

Leighton Asia

Customer-oriented construction services



Operating in Asia since 1975, Leighton Asia is one of Asia's leading construction and mining contractors. Its unique combination of local knowledge and extensive international experience has made the company the region's international contractor of choice.

**Mr Hamish Tyrwhitt,
Managing Director,
Leighton Asia**

Activities in the region

From its headquarters located in Hong Kong, Leighton Asia manages all the operations in Asia. Geographically, Leighton Asia operates as a general contractor locally in Hong Kong, Macau, Beijing, Ulaanbaatar, Manila, Bangkok, Guam, Ho Chi Minh City and Jakarta. From these offices, we cover Hong Kong, China, Macau, Taiwan, Vietnam, Thailand, Philippines, Laos, Cambodia, Guam, Mongolia and Indonesia.

Leighton Asia has restructured its business with a new approach to provide customer-oriented services and has developed strong relationships with a number of its customers. A recent typical project of this nature is Wynn Macau, an international resort and casino development which Leighton Asia demonstrates its experience and capabilities to ensure successful completion.

With major business in civil and building works, Leighton Asia is dedicated to complete projects based on specific requirement and according to schedule. This is to explain why about 80% of Leighton's current projects are from the same client base.

Business scopes of Leighton Asia have, basically, remained unchanged for the past 30 years. Market sectors include civil, infrastructure, mining, industrial, building and marine. Within these sectors, Leighton Asia offers a wide diversity of construction services including design, project management and as a general contractor.

Recently, the company has been awarded major customer-oriented projects in the region such as an expressway project in the Philippines; the Central Reclamation project and the Lai Chi Kok Transfer Scheme in



Hong Kong and a mining contract for the Ukhaakhudag coal mine project in Mongolia. The mining contract for the Ukhaakhudag coal mine is Leighton's first project in Mongolia.

Major challenges

As the world addresses the current global financial downturn, many large-scale construction and commercial developments are either postponed or cancelled. The economic crisis, on the other hand, also presents an opportunity for Leighton Asia to examine and analyze the company business model and plans for the future.

In order to tackle the present weak economic situation, governments are accelerating infrastructure projects which will provide more opportunities for Leighton Asia to secure new works and increase profitability.

In Hong Kong, the HKSAR Government has already given the green light for major infrastructure projects identified in the Chief Executive's Policy Address last year. Despite keen competition in Hong Kong, Leighton Asia has successfully secured a number of contracts in Hong Kong. Diversity is a key element of Leighton Asia's business strategy and helps the company manage through the cyclical nature of the markets.

Sustainability and environmental management

Sustainability is not just about financial results, it relates to the way Leighton Asia conduct business with respect to the environment and the communities in which the company operate.

Leighton Asia is regarded throughout the construction industry in Asia as a leader in environmental management. The company is striving to carry out projects and run business with sustainable measures which is beneficial to the environment and future generations. Protecting the environment is one of the core values at Leighton Asia and a critical element

of its approach to sustainability.

The aims of Leighton Asia are to use resources efficiently, to recycle where possible and to train people to be considerate of the environment. As an example, the company initiated environmental protection programmes in relation to the Lai Chi Kok Transfer Scheme project and the placement of a 'bubble curtain' to protect Chinese white dolphins from harmful noise pollution during marine works associated with the new fuel facility for the Hong Kong International Airport.

Leighton Asia has taken many steps to ensure that activities at its project sites are properly controlled in order to reduce environment impacts to acceptable levels, and to reduce its carbon footprint.

Leighton Asia launched its first annual Sustainability Report in 2008 with the theme of *Building a sustainable business through living our values*. The document covers sustainable practices as implemented and observed by the company, together with some key projects and developments carried out in line with the core values of Leighton Asia.

Core values

"While sustainability may well be the current *catchcry* across the globe, for Leighton Asia this simply means continued observation of the core values that have sustained us in the past and continue to grow the reputation across the region, whilst also guaranteeing that our business remains consistently profitable and corporately responsible," Mr Hamish Tyrwhitt said.

To conclude, the main elements contributing to the success of Leighton Asia are that the company keeps in line and in tune with the business through balancing of business with its values. Leighton considers its people the heart of its success and key to the future and will continue to provide varied opportunities for staff that drives corporate success.



Leighton Asia

Leighton Asia is part of the Leighton Group, Australia's largest project development and contracting group. We have been operating in Asia since 1975, and our unique combination of local knowledge and extensive international experience have made us the region's international contractor of choice.

