

Contents of Register of Environmental Aspects

Table 1 - Office

OF) Office

SC) Evaluation of Suppliers and Contractors

Table 2 – Building/Civil Engineering Design

D) Building/Civil Engineering Design

Table 3 - Materials and Site Equipments Specification

SP) Materials and Site Equipments Specification

Table 4 – Use of Vehicles

V) Use of Vehicles

Table 5 – General Construction Works*

G1) Construction Dust and Suppression

G2) Construction Noise and Suppression

G3) Cumulative Resources Consumption

G4) Emergency Circumstances

G5) Handling and Storage of Materials/Chemicals

G6) Nuisance

G7) Site Plant and Machinery (Operation and Maintenance)

G8) Transportation

G9) Waste Collection, Handling and Disposal

G10) Wastewater Discharge and Treatment Facilities

Table 6 – Trade Specific Works*

T1) Ground Investigation

T2) Demolition (including site clearance)

T3) Site Formation (including fencing, excavation, blasting and slope works)

T4) Foundation

T5) Steel Reinforcement

T6) Structural Steelwork

T7) Formwork and Finishes to concrete

T8) Drainage Works

T9) Plumbing and other E&M

T10) Concrete Work

T11) Scaffolding

T12) Brickwork, Blockwork & Masonry

T13) Roofing & Waterproofing

T14) Claddings / Curtain Walling

T15) Glazing

T16) Carpentry and Joinery

T17) Ironmongery

T18) Metalworks

T19) Architectural Finishes

T20) Painting

T21) Internal Fittings & Fixtures

T22) Road Works

T23) Road Furniture

T24) Landscaping

T25) Testing

T26) Bridge Works

T27) Marine Works

T28) Railway Works

T29) Tunnelling Works

T30) Temporary Works

Implementation notes

* More resources and efforts should be allocated to address the environmental aspects of these activities

Note:

The environmental aspect (EA) tables are presented in the order of office activities as the first item because:

- 1) this arrangement is a well-accepted and common practice for EMS professionals to prepare the EA register
- 2) the EAs for office activities are applicable to all staff, which is important for promoting staff awareness

However, the significant EAs (SEAs) for production processes would normally be the most important area to address relevant operational controls

Ref	Environmental Aspects	Potential Environmental Impacts									Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material	Corporate		SEA
1) Office (Branch Office and Site Offices)																	
OF-1	Electricity consumption (for lighting, air conditioning, office equipment and other purposes)	x									0		0	1	-	Y	EI/07, O&T-2006-5
OF-2	Water consumption (for drinking, cleaning, flushing)	x									0		0	0	0	N	
OF-3	Consumption of papers	x									0		0	1	-	Y	EI/07, O&T-2006-4
OF-4	Consumption of stationery and office equipment	x									0		0	0	0	N	
OF-5	Consumption of cartridges for printers, copies, fax machines	x									0		0	1	-	Y	EI/07
OF-6	Use/release of CFC substances (e.g. refrigerants for air conditioning units)			x							1	A10, A11, A12, A18	-	-	-	Y	EI/06
OF-7	Domestic wastewater discharge (from pantry, flushing) to foul sewers				x						0		0	0	0	N	
OF-8	Release of ozone from photocopiers and laser printers			x							0		0	0	0	N	
OF-9	Indoor air ventilation			x							0	A28	0	0	0	N	
OF-10	Noise from office equipment					x					0		0	0	0	N	
OF-11	Disposal of waste (general refuse)		x								1	C1	-	-	-	Y	EI/07
OF-12	Disposal of toner cartridges		x								1	C1	-	-	-	Y	EI/07
OF-13	Disposal of Fluorescent tubes		x								1	C1	-	-	-	Y	EI/07
OF-14	Disposal of batteries		x								1	C1	-	-	-	Y	EI/07
OF-15	Disposal of recyclable waste (paper, plastic, aluminium cans)		x								1	C1	-	-	-	Y	EI/07
OF-16	Potential fire		x	x	x						0		1	-	-	Y	EP/05
OF-17	Pest control - use of insecticide by subcontractor			x							0	E2	0	0	1	Y	EI/06
OF-18	Cleaning and waste collection services provided by subcontractors		x		x						0		0	0	1	Y	EI/06
Evaluation of Suppliers and Contractors																	
SC-1	Shortlisting/selection of contractors with environmental concerns	x	x	x	x	x	x	x	x	x	0		0	0	1	Y	EI/05, EI/06
SC-2	Ongoing appraisal of selected contractors on their environmental performance	x	x	x	x	x	x	x	x	x	0		0	0	1	Y	EI/05, EI/06
SC-3	Shortlisting/selection of suppliers with environmental concerns	x	x	x	x	x	x	x	x	x	0		0	0	1	Y	EI/05, EI/06
SC-4	Ongoing appraisal of selected suppliers on their environmental performance	x	x	x	x	x	x	x	x	x	0		0	0	1	Y	EI/05, EI/06

