

SIVA JAYANTHAN

Nationality	Sri Lankan
Year of Birth	1980
Profession	Civil Engineer
Specialisation	Civil and Structural
Position	Chartered Design Engineer



KEY QUALIFICATIONS

Acquired 12 years of design and management experience as chartered design engineer and coordinator for number of major buildings and underground infrastructure projects in **Singapore and Australia**. Worked as site engineer/project engineer and gained in depth experience in the supervision of construction. Liaise with consultants, relevant authorities, and main contractor to ensure the design can satisfy all local codes and regulations. Proficient with design software like STAAD.pro, Robot, SAM, Orion, Rapt, TEDDS and Revit. Worked as a risk/safety facilitator for major structures during design and construction phase and established safe work procedure and propose contingency measures.

EDUCATION AND PROFESSIONAL STATUS

BSc Eng (Hons) Civil Engineering, University of Moratuwa, Sri Lanka

Masters of Science in Civil Engineering (Structural), National University of Singapore, Singapore.

Chartered Engineer –(MICE)-UK

Member of Institution of Engineers Sri Lanka(MIE-SL)

Member of Institute of Engineers – Singapore

EXPERIENCE RECORD

2017 – Present AECOM SINGAPORE PTE LTD

2007 – 2017 MOTT MACDONALD SINGAPORE PTE LTD
(Member firm of Mott MacDonald Group)

2007 – 2017 Senior Design Engineer

Land Transport Authority (LTA) TEL - Thomson East Cost Line - Currently working as a lead structural engineer for 5 station under package E1003. The project involves the detailed design of entire station which is included temporary and permanent structures. This project totally adopted BIM technologies for design and submission works.

North West Rail link (NWRL)-Sydney

Worked as a design team lead for Showground station for contract NRWL Australia. The project involves the detailed design for entire station which is mainly includes precast structures. The principle of the design and construction of underground stations made extensively from precast elements including retaining perimeter walls, beams, slabs, platforms, and tunnel ventilation plenums. Few challenges facing designers related to connection details, construction stages, lateral stability, diaphragm action of composite floors, limiting the weight of the precast elements for craning and transport considerations, waterproofing and drainage, achieving durability and creation of analytical models and integration into a full BIM environment are presented.

Design Coordinator for Eastern Region Line Contract E1003 - Working as a design coordinator with DP Architects for architectural and engineering (A/E) design consultancy for Package E1003- Eastern Regional Line. The project involves the design and planning of the track alignments and stations including associated facilities such as ventilation shafts, tunnel boring machine (TBM) launching/retrieval shafts, tunnel cross passages, escape staircases to ground, a cross over box, a triple siding, construction staging areas and a dedicated underground 66kV intake substation.

TSE UK TSUEN in Contract 822 – HK – Worked as a lead design checker for this design check was carried out of type P OHVD slab together with lower dividing wall at in the design package of Tunnel Internal Structures of TSE UK TSUEN in Contract 822.

WestConnex Stage 2 New M5, Sydney, NSW, Australia, McConnell Dowell-Ghella-Ferrovial (Agroman) Joint Venture - Tender design engineer for the design joint venture team, covering structural design disciplines of this multibillion dollar, design-and-construct and maintain, motorway project.

Stage 2 of WestConnex – New M5 is a motorway tunnel project, comprising approximately 9 km twin two-lane and four-lane mainline tunnels, with two underground interchanges consisting of merge/diverge caverns and associated on/off tunnel ramps to the surface. The project also includes cut-and-cover structures and complex connections to the existing M5 East motorway and local road network. Mott MacDonald in joint venture with GHD delivered the tender design for McConnell Dowell-Ghella-Ferrovial. The tender design was completed on time and to budget; the details of which are confidential as tender procurement process is on-going.

C913 LTA –MRT Downtown Line 2, GS Construction - Detail structural engineer for half a billion Singapore dollar underground MRT station under LTA. Design Cashew and Hillview stations (both civil design stations), Bukit Timah canal and six lane viaduct above the new station. Working together for this successful design and build tender/detail design and involved in analysis, design calculations, drawings and reports for tunnels for Contract 913. C913 was a successful design and build comprising two open cut stations and TBM bored tunnels along Upper Bukit Timah Road. This project also involves a viaduct for three-lane dual carriageway and 2.1 km long road widening option.

Tuas View Container Port – Mott MacDonald, as part of joint-venture with local partners, has been appointed by Maritime and Port Authority of Singapore to carry out the detailed design of over 8km of quay deck and 300ha of reclamation for a new container port in western part of Singapore. The project involves the development of a major new shipping facility which will cater for anticipated developments in the container shipping industry, including vessel trends, for the next twenty years. MM is part of a team investigating an optimal solution for the quay structure to minimise costs and maximise future benefits while considering resource and adjacent development constraints.

Work as structural engineer for Wharf Finger 2 design, supplemented by specialist input from its Maritime Divisions in UK and Asia Pacific.

