

HIP TO BE SQUARE

DEVELOPER : City of Stonnington
MAIN CONSTRUCTION COMPANY : Kane Constructions
ARCHITECT : Lyons Architecture
CONSTRUCTION VALUE : \$60 million



Prahran Square officially opened to the public in December 2019 following two years of extensive, complex and demanding construction works. The square includes 500 car parking spaces across two underground levels, four streets upgraded linking Chapel Street and Commercial Road to Prahran Square, three above ground grandstands, restaurant and café pavilion with sensory garden, central water feature, open paved areas, public amenities, and several art poles forming spectacular light and sound shows.

The \$60 million Prahran Square redevelopment separates the 10,000m² park into nine distinct areas including a central square creating a vibrant open space for recreation, events, festivals, markets, fitness, and socialising. The square includes retail spaces, landscaping, shaded areas, terraced seating and parking.

The public redevelopment is an exciting project initiated by the City of Stonnington to provide open space for festivals, events and recreation within the popular Chapel Street Precinct. Prahran Square is the single largest construction project the City of Stonnington has undertaken.

The modern urban parkland designed by Lyons Architecture and landscape architects, Aspect Studios represents a much needed expansion of open public space in a part of Melbourne anticipating continued population growth.

Kane Constructions was awarded the contract to deliver Prahran Square in November 2017. Onsite work commenced in January 2018

with the demolition of the existing Cato Street car park and excavation of two underground car parking levels.

Facilities include commercial spaces, a water play area, an accessible “forest walk” and lawns and seating. A variety of different installations and artworks are on show, including a number of 11m high poles holding vertical screens to generate spectacular light shows. The structure also includes ecologically sensitive features, including solar energy generation and stormwater capture and management.

“The car park is a feature in itself, with painted ceilings, bright pink and fluorescent green line marking, coloured glass staircases and white terrazzo footpaths and columns. The large underground car park opens up to the street level above through large open voids and raking glass façades, so from the ground level, you can see your car parked below,” said Project Manager, David Purcell.

“We incorporated the community’s feedback into the construction,” said David. “Some of the shop owners wanted to have short term



parking for their customers, so we adjusted the drawings and added a number of indented parking bays.”

As the excavation progressed, archaeological remains were unearthed, delaying the work for up to two months while the local council worked with Heritage Victoria to secure archaeological finds. These included the remains of a tunnel, evidence of a 1850s farmhouse, late 1900s housing structural walls, toys, clay pipes, animal bones and crockery. The objects will be put on display within the square as a recognition of the area’s history.

“Given the nature of the public site, the challenges involved access for equipment and delivery, and safety and staging within an operational environment. With 150 workers onsite, the car park was completed in early October 2019 and from then on, the job quickly progressed in time for the opening of the square on 1 December 2019.”

“It’s rewarding creating quality architecture in public spaces,”



said David. “Community structures are a place to take design risks, with good architects and consultants working together to make innovative buildings.”

Kane Constructions is a privately owned commercial construction company active in all sectors of the industry. With a turnover in excess of \$1 billion and over 450 full time employees, Kane operate throughout the east coast of Australia and overseas from offices in Melbourne, Sydney, Brisbane, Sunshine Coast and Canberra.

Kane Constructions was awarded the 2016 and 2019 National Construction Master Builder of the Year by Master Builders Australia and was also awarded Master Builder of the Year in Victoria for 2016, 2017, and 2019 by the Master Builders Association of Victoria.

For more information contact Kane Constructions, 658 Church Street, Richmond VIC 3121, phone 03 8420 1200, email viccontact@kane.com.au, website www.kane.com.au

Below LTE Construction Group completed the bulk excavation works and spoil removal for Prahran Square.

LTE Construction Group (LTE) is a Melbourne based civil and piling contractor specialising in excavation, retention systems and preparing foundations for concrete footings and slabs at busy city sites.

“We started working with Kane Constructions at the pretender stage for Prahran Square and were awarded the D&C contract in early 2018. We spent two weeks planning our construction programme then onsite work started with the demolition of the existing ground level carpark,” said Managing Director, Nick Maric.

“We then carried out bulk excavation and spoil removal followed by detailed excavation for footings and a slab at ground level, above Level 2 of the underground carpark. We designed and constructed the basement retention system including the placement of waterproofing, shotcrete walls and temporary ground anchors as well as a layer of crushed rock for drainage under the slab. Altogether we poured 172 retention piles and capping beam, installed shotcrete walls, waterproofing, and temporary ground anchors.”

