

U-M Health Zina Pitcher Parking Structure



Project Description

The addition of a new Zina Pitcher Parking Structure is an integral part of the university's plan to provide patient and visitor parking for anticipated incremental growth in demand due the opening of the Kahn Pavilion and helps to reduce displacement of current staff parking. The project will create a 570-space stand-alone parking structure to the east side of the Ann Street and Catherine Street parking structures that will be connected to the Ann Street Parking Structure on one level to enhance circulation. The parking deck is planned for the site currently occupied by the Molecular & Behavioral Neuroscience Institute (MBNI) building, which had been planned for demolition prior to this project's inception. The building's occupants and equipment have already been relocated, and the structure is now in the demolition phase.?

Embodied carbon reduction of approximately 20%.

- Pre-cast structural concrete utilizes thin panel design and lower carbon concrete to reduce embodied carbon.
- Concrete mixes with slag sand, fly ash & Portland Limestone Cement (PLC) and fly ash reduces the amount of cement used. PLC is a blended cement that uses ground limestone that yields a 10% carbon footprint reduction per the Portland Cement Association.

Low operational carbon; net-zero ready

- Structure is designed to support future rooftop solar panels
- Designed as an open-air parking structure, thereby avoiding the needed for powered mechanical ventilation.
- All electric equipment and uses regenerative elevator power that converts kinetic energy from braking into useable electricity
- LED light fixtures with photocell sensor controls (65% reduction compared to baseline code)

Other Sustainability Features

- Potential experimental use of titanium oxide coatings for atmosphere carbon absorption
- Covered bike parking with proximity to bus stops to promote alternative transportation
- Reduced idling time through card reader use and lane layout that promotes efficient traffic flow (vehicle emissions reduction)
- Native and adaptive plant materials allow for no permanent irrigation
- On-site storm water quality improvement by removal of suspended solids
- Use of a light-colored rooftop level to minimize heat island effect
- Provisions for future charging stations for electric vehicles