







LEIGHTON



Leighton Asia is the contractor behind some of Asia's most prestigious projects and is a part of CIMIC Group.

We deliver a comprehensive range of services in the construction, civil engineering, MEP and oil and gas sectors.

Liantang / Heung Yuen Wai Boundary Control Point, Hong Kong





Tseung Kwan O - Lam Tin Tunnel, Hong Kong

## A trusted and experienced partner

For almost 50 years, Leighton Asia has built a strong track record as an international contractor delivering prestigious projects in the urban, transport, resources, industrial and science and technology sectors.

We deliver complex infrastructure including tunnel, rail and road networks and renewable energy projects.

Our building projects range from data centres to hospitals, boundary crossing facilities, embassies, luxury residential towers and large scale leisure complexes, a growing number of which are built to green building and energy efficiency standards.

Leighton Asia operates in Hong Kong, Macau, Singapore, Philippines, Indonesia, Malaysia and India.



# A world of experience

Leighton Asia is a member of CIMIC Group, a family of industry leaders proven across diverse disciplines, sectors and environments.

With a history since 1899, the Group comprises around 24,000 people in around 20 countries across Australia and the Pacific, Asia, and North and South America.

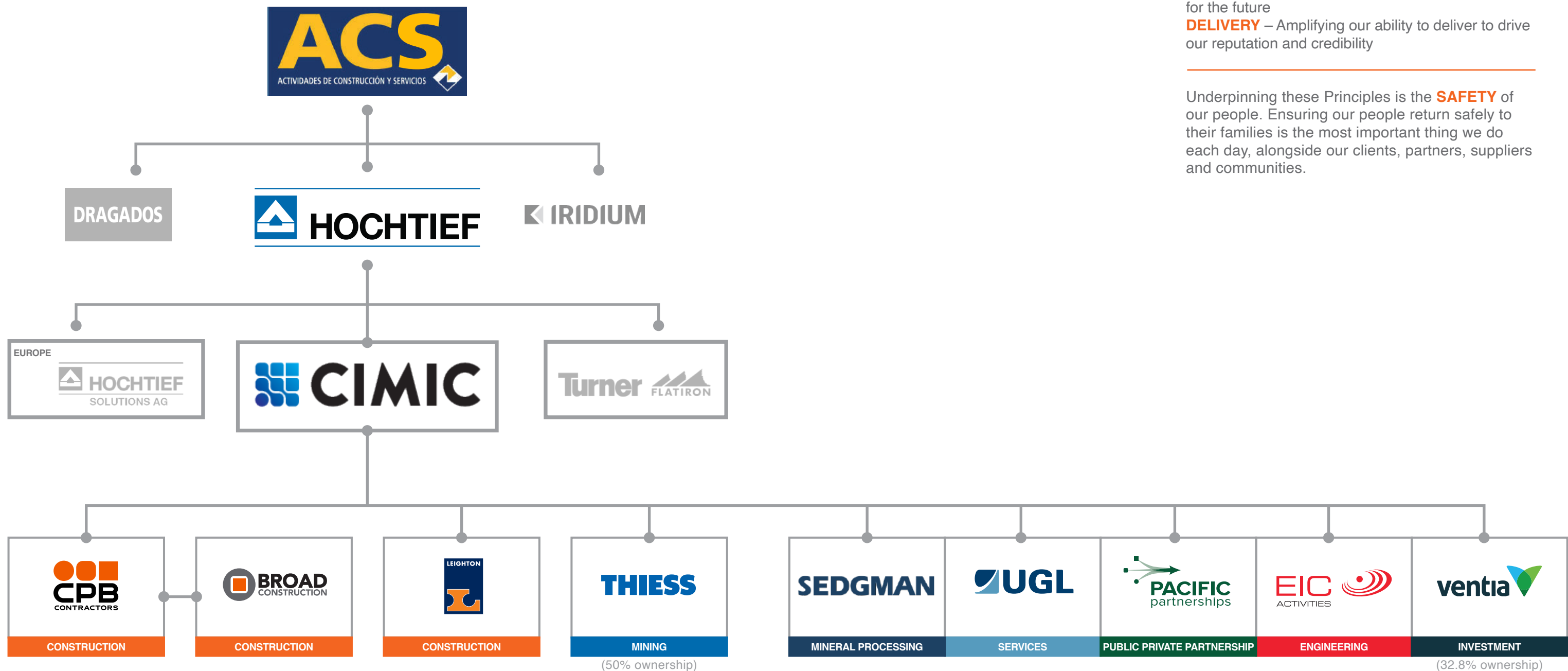
CIMIC delivers future-ready solutions and ensures value across the lifecycle of assets, infrastructure and resources projects.

In addition to Leighton Asia, CIMIC comprises construction arm CPB Contractors, mining and mineral processing companies Thiess (50% investment) and Sedgman, services specialist

UGL and investment and development leader Pacific Partnerships, all supported by in-house engineering consultancy EIC Activities.

CIMIC’s global reach provides access to specialist design, technical support, research and technology from shareholder HOCHTIEF and its shareholder, the ACS Group.

ACS is rated the top international contractor in the world-wide list of infrastructure companies produced by publication Engineering News-Record.



# Our Principles

Our approach to business is summarised in the Principles which guide our actions and act as a common unifying bond across our operations.

**INTEGRITY** – Being respectful and honest with ourselves, our colleagues, our clients, our partners, our suppliers and shareholders and other stakeholders

**ACCOUNTABILITY** – Committing to what we are responsible for

**INNOVATION** – Continually adapting and evolving for the future

**DELIVERY** – Amplifying our ability to deliver to drive our reputation and credibility

Underpinning these Principles is the **SAFETY** of our people. Ensuring our people return safely to their families is the most important thing we do each day, alongside our clients, partners, suppliers and communities.



# Safety

Keeping our people safe is our absolute priority and the most important thing we do.

Our strong focus on safety leadership at all levels of our organisation, and our strategic safety campaign “Strive for L.I.F.E.” (Leighton Incident Free Environment) with all its supporting initiatives, is the vehicle we use to deliver the highest standard of health and safety performance possible, as well as to actively involve all parties in the development and sustainability of our ONE HSE Safety Culture.

