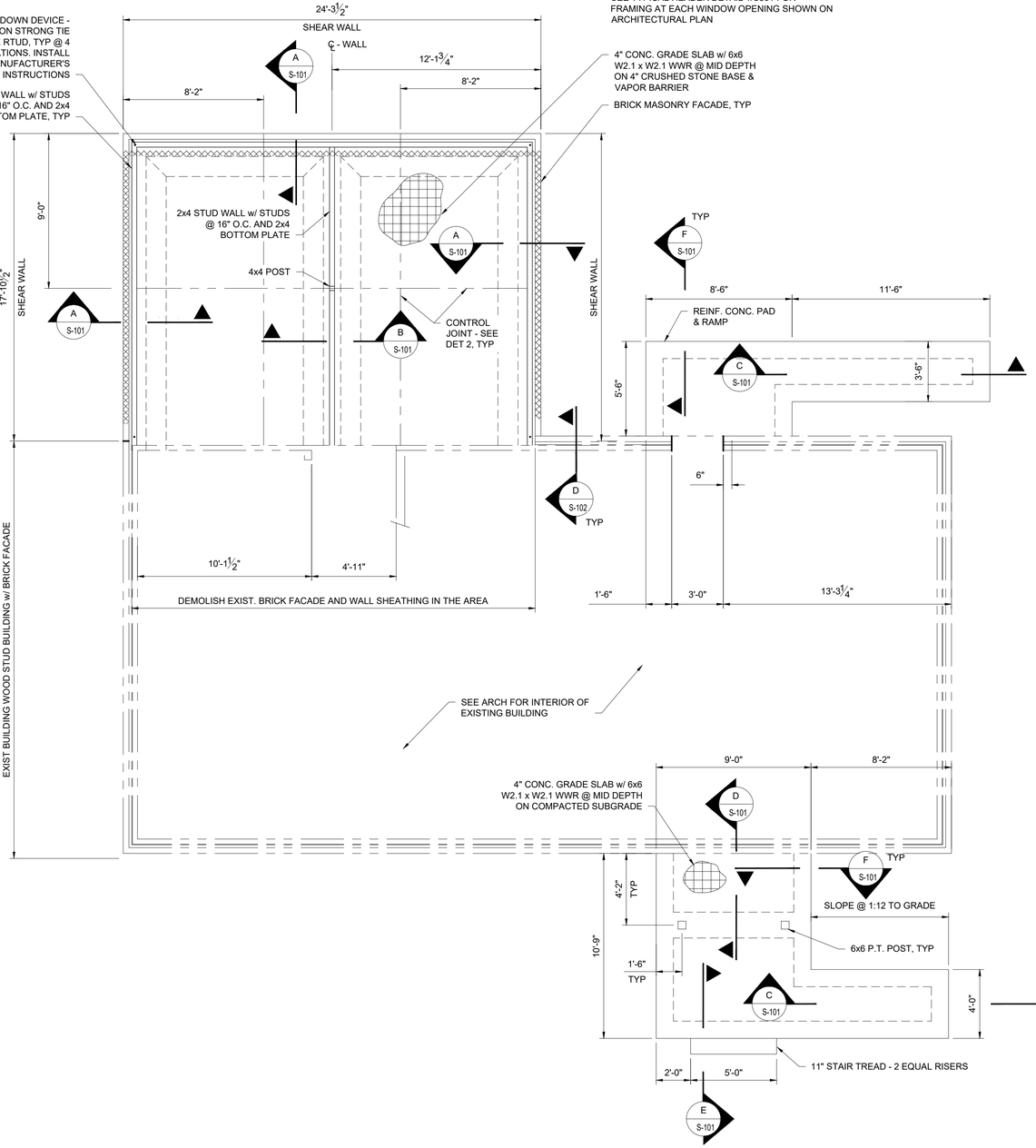
RAYMOND ENGINEERING

CITY OF GEORGETOWN
PUBLIC WORKS BUILDING

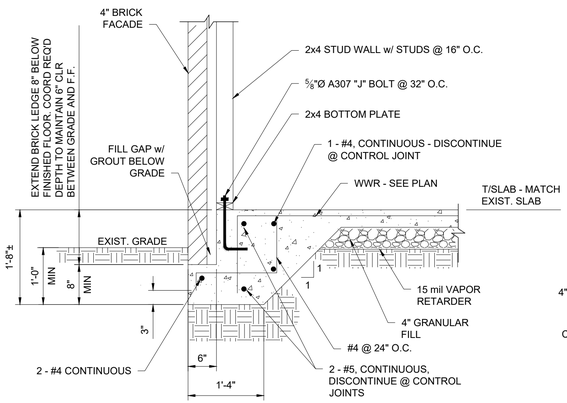
WIND LOAD DIAGRAMS: NAILING & INSPECTION REQUIREMENTS

PLATE NUMBER:
S-002
SHEET OF

6/4/2021 6:25:31 PM



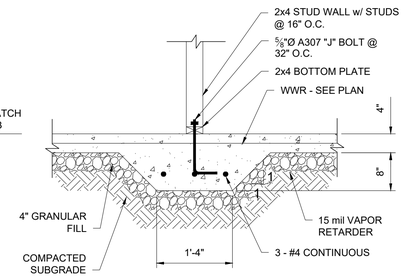
1 PLAN - FOUNDATION & GRADE SLAB
1/4" = 1'-0"



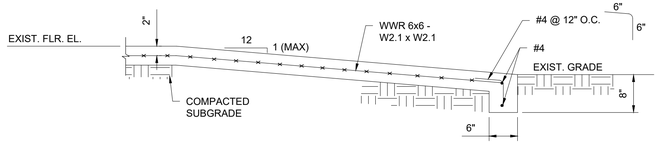
A SECTION
3/4" = 1'-0"

NOTES:

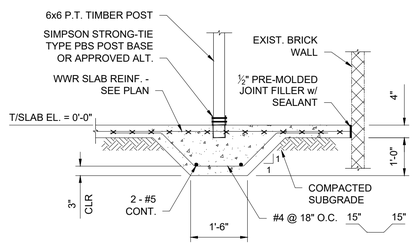
1. SEE DRAWING S-001 FOR STRUCTURAL GENERAL NOTES
2. REFERENCE ELEVATION 0'-0" CORRESPONDS TO EXISTING FINISHED FLOOR ELEVATION.



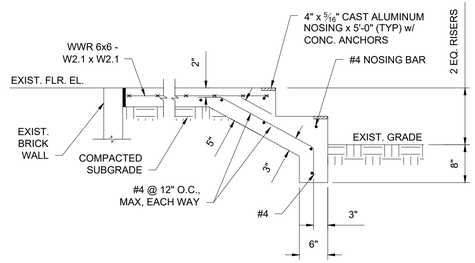
B SECTION
3/4" = 1'-0"



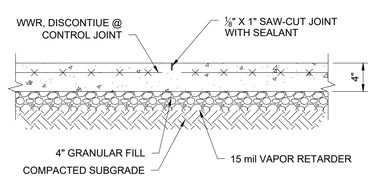
C SECTION
1/2" = 1'-0"



D SECTION
1/2" = 1'-0"



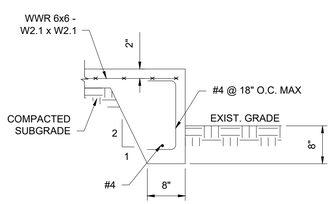
E SECTION
3/4" = 1'-0"



NOTES:

1. SLAB SHALL BE SAWN AS SOON AS THE CONCRETE WILL SAFELY SUPPORT MEN AND EQUIPMENT.
2. FILL JOINT WITH SEALANT AFTER SLAB HAS BEEN CURED.

2 CONTROL JOINT DETAIL
3/4" = 1'-0"



F SECTION
3/4" = 1'-0"

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
1	07/13/2021	IFC 100% CONSTRUCTION DRAWINGS	JJS	BW

DESIGNED BY: JJS
DRAWN BY: JJS
CHECKED BY: JJS
DATE: 11 JUNE 2021
PROJECT CODE: CHS1001.100
SCALE: As indicated
0 SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1083.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

RAYMOND ENGINEERING

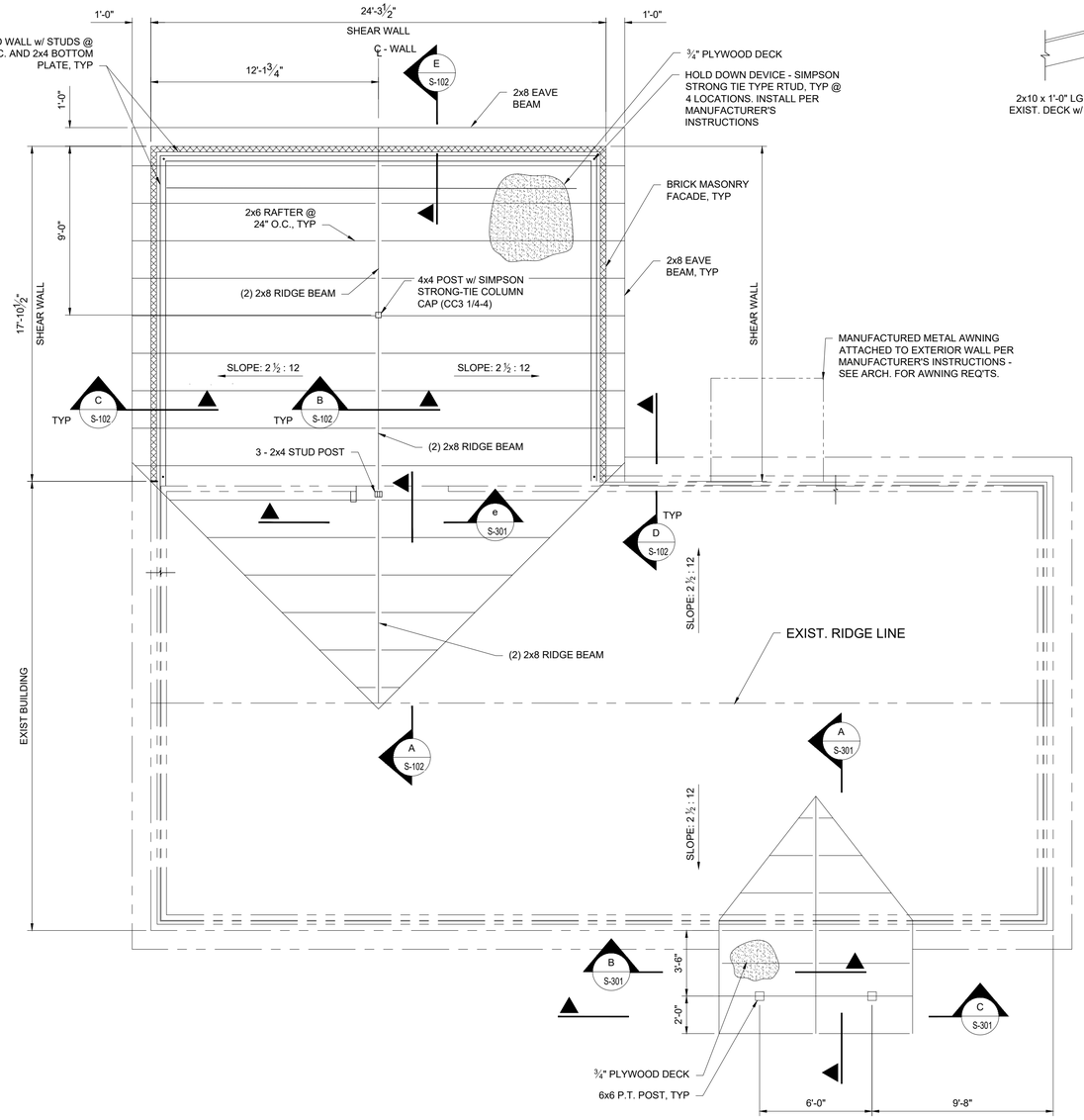
FOUNDATION & GRADE SLAB PLAN, SECTIONS & DETAILS

CITY OF GEORGETOWN
PUBLIC WORKS BUILDING

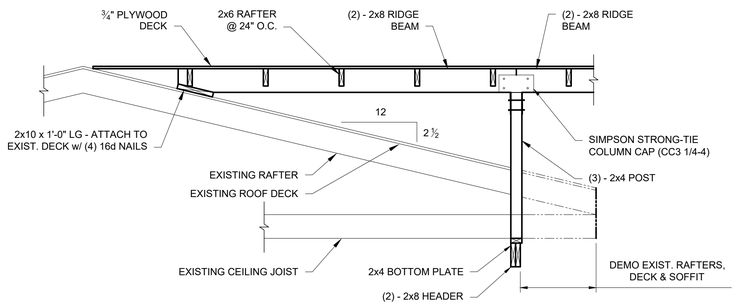
FOUNDATION & GRADE SLAB PLAN, SECTIONS & DETAILS

PLATE NUMBER:
S-101
SHEET OF

6/4/2021 6:25:31 PM



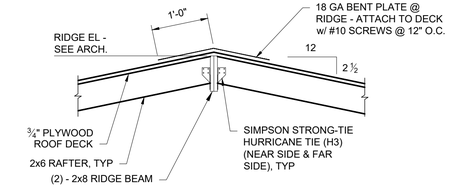
1 PLAN - ROOF FRAMING
1/4" = 1'-0"

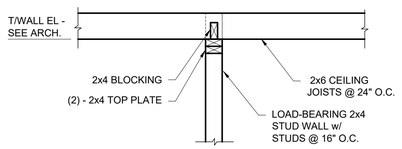


A SECTION
1/2" = 1'-0"

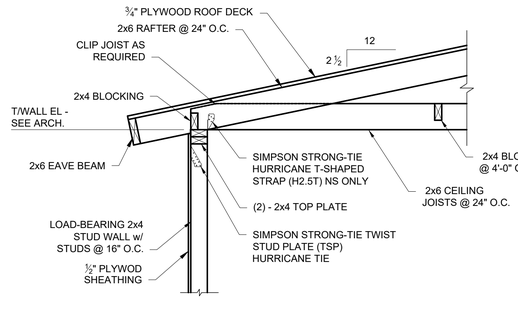
NOTES:

1. SEE DRAWING S-001 FOR STRUCTURAL GENERAL NOTES
2. REFERENCE ELEVATION 0'-0" CORRESPONDS TO EXISTING FINISHED FLOOR ELEVATION.

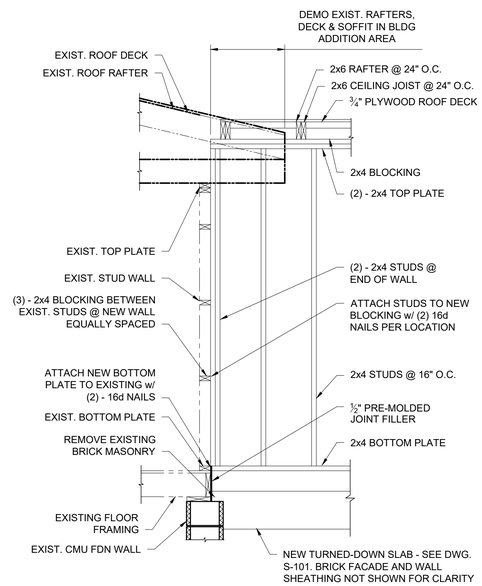




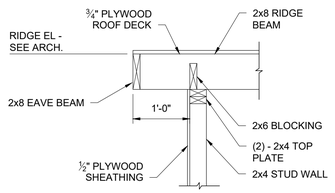
B SECTION
3/4" = 1'-0"



C SECTION
3/4" = 1'-0"



D SECTION
1/2" = 1'-0"



E SECTION
3/4" = 1'-0"

#	DATE	DESCRIPTION OF REVISION	BY	CHKD
1	07/13/2021	IFC 100% CONSTRUCTION DRAWINGS	JJS	BW

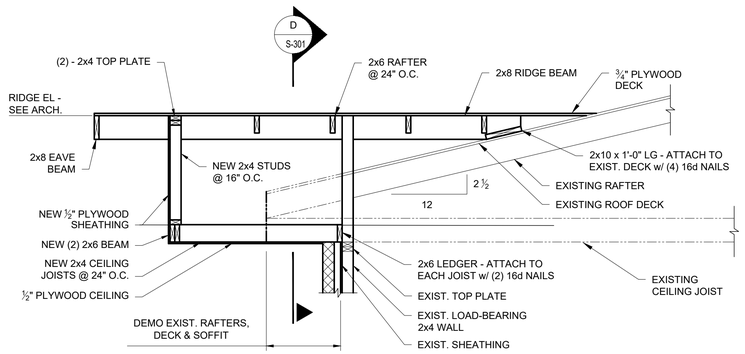
DATE: 11 JUNE 2021
PROJECT CODE: CHS1001.100
DESIGNED BY: JJS
DRAWN BY: JJS
CHECKED BY: JJS
SCALE: As indicated
D SIZE ANSI BORDER
PLOT DATE:
PLOT TIME:
FILE NAME: 1383.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

RAYMOND ENGINEERING

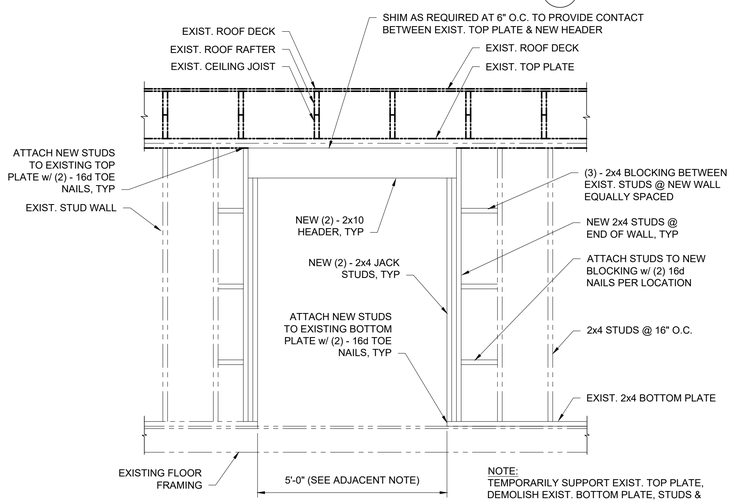
CITY OF GEORGETOWN
PUBLIC WORKS BUILDING
ROOF FRAMING PLANS & SECTIONS

PLATE NUMBER:
S-102
SHEET OF

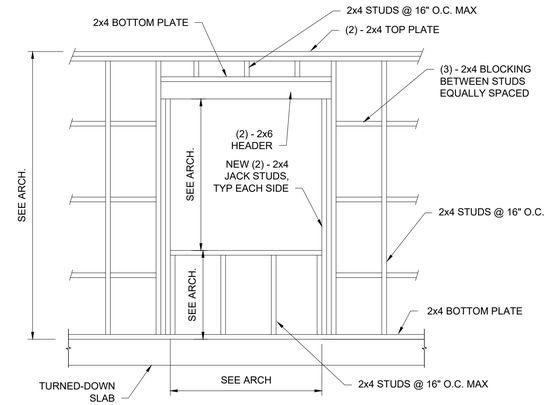
6/4/2021 6:25:31 PM



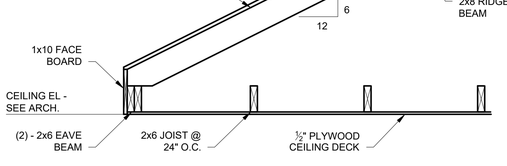
A SECTION
1/2" = 1'-0"



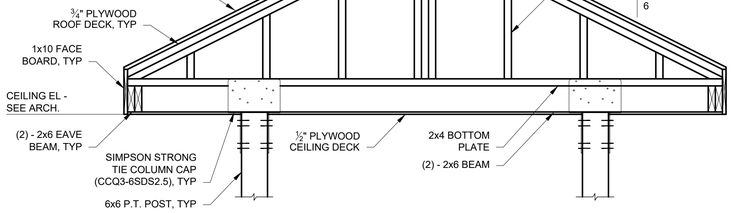
E SECTION
1/2" = 1'-0"



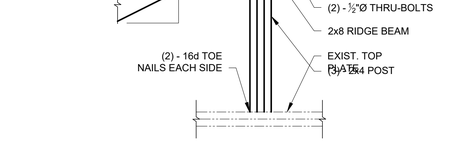
1 TYPICAL WINDOW HEADER DETAIL
1/2" = 1'-0"



B SECTION
3/4" = 1'-0"



C SECTION
3/4" = 1'-0"



D SECTION
3/4" = 1'-0"

#	DESCRIPTION OF REVISION	DATE	BY	CHKD
1	IFC 100% CONSTRUCTION DOCUMENTS	07/13/2021	JJS	BW

DESIGNED BY: JJS
DRAWN BY: JJS
CHECKED BY: JJS
DATE: 11 JUNE 2021
PROJECT CODE: CHS1001.100
PLOT DATE:
PLOT TIME:
SCALE: As indicated
D SIZE ANSI BORDER

