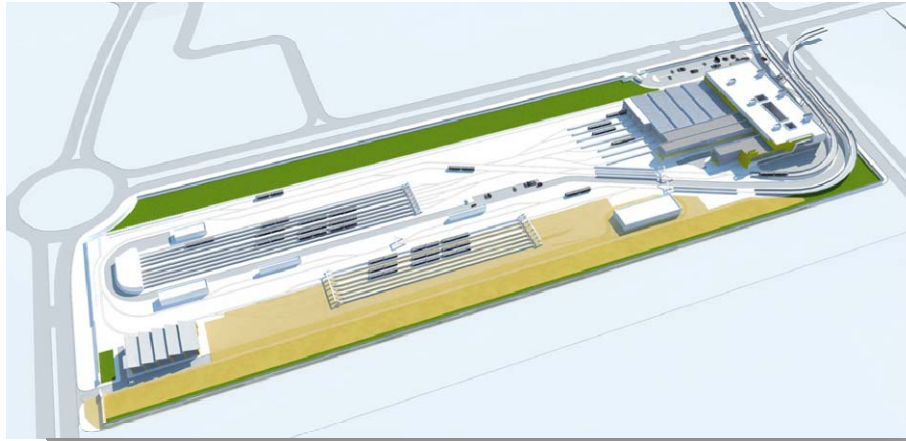


MACAO ELEVATED LIGHT RAIL TRANSIT (depot project)



Client/ Employer Government of the Macao Special Administrative Region
 Transportation Infrastructure Office

Service Light Rail Transit Depot Design by CONSULASIA, LDA.

Investment NA

Contract Price MOP 34,900,000

Time Schedule November 2015 to March 2016

Description of the Project The Macao Light Rail Transit System Is a very important project for the region that aims to strongly contribute to urban development, traffic planning and mobility of the resident population and tourists. The estimated investment exceeds 15,000 million mop.

The rolling stock will be provided by Mitsubishi Heavy Industries and will use trains with rubber tires running on cement plinths. It is planned to use 55 fully automated 2-car vehicles (without driver), called "Ocean Cruiser".

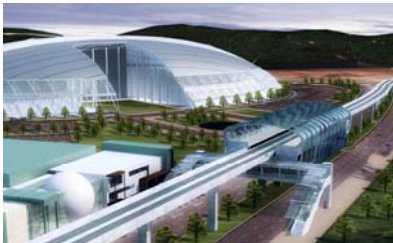
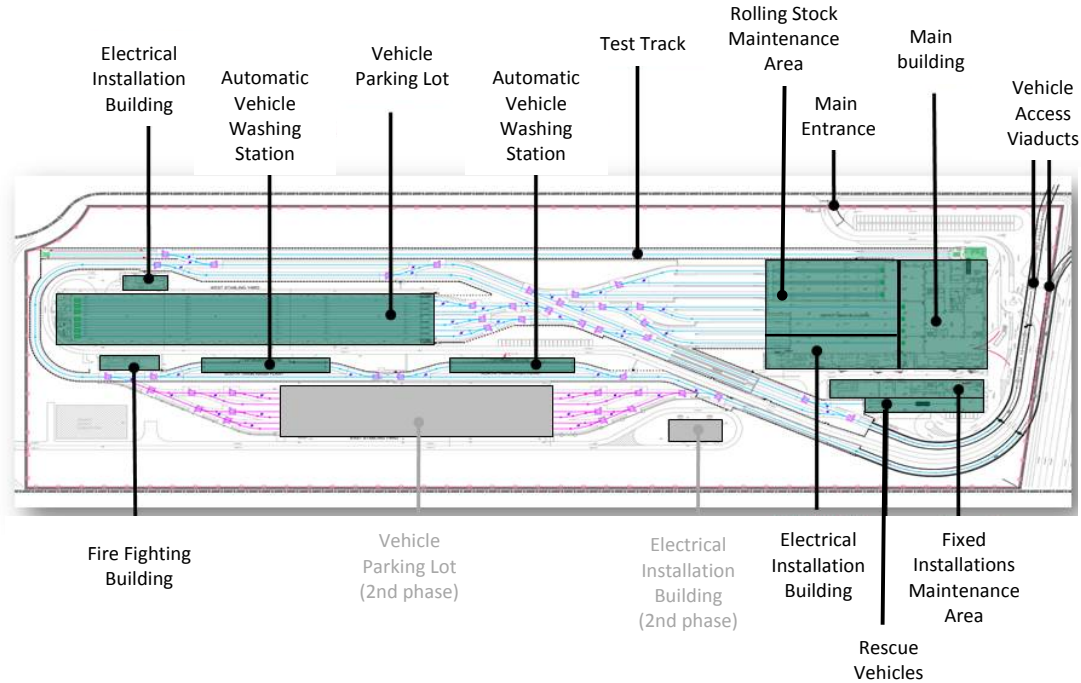


The involvement of CONSULASIA in this important project began in 2002 with the project initial feasibility study. In 2007 the Transportation Infrastructure Office was created by the Macao Special Administrative Region Government to coordinate the design and construction of the light rail system.

A few years later, in 2010, CONSULSASIA was responsible for the design of 4 stations and respective elevated viaducts in the Cotai segment.

In 2016, at the invitation of Transportation Infrastructure Office, CONSULASIA was asked to redesign a new project for the Light Rail Materials Depot.

MACAO ELEVATED LIGHT RAIL TRANSIT (depot project)



The Depot will be located in the reclaimed area on the eastern side of Cotai, south of Macau International Airport, and will have a total area of 163,000 m².

This infrastructure is considered strategic for the proper functioning of the entire light rail system, and its main functions will be:

- Parking of the carriages, protecting them from direct exposure to the sun, dust and rain;
- Periodical cleaning of the exterior of the carriages by automatic machines;
- Daily cleaning of the interior of the carriages;
- Maintenance of rolling stock and fixed installations:
- Storage of diverse material such as spare parts, consumables and road vehicles;
- Light rail operation and maintenance center which includes the control operation center, administrative offices, training rooms, meeting rooms, technical rooms, supervisory offices, locker rooms and dining rooms.

In order to respond to the functional requirements, 4 main buildings and 6 auxiliary buildings were designed.

A rigorous schedule of 4 months of work was defined and an interdisciplinary team composed of 12 civil engineers, 2 geotechnical engineers, 12 draftsman's and 3 administrative staff was mobilized.