Our ONE HSE Culture guides our behaviours and defines what each of us can do to build and maintain a robust safety culture.

integrity  
accountability  
innovation  
delivery  
**SAFETY**

# Our People

Our people are at the heart of our Mission and Principles, our focus on safety and our performance. International experience

Employing around 5,000 people across our operating regions, our integrated teams of specialists and construction personnel offer international experience in the design, construction, commissioning and maintenance in a variety of challenging and unique operating environments.

## Local knowledge

This specialist capability is founded on a profound basis of local knowledge of the markets in which we operate. We maintain strong local teams and management which enables us to have a robust presence across the geographical region of Asia.

This combined experience and knowledge provides our project teams with strong support in the fields of engineering, programming, cost planning, industrial relations, safety and environmental management which drives responsiveness and innovation in the projects we undertake.



# Delivering across geographies and sectors

Leighton Asia delivers a full suite of engineering and construction services across Asia and India.

We focus on our core strengths by combining best practice in international project delivery with our extensive in-country local knowledge.





# LEVERAGING CONSTRUCTION SAFETY TECHNOLOGY ACROSS SITES

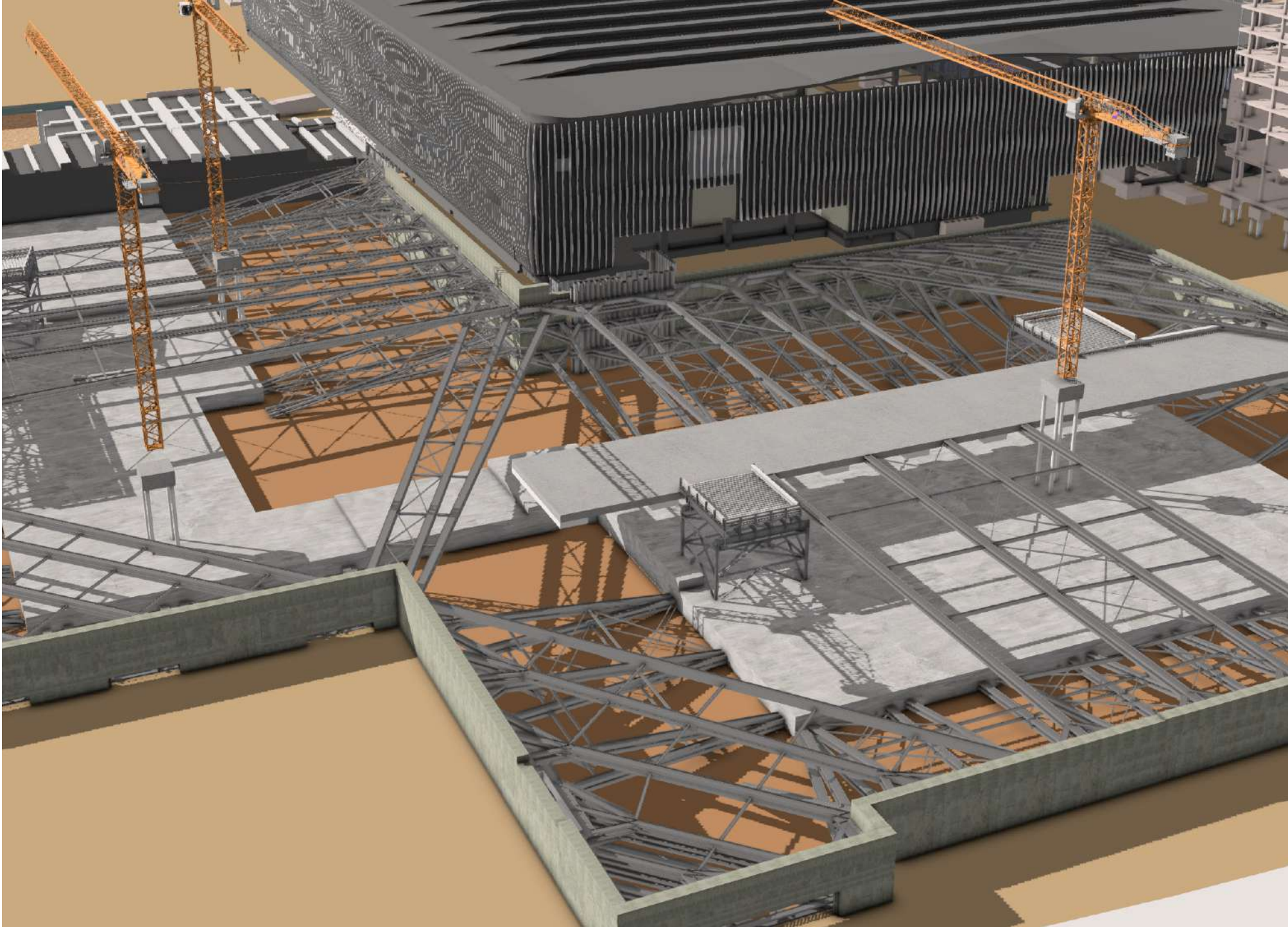


## Digitising our inspection process

Our cutting edge in-house developed digital applications “Strive for L.I.F.E. Inspection” and “Element Champion Reviews”, enable our people to address and rectify health and safety non-compliances at the source and in real-time. These digital solutions simplify the inspection process and eliminate the need for paper-based reports etc, whilst providing timely back-end analysis of all inspection data in order to identify emerging safety performance trends.

## Monitoring our safety performance

A Power BI dashboard is a key analytic tool to assist project leaders to monitor the safety performance of their respective teams and projects. The dashboard generates scores for various safety indicators, such as Class 1 Control Verification, individual Safety Leadership scores, project overall safety performance score, Total Recordable Incident Frequency Rate and Potential Class 1 Incident Frequency Rate etc, thus enabling our project leaders to benchmark their performance and monitor trends.



