



ADDENDUM NO. 4 A NEW BUILDING REPLACEMENT FOR: FINKLEA FIRE STATION #6

HORRY COUNTY, SOUTH CAROLINA HORRY COUNTY PROJECT NUMBER 2023-24-091 PMH PROJECT NO. 24002 May 8, 2025

NOTE: ADDENDUM NO. 4 HAS BEEN SENT TO GENERAL CONTRACTORS ONLY. GENERAL CONTRACTORS ARE RESPONSIBLE FOR COMMUNICATION OF THE ITEMS CONTAINED WITHIN THIS ADDENDUM TO APPROPRIATE SUB-CONTRACTORS.

THIS ADDENDUM CONTAINS:

- ONE (1) PAGE OF WRITTEN ADDENDUM
- TWELVE (12) PAGES OF SPECIFICATIONS

CORRECTION TO ITEMS IN ADDENDA #3 DATED May 7, 2025

- Contractor's attention is directed to Item #1 under "CLARIFICATIONS". Contractor is advised, the deadline for Pre-Approved Equals is MONDAY, May 19, 2025 at 2:00 PM local time and the deadline for Questions is WEDNESDAY, May 21, 2025 at 2:00 PM local time.
- 2. Contractor's attention is directed to Item #2 under "CLARIFICATIONS". Contractor is advised the Fill Placement for Surcharging was completed April 16, 2025 and the 30 day waiting period will be complete on Friday, May 16, 2025.
- 3. Contractor's attention is directed to A1 under "QUESTIONS AND ANSWERS". Contractor is advised to see Irrigation Specifications (attached herewith) consisting of 5 pages and also Landscaping Notes found on Drawing Sheet C7.1 Landscaping Plan already contained in the set of Drawings.
- 4. Contractor's attention is directed to PRE-BID AGENDA, Item VIII, B., 1. Contractor is advised to omit "Thursday" and replace with "MONDAY".
- 5. Contractor's attention is directed to PRE-BID AGENDA, Item VIII, C., 1. Contractor is advised to omit "Monday" and replace with "WEDNESDAY".

SPECIFICATIONS

1. COVER PAGE

A. Contractor's attention is directed to the cover page for Questions Acceptance Deadline. Contractor is advised to omit May 12, 202 and replace with May 21, 2025.

2. SECTION 02441 - IRRIGATION SYSTEM

A. Contractor's attention is directed to SECTION 02441 – IRRIGATION SYSTEM. Contractor is advised to omit the Section that was issued with Addenda #3 and insert this Section in its entirety (attached herewith) consisting of 5 pages into the Project Manual.

3. SECTION 03300 - CAST-IN-PLACE CONCRETE

A. Contractor's attention is directed to SECTION 03300 – CAST-IN-PLACE CONCRETE. Contractor is advised to insert this Section in its entirety (attached herewith) consisting of 7 pages into the Project Manual.

END OF ADDENDUM NO. 4

SECTION 02441 - IRRIGATION SYSTEM

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 DESCRIPTION

- A. Work Included: Provide irrigation system as designed by manufacturer and approved by the Architect and as specified herein, complete in place, tested and approved, including but not limited to:
 - 1. Standard area sprinkler system.
 - 2. Automatic controllers and remote control valves.

1.3 RELATED WORK

- A. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 in these Specifications.
- B. Section 02930 "Exterior Plants".

1.4 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work in this Section.
- B. Irrigation system installer shall be responsible for irrigation system design and layout as required for maintaining exterior planting as specified in Section 02930 Exterior Plants

1.5 SUBMITTALS

- A. Product Data: Within 21 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:
 - 1. Material list of items proposed to be provided under this Section,
 - 2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements.
 - 3. Manufacturer's recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the Work.
 - 4. Refer also to Item 3.7, Instructions.
 - 5. Irrigation system shop drawings for piping plan layout shall be submitted to Architect for review and approval. Refer to Section 01300 "Submittals".