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		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate	SEA
2) Building/Civil Engineering Design																	
D-1	Air pollution from completed projects (e.g. road traffic, emission from chimneys or other fixed sources)			x							0	A19,A21, A22	0	0	1	Y	EI/03
D-2	Noise from completed projects (e.g. road traffic, rail traffic, noise from ventilation fans or other fixed sources)					x					0	B13,B15, B18	0	0	1	Y	EI/03
D-3	Wastewater discharge from completed projects				x						0		0	0	1	Y	EI/03
D-4	Waste generation from completed projects and from maintenance and refurbishment		x								0		0	0	1	Y	EI/03
D-5	Specification for more environmental-friendly construction methods/design/techniques/modification (e.g. metal formwork, prefabrication components, sustainable timber)	x	x	x	x	x	x	x	x	x	0	A17,A19, A21,A22, A27,B13, B15,B18	0	0	1	Y	EI/03
D-6	Specification for energy efficient, electrical and mechanical facilities	x									0		0	0	1	Y	EI/03
D-7	Solar gains (e.g. building orientation, shading devices, external wall and roof detailing, thermal conductivity of external wall and roof materials and insulation, dimensions, positioning and solar transmittance of windows, etc.)	x									0		0	0	1	Y	EI/03
D-8	Natural ventilation (e.g. Building orientation, accommodation floor plan to facilitate cross ventilation, etc.)	x									0		0	0	1	Y	EI/03
D-9	Natural lighting/glare (e.g. Building orientation on site for daylight access, external wall detailing, dimensions, accommodation layout, floor plan and finishes for natural lighting, positioning and visible transmittance of windows, etc.)	x							x	0		0	0	1	Y	EI/03	
D-10	Noise/reverberation (e.g. building orientation on site for noise screening, wall and window detailing for noise attenuation, noise transmittance of glazing materials, etc.)					x					0		0	0	1	Y	EI/03
D-11	Waste minimisation: alteration and refurbishment by occupants		x								0		0	0	1	Y	EI/03
D-12	Provision of facilities for waste segregation to enhance recycling		x								0		0	0	1	Y	EI/03
D-13	Provision of facilities for waste collection and storage before ultimate disposal		x								0		0	0	1	Y	EI/03

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2) Building/Civil Engineering Design																
D-14	Water use: (for cleaning, toilet flushing, landscape irrigation by property management)	x								0		0	0	1	Y	EI/03
D-15	Landscaping: maximise greenery and pervious surfacing (e.g. planters, etc)					x		x		x	0	0	0	1	Y	EI/03
D-16	Landscaping: enhance local ecology and minimise maintenance requirements	x						x			0	0	0	1	Y	EI/03
D-17	Landscaping: introduction of non-indigenous plant species							x			0	0	0	1	Y	EI/03
D-18	Provision of proper maintenance facilities for estate management		x								0	0	0	1	Y	EI/03

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		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate	SEA
3) Materials and Site Equipments Specification																	
SP-1	Equipment selection: noise					x					0		0	0	1	Y	EI/03
SP-2	Equipment selection: energy efficiency	x									0		0	0	1	Y	EI/03
SP-3	Material estimation increase accuracy to minimise surplus	x									0		0	0	1	Y	EI/03
SP-4	Use of hazardous materials (formaldehyde, lead paints, timber preservatives)		x	x	x						0		1	-	-	Y	EI/03
SP-5	Use of structural steelwork, metalwork and ironmongery	x									0		0	1	-	Y	EI/03
SP-6	Use of solid & panel timber in permanent carpentry and joinery (floors, doors, skirtings, frames, etc)	x									0	G5	0	1	-	Y	EI/03
SP-7	Use of virgin materials in thermal insulation to building, fabric and services	x									0		0	1	-	Y	EI/03
SP-8	Use of virgin materials in brickwork, blockwork, masonry, pavers, plasters, etc	x									0		0	1	-	Y	EI/03
SP-9	Use of virgin aggregates in concrete (e.g. foundations, superstructure, screeds, etc)	x									0	C15, C24	0	1	-	Y	EI/03, O&T-2006-1
SP-10	Use of virgin materials in cement (e.g. foundations, superstructure, screeds, etc)	x									0	G1	0	1	-	Y	EI/03
SP-11	Selection of material/finishes to minimize radon emissions			x							0		0	0	1	Y	EI/03
SP-12	Use of ozone depleting refrigerants in air cooling system, thermal insulation to building, fabric and services			x							1	A10, A11, A12, A18	-	-	-	Y	EI/03
SP-13	Provision of fire protection systems	x	x	x	x	x	x	x	x	x	0		0	0	1	Y	EI/03
SP-14	Provision of metering and monitoring equipment for subsequent users	x									0		0	0	1	Y	EI/03
SP-15	Provision of electrical installations and EL voltage systems	x									0	G8	0	0	1	Y	EI/03
SP-16	Provision of centralised HVAC systems for public areas (air and water side)	x		x	x						0	G9	0	0	1	Y	EI/03
SP-17	Provision of lifts and escalators (power loads and controls)	x									0	G7	0	0	1	Y	EI/03
SP-18	Provision of interior/exterior lighting (lamps, installed loads, controls) in occupied/public areas	x									0	G10	0	0	1	Y	EI/03
SP-19	Provision of window and/or split type AC units (coefficient of performance, controls)	x		x							0		0	0	1	Y	EI/03
SP-20	Provision of water heating systems (fuel, insulation, controls) for occupant/public services	x									0		0	0	1	Y	EI/03

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Table 3 - Materials Specification

Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference		
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate	SEA
4) Use of Vehicles																	
V-1	Fuel consumption by vehicle	x									0		0	1	-	Y	EI/08
V-2	Type of fuel consumed (legal)			x							1	A6	-	-	-	Y	EI/08
V-3	Noise produced by vehicle					x					1	B4, B5	-	-	-	Y	EI/08
V-4	Exhaust emissions			x							1	A13, A14	-	-	-	Y	EI/08
V-5	Discharge of vehicle washwater				x						1	D1	-	-	-	Y	EI/08
V-6	Venting of refrigerants from air conditioning unit of vehicles			x							1	A10, A11, A12, A18	-	-	-	Y	EI/08
V-7	Vehicle maintenance: waste generation (old parts, contaminated wastes, lubricant oil disposal)		x				x				1	C1, C2, C3, C8, C10, C11	-	-	-	Y	EI/08
V-8	Traffic congestion			x					x	0		0	0	0		N	
V-9	Potential oil leakage		x	x	x		x		x	0		1	-	-		Y	EI/08
V-10	Selection of maintenance and repair services provider	x	x	x	x	x	x	x	x	0		0	0	1		Y	EI/08

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Table 4 - Use of Vehicles

Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference		
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate	SEA
G1) Construction Dust and Suppression																	
G1-1	Dust generated from construction activities, moving traffic, and insufficient protection or covering			x							1	A3, A25	-	-	-	Y	EI/04
G1-2	Dust emission from dusty load on outgoing trucks			x							1	A3, A25	-	-	-	Y	EI/04
G1-3	Dust emission from storage of cement/PFA			x							1	A3	-	-	-	Y	EI/04
G1-4	Dust emission from handling of cement/PFA			x							1	A3	-	-	-	Y	EI/04
G1-5	Consumption of water for wheel/vehicle washing	x									0		0	1	-	Y	EI/04
G1-6	Consumption of water for dust suppression	x									0		0	1	-	Y	EI/04
G1-7	Consumption of covering materials/dust screens/nettings	x									0		0	0	0	N	
G1-8	Disposal of used covering materials/dust screens/nettings		x								1	C1, C4, C19, C20	-	-	-	Y	EI/04
G1-9	Disposal of sludge from wheel/vehicle washing facilities		x								1	C2, C3, C8, C10, C11	-	-	-	Y	EI/04
G2) Construction Noise and Suppression																	
G2-1	Construction noise generated from equipment operation, vehicles and various construction activities					x					1	B1, B2, B3, B4, B5, B6, B8, B9, B10, B11, B12, B14, B16, B17	-	-	-	Y	EI/04
G2-2	Consumption of noise barriers	x									0		0	0	0	N	
G2-3	Disposal of noise barriers		x								1	C1	-	-	-	Y	EI/04
G3) Cumulative Resources Consumption																	
G3-1	Electricity consumption	x									0		0	1	-	Y	EI/04
G3-2	Water consumption	x									0		0	1	-	Y	EI/04

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Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
G3-3	Consumption of flushing water	x								0		0	0	0	N	
G3-4	Wastage of water from dripping taps, leaking pipelines, etc	x								0		0	1	-	Y	EI/04
G4) Emergency Circumstances																
G4-1	Accidental damage to underground utilities (e.g. sewage/potable water pipes, gas, electricity installations)				x		x			0		1	-	-	Y	EI/04
G4-2	Emergencies arising from flooding or fire during construction/demolition		x	x	x		x			0		1	-	-	Y	EI/04
G4-3	Discovery of archaeological findings/rare species							x	x	0	H3	1	-	-	Y	EI/04
G4-4	Land/groundwater contamination from construction/demolition works (e.g. major spillage accidents)						x			0		1	-	-	Y	EI/04
G4-5	Disposal of wastes arising from cleaning after spillage or accidents		x							1	C2,C3,C8, C10,C11	-	-	-	Y	EI/04
G5) Handling and Storage of Materials/Chemicals																
G5-1	Poor coverage of materials causing fugitive dust emission			x	x					1	A3,A25	-	-	-	Y	EI/04
G5-2	Improper storage of materials/chemicals resulting in leaching		x		x		x			0		1	-	-	Y	EI/04
G5-3	Improper storage of materials resulting in deterioration and wastage		x				x			0		0	1	-	Y	EI/04
G5-4	Inappropriate storage of timber and eventually leading to fire/wastage		x	x	x	x	x		x	0		1	-	-	Y	EI/04
G5-5	Spillage or leakage of chemicals/DG during handling/use/storage		x	x	x		x			0		1	-	-	Y	EI/04
G5-6	VOC emissions from improperly closed containers			x						0		1	-	-	Y	EI/04
G5-7	Storage of DG (e.g. acetylene/oxygen, diesel, paint)		x		x		x			1	E1,E3	-	-	-	Y	EI/04
G5-8	Excessive surplus materials	x	x							0		0	1	-	Y	EI/04
G5-9	Potential chemical reaction/fire due to improper storage of chemicals			x					x	0		1	-	-	Y	EI/04
G6) Nuisance																
G6-1	Odour impacts			x					x	1	A1,A9,A26, H4	-	-	-	Y	EI/04