## Immersive Virtual Reality (VR) training

Our Class 1 Risk Management Virtual Reality Training Module augments our existing classroom-based training material and provides our frontline Engineers and Supervisors with a more immersive experience. The interactive training builds trainees' skills and confidence in applying our Class 1 Risk Management Process. Several key modules of our corporate safety training curriculum are being converted into an e-learning format. Adopting an e-learning curriculum is helping us to maximise regional operational efficiency and ensure consistency in the delivery of our key mandatory safety training courses.



Play video



## Smart safety management

In partnership with the Advanced Science and Technology Research Institute and Nexlore, Leighton Asia has developed a plant proximity camera that uses artificial intelligence and computer vision technology. The award-winning solution improves safety and productivity by enhancing plant operators' confidence and issuing alerts to workers that enter restricted areas.



Play video





Salkhit wind farm, Mongolia

## Towards a carbon-free future

Leighton Asia is actively pursuing opportunities to support our clients and regional communities work towards a carbon free future. Our participation in power generation projects at Black Point Power Station in Hong Kong and the wind turbine project in Mongolia have helped facilitate the expansion of overall power generation capacity whilst achieving carbon intensity reduction targets.



Civil works for Black Point Power Station Additional Gas-Fired Generation Unit D1 Project, Hong Kong



Columbarium and Garden of Remembrance, Hong Kong



## Building a better environment

Throughout the planning, construction and commissioning of our building works, we ensure that the construction works are in-line with a comprehensive set of environmental criteria and comply with the highest environmental standards.

## Energy efficient processes

Leighton Asia has adopted battery energy storage systems for plant and equipment that create power surges, such as tower cranes. As well as eliminating the use of diesel, the system allows the capture of data that can be analysed to further improve energy efficiency.



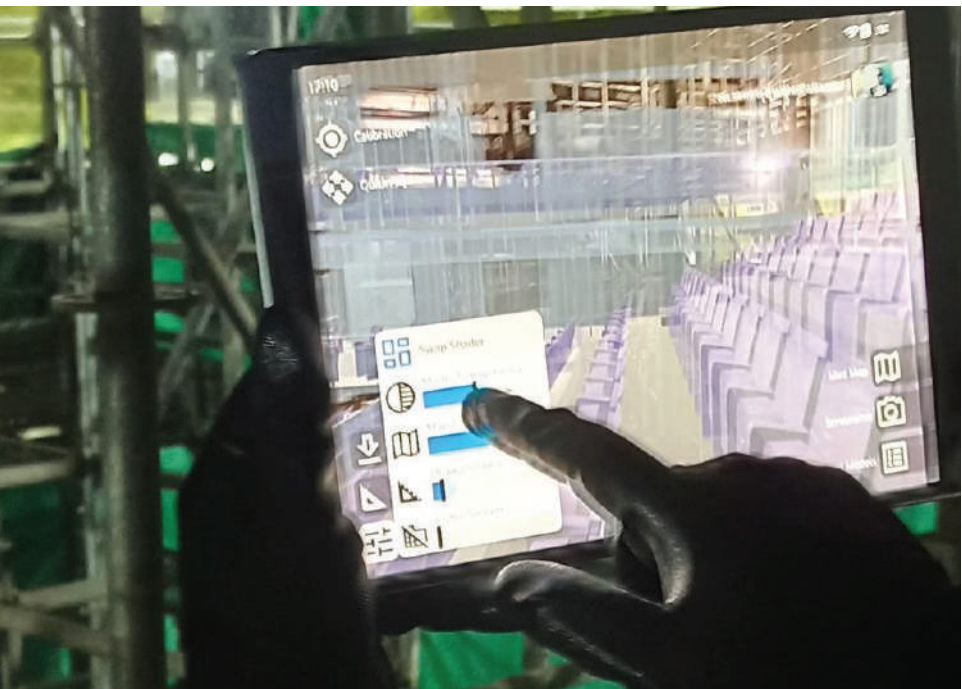
Replacement of diesel generators to reduce green house gas emissions by 80%



# DIGITAL ENGINEERING

At Leighton Asia and across CIMIC Group, our investment in innovation, digitisation and digital integration is equipping us to design, build and operate better. We are innovating in every phase of the project lifecycle and embracing new methods, materials and technologies to generate value, deliver sustainable solutions and build a legacy for the future.

As a business, we continuously seek innovative solutions to enhance safety, quality and efficiency across our operations. Such solutions are not limited to technical improvements on a project, they also include enhancements made to help us work smarter.