PART 2 - PRODUCTS

2.1 PIPE

A. Galvanized Steel Pipe:

- Comply with ASTM A120 or ASTM A53, galvanized, Schedule 40, threaded, coupled and hotdip galvanized.
- 2. Fittings: Use 150-lb. rated galvanized malleable iron, banded pattern.

B. Plastic Pipe:

- 1. Use PR-160 PVC, marked 1120-1220, and bearing the seal of the National Sanitation Foundation.
- 2. Fittings: Use PR-160 PVC, type I-II, bearing the seal of the National Sanitation Foundation, and complying with ASTM D2466.
- 3. For joining, use a solvent complying with ASTM D2466 and recommended by the manufacturer of the approved pipe.
- 4. Plastic Pipe Identification: Continuously and permanently mark with manufacturer's name, pipe size, schedule number, type of material, and code number.

2.2 VALVES

A. Gate Valve:

- 1. Provide 125-lb. rated valve size required for the line as with "O" ring and operating nut, adaptable to the pipe with AC adapters.
- 2. Acceptable Manufacturers:
 - a. Hammond.
 - b. Harvard.
 - c. Approved substitution.

B. Quick Coupling Valves:

- 1. Provide ³/₄" and 1", one-piece construction, all brass, locked top, to fit double lug couplers.
- 2. Deliver to the Owner the following items, all matching the approved quick coupling valve:
 - a. Four keys for locked top.
 - b. Four couplers.
 - c. Four hose adapters.
- 3. Use triple elbow swing joints on all quick coupling valves.

2.3 SPRINKLER HEADS

- A. Provide the sprinkler heads by the approved design.
- B. Layout of heads shall result in complete overlap of all zones.
- C. Provide drip coverage for all trees.
- D. Provide misting heads for all shrubbery planting.
- E. Provide rotary heads for all sod areas.

2.4 VACUUM BREAKER

A. Provide vacuum breaker as may be required by the approved design.

2.5 AUTOMATIC IRRIGATION CONTROLLER

- A. Provide 117 V input, 26.5 output, with the required number of valve stations and in type and model number as shown on the approved design.
 - 1. Acceptable Manufacturers:
 - a. Toro.
 - b. Or approved equivalent.
 - 2. Coordinate and verify Architect's approval of final location for controller unit.

2.6 REMOTE CONTROL VALVES

A. Use valves of the same manufacturer as the approved automatic irrigation controller, slow opening and slow closing, globe pattern, 24 V, with epoxy sealed solenoid coils and throttling system.

2.7 VALVE BOXES

- A. Provided molded plastic boxes and covers for each valve in the system. Covers to be green in color with a snap lock security device and the words "water" and/or "control valve" molded into the top. Covers to be installed flush with surface of surrounding grade.
- B. Acceptable Manufacturers:
 - 2. Ametek.
 - 3. Christy Products.
 - 4. Brooks.
 - 5. Or Approved Equivalent.

2.8 OTHER MATERIALS

- A. Electrical service and final connections as required to provide a complete and proper installation. Make connection at available locations within the new building.
- B. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 FIELD MEASUREMENTS

A. Make necessary measurements in the field to ensure precise fit of items in accordance with the approved design.

3.3 TRENCHING AND BACKFILLING

A. Trench, backfill and compact in accordance with pertinent provisions of Sections 02200 "Backfilling" and 02300 "Trenching".

3.4 INSTALLATION OF PIPING

- A. General.
 - 1. Lay out the piping system in accordance with the approved design.
- B. Piping Depth: Install piping with at least the following amount of cover:

Main or Trunk Lines: 12" Lateral Lines: 8"

- C. Inspection of Materials: Carefully inspect pipe and fittings before installation, removing all dirt, scale and burrs; and reaming as required. Install pipe with markings up for visual inspection.
- D. Plastic Pipe:
 - 1. Exercise care in handling, loading, unloading and storing plastic pipe and fittings:
 - a. Store under cover until ready to install.
 - b. Transport only on a vehicle with a bed long enough to allow the pipe to lay flat to avoid undue bending and concentrated external load.
 - 2. Repair dented and damaged pipe by cutting out and discarding the dented or damaged section, and rejoining with a coupling.
 - 3. In jointing, use only the specified solvent and make joints in accordance with the manufacturer's recommendations as approved by the Architect.
 - a. Give solvent welds at least 15 minutes set time before moving or handling, and 24 hours curing time before filling with water.
 - 4. Centerload plastic pipe with a small amount of backfill to prevent arching and whipping under pressure.
 - 5. For Plastic-To-Steel Connections:
 - a. Work the steel connections first.
 - b. Use a Teflon tape pipe dope on threaded plastic-to-steel connection.
 - c. Use only a light wrench pressure.

