SOUTHEAST ATLANTA LIBRARY
ADDENDUM #3
OCTOBER 16, 2014

This Addendum #3 dated October 16, 2014 issued by C D Moody Construction, Co., Inc. is hereby made part of the Southeast Atlanta Library. The changes and/or clarifications included in this Addendum shall be considered as part of the Bidding Documents and shall supersede, amend, add to, or subtract from those conditions included in the original Bid Documents, including the Project Bid Package, Drawings, Specifications, previous Addenda, etc.

Failure to acknowledge this Addendum may subject Bidder to disqualification.

Addendum #3 Contract Drawings
- Drawings S1.01, S1.02, S2.01, S2.02, S3.01, S3.02, S3.03, S4.01 and S4.02 dated 10/15/14. Drawings listed have been issued to supersede corresponding drawings dated 9/3/14.

Addendum #3 Contract Specifications
- Specification sections 01 3300, 01 3514.01, 01 3515, 01 3516, 01 3516.01, 01 3516.03, 01 3516.04, 01 3516.05, 01 4545, 01 7419, 05 1200, 05 2100 and 05 3123 dated 10/7/14. Specifications listed have been issued to supersede corresponding specifications dated 9/3/14.

END OF ADDENDUM #3
PROJECT MANUAL FOR
THE CONSTRUCTION OF
NEW SOUTHEAST ATLANTA PUBLIC LIBRARY
1463 PRIOR ROAD SW
ATLANTA / FULTON COUNTY, GEORGIA 30313

OWNER:
ATLANTA-FULTON COUNTY PUBLIC LIBRARY SYSTEM
ONE MARGARET MITCHELL SQUARE, 6TH FLOOR
ATLANTA, GEORGIA 30303-1089

ARCHITECT:
STANLEY, LOVE-STANLEY, P.C.,
1056 SPRING STREET, NW
ATLANTA, GEORGIA
404-876-3055

CIVIL ENGINEER:
BREEDLOVE LAND PLANNING
ATLANTA, GEORGIA

LANDSCAPE ARCHITECT:
SYLVATICA STUDIO
ATLANTA, GEORGIA

STRUCTURAL ENGINEER:
SEDKI & RUSS ENGINEERS
ATLANTA, GEORGIA

MECHANICAL/ELECTRICAL/PLUMBING/
FIRE PROTECTION ENGINEERS:
NEWCOMB & BOYD
ATLANTA, GEORGIA

LEED/COMMISSIONING:
EPSTEN GROUP
ATLANTA, GEORGIA

HARDWARE CONSULTANT:
PHILLIPS-LANGLEY
SUWANEE, GEORGIA

SPECIFICATION CONSULTANT:
SPIKER BALDWIN ASSOCIATES, INC.
DECATURE, GEORGIA

STRUCTURAL STEEL PACKAGE
OCTOBER 15, 2014
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SECTION 01 3300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes requirements for the submittal schedule and administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. Related Requirements:
   1. Section 01 3200 "Construction Progress Documentation" for submitting schedules and reports, including Contractor's construction schedule.
   2. Section 01 7823 "Operation and Maintenance Data" for submitting operation and maintenance manuals.
   3. Section 01 7839 "Project Record Documents" for submitting record Drawings, record Specifications, and record Product Data.
   4. Section 01 7900 "Demonstration and Training" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

1.2 DEFINITIONS

A. Action Submittals: Written and graphic information and physical samples that require Architect's responsive action.

B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 ACTION SUBMITTALS

A. Submittal Schedule: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and additional time for handling and reviewing submittals required by those corrections.

1.4 SUBMITTAL ADMINISTRATIVE REQUIREMENTS

A. Architect's Digital Data Files: Electronic copies of digital data files of select portions of the Contract Drawings will be provided by Architect at the Architect's option for Contractor's use in preparing submittals at Architect's cost.
a. Architect makes no representations as to the accuracy or completeness of digital data drawing files as they relate to the Contract Drawings.

b. Contractor shall execute a data licensing agreement in the form of AIA Document C106, Digital Data Licensing Agreement.

B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.

2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.

a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 calendar days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required or for time intensive submittals such as those requiring review by Architect and Architect's Consultants. Architect will advise Contractor when a submittal being processed must be delayed for coordination.

2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.

3. Resubmittal Review: Allow 15 calendar days for review of each resubmittal.

D. Paper Submittals: Place a permanent label or title block on each submittal item for identification.

1. Indicate name of firm or entity that prepared each submittal on label or title block.

2. Provide a space on label or beside title block to record Contractor's review and approval markings and action taken by Architect.

3. Include the following information for processing and recording action taken:

   a. Project name.
   b. Date.
   c. Name of Architect.
   d. Name of Construction Manager.
   e. Name of Contractor.
   f. Name of subcontractor.
   g. Name of supplier.
   h. Name of manufacturer.
   i. Submittal number or other unique identifier, including revision identifier.
1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).

j. Number and title of appropriate Specification Section.

k. Drawing number and detail references, as appropriate.

l. Location(s) where product is to be installed, as appropriate.

m. Other necessary identification.

4. Additional Paper Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

   a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.

5. Transmittal for Paper Submittals: Assemble each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return without review submittals received from sources other than Contractor.

   a. Transmittal Form for Paper Submittals: Provide locations on form for the following information:

      1) Project name.
      2) Date.
      3) Destination (To:).
      4) Source (From:).
      5) Name and address of Architect.
      6) Name of Construction Manager.
      7) Name of Contractor.
      8) Name of firm or entity that prepared submittal.
      9) Names of subcontractor, manufacturer, and supplier.
     10) Category and type of submittal.
     11) Submittal purpose and description.
     12) Specification Section number and title.
     13) Specification paragraph number or drawing designation and generic name for each of multiple items.
     14) Drawing number and detail references, as appropriate.
     15) Indication of full or partial submittal.
     16) Transmittal number, numbered consecutively.
     17) Submittal and transmittal distribution record.
     18) Remarks.
     19) Signature of transmitter.

E. Electronic Submittals: May be acceptable. Contractor and Architect will jointly determine which submittals may be electronically submitted.
1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.

2. Name file with submittal number or other unique identifier, including revision identifier.
   a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).

3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Architect/

4. Transmittal Form for Electronic Submittals: Use acceptable to Owner, containing the following information:
   a. Project name.
   b. Date.
   c. Name and address of Architect.
   d. Name of Construction Manager.
   e. Name of Contractor.
   f. Name of firm or entity that prepared submittal.
   g. Names of subcontractor, manufacturer, and supplier.
   h. Category and type of submittal.
   i. Submittal purpose and description.
   j. Specification Section number and title.
   k. Specification paragraph number or drawing designation and generic name for each of multiple items.
   l. Drawing number and detail references, as appropriate.
   m. Location(s) where product is to be installed, as appropriate.
   n. Related physical samples submitted directly.
   o. Indication of full or partial submittal.
   p. Transmittal number, numbered consecutively.
   q. Submittal and transmittal distribution record.
   r. Other necessary identification.
   s. Remarks.

5. Metadata: Include the following information as keywords in the electronic submittal file metadata:
   a. Project name.
   b. Number and title of appropriate Specification Section.
   c. Manufacturer name.
   d. Product name.

F. Options: Identify options requiring selection by Architect.

G. Deviations: Identify deviations from the Contract Documents on submittals.
H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
   1. Note date and content of previous submittal.
   2. Note date and content of revision in label or title block and clearly indicate extent of revision.
   3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.

I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

J. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

PART 2 - PRODUCTS

2.1 SUBMITTAL PROCEDURES

A. General Submittal Procedure Requirements:
   1. Post electronic submittals as PDF electronic files directly to Project Web site specifically established for Project.
   2. Action Submittals: Submit four paper copies of each submittal unless otherwise indicated. Architect will return two copies.
   3. Informational Submittals: Submit two paper copies of each submittal unless otherwise indicated. Architect will not return copies.
   4. Certificates and Certifications Submittals: Provide a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
      a. Provide a notarized statement on original paper copy certificates and certifications where indicated.

B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
   1. If information must be specially prepared for submittal because standard published data are not suitable for use, submit as Shop Drawings, not as Product Data.
   2. Mark each copy of each submittal to show which products and options are applicable.
3. Include the following information, as applicable:
   a. Manufacturer's catalog cuts.
   b. Manufacturer's product specifications.
   c. Standard color charts.
   d. Statement of compliance with specified referenced standards.
   e. Testing by recognized testing agency.
   f. Application of testing agency labels and seals.
   g. Notation of coordination requirements.
   h. Availability and delivery time information.

4. For equipment, include the following in addition to the above, as applicable:
   a. Wiring diagrams showing factory-installed wiring.
   b. Printed performance curves.
   c. Operational range diagrams.
   d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.

5. Submit Product Data before or concurrent with Samples.

6. Submit Product Data in the following format:
   a. PDF electronic file if acceptable to Architect or
   b. Four paper copies of Product Data unless otherwise indicated. Architect, will return two copies.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
   a. Identification of products.
   b. Schedules.
   c. Compliance with specified standards.
   d. Notation of coordination requirements.
   e. Notation of dimensions established by field measurement.
   f. Relationship and attachment to adjoining construction clearly indicated.
   g. Seal and signature of professional engineer if specified.

2. Submit Shop Drawings in the following format:
   a. PDF electronic file if acceptable to Architect or
   b. Four opaque copies of each submittal. Architect will retain two copies; remainder will be returned.

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.

2. Identification: Attach label on unexposed side of Samples that includes the following:
   a. Generic description of Sample.
   b. Product name and name of manufacturer.
   c. Sample source.
   d. Number and title of applicable Specification Section.

3. For projects where electronic submittals are required, provide corresponding electronic submittal of Sample transmittal, digital image file illustrating Sample characteristics, and identification information for record.

4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
   a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
   b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.

5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.

6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
   a. Number of Samples: Submit three sets of Samples. Architect will retain one.

E. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:

1. Submit product schedule in the following format:
   a. PDF electronic file.

F. Coordination Drawings Submittals: Comply with requirements specified in Section 01 3100 "Project Management and Coordination."
G. Contractor's Construction Schedule: Comply with requirements specified in Section 013200 "Construction Progress Documentation."

H. Application for Payment and Schedule of Values: Comply with requirements specified in Section 01 2900 "Payment Procedures."

I. Test and Inspection Reports and Schedule of Tests and Inspections Submittals: Comply with requirements specified in Section 014000 "Quality Requirements."

J. Closeout Submittals and Maintenance Material Submittals: Comply with requirements specified in Section 01 7700 "Closeout Procedures."

K. Maintenance Data: Comply with requirements specified in Section 017823 "Operation and Maintenance Data."

L. LEED Submittals: Comply with requirements specified in LEED sections 01 3514.01 through 01 3516.07

M. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.

N. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification and Procedure Qualification Record on AWS forms. Include names of firms and personnel certified.

O. Installer Certificates: Submit written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

P. Manufacturer Certificates: Submit written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

Q. Product Certificates: Submit written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

R. Material Certificates: Submit written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

S. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

T. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
U. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

V. Schedule of Tests and Inspections: Comply with requirements specified in Section 01 4000 "Quality Requirements."

W. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

X. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

Y. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

Z. Design Data: Prepare and submit written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

2.2 DELEGATED-DESIGN SERVICES

A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.

B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF electronic file three paper copies of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.
PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

   A. Action and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.

   B. Project Closeout and Maintenance Material Submittals: See requirements in Section 01 7700 "Closeout Procedures."

   C. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

   A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.

   B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or revisions required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action.

   C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.

   D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.