We focus our business in five key market segments: civil & infrastructure, mining, marine, industrial and building. We operate as a general contractor locally in Hong Kong, Macau, Beijing, Ulaanbaatar, Manila, Bangkok, Guam, Ho Chi Minh City and Jakarta. From these offices, we cover the following countries – Hong Kong, China, Macau, Taiwan, Vietnam, Thailand, Philippines, Laos, Cambodia, Guam, Mongolia and Indonesia.

Our annual revenue is approximately US\$400 million and we employ around 2,500 people throughout the region.

C U R R E N T P R O J E C T S

Hong Kong

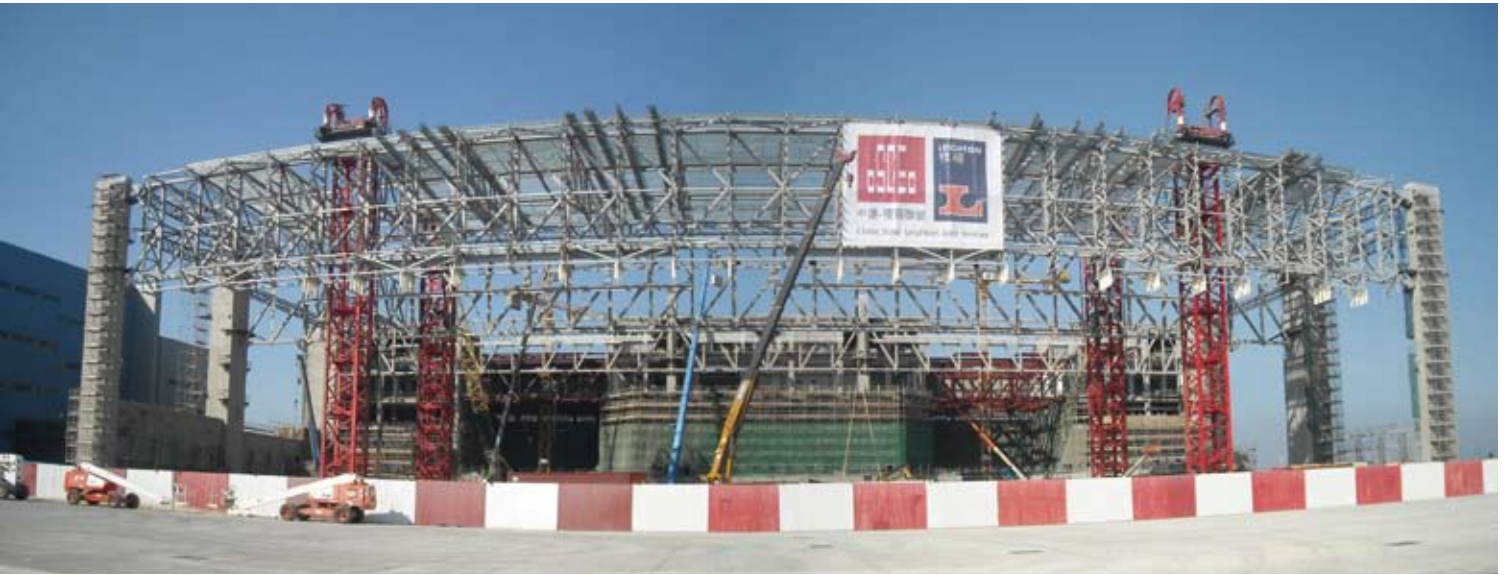
HAECO Aircraft Maintenance Hangar No. 3A, Main Contract Works



Leighton Asia, in joint venture with China State Construction Engineering secured this project involving the construction of the third aircraft maintenance hangar at Chek Lap Kok International Airport in Hong Kong.

The development will be a world-class 16,000 square-metre facility that can simultaneously accommodate two jumbo jets and one nose-in aircraft to provide a total of three Boeing 747 sized aircraft maintenance positions. It will allow a 33% increase in annual heavy maintenance capacity at Hong Kong International Airport.

A key feature and challenge of the project is the roof of the hangar which upon



completion will have a clear span in excess of 150 metres. It is steel truss weighing over 2,000 tonnes and will be constructed at ground level and lifted into final position with strand jacks. The project also involves the installation of a foam deluge system and computer controlled access scaffold that automatically encloses the aircraft and provides maintenance access to the entire plane.