3.5 INSTALLATION OF EQUIPMENT

- A. Install control valves in accordance with the manufacturer's recommendations as approved by the Architect.
- B. Turf Sprinkler Heads.
 - 1. Install in accordance with the manufacturer's recommendations as approved by the Architect.
- C. Vacuum Breaker: Install as required in accordance with all pertinent codes, regulations, and the manufacturer's recommendations as approved by the Architect.
- D. Wiring: Control valve wiring to be placed in the trench adjacent to the piping and not beneath piping. Provide adequate slack in wiring to prevent stretching or stress to connections. Any necessary splices are to be made with DBY Splice Kit sealing pack or equivalent.

3.6 TESTING AND INSPECTING

- A. Do not allow or cause any of the work in this Section to be covered up or enclosed until it has been inspected, testing and approved by the Architect.
- B. Before backfilling the main line, and with control valves in place but before lateral pipes are connected, completely flush and test the main line.
 - 1. Repair leaks.
 - 2. Flush out each section of lateral pipe before sprinkler heads are attached.

C. Testing:

- 1. Make necessary provisions for thoroughly bleeding the line of air and debris.
- 2. Before testing, fill the line with water for a period of at least 24 hours.
- 3. After valves have been installed, test live water lines for leaks at a normal operating pressure for a period of one hour, with couplings exposed and with pipe sections centerloaded.
- 4. Provide required testing equipment and personnel.
- 5. Repair leaks, and retest until acceptance by the Architect.

D. Final Inspection:

- 1. Clean, adjust and balance all systems. Verify that:
 - a. Remote control valves are properly balanced.
 - b. Heads are properly adjusted for radius and arc of coverage.
 - c. The installed system is workable, clean and efficient.

3.7 INSTRUCTIONS

- A. Print legibly with indelible ink the legend inside each controller door, stating the areas covered by each remote control valve and each station number.
- B. After the system has been completed, inspected and approved, instruct the Owner's maintenance personnel in the operation and maintenance of the system.
- C. Prepare and submit two sets of record drawings to the Owner clearly showing the location of the valves and the valve/station numbers. Locate valves with at least two dimensions from a permanent feature, i.e. building, curb, walk and fence.
- D. Perform one full system winterization shut-down and one full system spring start-up and instruct the Owner of the appropriate procedures and back-up with a written copy for the Owner's files. It is imperative that concise step-by-step procedures be recorded.

END OF SECTION 02441

SECTION 03300 - CAST-IN-PLACE CONCRETE

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies cast-in-place concrete, including reinforcement, concrete materials, mix design, placement procedures, and finishes.
- B. Related Sections include the following:
 - 1. Division 2 for drainage fill under slabs-on-grade.

1.3 SUBMITTALS

- A. General: In addition to the following, comply with submittal requirements in ACI 301.
- B. Product Data: For each type of manufactured material and product indicated.
- C. Design Mixes: For each concrete mix.
- D. Shop Drawings: For steel reinforcement

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed concrete work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
- C. Source Limitations: Obtain each type of cement of the same brand from the same manufacturer's plant, each aggregate from one source, and each admixture from the same manufacturer.
- D. Comply with ACI 301, "Specification for Structural Concrete," including the following, unless modified by the requirements of the Contract Documents.
 - 1. General requirements, including submittals, quality assurance, acceptance of structure, and protection of in-place concrete.
 - 2. Formwork and form accessories.
 - 3. Steel reinforcement and supports.
 - 4. Concrete mixtures.
 - 5. Handling, placing, and constructing concrete.
- E. Pre-Installation Conference: Conduct conference at Project site. Refer to Specification Section 01200 "Project Meetings".

