

Library Lane Parking Structure

Ann Arbor, MI



In July 2012, a 711-space, four-story garage was opened in Ann Arbor, Michigan. This library is part of a redevelopment project that could also accommodate a future 20-story building.

In order to make the facility comfortable and user friendly, the designers incorporated open stairways, glass side walls on the elevators, structural bracing to maximize visibility, large ceiling heights, long-span construction and bright white lighting.

The structure uses a number of sustainable features including being constructed from highly durable materials. The concrete contained calcium nitrite along with 25% fly ash and 15% slag. In addition the concrete had to provide a rapid strength gain and consistent air content, a predictable setting time and good consolidation at column girder intersections and PT anchorages. The material was also pumped up to 600 ft. The building uses rainwater that is detained in a 305,000 gallon tank at the lowest level of the structure. Epoxy-coated reinforcing steel (rebar) was also extensively used.

Team

Owner:

Downtown Development Agency, Ann Arbor

Architect:

Luchenbach/Ziegelman Architects PLLC

Engineer:

Carl Walker Inc.

General Contractor:

Christman Constructors Inc.

Design Criteria:

- Maximize below-grade parking.
- Create a welcoming parking environment.
- Design for future flexibility including adding a multi-story building, public plaza and below ground connections to the library.

Total Project Cost: \$50 million

Photography:

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