ROOF FRAMING SECTIONS

RAYMOND ENGINEERING

FILE NAME: 1900.021 PLANS AND DETAILS - ARCHITECTURAL.DWG

CITY OF GEORGETOWN
PUBLIC WORKS BUILDING

ROOF FRAMING SECTIONS

PLATE NUMBER:
S-301

SHEET OF

6/4/2021 6:25:31 PM

MECHANICAL SPECIFICATION NOTES

1.	ALL MECHANICAL EQUIPMENT AND INSTALLATIONS SHALL CONFORM WITH THE REQUIREMENTS OF THE 2018 INTERNATIONAL MECHANICAL CODE, THE 2018 INTERNATIONAL BUILDING CODE, THE 2009 INTERNATIONAL ENERGY CONSERVATION CODE, NFPA 90A, 96, 101, UNDERWRITERS LABORATORIES (OR ETL) AND ALL APPLICABLE LOCAL CODES AND ORDINANCES.
2.	IF ANY OF THE GOVERNING CODES ARE UPDATED, CHANGED, AND/OR MODIFIED AFTER THE SUBMITAL OF THE DRAWINGS TO THE OWNER AND/OR ARCHITECT AND PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, THEN THE DRAWINGS MUST BE RESUBMITTED TO THE ENGINEER FOR REVIEW, REEXAMINATION AND/OR REEVALUATION.
3.	CEILING RETURN AND SUPPLY AIR GRILLES AND EXHAUST AIR GRILLES PER OWNER SELECTION, IF NOT SPECIFIED IN THESE DRAWINGS.
4.	ADJUST AND BALANCE TO AIR FLOWS AS SHOWN ON PLAN AS ALL DIFFUSERS/ FANS/INTAKES/VENTS SHOULD BE BALANCED TO THE INDICATED AIRFLOW.
5.	PRIOR TO PURCHASING ANY MATERIALS OR STARTING ANY WORK, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, DUCTWORK SIZES AND LOCATIONS, EQUIPMENT, AND ETC. SHOWN ON THE DRAWINGS OR AFFECTING THIS WORK, AND SHALL REPORT ANY DEVIATIONS TO THE ENGINEER.
6.	SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO ORDERING, PURCHASING, OR FABRICATING ANY MECHANICAL EQUIPMENT. SHOP DRAWINGS SHALL INCLUDE: ALL EQUIPMENT SCHEDULED AND SPECIFIED ON THE DRAWINGS, DUCTWORK DRAWN TO 1/4" SCALE OR THE SCALE SHOWN ON THE DRAWINGS, REFRIGERANT PIPING AND CONTROL WIRING SCHEMATICS CERTIFIED BY THE AIR CONDITIONING EQUIPMENT MANUFACTURER. FAILURE TO SUBMIT REFRIGERANT PIPING DRAWINGS SHALL BE CAUSE FOR REJECTION OF THE ENTIRE SUBMITTAL. LONG LINE REFRIGERANT PIPING APPLICATIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S CURRENT SPLIT SYSTEM LONG-LINE APPLICATION GUIDELINE.
7.	ALL MECHANICAL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
8.	ALL HVAC COMPRESSORS SHALL HAVE EXTENDED 5-YEAR MANUFACTURER'S WARRANTY.
9.	FOR EXACT LOCATION(S) OF OUTDOOR AIR CONDITIONING UNITS, SEE ARCHITECTURAL DRAWINGS.
10.	PORTIONS OF DUCTWORK AND PIPE INSULATION VISIBLE THROUGH AIR DISTRIBUTION DEVICES IN FINISHED AREAS SHALL BE PAINTED FLAT BLACK.
11.	UNLESS SPECIFIED OTHERWISE, MOUNT THERMOSTATS AND SENSORS 4'-0" AFF. PROVIDE CLEAR LOCKING GUARD ASSEMBLIES FOR ALL PUBLIC AREA THERMOSTATS. COORDINATE THERMOSTAT LOCATIONS WITH OTHER TRADES.
12.	ALL WORK SHALL BE COORDINATED AND PERFORMED WITH PRIOR APPROVAL FROM THE OWNER TO SUIT THEIR OPERATING CONDITIONS. WORK IN ALL AREAS SHALL BE PERFORMED IN ACCORDANCE WITH THE OWNER'S REQUIREMENTS.
13.	ANY EXISTING WALL, FLOOR, OR CEILING SURFACE THAT IS DISTURBED DURING THE COURSE OF THE HVAC WORK SHALL BE REPAIRED TO MATCH NEW AND/OR EXISTING CONDITIONS.
14.	AFTER CONSTRUCTION, THE ENGINEER RECOMMENDS THAT THE ENTIRE HVAC SYSTEM BE TESTED, ADJUSTED, AND BALANCED TO DELIVER THE AIR QUANTITIES SHOWN ON THE DRAWINGS. RESIDENTIAL APARTMENT UNITS DO NOT REQUIRE BALANCING. SUBMIT CERTIFIED (AABC OR NEBB) TEST AND BALANCE REPORT TO THE ARCHITECT/ENGINEER FOR APPROVAL.
15.	CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT, DUCTWORK, PIPING, AND ETC. TO FIT WITHIN THE SPACE ALLOWED BY THE ARCHITECTURAL AND STRUCTURAL CONDITIONS. ALTERING ANY STRUCTURAL MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT/ ENGINEER.
16.	AIR HANDLING AND FAN COIL UNITS LOCATED ABOVE THE LOWEST LEVEL FINISHED FLOOR SHALL BE INSTALLED WITH AN AUXILIARY CONDENSATE DRAIN PAN UNDER THE UNIT. PROVIDE AN ELECTRONIC WATER LEVEL DETECTOR WIRED TO SHUTDOWN THE UNIT UPON DETECTION IN SECONDARY DRAIN PAN. UNLESS OTHERWISE SPECIFIED, INSTALL MINIMUM 4' X 4' X 3/4" THICK PLYWOOD SERVICE PLATFORM ON UNIT SERVICE SIDE OF UNITS LOCATED IN ATTIC SPACES.
17.	ALL PIPE AND DUCT PENETRATIONS OF FIRE AND/OR SMOKE-RATED ASSEMBLIES SHALL BE FIRE-STOPPED AS REQUIRED TO RESTORE THE ASSEMBLY TO ITS ORIGINAL INTEGRITY. FIRE BARRIER PRODUCTS SHALL BE AS MANUFACTURED BY 3M.
18.	MANUAL OVER-RIDE CONTROL (EMERGENCY SHUT-DOWN) SWITCHES FOR ALL EXIT CORRIDOR HVAC UNITS SHALL BE LOCATED IN LOCKING COVER ADJACENT TO FIRE ALARM ANNUNCIATOR PANEL.
19.	PROVIDE ACCESS PANELS IN NON-ACCESSIBLE CEILINGS AND IN WALL STRUCTURE TO ALLOW ADEQUATE ROOM FOR MAINTENANCE OF EQUIPMENT AND BALANCING OF SYSTEMS. ACCESS PANELS IN CEILING AND WALLS SHALL BE PROVIDED WHERE SHOWN ON THE DRAWINGS OR NECESSARY TO ACCESS DAMPERS, VALVES, ETC. COORDINATE EXACT LOCATION OF ALL ACCESS PANELS WITH THE ARCHITECT DURING THE SHOP DRAWING PROCESS.
20.	ALL MECHANICAL EQUIPMENT SHALL BE LABELED WITH A SEMI-RIGID PLASTIC LAMINATE NAMEPLATE WITH 2" HIGH WHITE LETTERS ON A BLACK BACKGROUND SECURELY AFFIXED TO THE EQUIPMENT. THE NAMEPLATE SHALL SHOW THE EQUIPMENT TAG USED ON THESE DRAWINGS. THE NAMEPLATE ON THE OUTDOOR EQUIPMENT SHALL INDICATE THE UNIT NUMBER IT SERVES AS WELL AS THE EQUIPMENT ID TAG.
21.	INSTALL GRADE MOUNTED OUTDOOR AIR CONDITIONING LEVEL ON 4" THICK REINFORCED CONCRETE PADS, EXTENDING 6" BEYOND UNIT PERIMETER.
22.	CEILING RETURN AND EXHAUST AIR GRILLES BLADES TO BE FIXED AT 38°.

MECHANICAL / ELECTRICAL COORDINATION

1.	CONTRACTOR SHALL COORDIANTE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH ELECTRICAL DRAWINGS PRIOR TO ORDERING EQUIPMENT OR SUBMITTING SHOP DRAWINGS, AND SHALL FURNISH EQUIPMENT WIRED FOR THE VOLTAGES SHOWN THEREIN. SHOP DRAWING SUBMITTALS SHALL CLEARLY STATE THAT THE ELECTRICAL CHARACTERISTICS OF ALL EQUIPMENT HAS BEEN COORDINATED WITH THE ELECTRICAL CONTRACT DOCUMENTS AND THE ELECTRICAL CONTRACTOR.
2.	ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH DISCONNECT SWITCHES AT EACH PIECE OF EQUIPMENT. COORDINATE SWITCH TYPE (FUSED OR NON-FUSED) WITH EQUIPMENT CHARACTERISTICS, MANUFACTURER'S RECOMMENDATIONS, AND THE ELECTRICAL DRAWINGS.
3.	ALL REQUIRED CONTROL WIRING (INCLUDING POWER WIRING REQUIRED FOR CONTROL PANELS, DEVICES, ETC.) NOT SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE INCLUDED AS PART OF THE MECHANICAL WORK. WIRING IN HVAC PLENUM SPACES SHALL BE INSTALLED ACCORDING TO CODE REQUIREMENTS.
4.	UNLESS NOTED OTHERWISE, TRANSFORMERS, CONTROLS AND CONTROL WIRING REQUIRED FOR ALL MECHANICAL SYSTEMS SHALL BE FURNISHED WITH THE EQUIPMENT IT SERVES AND INSTALLED BY THE MECHANICAL CONTRACTOR. MOTOR STARTERS FOR HVAC EQUIPMENT SHALL BE FURNISHED WITH THE MOTOR OR APPARATUS WHICH IT OPERATES. MOTOR STARTER INSTALLATION SHALL BE BY THE DIVISION 16 CONTRACTOR.

AIRSIDE

1.	ALL FANS SUPPLYING MORE THAN 2000 CFM OF AIR TO ANY SPACE AND ALL RECIRCULATING FAN SYSTEMS SERVING AREAS OF EGRESS, SHALL BE INSTALLED WITH A SMOKE DETECTOR IN THE SUPPLY DUCTWORK. DUCT SMOKE DETECTORS SHALL BE INSTALLED IN THE SUPPLY AIR PATH OF AIR DISTRIBUTION SYSTEMS UTILIZING A COMMON SUPPLY AND/OR RETURN AIR PLENUM WITH A COMBINED DESIGN CAPACITY GREATER THAN 2000 CFM.
2.	THE SMOKE DETECTOR SHALL BE WIRED TO STOP THE FAN UPON DETECTION OF SMOKE, AND SIGNAL THE BUILDING FIRE ALARM CONTROL PANEL. THE SMOKE DETECTOR SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR, MOUNTED IN THE DUCT BY THE MECHANICAL CONTRACTOR, AND WIRED BY THE ELECTRICAL CONTRACTOR.
3.	SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL AS RECOMMENDED IN SMACNA DUCT CONSTRUCTION STANDARDS, LATEST EDITION. ALL JOINTS AND SEAMS IN ALL SHEET METAL DUCTWORK SHALL BE SEALED WITH DUCT SEALER.
4.	ALL FIBERGLASS DUCTWORK TO BE 1" THICK FIBERGLASS DUCT BOARD (MINIMUM R-4.3 OR AS REQUIRED BY APPLICABLE ENERGY CODE), WITH GLASS FABRIC REINFORCED VAPOR BARRIER, JOHNS-MANVILLE TYPE 475. FIBERGLASS DUCTWORK AND TAPING SYSTEM SHALL BE U.L. – 181 LISTED AND SHALL BEAR THE U.L. LABEL. ALL FIBERGLASS DUCTWORK AND ACCESSORIES SHALL BE FABRICATED BY A MANUFACTURER'S AUTHORIZED FABRICATOR, SHALL ALSO BE INSTALLED WITH THE FABRICATOR'S SUPERVISION AND ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. FIBERGLASS DUCTWORK SHALL NOT BE USED OUTDOORS.
5.	SHEET METAL SUPPLY, RETURN, & OUTSIDE AIR DUCTWORK IN NON-AIR CONDITIONED AREAS SHALL BE INSULATED WITH 2" THICK, 3/4 LB/FT3 DENSITY FIBERGLASS BLANKET INSULATION WITH FOIL VAPOR BARRIER, U.L. LISTED, R-6 MINIMUM. PUNCTURES AND TEARS IN THE FOIL JACKET SHALL BE PATCHED WITH FOIL TAPE TO MAINTAIN THE INTEGRITY OF THE VAPOR BARRIER.
6.	ALL OPEN ENDED DUCTS AND FAN OUTLETS SHALL HAVE 1/2" X 1/2" HARDWARE CLOTH IN SHEET METAL HEM AFFIXED TO THE OPENING.
7.	EXHAUST DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED TO SMACNA STANDARDS AND SHALL NOT BE INSULATED UNLESS NOTED OTHERWISE.
8.	ALL DUCTWORK SHALL BE SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING TILES OR CEILING STRUCTURE. DUCT SUPPORTS AND ATTACHMENT TO STRUCTURE SHALL BE PER SMACNA STANDARDS.
9.	FLEXIBLE DUCTWORK SHALL BE THERMAFLEX M-KE (U.L. 181 LISTED, CLASS 1 FLEXIBLE AIR DUCT). PROVIDE THERMAFLEX M-KE R-6 (R VALUE – 6.0 MINIMUM OR AS REQUIRED BY LOCAL ENERGY CODE) IN ATTICS AND OTHER UNCONDITIONED SPACES. AIR CONNECTORS ARE NOT ACCEPTABLE. FLEX DUCT DIAMETER SHALL MATCH DEVICE NECK DIAMETER. PROVIDE ROUND GALVANIZED STEEL DUCT RUNOUTS TO MAINTAIN A MAXIMUM FLEXIBLE DUCT LENGTH OF 8'-0". DUCT RUNOUTS IN APARTMENTS HAVE NO FLEXIBLE DUCT LENGTH LIMITATION. FLEXIBLE DUCTWORK SHALL BE INSTALLED AS STRAIGHT AS POSSIBLE AND SHALL BE ROUTED AND SUPPORTED WITHOUT FORMING GRIMPS OR OTHER AIR FLOW RESTRICTIONS. PROVIDE SQUARE TO ROUND ADAPTERS OR BOOTS TO CONNECT TO AIR DEVICE NECK WHEN REQUIRED.
10.	ROUND AND FLEXIBLE SUPPLY AIR DUCTWORK SHALL BE CONNECTED TO MAIN DUCTS WITH A SPIN-IN FITTING AND BALANCING DAMPER. PROVIDE REMOTE ACTUATORS FOR BALANCING DAMPER LOCATED OVER INACCESSIBLE CEILINGS.
11.	LINE ALL SHEET METAL DUCTWORK A MINIMUM OF 10'-0" (OR AS INDICATED) DOWNSTREAM OF ALL AIR HANDLING UNITS. DUCT LINER SHALL BE 1" THICK, 3 LB/FT3 DENSITY (MINIMUM R VALUE = 4.0 OR AS REQUIRED BY APPLICABLE ENERGY CODE); CERTAINTEED "TOUGH GARD 2". THE LEADING EDGE OF THE DUCT LINER SHALL HAVE A SHEET METAL NOSING.
12.	EXTERNAL STATIC PRESSURE (ESP) DOES NOT INCLUDE COIL, CASING OR FILTER PRESSURE DROP.
13.	INSTALL FIRE DAMPERS IN ALL FIRE RATED WALLS, FLOOR AND CEILING PENETRATIONS. FIRE DAMPERS SHALL BE THE DYNAMIC TYPE WITH BLADES OUT OF THE AIRSTREAM WHERE POSSIBLE. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF RATED ASSEMBLIES. PROVIDE ACCESS DOORS IN DUCTWORK AT EACH FIRE DAMPER LOCATION. INSTALL SMOKE DAMPERS IN ALL DUCT PENETRATIONS THROUGH SMOKE RATED WALLS. WHERE DUCTS PENETRATE WALLS THAT CARRY BOTH FIRE AND SMOKE RATINGS, THE DAMPERS INSTALLED SHALL BE COMBINATION FIRE AND SMOKE DAMPERS. ALL DAMPERS SHALL BE U.L. 555 AND/OR 5555 LABELED.
14.	LOCATIONS OF GRILLES, REGISTERS, AND DIFFUSERS SHOWN ON THE DRAWINGS ARE APPROXIMATE. COORDINATE EXACT LOCATIONS WITH LIGHTS, CEILING GRID, ETC. AND ARCHITECTURAL REFLECTED CEILING PLAN.
15.	DUCTWORK WITHIN AN OPEN ATTIC SPACE WITHOUT FIRE OR DRAFT STOPS, SHALL BE GALVANIZED STEEL AND SHALL BE WRAPPED WITH MINIMUM R-6 DUCTWRAP INSULATION WITH FOIL FACED VAPOR BARRIER.
16.	DRYER DUCT LOCATED IN UL LISTED FLOOR/CEILING ASSEMBLIES SHALL BE PROTECTED WITH 1-HOUR FIRE BARRIER DUCT WRAP, FIRE-RESISTIVE 3M FIREMASTER DUCT WRAP, FIRE BARRIER DUCT WRAP SHALL BE APPLIED IN A CONTINUOUS WRAP FROM THE POINT THE DUCT ENTERS A CONCEALED SPACE TO ITS EXIT FROM A BUILDING. PROVIDE A THROUGH-PENETRATION FIRESTOP SYSTEM AT THE POINT OF ENTRY.
17.	EXHAUST DUCTS: GALVANIZED STEEL.
18.	A/C SUPPLY AND RETURN DUCTS:
	A. DIMENSIONS SHOWN ARE CLEAR INSIDE. DUCTS WITHOUT DIMENSIONS SHALL BE SIZED AT 0.07"/100'.
	B. RECTANGULAR AND ROUND GALVANIZED STEEL: FABRICATE PER SMACNA LOW VELOCITY DUCT STANDARDS. SEAL ALL JOINTS IN DUCT WITH APPROVED MASTIC.
	C. FLEXIBLE RUNOUTS: UL CLASS 1. ASSEMBLE WITH SOLID VINYL LINER, GALVANIZED HELICAL WIRE FORMER. 1" FIBERGLASS BLANKET WITH POLYOVAPOR BARRIER. SECURE ENDS WITH BAND CLAMPS: ONE DUCT-TO-COLLAR AND ONE OVER CAPOR CARRIER, TO SEAL OPEN SLEEVE END.
	D. INSULATION: 2" FIBERGLASS INSULATION WITH VAPOR BARRIER. SEAL SEAMS IN VAPOR BARRIER WITH 10X10 MESH GLASS FABRIC AND MASTIC.
	E. DUCT LINER: 1" THICKNESS, COATED AIRSIDE, K=0.25. INSTALL WITH 100% ADHESIVE COVERAGE. PROVIDE MECHANICAL FASTENERS ON 15" CENTERS ON TOP AND SIDE OF DUCTWORK WITH DIMENSIONS EXCEEDING 20". SEAL AND SMOOTH JOINTS WITH MASTIC.
19.	AIR DISTRIBUTION ACCESSORIES: TURNING VANES: DOUBLE WALL TYPE, SPIN-IN CONNECTIONS WITH SCOOP AND DAMPER.

PIPING

1.	REFRIGERANT PIPING SHALL BE TYPE L OR REFRIGERATION SERVICE COPPER TUBING WITH BRAZED JOINTS. SUCTION PIPING SHALL BE INSULATED WITH 3/4" MANVILLE AEROTUBE II PIPE INSULATION SLID OVER TUBING WITHOUT CUTTING. ALL JOINTS AND SEAMS SHALL BE SEALED WITH ADHESIVE.
2..	CONDENSATE FROM ALL AIR CONDITIONING EQUIPMENT SHALL BE TRAPPED AND ROUTED AS INDICATED ON THE FLOOR PLANS AND PER CODE REQUIREMENTS. CONDENSATE PIPING SHALL BE SCHEDULE 40 PVC (EXCEPT INSULATED COPPER IN HVAC PLENUMS). CONDENSATE SHALL BE PUMPED AS REQUIRED.
3.	PIPING AT EQUIPMENT SHALL BE SUPPORTED SO THAT NO PIPING OR ACCESSORY LOAD IS CARRIED BY THE EQUIPMENT.
4.	ALL PIPING ABOVE GRADE SHALL BE SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING TILES OR CEILING STRUCTURE. PIPING HUNG FROM JOISTS SHALL BE HUNG FROM THE TOP CHORDS OF THE JOISTS.
5.	WERE MAXIMUM OPERATING PRESSURE IS GREATER THAN 150 PSIG IN ANY SYSTEM, CONTRACTOR SHALL FURNISH AND INSTALL PRODUCTS, PIPING, VALVES, FITTINGS, AND ACCESSORIES WITH PRESSURE CLASSIFICATIONS THAT ARE SUITABLE FOR SERVICE. IN GENERAL, ALL PRODUCTS, PIPING, VALVES, FITTINGS, AND ACCESSORIES BELOW 350 FEET OF THE HIGHEST PIPING PINT MUST HAVE PRESSURE RATINGS OF 300 PSI W.O.G. OR GREATER. ALL PRODUCTS, PIPING, VALVES, FITTINGS, AND ACCESSORIES BELOW 575 FEET OF THE HIGHEST PIPING MUST HAVE PRESSURE RATINGS OF 500 PSI W.O.G. OR GREATER.
6.	EXPANSION IN PIPING SYSTEMS SHALL BE COMPENSATED FOR BY THE USE OF U-BENDS, Z-BENDS OR EXPANSION JOINTS AS INDICATED. U-BENDS (LOOPS) AND Z-BENDS SHALL BE COMPLETE WITH PIPE GUIDES AND ANCHORS.
7.	PIPE INSULATION: CLOSED CELL TUBULAR FIRE RATED FLEXIBLE FOAM RUBBER OR POLYOLEFIN.
8.	SUCTION LINES: 3/4" THICKNESS
9.	CONDENSATE LINES: 1/2" THICKNESS

GENERAL NOTES

1.	DRAWING(S) ARE SCHEMATIC, CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL DEVICE LOCATIONS AND INTERCONNECT ROUTING WITH ARCHITECTURAL AND STRUCTURAL CONFIGURATION AND REQUIREMENTS.
2.	OWNER AND/OR CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCY AND/OR ITEMS IN NEED OF CLARIFICATION AND/OR DETAIL ELABORATION.
3.	OWNER AND/OR CONTRACTOR TO NOTIFY ENGINEER OF ANY KNOWN ERRORS AND/OR OMISSIONS IN NEED OF ELABORATION IN WRITING FOR ENGINEERING REVIEW
4.	OWNER AND/OR CONTRACTOR TO NOTIFY ENGINEER OF ANY DIFFERENT SITE CONDITIONS, STRUCTURAL CONDITIONS, SPACE UTILIZATION OF ANY OTHER DIFFEREING CONDITION IN WRITING. ENGINEER TO REVIEW AND RESPOND TO ALL WRITTEN NOTIFICATIONS
5.	CONTRACTOR IS TO PROVIDE FIRE DAMPERS AS REQUIRED THROUGHOUT ALL FIRE RATED ASSEMBLIES. REFERENCE DETAIL X/SM3.0.
6.	ANY/ALL PENETRATION THROUGH FIRE RATED WALLS & CEILINGS MUST BE PROPERLY SEALED PER 2018 IBC CHAPTER 7.