## Building digitally first

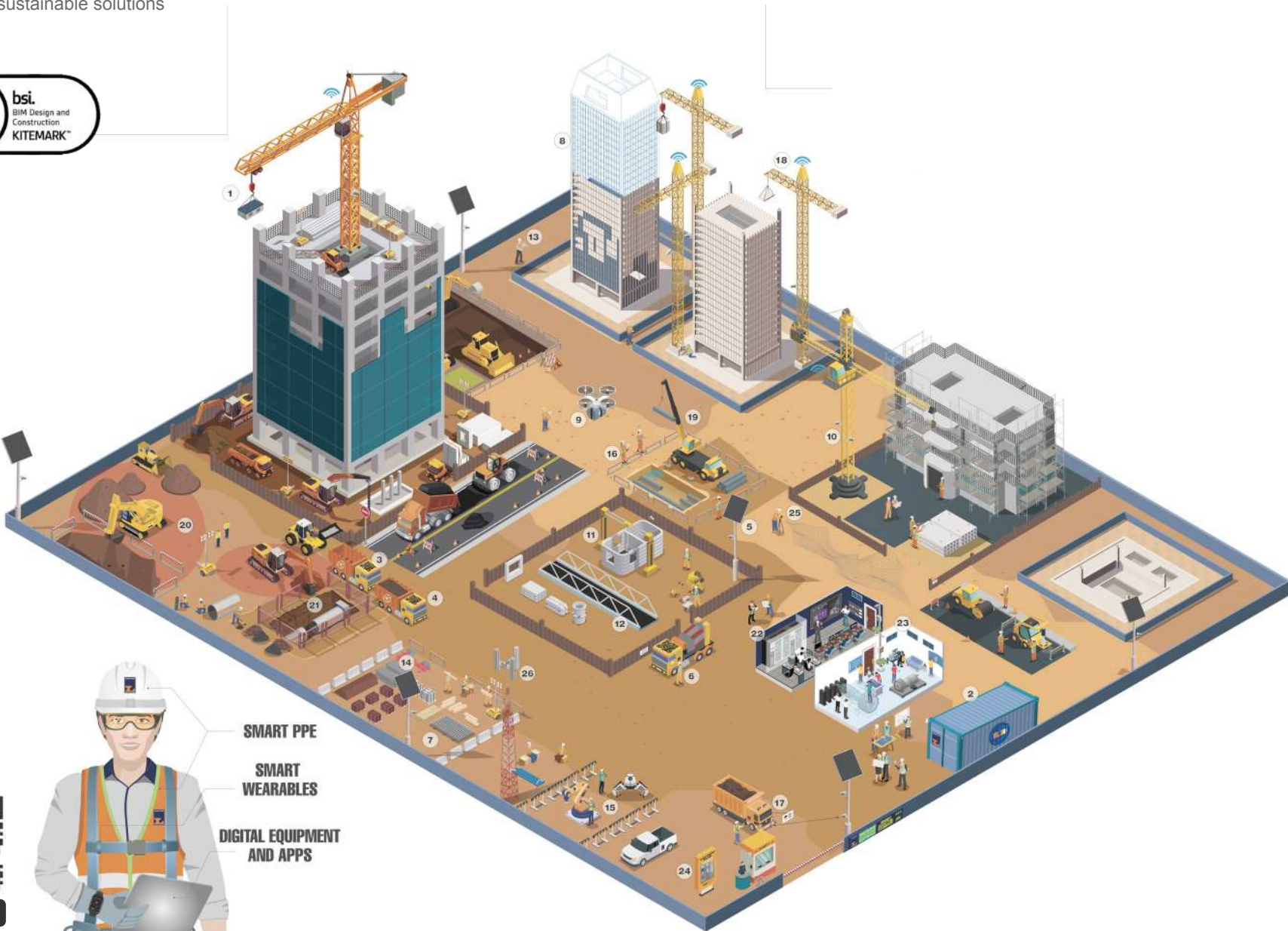
Leighton Asia is using 'Virtual Builder', our Group's cloud backed collaboration environment, for the planning and execution of construction activities. 'Virtual Builder' incorporates Geographic information system, Building Information Modelling (BIM), 4D planning and 5D cost analysis. It also includes an Augmented Reality (AR) application, which can visualise the finished works on a mobile device or AR glasses.



SMART PPE

SMART WEARABLES

DIGITAL EQUIPMENT AND APPS



# Digital Construction

Safe, Smart and Sustainable

	<b>CARBON ZERO</b> 1. Advance Green Materials 2. Battery Energy Storage System
	<b>WASTE REDUCTION</b> 3. Digital Dump Monitoring 4. Material Disposal Tracking
	<b>ENERGY SAVING</b> 5. Solar Panel
	<b>DIGITAL PROCUREMENT AND ASSET MANAGEMENT</b> 6. Digital Material Delivery Control 7. Smart Warehouse
	<b>DIGITAL TWIN</b> 8. Digital Twin
	<b>3D REALITY CAPTURE</b> 9. Drone 10. Smart Camera
	<b>MODULAR INTEGRATED CONSTRUCTION</b> 11. 3D Concrete Printing 12. MIC- Modular Integrated Construction
	<b>AI POWERED ROBOTS</b> 13. Augmented Reality 14. Safety AI Monitoring 15. Robotic Autonomous Patrol and Robot Driller
	<b>DIGITAL DATA COLLECTION</b> 16. Digital Inspection
	<b>INTEGRATED DIGITAL DELIVERY</b> 17. Truck Management with License Plate Recognition
	<b>SMART SAFETY</b> 18. Tower Cranes Anti-Collision System 19. Smart Lifting Operations 20. Danger Zone Sensor 21. Vibration and Water Leakage Sensor 22. Project Control Room 23. VR Safety Training Room 24. Smart Self Service Kiosk
	<b>INTERNET OF THINGS</b> 25. UAV Laser Scanning 26. 5G Network



## Nexplore

Powered by Leighton Asia, Nexplore Hong Kong is a software innovation company that builds custom-made solutions for the construction industry using next generation technologies to accelerate the industry's digital transformation. Based at Hong Kong Science and Technology Park, Nexplore Hong Kong has access to Hong Kong's leading technology and research facilities.