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		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material	Corporate		SEA
G6-2	Visual impact (visual intrusion, glare, etc. from project sites)									x	0		0	0	0	N	
G6-3	Mosquito/pest									x	1	H4,H8	-	-	-	Y	EI/04
G7) Site Plant and Machinery (Operation and Maintenance)																	
G7-1	Consumption of fuel (diesel/petroleum)	x									0		0	1	-	Y	EI/04
G7-2	Consumption of electricity	x									0		0	1	-	Y	EI/04
G7-3	Air emission from combustion of fuel (e.g. black smoke)			x							1	A4,A5,A8, A9	-	-	-	Y	EI/04
G7-4	Noise generation from plants and equipment					x					1	B1,B2,B3, B6,B8,B9, B10,B11, B12,B14, B16,B17	-	-	-	Y	EI/04
G7-5	Spillage of chemical during refuelling		x		x		x				0		1	-	-	Y	EI/04
G7-6	Leakage of fuel/lubricant/chemicals from plants and equipment due to poor maintenance				x		x				0		1	-	-	Y	EI/04
G7-7	Consumption of lubricant/hydraulic oil/solvents	x									0		0	0	0	N	
G7-8	Consumption of frags and gloves	x									0		0	0	0	N	
G8) Transportation																	
G8-1	Fuel consumption by vehicles	x									0		0	1	-	Y	EI/08
G8-2	Noise produced by vehicles					x					1	B4,B5	-	-	-	Y	EI/08
G8-3	Exhaust air emissions			x	x						1	A13,A14	-	-	-	Y	EI/08
G8-4	Spillage or leakage of DG (Category 1, 2, & 5) from vehicles due to accidents or inappropriate storage (e.g. lack of securing facilities)		x	x	x		x				1	E1,E3	-	-	-	Y	EI/04
G8-5	Spillage or leakage of DG (except Category 1, 2 & 5) and other chemicals from vehicles due to accidents or inappropriate storage (e.g. lack of securing facilities)		x	x	x		x				0		1	-	-	Y	EI/04
G8-6	Traffic congestion and potential blockage of site entrance			x						x	0		0	0	0	N	

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Table 5 - General Construction Works

Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
G9) Waste Collection, Handling and Disposal																
G9-1	Dust emission from collection/handling of waste (by bulldozer, grab lorry, refuse chutes, etc) and improperly uncovered stockpiled waste			x						1	A3, A25	-	-	-	Y	EI/04
G9-2	Odour from uncovered wastes			x						0		0	0	1	Y	EI/04
G9-3	VOC emission from uncovered chemical wastes			x						1	A1, A9	-	-	-	Y	EI/04
G9-4	Leaching from stockpiled wastes		x		x		x			0		1	-	-	Y	EI/04
G9-5	Leakage or spillage of chemical waste due to improper storage		x				x			0		1	-	-	Y	EI/04
G9-6	Visual intrusion by uncovered stockpiled waste								x	0		0	0	0	N	
G9-7	Disposal of chemical wastes (e.g. unused or spent fuel/lubricant/chemical containers/other chemicals, rags, gloves, soil, debris, etc contaminated with fuel/lubricant/other chemicals)		x	x	x		x			1	C2, C3, C8, C10, C11, H5, H6	-	-	-	Y	EI/04, O&T-2006-3
G9-8	Disposal of batteries		x		x		x			1	C2, C3, C8, C10, C11, H5, H6	-	-	-	Y	EI/04, O&T-2006-3
G9-9	Disposal of uncontaminated spoil/vegetation (including marine dumping)		x		x					1	C1, C4, C5, C6, C14, C16, C17, C18, C19, C20, C21, C22, C23, H5, H6	-	-	-	Y	EI/04, O&T-2006-3

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		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material	Corporate		SEA
G9-10	Disposal of contaminated spoil/vegetation (including marine dumping)		x		x		x				1	C1, C4, C5, C6, C8, C10, C11, C16, C17, C18, C19, C20, C21, C22, C23, H5, H6	-	-	-	Y	EI/04, O&T-2006-3
G9-11	Disposal of inert waste (debris from demolition, removal of concrete structures, etc.)		x		x						1	C1, C4, C8, C10, C11, C14, C16, C17, C19, C20, C22, H5, H6	-	-	-	Y	EI/04, O&T-2006-3
G9-12	Disposal of used bentonite slurry		x		x						1	C1, C20, H5, H6	-	-	-	Y	EI/04, O&T-2006-3
G9-13	Disposal of recyclable waste (timber, paper, metal, plastic)		x								1	C1, C20, H5, H6	-	-	-	Y	EI/04, O&T-2006-3
G9-14	Disposal of packaging waste (e.g. pallet, wrapping straps)		x								1	C1, C20, H5, H6	-	-	-	Y	EI/04, O&T-2006-3
G9-15	Disposal of other solid waste		x								1	C1, C20, H5, H6	-	-	-	Y	EI/04, O&T-2006-3
G10) Wastewater Discharge and Treatment Facilities																	

