END OF SECTION XXXXXXNOTE: THIS SECTION IS A COMMON DOCUMENT ON A MULTI-CONTRACT PROJECT.

SECTION 018113.0 - LEED DOCUMENTATION REQUIREMENTS

This Section was developed as an all inclusive master. Edit this Section to meet Project-specific requirements. Verify that Section titles referenced in this Section are correct for the Project's Specifications. LEED credits are optional; delete requirements for credits not sought. references to LEED are to LEED-NC, Version 3.0, unless noted otherwise. Where practical, terminology used in this Section has been made identical to or at least consistent with terminology used in the LEED rating systems; if questions arise relating to terminology, review the applicable LEED reference guide and the standards referenced by the applicable LEED rating system.

1. GENERAL
	* + 1. REFERENCES
				1. USGBC - United States Green Building Council, Washington, DC 20036, www.usgbc.org.

LEED: Leadership in Energy & Environmental Design.

* + - * 1. FSC - Forest Stewardship Council - U.S., Washington, DC 20007, [www.fscus.org](http://www.fscus.org).
				2. SMACNA - Sheet Metal and Air Conditioning Contractors' National Association, Chantilly, VA 20151, [www.smacna.org](http://www.smacna.org).
			1. DEFINITIONS
				1. LEED: Leadership in Energy & Environmental Design: The US Green Building Council’s Green Building Rating System for New Construction V3.0.
				2. Regional Materials: Materials that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of Project Site. If only a fraction of a product or material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) shall contribute to the regional value.
				3. Recycled Content: The percentage by weight of the constituents of project materials that have been recovered or otherwise diverted from the solid waste stream either during the manufacturing process (pre consumer) or after consumer use (post-consumer).

Pre-Consumer Material is defined as material in a product that is recycled from manufacturing waste. Excluded are rework, regrind, or scrap materials capable of being reclaimed within the same process that generated them. Materials discarded from one manufacturing process that are used in a different manufacturing process are considered pre-consumer recycled materials.

Post-Consumer Material is defined as material generated by household, commercial, industrial or institutional end-users and can no longer be used for its original purpose.

The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then multiplied by the cost of the assembly to determine the recycled content value.

* + - * 1. Rapidly Renewable Materials: Agricultural products, both fiber and animal, that take 10 years or less to grow or raise and can be harvested in a sustainable fashion. Examples of rapidly renewable materials include products made from bamboo flooring and plywood, wheatboard cabinetry, wool carpeting, cork flooring, bio-based paints, geotextile fabrics such as coir and jute, soy-based insulation and form-release agents, and straw bales.
				2. Chain-of-Custody Certificates: Certificates signed by manufacturers certifying that wood used to make products was obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, “FSC Principles and Criteria for Forest Stewardship.” Certificates shall include evidence that manufacturer is certified for chain of custody by an FSC-accredited certification body.
			1. SUMMARY
				1. This Section includes general requirements and procedures for compliance with certain USGBC LEED prerequisites and credits needed for this Project to obtain LEED certification.

USE ONE OF THE FOLLOWING 4 SUBPARAGRAPHS BELOW TO MEET PROJECT REQUIREMENTS.

LEED Certification: Certified.

LEED Certification: Silver.

LEED Certification: Gold.

LEED Certification: Platinum.

LEED-EB, LEED-CI, AND LEED-CS RATING SYSTEMS ARE NOT APPLICABLE TO NEW CONSTRUCTION, ADDITIONS, OR ALTERATIONS TYPICALLY EXECUTED BY DESIGN AND CONSTRUCTION.

* + - * 1. LEED certification requirements are based on LEED-NC, Version 3.0. (New Construction or Major Renovations).
				2. Other LEED prerequisites and credits needed to obtain certification depend on material selections and may not be specifically identified as LEED requirements. Compliance with requirements needed to obtain LEED prerequisites and credits may be used by the State as one criterion to evaluate “or-equal” submissions.
				3. Additional LEED prerequisites and credits needed to obtain certification depend on the design intent and other aspects of the Project that are not part of the Work of this Contract.
				4. A copy of the LEED Project checklist is attached at the end of this Section for information only.