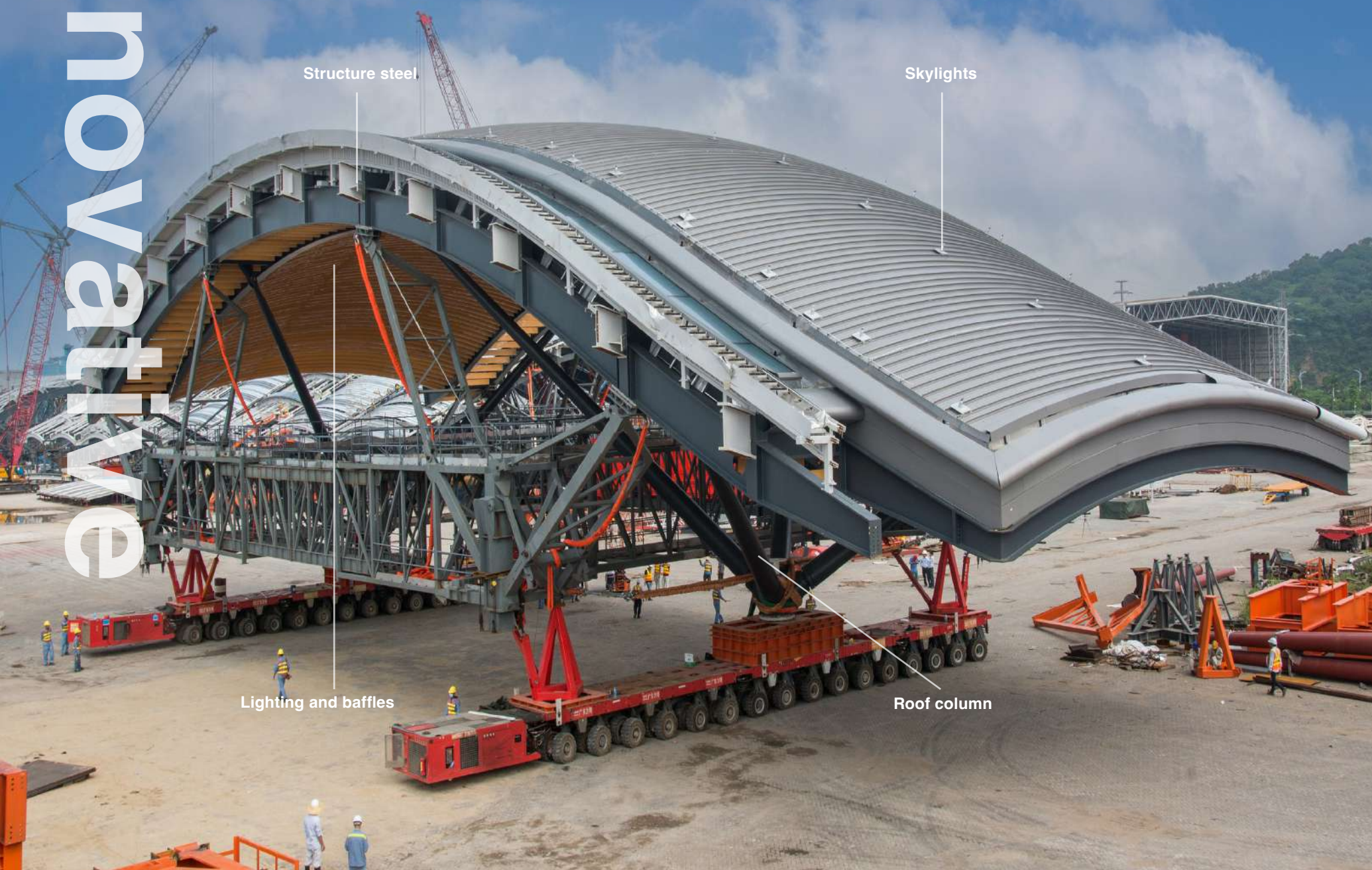
## Accelerating our digital delivery capability

Leighton Asia has recently set up One Digital Construction Services, a hub that provides integrated digital construction solutions to our operations and collaborates across the wider CIMIC Group. Located at Makati City, the Philippines, it provides technical services including digital engineering, planning, quantity surveying, estimating, reporting, integrations and other Digital Services.

By integrating the multitude of data captured, we can conduct complex analysis and share with our teams to foster collaboration and make data-based decisions more quickly. Ultimately, this can improve the efficiency, safety and quality of our operations.



The largest and most complex offsite fabrication scheme ever executed in Hong Kong.



## Hong Kong-Zhuhai-Macao Bridge Passenger Clearance Building

Leighton Asia's Passenger Clearance Building along with its ancillary buildings form a key and iconic component of the Hong Kong-Zhuhai-Macao Bridge.

The key feature of our solution was that typically labour intensive multi-disciplinary works were undertaken in an off-site prefabrication yard in Mainland China, providing a controlled factory environment that improved safety, quality, and productivity.

- 45 primary and 36 infill modules, each up to 60 metre long x 25 metre wide x 15 metre high and weighing up to 670 tonnes
- Fully integrated modular sections inclusive of building services and architectural finishes
- Transported by barge using specially engineered steel frames to support the modules
- Erected on site using innovative strand jack lifting and horizontal launching method



Play video

## Advanced project monitoring

Digital surveying technologies and drones (unmanned aerial vehicles) are used to enhance our ability to monitor construction conditions and progress, manage resources and generate high quality reality capture models. In addition, the use of 360 degree cameras and sophisticated software enables us to monitor the progress of projects against the BIM model.

## Data is the new gold

We are increasingly using SMART systems, IoT devices and sensors to track and better utilise our plant and resources. The data collected provides allow us to conduct analysis to enhance our efficiency and productivity.



## Underwater robots used for site inspections

Our Hong Kong project team has adopted a professional level underwater robot to conduct surveys and weekly inspections for the silt curtains along the harbour. The robot includes an in-built camera, laser scanner and sonar sensor, and remote control using a VR headset, which eliminates the need of manual inspections and improve site safety.

## Driving MiC to the next level

Leighton Asia and Buro Happold, an integrated consulting engineers and advisers, are collaborating in an industry research on Modular Integrated Construction related projects to improve the logistics of construction sites.

We are exploring how technology and computational analysis can assist a construction site to adopt the time-and-motion approach of a factory.





# TUNNELLING

From cost-effective cut-and-cover construction to precision drilling and blasting, and sophisticated tunnel-boring machines, our tunnelling works are built on our extensive project planning, design and management knowledge and experience.

Clients benefit from our comprehensive understanding of tunnel and underground construction, especially in dense urban environments, and our experience with in-tunnel works like track installations, electrical and mechanical works, cladding, portal construction and beyond.

## Tseung Kwan O – Lam Tin Tunnel

### HONG KONG

The project includes the construction of a 2.2km dual two-lane highway tunnel together with a 650 metre long branch tunnel, plus 1.6km of viaduct structures erected mainly by the precast segmental method, a large landscaped deck and 1.7 million cubic metres of excavation (mainly in rock) as site formation works. The contract also involves the construction of two ventilation buildings and an administration building, as well as the design, supply and installation of the tunnel electrical and mechanical works.



Play video



## Central - Wan Chai Bypass

### HONG KONG

The Central-Wan Chai Bypass and Island Eastern Corridor Link project (CWB) traverses six densely populated commercial and residential districts and runs for 4.7km with approximately 4km of underground tunnel.

The two contracts being delivered by Leighton Asia for the CWB project include the Central Interchange and Route-Wide System and Commissioning. Works include construction of two bridges, cut-and-cover tunnels, tunnel buildings, realigning and reconstructing existing roads, design and installation of all tunnel services, and works associated with tunnel commissioning.