MECHANICAL LEGEND

———	SUPPLY DUCT	–◇–	DUCT DIAMETER SIZE INDICATOR
— —	RETURN/EXHAUST DUCT	AHU	AIR HANDLER UNIT
	AIR SUPPLY DIFFUSER	CU	CONDENSING/COMPRESSOR UNIT
	RETURN AIR INTAKE	CFM	CUBIC FEET PER MINUTE
	EXHAUST FAN	EA	EXHAUST AIR
	FRESH AIR INTAKE	OA	OUTDOOR AIR
T	THERMOSTAT PLACEMENT INDICATOR	RA	RETURN AIR

MINIMUM VENTILATION RATES IN BREATHING ZONES (PER ASHRAE 6.1) FOR THE GEORGETOWN PUBLIC WORKS BUILDING

OCCUPANT CATEGORY	PROJECT SQ FT	OCCUPANT DENSITY #/ APPLICABLE SQ FT	OCCUPANTS PER ARCHITECT	OUTDOOR AIR RATE CFM PER PERSON	REQUIRED OUTDOOR AIR
BUISNESS	1,334 SQ FT	150	9	17	153
				ACTUAL OA:	200

NOTES:

1. FRESH AIR MODULATED BY MOTORIZED CONTROLS.

AIR BALANCE SCHEDULE FOR THE BUILDING

UNIT NAME	EXHAUST CFM	OA CFM
EF	100	-
AHU1	-	200
FLOOR TOTAL: 100 POSITIVE CFM		

AIR CONDITIONING EQUIPMENT SCHEDULE

QTY.	UNIT NAME	NOMINAL COOLING TONS (T)	MIN SEER.	MIN IEER.	FAN CFM	OA CFM	SHIPPING WEIGHT (IBS)	MANUFACTURER & MODEL #	NOTES
1	AHU1	4	-	-	1400	200	172	CARRIER FV4CNF005L00	2, 8, 9
1	CU1	4	16.0	-	1600	-	339	CARRIER 25HCB648A003	1, 9
1	T5	-	-	-	-	-	-	CARRIER EB-STATE5CR-01	1, 9
2	EF	-	-	-	50	-	-	GREENHECK SPB-50 OR EQUIV.	3, 4, 5, 6, 7, 9

NOTES:

1. NON-PROGRAMMABLE THERMOSTAT OFFERING THERMOSTAT SENSORS, TEMPERATURE & HUMIDITY RANGES, AND ALEXA BUILT-IN.
2. SMOKE DETECTOR AS REQUIRED BY ALL APPLICABLE LOCAL CODES AND ORDINANCES
3. LOW-AMBIENT CONTROL TO 32° F.
4. OPERABLE FROM LIGHT SWITCH IN BATHROOM.
5. BACKDRAFT DAMPER.
6. DIRECT EXHAUST.
7. ELECTRIC FAN TO CONFORM TO UL/CUL 507.
8. AIR HANDLER UNIT DRAIN HOSE TO EITHER EMPTY ABOVE AN EXTERIOR WINDOW OR TO EMPTY TO THE NEAREST FLOOR SINK/HUB DRAIN/FLOOR DRAIN.
9. UNIT IS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS

DO NOT SCALE THE DRAWINGS. THE DESIGNER WILL NOT ACCEPT RESPONSIBILITY FOR CONSTRUCTION ERRORS DUE TO SCALING OF THE DRAWINGS. VERIFY ALL DIMENSIONS, FINISHES, FIXTURES, ETC. BEFORE BEGINNING CONSTRUCTION. IF DIMENSIONS OR DETAILS ARE OMITTED, INCORRECT, OR NOT CLEAR, THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION.

DESIGN REVIEW
09/09/2021

SOUTH CAROLINA PROFESSIONAL ENGINEER No.24188 MICHAEL I. THOMAS

SOUTH CAROLINA THOMAS & REEL ENGINEERING CONSULTANTS, INC. No. 3624 CERTIFICATE OF AUTHORIZATION

Thomas & Reel
Engineering Consultants, Inc.
trec | STRUCTURAL | MEP | FORENSICS
www.thomasreel.com
912-920-0950
9100 WHITE BLUFF RD. SUITE 306, SAVANNAH GEORGIA 31406
PO BOX 15818 SAVANNAH, GEORGIA 31416

TREC

GEORGETOWN PUBLIC WORKS BUILDING

399 NORTH KAMINSKI ST.,
GEORGETOWN, SC

RAYMOND ENGINEERING

GENERAL MECHANICAL NOTES

REVISIONS

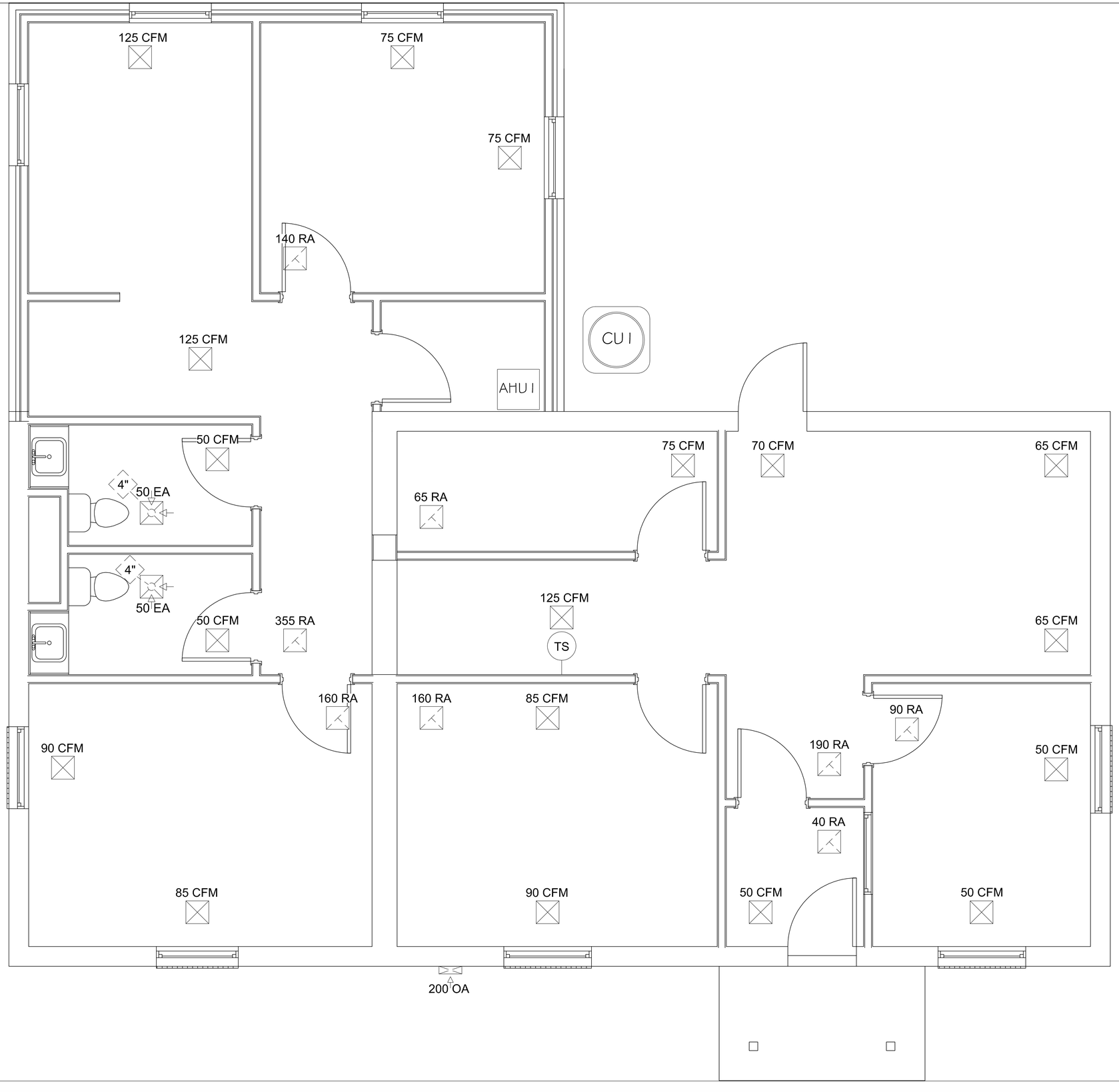
MARK	DATE	DESCRIPTION
	09/09/21	CITY COMMENTS

TREC No.	1905-1742-05
Date Printed	09/09/2021
Date Issued	09/09/2021
Designed By	KO
Checked by	MT
Approved by	MT

M1.0
N.T.S.

GENERAL MECHANICAL NOTES

ISSUE FOR CONSTRUCTION



DESIGN REVIEW
09/09/2021

SOUTH CAROLINA PROFESSIONAL ENGINEER No.24188 MICHAEL I. THOMAS
SOUTH CAROLINA THOMAS & REEL ENGINEERING CONSULTANTS, INC. No. 3624 CERTIFICATE OF AUTHORIZATION

Thomas & Reel
Engineering Consultants, Inc.
trec | STRUCTURAL | MEP | FORENSICS
www.thomasreel.com
912-920-0950
9100 WHITE BLUFF RD. SUITE 306, SAVANNAH GEORGIA 31406
PO BOX 15818 SAVANNAH, GEORGIA 31416

TREC

GEORGETOWN PUBLIC WORKS BUILDING

399 NORTH KAMINSKI ST.,
GEORGETOWN, SC

RAYMOND ENGINEERING

PUBLIC BUILDING MECHANICAL PLAN

DO NOT SCALE THE DRAWINGS. THE DESIGNER WILL NOT ACCEPT RESPONSIBILITY FOR CONSTRUCTION ERRORS DUE TO SCALING OF THE DRAWINGS. VERIFY ALL DIMENSIONS, FINISHES, FIXTURES, ETC. BEFORE BEGINNING CONSTRUCTION. IF DIMENSIONS OR DETAILS ARE OMITTED, INCORRECT, OR NOT CLEAR, THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION.

REVISIONS

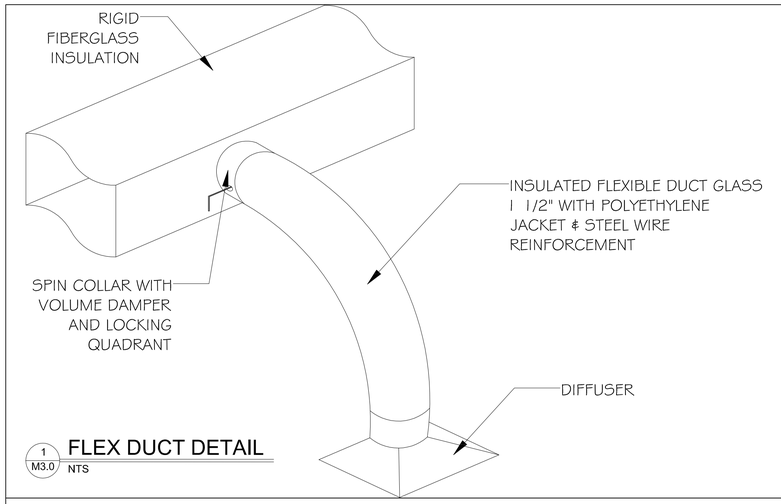
MARK	DATE	DESCRIPTION
	09/09/21	CITY COMMENTS

TREC No.	1905-1742-05
Date Printed	09/09/2021
Date Issued	09/09/2021
Designed By	KO
Checked by	MT
Approved by	MT

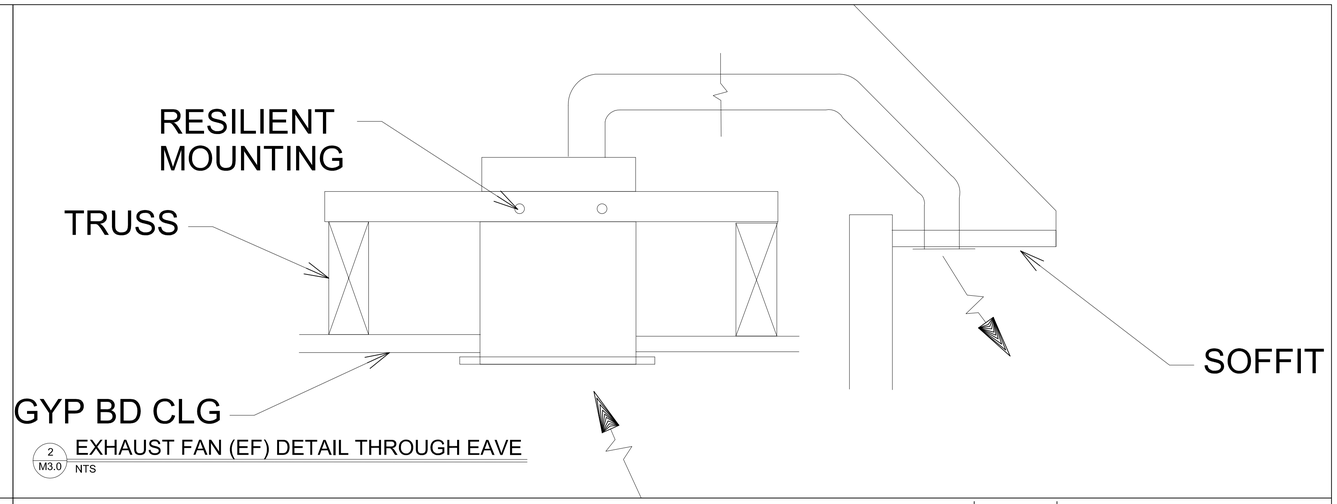
M2.0
N.T.S.

PUBLIC BUILDING MECHANICAL PLAN

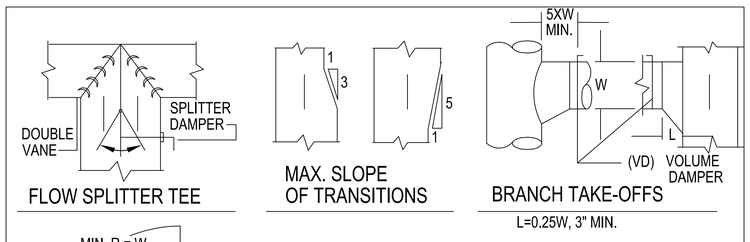
ISSUE FOR CONSTRUCTION



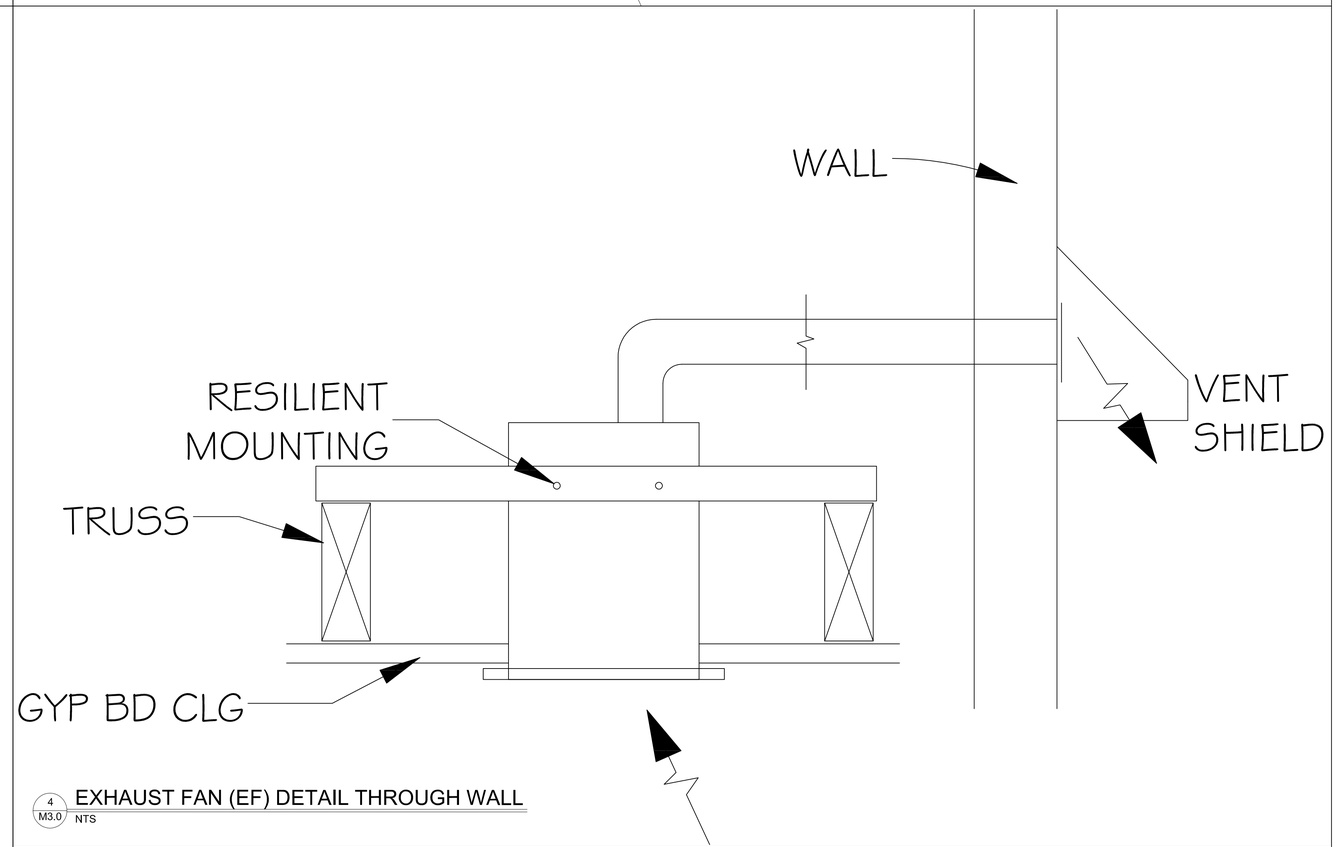
1 M3.0 FLEX DUCT DETAIL
NTS



2 M3.0 EXHAUST FAN (EF) DETAIL THROUGH EAVE
NTS



3 M3.0 DUCT DETAILS
NTS



4 M3.0 EXHAUST FAN (EF) DETAIL THROUGH WALL
NTS

DESIGN REVIEW
09/09/2021

SOUTH CAROLINA PROFESSIONAL ENGINEER No.24188 MICHAEL I. THOMAS
SOUTH CAROLINA THOMAS & REEL ENGINEERING CONSULTANTS, INC. No. 3634 CERTIFICATE OF AUTHORIZATION

Thomas & Reel
Engineering Consultants, Inc.
trec | STRUCTURAL | MEP | FORENSICS
www.thomasreel.com
912-920-0950
9100 WHITE BLUFF RD. SUITE 306, SAVANNAH GEORGIA 31406
PO BOX 15818 SAVANNAH, GEORGIA 31416

DO NOT SCALE THE DRAWINGS. THE DESIGNER WILL NOT ACCEPT RESPONSIBILITY FOR CONSTRUCTION ERRORS DUE TO SCALING OF THE DRAWINGS. VERIFY ALL DIMENSIONS, FINISHES, FIXTURES, ETC. BEFORE BEGINNING CONSTRUCTION. IF DIMENSIONS OR DETAILS ARE OMITTED, INCORRECT, OR NOT CLEAR, THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION.