USE PARAGRAPH BELOW IF PROJECT WILL INCLUDE NYSERDA INCENTIVES.

* + - * 1. This section includes additional general requirements associated with the State seeking incentives from the New York State Energy Research and Development Authority (NYSERDA) for the installation of energy efficient measures as a part of this project.
			1. RELATED REQUIREMENTS SPECIFIED ELSEWHERE
				1. Specific requirements pertaining to LEED materials and equipment specified elsewhere are additional to the requirements of this Section.

EDIT ARTICLE BELOW AS REQUIREDTO MEET PROJECT REQUIREMENTS.

* + - 1. SUBMITTALS
				1. LEED submittals are in addition to other submittals requirements specified elsewhere. If submitted item is identical to that submitted to comply with other requirements, submit duplicate copies as a separate submittal to verify compliance with indicated LEED requirements.
				2. Project Materials Cost Data: Provide statement indicating total cost for materials used for Project. Costs exclude labor, overhead, and profit. Include breakout of costs for the following categories of items:

Furniture.

Plumbing.

Mechanical.

Electrical.

Specialty items such as elevators and equipment.

Wood-based construction materials.

* + - * 1. Qualification Data: For LEED coordinator within 14 days after award of contract.
				2. LEED Action Plans: Transmit preliminary submittals within 30 days after award of Contract. Indicate how the following requirements will be met:

USE SUBPARAGRAPH BELOW IF WASTE DIVERSION IS A PROJECT REQUIREMENT.

MR Credit 2: Waste management plan complying with Section 017419.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR SALVAGED OR REFURBISHED WILL BE MET.

MR Credit 3: List of proposed salvaged and refurbished materials. Identify each material that will be salvaged or refurbished. Include its source, cost, and replacement cost if item was to be purchased new. Note: Heating, plumbing and electric components are excluded from this credit.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR RECYCLED CONTENT WILL BE MET

MR Credit 4: List of proposed recycled content materials. Identify each material with recycled content. Include its cost, post-consumer recycled content, and pre-consumer recycled content. Note: Heating, plumbing and electric components are excluded from this credit.

USE SUBPARAGRAPH BELOW IF REGIONAL MATERIALS ARE A PROJECT REQUIREMENT.

MR Credit 5: List of proposed regional materials. Identify each regional material. Include its source, cost, and the fraction by weight that is considered regional. Note: Heating, plumbing and electric components are excluded from this credit.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR RAPIDLY RENEWABLE MATERIALS WILL BE MET.

MR Credit 6: Identify the manufacturer’s name, the rapidly renewable content of the product submitted, and the cost of the product.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR CERTIFIED WOOD WILL BE MET.

MR Credit 7: Identify manufacturers’ name(s), percentage of FSC Certified Content, total cost of FSC Certified materials installed on the project, total cost of wood installed on the project, and provide Chain of Custody Documentation for each FSC certified product installed on the project.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO FOLLOW AN IAQ MANAGEMENT PLAN DURING CONSTRUCTION.

EQ 3.1 Credit: Construction indoor-air-quality management plan.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO FOLLOW AN IAQ MANAGEMENT PLAN BEFORE OCCUPANCY.

EQ 3.2 Credit: Before occupancy air flush-out plan.

USE SUBPARAGRAPH BELOW FOR LOW EMITTING MATERIALS – ADHESIVES AND SEALANTS

EQ Credit 4.1: Identify the manufacturer’s name, the product name, specific VOC data and the allowable VOC from the reference standard for each indoor adhesive, sealant or sealant primer utilized on the project. Identify the manufacturer’s name, the product name, specific VOC data and the allowable VOC from the reference standard for each indoor aerosol adhesive utilized on the project. Provide a narrative description of any special circumstances or non-standard compliance paths taken.

USE SUBPARAGRAPH BELOW FOR LOW EMITTING MATERIALS – PAINTS AND COATINGS

EQ Credit 4.2: Identify the manufacturer’s name, the product name, specific VOC data and the allowable VOC from the reference standard for each indoor paint or coating utilized on the project. Provide a narrative description of any special circumstances or non-standard compliance paths taken.