Play video



## Express Rail Link Contract 822

### HONG KONG

Leighton Asia delivered a 7.65km long drill and blast tunnel section between Tse Uk Tsuen and Shek Yam as a part of the 26km underground section of the Express Rail Link in Hong Kong. Our works also covered construction of ventilation buildings at Shing Mun and Pat Heung as well as temporary magazines for storing explosives.





## Harbour Area Treatment Scheme

### HONG KONG

Leighton Asia, with its joint venture partner, constructed a 7.5km long, 4-metre diameter sewage tunnel through rock from Aberdeen to Sai Ying Pun by drilling and blasting. There are five vertical shafts with diameters of between 5 metres and 12 metres and depths of between 83 metres and 121 metres. Due to soft ground conditions up to a depth of about 30 metres, the upper sections of the shafts are constructed using diaphragm walls and piling. Drill and blast construction is used for the lower sections, where the ground consists of granite and volcanic rock.

## Deep Tunnel Sewerage System Phase 2 Contract T-09

### SINGAPORE

This contract includes design and construction of approximately 7.9km of used water tunnels, each with an internal diameter of six metres, as well as shafts, hydraulic structures and other facilities associated with the used water sewerage conveyance system.

Tunnel excavation was carried out by tunnel boring machines, which were launched by using the patented 'Flying Launch' to optimise time, space and safety.



Play video

## Lai Chi Kok Drainage Tunnel

### HONG KONG

The project provided for the design and construction of two storm water drainage tunnels with a total length of 3.7km, each with an internal diameter of 4.9 metres. The work also included 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.



## Eagle's Nest Tunnel

### HONG KONG

The Eagle's Nest Tunnel is a major section of Route 8 linking Sha Tin in the New Territories with Kowloon West. The major element of the project delivered by Leighton Asia and its joint venture partner was the twin 2.1km long, three-lane Eagle's Nest Tunnel. This included a 400-metre-long adit joined to the main tunnels as part of the ventilation system. All tunnels were excavated by the drill and blast method, using six jumbo drilling machines.



## North-South Corridor N103 project

### SINGAPORE

Leighton Asia, with its joint venture partner, is delivering Contract N103 of the North-South Corridor Project. The project involves the delivery of 640 metres of twin, three-lane vehicular tunnels, the underpinning of an existing expressway flyover, a new facility building and an entrance ramp and exit ramp.



# RAIL

Our railway system design and construction expertise allows us to undertake all aspects of rail and associated works, including laying ballasted, high-speed, floating slab and special tracks, building bridges, viaducts, tunnels, stations and maintenance facilities, track rehabilitation, traction power design, constructing overhead systems, signalling and communications installation.



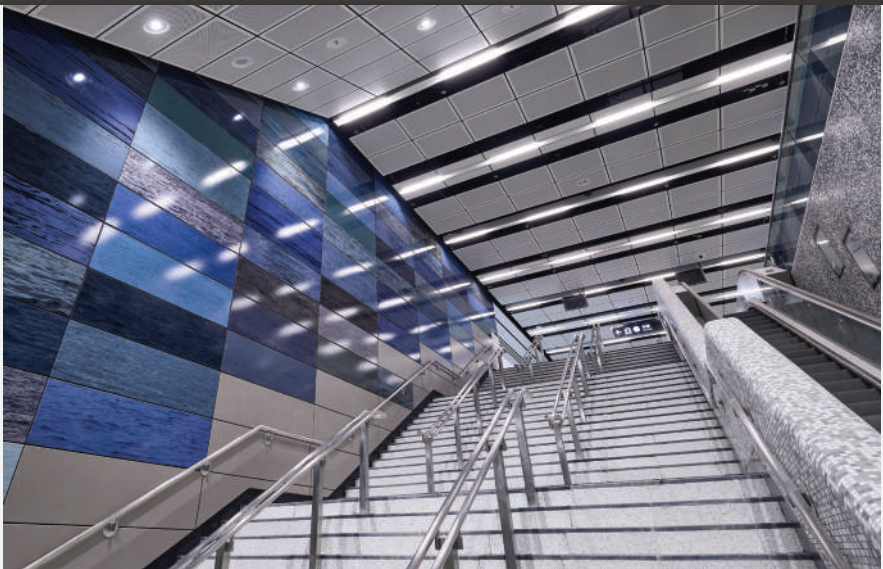
Express Rail Link West Kowloon Station, Hong Kong



## Springleaf Station and Tunnel for Thomson-East Coast Line Contract T208

### SINGAPORE

The project is part of the 43km Rapid Transit System consisting of 31 new stations and seven interchange stations. Leighton Asia, with its joint venture partner, delivered the Springleaf Station, twin bored tunnels totalling 4.4km, substantial earthworks with a cut and cover box midway along the alignment and cut and cover tunnels at the north end of the station, and associated ancillary works. Tunnel excavation was carried out by three slurry type tunnel boring machines, one of which was recovered and re-launched.



## Exhibition Centre Station

### HONG KONG

This contract includes the construction of an underground station (Exhibition Centre Station) and 300 metres of cut and cover tunnel along Convention Avenue (Western Approach Tunnel). The station and the tunnel is constructed within a cofferdam formed using a combination of diaphragm walls, pipe piles and sheet piles. The project requires complex sequencing to suit traffic management phasing and utility diversions within an area that includes a number of interfacing construction contracts, hotels and commercial premises.



## Downtown Line Stage 3 Contract 935 - Construction and Completion of Jalan Besar Station and Associated Tunnels

### SINGAPORE

Downtown Line Stage 3 is a key component of Singapore's 42km long Downtown Line and extends the existing Mass Rapid Transit railway network. Leighton Asia, with its joint venture partner, constructed the four-level underground Jalan Besar Station, and twin tunnels of approximately 775 metres in length, along with other ancillary facilities. The tunnels were built by using two tunnel-boring machines.





## BRIDGES AND ROADS

Our land transportation systems cover thousands of kilometres to connect communities across the region. With urban populations and car ownership on the rise in Asia, we understand the importance of delivering road transportation systems and facilities that enable people to travel efficiently, safely and reliably.



