

Detroit Observatory Classroom and Accessibility Addition



Project Description

The Detroit Observatory is a historic resource for the university and surrounding community, but it lacks accessibility, classrooms, restrooms, and support spaces that would allow it to be a destination that links the university's history of scientific study to the present and beyond. This project will construct an addition of approximately 7,000 gross square feet to the Detroit Observatory that will provide a flexible multi-use classroom, a new entry and reception area, restrooms, storage, and catering and support spaces. Additional improvements include a new elevator and stair as well as site work to allow for improved accessibility and greater connectivity. The project includes significant earthwork and specialized footings and foundations to protect the historic building and support the partially below-grade addition and landscape above. Only a minor renovation of the existing building to accommodate the addition is planned.

Energy Efficiency Measures

- The building's design and systems include a number of energy efficient features that will allow for an estimated 10% energy savings compared with an energy code compliant building as defined in ASHRAE 90.1-2013, Appendix G.
- Occupancy sensors for lighting in regularly occupied spaces
- LED lights to reduce electrical lighting load and heat gain

Other Sustainability Features

- Project site is located near public and U-M bus routes to encourage use of public transit
- Close proximity to basic services to encourage building occupants to walk
- Project contains no permanent irrigation
- Landscaping includes native and drought tolerant plantings
- Low-flow plumbing fixtures have been selected to reduce water consumption
- Construction waste to be diverted from landfill when possible
- The building will utilize campus chilled water
- No refrigerants will be used on site
- Low-VOC adhesives and sealants, paints and coatings, flooring systems, and composite wood and agrifiber products will be specified when possible
- Materials and products specified to be extracted and manufactured within 500 miles of the project site when possible
- Materials used on the project to contain recycled content when possible
- Certified wood materials to be used when possible
- Innovative double wythe insulated cast-in-place concrete exterior wall system