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Ref	Environmental Aspects	Potential Environmental Impacts									Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material	Corporate		SEA
G10-1	Discharge of wastewater from construction activities				x						1	D1, D3, D4, D6, D7, D8	-	-	-	Y	EI/04, O&T-2006-2
G10-2	Discharge of wastewater from cleaning of site plants/machineries/facilities				x						1	D1, D3, D4, D6, D7, D8	-	-	-	Y	EI/04, O&T-2006-2
G10-3	Discharge of wastewater from site toilets				x						1	D1, D3, D4, D6, D7, D8	-	-	-	Y	EI/04
G10-4	Discharge of wastewater from kitchens				x						1	D1, D3, D4, D6, D7, D8	-	-	-	Y	EI/04
G10-5	Discharge of stormwater runoff				x						1	D1, D3, D4, D6, D7, D8	-	-	-	Y	EI/04
G10-6	Consumption of canvas for reducing sediment load in stormwater runoff	x	x								0		0	0	0	N	
G10-7	Consumption of chemicals for wastewater treatment	x									0		0	0	0	N	
G10-8	Malfunctioning of treatment facilities leading to effluent quality exceeding license limits				x		x				1	D1, D3, D4, D6, D7, D8	-	-	-	Y	EI/04
G10-9	Overflow of septic tanks and/or sedimentation tanks (after unexpected weather conditions) leading to uncontrolled discharge of untreated wastewater into the surrounding				x			x			0		1	-	-	Y	EI/04
G10-10	Disposal of grease trap waste (should be classified as chemical wastes depending on the actual contents)		x								1	C1	-	-	-	Y	EI/04
G10-11	Disposal of sludge from sediment tank (should be classified as chemical wastes depending on the actual contents)		x								1	C2, C3	-	-	-	Y	EI/04
G10-12	Disposal of sludge from septic tank (should be classified as chemical wastes depending on the actual contents)		x								1	C2, C3	-	-	-	Y	EI/04

Reviewed and Approved by : **K.T. Wong**

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Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
T1) Ground Investigation																
T1-1	Consumption of water for flushing	x								0		0	1	-	Y	EI/04
T1-2	Consumption of cement bentonite grout (cement, sand, water, bentonite)	x								0		0	1	-	Y	EI/04
T2) Demolition (including site clearance)																
T2-1	Use of refuse chutes	x								0	C25	0	0	0	N	
T2-2	Consumption of material for shoring and supporting	x								0	C25	0	0	1	Y	EI/04
T2-3	Consumption of mesh screen	x								0	C25	0	0	0	N	
T2-4	Demolition of structure potentially containing asbestos			x						1	A2, A15, A16, A20, C25	-	-	-	Y	EI/04
T2-5	Disposal of asbestos waste		x							1	C9, C25	-	-	-	Y	EI/04
T2-6	Improper disconnection of existing pipelines leading to contamination		x		x					1	C25, D5	-	-	-	Y	EI/04
T2-7	Damage to plants to be retained							x		0	C25, H7, H9, H10	0	0	1	Y	EI/04
T2-8	Damage to plants when being transported to temporary nursery for future re-planting							x		0	C25, H7, H9, H10	0	0	1	Y	EI/04
T3) Site Formation (including fencing & earthworks)																
A) Fencing																
T3-1	Consumption of hoardings (e.g. timber, metal)	x								0		0	1	-	Y	EI/04
T3-2	Consumption of paints for painting hoardings, permanent fencing and gates	x								0		0	1	-	Y	EI/04
T3-3	Consumption of steel gates for temporary site hoardings	x								0		0	0	0	N	
T3-4	Disposal of used hoardings and steel gates		x							1	C1, G4	-	-	-	Y	EI/04
T3-5	Inadequate height to mitigate noise and dust emissions from site			x		x				1	A3	-	-	-	Y	EI/04
T3-6	Polluted water runoff from site due to inadequate integrity of hoarding at base				x					1	D1	-	-	-	Y	EI/04
T3-7	Consumption of gate materials for permanent fencing and gates	x								0		0	0	0	N	

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Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
T3-8	Consumption of concrete for fixing permanent posts	x								0		0	1	-	Y	EI/04, O&T-2006-1
B) Earthworks																
I) Excavation																
T3-9	Release of inherent contamination from ground during excavation				x		x			0	C12, C13	1	-	-	Y	EI/04
II) Blasting																
T3-10	Improper handling of explosive leading to explosion		x	x	x	x			x	0		1	-	-	Y	EI/04
T3-11	Dust emission from blasting			x	x					1	A3	-	-	-	Y	EI/04
T3-12	Noise from blasting					x				1	B1, B2, B6, B8, B9, B11, B12, B17	-	-	-	Y	EI/04
T3-13	Ground Vibrational from blasting					x				0		0	0	0	N	
III) Deposition and compaction of fill material																
T3-14	Consumption of fill material	x								0	A24, G3	0	1	-	Y	EI/04
IV) Slope Works and Associated Drainage																
T3-15	Use of bamboo scaffolding for preliminary slope work	x								0		0	1	-	Y	EI/04
T3-16	Use of protective fences and barriers for preliminary slope work	x								0		0	0	0	N	
T3-17	Consumption of water prior to slope surface treatment	x								0		0	1	-	Y	EI/04
T3-18	Consumption of compressed air for slope surface preparation	x								0		0	0	0	N	
T3-19	Consumption of cement mortar, soil cement or chunam (cement, sand, inorganic soil, hydrated lime, water) for slope treatment works	x								0		0	1	-	Y	EI/04
T3-20	Consumption of reinforcement for slope treatment works	x								0		0	1	-	Y	EI/04
T3-21	Consumption of rock bolts, rock dowels for slope treatment works	x								0		0	0	0	N	
T3-22	Consumption of PVC pipes (for weep holes) for slope treatment works	x								0		0	0	0	N	
T3-23	Consumption of pipes for underground drainage	x								0		0	0	0	N	

