

Building Infrastructures for the Future

TRA .







前廿

4

Ŀ

1

İ

About STEC	04
Milestones	06
Major Projects	08
Quality Management	16
Safety Management	18
Social Responsibility	20
International Markets	21

About **STEC**

Established in 1996, Shanghai Tunnel Engineering Co (Singapore) Pte Ltd ("STEC") is a leading civil engineering and construction firm. In over two decades, we have grown from a specialist tunnel subcontractor to one of the top main contractors in Singapore.

Our clients have trusted us to build many large-scale infrastructures in Singapore. To date, we have successfully undertaken and completed projects for Land Transport Authority (LTA), Public Utilities Board (PUB), and Marina Bay Sands (MBS).

Our involvement in all the major MRT lines, from North East Line and Downtown Line to Thomson East Coast Line and Cross Island Line, is a testament to our client's confidence in our technical capabilities and experience in handling projects with high complexity.





bored tunnels completed 109 safety and quality awards



Leading the Industry Setting New Standards **Growing with our Clients**

Milestones

With the trust of our clients and the support from our people and partners, we have reached significant milestones in our journey of becoming a leading infrastructure firm.



1996 Established in Singapore



1998 Awarded LTA Subcontracts North-East Line C703, C704, C708 and C810



2000 First Project as a Design & Build Main Contractor in Singapore PUB Deep Tunnel Sewerage System (DTSS) T-01



2001

First LTA Project as a Main Contractor in Singapore Circle Line Stage 1 C825



2002 - 2004

Awarded 1 LTA Subcontract and 2 LTA Joint Venture Main Contracts

» Circle Line Stage 2 C822» Circle Line Stage 3 C852» Circle Line Stage 4 & 5 C855



2008 First Projects as an Independent Main Contractor

» Marina Bay Sands Integrated Resort
P8402 Bayfront Infrastructure Project
» Downtown Line Stage 1 C902



2009 - 2011

Awarded 4 LTA Main Contracts First Viaduct Project in Singapore

» Downtown Line Stage 2 C920
» Downtown Line Stage 3 C923A
» North-East Line C713
» Tuas West Extension C1688



2013 - 2017

Awarded 1 PUB Contract and 4 LTA Main Contracts » Thomson-East Coast Line

T206, T225, T305 and T310 » PUB DTSS T-11



2018 - 2021

Awarded 1 PUB Contract and 4 LTA Main Contracts

» North South Corridor N109A
» Jurong Region Line J102
» Underground Infrastucture T316
» PUB TWRPPL Contract 1
» Cross Island Line CR102

We build a better future through infrastructures that **broaden spaces**, **reduce distances** and **connect people**.



Major Projects

From underground spaces and viaducts to metro stations and sewerage tunnels, STEC is experienced in building a wide range of civil infrastructures.

We continuously build upon our existing methods, enabling us to achieve everimproving productivity and safety. Our track record of successful completion of projects demonstrates our technical expertise, advanced technology, and enduring commitment to delivering safe and innovative construction solutions.





DTSS T-01 **Deep Tunnel Sewerage System Phase 1**

Client: **Public Utilities Board** Tunnel: 5.8 km long with 6 m l.D. Contract Value: S\$80.6 million Contract Period: Jan 2000 - Jun 2005

- STEC's first design and build project.
- Joint venture with Woh Hup.
- New Austrian tunneling method and tunnel boring method.



CCL1C825

Promenade, Esplanade, Bras Basah and Dhoby Ghaut **Stations and Tunnels**

Client: Tunnel: Contract Value: S\$343.9 million

Land Transport Authority 3.2 km long with 5.8 m l.D.

Contract Period: Aug 2001 - Jan 2006

- Featured 3.2 km TBM tunnels, 0.6 km C&C tunnel and 110 m overrun tunnel using SCL method for Circle Line 1.
- Two mixed-face Earth Pressure Balance (EPB) machines.
 - BCA Construction Excellence Award 2010



CCL3 C852

Serangoon Interchange Station and Tunnels

Client: Land Transport Authority Tunnel: 3.8 km long with 5.8 m l.D. Contract Value: S\$155.9 million Contract Period: Aug 2003 - Dec 2007

- A build only project with Woh Hup and Alpine Mayreder.
- Construction of underground station for Circle Line 3.
- Two EPB machines.



CCL4 C855

Holland Village, Buona Vista, One-North and Kent Ridge Stations and Tunnels

Client:Land Transport AuthorityTunnel:8.25 km long with 5.8 m l.D.Contract Value:\$\$399.9 millionContract Period:Aug 2004 - Feb 2009

- Construction of four underground stations for Circle Line 4
- Two EPB machines and two slurry machines.