Fast Facts

project value	HK\$623 million
project commencement	March 2008
project completion	May 2009

client
Hong Kong Aircraft Engineering Company Limited (HAECO)

Hong Kong

Kowloon Southern Link KDB200 - Austin Station & Tunnels

Leighton is the lead partner in the Link 200 joint venture that is responsible for the design and construction of the Austin Station and Tunnels which form a key section of MTR Corporation's Kowloon Southern Link project. The rail link will connect the West Rail Line and East Rail Line between Nam Cheong Station and East Tsim Sha Tsui Station.

The joint venture's scope of works includes the design and construction of:

1. The new underground Austin Station (a four level structure constructed within an internally braced perimeter wall formed by diaphragm walls up to 30 metres deep), including all building services



Tunnel boring machine at Kowloon Southern Link



Kowloon Southern Link, Hong Kong

2. Twin, 1.1 kilometre long, 7 metre diameter tunnels, to be constructed using a tunnel boring machine (TBM) running through mixed ground beneath the congested shopping and tourist area of Canton Road and Salisbury Road in Tsim Sha Tsui
3. A 50 metre long section of cut and cover tunnels connecting the existing East Rail Line tunnels with the new tunnels

client
Kowloon-Canton Railway Corporation

Fast Facts	
project value	HK\$2 billion
project commencement	August 2005
project completion	Second half of 2009

Hong Kong

Central Reclamation

Leighton Asia, in joint venture with China State Construction Engineering (Hong Kong) Limited and Van Oord ACZ, is undertaking this HK\$3.8 billion land reclamation project in Hong Kong for the Civil Engineering and Development Department.

The contract involves the reclamation of a key section of Hong Kong Harbour to form approximately 18 hectares of land.

Additional works include the construction of:

1. over one kilometre of seawalls
2. a rail overrun tunnel for the Airport Railway
3. a one kilometre dual three-lane road tunnel
4. a heliport
5. numerous ferry piers, including the famous Star Ferry pier
6. various roadworks, drainage and pedestrian access
7. cooling water pumping stations and pipelines.

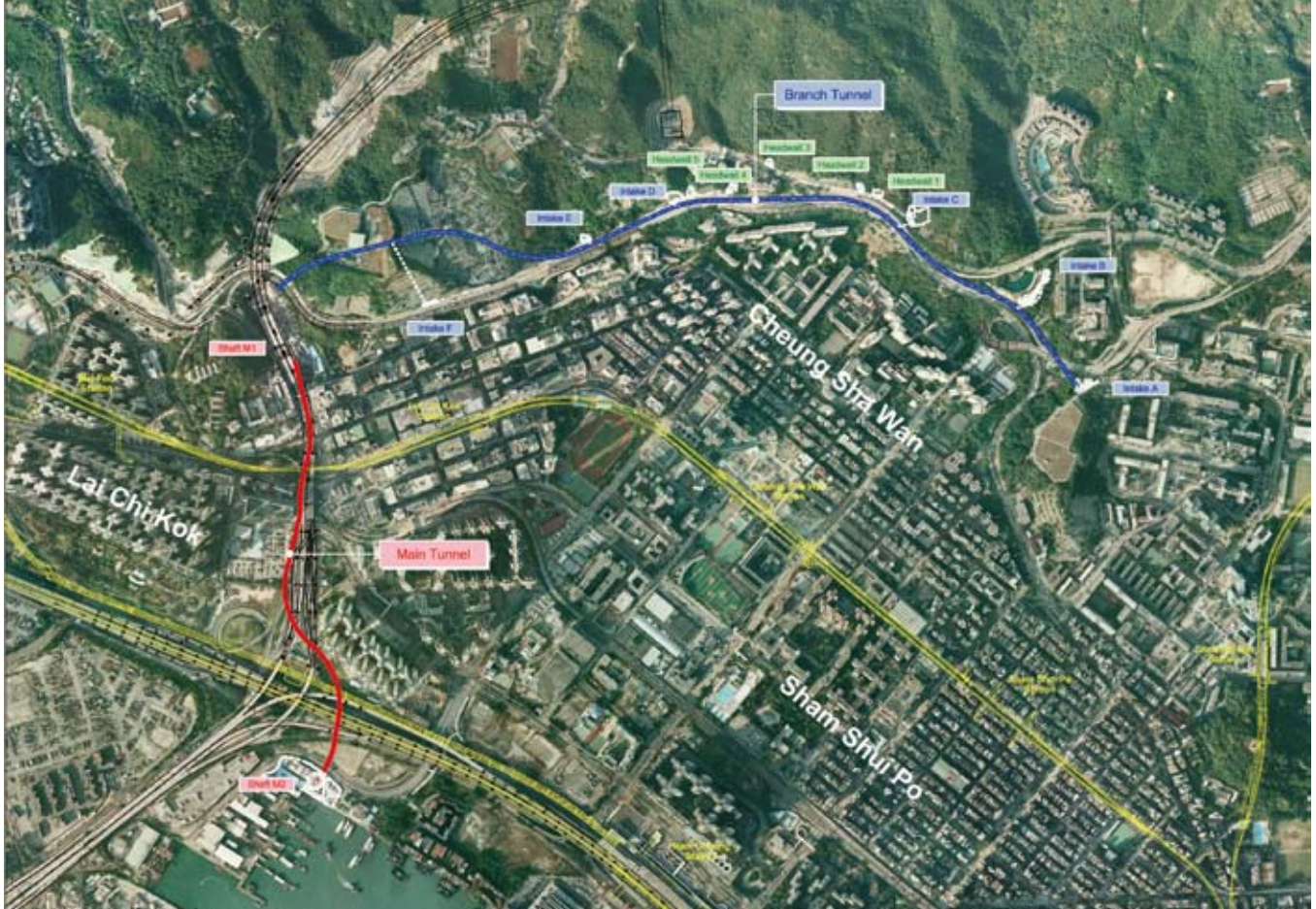
The joint venture was recently awarded an additional contract for construction of the protection works for Central Reclamation Phase III. The protection works include diaphragm wall installation, deep excavation and reinforced concrete works over a length of 914 metres at an estimated value of HK\$1.6 billion.