GEORGETOWN PUBLIC WORKS BUILDING
399 NORTH KAMINSKI ST,,
GEORGETOWN, SC

RAYMOND ENGINEERING

MECHANICAL DETAILS

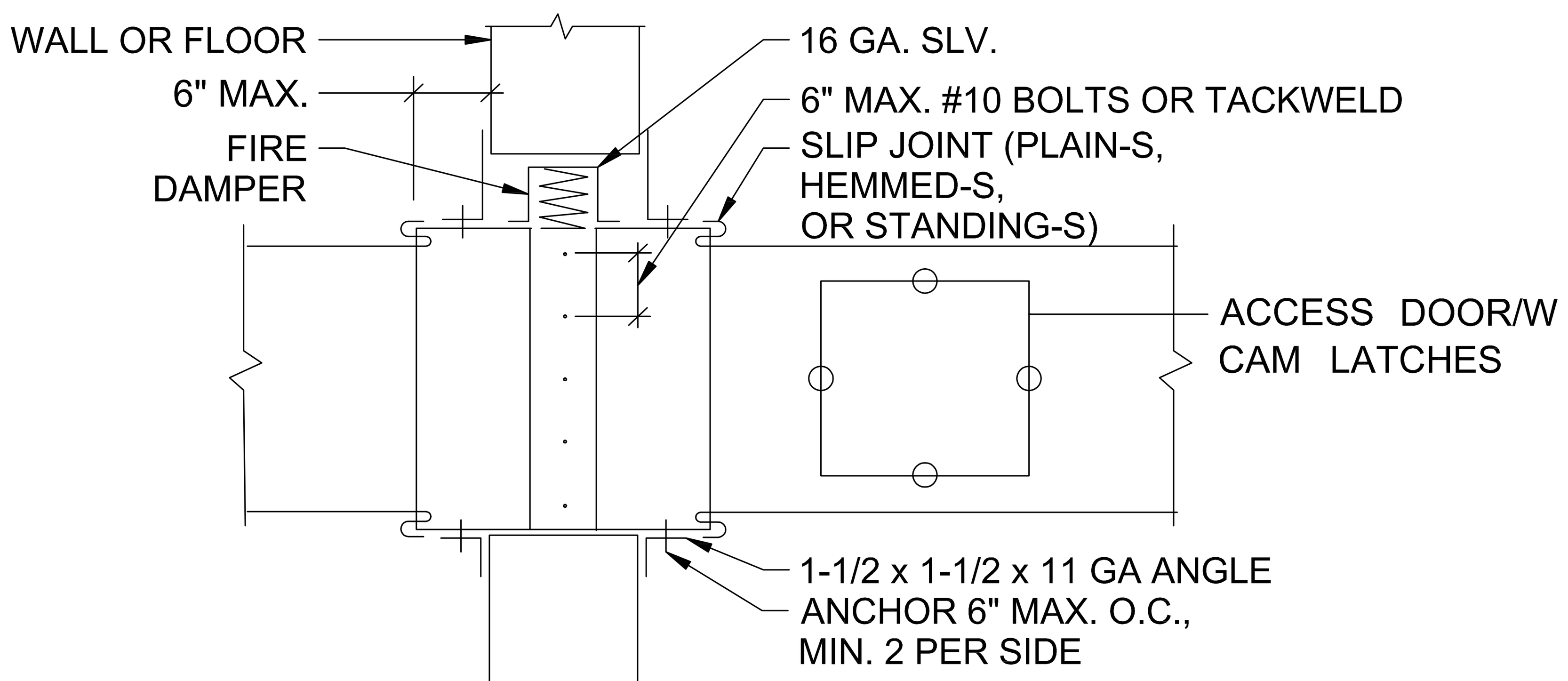
REVISIONS		
MARK	DATE	DESCRIPTION
	09/09/21	CITY COMMENTS

ISSUE FOR CONSTRUCTION

TREC No.	1905-1742-05
Date Printed	09/09/2021
Date Issued	09/09/2021
Designed By	KO
Checked by	MT
Approved by	MT

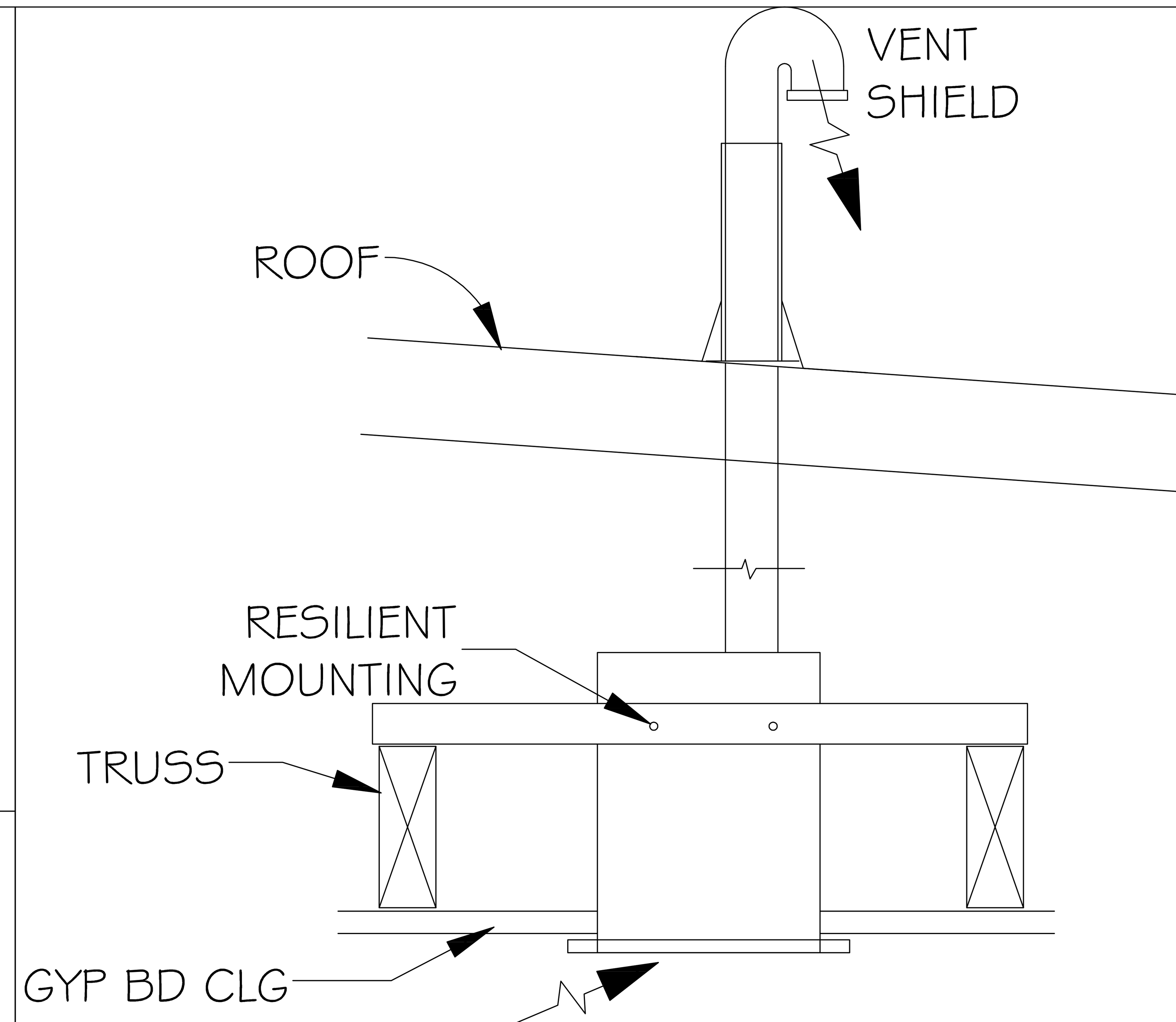
M3.0
N.T.S.

MECHANICAL DETAILS

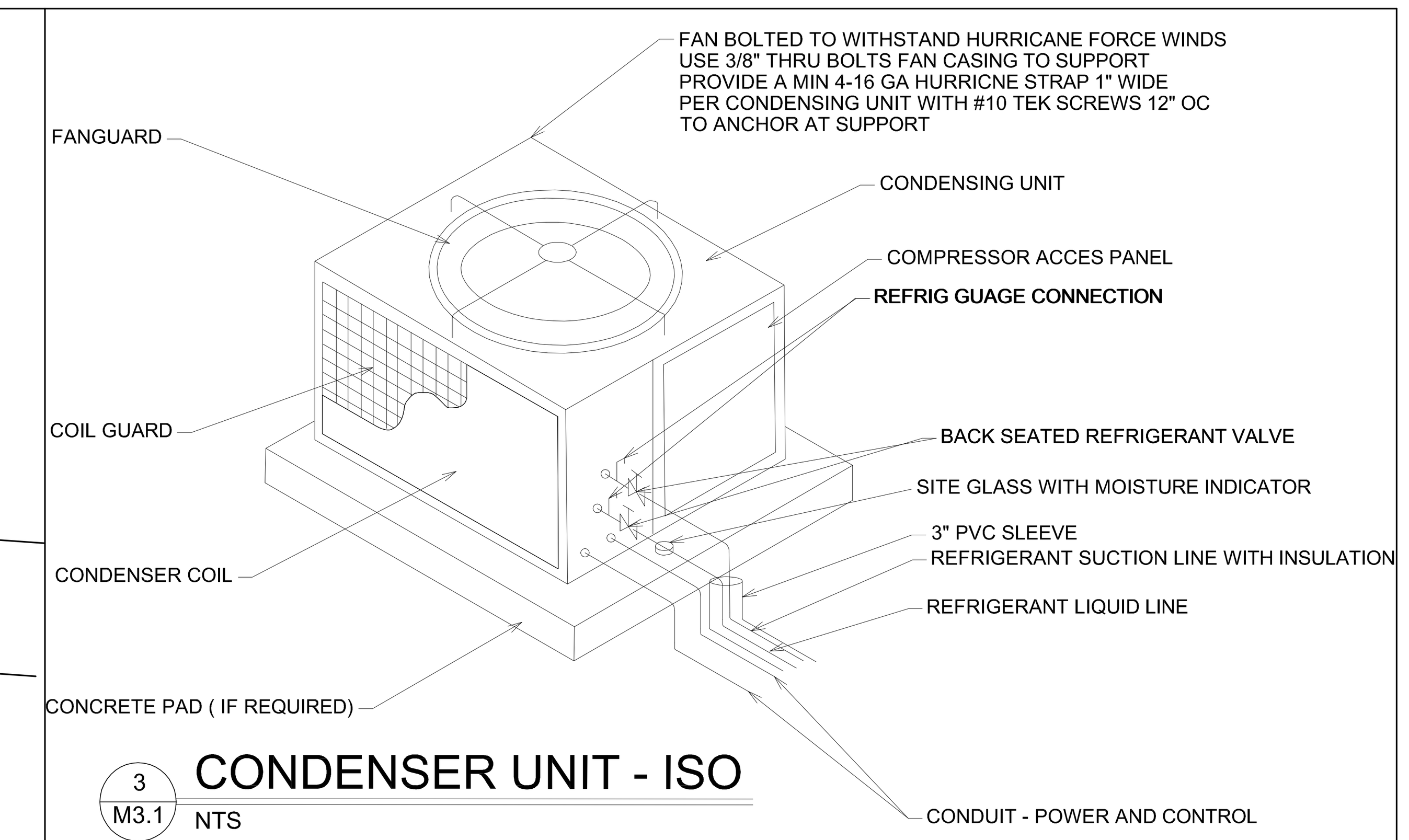


MINIMUM OPENING IN FLR OR WALL SHALL BE 1/8" PER FOOT LARGER THAN DAMPER DIMENSIONS. MININUM CLEARANCE OF 1/4" REQUIRED FOR ANY INSTALLATION.

1 / M3.1 FIRE DAMPER
NTS

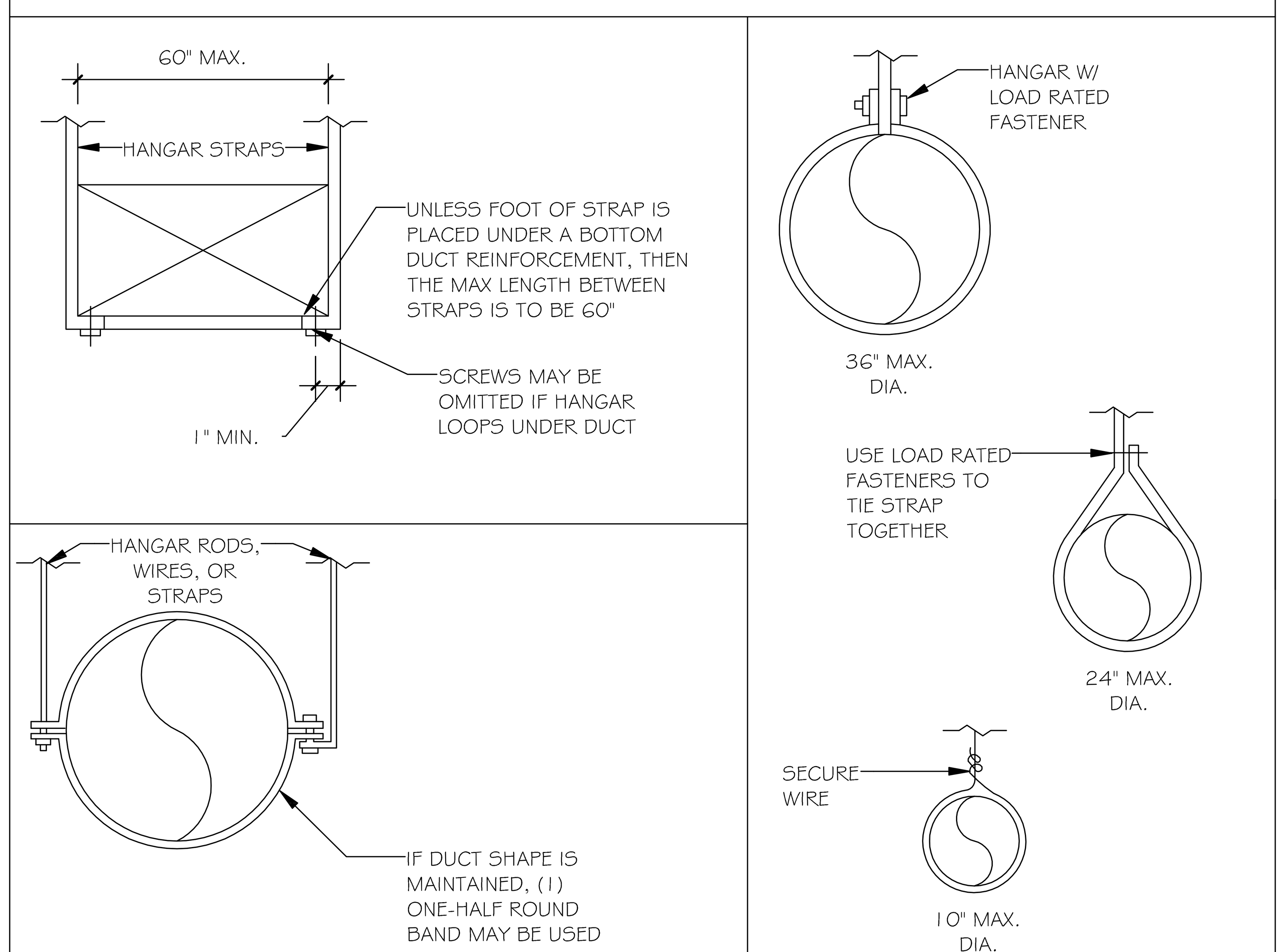


2 / M3.1 EXHAUST FAN (EF) DETAIL THROUGH ROOF
NTS


FAN BOLTED TO WITHSTAND HURRICANE FORCE WINDS
USE 3/8" THRU BOLTS FAN CASING TO SUPPORT
PROVIDE A MIN 4-16 GA HURRICNE STRAP 1" WIDE
PER CONDENSING UNIT WITH #10 TEK SCREWS 12" OC
TO ANCHOR AT SUPPORT
FANGUARD
CONDENSING UNIT
COMPRESSOR ACCES PANEL
REFRIG GUAGE CONNECTION
COIL GUARD
BACK SEATED REFRIGERANT VALVE
SITE GLASS WITH MOISTURE INDICATOR
3" PVC SLEEVE
REFRIGERANT SUCTION LINE WITH INSULATION
CONDENSER COIL
REFRIGERANT LIQUID LINE
CONCRETE PAD (IF REQUIRED)
CONDUIT - POWER AND CONTROL

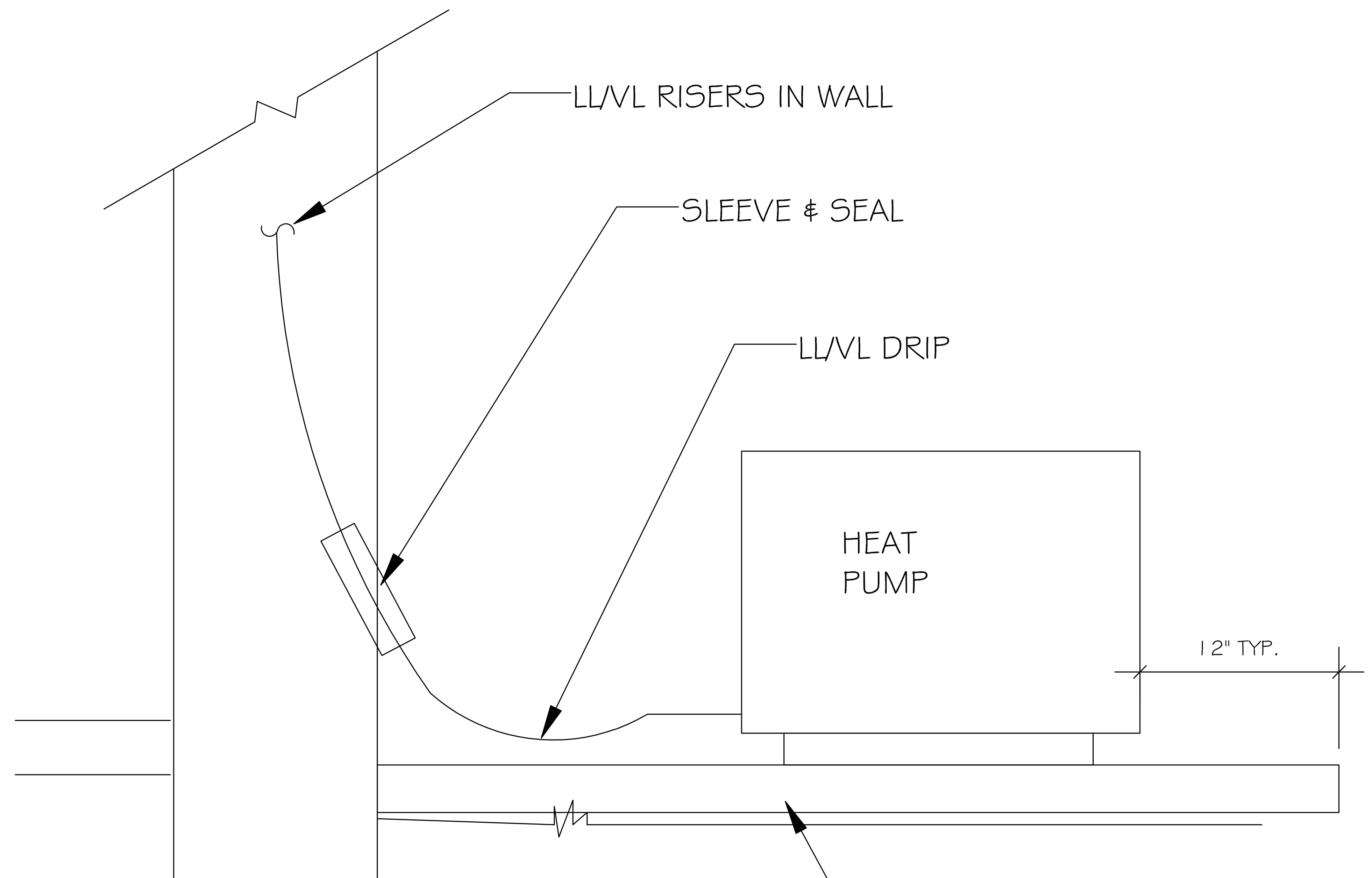
3 / M3.1 CONDENSER UNIT - ISO
NTS

STRAP HANGARS


60" MAX.
HANGAR STRAPS
UNLESS FOOT OF STRAP IS PLACED UNDER A BOTTOM DUCT REINFORCEMENT, THEN THE MAX LENGTH BETWEEN STRAPS IS TO BE 60"
SCREWS MAY BE OMITTED IF HANGAR LOOPS UNDER DUCT
1" MIN.
HANGAR W/ LOAD RATED FASTENER
36" MAX. DIA.
USE LOAD RATED FASTENERS TO TIE STRAP TOGETHER
24" MAX. DIA.
HANGAR RODS, WIRES, OR STRAPS
IF DUCT SHAPE IS MAINTAINED, (1) ONE-HALF ROUND BAND MAY BE USED
SECURE WIRE
10" MAX. DIA.

GENERAL NOTES:
1. DETAILS BASED ON SMACNA 1995, FIG. 4-4.
2. DO NOT EXCEED SMACNA, CH. 4, ALLOWABLE LOAD LIMITS.
3. HANGERS MUST NOT DEFORM DUCT SHAPE.
4. DUCT REINFORCEMENT MAY BE USED FOR ATTACHMENT IF IT QUALLIFIES FOR BOTH DUTIES.