USE SUBPARAGRAPH BELOW FOR LOW EMITTING MATERIALS – FLOORING SYSTEMS

EQ Credit 4.3: Identify each flooring product installed in the building interior and confirm that it complies with the Green Label Plus or FloorScore program. Identify each carpet cushion product installed in the building interior and confirm that it complies with the Green Label testing program. Identify all hard floor finishes such as sealer, stain and finish and confirm that they meet the requirements of South Coast Air Quality Management District (SCAQMD) Rule 1113, Architectural Coatings, rules in effect on January 1, 2004. Provide a narrative description of any special circumstances or non-standard compliance paths taken.

USE SUBPARAGRAPH BELOW FOR LOW EMITTING MATERIALS – COMPOSITE WOOD & AGRIFIBER PRODUCTS

EQ Credit 4.4: Identify each composite wood and agrifiber products installed in the building interior and document that it does not have any added urea-formaldehyde. Provide a narrative description of any special circumstances or non-standard compliance paths taken.

* + - * 1. LEED Progress Reports: Concurrent with each Application for Payment submit reports comparing actual construction and purchasing activities with LEED Action Plans for the following:

USE SUBPARAGRAPH BELOW IF WASTE DIVERSION IS A PROJECT REQUIREMENT.

MR Credit 2: Waste reduction progress reports complying with Section 017419.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR SALVAGED OR REFURBISHED WILL BE MET.

MR Credit 3: Salvaged and refurbished materials.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR RECYCLED CONTENT WILL BE MET.

MR Credit 4: Recycled content materials.

USE SUBPARAGRAPH BELOW IF REGIONAL MATERIALS ARE A PROJECT REQUIREMENT.

MR Credit 5: Regional materials.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR RAPIDLY RENEWABLE MATERIALS WILL BE MET.

MR Credit 6: Rapidly renewable materials.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR CERTIFIED WOOD WILL BE MET.

MR Credit 7: Certified wood products.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR COMPLIANT SEALANTS AND ADHESIVES WILL BE MET. DELETE SUBPARAGRAPH BELOW IF REQUIREMENTS FOR COMPLIANT SEALANTS AND ADHESIVES ARE SPECIFIED IN THE CONTRACT DOCUMENT

EQ Credit 4.1: Sealants and adhesives.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR COMPLIANT PAINTS AND COATINGS WILL BE MET. DELETE SUBPARAGRAPH BELOW IF REQUIREMENTS FOR COMPLIANT PAINTS AND COATINGS ARE SPECIFIED IN THE CONTRACT DOCUMENT

EQ Credit 4.2: Paints and coatings.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR COMPLIANT FLOORING SYSTEMS WILL BE MET. DELETE SUBPARAGRAPH BELOW IF REQUIREMENTS FOR COMPLIANT CARPET SYSTEMS ARE SPECIFIED IN THE CONTRACT DOCUMENT

EQ Credit 4.3: Flooring systems.

USE SUBPARAGRAPH BELOW IF CONTRACTOR IS REQUIRED TO DETERMINE HOW THE REQUIREMENT FOR COMPLIANT WOOD AND AGRIFIBER PRODUCTS WILL BE MET. DELETE SUBPARAGRAPH BELOW IF REQUIREMENTS FOR COMPLIANT WOOD AND AGRIFIBER PRODUCTS ARE SPECIFIED IN THE CONTRACT DOCUMENT

EQ Credit 4.4: Composite wood and agrifiber products.

* + - * 1. LEED Documentation Submittals:

EDIT 22 SUB PARAGRAPHS BELOW TO MEET PROJECT REQUIREMENTS.

SS Credit 7.2: Product Data for roofing materials indicating SRI values greater than 29.

SS Credit 8: Product Data for interior and exterior lighting fixtures that stop direct-beam illumination from leaving the building site.

WE Credit 3: Product Data for plumbing fixtures indicating water consumption.

EA Prerequisite 3: Product Data for new HVAC equipment indicating absence of CFC refrigerants.

EA Credit 4: Product Data for new HVAC equipment indicating the absence of HCFC refrigerants, and for clean-agent fire-extinguishing systems indicating absence of HCFC and Halon.

SUBPARAGRAPH BELOW APPLIES TO LEED-NC FOR A PERMANENT SYSTEM.