   E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 01 3300
PART 1 GENERAL

1.01 DEFINITIONS

B. Required: Achievement of this credit is essential for certification of this project.
C. Preferred: Achievement of this credit would be desirable but is not mandatory.
D. Not Required: Achievement of this credit is not expected or not possible for this project.

PART 2 CREDIT SUMMARY

2.01 CERTIFICATION TO BE ACHIEVED: SILVER, REQUIRING MINIMUM OF 50 POINTS. (62 ARE TARGETED)

2.02 SUSTAINABLE SITES (SS): 14 POINTS TO BE ACHIEVED.

A. SS Prerequisite 1 - Required - No points - Construction Activity Pollution Prevention.
   1. During Construction:
      a. Preventive measures and remediation are specified in Section 01 5713.

B. SS Credit 1 - Required - 1 point - Site Selection.
   1. The project is not located on any of the inappropriate or environmentally sensitive lands defined for this credit.

C. SS Credit 2 - Not Required - 5 points - Development Density & Community Connectivity.

D. SS Credit 3 - Required - 1 point - Brownfield Redevelopment.
   1. The project is located on a site documented as contaminated or designated as "brownfield."

E. SS Credit 4.1 - Not Required - 6 points - Alternative Transportation: Public Transportation Access.

F. SS Credit 4.2 - Required - 1 point - Alternative Transportation: Bicycle Storage & Changing Rooms.
   1. Secure bicycle storage and shower and changing facilities are to be provided.

G. SS Credit 4.3 - Required - 3 points - Alternative Transportation: Low-Emitting & Fuel-Efficient Vehicles.
   1. Preferred parking spaces have been provided, in the quantity required.

H. SS Credit 4.4 - Required - 2 points - Alternative Transportation: Parking Capacity.
   1. Preferred parking spaces have been provided, in the quantity required, without adding new parking.

I. SS Credit 5.1 - Required - 1 point - Site Development: Protect or Restore Habitat.

J. SS Credit 5.2 - Required - 1 point - Site Development: Maximize Open Space.
   1. The building footprint and open space are designed to meet this requirement.

K. SS Credit 6.1 - Required - 1 point - Stormwater Design: Quantity Control.
   1. The site design does not increase existing runoff rate and quantity.

L. SS Credit 6.2 - Required - 1 point - Stormwater Design: Quality Control.

M. SS Credit 7.1 - Not Required - 1 point - Heat Island Effect: Non-Roof.

N. SS Credit 7.2 - Required - 1 point - Heat Island Effect: Roof.

O. SS Credit 8 - Required - 1 point - Light Pollution Reduction.

2.03 WATER EFFICIENCY (WE): 10 POINTS TO BE ACHIEVED.

A. WE Prerequisite 1 - Required - No points - Water Use Reduction, 20% Reduction.

B. WE Credit 1.1 - Required - 2 points - Water Efficient Landscaping; Reduce by 50%.
C. WE Credit 1.2 - Required - 2 points - Water Efficient Landscaping: No Potable Use or No Irrigation.
D. WE Credit 2 - Required - 2 points - Innovative Wastewater Technologies.
E. WE Credit 3.1 - Required - 2 points - Water Use Reduction, 30% Reduction.
F. WE Credit 3.1 - Required - 2 points for 40% Reduction - Water Use Reduction.
   1. Same solutions as for WE Credit 3.1, but greater reduction.

2.04 ENERGY & ATMOSPHERE (EA): 9 POINTS TO BE ACHIEVED.
A. EA Prerequisite 1 - Required - No points - Fundamental Commissioning of Building Energy Systems.
B. EA Prerequisite 2 - Required - No points - Minimum Energy Performance.
C. EA Prerequisite 3 - Required - No points - Fundamental Refrigerant Management.
D. EA Credit 1 - Required - 5 points - Optimize Energy Performance.
E. EA Credit 2 - Not Required - 0 points - On-Site Renewable Energy.
F. EA Credit 3 - Not Required - 2 points - Enhanced Commissioning.
G. EA Credit 4 - Required - 2 points - Enhanced Refrigerant Management.
H. EA Credit 5 - Not Required - 3 points - Measurement & Verification.
I. EA Credit 6 - Required - 2 points - Green Power.
   1. The Fulton County intends to or has already entered into a contract for electricity from renewable sources, but that is not part of the construction contract.

2.05 MATERIALS & RESOURCES: 9 POINTS TO BE ACHIEVED.
A. MR Prerequisite 1 - Required - No points - Storage & Collection of Recyclables.
B. MR Credit 1.1 - Not Required - 1 point for 55% - Building Reuse: Maintain Existing Walls, Floors & Roof.
C. MR Credit 1.2 - Not Required - 1 point - Building Reuse: Maintain 50% of Interior Non-Structural Elements.
D. MR Credit 2.1 - Required - 1 point - Construction Waste Management, Divert 50% from Disposal.
E. MR Credit 2.2 - Required - 1 point - Construction Waste Management, Divert 75% from Disposal.
F. MR Credit 3.1 - Required - 1 point - Materials Reuse, 5%.
G. MR Credit 3.2 - Undecided - 1 point - Materials Reuse: 10%.
H. MR Credit 4.1 - Required - 1 point - Recycled Content: 10% (post-consumer plus 1/2 pre-consumer).
I. MR Credit 4.2 - Required - 1 point - Recycled Content: 20% (post-consumer plus ½ pre-consumer).
J. MR Credit 5.1 - Required - 1 point - Regional Materials: 10% Extracted, Processed & Manufactured Regionally.
K. MR Credit 5.2 - Required - 1 point - Regional Materials: 20% Extracted, Processed & Manufactured Regionally.
L. MR Credit 6 - Required - 1 point - Rapidly Renewable Materials.
M. MR Credit 7 - Required - 1 point - Certified Wood.

2.06 INDOOR ENVIRONMENTAL QUALITY: 12 POINTS TO BE ACHIEVED.
A. EQ Prerequisite 1 - Required - No points - Minimum IAQ Performance.
B. EQ Prerequisite 2 - Required - No points - Environmental Tobacco Smoke (ETS) Control.
C. EQ Credit 1 - Not Required - 1 point - Outdoor Air Delivery Monitoring.
D. EQ Credit 2 - Not Required - 1 point - Increased Ventilation.
E. EQ Credit 3.1 - Required - 1 point - Construction IAQ Management Plan, During Construction.
F. EQ Credit 3.2 - Required - 1 point - Construction IAQ Management Plan, Before Occupancy.
G. EQ Credit 4.1 - Required - 1 point - Low-Emitting Materials, Adhesives & Sealants.
H. EQ Credit 4.2 - Required - 1 point - Low-Emitting Materials, Paints & Coatings.
I. EQ Credit 4.3 - Required - 1 point - Low-Emitting Materials, Flooring Systems.
J. EQ Credit 4.4 - Required - 1 point - Low-Emitting Materials, Composite Wood & Agrifiber Products.
K. EQ Credit 5 - Required - 1 point - Indoor Chemical & Pollutant Source Control.
L. EQ Credit 6.1 - Required - 1 point - Controllability of Systems: Lighting.
M. EQ Credit 6.2 - Required - 1 point - Controllability of Systems: Thermal Comfort.
N. EQ Credit 7.1 - Required - 1 point - Thermal Comfort: Design.
O. EQ Credit 7.2 - Required - 1 point - Thermal Comfort: Verification.
P. EQ Credit 8.1 - Required - 1 point - Daylight & Views: Daylighting.
Q. EQ Credit 8.2 - Undecided - 1 point - Daylight & Views, Views for 90% of Spaces.

2.07 INNOVATION & DESIGN PROCESS (ID): 6 POINTS TO BE ACHIEVED.
A. ID Credit 1.1 - Required - 1 point - Innovation in Design: Exceptional Performance: EA e 6=100% Electricity.
B. ID Credit 1.2 - Required - 1 point - Innovation in Design: MR e4 or MR e2.
C. ID Credit 1.3 - Required - 1 point - Innovation in Design: MR e5 or SS e5.2.
D. ID Credit 1.4 - Required - 1 point - Innovation in Design: Educational Credit/C2C.
E. ID Credit 1.5 - Required - 1 point - Innovation in Design: Green Cleaning/Furniture FSC.
F. ID Credit 2 - Required - 1 point - LEED(tm) Accredited Professional.

2.08 REGIONAL PRIORITY (RP): 2 POINTS TO BE ACHIEVED.
A. RP Credit 1.1 - Required - 1 point - Region Specific Environmental Priority: IEQ c7: Thermal Control Design.
B. RP Credit 1.2 - Undecided - 1 point - Region Specific Environmental Priority: SS c6.1 Stormwater Design Quality Control Region.
C. RP Credit 1.3 - Undecided - 1 point - Region Specific Environmental Priority: EA e2 Renewable Energy 1% Region.
D. RP Credit 1.4 - Required - 1 point - Region Specific Environmental Priority: WEc3 (40%) or EA e1 (30%).

End of Section
PART 1 GENERAL

1.01 PROJECT GOALS

A. This project has been designed to achieve the LEED Silver (minimum 50 points rating as defined in the LEED(r) Green Building Rating System(tm) for New Construction and Major Renovations, 2009 Edition.

B. Contractor is not responsible for the application for LEED certification, nor for determination of methods of achieving LEED credits unless specifically so indicated.

C. Many of the LEED credits can be achieved only through intelligent design of the project and are beyond the control of the Contractor. However, certain credits relate to the products and procedures used for construction. Therefore, the full cooperation of the Contractor and subcontractors is essential to achieving final certification.

D. Contractor shall familiarize himself with the relevant requirements and provide the necessary information and instruction to all subcontractors and installers.

E. Since Contractor and subcontractors may not be familiar with LEED requirements, this section includes a summary of the products and procedures intended to achieve LEED credits.

1. Some credits are marked PREREQUISITE; these must be achieved regardless of the level of certification; many are dependent on proper performance by Contractor and subcontractors.

2. Other credits involve quantifying percentages by weight and cost; these require careful recordkeeping and reporting by the Contractor.


1.02 RELATED REQUIREMENTS

A. Sections that include requirements intended to achieve LEED credits include, but are not limited to, the following:

B. Section 01 3516 - LEED Submittal Forms: Procedures for using the forms.

1. 01 3516.01 - LEED Material Cost Summary; to report material only cost categories for computations necessary for MR Credits 3, 4.1, 4.2, 5.1, 5.2, and 6.

2. 01 3516.02 - LEED Wood-Containing Product List; for documentation of wood and wood-based products used on project; MR Credit 6.

3. 01 3516.03 - LEED Metal-Containing Product List; for documentation of steel and other metals used on project; MR Credits 4.1 and 4.2.

4. 01 3516.04 - LEED New Product Content Form; for content percentages for recycled, rapidly renewable, and certified wood credits, with material cost; MR Credits 4.1, 4.2, and 6; used in conjunction with Wood-Containing and Metal-Containing Product Lists as well as separately.

5. 01 3516.05 - LEED New Product Source Form; for documenting source of new products; MR Credit 5.1 and 5.2.

6. 01 3516.06 - LEED Reused Product Form; for documenting type, source, and cost of reused products; MR Credits 3, 5.1, and 5.2.

7. 01 3516.07 - LEED Prohibited Content Installer Certification; for each installer to certify compliance with VOC requirements for adhesives and sealants, including duct sealers, and to certify no use of urea-formaldehyde-containing wood products; EQ Credits 4.1 and 4.4.

C. Section 01 5713 - Temporary Erosion and Sediment Control: Preventive measures and remediation; SS PREREQUISITE 1.

D. Section 01 5721 - Indoor Air Quality Controls.

E. Section 01 6000 - Product Requirements: Overall project requirements for:

1. Reused products; MR Credit 3.
2. Regionally-sourced products; MR Credits 5.1 and 5.2.
3. Certified (sustainably harvested) wood; MR Credit 6.

