

**SECTION 03 00 00
CONCRETE**

PART 1 - GENERAL

- 1.1 Scope of work includes furnishing all labor, materials, and equipment required for the installation of concrete slabs, foundations, and walks as described in the documents.
- 1.2 See also the structural engineering specifications, which supersede these specifications with respect to the structural aspects of any concrete work. Notify the owner and architect if such discrepancies exist.
- 1.3 Provide submittals or shop drawings to ensure the materials meet the required quality standards associated with each product.

PART 2 - PRODUCTS

- 2.1 Cast-in-Place concrete shall comply with ACI 301-R75, "specifications for structural concrete for building". Cast-in-Place concrete shall be minimum 3000 psi at 28 days. Concrete slump shall be between 3 and 5 inches.
- 2.2 Reinforcement Bars- See structural engineering drawings for steel reinforcement specifications.
- 2.3 Fabric/Fibrous Slab Reinforcement- See also structural engineering drawings for fabric/fibrous slab reinforcement specifications. At minimum, welded wire fabric (WWF) shall be W6"x9"xW1.4x1.4 steel, placed in the bottom 1/3 of the slab depth. **OPTION:** Fibrous reinforcement shall be equal to Propex "Fibermesh 650" synthetic fiber reinforcement system. Install all products per the manufacturer's instructions.
- 2.4 Vapor Barrier- Provide minimum 6 mil sheet vapor barrier (0.1 perm rating) under all interior floor slabs. Provide tape for lap joints, grade 485 pressure sensitive tape, or approved equal.
- 2.5 Concrete testing shall be performed by an independent testing agency and paid for by the Contractor. Extent of testing shall be as recommended by the testing agency. Tests shall include but not limited to cylinder break test, slump and temperature. No water shall be added after initial mixing at batch plant. Copies of all test reports shall be furnished to the Contractor, Architect, and Owner.

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Concrete
03 00 00

**SECTION 04 00 00
MASONRY**

PART 1 - GENERAL

- 1.1 Scope of work includes furnishing all labor, materials, and equipment required for the installation of concrete unit masonry, and stone veneer as described in the documents.
- 1.2 See also the structural engineering specifications related to concrete unit masonry, which supersede these specifications. Notify the owner and architect if such discrepancies exist.
- 1.3 Provide submittals or shop drawings to ensure the materials meet the required quality standards associated with each product.
- 1.4 Conduct performance tests as required. This includes, but is not limited to ASTM C 270.

PART 2 - PRODUCTS

- 2.1 Concrete Masonry Units- Provide hollow, load-bearing concrete masonry units (CMU) in standardized sizes as described by ASTM C 90. Manufactured units will be grade N, with a compressive strength of 1,900psi.
- 2.2 Reinforcement Bars- See structural engineering drawings for steel reinforcement specifications.
- 2.3 Mortar- Provide mortar products that comply with ASTM C 270 or ASTM C 1142 standards, depending on the mixing conditions. Products include, but are not limited to: Portland cement (ASTM C 150), hydrated lime (ASTM C 207), aggregate (ASTM C 144), and clean potable water.
- 2.4 Ties and Anchors- Provide steel masonry ties or anchors as required for the final selection of stone veneer (if applicable).
- 2.5 Stone Veneer- There are two (2) options for the stone veneer:
 - A Natural Stone- Grey Elberton granite with fine grain, grade 2-3 from Elberton, Georgia area. Provide mortar materials, anchors, and accessories as described in section 04 43 00 of the specifications. Stone and detailing to match site applications.

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Masonry
04 00 00

**SECTION 05 00 00
METALS**

PART 1 - GENERAL

- 1.1 Scope of work includes furnishing all labor, materials, and equipment required for the installation of all structural and miscellaneous steel. The contractor shall also coordinate with other trades as necessary for the installation of other systems, such as timber framing. All materials and details shall comply with AISC standards.
- 1.2 Refer to the structural engineering drawings and specifications, which supersede these specifications. Notify the owner and architect if such discrepancies exist.
- 1.3 Provide shop drawings and steel reports to ensure the materials meet the required quality standards associated with each product.