Ministry of Education (MOE) PERI 3B - Design team leader and supervising of indoor sports hall (ISH) and 6 storey annex building under MOE school development project PERI 3B. Involved structural scheming of ISH, design, tender drawings preparation, calling tender, appointing successfully contractor and management as well as authority submission. (details are attached separately with this CV)

Jakarta MRT Line – Structural design engineer for the tender design of underground sections of the Jakarta MRT line contract packages CP104 and 105. The new Jakarta MRT Line Phase 1 consists of 12 stations starting from Lebak Bulus Depot via CP102 (Fatmawati and Cipete Raya), CP103 (Haji Nawi, Blok A, Blok M and Sisingamangaraja), CP104 (Senayan and Istora and Transition zone), CP105 (Bendungan Hilir and Setiabudi) and CP106 (Dukuh Atas and ending at Bunderan Hi Station). Jakarta MRT Line spans a total route length of about 13.7km including connections to Lebak Bulus Depot.

LTA C921 Downtown Line 2, Ssanyong Construction - Structural design engineer for this successful design and build tender. Involved in analysis, design calculations, drawings, and tender reports for Contract 921. The project includes the construction of two underground MRT stations; Rochor and Little India stations, bored tunnel between Bugis and Rochor stations, cut and cover tunnel between Rochor and Little India stations, mined (NATM) tunnel under existing North-East Line tunnel, sewer diversion and relocation of an existing pumping station. The site is located at one of the busiest part of Singapore with very limited space available for construction activities. This in turn requires very complex construction sequence involving several stages of canal diversions and traffic diversions

C918 (Tender) LTA Downtown Line 2 - Design engineer (tender) of Duchess Station (civil defence shelter). The design of permanent retention system for Duchess Station, launch shaft and cut and cover tunnels.

Downtown Line LTA Contract 908 - Structural design engineer for the cut and cover tunnel and Cross Street station (Telok Ayer). This contract includes the DTL Cross Street Station and cut and cover tunnels under Cross Street to the Raffles Quay. The station and tunnels are to be constructed by top-down construction method. The contract includes the design of the earth retaining system associated with the construction.

Marina Coastal Expressway Tender design of Contract 482, C483, C486 and C487 - Design engineer for civil and structural design of Marina Coastal Expressway tender design, including dual five-lane underground vehicular tunnel and ventilation building. Tender process included extensive value engineering exercises. Out of four tenders three of them were successful design and build tender.

SPPG North South Cable Tunnels – Engaged as design engineer for shaft structures for the advance engineering works for the north south cable tunnel. The north-south transmission cable tunnel is approximately 18.5km long, from Gambas to May Road. The cable tunnel is to lay maximum 12 circuits of high voltage cables. Involvement was primarily design in providing layouts of seven numbers of shafts and six numbers of equipment and ventilation buildings. Contributed in contract specifications including design criteria and material and workmanship specifications preparations for the shaft and buildings and involved in the tender evaluation process.

LTA North South Line Extension NSLe C156 (NSLe Station and Tunnels) Tender Stage - Structural design engineer for this successful design and build tender and involved in analysis, design calculations, drawings and tender reports for Contract 156. The project includes the construction of an underground MRT stations at Marina barrage and cut and cover tunnel.

Design Engineer Singapore Power Power Assets, addition, and alteration works to 66kV substations at Aida Street - Design engineer for building and civil works required for the above

existing substation and 7 storey new building to be built on existing building site. Designed for foundations, structural frames for the substations and includes coordination with sub contractors and authorities. Also appointed as co-ordinator of the project team to liaise with local authorities on development controls and planning permissions. Details are attached separately in this CV.

Engineering Assessment for Prima Jetty, Trincomallee, Sri Lanka.

Design engineer for structural assessment report is to assess the existing jetty for the suitability of installing an additional ship unloader with discharge capacity of 800tons/hr (mechanical unloaders) to the existing ship unloaders each of capacity 300tons/hr (Pneumatic unloaders) for wheat discharge operation. In addition involved Foundation design for conveyor belt from wheat silo to jetty.

2005 – 2007 **L&M FOUNDATION PTE LTD**
Site/Project Engineer

C825-Museum Station - Bored piling, debonding piling works, tam and chemical grouting.

Seating Gallery at Marina Bay - Bored piling, static load and dynamic load test, design the pile length according the soil investigation, prepare the method statements for piling and testing, supervise the work place safety and health and arrange the materials and plan the work schedule.

Condominium Development at Jalan Bunga Rambai - Bored piling, static load and dynamic load test, design the pile length according the soil investigation, prepare the method statements for piling and testing, supervise the work place safety and health, arrange the materials and planning the work schedule and instrumentation (noise and vibration monitoring).

Housing Development Board, Clementi Avenue 3 Redevelopment - Clementi N4C9 - Diaphragm wall, barrette pile, design the pile length according the soil investigation, prepare the method statements DW construction and repairing, load testing, prepare the shop drawing and arrange for fabrication, supervise the work place safety and health and arranging the materials and plan the work schedule.

2004 – 2005 **QUANTUM ENGINEERING PTE LTD (Sri-Lanka)**
Site/Detailing Engineer

Structural detailing of high rise residential buildings and cost estimation and survey for residential and industrial building projects.

PERSONAL INFORMATION

Tamil : Mother tongue
English : Spoken – good; written – good; reading – good
Contract Address: 24/3C,1/1 Frankfort Place Colombo 4
Contract Email: ks_jayanthanmrt@yahoo.com
Contract Number: +6591885057/+94112597873