F. Section 01 6116 - Volatile Organic Compound (VOC) Content Restrictions: List of product categories having VOC content restrictions, evidence required, and reporting requirements.

G. Section 01 7419 - Construction Waste Management and Disposal:
1. Construction and demolition waste management; MR Credit 2.1 and 2.2.

1.03 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for additional submittal procedures.

B. Use of electronic submittal service specified in this section is required.

C. LEED Submittal/Report: For each product with the notation “show quantity on LEED submittal or report,” submit a report with the following information:
   1. Submit with each Application for Payment; update the Report each period with latest period shown separately:
   2. Identify each product with:
      a. Name and manufacturer.
      b. Specification section number.
      c. Applicable Credit(s).
      d. Net weight per unit.
      e. Quantity installed.
      f. Material cost per unit.
      g. Total material cost.
   3. Attach evidence of compliance from either the manufacturer or an independent agency.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 ELECTRONIC LEED DOCUMENT SUBMITTAL SERVICE

A. Documents submitted for purposes of LEED certification are to be in electronic (PDF) format and transmitted via an Internet-based submittal service that receives, logs and stores documents, notifies participants, and provides electronic submission to USGBC (USGBC/GBCI LEED Online website).
   1. The types of submittals for which this service must be used include those for credits that relate to materials, and any others designated by LAD.
   2. For credits for which achievement requires substantiation of material type, quantity, and cost, submit receipts showing purchase of materials for this project.
   3. Contractor and LAD are required to use this service.
   4. It is Contractor’s responsibility to submit documents in PDF format.
   5. Subcontractors, suppliers, and LAD’s consultants will be permitted to use the service at no extra charge.
   6. Paper document transmittals will not be reviewed; emailed PDF documents will not be reviewed.
   7. All other specified submittal and document transmission procedures apply, except that electronic document requirements to not apply to samples or color selection charts.

End of Section
SECTION 01 3516

LEED SUBMITTAL FORMS

1.01 PURPOSE

A. These forms are for the Contractor’s use in submitting documentation to be used to determine whether particular credits have been achieved. The cooperation of subcontractors, suppliers, and manufacturers is required.

B. These forms apply to the following LEED Credits:
   1. MR Credits 3.1 and 3.2 - Materials Reuse.
   2. MR Credits 4.1 and 4.2 - Recycled Content.
   3. MR Credits 5.1 and 5.2 - Regional Materials.
   4. MR Credit 7 - Certified Wood.

1.02 FORMS

A. 01 3516.01 - LEED Material Cost Summary Form: Certification by Contractor.

B. 01 3516.02 - LEED Wood-Containing Product List: Certification by Contractor.

C. 01 3516.03 - LEED Metal-Containing Product List: Certification by Contractor.

D. 01 3516.04 - LEED New Product Content Form: Including separate reporting of wood, steel, rapidly renewable, and recycled content; data certification by manufacturer of product; cost and quantity certification by Contractor.

E. 01 3516.05 - LEED New Product Source Form: Data certification by manufacturer of product; cost and quantity certification by Contractor.

F. 01 3516.06 - LEED Reused Product Form: Data certification by manufacturer of product; cost and quantity certification by Contractor.

1.03 PROCEDURES

A. All LEED submittal forms are to be submitted by Contractor; certifications are to be made by indicated party.

B. Where a LEED Submittal is called for, fill out and submit the appropriate form.
   1. Fill out one form for each different brand name product and each different manufacturer of a lot of commodity products.
   2. Where required attachments are specified, attach the documentation to the back of the form.

C. Each form must be signed by the entity capable of certifying the information.
   1. Certification signatures must be made by an officer of the company.
   2. For products, certification must be made by the manufacturer not the supplier.
   3. For custom fabricated products, certification by the fabricator is acceptable.

D. Submit the completed forms in accordance with the requirements of Section 01 3000 - Administrative Requirements, as information submittals.
   1. Give each form a unique submittal number.
   2. Do not combine LEED forms with product data or shop drawing submittals.
   3. Each submittal for LEED credits will require separate product data and product data cut sheets in support of the credit attempted.
   4. Each submittal for LEED credits is required to have its own set of product data, technical data, cost data and MapQuest directions confirming the harvesting and manufacturing locations to the project site.

End of Section
SECTION 01 3516.01

LEED MATERIAL COST SUMMARY FORM

1.01 LEED SUBMITTAL FORM

A. Identification:
   1. Project Name: ________________________________.
   2. Project No.: ________________________________.
   3. LAD: ________________________________.

B. This form applies to the following LEED Credits: ____________________.
    ________________________________________.
    ________________________________________.

C. Procedure:
   1. Because the above listed credits require computations based on the material costs for the project, the Contractor is required to submit the following cost breakdown, in addition to any cost breakdown specified elsewhere.
   2. Costs are to be material costs excluding labor, overhead, and profit, but including delivery, storage, and handling charges. Revise cost summary whenever materials actually installed change due to contract modifications or Contractor preference.

1.02 CERTIFICATION

1.03 CERTIFIED BY: (CONTRACTOR)

A. Print Name: ________________________________.

B. Signature: ________________________________.

C. Title: ________________________________ Date: ________________.
   (officer of company),

End of Form
SECTION 013516.03

LEED METAL-CONTAINING PRODUCT LIST

1.01 LEED SUBMITTAL FORM

A. Identification:
   1. Project Name: ________________________________
   2. Project No.: ________________________________
   3. LAD: ________________________________

B. This form applies to LEED Credits MR 4.1 and 4.2 (recycled content).

1.02 CERTIFICATION

A. ___ All other steel- and cast iron-containing products used on this project are shown on the attached list.

B. CERTIFIED BY: (Contractor)
   1. Print Name: ____________________________________
   2. Signature: _____________________________________
   3. Title: ___________________ (officer of company), Date: __________________

End of Section
SECTION 01 3516.04

LEED NEW PRODUCT CONTENT FORM

1.01 LEED SUBMITTAL FORM

A. Identification:
   1. Project Name: ________________________________
   2. Project No.: ________________________________
   3. LAD: ________________________________
   4. Product Name: ______________________________ (brand name, model number, etc.)
   5. Manufacturer: __________________________________ www.________________
      a. Contact: __________________________________ tel: ______________________
   6. Supplier/Sub: __________________________________ www.________________
      a. Contact: __________________________________ tel: ______________________
   7. Applicable Specification Section Number(s) ____________________________

B. This form applies to LEED Credits MR 4.1 and 4.2 (recycled content) and MR 6 (certified wood).

1.02 PRODUCT CERTIFICATION

   1. ____ Product is FSCTrademarked.
   2. ____ FSC Chain-of-Custody certificate number is ________________
   3. FSC: Forest Stewardship Council Chain-of-Custody number or physical trademark; computation of less than 100 percent certified content in accordance with FSC policy.

B. Rapidly Renewable Content: _________ percent by weight.
   1. Description of Rapidly Renewable Content: ____________________________
   2. Definition: Made from plants that are harvested not more than 10 years after planting.

C. Steel Content: _________ percent by weight.
   1. ____ Steel Mill Source is: _____________________ __________________________
   2. ____ Mill letter describing mill process and typical re-used steel content is attached.

D. Other Content: (Percentages by weight may not add up to more than 100 percent.)
   1. Pre-Consumer/Post-Industrial Recycled Content: ____________ percent by weight.
   2. Post-Consumer Recycled Content: ____________ percent by weight.
   3. Description of Recycled Content: ____________________________
   4. Definition: Recycled content is defined in accordance with FTC regulations, found in 16 CFR 260.7(e); see www.ftc.gov/bcp/grnrule/guides980427.htm.

E. Total Weight: ____________ per ____________ (unit).

F. CERTIFIED BY: (Manufacturer)
   1. Print Name: ____________________________________ ___
   2. Signature: _____________________________________ __
   3. Title: _______________________ (officer of company), Date: _________________

1.03 COST CERTIFICATION

A. Unit Cost: $ ___________ per ____________ (same unit as above); No. of Units Installed: ______

B. OR (enter cost either above or below, not both)

C. Total Installed Material Cost of This Product: $ ________________

D. CERTIFIED BY: (Contractor)
1. Print Name: ____________________________________________
2. Signature: ____________________________________________
3. Title: ______________________ (officer of company), Date: ____________________
SECTION 01 3516.05

LEED NEW PRODUCT SOURCE FORM

1.01 LEED SUBMITTAL FORM

A. Identification:
   1. Project Name: ________________________________
   2. Project No.: ________________________________
   3. LAD: ________________________________
   4. Product Name: ______________________________ (brand name, model number, etc.)
   5. Manufacturer: __________________________________ www.________________
      a. Contact: ___________________________________ tel:__________________
   6. Supplier/Sub: __________________________________ www.________________
      a. Contact: ___________________________________ tel:__________________
   7. Applicable Specification Section Number(s) ________________

B. This form applies to LEED MR Credits 5.1 and 5.2 for new products only; see separate form for reused products.

1.02 PRODUCT CERTIFICATION

A. The following percentages of this product were processed in the locations indicated. (Indicate N/A if first column if process is not applicable.)

<table>
<thead>
<tr>
<th>Percent</th>
<th>Harvest, Extraction, Recovery, or Manufacturing Process</th>
<th>City/County, State, Country</th>
<th>Distance From Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>__</td>
<td>_____________:</td>
<td>__________________________</td>
<td>___________________</td>
</tr>
<tr>
<td>__</td>
<td>_____________:</td>
<td>__________________________</td>
<td>___________________</td>
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<tr>
<td>__</td>
<td>_____________:</td>
<td>__________________________</td>
<td>___________________</td>
</tr>
<tr>
<td>__</td>
<td>Manufactured at: (primary)</td>
<td>__________________________</td>
<td>___________________</td>
</tr>
<tr>
<td>__</td>
<td>Manufactured at: (primary)</td>
<td>__________________________</td>
<td>___________________</td>
</tr>
<tr>
<td>__</td>
<td>Manufactured at: (secondary)</td>
<td>__________________________</td>
<td>___________________</td>
</tr>
<tr>
<td>__</td>
<td>Manufactured at: (secondary)</td>
<td>__________________________</td>
<td>___________________</td>
</tr>
<tr>
<td>__</td>
<td>Manufactured at: (final)</td>
<td>__________________________</td>
<td>___________________</td>
</tr>
<tr>
<td>__</td>
<td>Manufactured at: (final)</td>
<td>__________________________</td>
<td>___________________</td>
</tr>
</tbody>
</table>

B. CERTIFIED BY: (Manufacturer)
   1. Print Name: ____________________________________ __________
   2. Signature: _____________________________________ _________
   3. Title: _______________________ (officer of company), Date: _________________

1.03 COST CERTIFICATION

A. Unit Cost: $ ______________ per ___________ (unit); No. of Units Installed: ______

B. OR (enter cost either above or below, not both)

C. Total Installed Material Cost: $ ______________

D. CERTIFIED BY: (Contractor)
   1. Print Name: ____________________________________ __________
   2. Signature: _____________________________________ _________
3. Title: ___________________________ (officer of company), Date: ____________________