The protection work is scheduled for completion in mid 2011.

client
Civil Engineering and Development Department



Fast Facts	
project value	HK\$5.4 billion



Hong Kong

Lai Chi Kok Transfer Scheme

The Lai Chi Kok drainage tunnel will capture rainwater from the upper catchment in West Kowloon and discharge it into Victoria Harbour to alleviate flooding of the low lying, developed areas of Kowloon.

The project provides for the design and construction of two storm water drainage tunnels (the main tunnel and the branch tunnel) with a total length of 3.7 kilometres, each with an internal diameter of 4.9 metres.

The work also includes six intake shafts, a stilling basin, an outfall structure, approximately 270 metres of three metre internal diameter connection adits and surface connecting drainage pipelines installed by pipe jacking. The main function of the intakes is to capture rainwater from streams and open channels and then convey them to the stilling basin via the drop shafts and branch tunnel. The branch tunnel will be constructed within a rock stratum while the main tunnel will pass through rock, mixed ground and soft ground strata.

The tunnels will be constructed by means of a tunnel boring machine (TBM)

and the intake shafts will be constructed using traditional methods, drill and split or by blasting. The connection adits will be constructed using blasting techniques.

The project is located in an urban area and therefore possible impacts on the public during construction is an issue that the joint venture has paid considerable attention to during the planning and development of the proposed construction methods. The joint venture will implement mitigation measures to control noise, dust and site run-off, such as the use of temporary noise barriers and silenced plant to reduce noise generation, water-spraying to reduce dust emissions and controls on diversions of streams within the site area.

client
Drainage Services Department, Hong Kong Government

Fast Facts

project value	HK\$1.3 billion
project commencement	November 2008
project completion	July 2012



Hong Kong

Permanent Aviation Fuel Facility

Leighton is responsible for the design and construction of the permanent aviation fuel facility for the Hong Kong International Airport.

The project consists of:

1. A 530 metre twin berth jetty for vessels up to 80,000 dwt
2. A tank farm containing eight above ground fuel tanks capable of storing 264,000 cubic metres of aviation fuel
3. An operations building, fire service pumps, stand-by generators and services
4. 4.7 kilometres of twin 500 millimetre diameter subsea pipelines, and transfer pumps to deliver fuel from the tanks to an existing delivery line

In terms of safety, a particular challenge

on the project is that the pipe-laying barge will be crossing a very busy shipping channel known as Urmston Road which connects Hong Kong and Mainland China. To avoid the necessity for the barge to cross this channel and interface with the extremely heavy marine traffic, it is proposed that it is placed 2 kilometres offshore and a bottom pull of the pipe-line performed along the pre-dredged trench to the tank farm using a 100 tonne winch. The balance of the pipe lay work will be completed by the Faulkner, a purpose built lay-barge suited for shallow water works. The pipe route is to be dredged using conventional grab dredgers and split hopper barges for disposal of the excavated material.