PART 2 - PRODUCTS

2.1 FORMWORK

- A. Furnish formwork and form accessories according to ACI 301.
 - 1. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 - 2. 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.
 - 3. Truck Bay Finish Concrete: Provide 'QuickKey' Metal Keyed Control Joints by "BoMetals", Inc. or approved equal. Provide dowel keys as recommended by structural engineer between each separate section of concrete slab area. Control joint system to be provided at the intersection where the slope of the slab changes direction in the truck bay areas where indicated on plans. Joints shall be the full depth of the specified slab thickness and slab fabric reinforcing shall terminate on each side of the joint system, typical.

2.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
- B. Plain-Steel Wire: ASTM A 82, as drawn.
- C. Plain-Steel Welded Wire Fabric: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.
- D. Deformed-Steel Welded Wire Fabric: ASTM A 497, flat sheet.
- E. 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."

2.3 CONCRETE MATERIALS

- A. Portland Cement: ASTM C 150, Type I or III. Only one brand of cement shall be used throughout project.
- B. Normal-Weight Aggregate: ASTM C 33, uniformly graded, not exceeding 1-1/2-inch nominal size, class designation 2M.
- C. Lightweight Aggregate: ASTM C 330.
- D. Water: Potable and complying with ASTM C 94.
- E. Synthetic Fiber: Fibrillated or monofilament polypropylene fibers engineered and designed for use in concrete, complying with ASTM C 1116, Type III, 1/2 to 1 inch long.

2.4 ADMIXTURES

- A. General: Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cement and to be compatible with other admixtures. Do not use admixtures containing calcium chloride.
- B. Air-Entraining Admixture: ASTM C 260.

- C. Water-Reducing Admixture: ASTM C 494, Type A.
- D. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
- E. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.
- F. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.

2.5 RELATED MATERIALS

- A. Vapor Retarder: Multi-ply reinforced polyethylene sheet, ASTM E 1745, Class C, not less than 15 mils thick minimum by a company that manufactures vapor retarders/barriers, I.E.: Stego Industries Reef Industries, Viper, or approved equivalent. Provide membrane taping to seal between all membrane sections and to foundations as recommended by Vapor Retarder manufacturer provided. Also provide pointing mastic as recommended by Vapor Retarder manufacturer for all vertical pipe and conduit penetrations. Minimize opening sizes for penetrations to limit amount of mastic required to fully seal around penetrations.
- B. Clean Granular Drainage Material: #57 Stone Granite.
- C. Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.

2.6 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz. / sq. yd. dry.
- C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- D. Water: Potable.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
- F. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

2.7 CONCRETE MIXES

- A. Comply with ACI 301 requirements for concrete mixtures.
- B. Prepare design mixes, proportioned according to ACI 301, for normal-weight concrete determined by either laboratory trial mix or field test data bases, as follows:
 - 1. Compressive Strength (28 Days): As noted on drawings.
 - 2. Slump: 4 inches (+ / 1"). Without plasticizer.
 - a. Slump Limit for Concrete Containing High-Range Water-Reducing Admixture: Not more than 8 inches after adding admixture to plant- or site-verified, 2- to 3-inch slump.

- C. Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content of 2.5 to 4.5 percent.
 - 1. Air content of trowel-finished interior concrete floors shall not exceed 3.0 percent.
- D. Synthetic Fiber: Uniformly disperse in concrete mix at manufacturer's recommended rate, but not less than 1.0 lb. / cu. yd.

2.8 CONCRETE MIXING

- A. Ready-Mixed Concrete: Comply with ASTM C 94, and furnish batch ticket information
 - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 FORMWORK

A. Design, construct, erect, shore, brace, and maintain formwork according to ACI 301.

3.2 VAPOR RETARDER

- A. Install, protect, and repair vapor-retarder sheets according to ASTM E 1643 and as recommended by manufacturer; place sheets in position with longest dimension parallel with direction of pour.
- B. Lap joints 6 inches and seal with Manufacturer's recommended tape.