End of Section
**SCHEDULE OF SPECIAL INSPECTION SERVICES**

**PROJECT**: New Southeast Atlanta Public Library

<table>
<thead>
<tr>
<th>MATERIAL / ACTIVITY</th>
<th>SERVICE</th>
<th>Y/N</th>
<th>EXTENT</th>
<th>AGENT*</th>
<th>DATE COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1704.2.5 Inspection of Fabricators</td>
<td>Verify fabrication/quality control procedures</td>
<td>In-plant review (3)</td>
<td>Y</td>
<td>Periodic</td>
<td>TA</td>
</tr>
<tr>
<td>1705.1.1 Special Cases (work unusual in nature, including but not limited to alternative materials and systems, unusual design applications, materials and systems with special manufacturer's requirements)</td>
<td>Submittal review, shop (3) and/or field inspection</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1705.2 Steel Construction</td>
<td>1. Fabricator and erector documents (Verify reports and certificates as listed in AISC 360, chapter N, paragraph 3.2 for compliance with construction documents)</td>
<td>Submittal Review</td>
<td>Y</td>
<td>Each submittal</td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td>2. Material verification of structural steel</td>
<td>Shop (3) and field inspection</td>
<td>Y</td>
<td>Periodic</td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td>3. Embedments (Verify diameter, grade, type, length, embedment. See 1705.3 for anchors)</td>
<td>Field inspection</td>
<td>Y</td>
<td>Periodic</td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td>4. Verify member locations, braces, stiffeners, and application of joint details at each connection comply with construction documents</td>
<td>Field inspection</td>
<td>Y</td>
<td>Periodic</td>
<td>EOR1/TA</td>
</tr>
<tr>
<td></td>
<td>5. Structural steel welding:</td>
<td>Shop (3) and field inspection</td>
<td>Y</td>
<td>Observe or Perform as noted (4)</td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td>a. Inspection tasks Prior to Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-1)</td>
<td>Shop (3) and field inspection</td>
<td>Y</td>
<td>Observe (4)</td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td>b. Inspection tasks During Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-2)</td>
<td>Shop (3) and field inspection</td>
<td>Y</td>
<td>Observe or Perform as noted (4)</td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td>c. Inspection tasks After Welding (Observe, or perform for each welded joint or member, the QA tasks listed in AISC 360, Table N5.4-3)</td>
<td>Shop (3) and field inspection</td>
<td>Y</td>
<td>Observe or Perform as noted (4)</td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td>d. Nondestructive testing (NDT) of welded joints: see Commentary</td>
<td>Shop (3) or field ultrasonic testing - 100%</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1) Complete penetration groove welds 5/16&quot; or greater in risk category III or IV</td>
<td>Shop (3) or field ultrasonic testing - 10% of welds minimum</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Complete penetration groove welds 5/16&quot; or greater in risk category II</td>
<td>Shop (3) or field magnetic particle or penetrant testing</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) Thermally cut surfaces of access holes when material t &gt; 2&quot;</td>
<td>Shop (3) or field radiographic or Ultrasonic testing</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) Welded joints subject to fatigue when required by AISC 360, Appendix 3, Table A3-1</td>
<td>Shop (3) or field radiographic or Ultrasonic testing</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5) Fabricator's NDT reports when fabricator performs NDT</td>
<td>Verify reports</td>
<td>Y</td>
<td>Each submittal (5)</td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td>6. Structural steel bolting:</td>
<td>Shop (3) and field inspection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Inspection tasks Prior to Bolting (Observe, or perform tasks for each bolted connection, in accordance with QA tasks listed in AISC 360, Table N5.6-1)</td>
<td>Shop (3) or field inspection</td>
<td>Y</td>
<td>Observe or Perform as noted (4)</td>
<td>TA</td>
</tr>
</tbody>
</table>
## SCHEDULE OF SPECIAL INSPECTION SERVICES

**PROJECT**
New Southeast Atlanta Public Library

<table>
<thead>
<tr>
<th>MATERIAL / ACTIVITY</th>
<th>SERVICE</th>
<th>APPLICABLE TO THIS PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Y/N</td>
<td>EXTENT</td>
</tr>
<tr>
<td>b. Inspection tasks During Bolting (Observe the QA tasks listed in AISC 360, Table N5.6-2)</td>
<td>Observe (4)</td>
<td></td>
</tr>
<tr>
<td>1) Pre-tensioned and slip-critical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>joints</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Turn-of-nut with matching markings</td>
<td>NOT ALLOWED</td>
<td>N</td>
</tr>
<tr>
<td>b) Direct tension indicator</td>
<td>Y</td>
<td>Periodic</td>
</tr>
<tr>
<td>c) Twist-off type tension control bolt</td>
<td>Y</td>
<td>Periodic</td>
</tr>
<tr>
<td>d) Turn-of-nut without matching markings</td>
<td>NOT ALLOWED</td>
<td>N</td>
</tr>
<tr>
<td>e) Calibrated wrench</td>
<td>Y</td>
<td>Continuous</td>
</tr>
<tr>
<td>2) Snug-tight joints</td>
<td>Y</td>
<td>Periodic</td>
</tr>
<tr>
<td>c. Inspection tasks After Bolting (Perform tasks for each bolted connection in accordance with QA tasks listed in AISC 360, Table N5.6-3)</td>
<td>Perform (4)</td>
<td></td>
</tr>
<tr>
<td>7. Inspection of steel elements of composite construction prior to concrete placement in accordance with QA tasks listed in AISC 360, Table N6.1</td>
<td>Shop (3) and field inspection and testing</td>
<td>Observe or Perform as noted (4)</td>
</tr>
</tbody>
</table>

### 1705.2.2 Steel Construction Other Than Structural Steel

1. Material verification of cold-formed steel deck:
   a. Identification markings | Field inspection | Y | Periodic | TA |
   b. Manufacturer's certified test reports | Submittal Review | Y | Each submittal | EOR1 |

2. Connection of cold-formed steel deck to supporting structure:
   Shop (3) and field inspection
   a. Welding | Y | Periodic | TA |
   b. Other fasteners (in accordance with AISC 360, Section N6)
   1) Verify fasteners are in conformance with approved submittal | Y | Periodic | TA |
   2) Verify fastener installation is in conformance with approved submittal and manufacturer's recommendations | Y | Periodic | TA |

3. Reinforcing steel
   Shop (3) and field inspection
   a. Verification of weldability of steel other than ASTM A706 | N | Periodic | |
   b. Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, boundary elements of special concrete structural walls and shear reinforcement | | Continuous | |
   c. Shear reinforcement | N | Continuous | |
   d. Other reinforcing steel | N | Periodic | |

4. Cold-formed steel trusses spanning 60 feet or greater
   a. Verify temporary and permanent restraint/bracing are installed in accordance with the approved truss submittal package | Field inspection | N | Periodic | |

### 1705.3 Concrete Construction

1. Inspection of reinforcing steel installation (see 1705.2.2 for welding) | Shop (3) and field inspection | Y | Periodic | TA |

2. Inspection of prestressing steel installation | Shop (3) and field inspection | N | Periodic | |

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## SCHEDULE OF SPECIAL INSPECTION SERVICES

### PROJECT
New Southeast Atlanta Public Library

<table>
<thead>
<tr>
<th>MATERIAL / ACTIVITY</th>
<th>SERVICE</th>
<th>APPLICABLE TO THIS PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Inspection of anchors cast in concrete where allowable loads have been increased per section 1908.5 or where strength design is used</td>
<td>Shop (3) and field inspection</td>
<td>Y/TA</td>
</tr>
<tr>
<td>4. Inspection of anchors and reinforcing steel post-installed in hardened concrete: Per research reports including verification of anchor type, anchor dimensions, hole dimensions, hole cleaning procedures, anchor spacing, edge distances, concrete minimum thickness, anchor embedment and tightening torque</td>
<td>Field inspection</td>
<td>Periodic or as required by the research report issued by an approved source</td>
</tr>
<tr>
<td>5. Verify use of approved design mix</td>
<td>Shop (3) and field inspection</td>
<td>Y/TA</td>
</tr>
<tr>
<td>6. Fresh concrete sampling, perform slump and air content tests and determine temperature of concrete</td>
<td>Shop (3) and field inspection</td>
<td>Continuous</td>
</tr>
<tr>
<td>7. Inspection of concrete and shotcrete placement for proper application techniques</td>
<td>Shop (3) and field inspection</td>
<td>Continuous</td>
</tr>
<tr>
<td>8. Inspection for maintenance of specified curing temperature and techniques</td>
<td>Shop (3) and field inspection</td>
<td>Periodic</td>
</tr>
<tr>
<td>10. Erection of precast concrete members</td>
<td>Shop (3) and field inspection</td>
<td>Periodic</td>
</tr>
<tr>
<td>a. Application of prestressing force</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>b. Grouting of bonded prestressing tendons in the seismic-force-resisting system</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>11. Verification of in-situ concrete strength, prior to stressing of tendons in post tensioned concrete and prior to removal of shores and forms from beams and structural slabs</td>
<td>Review field testing and laboratory reports</td>
<td>N</td>
</tr>
<tr>
<td>12. Inspection of formwork for shape, lines, location and dimensions</td>
<td>Field inspection</td>
<td>Periodic</td>
</tr>
<tr>
<td>13. Concrete strength testing and verification of compliance with construction documents</td>
<td>Field testing and review of laboratory reports</td>
<td>Periodic</td>
</tr>
</tbody>
</table>

### 1705.4 Masonry Construction

#### (A) Level A, B and C Quality Assurance:
1. Verify compliance with approved submittals | Field Inspection | Y/TA |

#### (B) Level B Quality Assurance:
1. Verification of $f_m$ and $f'_{m,AC}$ prior to construction | Testing by unit strength method or prism test method | Y/TA |
## SCHEDULE OF SPECIAL INSPECTION SERVICES

### PROJECT
New Southeast Atlanta Public Library

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<tbody>
<tr>
<td>(C) Level C Quality Assurance:</td>
<td></td>
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<tr>
<td>1. Verification of $f_m$ and $f_{c',c}$ prior to construction and for every 5,000 SF during construction</td>
<td>Testing by unit strength method or prism test method</td>
<td>N</td>
</tr>
<tr>
<td>2. Verification of proportions of materials in premixed or preblended mortar, prestressing grout, and grout other than self-consolidating grout, as delivered to the project site</td>
<td>Field inspection</td>
<td>N</td>
</tr>
<tr>
<td>3. Verify placement of masonry units</td>
<td>Field Inspection</td>
<td>N</td>
</tr>
<tr>
<td>(D) Levels B and C Quality Assurance:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Verification of Slump Flow and Visual Stability Index (VSI) of self-consolidating grout as delivered to the project</td>
<td>Field testing</td>
<td>N</td>
</tr>
<tr>
<td>2. Verify compliance with approved submittals</td>
<td>Field inspection</td>
<td>Y</td>
</tr>
<tr>
<td>3. Verify proportions of site-mixed mortar, grout and prestressing grout for bonded tendons</td>
<td>Field Inspection</td>
<td>Y</td>
</tr>
<tr>
<td>4. Verify grade, type, and size of reinforcement and anchor bolts, and prestressing tendons and anchorages</td>
<td>Field Inspection</td>
<td>Y</td>
</tr>
<tr>
<td>5. Verify construction of mortar joints</td>
<td>Field Inspection</td>
<td>Y</td>
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<tr>
<td>6. Verify placement of reinforcement, connectors, and prestressing tendons and anchorages</td>
<td>Field Inspection</td>
<td>Y</td>
</tr>
<tr>
<td>7. Verify grout space prior to grouting</td>
<td>Field Inspection</td>
<td>Y</td>
</tr>
<tr>
<td>8. Verify placement of grout and prestressing grout for bonded tendons</td>
<td>Field Inspection</td>
<td>Y</td>
</tr>
<tr>
<td>9. Verify size and location of structural masonry elements</td>
<td>Field Inspection</td>
<td>Y</td>
</tr>
<tr>
<td>10. Verify type, size, and location of anchors, including details of anchorage of masonry to structural members, frames, or other construction.</td>
<td>Field Inspection</td>
<td>Y</td>
</tr>
<tr>
<td>11. Verify welding of reinforcement (see 1705.2.2)</td>
<td>Field inspection</td>
<td>Y</td>
</tr>
<tr>
<td>12. Verify preparation, construction, and protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F)</td>
<td>Field inspection</td>
<td>Y</td>
</tr>
<tr>
<td>13. Verify application and measurement of prestressing force</td>
<td>Field Inspection</td>
<td>N</td>
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</table>
### SCHEDULE OF SPECIAL INSPECTION SERVICES