4 / M3.1 DUCTWORK STRAP HANGAR DETAIL
NTS



5 / M3.1 CONDENSER UNIT - ELEVATION
NTS

ISSUE FOR CONSTRUCTION

DESIGN REVIEW
09/09/2021

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No.24188 MICHAEL I. THOMAS

SOUTH CAROLINA THOMAS & REEL ENGINEERING CONSULTANTS, INC. No. 3624 CERTIFICATE OF AUTHORIZATION

Thomas & Reel
Engineering Consultants, Inc.
trec | STRUCTURAL | MEP | FORENSICS
www.thomasreel.com
912-920-0950
9100 WHITE BLUFF RD, SUITE 306, SAVANNAH GEORGIA 31406
PO BOX 15818 SAVANNAH, GEORGIA 31416

GEORGETOWN PUBLIC WORKS BUILDING
399 NORTH KAMINSKI ST,,
GEORGETOWN, SC

RAYMOND ENGINEERING

MECHANICAL DETAILS

REVISIONS		
MARK	DATE	DESCRIPTION
	09/09/21	CITY COMMENTS

TREC No.	1905-1742-05
Date Printed	09/09/2021
Date Issued	09/09/2021
Designed By	KO
Checked by	MT
Approved by	MT

M3.1
N.T.S.

MECHANICAL DETAILS

PLUMBING SPECIFICATION NOTES

1.	ALL PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2018 INTERNATIONAL PLUMBING CODE, 2018 INTERNATIONAL BUILDING CODE, ANY/ALL CODES, ORDINANCES, AND REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION OVER THIS WORK WHETHER SHOWN IN THESE DOCUMENTS OR NOT
2.	IF ANY OF THE GOVERNING CODES ARE UPDATED, CHANGED, AND/OR MODIFIED AFTER THE SUBMITTAL OF THE DRAWINGS TO THE OWNER AND/OR ARCHITECT AND PRIOR TO THE ISSUANCE OF A BUILDING PERMIT, THEN THE DRAWINGS MUST BE RESUBMITTED TO THE ENGINEER FOR REVIEW, REEXAMINATION AND/OR REEVALUATION.
3.	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF ALL PLUMBING FIXTURES.
4.	PLUMBING CONTRACTOR TO VERIFY ALL PLUMBING FIXTURES WITH ARCHITECT AND/OR OWNER BEFORE PROCUREMENT AND/OR INSTALLATION.
5.	WATER PIPING ROUTED ABOVE CEILING AND IN EXTERIOR WALLS SHALL BE ROUTED ON HEATED SIDE (UNDERSIDE) OF CEILING INSULATION AND HEATED SIDE (INSIDE) OF WALL INSULATION.
6	SANITARY AND DRAINAGE PIPING 2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM AND BE SET FLUSH WITH FINISHED FLOOR. PIPING 3" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT MINIMUM.
7.	TOPS OF ALL FLOOR DRAINS AND CLEANOUTS SHALL BE SET FLUSH WITH FINISHED FLOOR.
8.	TRAP PRIMERS ARE TO BE PROVIDED ON ALL FLOOR DRAINS AND HUB DRAINS. TP "A" AUTOMATIC TRAP PRIMERS ARE TO BE PROVIDED IN ALL REQUIRED LOCATIONS.
9.	PLUMBING AND FIRE PROTECTION PIPING IS NOT TO BE INSTALLED IN ELECTRICAL ROOMS, CLOSETS, TELEPHONE ROOMS, OR ELEVATOR EQUIPMENT ROOMS EXCEPT PIPING SERVING THAT SPECIFIC ROOM.
10.	LOCATE ALL SECTIONAL OR MAIN CONTROL VALVES WITHIN 1'-0" FROM ACCESS PANELS, CEILING TILES, OR OTHER POINT OF ACCESS.
11.	ALL COLDWATER, HOT WATER AND DRAIN PIPING AT HANDICAPPED FIXTURES SHALL BE INSULATED WITH HANDI-LAV GUARD MODELS 102 AND 105 INSULATION KITS.
12.	PROVIDE SHOCK ABSORBERS SIZED PER PDI SPECIFICATIONS ON ALL DOMESTIC WATER LINES SERVING FLUSH VALVE FIXTURES, WASHING MACHINES SUPPLIES, PRV STATIONS AND OTHER INSTALLATIONS WITH QUICK CLOSING VALVES.
13.	PROVIDE A BASE CLEANOUT AT THE LOWEST LEVEL OF ALL SANITARY AND WASTE STACKS.
14.	PROVIDE REDUCED PRESSURE BACKFLOW PREVENTORS AT ALL DOMESTIC WATER CONNECTIONS TO MECHANICAL EQUIPMENT, AS REQUIRED BY ANY/ALL CODES, ORDINANCES, AND REGULATIONS. BACKFLOW PREVENTORS ARE TO BE LOCATED WITH A MINIMUM OF1'-0" CLEARANCE AT THE LOWEST POINT AND AT A MAXIMUM OF 5'-0" ABOVE FINISHED FLOOR AT THE HIGHEST POINT OF THE DEVICE.
15.	PROVIDE MANUFACTURED EXPANSIONS DEVICE OR FABRICATED EXPANSION LOOP ON ALL PIPING SYSTEMS CROSSING BUILDING EXPANSION JOINTS.
16.	PLUMBING CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL PLUMBING EQUIPMENT WITH THE ELECTRICAL DRAWINGS AND THE ELECTRICAL CONTRACTOR; AND SHALL FURNISH EQUIPMENT WIRED FOR THE VOLTAGES SHOWN THEREIN.
17.	ALL PLUMBING EQUIPMENT, PIPING, INSULATION, ETC. INSTALLED IN HVAC PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND COMBUSTIBILITY.
18.	ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE GUARANTEED FOR A MINIMUM PERIOD OF ONE-YEAR AFTER FINAL ACCEPTANCE.
19.	ALL PIPE PENETRATIONS OF FIRE AND/OR SMOKE RATED ASSEMBLIES SHALL BE FIRE STOPPED AS REQUIRED TO RESTORE ASSEMBLY TO ORIGINAL INTEGRITY. FIRE BARRIER PRODUCTS SHALL BE MANUFACTURED BY 3M COMPANY. USE CP25 CAULK, CS195 COMPOSITE PANEL, FS195 WRAP/SHRINK, TREMCO, HILTI, METACAULK, NELSON, OR PSS 7900 SERIES SYSTEMS AS RECOMMENDED BY MANUFACTURER FOR PARTICULAR APPLICATIONS, OR EQUIVALENT SYSTEM AS APPROVED BY LOCAL CODE OFFICIALS. ALSO, REFER TO DIVISION 7 – THERMAL AND MOISTURE PROTECTION.
20.	ALL VENT TRHU ROOF PENETRATIONS SHALL BE ROUTED TO TERMINATE AT THE LEAST VISIBLE LOCATION FROM THE ENTRY VIEW.
23.	WATER LINES INSIDE BUILDING:
	A. COPPER TYPE "L" WITH LEAD FREE SOLDER.
	B. SCHEDULE 40 CPVC WITH SOLVENT JOINTS.
	C. PEX WITH MANUFACTURER'S APPROVED CONNECTIONS.
24.	WATER LINES OUTSIDE BUILDING:
	A. SCHEDULE 40 PVC WITH SOLVENT JOINTS FOR WATER METER TO 20' OUTSIDE BUILDING.
	B. SCHEDULE 40 CPVC OR COPPER TYPE "L" WITH LEAD FREE SOLDER FOR 20' OUTSIDE BUILDING ENTRY.
25.	SCHEDULE 40 PVC WITH DRAINAGE PATTERN FITTINGS AND SOLVENT WELDED JOINTS FOR WASTE AND VENT PIPES.
26.	SHUT-OFF VALVES TO BE PROVIDED AT FIXTURES.
27.	ANY/ALL EXPOSED FIXTURE TRIM SHALL BE CHROME PLATED.
28.	ALL FIXTURES AND EQUIPMENT SHALL BE PROVIDED WITH A UNION TYPE CONNECTION TO FACILITATE REMOVAL/SERVICE.
29.	INSULATE HOT WATER LINES FROM THE WATER HEATER AND THROUGHOUT THE SYSTEM WITH 3/4" FIBERGLASS PREFORM OF "FR" TYPE RUBBER OR POLYOLEFIN FLEXIBLE FOAM.
30.	NOTIFY ALL RESPECTIVE UTILITY COMPANIES WHOSE LINES ARE ROUTED THROUGH, CONNECTED TO, AND/OR ARE IN 10' PROXIMITY OF CONSTRUCTION SITE
31.	AS REQUIRED, COORDINATE WITH UTILITY COMPANIES FOR SERVICE AND METER LOCATIONS.
32.	NOTIFY THE UTILITIES PROTECTION CENTER AT LEAST THREE BUSINESS DAYS PRIOR TO BEGINNING ANY/ALL:
	A. EARTH EXCAVATION OR DIGGING WORK.
	B. WORK WHICH POTENTIALLY COMES WITHIN 10' OF ANY OVERHEAD HIGH VOLTAGE LINE.

GENERAL NOTES

1.	DRAWING(S) ARE SCHEMATIC. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL DEVICE LOCATIONS AND INTERCONNECT ROUTING WITH ARCHITECTURAL AND STRUCTURAL CONFIGURATION AND REQUIREMENTS.
2.	OWNER AND/OR CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCY AND/OR ITEMS IN NEED OF CLARIFICATION AND/OR DETAIL ELABORATION.
3.	OWNER AND/OR CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCY AND/OR OMISSIONS IN NEED OF ELABORATION IN WRITING FOR ENGINEERING REVIEW
4.	OWNER AND/OR CONTRACTOR TO NOTIFY ENGINEER OF ANY DIFFERENT SITE CONDITIONS, STRUCTURAL CONDITIONS, SPACE UTILIZATION OF ANY OTHER DIFFEREING CONDITION IN WRITING. ENGINEER TO REVIEW AND RESPOND TO ALL WRITTEN NOTIFICATIONS.

PLUMBING WASTE NOTES

1.	LOCATE EXISTING SANITARY SEWER LINES INFIELD.
2.	REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF ALL PLUMBING FIXTURES
3.	INSTALL NEW FLOOR DRAIN AND ROUTE 4" WASTE LINE TO EXISTING SEWER LINE. VERIFY LOCATION AND FLOW PRIOR TO INSTALLATION. INSTALL NEW 1/2" TRAP PRIMER LINE FROM FLOOR DRAIN TO LAVATORY.
4.	I.W. = INDIRECT WASTE LINE RUN TO NEAREST FLOOR SINK/HUB DRAIN/FLOOR DRAIN.
5.	SANITARY AND DRAINAGE PIPING 2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM AND BE SET FLUSH WITH FINISHED FLOOR. PIPING 3" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT MINIMUM.
6.	PROVIDE A BASE CLEANOUT AT THE LOWEST LEVEL OF ALL SANITARY AND WASTE STACKS.

PLUMBING LEGEND	
———	WASTE LINE
– – –	WASTE VENT
	P-TRAP
	SANITATION TIE IN, VERIFY LOCATION IN FIELD
———	COLD WATER LINE
— — —	HOT WATER LINE
	HOT WATER HEATER CIRCULATION PUMP
	WATER TIE IN, VERIFY LOCATION IN FIELD
	CHECK VALVE
	PIPE DOWN
	PIPE UP
	PIPE CAP
	PISTON TYPE WATER HAMMER ARRESTOR
	PRESSURE/TEMPERATURE RELIEF VALVE
FD	FLOOR DRAIN
VTR	VENT THRU ROOF
WCO	CLEAN OUT @ WALL

PLUMBING EQUIPMENT & FIXTURE SCHEDULE

QTY.	UNIT NAME	DESCRIPTION	MANUFACTURER MODEL	COLD INLET	HOT INLET	WASTE OUTLET	I.W.	NOTES
1	WH	50 GALLON ELECTRICAL HOT WATER HEATER	SELECTION BY OWNER	3/4"	3/4"	-	-	3, 5
2	WC	ADA RATED, FLOOR MOUNTED, 1.6 GPF WATER CLOSET MADE OF VITREOUS CHINA W/ 18" NOMINAL SEAT HEIGHT & FLUSH TANK	SELECTION BY OWNER	1/2"	-	3"	-	1, 2, 3
2	L	ADA RATED, DROP-IN, LAVATORY MADE OF VITREOUS CHINA W/ 4" CENTERED SINGLE LAYER FAUCET & GRID DRAIN	SELECTION BY OWNER	1/2"	1/2"	1-1/2"	-	3, 4
1	KS	DROP-IN, SINGLE BASIN KITCHEN SINK MADE OF STAINLESS STEEL W/ DOUBLE HANDLE FAUCET & CENTERED DRAIN	SELECTION BY OWNER	1/2"	1/2"	1-1/2"	-	3, 4
1	REF	REFRIGERATOR W/ WATER DISPENSER & ICE MAKER	SELECTION BY OWNER	1/2"	-	-	-	3

NOTES:

1. OPEN FRONT WATER CLOSET SEAT TO BE MADE OF HEAVY DUTY SOLID PLASTIC W/ STAINLESS STEEL SELF-SUSTAINING CHECK HINGE.
2. WATER CLOSET OPERATOR TO BE LOCATED ON THE MOST OPEN SIDE OF FIXTURE.
3. ANY/ALL FIXTURE CONTACT WITH WALLS/FLOORS/COUNTERS SHALL BE CAULKED/GROUTED/SEALED, AS APPLICABLE.
4. MIXING VALVE TO BE PROVIDED TO TEMPER HOT WATER TO 110° F.
5. FIXTURE TO BE SUPPORTED BY SOLID BLOCKING IN WALL.
6. HOT WATER HEATER DRAIN HOSE TO EMPTY ABOVE AN EXTERIOR WINDOW OR TO EMPTY TO THE NEAREST FLOOR SINK/HUB DRAIN/FLOOR DRAIN.

ISSUE FOR CONSTRUCTION

DESIGN REVIEW
09/09/2021

SOUTH CAROLINA PROFESSIONAL ENGINEER No.24188 MICHAEL I. THOMAS

SOUTH CAROLINA THOMAS & REEL ENGINEERING CONSULTANTS, INC. No. 3624 CERTIFICATE OF AUTHORIZATION

Thomas & Reel
Engineering Consultants, Inc.
trec | STRUCTURAL | MEP | FORENSICS
www.thomasreel.com
912-920-0950
9100 WHITE BLUFF RD, SUITE 306, SAVANNAH GEORGIA 31406
PO BOX 15818 SAVANNAH, GEORGIA 31416

GEORGETOWN PUBLIC WORKS BUILDING

399 NORTH KAMINSKI ST.,
GEORGETOWN, SC

RAYMOND ENGINEERING

PLUMBING GENERAL NOTES

REVISIONS		
MARK	DATE	DESCRIPTION
	09/09/21	CITY COMMENTS

TREC No.	1905-1742-05
Date Printed	09/09/2021
Date Issued	09/09/2021
Designed By	KO
Checked by	MT
Approved by	MT

P1.0
N.T.S.

PLUMBING GENERAL NOTES

PLUMBING SPECIFICATION NOTES

1. ALL WORK SHALL CONFORM TO ALL CODES, ORDINANCE, AND REGULATIONS OF ANY/ALL AUTHORITIES AUTHORITIES HAVING JURISDICTION OVER THIS WORK WHETHER SHOWN IN THESE DOCUMENTS OR NOT.

2. WATER LINES INSIDE BUILDING:
   A. COPPER TYPE "L" WITH LEAD FREE SOLDER.
   B. SCHEDULE 40 CPVC WITH SOLVENT JOINTS.
   C. PEX WITH MANUFACTURER'S APPROVED CONNECTIONS.

3. WATER LINES OUTSIDE BUILDING:
   A. SCHEDULE 40 PVC WITH SOLVENT JOINTS FOR WATER METER TO 20' OUTSIDE BUILDING.
   B. SCHEDULE 40 CPVC OR COPPER TYPE "L" WITH LEAD FREE SOLDER FOR 20' OUTSIDE BUILDING ENTRY.

4. SCHEDULE 40 PVC WITH DRAINAGE PATTERN FITTINGS AND SOLVENT WELDED JOINTS FOR WASTE AND VENT PIPES.

5. SHUT-OFF VALVES TO BE PROVIDED AT FIXTURES.

6. ANY/ALL EXPOSED FIXTURE TRIM SHALL BE CHROME PLATED.

7. ALL FIXTURES AND EQUIPMENT SHALL BE PROVIDED WITH A UNION TYPE CONNECTION TO FACILITATE REMOVAL/SERVICE.

8. INSULATE HOT WATER LINES FROM THE WATER HEATER THROUGHOUT THE SYSTEM WITH 3/4" FIBERGLASS PREFORM OF "FR" TYPE RUBBER OR POLYOLEFIN FLEXIBLE FOAM.

9. NOTIFY ALL RESPECTIVE UTILITY COMPANIES WHOSE LINES ARE ROUTED THROUGH, CONNECTED TO, AND/OR ARE IN 10' PROXIMITY OF CONSTRUCTION SITE

10. AS REQUIRED, COORDINATE WITH UTILITY COMPANIES FOR SERVICE AND METER LOCATIONS.

11. NOTIFY THE UTILITIES PROTECTION CENTER AT LEAST THREE BUSINESS DAYS PRIOR TO BEGINNING ANY/ALL:
   A. EARTH EXCAVATION OR DIGGING WORK.
   B. WORK WHICH POTENTIALLY COMES WITHIN 10' OF ANY OVERHEAD HIGH VOLTAGE LINE.

PLUMBING WASTE NOTES

1. LOCATE EXISTING SANITARY SEWER LINES IN FIELD.

2. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF ALL PLUMBING FIXTURES.

3. INSTALL NEW FLOOR DRAIN AND ROUTE 4" WASTE LINE TO EXISTING SEWER LINE. VERIFY LOCATION AND FLOW PRIOR TO INSTALLATION. INSTALL NEW 1/2" TRAP PRIMER LINE FROM FLOOR DRAIN TO LAVATORY.

4. I.W. = INDIRECT WASTE LINE RUN TO NEAREST FLOOR SINK/HUB DRAIN/FLOOR DRAIN.

5. SANITARY AND DRAINAGE PIPING 2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM AND BE SET FLUSH WITH FINISHED FLOOR. PIPING 3" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT MINIMUM.

6. PROVIDE A BASE CLEANOUT AT THE LOWEST LEVEL OF ALL SANITARY AND WASTE STACKS.

GENERAL NOTE:

DRAWING(S) ARE SCHEMATIC. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL DEVICE LOCATIONS AND INTERCONNECT ROUTING WITH ARCHITECTURAL AND STRUCTURAL CONFIGURATION AND REQUIREMENTS.

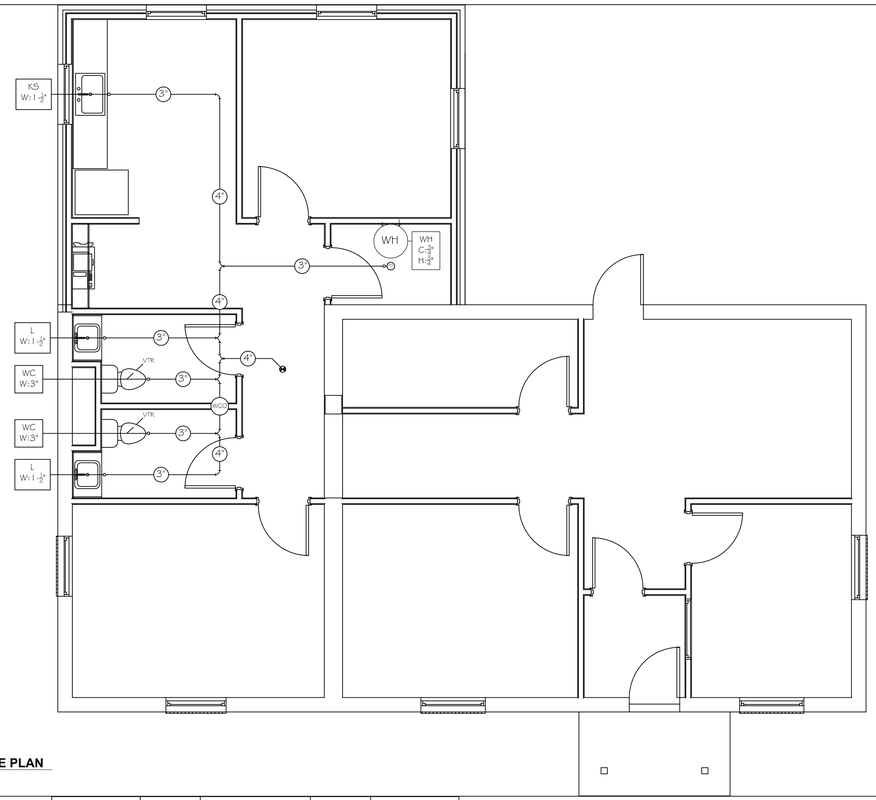
PLUMBING LEGEND	
———	WASTE LINE
– – –	WASTE VENT
	P-TRAP
	SANITATION TIE IN, VERIFY LOCATION IN FIELD
———	COLD WATER LINE
— — —	HOT WATER LINE
	HOT WATER HEATER CIRCULATION PUMP
	WATER TIE IN, VERIFY LOCATION IN FIELD
	CHECK VALVE
	PIPE DOWN
	PIPE UP
	PIPE CAP
	PISTON TYPE WATER HAMMER ARRESTOR
	PRESSURE/TEMPERATURE RELIEF VALVE
FD	FLOOR DRAIN
VTR	VENT THRU ROOF
WCO	CLEAN OUT @ WALL

