

## New Dance Building



### Project Description

The new Dance Building will be approximately 24,000 gross square feet and will include a 100-seat performance venue, dance studios, locker rooms, and administrative space. The parking spaces displaced by the new building on North Campus will be replaced in that area, and there will be a net improvement for Central Campus parking after this program is relocated to North Campus.

### Energy Efficiency Measures

- The building design and building systems are being designed with a number of energy efficient features with a stretch goal for energy cost savings of 20% compared with an energy code compliant building as defined in ASHRAE 90.1-2013 Appendix G.
- Energy efficient measures included in the building envelope
- Increased Glass Performance via the use of high performance low e coatings to exceed the performance requirements of ASHRAE 90.1 - Appendix G in excess of 20%
- Reduction in the amount of glazing by the strategic location and sizing of windows to achieve a window to wall ratio of 26.5% versus the ASHRAE 90.1 maximum of 40%
- Increased Roof Insulation: Average R value of 36
- Increased Wall Insulation: Increased insulation to exceed the performance requirements of ASHRAE 90.1 - Appendix G by 20%
- Provide higher lighting efficiency and lighting level reductions
- Multiple, parallel supply and relief fans (variable speed) for efficient part-load performance
- Four pipe fan coil units in certain spaces with 24/7 or high density cooling load to allow de-coupling of heating/cooling in those spaces from central air handling unit's supply
- Winter water-side economizer via the North Campus chilled water system
- Hydronic heating systems designed for maximum 140F supply water temperature to reduce pipe heat losses and to accommodate possible future low-grade heat sources

### Other Sustainability Features

- This project is LEED® certified to the Silver level and achieved 53 points under the LEED for New Construction v4 rating system.
- Occupancy sensors linked to zone VAV boxes for automatic occupancy mode control
- Separate VAV boxes for each Studio to allow separate occupancy control
- Automatic demand control ventilation strategy in all studios and the meeting room based on space carbon dioxide sensors
- A 35% water consumption savings beyond Energy Policy Act of 1992 fixture performance requirements is anticipated; savings will be obtained through the use of low flow bathroom fixtures and showers
- Woodlot care - Exercising care to preserve and protect the woodlot which serves an important role to North Campus in terms of its character, setting, and environmental significance
- Water quality: Protect water quality for existing wooded areas to maintain uncontaminated water supply to woodlot and to the Huron River watershed
- Limited storm water run off
- Quality (treatment) of storm water run off
- Reduce construction waste
- Utilization of construction materials containing recycled content

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- Utilization of regional construction materials
- Indoor air quality management during construction and before occupancy
- Utilization of low-emitting materials
- Control of indoor chemical and pollutant sources
- Enhanced control of lighting systems
- Utilization of LED lighting throughout the project