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<tbody>
<tr>
<td>14. Verify placement of AAC masonry units and construction of thin-bed mortar joints (first 5000 SF of AAC masonry)</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
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</tr>
<tr>
<td>15. Verify placement of AAC masonry units and construction of thin-bed mortar joints (after the first 5000 SF of AAC masonry)</td>
<td>Field inspection</td>
<td>N</td>
<td>Level B - Periodic</td>
<td>Level C - Continuous</td>
<td></td>
</tr>
<tr>
<td>16. Verify properties of thin-bed mortar for AAC masonry (first 5000 SF of AAC masonry)</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Verify properties of thin-bed mortar for AAC masonry (after the first 5000 SF of AAC masonry)</td>
<td>Field inspection</td>
<td>N</td>
<td>Level B - Periodic</td>
<td></td>
<td></td>
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</table>

**1705.5 Wood Construction**

1. Inspection of the fabrication process of wood structural elements and assemblies in accordance with Section 1704.2.5
   - In-plant review (3) | Periodic
   - N

2. For high-load diaphragms, verify grade and thickness of structural panel sheathing agree with approved building plans
   - Field inspection | Periodic
   - N

3. For high-load diaphragms, verify nominal size of framing members at adjoining panel edges, nail or staple diameter and length, number of fastener lines, and that spacing between fasteners in each line and at edge margins agree with approved building plans
   - Field inspection | Periodic
   - N

4. Metal-plate-connected wood trusses spanning 60 feet or greater: verify temporary and permanent restraint/bracing are installed in accordance with the approved truss submittal package
   - Field inspection | Periodic
   - N

**1705.6 Soils**

1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.
   - Field inspection | Periodic
   - TA

2. Verify excavations are extended to proper depth and have reached proper material.
   - Field inspection | Periodic
   - TA

3. Perform classification and testing of controlled fill materials.
   - Field inspection | Periodic
   - TA

4. Verify use of proper materials, densities, and lift thicknesses during placement and compaction of controlled fill
   - Field inspection | Continuous
   - TA

5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly
   - Field inspection | Periodic
   - TA

**1705.7 Mechanical Systems**

1. Verify the placement and quality of the insulation materials and installation of the mechanical systems.
   - Field inspection | Periodic
   - TA

2. Verify the installation of the HVAC system, including ductwork, ventilation, and controls.
   - Field inspection | Periodic
   - TA

3. Verify the installation of the plumbing system, including pipes, valves, and fixtures.
   - Field inspection | Periodic
   - TA

4. Verify the installation of the electrical system, including wiring, panels, and fixtures.
   - Field inspection | Periodic
   - TA

5. Verify the installation of the fire protection system, including sprinklers, detectors, and alarms.
   - Field inspection | Periodic
   - TA

**1705.8 Electrical Systems**

1. Verify the installation of the electrical system, including wiring, panels, and fixtures.
   - Field inspection | Periodic
   - TA

2. Verify the installation of the lighting system, including fixtures, wiring, and controls.
   - Field inspection | Periodic
   - TA

3. Verify the installation of the electrical systems, including disconnects, transformers, and panels.
   - Field inspection | Periodic
   - TA

4. Verify the installation of the electrical systems, including wiring, panels, and fixtures.
   - Field inspection | Periodic
   - TA

5. Verify the installation of the electrical systems, including wiring, panels, and fixtures.
   - Field inspection | Periodic
   - TA

**1705.9 Security Systems**

1. Verify the installation of the security system, including cameras, sensors, and alarms.
   - Field inspection | Periodic
   - TA

2. Verify the installation of the security system, including cameras, sensors, and alarms.
   - Field inspection | Periodic
   - TA

3. Verify the installation of the security system, including cameras, sensors, and alarms.
   - Field inspection | Periodic
   - TA

4. Verify the installation of the security system, including cameras, sensors, and alarms.
   - Field inspection | Periodic
   - TA

5. Verify the installation of the security system, including cameras, sensors, and alarms.
   - Field inspection | Periodic
   - TA

**1705.10 Fire Protection Systems**

1. Verify the installation of the fire protection system, including sprinklers, detectors, and alarms.
   - Field inspection | Periodic
   - TA

2. Verify the installation of the fire protection system, including sprinklers, detectors, and alarms.
   - Field inspection | Periodic
   - TA

3. Verify the installation of the fire protection system, including sprinklers, detectors, and alarms.
   - Field inspection | Periodic
   - TA

4. Verify the installation of the fire protection system, including sprinklers, detectors, and alarms.
   - Field inspection | Periodic
   - TA

5. Verify the installation of the fire protection system, including sprinklers, detectors, and alarms.
   - Field inspection | Periodic
   - TA
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<thead>
<tr>
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<tbody>
<tr>
<td>1705.7 Driven Deep Foundations</td>
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<tr>
<td>1. Verify element materials, sizes and lengths comply with requirements</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
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<tr>
<td>2. Determine capacities of test elements and conduct additional load tests, as required</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
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</tr>
<tr>
<td>3. Observe driving operations and maintain complete and accurate records for each element</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Verify placement locations and plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and document any damage to foundation element</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. For steel elements, perform additional inspections per Section 1705.2</td>
<td>See Section 1705.2</td>
<td>N</td>
<td>See Section 1705.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. For concrete elements and concrete-filled elements, perform additional inspections per Section 1705.3</td>
<td>See Section 1705.3</td>
<td>N</td>
<td>See Section 1705.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. For specialty elements, perform additional inspections as determined by the registered design professional in responsible charge</td>
<td>Field inspection</td>
<td>N</td>
<td>In accordance with construction documents</td>
<td></td>
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<tr>
<td>8. Perform additional inspections and tests in accordance with the construction documents</td>
<td>Field Inspection and testing</td>
<td>N</td>
<td>In accordance with construction documents</td>
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<tr>
<td>1705.8 Cast-in-Place Deep Foundations</td>
<td></td>
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<tr>
<td>1. Observe drilling operations and maintain complete and accurate records for each element</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Verify placement locations and plumbness, confirm element diameters, bell diameters (if applicable), lengths, embedment into bedrock (if applicable) and adequate end-bearing strata capacity. Record concrete or grout volumes</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. For concrete elements, perform additional inspections in accordance with Section 1705.3</td>
<td>See Section 1705.3</td>
<td>N</td>
<td>See Section 1705.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Perform additional inspections and tests in accordance with the construction documents</td>
<td>Field Inspection and testing</td>
<td>N</td>
<td>In accordance with construction documents</td>
<td></td>
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<tr>
<td>1705.9 Helical Pile Foundations</td>
<td></td>
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</tr>
<tr>
<td>1. Verify installation equipment, pile dimensions, tip elevations, final depth, final installation torque and other data as required.</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Perform additional inspections and tests in accordance with the construction documents</td>
<td>Field Inspection and testing</td>
<td>N</td>
<td>In accordance with construction documents</td>
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<tr>
<td>1705.10.1 Structural Wood Special Inspections For Wind Resistance</td>
<td>1. Inspection of field gluing operations of elements of the main windforce-resisting system</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Inspection of nailing, bolting, anchoring and other fastening of components within the main windforce-resisting system</td>
<td>Shop (3) and field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td>1705.10.2 Cold-formed Steel Special Inspections For Wind Resistance</td>
<td>1. Inspection during welding operations of elements of the main windforce-resisting system</td>
<td>Shop (3) and field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Inspections for screw attachment, bolting, anchoring and other fastening of components within the main windforce-resisting system</td>
<td>Shop (3) and field inspection</td>
<td>N</td>
<td>Periodic</td>
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<tr>
<td>1705.10.3 Wind-resisting Components</td>
<td>1. Roof cladding</td>
<td>Shop (3) and field inspection</td>
<td>N</td>
<td>Periodic</td>
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<tr>
<td></td>
<td>2. Wall cladding</td>
<td>Shop (3) and field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td>1705.11.1 Structural Steel Special Inspections for Seismic Resistance</td>
<td>Inspection of structural steel in accordance with AISC 341</td>
<td>Shop (3) and field inspection</td>
<td>N</td>
<td>In accordance with AISC 341</td>
<td></td>
</tr>
<tr>
<td>1705.11.2 Structural Wood Special Inspections for Seismic Resistance</td>
<td>1. Inspection of field gluing operations of elements of the seismic-force resisting system</td>
<td>Field inspection</td>
<td>N</td>
<td>Continuous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Inspection of nailing, bolting, anchoring and other fastening of components within the seismic-force-resisting system</td>
<td>Shop (3) and field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td>1705.11.3 Cold-formed Steel Light-Frame Construction Special Inspections for Seismic Resistance</td>
<td>1. Inspection during welding operations of elements of the seismic-force-resisting system</td>
<td>Shop (3) and field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Inspections for screw attachment, bolting, anchoring and other fastening of components within the seismic-force-resisting system</td>
<td>Shop (3) and field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td>1705.11.4 Designated Seismic Systems Verification</td>
<td>Inspect and verify that the component label, anchorage or mounting conforms to the certificate of compliance in accordance with Section 1705.12.3</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
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<tr>
<td>1705.11.5 Architectural Components Special Inspections for Seismic Resistance</td>
<td></td>
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</tr>
<tr>
<td>1. Inspection during the erection and fastening of exterior cladding and interior and exterior veneer</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
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<tr>
<td>2. Inspection during the erection and fastening of interior and exterior nonbearing walls</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
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<tr>
<td>3. Inspection during anchorage of access floors</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
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<tr>
<td>1705.11.6 Mechanical and Electrical Components Special Inspections for Seismic Resistance</td>
<td></td>
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</tr>
<tr>
<td>1. Inspection during the anchorage of electrical equipment for emergency or standby power systems</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
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</tr>
<tr>
<td>2. Inspection during the anchorage of other electrical equipment</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
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<tr>
<td>3. Inspection during installation and anchorage of piping systems designed to carry hazardous materials, and their associated mechanical units</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
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<tr>
<td>4. Inspection during the installation and anchorage of HVAC ductwork that will contain hazardous materials</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
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<tr>
<td>5. Inspection during the installation and anchorage of vibration isolation systems</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
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<tr>
<td>1705.11.7 Storage Racks Special Inspections for Seismic Resistance</td>
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<tr>
<td>Inspection during the anchorage of storage racks 8 feet or greater in height</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
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<tr>
<td>1705.11.8 Seismic Isolation Systems</td>
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<tr>
<td>Inspection during the fabrication and installation of isolator units and energy dissipation devices used as part of the seismic isolation system</td>
<td>Shop and field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td>1705.12.1 Concrete Reinforcement Testing and Qualification for Seismic Resistance</td>
<td></td>
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</tr>
<tr>
<td>1. Review certified mill test reports for each shipment of reinforcement used to resist earthquake-induced flexural and axial forces in reinforced concrete special moment frames, special structural walls, and coupling beams connecting special structural walls</td>
<td>Review certified mill test reports</td>
<td>N</td>
<td>Each shipment</td>
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<tr>
<td>2. Verify reinforcement weldability of ASTM A615 reinforcement used to resist earthquake-induced flexural and axial forces in reinforced concrete special moment frames, special structural walls, and coupling beams connecting special structural walls</td>
<td>Review test reports</td>
<td>N</td>
<td>Each shipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1705.12.2 Structural Steel Testing and Qualification for Seismic Resistance</td>
<td>Test in accordance with the quality assurance requirements of AISC 341</td>
<td>N</td>
<td>Per AISC 341</td>
<td></td>
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</tr>
<tr>
<td>1705.12.3 Seismic Certification of Nonstructural Components</td>
<td>Review certificate of compliance for designated seismic system components.</td>
<td>N</td>
<td>Each submittal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1705.12.4 Seismic Isolation Systems</td>
<td>Test seismic isolation system in accordance with ASCE 7 Section 17.8</td>
<td>N</td>
<td>Per ASCE 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1705.13 Sprayed Fire-resistant Materials</td>
<td>1. Verify surface condition preparation of structural members</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td>2. Verify application of sprayed fire-resistant materials</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Verify average thickness of sprayed fire-resistant materials applied to structural members</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Verify density of the sprayed fire-resistant material complies with approved fire-resistant design</td>
<td>Field inspection and testing</td>
<td>N</td>
<td>Per IBC Section 1705.13.5</td>
<td></td>
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<tr>
<td>5. Verify the cohesive/adhesive bond strength of the cured sprayed fire-resistant material</td>
<td>Field inspection and testing</td>
<td>N</td>
<td>Per IBC Section 1705.13.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1705.14 Mastic and Intumescent Fire-Resistant Coatings</td>
<td>Inspect mastic and intumescent fire-resistant coatings applied to structural elements and decks</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
</tr>
<tr>
<td>1705.15 Exterior Insulation and Finish Systems (EIFS)</td>
<td>1. Verify materials, details and installations are per the approved construction documents</td>
<td>Field inspection</td>
<td>N</td>
<td>Periodic</td>
<td></td>
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<tr>
<td>2. Inspection of water-resistant barrier over sheathing substrate</td>
<td>Field inspection</td>
<td>N</td>
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## MATERIAL / ACTIVITY