PART 2 - PRODUCTS

- 2.1 Structural Steel- All materials must be new, clean, and free of rust or scale. Conform to the current ASTM references in the AISC specifications. Those include, but are not limited to:
 - A. Steel columns, etc. ASTM A-36
 - B. Bolts ASTM A-325 or A-490
- 2.2 Miscellaneous Steel- Metal fabrications such as railings, angles, clips, anchors and welding shall comply with the provisions of AISC "Specifications for the Design Fabrication and Erection of Steel for Buildings" the American Welding Society (AWS) Standard D1.1-86.
- 2.3 Grout- Provide non-metallic, shrink resistant grout complying with CRD-C-621, CRD-C-588

PART 3 - EXECUTION

- 3.1 Design and fabrication of structural and miscellaneous steel shall follow AISC specifications in general.
- 3.2 All fabrications shall receive a mill finish.
- 3.3 Furnish and install bolts, plates, gusset plates, and other connections as shown or detailed or as required to support the ultimate load per AISC.
- 3.4 Welding- Perform all welded connections in accordance with the Code of Arc and Gas

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Metals
05 00 00

**SECTION 06 00 00
WOOD, PLASTICS, AND COMPOSITES**

PART 1 - GENERAL

- 1.1 Scope of work includes furnishing all labor, materials, and equipment required for the installation of all wood, plastic, and composite materials and products as described in the drawings.
- 1.2 Where those products are in a structural capacity, refer to the structural engineering drawings and specifications, which supersede these specifications. Notify the owner and architect if such discrepancies exist.
- 1.3 Provide shop drawings and submittals to ensure the materials meet the required quality standards associated with each product.
- 1.4 Deliver and store all products and materials in a manner which prevents damage to the products. Verify suitable conditions exist for the installation of all products. Follow manufacturer's recommendations for installation.

PART 2 - PRODUCTS

- 2.1 Plywood and Sheathing- All products shall comply with the American Plywood Association (APA) PS-1-83. Refer to the structural specifications for details related to the products required in a structural condition.
- 2.2 Wood Framing- Provide lumber for blocking, framing, bearing, and other conditions as described in the drawings. Any lumber in contact with masonry shall be preservative (pressure) treated, meeting the AWPA PS and C2 or C9 standards for above ground use. Lumber not in contact with masonry or exposed conditions shall be utility grade #2 or better Southern Pine. Refer to the structural specifications for details related to products in a structural condition.
- 2.3 Heavy Timber Framing- Provide solid wood timber in sizes and shapes as indicated in the drawings. All members shall be Eastern White Pine (or approved alternative species), planed smooth, with chamfered edges. Grade shall be no. 1, kiln-dried. Final engineering shall be performed by the timber fabricator, or it's engineer. Fastening method is to be determined, and shall be one of the following:
 - A. Steel plate connectors with bolt fasteners (ASTM 446 grade A)
 - B. Mortise and tenon joinery

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Wood, Plastics, and Composites
06 00 00

- 2.4 Wood Trusses- Provide pre-fabricated wood trusses as described in the drawings. Refer to the structural specifications for performance standards.

PART 3 - EXECUTION

- 3.1 Verify that suitable conditions exist for the proper installation of all products. All surfaces shall be clean, free of debris, and prepared as required.
- 3.2 Layout, cut, fabricate, fit, and securely install all wood, plastic and composite products as described in the drawings. Install all products within the acceptable limits of their applicable standards.
- 3.3 Anchorage- Fasten and secure all products as described in these and the structural drawings and specifications, to derive the appropriate connection. Ensure proper alignment or contact for the anchorage condition.
- 3.4 Protect all installed products as required after their installation. Any damaged products shall be replaced.