BCA Construction Excellence Award 2013



P8402

Marina Bay Sands Integrated Resort Development

Client:	Marina Bay Sands Pte Ltd
Contract Value:	S\$167.9 million
Contract Period:	Apr 2008 – Nov 2011

A build only project

 Construction of basement retail concourse, car park and two-directional, two-line MRT section tunnels underneath.



DTL1 C902 Promenade Stations and Tunnels

Client:	Land Transport Authority
Tunnel:	1.12 km long with 5.8 m l.D.
Contract Value:	S\$230.9 million
Contract Period:	Aug 2008 - Sep 2013

- A design and build project comprising the extension of existing Promenade station and construction of tunnels.
- One EPB machine.



DTL2 C920

Newton Stations and Tunnels

Client:	Land Transport Authority
Tunnel:	5.32 km long with 5.8 m l.D.
Contract Value:	S\$355.7 million
Contract Period:	Aug 2009 - Jul 2015

- A design and build project involving an underground station and four tunnels.
- Pipe Jacking method for a cable tunnel.
- Four EPB machines.

BCA Construction Excellence Award 2017



C713 North East Line Extension

Client:	Land Transport Authority
Contract Value:	S\$8.16 million
Contract Period:	Oct 2011 - Dec 2014

- A build only project for a 48m C&C tunnel and a two-tier box tunnel linked to an existing parking tunnel.
- Scope of works include traffic turn pouring, temporary retaining structures, soil excavation and support, tunnels and the main structure.



C923A

Downtown Line Stage 3 Tunnels

Client: Tunnel: Contract Value: S\$91.1 million

Land Transport Authority 4.76 km long with 5.8 m l.D.

- Contract Period: Aug 2011 Dec 2016
- Construction of tunnels between Tampines East Station and Upper Changi Station, TBM launching shaft, eight cross passages
- Two EPB machines.



C1688 Tuas West Extension

Client:Land Transport AuthorityViaduct:3.65 km longContract Value:\$\$190.5 millionContract Period:Nov 2011 - Jul 2016

- STEC's first viaduct project in Singapore.
- One elevated 3-storey interchange Gul Circle station and 3.05 km elevated MRT viaduct.
- A further 600 m of elevated viaduct for the Tuas South Extension.
 - BCA Construction Excellence Award 2018



T2O6 Thomson Line Tunnels

Client:	
Funnel:	

Land Transport Authority 6.15 km long with 5.8 m l.D.

Contract Value: S\$421.5 million

Contract Period: Jul 2013 - Sep 2019

- Tunnels between Woodlands Station & Woodlands South Station and between Woodlands South Station and Sembawang Airbase.
- Three EPB machines and two slurry TBMs

Land Transport Best Managed Project Award 2022



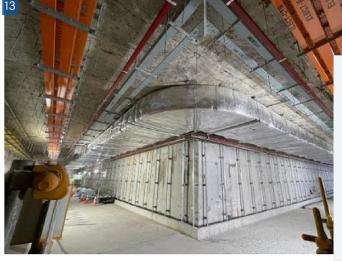
TEL T225

Shenton Way Station and Tunnels

Client:	Land Transport Authority
Tunnel:	2.28 km long with 5.8 m l.D.
Contract Value:	S\$368.1 million
Contract Period:	May 2014 - Dec 202

- 5-storey underground Shenton Way Station with three entrances, tunnels and links to adjacent buildings.
- Two EPB machines.

LTA Construction Challenge Shield Award 2017 & 2018



TEL T305

Katong Park Station and Tunnels

and Transport Authority
6 km long with 5.8 m l.D.
\$293.4 million
an 2016 - Sep 2023

- Construction of underground Katong Park Station with two entrances, bored tunnels and two cross passages.
- Two EPB machines.

LTA ASAC Best Innovation Award 2019



TEL T310 Bayshore Station and Tunnels

Client:	Land Transport Authority
Tunnel:	3.6 km long with 5.8 m l.D.
Contract Value:	S\$295.8 million
Contract Period:	Jan 2016 - Sep 2023

- Construction of underground Bayshore Station with five entrances, bored tunnels, one escape shaft and one cross passage
- Three EPB machines.



Funan UPL

Underground Pedestrian Linkway

Client:	Woh Hup - Obayashi Joint Venture
Tunnel:	108 m long
Contract Value:	S\$21.2 million
Contract Period:	Aug 2017 - Aug 2021

- Tunnel connecting Funan Mall with City Hall MRT station and surrounding shopping centers.
- STEC's first commercial UPL project with Rectangular Pipe Jacking Methodology (RPJM).
- RPJM improves productivity while minimizing disruption and environmental impact.