3.3 STEEL REINFORCEMENT

- A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
 - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

3.4 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Locate and install so as not to impair strength or appearance of concrete, at locations indicated or as approved by Architect. Verify final joint locations with Architect prior to installation.
 - Extend joint fillers full width and depth of joint, terminating flush with finished concrete surface, unless otherwise indicated.
- C. Contraction (Control) Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-third of the concrete thickness, or 1" whichever is greater, as follows:
 - 1. Sawed Joints: Cut 1/8-inch wide joints into concrete when cutting action will not tear, abrade,

or otherwise damage surface and before concrete develops random contraction cracks.

3.5 CONCRETE PLACEMENT

- A. Comply with recommendations in ACI 304R for measuring, mixing, transporting, and placing concrete.
- B. Do not add water to concrete during delivery, at Project site, or during placement.
- C. Consolidate concrete with mechanical vibrating equipment.

3.6 FINISHING FORMED SURFACES

- A. See Architectural drawings for type and location of finishes.
- B. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defective areas repaired and patched, and fins and other projections exceeding 1/4 inch in height rubbed down or chipped off.
 - 1. Apply to concrete surfaces not exposed to public view.
- C. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defective areas. Completely remove fins and other projections.
 - 1. Apply to concrete surfaces exposed to public view or to be covered with a coating or covering material applied directly to concrete, such as waterproofing, dampproofing, veneer plaster, or painting.
 - 2. Do not apply rubbed finish to smooth-formed finish.
 - 3. Apply the following rubbed finish, defined in ACI 301, to smooth-formed finished concrete.
 - a. Smooth-rubbed finish.
 - b. Grout-cleaned finish.
 - c. Cork-floated finish.
- D. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

3.7 FINISHING UNFORMED SURFACES

- A. General: Comply with ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Screed surfaces with a straightedge and strike off. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane before excess moisture or bleedwater appears on the surface.
 - 1. Do not further disturb surfaces before starting finishing operations.
- C. Float Finish: Apply float finish to surfaces indicated, to surfaces to receive trowel finish, and to floor and slab surfaces to be covered with fluid-applied or sheet waterproofing, built-up or membrane roofing, or sand-bed terrazzo.

- D. Trowel Finish: Apply a hard trowel finish to surfaces indicated and to floor and slab surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin film-finish coating system.
- E. Trowel and Fine-Broom Finish: Apply a partial trowel finish, stopping after second troweling, to surfaces indicated and to surfaces where ceramic or quarry tile is to be installed by either thickset or thin-set methods. Immediately after second troweling, and when concrete is still plastic, slightly scarify surface with a fine broom.
- F. Nonslip Broom Finish: Apply a nonslip broom finish to surfaces indicated and to exterior concrete platforms, steps, and ramps. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route.

3.8 TOLERANCES

- A. Comply with ACI 117, "Specifications for Tolerances for Concrete Construction and Materials".
- B. Finish and measure surface so gap at any point between concrete surface and an unleveled freestanding 10-foot-long straightedge, resting on two high spots and placed anywhere on the surface does not exceed the following:
 - 1. 1/8 inch.

3.9 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection, and follow recommendations in ACI 305R for hot-weather protection during curing.
- B. Protection cover: Provide ¾" minimum thickness plywood sheets (or approved similar material able to withstand construction traffic abuse), over all concrete surfaces in Truck Bay areas and maintain and replace as needed until floor finish application.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- D. Begin curing after finishing concrete, but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure formed and unformed concrete for at least seven days by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair any holes or tears

- during curing period using cover material and waterproof tape.
- 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified independent testing and inspecting agency to sample materials, perform tests, and submit test reports during concrete placement according to requirements specified in this Article. Perform tests according to ACI 301.
 - 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mix, plus one set for each additional 50 cu. yd. or fraction thereof.

3.11 REPAIRS

A. Remove and replace concrete that does not comply with requirements in this Section.

END OF SECTION 03300