END OF SECTION

END OF SECTION

PART 3 - EXECUTION

- 3.1 Preparation- Verify that the conditions of the site are suitable for placement of concrete. Correct any deficiencies prior to placement.
- 3.2 Reinforcing- Install all reinforcement bars, fabrications, and meshes according to the drawings. Shop form all pieces to dimension as described in the drawings. Coordinate the installation of masonry reinforcement with the requirements for concrete as described in section 03 00 00. Provide ties and fasteners as required to secure placement of reinforcing.
- 3.3 Installation- Follow referenced standards for installation of all materials. Cut and tool masonry products to ensure clean, sharp, unchipped edges. Comply with the tolerances of referenced masonry standards.
- 3.4 CMU Walls- Lay out walls in advance to ensure accurate position, spacing, even joints, and locations of openings. Use no less than half-units at corners and jambs. Coursing shall be laid out in a running bond pattern. Fill cells not framed as required for reinforcement and opening locations.
- 3.5 Mortar Bedding- Provide mortar joints and beds in nominal 3/8" (inch) thickness. All joints to be smooth concave, so as to resist water intrusion. Keep cavity above and air spaces free of mortar droppings during construction.
- 3.6 Lintels- Provide metal plate reinforcement at all openings. Minimum 8" (inches) of bearing on both ends of the lintel.
- 3.7 Flashing- Coordinate installation of flashing products with the installation of masonry products as required. Prepare masonry surfaces for the installation of flashing to ensure proper installation.
- 3.8 Stone Veneer- Refer to the execution details described in section 04 43 00 of the specifications. If synthetic stone, follow the manufacturer's recommendations and requirements.
- 3.9 Cleaning and Repairing- Replace any broken or loose units. Re-point mortar joints and fill any voids to a smooth finish if required. Once mortar is thoroughly set and cured, remove any large particles or droppings. Rinse walls and surfaces with an appropriate cleaner and water.

END OF SECTION

PART 3 - EXECUTION

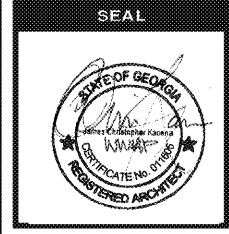
- 3.1 Preparation- Verify that the conditions of the site are suitable for placement of concrete. Correct any deficiencies prior to placement.
- 3.2 Reinforcing- Install all reinforcement bars, fabrications, and meshes according to the drawings. Shop form all pieces to dimension as described in the drawings. Provide ties and fasteners as required to secure placement of reinforcing.
- 3.3 Formwork- Construct all forms in the shapes, sizes, and dimensions as described in the drawings. Forms shall be constructed of plywood and dimensional lumber, in accordance with ACI 347 standards. Surfaces shall be clean and uniform prior to the placement of any concrete.
- 3.4 Vapor Barrier Installation- Coordinate placement vapor barrier so as to minimize potential damage to the product. Install over gravel base with 6" lap joints. Secure joints with tape. Repair any punctures or damage to the surface prior to concrete placement.
- 3.5 Concrete Placement- Install all concrete according to ACI 304 standards.
- 3.6 Concrete Finishing- All interior floor slabs shall receive a smooth brotowed finish.
- 3.7 Form Removal- All formwork not supporting the weight of concrete may be removed after a minimum of 24 hours of curing (minimum 50 degrees Fahrenheit), and the concrete has hardened sufficiently so that no damage will be caused by removal of the forms. Cut all form ties, exposed wires, etc. flush with the surface of the concrete.

END OF SECTION

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LOCATION

**WINDWOOD HOLLOW PARK
 RESTROOM ADDITION**
 4865 LAKESIDE DRIVE
 DUNWOODY, GA 30360

SHEET TITLE

SPECS

DRAWN: _____
 CHECKED: _____
 SCALE: _____

DATE PRINTED

3/28/2016

REV.	DATE	REMARKS
2	07/16/18	PERMIT COMMENTS

SHEET NUMBER

A4.1

OF SHEETS

Order Plans

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