Arcus Center for Social Justice Leadership
Sustainable and Environmentally Sensitive Features
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GENERAL INFORMATION ON THE ARCUS CENTER
- The Arcus Center is a LEED registered project with a goal of LEED Gold Certification.
- The 10,000 square foot building is currently under construction at the northwest corner of campus with an anticipated project completion date of March 2014.

ENERGY EFFICIENCY
- The Arcus Center is designed to be 50% more efficient than what is required by the Michigan Energy Code (ASHRAE 90.1 – 2007). This exceeds by 20% the ambitious energy efficiency standard that Kalamazoo College committed to following in its 2010 Sustainability and Climate Action Plan.
- The building orientation, geometry and window systems have been designed to passively maximize solar gain during the winter and minimize it during the summer. Additionally, the large windows at the ends of each wing of the building will have shades that will automatically deploy to enhance or minimize solar gain relative to seasonal requirements.
- The building management system will constantly monitor both fresh air delivery to the building and carbon dioxide levels within the building in order to automatically optimize ventilation rates.
- The building management system will also monitor interior and exterior lighting levels and automatically and incrementally turn off electric lighting when natural light is sufficient to maintain the minimum required lighting for interior spaces.
- The building management system will additionally monitor and control interior and exterior lighting levels, automatically deploying shades to enhance or minimize solar gain relative to seasonal requirements.
- The cordwood exterior veneer combined with a traditional interior wall construction will result in an extremely efficient insulating value of R-39 on the exterior walls of building.
- The Arcus Center will be the second facility on campus to be both heated and cooled by a geothermal energy storage system. The geothermal system will utilize a dozen deep wells that have been drilled on the Academy Street side of the building.

SUSTAINABLE INDOOR COMFORT
- The building management system will constantly monitor both fresh air delivery to the building and carbon dioxide levels within the building in order to automatically optimize ventilation rates.
- An innovative air floor distribution system will combine the most efficient features of convection and radiant heating and cooling.
- The HVAC system will employ displacement (very low velocity) ventilation allowing for a very efficient use of fan horsepower while also providing a quieter and more comfortable indoor environment.
- Furniture and finishes in the building will be/ will be manufactured or applied with either very low or zero percentage content of volatile organic compounds (VOCs) preventing the off-gassing of VOCs into the building. This will protect the health of both the construction workers building the facility and the future occupants of the Arcus Center.

SITE DESIGN
- The Arcus Center landscaping is designed to follow xeriscaping standards. There will not be a supplemental irrigation system installed on site and the plantings will feature drought resistant native species.
- The Arcus Center site is designed to be storm water neutral. All storm water will be captured and stored on site. This is consistent with Kalamazoo College’s commitment to reduce storm water runoff in an effort to protect and maintain flooding in the Arcadia Creek and Kalamazoo River watersheds.
- Exterior entrances will use fitted glass to protect birds from errantly flying into them – phenomena commonly known as bird strikes that are responsible for millions of bird fatalities annually in U.S. urban areas.

SUSTAINABLE USE OF RESOURCES
- Compost produced from Living Learning Unit food waste will be used to enrich the landscape soil on the Arcus Center site.
- The exterior veneer of the building will consist of northern white cedar cordwood harvested in Michigan. The 11 inch lengths of logs with diameters ranging from 2 to 12 inches will be set perpendicular to the exterior wall and laid up in mortar in a fashion similar to a field stone wall.
- The Existing structure on the Arcus Site, Hoben House, was saved from demolition as the College partnered with a local couple to move it to a new location across Monroe Street.
- At least 20% of the content of all the materials used to construct the Arcus Center will consist of recycled products.
- At least 20% of the materials used to construct the Arcus Center will be harvested or mined and manufactured regionally.
- Some of the Arcus Center furniture will be custom fabricated by local carpenters using wood from the trees that were removed from the site to make room for the new building.

ACKNOWLEDGEMENTS
- The building was designed by Studio Gang Architects of Chicago.
- The construction manager is Miller-Davis of Kalamazoo.