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Table 6 - Trade Specific Works

Ref	Environmental Aspects	Potential Environmental Impacts									Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material	Corporate		SEA
T3-24	Consumption of other components (e.g. prefabricated band drains) for underground drainage	x									0		0	0	0	N	
T3-25	Consumption of new concrete caisson liners for underground drainage	x									0		0	0	0	N	
T3-26	Consumption of protective mesh for slope treatment works	x									0		0	0	0	N	
T3-27	Consumption of curing chemicals for slope treatment works	x									0		0	0	0	N	
T3-28	Consumption of granular material for underground drainage	x									0		0	0	0	N	
T3-29	Consumption of geotextile for underground drainage	x									0		0	1	-	Y	EI/04
T3-30	Consumption of concrete for open drainage	x									0		0	1	-	Y	EI/04, O&T-2006-1
T4) Foundation																	
A) Percussive piling (driven piles: precast concrete piles, precast tubular concrete piles, steel pile)																	
T4-1	Consumption of piles	x									0		0	1	-	Y	EI/04
T4-2	Dispersion of mist of lube oil from pile driver			x	x		x				0		1	-	-	Y	EI/04
T4-3	Vibration of piles leading to nuisance to nearby structure / building					x					1	B1, B10, B11, B17	-	-	-	Y	EI/04
B) Percussive cast in-situ concrete pile																	
T4-4	Consumption of steel casing	x									0		0	1	-	Y	EI/04
T4-5	Consumption of concrete	x									0		0	1	-	Y	EI/04, O&T-2006-1
T4-6	Contamination of groundwater				x		x				0		0	0	0	N	
T4-7	Vibration of piles leading to nuisance to nearby structure / building					x					1	B1, B10, B11, B17	-	-	-	Y	EI/04
C) Non-percussion piling (large diameter bored concrete piles, non-percussion cast in-situ concrete piles)																	
T4-8	Consumption of concrete	x									0		0	1	-	Y	EI/04, O&T-2006-1
T4-9	Consumption of steel reinforcement	x									0		0	1	-	Y	EI/04
T4-10	Consumption of bentonite (or other chemicals)	x									0		0	1	-	Y	EI/04
T4-11	Contamination of groundwater				x		x				0		0	0	0	N	
T4-12	Vibration of steel casing leading to nuisance to nearby structure / building					x					1	B1, B17	-	-	-	Y	EI/04

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Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
T5) Steel Reinforcement																
T5-1	Consumption of steel reinforcement	x								0		0	1	-	Y	EI/04
T5-2	Consumption of tying wires, clips, etc for fixing reinforcement	x								0		0	0	0	N	
T5-3	Emission of metal particles in cutting yard			x						1	A1, A9	-	-	-	Y	EI/04
T6) Structural Steelwork																
T6-1	Consumption of steelwork	x								0		0	1	-	Y	EI/04
T6-2	Consumption of bolts, nuts, and other fixers	x								0		0	0	0	N	
T6-3	Consumption of welding rods (with flux)	x								0		0	0	0	N	
T6-4	Consumption of acetylene for welding and flame cutting	x								0		0	0	0	N	
T6-5	Air emission during flame cutting and welding			x						0		0	0	0	N	
T6-6	Consumption of chemicals for preparing steelwork surface (sealer)	x								0		0	1	-	Y	EI/04
T6-7	Dust emission from grind cleaning for preparing steelwork surface			x	x					1	A3	-	-	-	Y	EI/04
T6-8	Consumption of grinding disc for preparing steelwork surface	x								0		0	0	0	N	
T6-9	Consumption of steel wire brushes for preparing steelwork surface	x								0		0	0	0	N	
T6-10	Consumption of steel materials for temporary supporting structures	x								0		0	1	-	Y	EI/04
T7) Formwork and Finishes to Concrete																
T7-1	Consumption of materials as formwork (e.g. timber, metal)	x								0		0	1	-	Y	EI/04
T7-2	Consumption of chemicals (sealant, release agent, wood preservatives, etc.)	x								0		0	1	-	Y	EI/04
T7-3	Consumption of nut, bolts, screws, etc for formwork	x								0		0	0	0	N	
T7-4	Consumption of cement mortar (for filling tie blow holes or other cavities)	x								0		0	1	-	Y	EI/04
T7-5	VOC emission from chemicals (sealant)			x						0		0	0	0	N	
T7-6	Excessive wastage of concrete and generated debris from formwork bulging and bursting		x							0		0	1	-	Y	EI/04
T7-7	Disposal of failed trial panels (inert debris)		x							1	C1, C16, C17, C19, C20, C22	-	-	-	Y	EI/04