### 1705.16 Fire-Resistant Penetrations and Joints

1. Inspect penetration firestop systems  
   - **SERVICE**: Field testing  
   - **Y/N**: Y  
   - **EXTENT**: Per ASTM E2174  
   - **AGENT**: TA  

2. Inspect fire-resistant joint systems  
   - **SERVICE**: Field testing  
   - **Y/N**: Y  
   - **EXTENT**: Per ASTM E2393  
   - **AGENT**: TA

### 1705.17 Smoke Control Systems

1. Leakage testing and recording of device locations prior to concealment  
   - **SERVICE**: Field testing  
   - **Y/N**: N  
   - **EXTENT**: Periodic

2. Prior to occupancy and after sufficient completion, pressure difference testing, flow measurements, and detection and control verification  
   - **SERVICE**: Field testing  
   - **Y/N**: N  
   - **EXTENT**: Periodic

## * INSPECTION AGENTS

<table>
<thead>
<tr>
<th>FIRM</th>
<th>ADDRESS</th>
<th>TELEPHONE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Testing Agency (TA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Sedki &amp; Russ Engineers (EOR1)</td>
<td>6700 Vernon Woods Dr. Suite 200 Atlanta, GA 30328</td>
<td>404-256-5662</td>
</tr>
<tr>
<td>3.</td>
<td></td>
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</tbody>
</table>

**Notes:**

1. The inspection and testing agent(s) shall be engaged by the Owner or the Owner's Agent, and not by the Contractor or Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official prior to commencing work. The qualifications of the Special Inspector(s) and/or testing agencies may be subject to the approval of the Building Official and/or the Design Professional.

2. The list of Special Inspectors may be submitted as a separate document, if noted so above.

3. Special Inspections as required by Section 1704.2.5 are not required where the fabricator is approved in accordance with IBC Section 1704.2.5.2

4. Observe on a random basis, operations need not be delayed pending these inspections. Perform these tasks for each welded joint, bolted connection, or steel element.

5. NDT of welds completed in an approved fabricator's shop may be performed by that fabricator when approved by the AHJ. Refer to AISC 360, N7.

---

**Are Requirements for Seismic Resistance included in the Statement of Special Inspections?**  
Yes  No

**Are Requirements for Wind Resistance included in the Statement of Special Inspections?**  
Yes  No

**DATE:** 3/14/2014
SECTION 017419

CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

SUMMARY

1.1 Section includes administrative and procedural requirements for the following;

A. Salvaging nonhazardous demolition and construction waste.
   1. Recycling nonhazardous demolition and construction waste.
   2. Disposing of nonhazardous demolition and construction waste.

B. Related Requirements:

   B. Section 024116 "Structure Demolition" for disposition of waste resulting from
      1. demolition of buildings, structures, and site improvements.
      2. Section 024119 "Selective Demolition" for disposition of waste resulting from
         partial demolition of buildings, structures, and site improvements.
      3. Section 311000 "Site Clearing" for disposition of waste resulting from site
         clearing and removal of above- and below-grade improvements.

DEFINITIONS

1.2 Construction Waste: Building and site improvement materials and other solid waste
resulting from construction, remodeling, renovation, or repair operations. Construction
waste includes packaging.

Demolition Waste: Building and site improvement materials resulting from demolition or
selective demolition operations.

Disposal: Removal off-site of demolition and construction waste and subsequent sale,
recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having
jurisdiction.

Recycle: Recovery of demolition or construction waste for subsequent processing in
preparation for reuse.

Salvage: Recovery of demolition or construction waste and subsequent sale or reuse in
another facility.

Salvage and Reuse: Recovery of demolition or construction waste and subsequent
incorporation into the Work.
PERFORMANCE REQUIREMENTS

1.3 General: Achieve end-of-Project rates for salvage/recycling of 75 percent by weight of total non-hazardous solid waste generated by the Work. Facilitate recycling and salvage of materials, if any.

A. ACTION SUBMITTALS

1.4 Waste Management Plan: Submit plan within 30 days of date established for commencement the Notice to Proceed.

A. INFORMATIONAL SUBMITTALS

1.5 Waste Reduction Progress Reports: Concurrent with each Application for Payment,

A. submit report. Include the following information:
   Material category.
   1. Generation point of waste.
   2. Total quantity of waste in tons.
   3. Quantity of waste salvaged, both estimated and actual in tons.
   4. Quantity of waste recycled, both estimated and actual in tons.
   5. Total quantity of waste recovered (salvaged plus recycled) in tons.
   6. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.

B. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.

C. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.

D. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.

E. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

F. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.

G. LEED Submittal: LEED letter template for Credit MR 2.1 and Credit MR 2.2, signed by Contractor, tabulating total waste material, quantities diverted and means by which it is diverted, and statement that requirements for the credit have been met.

H. Qualification Data: For waste management coordinator.
QUALITY ASSURANCE

1.6  Waste Management Coordinator Qualifications: LEED-Accredited Professional, certified by USGBC. Waste management coordinator may also serve as LEED coordinator. Waste Management Conference: Conduct conference at Project site to comply with requirements in Section 013100 "Project Management and Coordination."

WASTE MANAGEMENT PLAN

1.7  General: Develop a waste management plan according to ASTM E 1609 and requirements in this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Distinguish between demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan. Waste Identification: Indicate anticipated types and quantities of demolition and site-clearing and construction waste generated by the Work. Include estimated quantities and assumptions for estimates. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.

2.  Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses, and telephone numbers.

3.  Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses, and telephone numbers.

4.  Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.

5.  Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.

6.  Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION
3.1 PLAN IMPLEMENTATION

A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract.

B. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
   1. Distribute waste management plan to everyone concerned within three days of submittal return.
   2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.

C. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
   1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.
   2. Comply with Section 015000 "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection, and noise control.

3.2 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

A. General: Recycle paper and beverage containers used by on-site workers.

B. Recycling Incentives: Revenues, savings, rebates, tax credits, and other incentives received for recycling waste materials shall accrue to Owner.

C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
   1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
      a. Inspect containers and bins for contamination and remove contaminated materials if found.
   2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
   3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
   4. Store components off the ground and protect from the weather.
   5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.
RECYCLING DEMOLITION WASTE

1.8
A. Asphalt Paving: Grind asphalt to maximum 1-1/2-inch (38-mm) or 4-inch (100-mm) size as may be approved by architect for a specific use.
B. Asphalt Paving: Break up and transport paving to asphalt-recycling facility.
C. Concrete: Remove reinforcement and other metals from concrete and sort with other metals.
   Pulverize concrete to maximum 1-1/2-inch (38-mm) or 4-inch (100-mm) size. as may be approved by Architect for specific use.
D. Masonry: Remove metal reinforcement, anchors, and ties from masonry and sort with other metals.
   Pulverize masonry to maximum 3/4-inch (19-mm size).
1. Wood Materials: Sort and stack members according to size, type, and length. Separate
E. lumber, engineered wood products, panel products, and treated wood materials.
F. Metals: Separate metals by type.
G. Structural Steel: Stack members according to size, type of member, and length.
1. 2. Remove and dispose of bolts, nuts, washers, and other rough hardware.
H. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers, and other components by type and size.
   Conduit: Reduce conduit to straight lengths and store by type and size.
   RECYCLING CONSTRUCTION WASTE

1.9
A. Packaging:
   Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store
   in a dry location.
1. 2. Polystyrene Packaging: Separate and bag materials.
3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
B. Wood Materials:
   Clean Cut-Offs of Lumber: Grind or chip into small pieces.
   1. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
Gypsum Board: Stack large clean pieces on wood pallets or in container and store in a dry location.

Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

DISPOSAL OF WASTE

1.10

General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.

Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.

2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

Burning: Do not burn waste materials.

B. Disposal: Remove waste materials from Owner's property and legally dispose of them.

C. END OF SECTION 017419
SECTION 05 1200

STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

1.1 REFERENCE STANDARDS:

A. Except as called for otherwise herein, fabrication and erection shall meet the specifications for structural steel for buildings of the AISC dated March 9, 2005.


C. All welding shall meet the Standard of the American Welding Society, D1.1-04.

1.2 SHOP DRAWINGS:

A. Shop drawings shall be submitted for the Architect's review.

B. Where welded connections are detailed, standard AWS symbols shall be used.

C. Shop drawings shall be made to conform with the design drawings. Contract drawings shall take precedence over shop drawings unless otherwise authorized in writing. Review of the shop drawings by the Architect or the Engineer does not constitute a change to the contract.

D. All joints shall be completely detailed so as to cover both shop and field work.

E. In case the Contractor is in doubt regarding certain dimensions shown on the contract drawings, or if there is a discrepancy on the contract drawings, the Contractor or his agent shall circle and question such dimensions with pencil on his shop drawings. In such cases, the dimensions shall be especially checked or supplied by the Architect.

F. The Contractor must check and be responsible for the conforming of all steel details indicated on the contract drawings.

G. All drawings for review must be submitted in five (5) copies. Two sets shall be returned to the Contractor marked as follows:
   1. "No Exceptions Taken" - Indicates the drawings have been reviewed for conformance with contract documents and that no exceptions have been taken. Proceed with the work.
   2. "Exceptions Noted" - Indicates that the drawings have been reviewed for conformance with the contract documents and that exceptions have been taken. Contractor may proceed with the work provided he corrects the work as noted. Resubmittal will not be required.
   3. "Exceptions Noted - Resubmit" - Indicates the drawings have been reviewed for conformance with the contract documents and that work may proceed on items to which no exceptions have been taken. After items to which exceptions have been taken are corrected, Contractor shall again submit copies for review.
4. "Resubmit" - Indicates the drawings have been reviewed for conformance with the contract documents and are too incomplete or in an unacceptable condition for review. A notation will be made on the shop drawings as to the exceptions taken. Drawings shall be revised and resubmitted for review before proceeding.