EA Credit 5: Product data and wiring diagrams for sensors and data collection system used to provide continuous metering of building energy-consumption performance over time. Select Option 1 or Option 2 as per LEED Reference Guide.

SUBPARAGRAPH BELOW APPLIES TO LEED-NC FOR A TEMPORARY SYSTEM.

EA Credit 5: Product data and wiring diagrams for sensors and data collection system used to provide continuous metering of building energy-consumption performance over a period of time of not less than one year of post-construction occupancy.

MR Credit 2: Comply with Section 017419.

MR Credit 3: Receipts for salvaged and refurbished materials used for Project. Indicate sources and costs for salvaged and refurbished materials.

MR Credit 4: Product data and certification letter for each product having recycled content. Indicate percentages by weight of post-consumer and pre-consumer recycled content of each product having recycled content. Include statement indicating cost of each product having recycled content.

MR Credit 5: Product data and certification letter for each product having regional materials content. Indicate location and distance from Project of material manufacturer and point of extraction, harvest, or recovery for each raw material. Include statement indicating cost of each regional material and the fraction by weight that is considered regional.

MR Credit 6: Identify the manufacturer’s name, the rapidly renewable content of the product submitted, and the cost of the product.

MR Credit 7: Product data and chain-of-custody certificates for products containing certified wood. Include statement indicating cost of each certified wood product.

EQ Credit 1: Product Data and Shop Drawings for carbon dioxide monitoring system.

EQ 3.1 Credit:

Construction indoor-air-quality management plan.

Product data for temporary filtration media.

Product data for filtration media used during occupancy.

Construction Documentation: Six photographs at three different times during the construction period, along with a brief description of the SMACNA approach employed, documenting implementation of the indoor-air-quality management measures, such as protection of ducts and on-site stored or installed absorptive materials.

EQ Credit 3.2.

Signed statement describing the building air flush-out procedures including the dates when flush-out was begun and completed and statement that filtration media was replaced after flush-out.

Product Data for filtration media used during flush-out and during occupancy.

Report from testing and inspecting agency indicating results from IAQ testing and documentation showing conformance with IAQ testing procedures and requirements.

EQ Credit 4.1: Product data for adhesives and sealants used inside the weatherproofing system. Indicate VOC content of each product used in g/L calculated according to 40 CFR 59, Subpart D.

EQ Credit 4.2: Product data for paints and coatings used inside the weatherproofing system. Indicate VOC content of each product used in g/L calculated according to 40 CFR 59, Subpart D.

EQ Credit 4.3: Product Data for flooring system products indicating VOC content of each product used.

EQ Credit 4.4: Product data for products containing composite wood or agrifiber products or wood glues. Indicate that they do not contain urea-formaldehyde resin.

EQ Credit 6.1: Product Data and Shop Drawings for individual lighting controls and shared lighting system controls.

EQ Credit 6.2: Product Data and Shop Drawings for sensors and control systems used to provide airflow and temperature control.

USE PARAGRAPH BELOW IF PROJECT WILL INCLUDE NYSERDA INCENTIVES:

* + - * 1. NYSERDA Incentives: Submit documentation (i.e. copies of invoices including all materials, labor and equipment discounts) as requested by the Director’s Representative to verify the cost of purchasing and installing energy efficient measures. Other reasonable documentation or verification of the cost for the purchase and installation of energy efficient measures may also be required by the Director’s Representative.

DELETE PARAGRAPH BELOW IF DESIGN AND CONSTRUCTION (IN-HOUSE STAFF OR DESIGN CONSULTANT) IS SERVING AS THE LEED ACCREDITED PROFESSIONAL AND WILL TAKE RESPONSIBILITY FOR COMPILING THE APPROVED LEED SUBMITTALS PACKAGE.

* + - * 1. Approved LEED Submittals Package: After approval of all LEED submittals from each section with LEED requirements is received, create electronic versions of the approved LEED submittals. Black and white documents are to be scanned into TIFF format using CCIT Group 4 compression or PDF format. Documents with color, which include black line documents with color notations, are to be scanned into TIFF format using a minimum of 8 colors and “packbit” compression or color PDF format.