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Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
T8) Drainage works																
T8-1	Consumption of pipe units	x								0		0	1	-	Y	EI/04
T8-2	Consumption of cement mortar (cement, sand, water)	x								0		0	1	-	Y	EI/04
T8-3	Consumption of bituminous protective coating	x								0		0	1	-	Y	EI/04
T8-4	Consumption of other fittings (fixers, protective tapes, manhole covers, etc)	x								0		0	0	0	N	
T8-5	Consumption of aggregates	x								0		0	1	-	Y	EI/04
T8-6	Consumption of polythene sheetings	x								0		0	1	-	Y	EI/04
T8-7	Consumption of energy for heating bituminous material	x								0		0	1	-	Y	EI/04
T8-8	Fume from bituminous material			x						0		0	0	0	N	
T8-9	Consumption of lubricant for jointing pipes/concrete	x								0		0	1	-	Y	EI/04
T8-10	Over-application of lubricant leading to land contamination				x		x			0		1	-	-	Y	EI/04
T8-11	Consumption of water for testing and cleaning pipelines	x								0		0	1	-	Y	EI/04
T9) Plumbing and other E&M																
T9-1	Consumption of pipes, wires, fittings or other materials	x								0		0	1	-	Y	EI/04
T9-2	Consumption of adhesive mortar (cement, water, aggregate, sand, etc)	x								0		0	1	-	Y	EI/04
T9-3	Consumption of water for testing for plumbing services	x								0		0	1	-	Y	EI/04
T10) Concrete Work (including prestressed concrete works)																
T10-1	Consumption of ready mixed concrete	x								0		0	1	-	Y	EI/04, O&T-2006-1
T10-2	Use and maintenance of concrete batching plant with ozone-depleting refrigerants (e.g. R22)			x						1	A10, A11, A12	-	-	-	Y	EI/04
T10-3	Consumption of curing chemical	x								0		0	1	-	Y	EI/04
T10-4	Consumption of water for concrete curing	x								0		0	1	-	Y	EI/04
T10-5	Consumption of covering material for concrete curing	x								0		0	0	0	N	
T10-6	Consumption of steel components (prestressed concrete works)	x								0		0	0	1	Y	EI/04
T10-7	Consumption of concrete grout (cement, water, aggregates)	x								0		0	0	1	Y	EI/04

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		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
T10-8	Consumption of chemicals for treating prestressed tendon	x								0		0	1	-	Y	EI/04
T10-9	Consumption of compressed air for cleaning prestressed tendon	x								0		0	0	0	N	
T11) Scaffolding																
T11-1	Consumption of new scaffolding materials	x								1	G5, G6	-	-	-	Y	
T11-2	Consumption of fixers (nylon ties, bolts, nuts)	x								0		0	0	0	N	
T11-3	Noise when setting up and dismantling scaffolding					x				1	B1, B2, B6, B8, B9, B11, B12, B17	-	-	-	Y	
T11-4	Dust emission from dismantling of scaffolding			x	x					1	A3	-	-	-	Y	
T11-5	Disposal of used bamboo scaffolding, metal components or nylon ribbons as waste															Refer Table 5(G9) Waste collection, handling & disposal
T12) Brickwork, Blockwork & Masonry																
T12-1	Consumption of bricks, cement blocks, glass block panels, tiles, stones, etc	x								0		0	1	-	Y	EI/04
T12-2	Consumption of bituminous paper	x								0		0	1	-	Y	EI/04
T12-3	Consumption of adhesive mortar (lime, cement, water)	x								0		0	1	-	Y	EI/04
T13) Roofing and Waterproofing																
A) Bituminous roofing, mastic asphalt (rock asphalt) roofing and waterproofing																
T13-1	Consumption of bituminous felt	x								0		0	1	-	Y	EI/04
T13-2	Consumption of bituminous compound (primer, bonding compound, emulsion, etc)	x								0		0	1	-	Y	EI/04
T13-3	Consumption of other chemicals for bituminous roofing and mastic asphalt roofing	x								0		0	1	-	Y	EI/04
T13-4	Water consumption for washing and priming bituminous coat	x								0		0	1	-	Y	EI/04
T13-5	Consumption of sand for surface finish	x								0		0	1	-	Y	EI/04
T13-6	Odour from heated bituminous compound			x						0		1	-	-	Y	EI/04

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B) Tilerooting																
T13-7	Consumption of tiles	x								0		0	1	-	Y	EI/04
T13-8	Consumption of adhesive mortar (cement, lime, water)	x								0		0	1	-	Y	EI/04
C) Roofing using metal sheets, glass-fibre reinforced plastic, rigid PVC sheets, compressed particle sheets																
T13-9	Consumption of sheets	x								0		0	1	-	Y	EI/04
T13-10	Use of lap sealants or adhesive	x								0		0	1	-	Y	EI/04
T13-11	Fine particles from cutting and drilling			x						1	A1, A9	-	-	-	Y	EI/04
T13-12	VOC emission from chemicals			x						0		1	-	-	Y	EI/04
T14) Claddings/Curtain Walling																
T14-1	Consumption of enamel steel for steel wall claddings	x								0		0	1	-	Y	EI/04
T14-2	Consumption of aluminium for aluminium wall claddings	x								0		0	1	-	Y	EI/04
T14-3	Consumption of glass for glass wall claddings	x								0		0	1	-	Y	EI/04
T14-4	Consumption of pre-cast concrete for concrete wall claddings	x								0		0	1	-	Y	EI/04
T14-5	Consumption of stone for stone wall claddings	x								0		0	1	-	Y	EI/04
T14-6	Consumption of chemicals (backers, bond breakers, primers, sealants, paints)	x								0		0	1	-	Y	EI/04
T15) Glazing																
T15-1	Consumption of glass	x								0		0	1	-	Y	EI/04
T15-2	Consumption of plastic panels	x								0		0	1	-	Y	EI/04
T15-3	Consumption of sealants	x								0		0	1	-	Y	EI/04
T15-4	Consumption of bitumen paints	x								0		0	1	-	Y	EI/04
T16) Carpentry and Joinery																
T16-1	Consumption of timber	x								0		0	1	-	Y	EI/04
T16-2	Consumption of other fittings for carpentry and joinery	x								0		0	1	-	Y	EI/04
T16-3	Consumption of nails, screws, etc.	x								0		0	1	-	Y	EI/04
T16-4	Consumption of chemicals (adhesives, wood preservatives, polish, sealer)	x								0		0	1	-	Y	EI/04