DTSS T-11

Deep Tunnel Sewerage System Phase 2

Client: Tunnel:	Public Utilities Board 4.6 km long with 3.3 m I.D. and 6.8 km long with 3 m I.D
Contract Value:	S\$472.1 million
Contract Period:	Nov 2017 – Nov 2024

- Design and build project consisting of 6 km-long South Main Sewerage Tunnel, a 5.5km long South Linkway Sewerage Tunnel, and 15 working shafts.
- Five slurry TBMs



N109A North-South Corridor

Client:	Land Transport Authority
Tunnel:	800 m long
Contract Value:	S\$615.9 million
Contract Period:	Jan 2019 - Oct 2028

- Road tunnel between Sin Ming Avenue and Ang Mo Kio Avenue 3 featuring a pair of three-lane roads
- Integrated with Teck Ghee Station on Cross Island Line.
- Construction of an an underground structure that lays the foundation for a future station and commuter facilities.



J102

Choa Chu Kang, Choa Chu Kang West, Tengah Station and Viaducts

Client:	Land Transport Authority
Viaduct:	4.3 km long
Contract Value:	S\$465.1 million
Contract Period:	Sep 2019 - Mar 2026

- Design and construction of three stations with a viaduct for Jurong Region Line
- Addition and alteration works to the existing Choa Chu Kang station on North-South Line, to integrate it with the new JRL station.



T316

Underground Infrastructure at Changi Airport

Client:	Land Transport Authority
Tunnel:	3.97 km long with 5.8 m l.D.
Contract Value:	S\$351.7 million
Contract Period:	Oct 2019 - Mar 2031

 Twin bored tunnels from Changi Airport Terminal 5 development to Changi Airport (CGA) Station Terminal 2 North Finger Pier.

CAG Zero Safety Infringement 2021



TWRPPL C1

Tuas Water Reclamation Plant Contract 1

Client:	Land Transport Authority
Tunnel:	1.6km long with 6m l.D.
Contract Value:	S\$116 million
Contract Period:	Jul 2021 - Sep 2024

- Construction of tunnel from the proposed Tuas Water Reclamation Plant (TWRP) / Tuas NEWater Factory to existing network in Jurong Island and launching and receiving shafts.
- Installation of twin 2200mm and 1200mm diameter pipelines and appurtenances within the tunnel, pipelaying by cut and cover method, and construction of associated chambers.
- One slurry TBM.



CR102

Cross Island Line Phase 1 Tunnels

Client:	Land Transport Authority
Tunnel:	6 km long with 5.8m l.D.
Contract Value:	S\$780 million
Contract Period:	Dec 2021 - Dec 2029

- Tunnels connecting Aviation Park station to Changi East Depot for Cross Island Line
- The project includes 5 bored tunnels, 7 connecting passages as well as 2 sections of open-cut tunnels and a supporting building.
- Four EPB machines.

Quality Management

Quality is an integral part of STEC's business principles. Our Integrated Quality Management approach enables us to provide services and products that meet the needs and exceed the expectations of our clients.



Our goal is to never compromise on the quality and compliance of our products and services. Accomplishing this goal requires each individual at STEC to recognize their responsibility to safeguard our quality standards.

Simultaneously, we support every stakeholder to understand that they are empowered to protect our clients and brand.

We have adopted an Integrated Quality Management approach involving the client, sub-contractors, and suppliers, coupled with a stringent in-house Quality Assessment System that has led to greater efficiency during construction.

QUALITY MANAGEMENT CERTIFICATIONS

Our company is registered with the SGS International Certification Services Singapore in Mechanical and Electrical works, Civil Engineering, Underground Construction, General Building Works, and Tendering. In 2018, STEC was awarded the ISO 9001-2015 by SGS International Certification Services Singapore.



Our construction teams understand our guidelines and systematically apply the procedures in their work to ensure consistency and a high standard of engineering and craftsmanship.

Evident in our systems and policies, quality is an integral part of STEC's business principles – guiding our steps to deliver excellence to our clients. It is the core of our pursuit of being trusted as a leading construction company.

QUALITY AWARDS

STEC has received numerous quality awards from government agencies such as Building Construction Authority and Land Transport Authority. These awards exemplify our work ethic and highly developed systems.



