

Organisations Category

Project Owner (Public Sector)

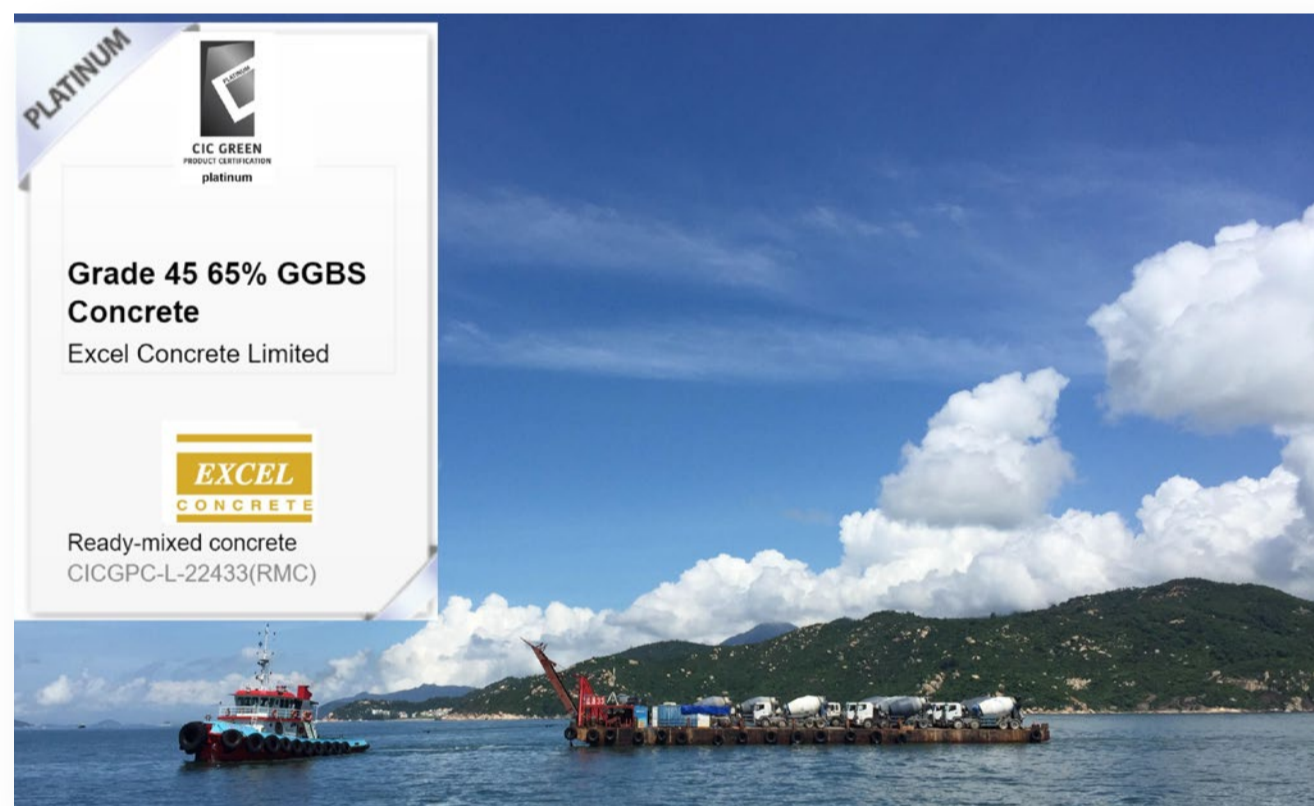
Silver Award

Drainage Services Department,
the Government of the Hong Kong Special Administrative Region, China



Outlying Islands Sewerage Stage 2 - Upgrading of Cheung Chau Sewage Treatment and Disposal Facilities

The Drainage Services Department (DSD) is committed to adopt advanced construction methods to promote sustainable development of projects and address climate change. We also committed to promote innovative technology and blue-green drainage infrastructure, improve energy efficiency, reduce carbon footprint and pollutant emissions.



Sustainable Best Practice 1

It is the first DSD project to adopting GGBS (Ground Granulated Blast-furnace Slag) concrete for all structure construction. GGBS is a cementitious material which is a by-product from the blast-furnaces used to make iron. By using GGBS as cementitious material in concrete mix, the carbon emissions of our project will be reduced by approximately 2,740 tons, which is equivalent to the carbon emissions absorbed by 120,000 trees in a year.

Sustainable Best Practice 2

Modular Integrated Construction (MiC) method is adopted for our site office construction. The modules which are fabricated in the factory minimise construction waste and improve the construction waste management on site. MiC method shorten construction time, which reduce dust and noise nuisance to the surrounding environment and neighbours. After completion of our project, the site office can be reused by other projects or developed to local facilities to achieve sustainable development.



Sustainable Best Practice 3

Hybrid Hydraulic Tubular Shoring System is used for excavation and lateral support (ELS) construction. As compared with traditional ELS construction, it only requires to assemble a very few different components for the shoring system by bolt and nut. Due to the characteristics of easy assembly and disassembly, our project has adopted to reuse some of the components in different ELS construction in different stages of works to minimise number of shipments so as to enhance sustainability.