CONTRACTOR TO EXTEND MAIN WATER LINE TO EXISTING WATER METER AND MAIN SEWER LINE TO EXISTING CLEANOUT

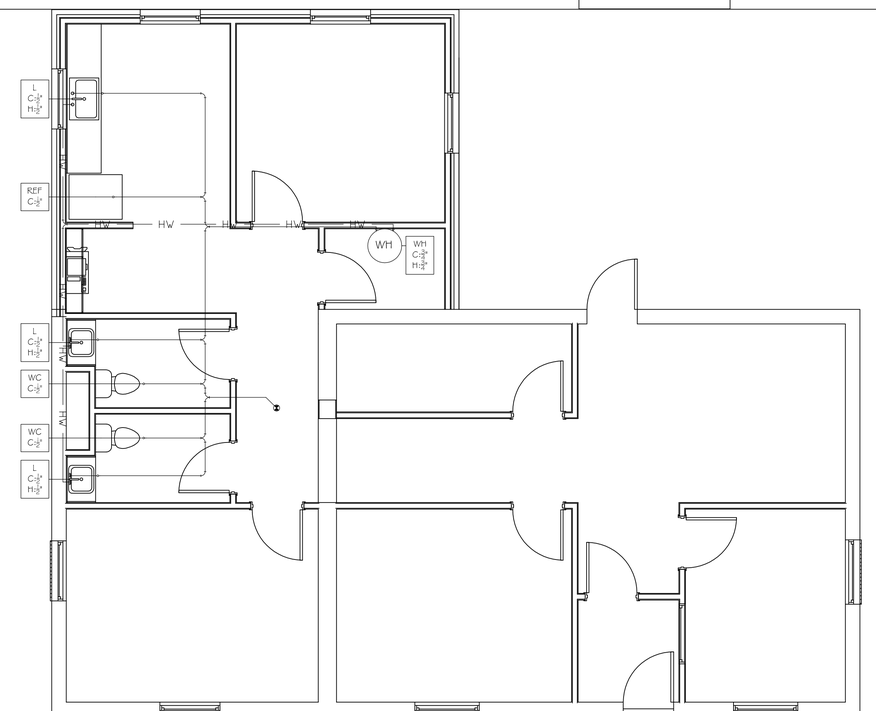
PLUMBING EQUIPMENT & FIXTURE SCHEDULE

QTY.	UNIT NAME	DESCRIPTION	MANUFACTURER MODEL	COLD INLET	HOT INLET	WASTE OUTLET	I.W.	NOTES
1	WH	50 GALLON ELECTRICAL HOT WATER HEATER	SELECTION BY OWNER	3/4"	3/4"	-	-	3, 5
2	WC	ADA RATED, FLOOR MOUNTED, 1.6 GPF WATER CLOSET MADE OF VITREOUS CHINA W/ 15" NOMINAL SEAT HEIGHT & FLUSH TANK	SELECTION BY OWNER	1/2"	-	3"	-	1, 2, 3
2	L	ADA RATED, DROP-IN, LAVATORY MADE OF VITREOUS CHINA W/ 4" CENTERED SINGLE LAYER FAUCET & GRID DRAIN	SELECTION BY OWNER	1/2"	1/2"	1-1/2"	-	3, 4
1	KS	DROP-IN, SINGLE BASIN KITCHEN SINK MADE OF STAINLESS STEEL W/ DOUBLE HANDLE FAUCET & CENTERED DRAIN	SELECTION BY OWNER	1/2"	1/2"	1-1/2"	-	3, 4
1	REF	REFRIGERATOR W/ WATER DISPENSER & ICE MAKER	SELECTION BY OWNER	1/2"	-	-	-	3

NOTES:
1. OPEN FRONT WATER CLOSET SEAT TO BE MADE OF HEAVY DUTY SOLID PLASTIC W/ STAINLESS STEEL SELF-SUSTAINING CHECK HINGE.
2. WATER CLOSET OPERATOR TO BE LOCATED ON THE MOST OPEN SIDE OF FIXTURE.
3. ANY/ALL FIXTURE CONTACT WITH WALLS/FLOORS/COUNTERS SHALL BE CAULKED/GROUTED/SEALED, AS APPLICABLE.
4. MIXING VALVE TO BE PROVIDED TO TEMPER HOT WATER TO 110° F.
5. FIXTURE TO BE SUPPORTED BY SOLID BLOCKING IN WALL.
6. HOT WATER HEATER DRAIN HOSE TO EMPTY ABOVE AN EXTERIOR WINDOW OR TO EMPTY TO THE NEAREST FLOOR SINK/HUB DRAIN/FLOOR DRAIN.



1 **PUBLIC BUILDING WASTE PLAN**
N.T.S.



2 **PUBLIC BUILDING WASTE PLAN**
N.T.S.

DESIGN REVIEW
09/09/2021

SOUTH CAROLINA PROFESSIONAL ENGINEER No.24188 MICHAEL I. THOMAS

SOUTH CAROLINA THOMAS & REEL ENGINEERING CONSULTANTS, INC. No. 3624 CERTIFICATE OF AUTHORIZATION

Thomas & Reel
Engineering Consultants, Inc.
trec | STRUCTURAL | MEP | FORENSICS
www.thomasreel.com
912-920-0950
9100 WHITE BLUFF RD, SUITE 306, SAVANNAH GEORGIA 31406
PO BOX 15818 SAVANNAH, GEORGIA 31416

DO NOT SCALE THE DRAWINGS. THE DESIGNER WILL NOT ACCEPT RESPONSIBILITY FOR CONSTRUCTION ERRORS DUE TO SCALING OF THE DRAWINGS. VERIFY ALL DIMENSIONS, FINISHES, FIXTURES, ETC. BEFORE BEGINNING CONSTRUCTION. IF DIMENSIONS OR DETAILS ARE OMITTED, INCORRECT, OR NOT CLEAR, THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION.

GEORGETOWN PUBLIC WORKS BUILDING
399 NORTH KAMINSKI ST.,
GEORGETOWN, SC

RAYMOND ENGINEERING

PUBLIC BUILDING WASTE & WATER PLAN

REVISIONS

MARK	DATE	DESCRIPTION
	09/09/21	CITY COMMENTS

ISSUE FOR CONSTRUCTION

TREC No.	1905-1742-05
Date Printed	09/09/2021
Date Issued	09/09/2021
Designed By	KO
Checked by	MT
Approved by	MT

P2.0
N.T.S.

PUBLIC BUILDING WASTE & WATER PLAN

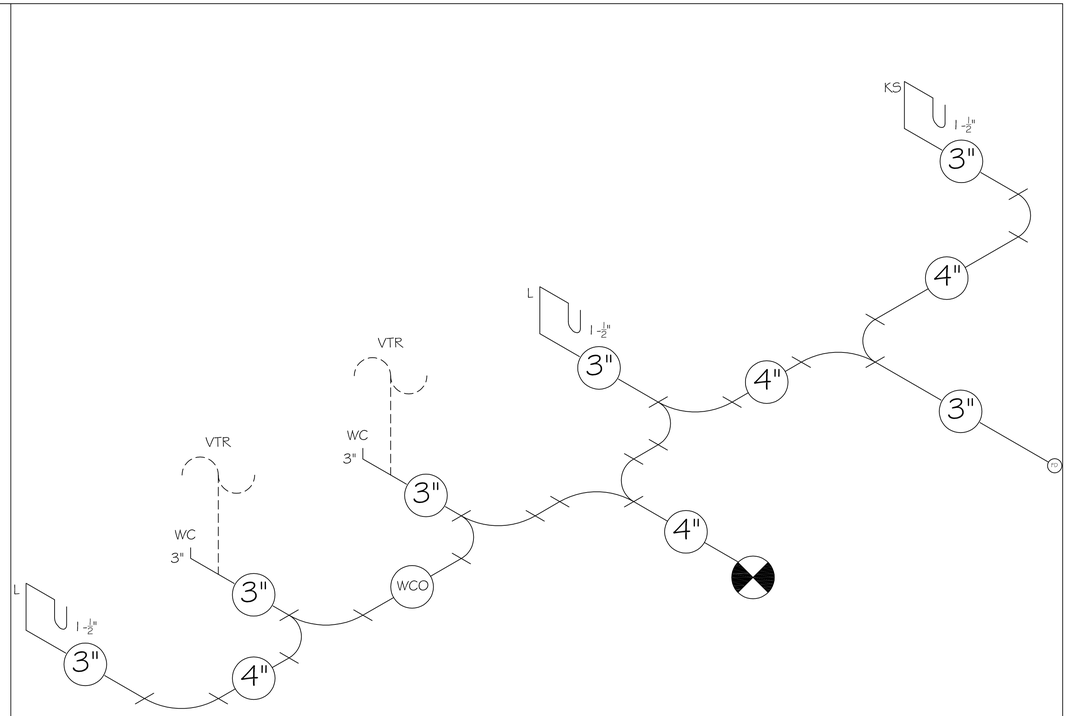
PLUMBING LEGEND	
———	WASTE LINE
- - - - -	WASTE VENT
	P-TRAP
	SANITATION TIE IN, VERIFY LOCATION IN FIELD
———	COLD WATER LINE
— HW —	HOT WATER LINE
	HOT WATER HEATER CIRCULATION PUMP
	WATER TIE IN, VERIFY LOCATION IN FIELD
	CHECK VALVE
	PIPE DOWN
	PIPE UP
	PIPE CAP
	PISTON TYPE WATER HAMMER ARRESTOR
	PRESSURE/TEMPERATURE RELIEF VALVE
FD	FLOOR DRAIN
VTR	VENT THRU ROOF
WCO	CLEAN OUT @ WALL

PLUMBING EQUIPMENT & FIXTURE SCHEDULE

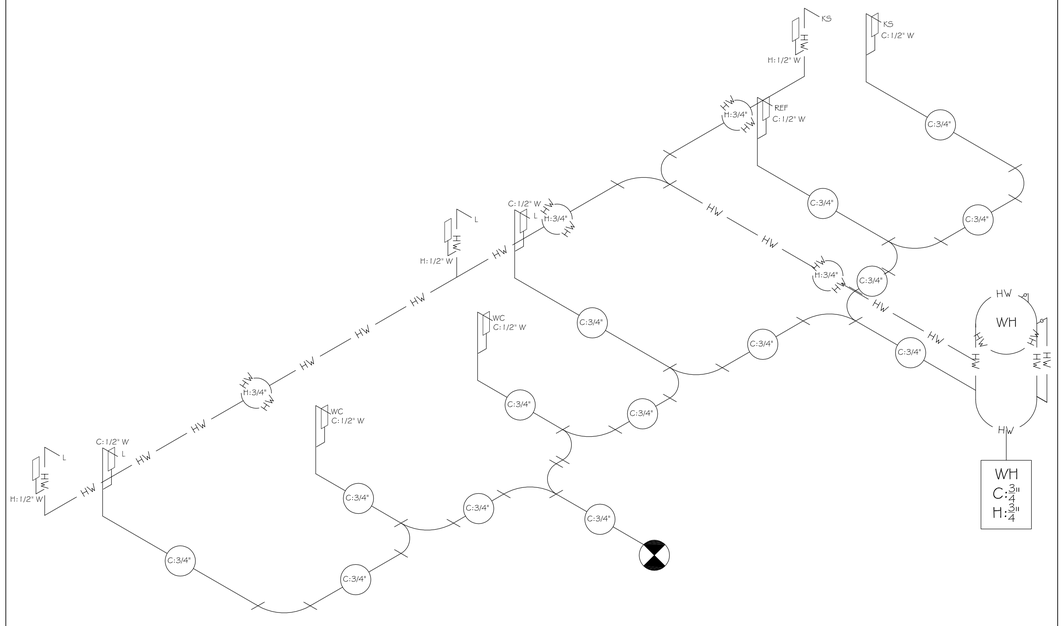
QTY.	UNIT NAME	DESCRIPTION	MANUFACTURER MODEL	COLD INLET	HOT INLET	WASTE OUTLET	I.W.	NOTES
1	WH	50 GALLON ELECTRICAL HOT WATER HEATER	SELECTION BY OWNER	3/4"	3/4"	-	-	3, 5
2	WC	ADA RATED, FLOOR MOUNTED, 1.6 GPF WATER CLOSET MADE OF VITREOUS CHINA W/ 18" NOMINAL SEAT HEIGHT & FLUSH TANK	SELECTION BY OWNER	1/2"	-	3"	-	1, 2, 3
2	L	ADA RATED, DROP-IN, LAVATORY MADE OF VITREOUS CHINA W/ 4" CENTERED SINGLE LAYER FAUCET & GRID DRAIN	SELECTION BY OWNER	1/2"	1/2"	1-1/2"	-	3, 4
1	KS	DROP-IN, SINGLE BASIN KITCHEN SINK MADE OF STAINLESS STEEL W/ DOUBLE HANDLE FAUCET & CENTERED DRAIN	SELECTION BY OWNER	1/2"	1/2"	1-1/2"	-	3, 4
1	REF	REFRIGERATOR W/ WATER DISPENSER & ICE MAKER	SELECTION BY OWNER	1/2"	-	-	-	3

NOTES:

1. OPEN FRONT WATER CLOSET SEAT TO BE MADE OF HEAVY DUTY SOLID PLASTIC W/ STAINLESS STEEL SELF-SUSTAINING CHECK HINGE.
2. WATER CLOSET OPERATOR TO BE LOCATED ON THE MOST OPEN SIDE OF FIXTURE.
3. ANY/ALL FIXTURE CONTACT WITH WALLS/FLOORS/COUNTERS SHALL BE CAULKED/GROUTED/SEALED, AS APPLICABLE.
4. MIXING VALVE TO BE PROVIDED TO TEMPER HOT WATER TO 110° F.
5. FIXTURE TO BE SUPPORTED BY SOLID BLOCKING IN WALL.
6. HOT WATER HEATER DRAIN HOSE TO EMPTY ABOVE AN EXTERIOR WINDOW OR TO EMPTY TO THE NEAREST FLOOR SINK/HUB DRAIN/FLOOR DRAIN.



1 **PUBLIC BUILDING PLUMBING WASTE RISER DIAGRAM**
N.T.S.



2 **PUBLIC BUILDING PLUMBING WASTE RISER DIAGRAM**
N.T.S.

DESIGN REVIEW
09/09/2021

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No.24188 MICHAEL I. THOMAS

SOUTH CAROLINA THOMAS & REEL ENGINEERING CONSULTANTS, INC. No. 3624 CERTIFICATE OF AUTHORIZATION

Thomas & Reel
Engineering Consultants, Inc.
trec | STRUCTURAL | MEP | FORENSICS
www.thomasreel.com
912-920-0950
9100 WHITE BLUFF RD, SUITE 306, SAVANNAH GEORGIA 31406
PO BOX 15818 SAVANNAH, GEORGIA 31416

TREC

DO NOT SCALE THE DRAWINGS. THE DESIGNER WILL NOT ACCEPT RESPONSIBILITY FOR CONSTRUCTION ERRORS DUE TO SCALING OF THE DRAWINGS. VERIFY ALL DIMENSIONS, FINISHES, FIXTURES, ETC. BEFORE BEGINNING CONSTRUCTION. IF DIMENSIONS OR DETAILS ARE OMITTED, INCORRECT, OR NOT CLEAR, THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION.

GEORGETOWN PUBLIC WORKS BUILDING

399 NORTH KAMINSKI ST.,
GEORGETOWN, SC

RAYMOND ENGINEERING

PUBLIC BUILDING WASTE & WATER RISER DIAGRAM

REVISIONS		
MARK	DATE	DESCRIPTION
	09/09/21	CITY COMMENTS

TREC No.	1905-1742-05
Date Printed	09/09/2021
Date Issued	09/09/2021
Designed By	KO
Checked by	MT
Approved by	MT

P3.0
N.T.S.

PUBLIC BUILDING WASTE & WATER RISER DIAGRAM

ISSUE FOR CONSTRUCTION

PLUMBING LEGEND	
———	WASTE LINE
- - - - -	WASTE VENT
⌐	P-TRAP
⊗	SANITATION TIE IN, VERIFY LOCATION IN FIELD
———	COLD WATER LINE
— HW —	HOT WATER LINE
	HOT WATER HEATER CIRCULATION PUMP
⊗	WATER TIE IN, VERIFY LOCATION IN FIELD
	CHECK VALVE
	PIPE DOWN
	PIPE UP
	PIPE CAP
	PISTON TYPE WATER HAMMER ARRESTOR
	PRESSURE/TEMPERATURE RELIEF VALVE
FD	FLOOR DRAIN
VTR	VENT THRU ROOF
WCO	CLEAN OUT @ WALL

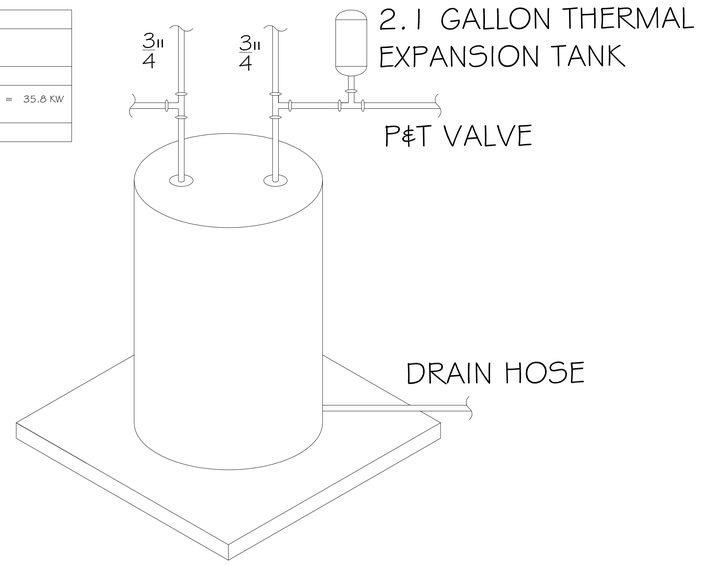
PLUMBING EQUIPMENT & FIXTURE SCHEDULE

QTY.	UNIT NAME	DESCRIPTION	MANUFACTURER MODEL	COLD INLET	HOT INLET	WASTE OUTLET	I.W.	NOTES
1	WH	50 GALLON ELECTRICAL HOT WATER HEATER	SELECTION BY OWNER	3/4"	3/4"	-	-	3, 5
2	WC	ADA RATED, FLOOR MOUNTED, 1.6 GPF WATER CLOSET MADE OF VITREOUS CHINA W/ 18" NOMINAL SEAT HEIGHT & FLUSH TANK	SELECTION BY OWNER	1/2"	-	3"	-	1, 2, 3
2	L	ADA RATED, DROP-IN, LAVATORY MADE OF VITREOUS CHINA W/ 4" CENTERED SINGLE LAYER FAUCET & GRID DRAIN	SELECTION BY OWNER	1/2"	1/2"	1-1/2"	-	3, 4
1	KS	DROP-IN, SINGLE BASIN KITCHEN SINK MADE OF STAINLESS STEEL W/ DOUBLE HANDLE FAUCET & CENTERED DRAIN	SELECTION BY OWNER	1/2"	1/2"	1-1/2"	-	3, 4
1	REF	REFRIGERATOR W/ WATER DISPENSER & ICE MAKER	SELECTION BY OWNER	1/2"	-	-	-	3

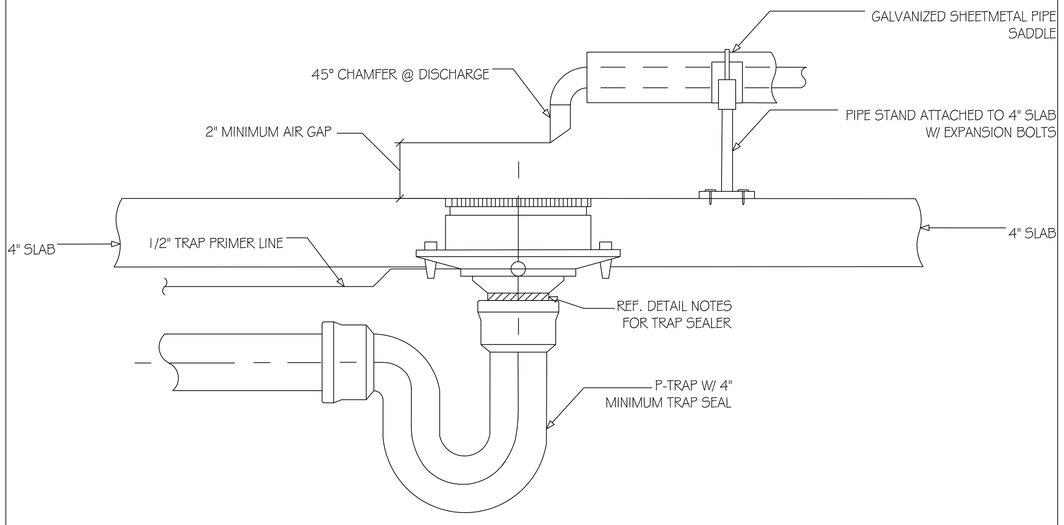
NOTES:

1. OPEN FRONT WATER CLOSET SEAT TO BE MADE OF HEAVY DUTY SOLID PLASTIC W/ STAINLESS STEEL SELF-SUSTAINING CHECK HINGE.
2. WATER CLOSET OPERATOR TO BE LOCATED ON THE MOST OPEN SIDE OF FIXTURE.
3. ANY/ALL FIXTURE CONTACT WITH WALLS/FLOORS/COUNTERS SHALL BE CAULKED/GROUTED/SEALED, AS APPLICABLE.
4. MIXING VALVE TO BE PROVIDED TO TEMPER HOT WATER TO 110° F.
5. FIXTURE TO BE SUPPORTED BY SOLID BLOCKING IN WALL.
6. HOT WATER HEATER DRAIN HOSE TO EMPTY ABOVE AN EXTERIOR WINDOW OR TO EMPTY TO THE NEAREST FLOOR SINK/HUB DRAIN/FLOOR DRAIN.