### North Luzon Expressway Harbor Link Segment 10

#### PHILIPPINES

Leighton Asia delivered the Phase 2 Segment 10 of the North Luzon Expressway Harbour Link, which is a 5.6km of elevated highway from McArthur Highway to C3 Road with provisions for future expansion to a six-lane divided elevated expressway. Our scope of works comprised the construction of the foundations, sub-structure and superstructure of the elevated highway, together with its associated buildings and facilities.



### Cavite Laguna Expressway (Cavite Section)

#### PHILIPPINES

Leighton Asia is constructing a 28km, four-lane expressway, including bridges, interchanges, toll plazas and ancillary facilities. The Cavite and Laguna regions are the most industrialised and urbanised areas in the Philippines, and on completion, the expressway will reduce travel times from Cavite to Laguna by approximately 45 minutes.



### South Island Line 903

#### HONG KONG

The South Island Line is a medium-capacity railway covering approximately 7km from Admiralty Station to South Horizons in Ap Lei Chau. Our works consisted of the construction of the two elevated stations in Ocean Park and Wong Chuk Hang, which involved a viaduct appropriately 2,100 metre long and the Aberdeen Channel Bridge with a main span of 115 metres. Leighton Asia, with its joint venture partner, has constructed two underground stations at Lei Tung and South Horizons which involved 1,100 metres of tunnels and related plant and ventilation buildings.





## HEALTHCARE

From brand new medical facilities to challenging expansions of occupied hospital buildings, we have the expertise and experience to meet the technical needs of the healthcare industry. Our solid track record in healthcare construction projects demonstrates our abilities as an industry leader in developing state-of-the-art critical care facilities.



### Tin Shui Wai Hospital

#### HONG KONG

Leighton Asia, with its joint venture partner, has delivered the 12-storey, 58,900sqm Tin Shui Wai Hospital. The hospital provides up to 300 in-patient and day beds and various ambulatory care services.

This was the first NEC Engineering and Construction Contract (ECC) Option A project awarded by the Architectural Services Department and was built to Hong Kong's green building certification standard (BEAM), featuring a glass curtain wall installed to enhance natural illumination and environmental friendliness.



### North Lantau Hospital

#### HONG KONG

Leighton Asia delivered a seven-storey C-shaped block on top of a single-storey podium. The hospital provides around 160 inpatient beds and 20 day beds for ambulatory services including an Accident and Emergency department. Leighton Asia also prepared the 1.9-hectare site, built associated car parking, an internal road network and a new road link.



### Haven of Hope

#### HONG KONG

Leighton Asia delivered the Haven of Hope project, which comprised the demolition of existing family quarters and administration buildings; construction of a low-rise non-acute hospital, providing 316 in-patient beds. It also included the construction of relevant buildings and roads.



## BUILDING

Our diverse portfolio of public and private sector projects encompasses commercial and residential developments, casinos and theme park attractions, schools, hospitals, museums, industrial facilities and more.

### Data Centre

#### HONG KONG

Leighton Asia is delivering a Data Centre project, which involves the design and construction of a data centre. Our works comprise the expansion of an existing data centre, fit-out of data halls, including the supply and installation of equipment.



### Data Centre Campus

#### INDONESIA

Leighton Asia is constructing a data centre campus in Jakarta, Indonesia, for a multinational technology corporation. Construction works comprise the delivery of site infrastructure for the campus, a data centre building with two data halls and associated buildings for storage, security and other operational facilities, as well as mechanical, electrical, and plumbing services, façade and external works.



### Zuellig Building

#### PHILIPPINES

The Zuellig Building is the first LEED Platinum building in the Philippines awarded by the U.S. Green Building Council.

Leighton Asia's scope of work included the construction of a green building – a 33-storey office tower, a two-storey retail component with five levels of basement car parking and other associated works.



### East Kowloon Cultural Centre

#### HONG KONG

Leighton Asia is delivering the East Kowloon Cultural Centre, which includes construction of a seven-storey building, three studios with the capacity of between 120 and 250 seats, a 1,200-capacity auditorium, 550-seat theatre and under stage area, semi-basement areas for plant rooms, and other ancillary facilities. The project will also house a large rehearsal room, two connectable rehearsal rooms, a restaurant, box office, cloak room and enquiry counter.







## Wynn Palace

### MACAU

Leighton Asia's scope of works for the project included ground and major foundation works together with construction of a luxury hotel with 2,000 rooms and a mixed-use podium comprising gaming, dining, retail and convention facilities, as well as numerous specialist attractions including a 30,000sq m performance lake.



## City of Dreams Manila

### PHILIPPINES

Leighton Asia delivered the City of Dreams Manila, which was an integrated casino and entertainment complex comprising two floors of gaming, six hotel towers, retail, food and beverage outlets, ballrooms, nightclub and support facilities.



## Wynn Encore

### MACAU

Leighton Asia delivered the design and build of a fully integrated resort hotel, consisting of five-level podium including spa, villas, restaurants, retail promenade and additional VIP gaming space, 41-level curved tower with 410 luxury suites, and a four-level car park basement.



## City of Dreams

### MACAU

Construction of a mega-size integrated urban entertainment resort. The scope of work consisted of 600,000sq m of developed floor space which included four deluxe towers of between 30 and 36 storeys containing Grand Hyatt, Hyatt Regency, Crown and Hard Rock Hotels, a gambling casino, serviced apartments, an underwater-themed casino, luxury retail arcades and department store, a custom-designed water theatre with seating for around 2,000 people. A custom-built energy centre covering six levels was built to contain electrical substations, a central cooling plant and an emergency power generator.



## Wynn

### MACAU

Leighton Asia, with its joint venture partner, is responsible for the design and construction of a new five-star hotel and casino complex in Macau for Wynn Resorts. Our work comprised the design and construction of a 600-room hotel tower, gaming areas and supporting facilities.





## New Australian Embassy

### JAKARTA, INDONESIA

Leighton Asia, with its joint venture partner, has delivered the largest Australian embassy in the world, the 40,500sq m New Australian Embassy Compound in Jakarta. The project comprises a five-storey chancery building, an Executive Residence, 32 staff accommodation units, and medical and recreational facilities.