2022	LTA Excellence Award Best Managed Rail/Road Infrastructure Project Partner - T2O6
2021	BCA Construction Excellence Merit Award - T206
2019	LTA Excellence Award Best Managed Rail/Road Infrastructure Project Partner - C1688 BCA Green and Gracious Star Champion Award - Corporate TUCSS Project of the Year Merit Award - T225



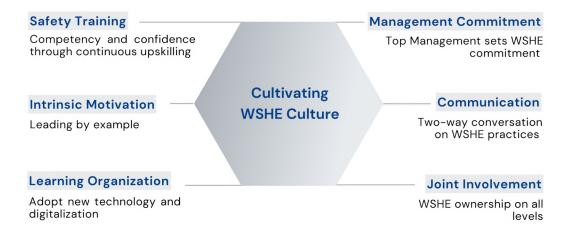


WSHE Management

At STEC, we prioritize the safety and health of our people and the sustainability of our environment. We optimize our Workplace Safety, Health, and Environment (WSHE) management strategy and strengthen our WSHE culture and collaboration to realize a safer workplace and a healthier workforce.

TOTAL WORKPLACE SAFETY, HEALTH, AND ENVIRONMENT

In a safe and healthy workplace, staff of all levels collaborate and work towards protecting and promoting the health, safety, and well-being of all workers and the sustainability of the business. Integrating programs that control risks in the workplace together with health campaigns results in higher productivity, reduction in sickness absence, higher employee retention, increase in financial performance, and better quality of life.



WSHE MANAGEMENT SYSTEM

We employ experienced Safety Officers in all projects, led by a Corporate Safety Manager who directly reports to the Managing Director. These safety professionals are part of a core team responsible for the implementation of our Safety, Health, and Environmental Management System.



VISUALIZATION TECHNOLOGY IN WSHE TRAINING

We have established WSHE training facilities on our project sites. At these training centers, staff can access Virtual Reality (VR) technology that provides realistic simulations of different sitespecific hazards. Through VR training on relevant workplace scenarios such as work-at-height and electrical and lifting works, site personnel can attain better situational awareness and gain the skills necessary to prevent accidents and injuries.

PROMOTING WSHE AWARENESS

To attain an accident-free workplace, promoting WSH awareness and communicating our WSH goals is of paramount importance. Our Managing Director and WSHE Committee conduct monthly inspections for all projects. On top of that, we hold an annual corporate WSHE campaign to recognize individual safety efforts and performance. We also launch a WSHE handbook - a comprehensive guide on WSHE best practices. We fully support and strive towards **MOM's 'VISION ZERO'** and **LTA's 'ZERO ACCIDENT MOVEMENT'** through the resolve of our top management and the active participation of supervisory staff and workers.



WSHE AWARDS

Our efforts have been commended and recognized by authorities with workplace safety, health, and environment awards. We remain committed to our high standards of WSHE and continue to step up our initiatives and performance as a WSHE role model in the construction industry.

2022	WSH Performance (Silver) Award - Corporate WSH Performance (SHARP) Awards - T225, T305, T310, T316, J102, N109A, T11 LTA ASAC Construction Workplace Health Award - T305 LTA ASAC Safety Merit Award - T316 CAG Zero Safety Infringement - T316
2021	WSH Performance (Silver) Award - Corporate WSH Performance (SHARP) Awards - T225, T305, T310, T316, J102, N109A, T11
2020	WSH Performance (Silver) Award - Corporate WSH Performance (SHARP) Awards - T225, T305, N109A, T11 LTA Annual Safety Award Convention (ASAC) Safety Merit Award - T305





Social Responsibility

STEC is committed to making a positive difference in the local community. Through our Corporate Social Responsibility (CSR) programs, we aim to benefit the places where we live and work by sharing knowledge, serving the community, and protecting the environment. We believe in empowering our people to make a meaningful contribution to society and together create a better, more sustainable future.

COMMUNITY

We understand the importance of building healthy and thriving communities. Throughout the years, we have worked towards this goal through partnerships with non-profit organizations. We participated in activities such as befriending seniors, organizing an event for children with chronic illnesses, delivering meals, renovating the homes of elderlies, and donating to charities and their beneficiaries.



EDUCATION

Our educational initiatives are a part of a corporate commitment to developing the next generation and equipping the youth with relevant skills for their future. We support organizations with programs that enhance understanding of science, arts, literature and more.



ENVIRONMENT

Our sponsorships and volunteering efforts support conservation and rehabilitation of green spaces. In the spirit of innovation, STEC also partners with organizations that leverage new technologies to improve the way we care for the environment.



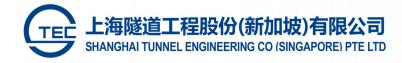


International Markets



We provide **solutions** to urban construction for more **convenient and modern cities** both at home and abroad.





www.STEC.com.sg



Scan to visit our website

SINGAPORE

30 Cecil Street #11-08 Prudential Tower Singapore 049712 Tel: (65) 6392 0060 Fax : (65) 6299 3033

SHANGHAI

No. 1099 South Wan Ping Road Xuhui District, Shanghai 200323 Tel: (86-21) 5359 9950 Fax: (86-21) 5359 9591