TYPICAL WATER HEATER CALCULATION
(4) L@1 = 4
(1) 2CS @ 1 = 1
TOTAL LOAD: 5 GPM X 60 X .80 = 240 - GPH DEMAND
KW INPUT = GPH X RISE X 1B GAL. / THERMAL EFFICIENCY = 240 GPH X 60° RISE X 8.33 1B. / .98 X 3412 BTU/KW = 35.8 KW
USE 50 GAL. WATER HEATER



1 **HOT WATER HEATER DETAIL**
N.T.S.



DETAIL NOTES:

1. REFERENCE PLUMBING SPECIFICATION NOTES & PLUMBING WASTE NOTES FOR TRAP SEALERS & TRAP PRIMERS.
2. INSULATION REQUIRED ONLY FOR INDIRECT WASTE LINES RECEIVING CONDENSATE FROM REFRIGERATION EQUIPMENT. REFER TO PLANS AND COORDINATE FOR OTHER TRADES.
3. INDIRECT WASTE IS TO BE SPILLED OVER ALL OPENINGS IN DRAIN GRATES

1 **FLOOR DRAIN DETAIL**
N.T.S.

DESIGN REVIEW
09/09/2021

SOUTH CAROLINA PROFESSIONAL ENGINEER No.24188 MICHAEL I. THOMAS
SOUTH CAROLINA THOMAS & REEL ENGINEERING CONSULTANTS, INC. No. 3624 CERTIFICATE OF AUTHORIZATION

Thomas & Reel
Engineering Consultants, Inc.
trec | STRUCTURAL | MEP | FORENSICS
www.thomasreel.com
912-920-0950
9100 WHITE BLUFF RD, SUITE 306, SAVANNAH GEORGIA 31406
PO BOX 15818 SAVANNAH, GEORGIA 31416

GEORGETOWN PUBLIC WORKS BUILDING
399 NORTH KAMINSKI ST., GEORGETOWN, SC
RAYMOND ENGINEERING
HOT WATER HEATER & FLOOR DRAIN DETAIL

REVISIONS		
MARK	DATE	DESCRIPTION
	09/09/21	CITY COMMENTS

TREC No.	1905-1742-05
Date Printed	09/09/2021
Date Issued	09/09/2021
Designed By	KO
Checked by	MT
Approved by	MT

P4.0
N.T.S.

HOT WATER HEATER & FLOOR DRAIN DETAIL

ELECTRICAL NOTES

PART I - GENERAL

A. Codes and Ordinances - The entire installation shall be strictly in accordance with the latest version of the National Electrical Code, and amendments of the local governing body.

B. Tests - Provide test of all systems to demonstrate proper operation.

C. Provide maintenance and operational instructions for all equipment. All panel boards, disconnect switches, control cabinets, etc., shall be clearly marked with identification externally and internally for each circuit.

D. The contractor shall schedule all required inspections.

E. Provide materials and equipment that are products of manufacturers regularly engaged in the production of such products which are of equal material, design and workmanship. Products shall have been in satisfactory commercial or industrial use for 2 years prior to bid opening. Products manufactured more than 3 years prior to date of delivery to site shall not be used, unless specified otherwise.

F. Lighting shall comply with ASHRAE 90.1 where applicable.

PART II - PRODUCTS

A. As a minimum, meet requirements of UL, where UL standards are established for those items, and requirements of NFPA 70 for all materials, equipment, and devices.

B. Light fixtures shall be as per plan. Emergency lighting shall be connected ahead of switch for lighting serving the area. Exit lighting shall be un-switched.

C. Device plates shall be impact resistant nylon. Color selection by owner and may vary per location.(UL listed)

D. Switches (NEMA WD 1,UL 20) and receptacles (NEMA WD1)shall be screw type side wire commercial grade and as per plan. Color selection by owner and may vary.

E. Circuit Breaker and fused protected circuits shall be as per above referenced code.

F. Outlet boxes and conduit boxes shall be metal, cadmium or zinc coated (UL514a).

G. Conduit and/or conductors shall be concealed in walls and above GYPBOARD or suspended ceilings.Unless physically impossible. All exposed conduit shall be painted to match the surrounding surface.

H. Equipment connections shall be made with short sections of flexible conduit (Sealtite in exterior locations) using compatible fittings.

I. Conductors shall be 2 #12 AWG with 1 #12 AWG GND Copper w/THHN or THWN insulation in 1/2"conduit unless otherwise indicated on drawings. MC cable with 2 #12 AWG with 1 #12 AWG GND Copper w/THHN or THWN is acceptable.

J. Provide grounding conductors in all conduit. Hash marks on drawing do not include grounding conductor.

K. Disconnects switches: NEMA KS1. enclosures -Indoor NEMA 1, Outdoor Heavy Duty NEMA 3R. Provide label indicating source and load.

L. Panelboard shall be UL 67 and UL 50 listed. Install a typewritten circuit directory on panel board cover interior, reflecting an "As Wired" condition after completion of wiring.Provide nameplate indicated name and feeder source. Circuit breakers shall be UL 489 thermal magnetic type with short rating as indicated on panel. Multiple shall be provided with common trip single operating handle. Arc-fault circuit interrupters SHALL be provided in accordance with NEC 2020 Article 210.12 and SHALL be UL 489 and UL 1699 listed and comply with NFPA 70. Surge Protection to be provided at service entrance as indicated.

M. Contractor to verify all circuit requirements with actual equipment provided.

N. Raceway Seal(S). Where a service raceway enters a building or structure from an underground distribution system, it shall be sealed in accordance with NEC 300.5(G). Spare or unused raceways shall also be sealed. SEALANTS shall be identified for use with the cable insulation, shield, or other components. Conduits or raceways through which moisture may contact live parts shall be sealed or plugged at either or both ends. Spare or unused raceways shall also be sealed. SEALANTS shall be identified for use with the cable insulation, conductor insulation, bare conductor, shield, or other components.

O. All outlets and receptacles in all fire rated walls or partitions shall be fire stopped. All conduit in one- hour fire rated walls or partitions shall be EMT. Seal all points of penetration w/ 3M Fire Barrier caulk or equal.

P. Penetrations of all fire rated wall with a fire rating of more than one hour shall be in accordance with an approved UL design.

Q. Data and telephone by others.

R. Fire Alarm by others.

PART III - EXECUTION

A. Remove all manufacturers labels and clean all exposed fixtures and equipment.

B. Replace all damaged fixtures and equipment.

C. Adjust or calibrate all items of equipment to assure proper operation.

D. Make all wiring connections in outlet or junction boxes.

E. Nameplates: ATM d709, Provide laminated plastic nameplates for each equipment enclosure, relay, switch, and device; as specified or as indicated on the drawings. identify the function and, when applicable, the position. Minimum size of nameplates: one by 2.5 inches. Lettering size and style: a minimum of 0.25 inch high normal block style.

F. WARNING signs - Provide warning signs for flash protection in accordance with NFPA 70E and NEMA Z535.4 for switchboards, panelboards. Provide field installed signs to warn qualified persons of potential electric arc flash hazards when warning signs are not provided by the manufacturer. Provide marking that is clearly visible to qualified persons before examination, adjustment, servicing, or maintenance of the equipment.

PART IV - DEMOLITION

A. Remove exsiting electrical wiring, lighting, receptacles, switches, wiring devices, etc.

B. Disconnect and cap any conduit that cannot be removed.

C. Consult owner for salvage of lighting that is removed.

D. Do not use any wiring, devices, conduit, equipment, etc. removed.

SPECIAL NOTES:

A. DATA AND TELEPHONE BY GENERAL CONTRACTOR.
- DATA AND TELEPHONE SHALL BE INSTALLED BY A LICENSED CONTRACTOR SPECIALIZING IN DATA AND TELEPHONE SYSTEMS. REQUIREMENTS SHALL BE PER INSTRUCTION FROM CITY. PLANS AND CATALOG SHEETS SHALL BE SUBMITTED TO CITY BEFORE CONSTRUCTION BEGINS.

B. FIRE ALARM BY GENERAL CONTRACTOR.
- FIRE ALARM SYSTEM SHALL BE DESIGNED AND INSTALLED BY A CERTIFIED FIRE ALARM SYSTEMS CONTRACTOR AND LICENSED IN THE STATE OF SOUTH CAROLINA. REQUIREMENTS SHALL PER NFPA AND INSTRUCTION FROM CITY. THE SYSTEM WILL INCLUDE 24/7/365 MONITORING WITH REPORTING TO THE LOCAL FIRE DEPARTMENT OR EMERGENCY SERVICES. PLANS AND CATALOG SHEETS SHALL BE SUBMITTED TO CITY BEFORE CONSTRUCTION BEGINS.

C. SECURITY AND CCTV BY CITY. GENERAL CONTRACTOR TO COORDINATE WITH SECURITY CONTRACTOR.

1

ELECTRICAL LEGEND

LIGHTING

4' OR 2' LED STRIP FIXTURE FOR U/C. LETTER DENOTES TYPE GIVEN IN FIXTURE SCHEDULE.

2x2 LED PANEL SURFACE MOUNTED FIXTURE. LETTER DENOTES TYPE GIVEN IN FIXTURE SCHEDULE.

A — PENDANT / CEILING / WALL MOUNTED LIGHTING FIXTURE. LETTER DENOTES TYPE GIVEN IN FIXTURE SCHEDULE.

FF — BATHROOM EXHAUST PLAN
SEE MECHANICAL PLANS FOR LOCATION AND SIZE.

EM — EMERGENCY LIGHT FIXTURE, WET LOCATIONS, BATTERY BACKUP

$ — SINGLE POLE WALL SWITCH. MH MINIMUM 42" AFF

$M — SINGLE POLE WALL SWITCH WITH MOTION SENSOR. MH MINIMUM 42" AFF

OS — CEILING MOUNTED OCCUPANCY SENSOR

POWER

20A DUPLEX RECEPTACLE; M.H.=1.5' AFF, UNLESS OTHERWISE INDICATED.
COORDINATE RECEPTACLES ABOVE COUNTER TOP COUNTER TOP HT.
"TV" INDICATES TV RECEPTACLE. MOUNT AT 72" AFF.

WP — SAME AS ABOVE WITH GROUND FAULT CIRCUIT INTERRUPTER TYPE.
WP= WEATHER PROOF AND IDENTIFEID AS "EXTRA DUTY".
COORDINATE RECEPTACLES ABOVE COUNTER TOP COUNTER TOP HT.

SPLIT 20A DUPLEX RECEPTACLE; M.H.=1.5' AFF, UNLESS OTHERWISE INDICATED.
LOWER SECTION CONTROLLED BY OCCUPANCY SENSOR. UPPER SECTION NOT CONTROLLED.
SEE WIRING DIAGRAMS.

F — 20A FLOOR DUPLEX RECEPTACLE; FLUSH MOUNT WITH BRASS HINGED COVER.

J — JUNCTION BOX CEILING / WALL MOUNTED, SIZED AS REQUIRED BY N.E.C.

MOTOR STARTER M.H. = 60 in TO TOP OF

30/3/NF/3R OR 30/3/F/3R — MOTOR DISCONNECT/SAFETY SWITCH. M.H. = 60 in TO TOP OF ENCLOSURE UNLESS OTHERWISE INDICATED. SWITCHES TO BE RATED 30/3/NF UNLESS OTHERWISE INDICATED. ENCLOSURES TO BE RATED NEMA 1 UNLESS OTHERWISE INDICATED.
"30" DENOTES AMPERE RATING;
"3" DENOTES NUMBER OF POLES;
"NF" DENOTES NON-FUSED;
"3R" DENOTES NEMA ENCLOSURE RATING
"F" DENOTES FUSE RATING; SIZED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION

CIRCUIT BREAKER PANELBOARD. SURFACE MOUNTED AS INDICATED IN SCHEDULE. SIZE AND RATINGS AS INDICATED IN SCHEDULE.

A-1,3 — HOMERUN TO PANELBOARD. NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. "A" INDICATES PANELBOARD THE HOMERUN IS SERVED FROM; "1,3" INDICATES THE CIRCUIT NUMBERS IN THE PANELBOARD FOR CONNECTION.

HASH MARKS INDICATE NUMBER OF SIZE 12 AWG CURRENT CARRYING CONDUCTORS IN 3/4 IN. RACEWAY, UNLESS OTHERWISE INDICATED. RACEWAYS WITHOUT HASH (NOTE: GROUNDING CONDUCTORS SHALL BE PROVIDED BUT ARE NOT INDICATED BY HASHMARKS.)

SYSTEM GROUND (NEC ARTICLE 250-50)

COM

COM OUTLET BOX. M.H. =1.5" AFF, UNLESS OTHERWISE INDICATED.
EXTEND 3/4" CONDUIT FROM BOX TO ATTIC WITH PULL CHORD.
"TV" INDICATES OUTLET FOR TV. MOUNT AT 72" AFF.

COM FLOOR OUTLET BOX. FLUSH MOUNT WITH BRASS HINGED COVER.
EXTEND 3/4" CONDUIT FROM BOX TO NEAREST WALL THEN TO ATTIC WITH PULL CHORD.

TELE BKBD — 4'X4'X3/4" TELEPHONE BACKBOARD. COORDINATE REQUIRMENT WITH COM PROVIDER.

ABBREVIATIONS

A	AMPERE
AFF	ABOVE FINISHED FLOOR
AL	ALUMINUM
1/C	ONE CONDUCTOR
3/C	THREE CONDUCTOR
C	CONDUIT
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CU	COPPER
DIA	DIAMETER
EB	ENCASED BURIAL
EF	EXHAUST FAN
EWC	ELECTRIC WATER COOLER
EXP	EXPLOSION PROOF
FACP	FIRE ALARM CONTROL PANEL
GF	GROUND FAULT CIRCUIT INTERRUPTER
GFP	GROUND FAULT PROTECTION
HPS	HIGH PRESSURE SODIUM
HT	HEIGHT
HZ	HERTZ
JB	JUNCTION BOX
LED	LIGHT EMITTING DIODE
M	METERS
mm/MM	MILLIMETERS
MCB	MAIN CASE BREAKER
MCP	MECHANICAL CONTROL PANEL
M.H.	MOUNTING HEIGHT
MLO	MAIN LUGS ONLY
N.E.C.	NATIONAL ELECTRICAL CODE
NF	NON FUSED
NIC	NOT IN CONTRACT
NO.	NUMBER
PH	PHASE
SPS	STANDBY POWER SYSTEM
SWD	SWITCHING DUTY
TC/SW	TIME CLOCK AND H-O-A SWITCH
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLT
VA	VOLTAMPERE
VAV	VARIABLE AIR VOLUMN
VSD	VARIABLE SPEED DRIVE
W	WATTS
WH	WATER HEATER
WP	WEATHER PROOF

CONSTRUCTION DRAWING

GEORGETOWN PUBLIC WOKRS BUILDING

2 NORTH KAMINSKI STREET
GEORGETOWN, SC

ELECTRICAL NOTES, LEGEND, & ABBREVIATIONS

REVISIONS		
MARK	DATE	DESCRIPTION
1	10SEP21	SPCL NOTES & 200 AMP MAIN

Project No.	
Date Printed	9/10/2021
Date Issued	9/10/2021
Designed By	FDB
Checked by	FDB
Approved by	FDB

E001

ELECTRICAL NOTES, LEGEND, & ABBREVIATIONS

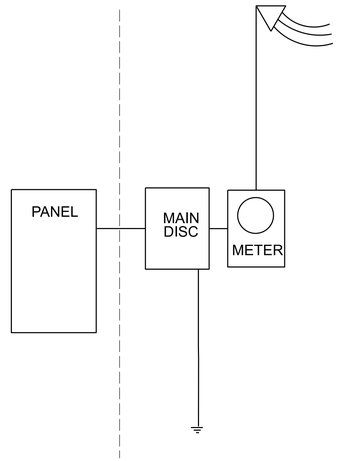
SCHEDULE OF NEW PANEL

VOLTAGE: 240 / 120				**PHASE: 1**							**WIRE: 3**
BUS AMPS: 200 A				**DEVICE AMPS: 200 A**			**MLO**				**NEMA: 1**
A.I.C RATING: 22,000 A				**MOUNTING: SURFACE**							
LOCATION DESCRIPTION	**LOAD (KVA)**	**LOAD TYPE**	**TRIP POLE**	**#**	**PH**	**#**	**TRIP POLE**	**LOAD TYPE**	**LOAD (KVA)**	**LOCATION DESCRIPTION**	
REFRIGERATOR	1.5	C	20/1	**1**	**A**	**2**	40/2	E	2.6	COMP UNIT	
KITCHEN RECEPTS	0.4	B	20/1	**3**	**B**	**4**		E	2.6		
KITCHEN RECEPTS	0.4	B	20/1	**5**	**A**	**6**	60/2	E	4.8	AHU	
RECEPTS - BR, STORAGE, AND CIRC.	1.1	B	20/1	**7**	**B**	**8**		E	4.8		
RECEPTS - EXT., VEST., AND CIRC.	0.9	B	20/1	**9**	**A**	**10**	30/2	H	2.3	WATER HEATER	
RECEPT TELE BACKBOARD	0.4	B	20/1	**11**	**B**	**12**		H	2.3		
LTG - CIRC., RRs, KIT.,MECH, VEST.	0.6	A	20/1	**13**	**A**	**14**	20/1	H	0.5	RECEPT - TV	
RECEPT & LTG OFFICE DIRECTOR	0.8	B	20/1	**15**	**B**	**16**	20/1	B	1.1	RECEPTS AND LTG CONF.	
RECEPT & LTG OFFICE	0.8	B	20/1	**17**	**A**	**18**	20/1	A	0.9	LTG - CONF.	
RECEPT & LTG OPEN OFFICE	0.8	B	20/1	**19**	**B**	**20**	20/1	H	1.5	COPY MACHINE	
RECEPT & LTG OFFICE	1.2	B	20/1	**21**	**A**	**22**	20/1	B	0.5	RECEPT - MECH RM	
			20/1	**23**	**B**	**24**					
				25	**A**	**26**					
				27	**B**	**28**					
				29	**A**	**30**					
				31	**B**	**32**					
				33	**A**	**34**					
				35	**B**	**36**					
				37	**A**	**38**					
				39	**B**	**40**					

PANEL LOAD ANALYSIS

Load Type	DESCRIPTION	Conn. KVA	Demand KVA	2020 NEC Reference	Load Type	DESCRIPTION	Conn. KVA	Demand KVA	2020 NEC Reference
A	Lighting	1.5	1.9	NEC Table 220.42	E	Heating	14.8	14.8	NEC Article 220.60
B	Receptacles	8.3	8.3	NEC Table 220.44	F	Largest Motor	0.0	0.0	NEC Article 440.7
C	Kitchen Equipment	1.5	1.0	NEC Table 220.56	G	Other Motors	0.0	0.0	NEC Article 440.7
D	Air-Conditioning	0.0	0.0	NEC Article 440.32	H	Other Loads	6.5	6.5	

Phase A Connected Load	17.0 KVA	**Notes:**	TOTAL CONNECTED LOAD	32.7 KVA	136.3 AMPS
Phase B Connected Load	15.7 KVA		TOTAL DEMAND LOAD	32.6 KVA	135.7 AMPS



1 E002 ELECTRICAL RISER DIAGRAM
NTS

NOTES:

1. COORDINATE WITH ELECTRICAL DEPARTMENT FOR METER BASE AND CONNECTION TO POWER SERVICE DROP.
2. INSTALLATION SHALL COMPLY WITH THE LATEST ADOPTED NEC AND APPLICABLE LOCAL CODES.
3. GROUNDING SHALL BE IN ACCORDANCE WITH ARTICLE 250 OF THE NEC. AS A MINIMUM PROVIDE 1#6AWG CU AND 10' COPPER CLAD GROUND ROD.
4. SEE CONDUCTOR AND CONDUIT SCHEDULE.