The scanned images are to be put on a compact disc (CD) using ISO 9660 format. Name the electronic files with the same identifier as the related specification section and group them in folders by LEED Credit, along with completed LEED Templates.

Label the CD with the project number, name, and title as it appears on the project manual cover and with the words “Approved LEED Submittals Package”. If there is more than one CD include notation to that effect on the label; i.e., 1 of 3, 2 of 3, 3 of 3. The CD(s) are to be turned over to the Director’s Representative.

DELETE ARTICLE BELOW IF CONTRACTOR IS NOT REQUIRED TO EMPLOY A LEED ACCREDITED PROFESSIONAL

* + - 1. QUALITY ASSURANCE
				1. LEED Coordinator: Engage an experienced LEED Accredited Professional to be available throughout the duration of the entire construction project to coordinate LEED requirements. This person will be responsible to ensure that the LEED requirements are being met, maintain the LEED logs, prepare the weekly LEED progress reports, attend all biweekly meetings, manage the LEED paper trail and ensure that the LEED submittals packages are complete and accurate before they are sent to the Director’s Representative for review and approval. This person will also be responsible for tracking down any missing information required to complete the LEED submission documentation and to coordinate this effort with the Director’s Representative. It is recommended that the LEED coordinator also serve as the construction waste management coordinator.

USE PARAGRAPH BELOW IF PROJECT WILL INCLUDE NYSERDA INCENTIVES:

* + - * 1. NYSERDA Incentives Verification: From time to time, the Director’s Representative may schedule pre- and post-installation follow-up visits to verify satisfactory installation of energy efficient measures per NYSERDA new construction program incentives terms and conditions.
1. PRODUCTS

EDIT ARTICLE BELOW TO MEET PROJECT REQUIREMENTS.

* + - 1. RECYCLED CONTENT OF MATERIALS
				1. MR Credit 4: Provide building materials with recycled content such that post-consumer recycled content plus one-half of pre-consumer recycled content constitutes a minimum of 10 (20) percent of the cost of materials used for the Project.
				2. Meet minimum recycled content for requirements shown on Table 018113.1 attached at the end of this Section.
			2. REGIONAL MATERIALS
				1. MR Credit 5: Provide 10 (20) percent of building materials (by cost) that are extracted, harvested or recovered as well as manufactured regionally within 500 miles of the Project Site.
				2. For suggested regional products see Table 018113.1 attached at the end of this Section.
			3. RAPIDLY RENEWABLE MATERIALS
				1. MR Credit 6: Provide 2.5 percent of building materials (by cost) that are extracted, harvested or recovered as well as manufactured regionally within 500 miles of the Project Site.
				2. For suggested rapidly renewable products see Table 018113.1 attached at the end of this Section.
			4. CERTIFIED WOOD
				1. MR Credit 7: Provide not less than 50 percent by cost of wood-based materials from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, “FSC Principles and Criteria for Forest Stewardship.”

Wood materials include, but are not limited to, the following:

Rough carpentry.

Miscellaneous carpentry.

Heavy timber construction.

Wood decking.

Metal-plate-connected wood trusses.

Structural glued-laminated timber

Finish carpentry.

Architectural woodwork.

Wood paneling.

Wood veneer wall covering.

Wood flooring.

Wood lockers.

Wood cabinets.

Furniture.

* + - 1. LOW-EMITTING MATERIALS
				1. EQ Credit 4.1 and 4.3: For interior applications use adhesives and sealants that do not exceed limits for VOC content see Specification Section 018120.
				2. EQ Credit 4.2: For interior applications use paints and coatings that comply with the limits for VOC content see Specification Section 099101.
				3. EQ Credit 4.4: Do not use composite wood and agrifiber products that contain urea-formaldehyde resin.
1. EXECUTION

EDIT P2 ARTICLES BELOW TO MEET PROJECT REQUIREMENTS.

* + - 1. CONSTRUCTION WASTE MANAGEMENT
				1. MR Credit 2: Comply with Section 017419.
			2. CONSTRUCTION INDOOR AIR QUALITY MANAGEMENT
				1. EQ Credit 3.1 and EQ 3.2: Comply with Section 018119.

END OF SECTION 018113.0