The project requires a total of 8 pipe landings to be provided at the shore and jetty approaches. These landings will be constructed by using a combination of the cranes on the Faulkner and a converted crane barge that are currently operating on the site.

client
ECO Aviation Fuel Development Ltd

Leighton Faulkner at Permanent Aviation Fuel Facility project



Fast Facts

project value	HK\$1.1 billion
project commencement	March 2006
project completion	November 2010



Wynn Encore, Macau

Macau

Wynn Encore

Leighton Asia, in joint venture with China State Construction Engineering, secured this contract for design and construction of a second fully integrated resort hotel, Wynn Encore.

The development will have 106,000 square meters of developed floor space including:

1. 60 metre deep foundations and perimeter diaphragm wall
2. 4 level car park basement
3. 5 level podium including; spa, villas, restaurants, retail promenade and additional VIP gaming space
4. 41 level curved tower with 410 luxury suites
5. The first phase of the Wynn Resorts opened in September 2006, this was then followed by the expansion phase which opened in December 2007



Wynn Resorts, Macau

client
Wynn Resorts Macau (SA)

Fast Facts

project value	HK\$2.7 billion
project commencement	June 2007
project completion	March 2010



Thailand

Conrad Resort and Spa, Koh Samui

Leighton is responsible for the construction of this hotel resort and spa which is located in the south west corner of the resort island of Koh Samui.

The project involves structures, finishes, building services and interior decoration works. The works include the construction of 66 hotel villas, 32 residential villas, four main public buildings and all civil and

services infrastructure required to operate this resort.

The project area covers a 10 hectare, sloping site with complex geotechnical conditions. Each hotel villa has access to an internal buggy road with the front plunge pool being elevated up to 10 metres above ground overlooking the Gulf of Thailand.

The works require a high degree of productivity to achieve a tight construction schedule, whilst maintaining a high quality of finishes and workmanship associated with a six star resort complex.



client
Hillcrest Resorts (Samui) Co Ltd

Fast Facts

project commencement	August 2008
project completion	August 2010

Cambodia

Australian Embassy, Phnom Penh

Leighton has been appointed by the Department of Foreign Affairs and Trade of the Australian Commonwealth to construct the new Australian Embassy in Phnom Penh, Cambodia. The scope of works comprises of:

1. A new three-storey purpose built Chancery building with high quality finishes and high level security
2. Two guard booths and perimeter security walls
3. Services enclosures, underground tank enclosures, covered walkways, covered parking and stores
4. External works including site works, site services, landscaping, fencing, road works and paving



client
Department of Foreign Affairs and Trade of the Australian Commonwealth

Fast Facts

project value	US\$14.6 million
project commencement	October 2007
project completion	April 2009

Mongolia

UHG Coal Mine, South Gobi Desert

Leighton Asia has undertaken the initial mine development works at Ukhaakhudag and has established a mining team at the site that has commenced the mining contract in March 2009. The contract works includes the removal of overburden and mining of the coal, plus provision of mining planning and engineering services.

Leighton established its office in Ulaanbaatar in August 2007 and has developed a strong working relationship with Energy Resources LLC, the owner of the

Ukhaakhudag coal deposit which is located in the South Gobi region of Mongolia some 200 kilometres from the China border and 540 kilometres from Ulaanbaatar.

client
Energy Resources LLC

Fast Facts

project value	US\$235 million
project commencement	March 2009
project completion	December 2014

Mining camp facilities at Ukhaakhudag Coal Mine in Mongolia





Philippines

Masbate Gold Mine Project



The contract involves the open pit mining of the Masbate deposit over a number of pits. It includes the construction of selected haul roads, removal of approximately 28Mbcm of waste material and mining of approximately 18.7Mbcm of ore.

The basic scope of the contract is to mine 46.7 million cubic metres. Leighton is responsible for all mining operations (mine planning, drill and blast, load and haul ore/waste), with the exception of geology and grade control.

Under variations to the contract, Leighton is also responsible for the construction of the tailings dam and the ore feed to the crusher.

client
Filminera Resources Corp. and Philippines Gold Processing and Refining Corp.

Fast Facts	
project value	US\$170 million
project commencement	April 2008
project completion	March 2014