CONDUCTOR AND CONDUIT SCHEDULE

NO.	DESCRIPTION	VOLTAGE	PHASE	AMPS	MCA	MOCP	WATTS	QTY	CONNECTION TYPE	BREAKER	CONDUIT AND CONDUCTOR
1	SERVICE TO MAIN DISC	240/120	1	N/A	N/A	200	N/A	1	WEATHERHEAD & METER BASE	200/2	3-3/0 AWG THHW CU IN 1-1/2" CONDUIT
2	SERVICE TO PANEL	240/121	1	N/A	N/A	200	N/A	1	HARDWIRE	200/2	3-3/0 AWG AND 1#6 AWG GND THHW CU IN 2-1/2" CONDUIT
3	CU	240/120	1	21.9	27.3	40	5244	1	NEMA 3R 60A 250V 2P3W NF	40/2	3#8 AWG AND 1 #10AWG GND THHN CU IN 3/4 IN CONDUIT
4	AHU	240	1	40	50	60	9600	1	NEMA 1 60A 250V 2P3W NF	60/2	3#6 AWG AND 1 #10AWG GND THHN CU IN 3/4 IN CONDUIT
5	WATER HEATER	240	1	18.8	23.4	30	4500	1	NEMA 1 60A 250V 2P3W NF	30/2	3#10 AWG AND 1 #10AWG GND THHN CU IN 3/4 IN CONDUIT

LIGHT FIXTURE SCHEDULE (BASIS OF DESIGN)

MARK	MOUNTING TYPE	DESCRIPTION	NO OF LPS	TYPE LP	WATTS	BASIS OF DESIGN
A	SURFACE	2X2 SURFACE MOUNTED PANEL	1	LED	29	LITHONIA 2ACLX2 33L EZB LP835 N80
B	U\C	4 FOOT STRIP LED (Not Used)	1	LED	19.5	LITHONIA UCL 48IN 30K 90CRI WH
C	U\C	2 FOOT STRIP LED	1	LED	10.2	LITHONIA UCL 24IN 30K 90CRI WH
D	SURFACE	DISC LED FLUSHMOUNT 7IN DIMMABLE	1	LED	15.5	WAC LIGHTING LUMENS WACP160070 1010 LM 120V 90CRI 3000K WHITE
DX	SURFACE	DISC LED FLUSHMOUNT 5IN	1	LED	12.5	WAC LIGHTING LUMENS WACP160070 835LM 120V 90CRI 3000K WHITE
EMC	CEILING	CEILING MOUNTD EXIT LIGHT RED	1	LED	1	LITHONIA EXRG EL M6
EMX	WALL	COMBO UNIT EMERGENCY / EXIT RED	2	LED	2	LITHONIA ECRG RD M6
EM	WALL	EMERGENCY LIGHT	2	LED	0.33	LITHONIA EU2L M12 OR EQUAL
EM1	WALL	EMERGENCY LIGHT - EXTERIOR	1	LED	2.8	LITHONIA AFO DB MVOLT NSDCW OR EQUAL
W	WALL	EXTERIOR ENTRY LIGHT FIXTURE WITH PHOT CONTROL	1	LED	8	KENALL SENTINALL S711D P MW 8635K 120 BPC

NOTE: ALL FINISHES FOR LIGHTING SHALL BE SUBMITTED AND APPROVED BY OWNER/ ARCHITECT.
EQUALS ARE ACCEPTABLE WHEN APPROVED BY ARCHITECT / ENGINEER.

CONSTRUCTION DRAWING

GEORGETOWN PUBLIC WOKRS BUILDING

2 NORTH KAMINSKI STREET
GEORGETOWN, SC

ELECTRICAL RISER DIAGRAM AND SCHEDULES

REVISIONS		
MARK	DATE	DESCRIPTION
1	10SEP21	SPCL NOTES & 200 AMP MAIN

Project No.

Date Printed 9/10/2021

Date Issued 9/10/2021

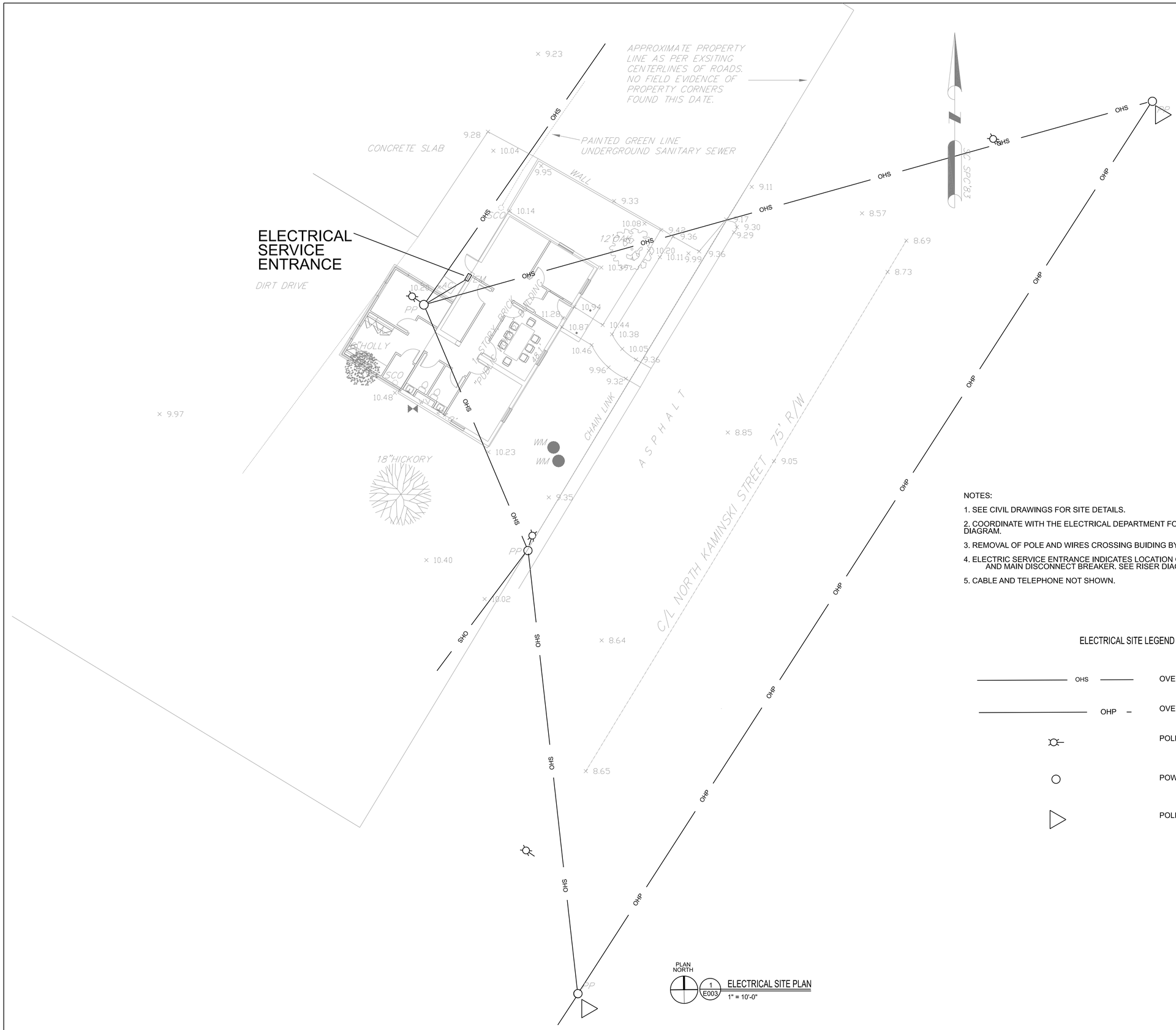
Designed By FDB

Checked by FDB

Approved by FDB

E002

ELECTRICAL RISER DIAGRAM AND SCHEDULES



PLAN NORTH

1 / E003 ELECTRICAL SITE PLAN

1" = 10'-0"

NOTES:

1. SEE CIVIL DRAWINGS FOR SITE DETAILS.
2. COORDINATE WITH THE ELECTRICAL DEPARTMENT FOR CONNECTION LOCATIONS. SEE RISER DIAGRAM.
3. REMOVAL OF POLE AND WIRES CROSSING BUIDING BY ELECTRIC DEPARTMENT.
4. ELECTRIC SERVICE ENTRANCE INDICATES LOCATION OF NEW WEATERHEAD, METER BASE, AND MAIN DISCONNECT BREAKER. SEE RISER DIAGRAM.
5. CABLE AND TELEPHONE NOT SHOWN.

ELECTRICAL SITE LEGEND

OHS	OVERHEAD SECONDARY OR SERVICE
OHP	OVERHEAD PRIMARY
	POLE MOUNTED LIGHT FIXTURE
	POWER POLE
	POLE MOUNTED TRANSFORMER(S)

DO NOT SCALE THE DRAWINGS. THE DESIGNER WILL NOT ACCEPT RESPONSIBILITY FOR CONSTRUCTION ERRORS DUE TO SCALING OF THE DRAWINGS. VERIFY ALL DIMENSIONS, FINISHES, SIZES, ETC. BEFORE BEGINNING CONSTRUCTION. IF DIMENSIONS OR DETAILS ARE OMITTED, INCORRECT, OR NOT CLEAR, THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION.

CONSTRUCTION DRAWING

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 35117 FREDERICK DEERLE BLACKBURN JR.

7/7/2021

GEORGETOWN PUBLIC WOKRS BUILDING

2 NORTH KAMINSKI STREET
GEORGETOWN, SC

ELECTRICAL NOTES, LEGEND, & ABBREVIATIONS

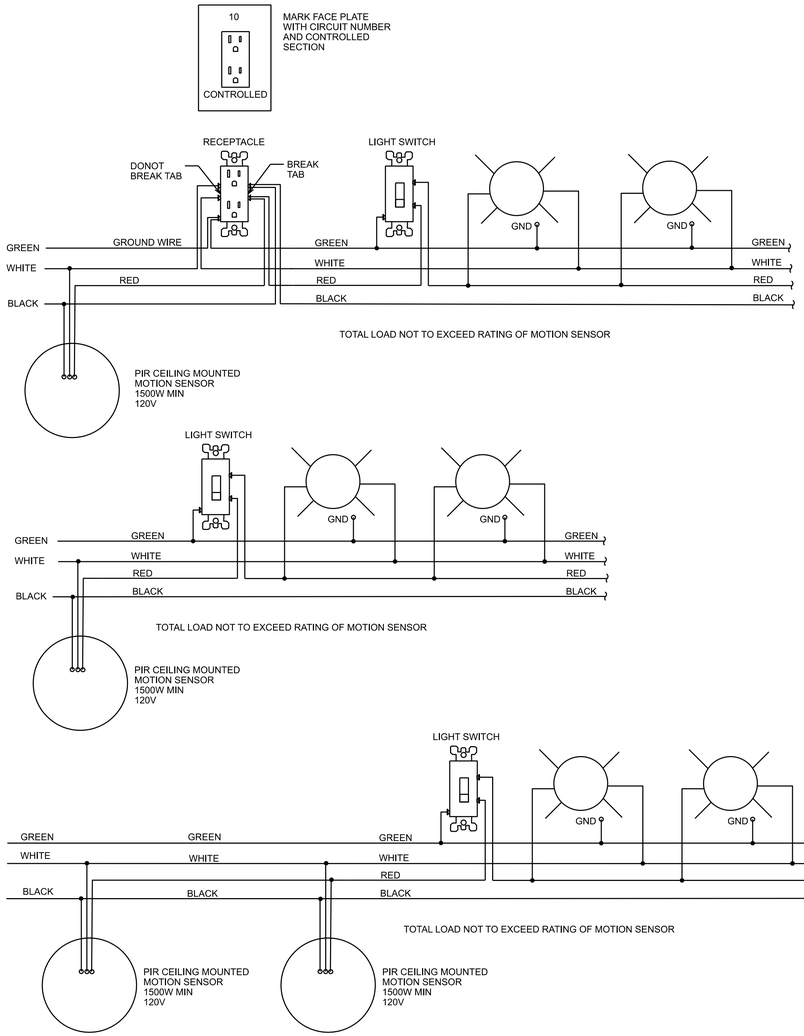
REVISIONS		
MARK	DATE	DESCRIPTION

Project No.	
Date Printed	7/7/2021
Date Issued	7/7/2021
Designed By	FDB
Checked by	FDB
Approved by	FDB

E003

ELECTRICAL SITE PLAN

E003 ELECTRICAL SITE PLAN.dgn



1 E004 ELECTRICAL WIRING DIAGRAMS

NTS

CONSTRUCTION DRAWING

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 35117 FREDERICK DEERLE BLACKBURN JR.

7/7/2021

GEORGETOWN PUBLIC WOKRS BUILDING

2 NORTH KAMINSKI STREET
GEORGETOWN, SC

ELECTRICAL RISER DIAGRAM AND SCHEDULES

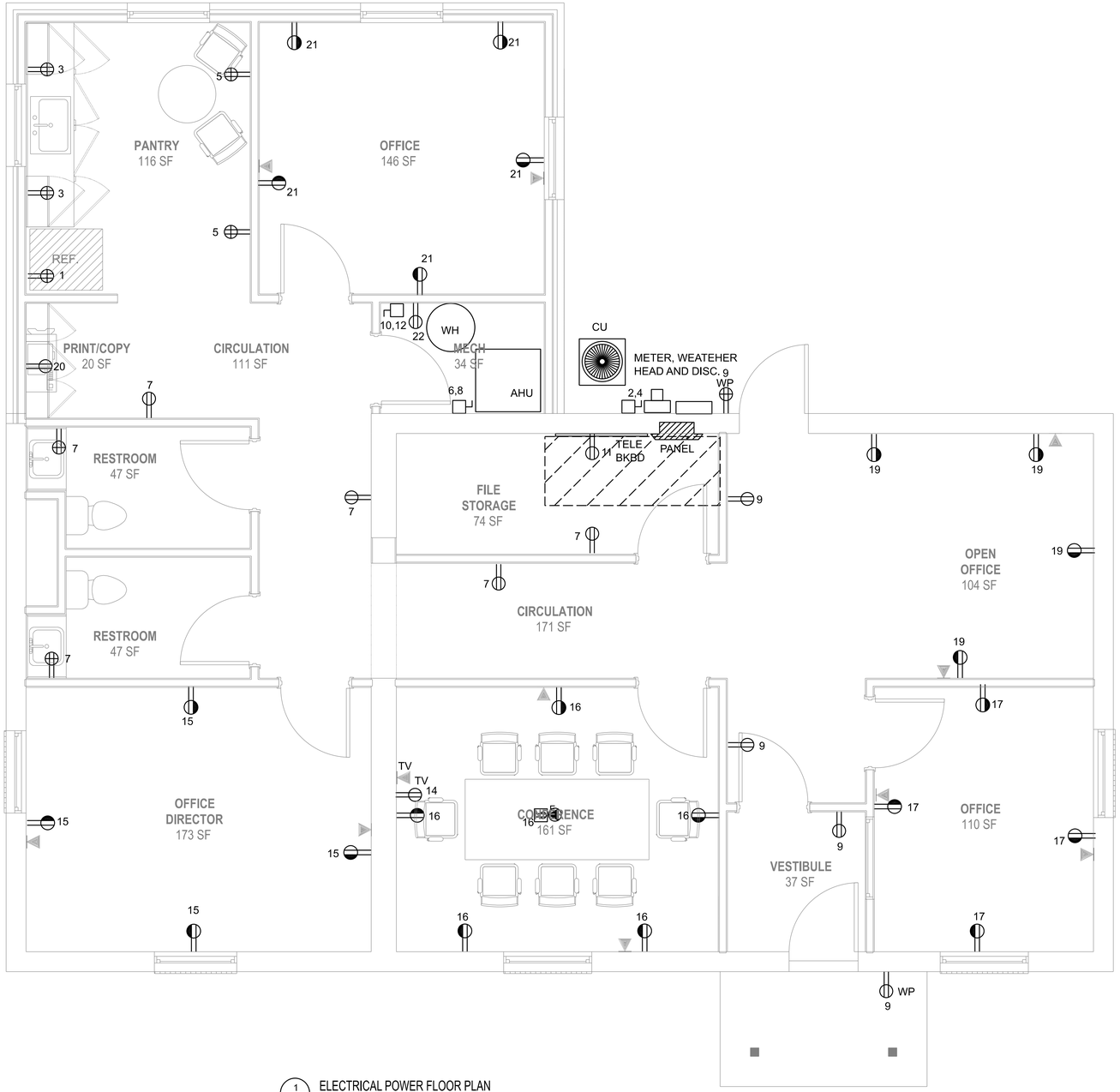
REVISIONS

MARK	DATE	DESCRIPTION

Project No.	
Date Printed	7/7/2021
Date Issued	7/7/2021
Designed By	FDB
Checked by	FDB
Approved by	FDB

E004

ELECTRICAL DETAILS



1 E100 ELECTRICAL POWER FLOOR PLAN
3/8" = 1'-0"

1. SEE WIRING DIAGRAM FOR SWITCH RECEPTACLES. RECEPTACLES, WHERE INDICATED TO BE CONTROLLED BY MOTION SENSOR.

2. PROVIDE EMPTY CONDUIT WILL PULL CHORD ONLY TO COM / DATA RECEPTACLES.

NOTE:
TOTAL NET SF = 1,449

CONSTRUCTION DRAWING

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER
No. 35117
FREDERICK DEERLE BLACKBURN JR.
7/7/2021

GEORGETOWN PUBLIC WOKRS BUILDING

2 NORTH KAMINSKI STREET
GEORGETOWN, SC

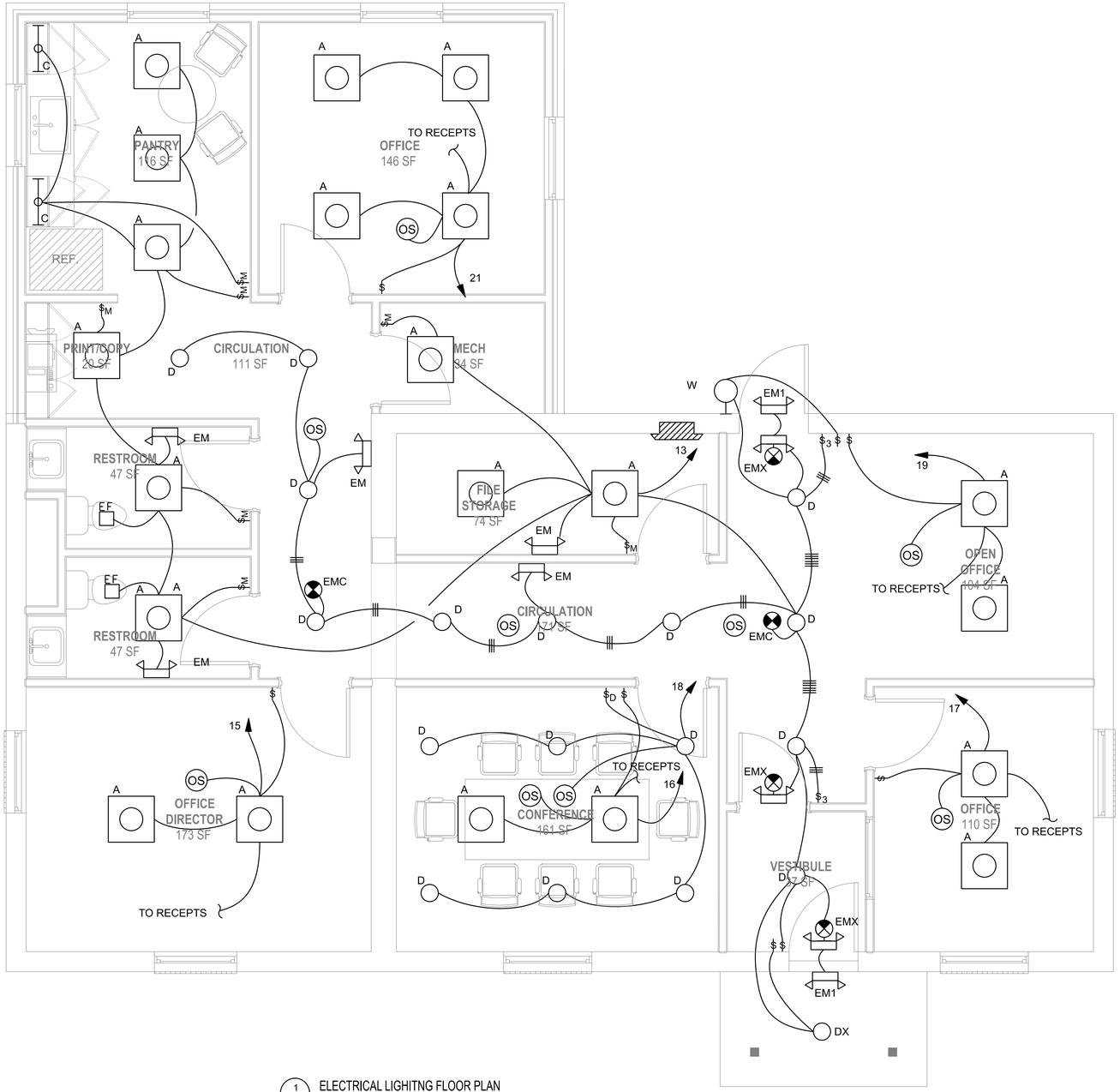
ELECTRICAL FIRST FLOOR POWER PLANS

REVISIONS		
MARK	DATE	DESCRIPTION

Project No.	
Date Printed	7/7/2021
Date Issued	7/7/2021
Designed By	FDB
Checked by	FDB
Approved by	FDB

E100

ELECTRICAL POWER FLOOR PLAN



1 E100 ELECTRICAL LIGHITNG FLOOR PLAN

3/8" = 1'-0"

1. EXHAUST FANS TO BE SWITCHED WITH LIGHTING INCLUDING CONTROL BY OCCUPANCY SENSOR.

N0TE:
TOTAL NET SF = 1,449

DO NOT SCALE THE DRAWINGS. THE DESIGNER WILL NOT ACCEPT RESPONSIBILITY FOR CONSTRUCTION ERRORS DUE TO SCALING OF THE DRAWINGS. VERIFY ALL DIMENSIONS, FINISHES, EQUIPMENT SIZES, ETC. BEFORE BEGINNING CONSTRUCTION. IF DIMENSIONS OR DETAILS ARE OMITTED, INCORRECT, OR NOT CLEAR, THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION.

CONSTRUCTION DRAWING

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER No. 35117 FREDERICK DEERLE BLACKBURN JR.

7/7/2021

GEORGETOWN PUBLIC WOKRS BUILDING

2 NORTH KAMINSKI STREET
GEORGETOWN, SC

ELECTRICAL FIRST FLOOR POWER PLANS

REVISIONS		
MARK	DATE	DESCRIPTION

Project No.	
Date Printed	7/7/2021
Date Issued	7/7/2021
Designed By	FDB
Checked by	FDB
Approved by	FDB

E200

ELECTRICAL LIGHITNG FLOOR PLAN

E200 ELECTRCAL LIGHTING FLOOR PLAN.dgn