

P4246 / P4246S Job Reference (Local)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
01.	PCS Phase 3 - Jurong Island	2007	Petrochemical Corporation Singapore	Jurong Consultants Pte Ltd	HSL Constructors Pte Ltd		
02.	Singapore Hydro Carbon Fluid Expansion Project - Juong Island	2007	Exxonmobil		Toh Teck Seng Engineering & Construction Pte Ltd		
03.	Marina Sand IR Project	2007	LAS Vegas Sand Corporation	Arup Singapore Pte Ltd	Island Concrete Pte Ltd		
04.	Changi Reclamation Project, C4C Digesters	2003 - on-going	PUB	CPG / CH2M	SembCorp	Durability	Foundation / Substructure
05.	Changi Reclamation Project, C3B Liquids Module	2003 - on-going	PUB	CPG / CH2M	SembCorp	Durability	Foundation / Substructure
06.	Changi Reclamation Project, C3A Liquids Module	2003 - on-going	PUB	CPG / CH2M	Koh Brothers	Durability	Foundation / Substructure
07.	Changi Outfall Structure Precast pipes	2003 - 2004	PUB	Montgomery Watson	Boskalis International	Durability	Sewage Precast Pipes (submerged)
08.	Paya Lebar / Kallang Expressway Contract 421 (Tunnel ECP to Nicoll Highway)	2003 - on-going	LTA	LTA	SembCorp-Daewoo	Low Heat	Structure >500mm thick
09.	Paya Lebar / Kallang Expressway Contract 422 (Nicoll Highway to PIE)	2003 -2004	LTA	LTA	SembCorp	Low Heat	Structure >500mm thick

P4246 / P4246S Job Reference (Local)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
10.	Fairfield Secondary School	2003	PWD	Camp Dresser Mckay	ABV Systems	Durability	Bored Micopile
11.	Biomedical Research & Development at North Buona Vista Drive	2002	JTC	JTC	Samsung Corporation (Engineering & Construction Group)		
12.	NTUC Building Development	2002	NTUC	NTUC	Samsung - Tiong Seng JV		
13.	Harbour Front	2001	Keppel	PSA	Samsung Corporation		
14.	Cycle Power Plant CCPP Project	2000	Pulau Seraya	PSB	Samsung Corporation		
15.	VLCC Fixed Berth Jetties (Jurong Island)	2000 - 20001	JTC	OGI	Penta-Ocean McConnell Dowell/ Interbeton JV (Sub-Contractor)	Resistance to Chemical	Marine Jetty / Berth
16.	Singapore Indoor Stadium	2000 - 2001	Sports Council	RSP	Koon Construction L&M Foundation (Sub-Contractor)	Resistance to Chemical	Contiguous Bored Pile for Foreshore Protection
17.	Changi Naval Base	2000 - 2001	Mindef	SPECS	Sembawang Corporation	Resistance to Chemical	Substructure Works
18.	Singapore Chinese Chamber of Commerce	2000 - 2001	Chinese Chamber of Commerce	Maunsell	Samsung Corporation	Low Heat	Substructure Works
19.	Pulau Seraya Power Station Combined Cycle Power Plant Development	2000 - 2001	Singapore Power	PB Merz And McLellan	Samsung Corporation	Resistance to Chemical	Substructure Works

P4246 / P4246S Job Reference (Local)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
20.	Ayer Rajah Expressway / Tuas Power Grid	2000 - 2001	Power Grid	Power Grid	Techfield Engineering	Low Heat Low Thermal Resistivity (<0.8km / watt)	Cable Protection
21.	Shell Seraya Phase 2	2000 - 2001	Shell Petroleum	ABB Lummus Global / JGC	Gammon (HK)	Resistance to Chemical	Substructures
22*	Singapore Gas Project	2000	Singapore Gas	JGC	ABV Systems	Resistance to Chemical	Bored Micropiles Substructure
23.	Changi Naval Base Phase 2 & 3	1999 - 2001	MINDEF	Specs	Sum Cheong Piling / Zhen Hua Singapore (Sub-Contractor)	Resistance to Chemical	Marine Jetty / Wharves
24.	Civil Defence Headquarter Ubi Avenue 4	2000	Civil Defence	PWD	Koh Brothers	Low Heat & Resistance to Chemical	Substructure - Raft Foundation
25.	South View Primary School	2000	Ministry of Education	Meinhardt (S)	L&M Geotechnic	Low Heat & Resistance to Chemical	Bored Micropiles
26.	South View Primary School	1999 - 2000	Ministry of Education	Meinhardt (S)	PSL Engineering	Low Heat & Resistance to Chemical	Bored Micropiles
27*	Exxon Project at Pulau Ayer Merbau	1999 - 2000	Exxon	OGI	PSL Engineering	Low Heat & Resistance to Chemical	Bored Micropiles
28.	Thomson Medical Centre	1999 - 2000	Thomson Medical Centre	SCE Consultant	Son Beng Tee Construction	Low Heat	Thick Raft Foundation

