

Metro De Santiago Line 3 Santiago Metro

Location: Santiago, Chile

Date: 2017

Structure: Subsectors 1 & 2: SEM Light Rail Tunnel, SEM stations

Length: Subsectors 1 & 2:
Running Tunnels: 3.3 miles (5.3 km)
Stations: 394 ft (~120 m)

Cross-Section: Station Tunnels:
55 ft (16.8 m) width
36.4 ft (11.1 m) height
Running Tunnels:
32.5 – 38 ft (9.9 – 11.66 m) width
23.8 – 31.8 ft (7.26 – 9.69 m) height

Geology: Fill, sandy gravels, sandy gravels with clays, clays and silts

Cost: Approx. USD \$92 Million

Client: Santiago Metro

Owner: Santiago Metro



Figure 1. Map of Santiago Metro network, including the newly constructed lines 3 and 6 (dashed).

Technical Advisory Services:

The Santiago Metro is currently the largest metro system in South America with more than 100 Km (62 miles) of lines and 108 stations operating on 5 lines and providing service for more than 2 million passengers daily. Construction of Lines 3 and 6 serve to further expand access to the metro for the 7.3 million inhabitants of the Santiago Metropolitan area.

Metro engaged Gall Zeidler Consultants (GZ) as technical expert specialized in tunnel design, consulting construction support and construction management. GZ's scope of work included review of the tunnel design as well as select construction documentation provided by Metro. The scope of work is limited to subsections 1 and 2 of the Line 3 project. GZ was tasked with analyzing adequacy of the NATM design and construction methodology portrayed for the ground conditions anticipated, and assessing the contractor's proposal, particularly in view of constructability and proposed progress rates.

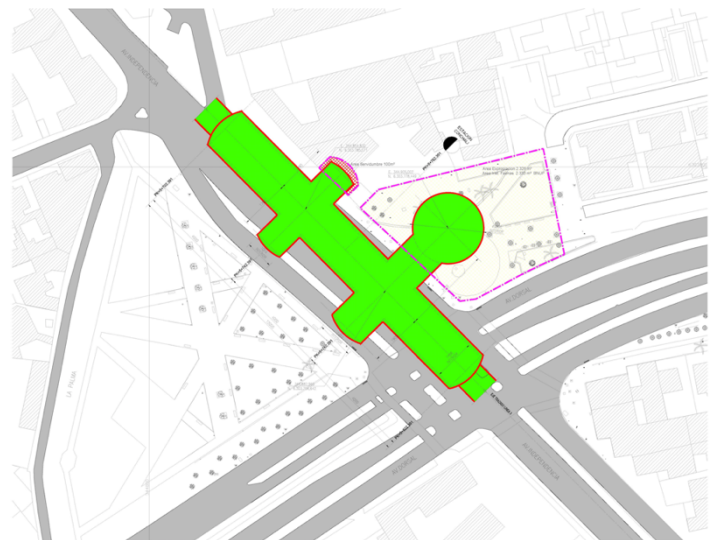


Figure 2. Plan view of Estacion Conchali.