| | NC State University Sustainability Project Requirements | I | II | III | |
|----|---|---|----------|-----|--|
| | Integrated Design | | | | |
| I1 | Integrated design kickoff meeting notes, with sustainability goals, including items that can be reused or recycled, attached. | X | X | | |
| I2 | LEED scorecard (Tier I) with a LEED action plan for each credit, attached. | X | | | |
| I3 | A commissioning agent was brought into schematic design and provided review and testing through the completion of the project. | X | X | | |
| I4 | Forall projects , refer to Stormwater Design Manual. | X | X | X | |
| I5 | Ensure Tree Protection plan is developed and adhered to for exterior projects | X | X | X | |
| | Indoor Air Quality | - | <u>'</u> | | |
| A1 | Zero VOC paints in all public spaces, classrooms, and offices, excluding metal. | X | X | X | |
| A2 | Eliminate the use of adhesives for carpet. | X | X | X | |
| А3 | Use only low VOC adhesives and sealants. | X | X | X | |
| A4 | No use of aerosol adhesives. | X | X | X | |
| A5 | Follow <u>6 SMACNA guidelines</u> for indoor air quality during construction AND utilize supplemental filtration in occupied buildings. | X | X | X | |
| A6 | Investigate the need for duct hygiene in projects with HVAC renovations | X | X | X | |
| | Materials | | | | |
| M1 | Equipment and materials are chosen for compatibility across campus | X | X | X | |
| M2 | Equipment and materials are repaired, when feasible, before replacement becomes cost effective. | | X | X | |
| М3 | Prefer NC manufactured materials (concrete, lumber, steel, textiles, masonry). | X | X | X | |
| | Recycling and Reuse | | | | |
| R1 | Reuse materials when possible. Leftover scraps are placed in Shop Storage, Student Reuse Trailer, or Campus Satellite Staging Areas. | | | X | |
| R2 | Donate or allocate reusable materials. Input reuse information on Reuse Tracking Form. Order of diversion options: A.) Surplus B.) Habitat for Humanity C.) Waste Reduction and Recycling (WRR) (Tiers I-III) | X | X | X | |
| R3 | Recycle what cannot be reused, with a goal of 75%. Waste diversion is tracked by WRR. Input waste information on LEED Online (Tier 1) or Construction Waste Management tracking sheet (Tier II and III). | X | X | X | |
| R4 | Assure that building occupants have access to recycling. | X | X | X | |
| | Efficiency | | | | |
| E1 | Completed Lifecycle Cost templates per State Construction requirement with narrative explanation for any phase of value engineering. Inclusion of building operations staff in value engineering reviews. | X | | | |
| E2 | Energy model was used as an iterative tool. An as-built energy model, with a summary of assumptions, is attached. | X | X | | |
| E3 | Meters and sub-meters are tied into the Enterprise Level Control System | X | X | X | |
| E4 | Project's M&V plan was developed and attached (LEED and SB 668 projects) | X | | | |

| E5 | Target energy and water savings of 30% and 50% respectively. Energy savings | X | X | X |
|----|--|---|---|---|
| | are tracked on Request for Project Number form (Tier I and II). Energy savings | | | |
| | are identified in AIM with Energy Management (Tier III). | | | |
| E6 | Campus Satellite Staging Areas reduce total driving time and energy use | | | X |
| | Close out | | | |
| C1 | Electronic as-built energy model, with summary of inputs and outputs, | X | | |
| | submitted | | | |
| C2 | LEED documentation submitted on LEED Online | X | | |
| С3 | Sustainability lessons learned summary meeting | X | X | |

Tier 1 and Tier 2* Attachments

| Integrated Design kickoff meeting notes* | Schematic Design |
|---|------------------|
| Sustainability/ LEED Action Plan- list of credits with narrative plan | Schematic Design |
| Measurement and Verification Plan | Design Documents |
| Energy model (digital copy of raw file) | As-built |
| Lessons Learned* | As-built |

KEY

 $Tier\ I-\ Budget\ of\ \$2\ million\ +\ AND\ construction\ over\ 20,000\ GSF\ and\ renovations\ if\ the\ replacement\ value\ >\ than\ insurance\ value$

Tier II- Budget of \$250,000 to \$2million +

Tier III- Budget of \$0-\$250,000