P4246 / P4246S Job Reference (Local)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
29.	MRT 504 Changi Station	1999 - 2000	LTA	LTA	Kumagai / Sembawang Corporation Construction / Mitsui JV	Low Heat & Resistance to Chemical	Underground Station
30.	LRT 810 Sengkang East	1999 - 2001	LTA	LTA	Sembawang Corporation Construction / Mitsubishi	Low Heat & Resistance to Chemical	Substructure / Bored Piling
31.	MRT 712 Punggol	1998 - 2000	LTA	LTA	Sato Kogyo / Hock Lian Seng	Low Heat & Resistance to Chemical	Substructure
32.	MRT 711 World Trade Centre	1998 - 2000	LTA	LTA	Hyundai Engineering & Construction	Low Heat & Resistance to Chemical	Underground Station
33.	MRT 706 Kandang Kerbau Farrer Park	1998 - 2000	LTA	LTA	Hyundai Engineering & Construction	Low Heat & Resistance to Chemical	Underground Station
34.	MRT 705 Boon Keng Sennett	1997 - 2000	LTA	LTA	Kumagai / Sembawang Corporation Construction / Mitsui JV	Low Heat & Resistance to Chemical	Underground Station
35.	MRT 702 Sengkang Buangkok	1997 - 2000	LTA	LTA	Sato Kogyo	Low Heat & Resistance to Chemical	Underground Station
36.	MRT 701 Sengkang Depot	1998 - 2000	LTA	LTA	Hyundai Engineering & Construction	Low Heat & Resistance to Chemical	Underground Station

P4246 / P4246S Job Reference (Local)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
37.	Mindef Changi Naval Base Phase 1A/B	1998 -2000	MINDEF	ST Architects & Engineers / Specs Consultant	Bored Piling / Sum Cheong Piling / Zhen Hua Engineering	Low Heat & Resistance to Chemical	Wharves Structure, Precast Beams and Decks
38.	SATS Airfreight Terminal	1998 - 1999	CAAS	CAAS	Sembawang Resources	Low Heat	Substructure
39.	Jurong Town Corporation Headquarter	1998	Jurong Town Corporation	JTC	Kajima Corporation	Low Heat	Raft Foundation
40.	Pulau Semakau Jetty	1998	Ministry of Environment	Specs Consultant	Antara Kah / G&C General Contractors	Resistance to Chemical	Pier / Dolphins
41.	New Airport Police Station at Singapore Airport	1998	PWD	PWD	United Engineers	Low Heat	Pile Cap
42.	Esplanade Mall	1997 - 1998	Hong Kong Lane	Meinhardt	Gammon	Low Heat	Raft Foundation
43.	Ulu Pandan Sewerage Treatment Plant	1997 - 1998	Ministry of Environment	Camp Dresser & Mckee International	Sembawang Construction	Low Heat & Resistance to Chemical	Tank Slab & Wall
44.	Trellis Tower	1997 - 1998	CDL	T.Y. Lin South East Asia	Shimizu Corporation	Low Heat	Raft Foundation
45.	POSB HQ	1997 - 1998	POSB	Maunsell Consultants	SsangYong Engineering & Construction	Low Heat	Caisson Piles & Pile Raft
46.	Bedok Sewerage Treatment Plant	1997 - 1998	Ministry of Environment	Montgomery	LKN Construction	Low Heat & Resistance to Chemical	Tank Slab & Wall