The main challenge occurred when existing structures were uncovered during the first stage of the excavation. LTE had to modify their approach. The ground conditions too, were very difficult due to in-ground water and we set up pumps and to dewater the site. This continued throughout the construction and the pumps were left in position to continuously service the site. LTE Construction has all the skills and equipment to keep sites permanently dewatered, it's a common procedure in Melbourne.

It was also a difficult location, close to busy Chapel Street, with narrow local roads, businesses and shops, including a Coles supermarket, and surrounding apartment buildings. With a large numbers of trucks exiting and entering the site, the company had to implement dust control arrange the safe movement of pedestrians.

“We had 60 employees onsite for nine months and the job went very well with all works delivered according to schedule and completed by November 2018,” said Nick.

With years of experience in the civil industry Nick established LTE in 1998, servicing the Melbourne CBD and metropolitan area as well as outer regions including Ballarat, Shepparton and Bendigo.

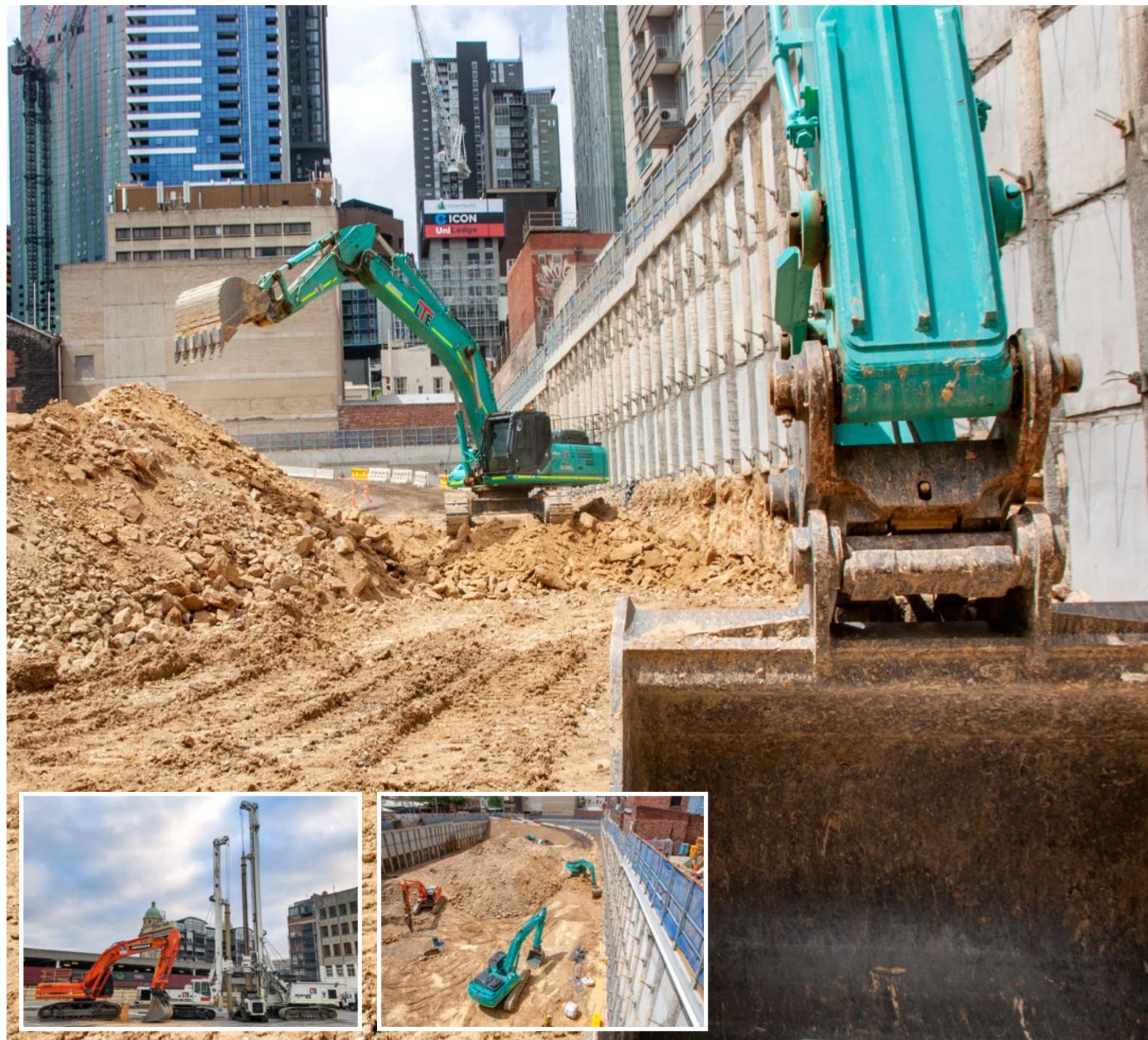
“We have around 96 full time 40 casuals employees, our workforce are loyal and experienced with a number of our operators having more than 25 years industry experience. We offer geotechnical and structural design and consulting as well as soil testing, remediation and removal. We own and operate our own equipment and have recently expanded our fleet and now have seven near new piling rigs ranging from 35T through to 85T, 36 modern excavators and 56 trucks with trailers. We also own and operate our own tip sites offering the most economical and timely service in the market,” said Nick.

