



BRIDGE

Dragages brought a range of bridge-building technologies to Hong Kong for the first time, most notably the sizeable launching girder, which transformed the way that bridges are built across the territory.

Leveraging the experience and expertise of its international parent company, Dragages introduced enhanced environmental and technical methods, including the widespread use of precast bridge and viaduct segments. These methods not only cut costs and shortened construction time, they also brought measurable improvement to the environmental impact of construction sites.

Kwun Tong Bypass - Phases II & III



Rambler Channel Bridge



Rambler Channel Rail Bridge



2004 East Tsing Yi Viaduct

Construction of a 1,100 m dual three-lane carriageway, viaduct ramps, roadworks, slope works, landscaping and associated works.

Bridge segments were precast off site and transported to the site by barge. The bridge was erected by balanced cantilever method, using a 160-metre long launching girder.

1995 Rambler Channel Rail Bridge

Design and build of a bridge and access viaduct carrying four rail tracks on two levels.

A combination of advanced design and engineering technologies ensured that the busy marine route below was open throughout the construction period. This included what is believed to be the launching of the world's largest precast segments produced for a segmental bridge, using the balanced cantilever method.

1993 Rambler Channel Bridge

Construction of a 1,960 m, dual three-lane expressway road bridge, viaducts and access roads, using 1,000 precast segments.

The launching girder technique, together with external prestressing in all the segments – a technical first in Hong Kong – saved time and cost, as well as allowing for ease of maintenance and upgrading works in the future.

1992 Kai Tak Airport Taxiway Bridge

A design and build contract for a 230 m bridge to relieve congestion on the Kai Tak Airport runway.

Special requirements included a load-bearing capacity equivalent to two fully-laden Boeing 747-400s, and a bridge platform height sufficient to allow a fireboat to pass underneath.

1989 Kwun Tong Bypass - Phases II & III

New bridge-building technology used to construct two elevated highways, two ferry piers and a 1,000 m quay.

For the first time in Hong Kong, a 120 m long launching girder was used. The 450-tonne steel structure allowed for the lifting of two segments at a time. Such was the success of the new technique, the project was completed ahead of schedule.

1986 Liu To Bridge

Construction of a four-lane bridge across a steep valley, with a 70 m central span.

As a pioneer of environmental construction techniques in Hong Kong, Dragages proposed launching the deck sections from both ends of the bridge, avoiding the need for scaffolding in the valley below.

1978 Tsuen Wan Bypass - Phase I

Construction of a 6,000 m, dual three-lane expressway, including a curved box girder viaduct.

The bypass weaved its way through an existing busy network of roads, requiring complex at grade construction work and rock excavation. The post-tensioned concrete viaduct was poured on site and rock excavation was done with a rock splitting technique.