

Underground Science City, Singapore

CNA Consulting Engineers conducted the feasibility assessment of a very large underground office park in Singapore. The assessment included:

- Site Analysis
- Site Geology Appraisal
- Previous Site Investigation Evaluation
- Space Programming
- Preliminary planning and design for three underground space layouts
- Detailed layout development for the preferred layout
- Construction cost estimate

The preferred layout was a regular, room-and-pillar underground complex consisting of 36 caverns

each 20 meters wide by 22 meters high by 75 meters long. All caverns branch off a main concourse that connects underground entry points. The gross underground floor area was approximately 290,000 square meters. The design featured a flexible layout, and provided daylight and connection to the surface deep underground through a massive open atrium. CNA concluded that the project was feasible and would cost approximately S\$1.13 billion.



Surface Layout



East Half Underground Layout

Owner — Nanyang Technical University, Singapore

Completion Date — 2001

Estimated Construction Cost — S\$1.13 billion

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