This section specifies the general requirements and responsibilities of the parties for inspection on the project. The Contract Documents call for the Design Builder to create a Quality Control Plan that will outline the requirements for testing and inspection for the Work, to assure the Work is done within the quality and requirements of the Contract Documents. See the Scope of Work for the delineation of testing and inspection responsibilities, including payment.

SECTION 01 44 00 QUALITY CONTROL

PART 1 - GENERAL

1.1 QUALITY CONTROL PLAN

A. The Quality Control Plan shall address the procedures and methods the Design Builder will utilize to control the quality of Work. At a minimum the Quality Control Plan shall include:

1. An organizational structure description, including Quality Control supervision and inspection reporting structure. Delineate personnel training and qualification activities.

2. Plans and procedures for testing and inspections to verify attributes delineated in the Contract Documents, including those specified in invoked codes and standards. Include documents that identify individual inspection or testing points and acceptance criteria, and include provisions for recording results and the responsible inspection/test personnel. This documentation shall be traceable to the particular material, items, processes, or systems evaluated. Testing procedures shall also provide for University provided laboratory testing, including notification requirements.

3. Procedures for identifying and contractually invoking the applicable technical and quality requirements delineated in the specifications on vendors supplying materials, parts and services within the scope of this Agreement.

4. Plans and procedures for receiving, inspecting, and accepting material and items; These shall include examination of physical condition and compliance to purchasing requirements, including markings for class type and grade, and conformance of supplied documentation. These shall also include provisions for:
   a. Identifying, controlling, and processing non-conforming items, including notification of the University Representative.
   b. Inspection of materials for authenticity to preclude counterfeit parts for items and attributes of concern identified by University Representative.
   c. Verifying for compliance and traceability, maintaining, and turnover to the University, certificates of conformance and mill certificates required by the Contract Documents or codes/standards invoked, for material received.

5. Plan or procedures for punchlist and acceptance of the Work. The Design Builder shall provide final certification of completion and compliance to the Contract Documents; and Inspection Acceptance from each Design Professional of Record, certifying that the Construction Work meets the requirements of the Contract Documents.

6. Provisions for identifying Defective Work. The Design Builder shall bring to the University’s Representative’s attention for consultation and possible relief (use as-is, repair, or modification), those cases where correction within the specified requirements may introduce a significant schedule penalty, personnel hazard, or compromise to the quality of other installed items, or otherwise is impractical.

7. Controls to assure that only the current and approved design documents are utilized in the Work. This includes provisions for removing superseded versions from the work area, except where explicitly and prominently marked for information only, such as to retain annotated installation data. The Design Builder work shall comply with the design documents. Field initiated design change shall be processed as provided in the Contract Documents, and shall not be implemented prior to written approval by University’s Representative.
8. Detailed formal procedures or instructions for the performance of special processes, such as welding and concrete placement. These procedures/instructions and personnel performing special processes shall be qualified and certified as required by codes and standards invoked by the Contract Documents.

9. Controls providing for periodic calibration of test and measurement equipment, including unique equipment identification and calibration tracking.

10. Design Builder shall maintain records documenting the implementation of the above activities, including tests, inspections, special process qualification and execution, vendor documentation, and Defective Work resolution. These records shall be indexed, protected, and retrievable for final turnover to the University.

11. The Design Builder shall perform other routine verification and inspection activities to assure the requirements of the Contract Documents are implemented and the completed Work will be acceptable. The frequency and depth of these routine inspections and verifications shall be responsive to identified defective Work, changes in work complexity or other conditions that may affect the quality of the Work.

12. Identify all test and inspections that Design Builder proposes to be conducted by the University.

B. DESIGN BUILDER’S RESPONSIBILITIES TESTING AND INSPECTION

1. Follow the approved Quality Control Plan at all times through the Construction Work.

2. Submit copies of product test reports to the University’s Representative.

3. Furnish incidental labor and facilities to provide University’s Representative access to Work to be tested, obtain and handle samples at the Project site or at the source of the product to be tested, facilitate inspections and tests, and for storage and curing of test samples.

4. Provide written notice to University’s Representative and [72] hours in advance of operations of testing and inspection to allow for University’s Representative the opportunity to observe the testing and inspection.

5. If Work and the associated testing and inspection is not performed when scheduled, Design Builder shall reimburse University for University’s personnel and travel expenses incurred.

6. Design Builder shall personally supervise all work and inspect all materials as they arrive for compliance with the Contract Documents, and shall reject defective work and material without waiting for such rejection from others in authority.

C. TESTS AND INSPECTIONS BY UNIVERSITY

1. University’s Representative may make periodic on-site observations of construction as it progresses and upon completion, and may make off-site reviews of fabricated materials and equipment when such off-site reviews are specified in the Contract Documents at University Expense. Opportunity for observation, testing, and inspection by University’s Representative shall be afforded by the Design Builder throughout the progress of the Work.

D. ADDITIONAL TESTING AND INSPECTION

1. If the University or public authorities having jurisdiction determine that portions of the Construction Work require additional testing, inspection or approval beyond that required in the Construction Documents, such additional testing and inspection shall be carried out by Design Builder, or by entity directed by University. Design Builder will make arrangements for such inspections and testing; and shall give the University’s Representative timely notice of when and where tests and inspections are to be made so that University may observe such procedures. If such additional tests and/or inspections reveal Defective Work, the cost of such test and/or inspection and correction shall considered as part of the Contract Sum; otherwise the Contract Sum will be adjusted by Change Order for cost of testing and/or inspection.

E. TEST REPORTS
1. University's Testing Laboratory and Design/Builder's Testing Laboratory shall distribute copies of all reports as follows:
   a. University's Representative: 4 copies.
   b. The number of copies for Design/Builder and Subcontractors being tested will be determined upon commencement of Contract.

F. WORK COVERED PRIOR TO INSPECTION

1. If a portion of the Work is covered contrary to University's Representative's request or direction, or contrary to the requirements of the Contract Documents, it shall, if required in writing by University's Representative, be uncovered for University's Representative's observation and be replaced at Design Builder's expense without adjustment of the Contract Time or the Contract Sum.

2. If a portion of the Work has been covered, which is not required by the Contract Documents to be observed or inspected prior to its being covered and which University's Representative has not specifically requested to observe prior to its being covered, University's Representative may request to see such Work and it shall be uncovered and replaced by Design Builder. If such Work is found to be in accordance with the Contract Documents, and additional cost and/or time have been incurred by Design Builder, such cost and/or time shall be added to the Contract Sum and/or Contract Time by Change Order. Where the Design Builder requests adjustment to either the Contract Time or Contract Sum, Design Builder shall document and show that such per the requirements of the Contract Documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01 44 00