## Phoenix Equinox

### HYDERABAD, INDIA

Leighton Asia is delivering Phoenix Equinox, an Indian Green Building Council Platinum rating commercial complex. The complex comprises the delivery of four commercial office towers, including two 20-storey and two 11-storey buildings, all with three common basements. Our scope of work comprises the completion of the civil and structural works, façades, electrical works, common area finishes, external development and associated works.



## Birla Niyarra

### MUMBAI, INDIA

Leighton Asia is delivering the Birla Niyarra, a flagship mixed use development by Century Estates. Construction works comprise the delivery of a 70-storey and a 72-storey residential building, including three common basements, a podium and a terrace. A club house and retail section are also to be constructed across a 6.6 hectare site with a total built-up area of approximately 273,000sq m.



## The Camellias

### GURGAON, INDIA

Leighton Asia has constructed the Camellias, one of the largest residential schemes in India. The luxury residential development occupies a site area of approximately 18-acres and includes nine tower blocks totaling 429 apartments, including 14 penthouses. The project has received an Exemplary Performance award for Site Management by the Green Rating for Integrated Habitat Assessment India Council.



# BOUNDARY CONTROL FACILITIES

Leighton Asia is the contractor behind the delivery of three major gateway projects from Hong Kong into Mainland China.



## Express Rail Link West Kowloon Station

### HONG KONG

Leighton Asia, with its partner, had successfully delivered the world's largest underground railway station of 400,000sq m. The 30-metre-deep underground terminus includes nine long-haul and six shuttle platforms, customs and immigration facilities, departure lounges, duty free and other retail outlets on four levels. Utilising a combination of conventional bottom-up and top-down construction methods, the construction involved placing approximately 600,000m<sup>3</sup> of concrete, fixing of 150,000 tonnes of reinforcement, and erecting 9,000 tonnes of structural steel for the roof.



## Hong Kong – Zhuhai – Macau Bridge Passenger Clearance Building

### HONG KONG

The project comprises the construction of a 40,000sq m. 30 metre high Passenger Clearance Building, including bored pile foundations, reinforced concrete structure, profiled steel roof, curtain walling and glazing, architectural finishes and mechanical and electrical works. The building roof, complete with cladding, was prefabricated in large modules up to 60 metres by 25 metres in size and weighing up to 690 tonnes in an assembly yard in China. Each of these units were transported to site by barge, offloaded and maneuvered into the building using self-propelled multi-wheel transporters.



## Liantang / Heung Yeun Wai Boundary Control Point

### HONG KONG

In addition to the main Passenger Terminal Building the contract also includes nine other main ancillary buildings including fire and police bases, and vehicle examination buildings. The size of the terminal building is approximately 266 metres x 172 metres on plan with an overall building height of 36 metres. The contract also includes all associated external and road works within the site comprising vehicular bridges, vehicular roads, footpaths, planters, fencing, underground drainage, external services and high mast lighting.



Leighton Asia has been involved in the ongoing development of the Black Point Power Station since it began operations in 1996.



Black Point Power Station, Hong Kong

Energy

From combined and open cycle power plants to clean coal technologies, Leighton Asia is at the forefront of many major energy projects in the region. Our capabilities cover a wide range of energy efficient power generation options while our reputation for reliability and safety is a key competitive advantage in an industry that demands exceptionally high and exacting standards.



Indian Oil Corporation  
Single Point Mooring  
(SPM) systems

GUJARAT, INDIA

The project's scope of work comprises dredging and backfilling of a 2.9km trench; installation of 17km of 42" subsea pipelines and a new SPM; relocation of an existing SPM, and relevant decommissioning, pre-commissioning and commissioning works.



Davao Power project  
DAVAO CITY, PHILIPPINES

Leighton Asia constructed a 300-megawatt circulating fluidised-bed coal-fired power plant in Davao City and Davao del Sur in the Philippines. Scope of work includes the construction of a 70-metre high and 120-metre diameter coal storage dome, installing coal conveyors, a ship unloader and stacker reclaimer, and constructing 1,500 metres of 2.5-metre diameter circulating water mains, the circulating water intake structure, project-wide piling, site infrastructure, ash lagoons and the power island.



Supreme Energy  
Rantau Dedap  
Geothermal project

SOUTH SUMATRA,  
INDONESIA

The scope of work for the contract included upgrading and widening 14 14km of existing roads, construction of 35km of new 'green field' access roads, construction of five well pads for drilling works, including drainage and sumps, supplying and installing 19km of water/brine distribution pipeline, including a water supply intake and associated pumps and construction of camp accommodation for 250 staff and workers.





## MECHANICAL AND ELECTRICAL (M&E)

Our M&E team provides complete solution including design, coordination, manufacture, fabrication, testing and commissioning and setting up of M&E systems. Our extensive experience covers M&E work in projects ranging from tunnel, metro stations, mega boundary crossing facilities to hospitals, casino, and traffic control systems.

### Electrical works package for the Third Runway Concourse and Apron

#### HONG KONG

Leighton Asia is delivering all the electrical works for the management of design, procurement, installation, testing and commissioning. As part of the Airport Authority of Hong Kong's strategic expansion program, the works for the Third Runway Concourse and Apron will serve as one of the key components of the Three-runway System project.



### Shatin to Central Link Contract 1175 - Building Services for Kai Tak Station

#### HONG KONG

Leighton Asia delivered the complete solution including design development, manufacture, supply, installation, testing and commissioning of building services installation, which comprise the environmental control system, electrical system, fire services system, plumbing and drainage system, station based control system and condition based maintenance system for the Kai Tak Station and ancillary buildings. This is the first complete M&E package contract awarded directly to our M&E team by MTR Corporation Limited.



### Express Rail Link – West Kowloon Station, Fire Services, Plumbing and Drainage

#### HONG KONG

Leighton Asia, its joint venture partner, was responsible for the design, manufacture, supply, installation and testing and commissioning of the fire services, plumbing and drainage and emergency signage system of the entire West Kowloon Station.



### Electrical Services for Tunnels

#### SINGAPORE

Leighton Asia, with its joint venture partner, is replacing the electrical services and systems for the existing Central Expressway and Fort Canning Road Tunnels for the Land Transport Authority.





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