P4246 / P4246S Job Reference (Local)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
47.	China Square	1997	AIA	Meinhardt	Nishimatsu Construction / Lum Chang Building	Low Heat	Raft Foundation
48.	PSA Pasir Panjang Terminal Phase 1B	1996 - 1999	PSA	PSA	Koh Brothers Group	Low Heat	Columns & Rigid Pavement
49.	Aircraft Tunnel & Ramp at Changi Airport	1996 - 1998	CAAS	CAAS	Resources Development Corporation	Low Heat	Pile Cap & Taxiway
50.	Tuas Underseas Cable Tunnel	1996 - 1998	Power Grid	Development Resources	Obayashi Corporation	Low Heat & Resistance to Chemical	Immersed Tunnel Structure-on ocean floor / underland
51*	Seletar Sewerage Treatment Plant	1996 - 1998	Ministry of Environment	Kinhill Tan	Hyundai Engineering & Construction	Low Heat & Resistance to Chemical	Sewerage Tanks
52*	Tuas Oil Storage	1996 - 1997	PUB	Development Resources	Korean Heavy Industries & Construction	Low Heat & Resistance to Chemical	Storage Tanks
53.	Jalan Ahmad Ibrahim / Upper Jurong Road	1996 - 1997	PWD	PWD	Wee Poh Construction	Low Heat & Resistance to Chemical	Submerged Carriageway
54.	Scotts 28	1996 - 1997	Hotel Properties	Meinhardt	Hyundai Engineering & Construction	Low Heat	Raft Foundation
55.	Bukit Batok Commercial Complex	1996	Centrepoint	P&T Consultant	Kumagai Gumi	Low Heat	Raft Foundation
56.	Holland / Farrer Road Interchange	1996	PWD	PWD	Koh Brothers	Low Heat & Resistance to Chemical	Flyover / Surface Roads / Submerged Carriageway

P4246 / P4246S Job Reference (Local)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
57.	Esso Berth at Pulau Ayer Chawan	1996	Esso	R.J. Brown	McConnell Dowell	Resistance to Chemical	Dolphins / Jetty
58.	Ministry of Education HQ at Buona Vista	1996	Ministry of Education	PWD	Singapore Piling	Low Heat	Piled Foundation & Basement Works
59.	Suntec City Phase 3B & 4	1996	Suntec City Development	Manunsell Consultant	Hyundai Engineering & Construction	Low Heat	Transfer Beam
60.	Kranji Sewerage Treatment Plant	1995 - 1998	Ministry of Environment	Binnie & Partner	Hyundai Engineering & Construction	Low Heat & Resistance to Chemical	Sewerage Tanks
61.	PSA Pasir Panjang Terminal Phase 1A	1995 - 1997	PSA	PSA	Hock Lian seng	Low Heat	Columns & Rigid Pavement
62.	Jalan Ahmad Ibrahim / Tuas Checkpoint	1995 - 1996	PWD	PWD	Wee Poh Construction	Low Heat & Resistance to Chemical	Big U Drain
63.	CWT Logistics	1995	CWT	Bylandaers Meinhardt	Koh Brothers	Low Heat	Raft Foundation
64.	Coasta Phu	1995	Amco Holding	RSP Architects Planners & Engineers	Shimizu Corporation	Low Heat	Pile Caps & Raft Foundation
65.	Tuas Power Plant	1994 - 1995	PUB	Development Resource	Chew Eu Hock Construction	Low Heat & Resistance to Chemical	Bored Piles, Pile Cap & Structure
66.	Marina Bay Bridge	1994 - 1995	PWD	PWD	Obayashi Corporation	Low Heat & Resistance to Chemical	Pile Caps

P4246 / P4246S Job Reference (Local)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
67*	Bank of China	1994 - 1995	Bank of China	T.Y. Lin South East Asia	Shimizu Corporation	Low Heat	Bored & Cassion Piles
68.	Aspen Heigths	1994 - 1995	DBS Land	T.Y. Lin South East Asia	Sembawang Construction	Low Heat	Thick Raft Foundation
69.	Jalan Ahmad Ibrahim / Tuas West Road / Interchange	1994	LTA	LTA	Heng Mah Construction	Low Heat	Thick Base Slab of Depressed Road
70.	Mirage Tower	1994	CDL	Steen Consultant	Samsung Engineering & Consultant	Low Heat	Raft Foundation
71.	Tampines Expressway Lorong Halus Interchange	1994	PWD	PWD	Torie Construction	Low Heat & Resistance to Chemical	Submerged Structure
72.	Tampines Mall	1993 - 1994	DBS Land	Beca Carter Hollinas & Ferner	Singapore Piling	Low Heat	Raft Foundation
73.	Changi Airport Remote Aircraft Parking Bays	1993 - 1995	CAAS	CAAS	Chuan Joo	Low Heat	Rigid Aircraft Pavement
74.	International Business Centre	1993 - 1994	Jurong Town Corporation	Eugene HL Chan & Associates	Evan Lim Construction	Low Heat & Resistance to Chemical	Raft Foundation
75.	Eastern General Hospital	1993	Ministry of Health	Indecco Consultant	Sembawang Construction	Low Heat	Thick Raft Foundation
76.	Century Square	1993	First Capital	DE Consultant	Sembawang Construction	Low Heat	Raft Foundation

