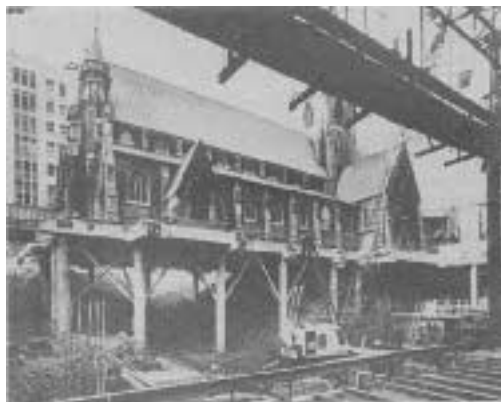


## An Uplifting Rehab...

by Kate O'Brien



Last Fall, the Christ Church Cathedral located in downtown Montreal, Quebec, was a special source of inspiration to everyone who saw it—but especially to building engineers. The 128-year-old landmark was tagged the “floating cathedral” by some while it was undergoing an unusual and complete foundation renovation.

Poor soil conditions had plagued the church's foundation since it was constructed in 1859. Last October, engineers sank foundation columns into bedrock, and created a concrete girdle around the church. Forms were tunneled under the church and horizontal beams cast. Together this created a concrete pad for the church to rest on. The pad was post-tensioned with steel cables. Once this new support system was in place the old foundations were cut away and the surrounding soil was excavated, making the church look suspended in thin air.

By the end of construction (scheduled for late this month) the area below the cathedral will be enclosed and will house a two-level shopping center, and the local subway station. Adjacent to the church, a 34-story office building has been completed, according to Eugene Riesman, a representative of First Quebec, one of the developers in the project. A cloistered garden will be installed between the office building and the cathedral. Other developers involved in the joint venture include the Westcliff Group and the Cooperants Mutual Life Insurance Company. In addition to the engineering firm Quinn-Dressel, architects W.Z.M.H. and contractor Magio Construction Ltd., all of Montreal, were responsible for the project. The property will eventually revert to the ownership of the Anglican Diocese of Montreal.

The top two photos show the project while the unusual excavation was in progress. The photo on the right shows the project further along with construction begun on the underground complex. ■