LTE is a preferred contractor of Kane Constructions and have completed a number of projects with them, they are one of our bigger clients. “I am personally involved in negotiations with the directors as well as working with them on design and preparing tender documents,” said Nick.

In November 2019, LTE completed a contract for Kane Constructions for the Ballarat GovHub building. The job included the full demolition of a 4-storey building, civil and piling works, retention works, and contracting for the footings and on ground slab. In the same year LTE completed the same scope of works for Kane Constructions at the Shepparton Arts Museum as well as for a carpark at Monash University.

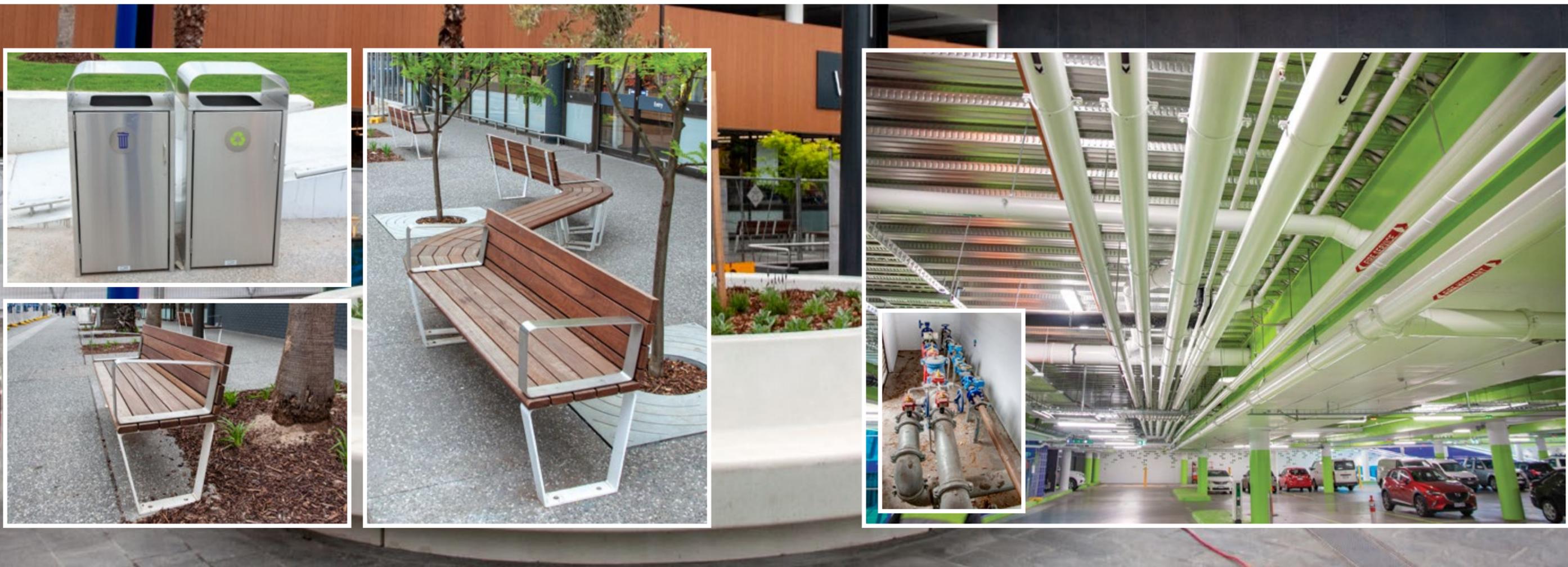
Other successful projects for LTE include civil works at the Queen Victoria Markets redevelopment completed in February 2020 and Westgate Tunnel, with civil works, basement excavation and retention systems, piling and anchoring, set for completion in 2022.