In case exceptions are noted on one sheet which affects details on other sheets, the exception is to be taken as applying to such other details.

H. All drawings and details must be checked and show the initial of the checker before they are submitted for review.

I. The Contractor must check and be responsible for the conforming of all steel details indicated on the contract drawings.

1.3 RESPONSIBILITY FOR ERRORS:

A. The Contractor shall be responsible for all errors of detailing, fabrication and for the correct fitting of the structural members. The Contractor shall make all measurements in the field to verify or supplement dimensions shown on the drawings, and he will verify that all dimensions shown on shop drawings are coordinated with the dimensions and requirements of the architectural plans, elevations and sections.

B. If steel is damaged or does not fit-up, the Contractor shall prepare and submit drawings showing his proposed corrective measures to the Architect. No modifications shall be made to the steel until such drawings have been approved by the Architect and a change order issued.

1.4 TESTS AND INSPECTIONS:

A. The Contractor shall furnish the Architect with two certified copies of all mill reports covering the chemical and physical properties of the steel used.

B. Inspection of welding shall comply with AWS D1.1-04. Inspection of preparation of materials and welding shall be by the visual method as covered in AWS D1.1-04. Inspection shall cover the following:
   1. Butt welds introduced by the fabricator shall be inspected. Such welds shall be indicated on shop drawings with the appropriate reference joint number as covered in AISC Thirteenth Edition.
   2. All welds indicated on contract drawings as full penetration welds shall be inspected. Such welds shall be taken to include all welds of the types covered in AISC Thirteenth Edition.
   3. Initial inspection shall be made of a random selection of 15 percent of fillet welds. If the fillet welding fails to pass this inspection, then all such welding shall be inspected and passed before acceptance.
   4. If inspection of full strength welding is not accomplished during preparation and welding, nondestructive testing will be provided in compliance with AWS D1.1-04. Such testing shall be paid for by the Contractor.

C. Inspection will be made of a random selection of 15 percent of all high strength shop and field bolting. To be acceptable, 95 percent of all bolts tested shall
meet design tension, and no bolt shall test less than 85 percent of design tension. If the bolting fails to meet this requirement, bolts shall be reworked by the Contractor and additional tests of 50 percent of all bolts shall be made until the above requirements are met.

D. All inspections shall be made by a Registered Engineer or by an inspection laboratory approved by the Architect.

E. Inspection reports shall include certification that:
   1. The work has been checked against the contract drawings and that full strength butt welds have been provided where they were called for on the plans.
   2. The work has been checked against the shop drawings and full strength butt welds introduced by the fabricator have been provided.
   3. Fillet welds have been inspected.
   4. The welding has been accomplished to meet AWS Standards.
   5. High strength bolts have been installed with one hardened washer and that they meet the inspection requirements prescribed in the contract specifications.

F. One copy of inspection reports shall be furnished to the Architect, one to the Engineer, one to the Owner and one to the Contractor. Cost of such inspection shall be paid for by the Contractor.

PART 2 - PRODUCTS

2.1 RECYCLED CONTENT

A. A minimum of 30% of the total building materials content, by value, shall be manufactured using recycled materials.

2.2 REGIONAL MATERIALS

A. A minimum of 30% of the total building materials by value shall include materials and products that have been manufactured and extracted within 500 miles of the project site.

2.3 MATERIALS:

A. Structural steel shall conform to ASTM A992 (50 KSI yield strength) unless shown therein on the contract documents.

B. Steel for structural tubing shall meet the requirements of ASTM A500, Grade B with A Fy = 46,000 psi.

C. High strength bolts, nuts, and washers shall conform to ASTM A325-04.

D. Electrodes for manual metal arc-welding shall conform to Classification E7015, E7016, or E7018.
E. Steel for Structural pipe shall meet the requirements of ASTM A501 with a Fy = 36,000 psi.

2.4 CONNECTIONS:

A. General
1. Beam and girder connections shall meet Tables 10-1, 10-2 and 10-3 of the AISC Code Fourteenth Edition unless otherwise prescribed on plans.
2. Except as otherwise prescribed on plans, all connections of beams or girders shall be designed as flexible and shall be proportioned for the reaction shears. If, however, a concentric connection is not possible, the Architect shall be notified.
3. Where final connection is to be welded, provision shall be made for securing the members together during erection and alignment.
4. Except where called for otherwise, field connections shall be bolted.
5. Fabricator shall punch all holes for the attachment of nailers, hangers, and other work that is specified and shown to be attached to the steel.
6. Placement of Bolts and Welds: The bolts or welds at the ends of any member transmitting stresses into that member shall preferably have their centers of gravity on the gravity axis of the member; otherwise, provision shall be made for the effect of the resulting eccentricity. Pins may be so placed as to counteract the effect of bending due to dead load.
7. Eccentric Connections: Members meeting at a point shall have their gravity axis meet at a point if practical; if not, provision shall be made for bending stresses due to eccentricity.
8. Where a steel joist is designated on plans as a strut joist, it shall serve as an erection strut and shall have bolted end connections. Provision shall be made in the steel to receive these joists, and two 9/16” OH shall be provided for each connection.

B. Welds
1. Welding and joint details shall meet the requirements of the AISC Fourteenth Edition.

C. High strength steel bolts
1. High strength steel bolt connections shall be provided and installed in accordance with "Specifications for Assembly of Structural Joints Using High Strength Steel Bolts" as provided for in the AISC Fourteenth Edition.
2. Bolts, nuts, and washers shall conform to ASTM A325-04.
3. Bolts shall be equipped with nut and one hardened washer. Washers shall be flat and smooth, but if the bearing faces of the bolted parts have a slope of more than 1:20 with respect to a plane normal to the bolt axis, smooth beveled washers shall be used to compensate for the lack of parallelism.
4. Bolts shall be in bearing and threads must be out of the shear plane.
5. Bolts shall be tightened by use of a power wrench or manual torque wrench calibrated to the minimum bolt tension prescribed by the AISC Specifications. The turn of the nut method will not be accepted.

D. Expansion Bolts
1. Where called for on plans, bolts for attaching steel to existing concrete shall be one of the following:
   “Kwik-Bolt TZ” Expansion Anchor
   Hilti
   P.O. Box 21148
   Tulsa, OK 74121

   “Strong Bolt” Expansion Anchor
   Simpson Anchor Systems
   1720 Couch Drive
   McKinney, TX 75069

2. Holes for expansion bolts shall be made by first securing the steel item in place then drilling the holes through the holes in the steel using the steel as a template. Drilling of the holes by center measurement will not be permitted. Reaming or burning of the holes in the steel will not be permitted. The drill size shall be of the same diameter as the bolt.

PART 3 - EXECUTION

3.1 WORKMANSHIP

A. All work shall be executed by skilled workmen under experienced supervision.

B. Both shop and field welding shall be done by certified welders. Two (2) copies of welder's certifications shall be furnished to the Architect.

3.2 FABRICATION:

A. Structural material shall be fabricated and assembled in the shop to the extent that additional assembly is restricted by shipping limitations. Flame cutting and chipping shall be done to prescribed dimensions. Burrs and shavings shall be removed. Parts not connected in the shop shall be secured by bolts to prevent loss or damage in shipment and handling.

B. Shearing and punching shall be without ragged or torn edges. The diameter of the punch shall not exceed that of the bolt or the diameter of the die exceed the nominal diameter of the bolts plus 1/8". Holes shall be spaced so that when parts are assembled, bolts will enter without distortion. Holes shall be enlarged only by reaming. Drift pins shall not enlarge or distort the holes.

C. Shop connections to be welded or high strength steel bolts unless specified otherwise.

D. All members shall be free from twists, kinks, buckles or open joints. Parts assembled with bolts shall be in close contact except where separators are prescribed. All members shall be so made that when assembled, the parts shall come together without shimming.

E. Open holes shall be provided for bolted connections of other work to structural metal work.

F. Metal shall be prepared in accordance with shop details before welding is begun.
G. No shop splice or other connection, welded or otherwise, shall be made without having been detailed on shop drawings.

3.3 SHOP PAINTING:

A. All steel and iron work shall be cleaned of mill scale, dirt, rust, oils, and grease, and all members that shall not receive spray on fireproofing shall be given one shop coat of a rust inhibitive paint.

B. Paint shall be used from original containers without dilution.

3.4 ERECTION PRECAUTIONS:

A. All structural metal work shall have temporary guys, braces and stays to hold it in position until it is permanently secure. It shall be the responsibility of the Contractor to secure steel against displacement until the erection of all steel is completed, and all floor and roof decks are in place.

B. All structural metal work shall be set and secured with temporary or permanent connections as erected.

C. Column bases are designed as unrestrained and columns shall be guyed, braced or stayed as erected. (Staying may be accomplished by fastening to framing members attached to a section of framing already braced).

3.5 ERECTION:

A. Field connections may be welds or high strength steel bolts unless specified otherwise.

B. Bolts for structural work exposed to the weather shall be dipped in rust-inhibitive paint just before they are put in place.

C. Anchor bolts shall be located and built into the connecting work in advance.

D. Column bases and bearing plates shall be set on 1-1/2" thick non-shrinking, non-metallic grout with a minimum strength of 5,000 psi.

E. No erection holes shall be burned or enlarged with a torch.

F. After assembly the various members forming parts of a completed frame or structure shall be aligned and adjusted before being permanently fastened. Tolerance shall conform to AISC. Fastening of splices of compression members shall be done after the abutting surfaces have been brought completely into contact. Bearing surfaces and surfaces that will be in permanent contact shall be cleaned before the members are assembled.

G. As erection progresses, the work shall be fastened to take care of all dead load, wind, and erection stresses. Splices will be permitted only where indicated. Unless removal is prescribed by the Architect, all erection bolts used in welded construction shall be tightened and left in place.
H. All bolts, including anchor bolts, shall expose 1-1/2 threads minimum after nut is tightened.

I. Erection of steel shall meet the latest – OSHA requirements.

3.6 FIELD PAINTING

A. After erection, all surfaces on which the shop coat is damaged or destroyed, or on which the metal is exposed by rust spots shall be cleaned off and painted one coat of paint.

B. After erection, all bolts, heads, and welds shall be painted by erector.

C. After erection, all steel exposed to weather shall have one coat of rust-prohibitive paint. Approved paints are as follows: Tnemec Company 10-99 rust-inhibitive primer; Sherwin William’s Kam Kromik Primer; Rustoleum Corporation #1069. Primer to be applied to provide a minimum dry film of two mills.

***NOTE: AISC Fourteenth Edition is part of the specifications except the steel fabricator shall be responsible for the design and detail of all connections not shown on the contract documents.

END OF SECTION 05 1200
SECTION 05 2100

STEEL JOIST FRAMING

PART I – GENERAL

1.1 REFERENCE STANDARDS


1.2 SHOP DRAWINGS

A. The Contractor shall submit to Architect five copies of drawings which shall show all details and dimensions for checking, fabrication, and installation of joists. Work must not proceed in field before Contractor has received drawings from Architect to which no exceptions have been taken.

B. Name of manufacturer of joists shall be shown on shop drawings.

C. All field welding for attachment of steel joists shall be shown on shop drawings.

1.3 INSPECTION

A. All joists not manufactured by a member of SJI or AISC shall have 15% of welds inspected by an inspection laboratory approved by Architect or by a Registered Engineer.