P4246 / P4246S Job Reference (Local)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
77.	Kandang Kerbau Hospital	1992 - 1993	Ministry of Health	Indecco Consultant	SsangYong Engineering & Construction	Low Heat	Foundation - Pile Caps
78.	Coin Operation Centre Depot Road	1992	Board of Commissioners of Currency	Maunsell Consultant	Project Building	Low Heat	Thick Wall Element-Vault
79.	Alfa Centre Bukit Timah Road	1992	Ruby Properties	SCE Consultant	Chuang Uming	Low Heat	Raft Foundation
80.	Milenia	1991 - 1994	Pontiac Marina	BMP	Drangages et Travaux Public	Low Heat & Resistance to Chemical	Pile Cap & Rat Foundation
81.	Tiger Breweries	1991 - 1992	Asia Pacific Breweries	RSP Architects, Planners & Engineers	Reliance Contractor	Low Heat	Raft Foundation
82.	Jalan Ahmad Ibrahim Culvert & Jurong Lake	1991 - 1992	Ministry of Environment	Mott MacDonald Asia	Ohin Contractors Engineering Construction	Low Heat & Resistance to Chemical	Box Culvert / Tidal Gates
83.	DBS Extension Building	1991	DBS	Tan Ee Ping & Partners	Obayashi Corporation	Low Heat	Thick Raft
84.	Bukit Gombak Nursery	1991	MINDEF	CDC	Resources Development Corporation	Low Heat & Resistance to Chemical	Massive Pours
85.	Mindef Paya Lebar	1990 - 1992	MINDEF	MINDEF	CDC	Low Heat & Resistance to Chemical	Massive Pours & Coastal Structure
86.	Senoko 2nd Incineration Plant	1990	Ministry of Environment	Fichtner Consulting Engineer	Tion Seng Contractors	Low Heat	Bunker & Chimney

\* Projects that specified SRC but approved to use HSPBFC

P4246 / P4246S Job Reference (Overseas)

Nos.	Project	Period	Owner	Consultant	Contractor	Specification	Area of Application
01*	American Naval Base Diego Garcia Island	2000 - 2001	US Navy	Corps of Engineer	Term Contractors	Low Heat & Resistance to Chemical Attacks	Marine Works
02.	Changi Naval Base Phase 3	1999 - 2000	Mindef (S'pore)	Specs	Sum Cheong Piling Precaster P.T. Kobe (Jakarta)	Low Heat & Resistance to Chemical Attacks	Precast Marine Deckings / Beams
03.	Royal Thai Navy Drydock	1995 - 1998	Thai Government	P.T. Spectra (Batam)	BCK	Resistance to Chemical Attack	Soil Stabilization
04.	Duriangkang Dam, Batam, Indonesia	1997	Authority Batam	P.T. Spectra (Batam)	BCK	Resistance to Chemical Attack	Soil Stabilization
05.	Malaysia & Singapore Second Crossing	1995 - 1997	Malaysia Government	Acer / Ranhill	ACP United Engineers (M) Berhad	Resistance to Chemical Attack	Bored Piles, Pile Cap & Pier
06*	Brunei Shell LNG Tank	1991 - 1992	Shell	Dycheroff & Widmann Ang	TDP Consotium	Low Heat	800mm Thick Wall
07*	Royal Gadung Power Station Brunei	-	-	-	-	Low Heat	Raft Foundation
08*	Jerudong Park Brunei	1995	Brunei	-	-	Low Heat	Raft Foundation
09.	Rantembe Dam	1987 - 1989	Government of Sri Lanka	Salzgitter Consultant Asia (UK / West Germany)	Zueblin / Hochtieg JV West Germany	Low Heat	Gravity Dam

\* Projects that specified SRC but approved to use HSPBFC