For more information contact LTE Construction Group, 25 Elm Park Drive, Hoppers Crossing VIC 3029, phone 03 9748 3646, email info@lteconstructiongroup.com.au, website www.lteconstructiongroup.com.au



Below Commercial Systems Australia fabricated a large number of items, including seats, tables, tree grates and litter bins for Prahran Square.

Below Harris & Thorn Plumbing & Gasfitting completed the sewer and water mains connection and hot and cold water system installation.



Commercial Systems Australia are experts at the manufacture of quality robust street, public and park furniture, utilities and stylish shade structures.

For Prahran Square, Commercial Systems Australia manufactured custom designed items according to supplied specifications. “We manufactured seats and tables, stools, tree grates and litter bin enclosures” said Director, Russell Wilson. “It was a large scale job with many stakeholders, we had to satisfy state and local government standards, fulfill our contract with Kane and, most importantly, maintain the architect’s and the landscape architect’s vision.”

“Site deliveries were challenging, it’s an older part of Melbourne with narrow roads yet busy with many residents and shops and access was difficult. We were set for our first delivery in February 2019, but during excavation some historic items were found and work stopped for a heritage survey. Finally the first items arrived onsite in April and we completed delivery in late November,” said Russell.

Commercial Systems Australia operates a 3,500m² manufacturing facility employing over 30 people including 20 welders and joiners and two engineers. Their product range includes bike racks, bollards and

tree guards as well as unique shelters. Commercial Systems Australia provide a rebirthing and repair service for older items and use local FSC timbers and materials that they recycle.

“Our greatest challenge is competing with imported products,” said Russell. “We deal with this by working efficiently, continuously investing in new machinery and equipment. We are an Australian owned family company and supply our product all around the country as well as overseas. In March 2019, we manufactured and delivered outdoor seating and litter bin enclosures to a housing estate in Hawaii and park seating to Abu Dhabi and Dubai in 2014.”

Previous work for Kane includes the supply of seats, bollards and bubblers to the Epworth Hospitals in Melbourne and Geelong and to Monash, La Trobe and Deakin Universities, and the new City of Brimbank Library.

For more information contact Commercial Systems Australia, 42a Orchard Street, Kilsyth South VIC 3137, phone 03 9723 4111, email admin@commercialsystems.com.au, website www.comercialsystems.com.au

When quality and reliability matter most, Harris & Thorn Plumbing & Gasfitting has the expertise to deliver. As specialist hydraulics contractors, Harris & Thorn started work on Prahran Square in September 2017 detailing the design drawings.

“There was a lot of coordination required between existing services and the new installation before the design could be finalised and we had to consolidate the information about ground levels and determine where it was safe to cast through the slab to avoid clashes with fire and mechanical pipes and ducts servicing the carpark below,” said Operations Director, Jared Grigor.

Onsite work started in April 2018 installing hot and cold water supply as well as five separate gas supply lines to the tenancies. “We also set up a stormwater collection system and the piping. We connected the site to the sewer and water mains, liaising with South East Water and completing all the necessary paperwork including an Environmental Sustainable Design (ESD) report. With six plumbers onsite we were able to complete the job by the end of October 2019,” said Jared.

Established in 2003, Harris & Thorn offer a comprehensive service that includes design drawings through to efficient plumbing

installations with top quality products. Across Melbourne Ballarat and Geelong, the company provides hydraulic, gas and fire services to apartment buildings, shopping centres, schools, aged care facilities and hospitals as well as high end architecturally designed residences and government buildings.

Previous work for Kane Constructions include the large scale project being Stage 1 of a fire main upgrade at the carpark and amenities at Deakin University finished in September 2017. In 2018, Harris & Thorn Plumbing & Gasfitting completed civil work, hydraulics and plumbing, including water management systems, for Parkville Youth Detention Centre.

Currently Harris & Thorn are at work on Stage 2C of Bio21, an advanced microscopy facility at Melbourne University with expected completion being mid 2020.

For more information contact Harris & Thorn Plumbing & Gasfitting, 1/233 Arden Street, North Melbourne VIC 3051, phone 03 9328 8448, email estimating@harrisandthorn.com.au, website www.harrisandthorn.com.au