B. One copy of inspection report shall be furnished to the Architect, one to the Engineer and one to the Contractor.

C. Cost of inspection shall be paid for by the Contractor.

PART 2 - PRODUCTS

2.1 RECYCLED CONTENT

A. A minimum of 30% of the total building materials content, by value, shall be manufactured using recycled materials.

2.2 REGIONAL MATERIALS

A. A minimum of 30% of the total building materials by value shall include materials and products that have been manufactured and extracted within 500 miles of the project site.

2.3 MANUFACTURER

A. All joists shall be manufactured by one of the following:
   1. A member company of Steel Joist Institute.
   2. A member company of American Institute of Steel Construction.
2.4 SPECIAL ENDS
A. All joists designated on plans as strut joists shall be equipped with 1/4" bearing plate with two 9/16" holes each end for bolting as erection progresses.

2.5 BRIDGING
A. Bridging shall be spaced as prescribed in the SJ1 Specifications.
B. The size and type of bridging shall be as prescribed in the SJI Specifications, except that when horizontal bridging is used, a vertical "X" brace shall be provided in the first panel and in every sixth panel.
C. Additional bridging shall be provided at end of each roof joist at the bottom chord for uplift. These rows of bridging will not be shown on the plans.

2.6 PROVISION FOR OPENING
A. Openings between joists over 12" square shall be framed with 3 x 3 x 1/4" angles with vertical leg down, except where called for otherwise on plans. This also applies to roof drains.
B. Vertical legs of angles shall be coped for field welding to steel joists or to other angles.

PART 3 - EXECUTION

3.1 ERECTION
A. As structural steel is erected, strut joists shall be bolted in place with two 1/2" diameter bolts each end and welded with 3/16" fillet weld all around.
B. As joists are erected, they shall be secured to their supports by temporary or permanent connection.
C. Except where bolted, joists shall be welded to steel supports with 1/8" x 2" fillet welds each side.
D. Bridging shall be installed as erection of joists progresses. Bridging shall be attached at each connection and at crossover by welding or bolting (see plans).
E. Opening framing shall be attached by welding.
F. Joists shall not be subjected to construction loads until top chords are stayed by attachment of roof deck.
G. Where called for on plans, angle type extensions shall be provided.
H. Roof joists shall not be subjected to construction loads in excess of 20 psf.
I. Ends of joist shall be extended where indicated on plans. Extension shall be in accordance with the SJI Standards, Type 1, unless otherwise indicated.

J. If any member of the joist is damaged, joist shall either be replaced or damaged member corrected.

K. After erection is completed joists shall not have horizontal sweep. Horizontal sweep to be eliminated with the use of the bridging.

L. No load shall be hung from the joist bridging.

M. Erection of joists shall meet the latest OSHA requirements.

END OF SECTION 05 2100
PART 1 - GENERAL

1.1 REFERENCE STANDARDS

A. American Iron and Steel Institute, Specification for the Design of Cold Formed Steel Structural Members 1986 Edition.


1.2 SHOP DRAWINGS

A. Shop drawings shall be submitted to the Project Coordinator in five copies for review. Two copies shall be returned to the Contractor marked as follows:

1. “No Exception Taken” - Indicates the drawings have been reviewed for conformance with the contract documents, and no exceptions have been taken. Proceed with the work.

2. “Exceptions Noted” - Indicates the drawings have been reviewed for conformance with the contract documents, and that exceptions have been taken. Contractor may proceed with the work provided he corrects the work as noted. Resubmittal will not be required.

3. “Exceptions Noted - Resubmit” - Indicates the drawings have been reviewed for conformance with the contract documents and work may proceed on items to which no exceptions have been taken. After items to which exceptions have been taken are corrected, Contractor shall again submit copies for review.

4. “Resubmit” - Indicates the drawings have been revised for conformance with the contract documents and area too incomplete or in an unacceptable condition for review. A notation will be made on shop drawings as to the exceptions taken. Drawings shall be revised and resubmitted for review before proceeding with the work.

B. The welding washers and welding patterns for attachment of deck to supports shall be covered on shop drawings.

PART 2 - PRODUCT

2.1 RECYCLED CONTENT

A. A minimum of 30% of the total building materials content, by value, shall be manufactured using recycled materials.
A. A minimum of 30% of the total building materials by value shall include materials and products that have been manufactured and extracted within 500 miles of the project site.

2.3 STEEL DECK - TYPE “B”

A. Deck shall be manufactured from 22 gauge steel conforming to ASTM A-245 Grade C or A-466 Grade A and having minimum yield strength of 33,000 psi.

B. The deck shall have integral ribs, all continuous and complete in cross section. Ribs shall be formed to a depth as indicated on the drawings.

C. Sheets shall be so fabricated as to permit tele-scoping end laps not less than 2-1/2" long made at structural support. Side laps shall be of the interlocking type or have other provisions for fastening.

D. All sheets of deck furnished shall be furnished in proper lengths to match spacing of supports and be free of imperfections, rust spots, etc. Defective sheets shall be replaced.

E. Deck sheets shall be hot dipped galvanized with a G90 galvanization or they shall be scoured and phosphate coated and then painted with a sprayed-on oven baked primer where called for on plans.

2.4 ACOUSTIC STEEL ROOF DECK

A. Roof deck will be Epicore ER 3.5A (or approved equal) (an approved product in Versa – Deck 3.5 LS Acoustical by Consolidated Systems, Inc.) Deck shall be manufactured from 20 gauge steel conforming to ASTM A-65, Grade 40 and having a minimum yield strength of 40,000 psi.

B. Before forming, the steel sheets shall have received a hot-dip protective coating of zinc conforming to ASTM-A-924, G90.

Prime Paint – Prior to forming, galvanized steel shall be chemically cleaned and pre-treated followed by an oven-cured epoxy primer and a second coat of oven-cured polyester prime paint in the manufacturer's standard color of off-white. Compatibility of field applied finish paint with factory applied prime paint shall be the responsibility of the painting contractor.

C. ER3.5A Acoustical Roof Deck panels shall have continuous dovetail-shaped ribs spaced 8" on center and formed to the following nominal dimensions: 3.5" depth, 3/4" rib opening at bottom, 3" rib width at top.

D. The design thickness and minimum section properties shall be indicated on the contract drawings.

E. ER3.5A Acoustical Roof Deck panels shall have full depth positive registering sidetaps that can be fastened by welds or screws.
F. ER3.5A Acoustical Roof Deck panels shall be fabricated to provide a minimum two span condition.

G. ER3.5A Acoustical Roof Deck panels shall be fabricated with perforations in all bottom flange areas between the dovetail-shaped ribs.

H. Deck shall have bottom flat areas perforated for acoustic performance. Perforation shall be the same as specified by Epicore.

2.5 WELDING WASHERS

A. Welding washers shall be standard cut washers not less than 1” in diameter and 1/16” thick or 14 GA rectangular washers.

2.6 ACCESSORIES

A. Hanging devices as manufactured by Epicore shall be provided where required by the Architect’s drawing.

B. Sump pans, ridge, valley, transition, and eave plates shall be provided as indicated by the manufacturer standards.

C. Manufacturer’s standard flexible or metal type profile closures shall be provided as required by the manufacturer.

D. Acoustic elements shall be provided for installation above the perforated holes in the bottom flat area between the dovetail-shaped ribs to provide an NRC rating of .95. To facilitate field painting of the perforated surfaces, the sound absorbing elements shall be supported above the surface. Sound absorbing elements and spacers shall be furnished under this specification section for installation by the roofing contractor.

E. Acoustic batt insulation shall be fiberglass with a density of 1.65 pcf and a height of 3 1/2”.

PART 3 - EXECUTION

3.1 GENERAL

A. ER3.5A Acoustical Roof Deck panels and accessories shall be installed in strict accordance with the manufacturer’s approved erection drawings, installation instructions, the Steel Deck Institute (SDI) Manual for Construction with Steel Deck, and all applicable safety regulations.

3.2 ERECTION
A. Bundles of decking shall not be placed on steel joists prior to placement as the joists must be laterally stayed by the deck before they can develop their design loads. Bundles on stack high may be placed along beam lines after joists are welded in place and bridged.

B. The sheets shall be erected true to alignment, placed evenly, and matched at joints.

C. The deck shall be fastened to structural members by means of electric arc-welding through steel washers. Connections shall be spaced not more than 12” o.c. at all bearing points. Welds shall fill the holes in the washers and extend outside the holes.

D. When completed the deck shall form a flat and continuous surface for the complete support of all insulating and roofing materials.

E. During erection coordination with other trades shall prevail, and openings and special conditions shall be provided as called for by plans and specifications.

3.3 PRECAUTION

A. After decking is welded to supporting members, construction loads not exceeding 20 pounds per square foot may be placed on the deck.

B. No load shall be hung from deck

3.4 BEFORE INSTALLATION

A. The supporting frame and other work relating to the ER3.5A Acoustical Roof Deck shall be examined to determine if this work has been properly completed.

B. All components of the ER3.5A Acoustical Roof Deck System shall be protected from significant damage during shipment and handling. If storage at the jobsite is required, bundles or packages of these materials shall be elevated above the ground, sloped to provide drainage, and protected from the elements with a ventilated waterproof covering.

3.5 INSTALLATION

A. Bundles or packages of ER3.5A Acoustical Roof Deck System components shall be located on supporting members in such a manner that overloading of any individual members does not occur.

B. Before being permanently fastened, ER3.5A Acoustical Roof Deck panels shall be placed with ends accurately aligned and adequately bearing on supporting members. Proper coverage of the ER3.5A Acoustical Roof Deck panels shall be maintained. Care must be taken by the erector to maintain uniform spacing of the bottom rib opening (equal to the openings in the profiled sheet) at the sidelaps. Consistent coverage shall be maintained so that panels located in adjacent bays will be properly aligned.
C. Field cutting of the ER3.5A Acoustical Roof Deck panels shall be performed in a neat and precise manner. Only those openings shown on the structural engineer and cut by those requiring the opening.

D. ER3.5 Acoustical Roof Deck panels shall be fastened to all supporting members with ¾” diameter puddle welds at a nominal spacing of 8” on center or less as indicated on the manufacturer’s erection drawings.

E. Mechanical fasteners may be substituted for puddle welds to permanently fasten ER3.5A Acoustical Roof Deck panels to supporting members. The mechanical fastener manufacturer shall provide documentation as to the equivalent load capacity and proper installation procedure for each type of fastener being used.

F. Sidelaps of ER3.5A Acoustical Roof Deck panels shall be fastened by 1 ½” long welds or #12 screws at a spacing of 2’-0” on center or less as indicated on the manufacturer’s erection drawings. Sides of ER3.5A Acoustical Roof Deck panels that are located at perimeter edges of the building shall be fastened to supporting members at a spacing of 12” on center or less as indicated on the manufacturer’s erection drawings.

G. Sump pans, ridge, valley, transition, eave plates, and supplied reinforcement for small openings shall be fastened as indicated on the manufacturer’s erection drawings.

3.6 AFTER INSTALLATION

A. Construction loads that could damage the ER3.5A Acoustical Roof Deck such as heavy concentrated loads and impact loads shall be avoided. Planking shall be used in all high traffic areas.

B. Prior to the placement of the sound absorbing elements, the top surface of the ER3.5A Acoustical Roof Deck shall be cleaned of all debris, grease, oil and other foreign substances. Cleaning the bottom surface of the ER3.5A Acoustical Roof Deck for field painting shall be the responsibility of the painting contractor.

C. Galvanized coatings that are significantly damaged shall be repaired, appropriate galvanized repair paint shall be used, and the paint manufacturer’s application instructions shall be followed.

D. Sound absorbing elements shall be dry before installation of the elements or overlying roof materials.

E. No load shall be hung from the deck unless it is approved by the Architect.

3.7 FIELD PAINTING

A. After erection, all welds shall be touched up with a zinc rich primer.