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		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
T16-5	Fine particles from cutting and drilling			x						1	A1, A9	-	-	-	Y	EI/04
T16-6	VOC emission from chemicals			x						0		1	-	-	Y	EI/04
T17) Ironmongery																
T17-1	Consumption of metal components (water bars, hinges, fixing bolts, etc) for ironmongery	x								0		0	1	-	Y	EI/04
T17-2	Inappropriate handling of floor spring hinges leading spillage of hydraulic fluid		x	x	x		x			0		1	-	-	Y	EI/04
T17-3	Consumption of mortar	x								0		0	1	-	Y	EI/04
T18) Metalworks																
T18-1	Consumption of metal components for metalworks	x								0		0	1	-	Y	EI/04
T18-2	Consumption of paints and lacquer for metalworks	x								0		0	1	-	Y	EI/04
T18-3	Consumption of mortar/adhesives	x								0		0	1	-	Y	EI/04
T18-4	Consumption of compressed oxygen and acetylene for arc welding	x								0		0	0	0	N	
T18-5	Consumption of welding flux and welding rods for metalworks	x								0		0	0	0	N	
T18-6	Air emission from arc welding			x						0		0	0	0	N	
T19) Architectural Finishes (e.g. plastering, wall tiling)																
T19-1	Consumption of sand/cement/lime/gypsum plaster	x								0		0	1	-	Y	EI/04
T19-2	Consumption of tiles	x								0		0	1	-	Y	EI/04
T19-3	Consumption of other materials for architectural finishes	x								0		0	1	-	Y	EI/04
T19-4	Consumption of dust sheets	x								0		0	1	-	Y	EI/04
T19-5	Consumption of chemicals for architectural finishes	x								0		0	1	-	Y	EI/04
T19-6	VOC emission from application of adhesives			x						0		1	-	-	Y	EI/04
T20) Painting (including priming paints, plaster sealers, limewash, fire retardant paints, etc EXCEPT road markings)																
T20-1	Consumption of paints and solvents	x								0		0	1	-	Y	EI/04
T20-2	Consumption of brushes, rags, gloves	x								0		0	0	0	N	
T20-3	VOC emission during manual application by brush			x						0		1	-	-	Y	EI/04
T20-4	VOC and aerosol emission during spray painting			x						0		1	-	-	Y	EI/04

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		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material	Corporate		SEA
T20-5	VOC emission from paint curing surfaces			x							0		0	0	0	N	
T21) Internal Fittings & Fixtures																	
T21-1	Consumption of gypsum plasterboard, plywood, chipboard for demountable partitions	x									0		0	1	-	Y	EI/04
T21-2	Consumption of Venetian blinds (galvanised steel, aluminium)	x									0		0	1	-	Y	EI/04
T21-3	Consumption of strong room door (tough steel)	x									0		0	1	-	Y	EI/04
T21-4	Consumption of lockers (galvanised steel)	x									0		0	1	-	Y	EI/04
T21-5	Consumption of hardwood and other materials (steel, aluminium, plastic laminate, vinyl cloth) for folding/sliding partitions	x									0		0	1	-	Y	EI/04
T22) Roads Works																	
T22-1	Consumption of sub-base material for bituminous road works	x									0		0	1	-	Y	EI/04
T22-2	Consumption of asphalt pavement (road base and wearing course) for bituminous road works	x									0		0	1	-	Y	EI/04
T22-3	Spillage of bituminous material used in bituminous road works		x				x				0		1	-	-	Y	EI/04
T22-4	Consumption of ready mixed concrete for concrete road works	x									0		0	1	-	Y	EI/04, O&T-2006-1
T22-5	Consumption of cement mortar (cement, sand, water) for concrete road works	x									0		0	1	-	Y	EI/04
T22-6	Consumption of polyethylene membrane for concrete road works	x									0		0	1	-	Y	EI/04
T22-7	Consumption of formwork materials for concrete road works	x									0		0	1	-	Y	EI/04
T22-8	Consumption of reinforcement for concrete road works	x									0		0	1	-	Y	EI/04
T22-9	Consumption of sealant and primer for concrete road works	x									0		0	1	-	Y	EI/04
T23) Road Furniture (Misc. Road Works)																	
A) Concrete Profile Barrier, Kerbs, Edgings, Concrete Slabs, Interlocking Blocks																	
T23-1	Consumption of precast units or granite kerbs	x									0		0	1	-	Y	EI/04
T23-2	Consumption of concrete for casting barriers on site	x									0		0	1	-	Y	EI/04, O&T-2006-1
T23-3	Consumption of cement mortar (cement, sand, water)	x									0		0	1	-	Y	EI/04
T23-4	Consumption of sand for bedding precast units and filling joints	x									0		0	1	-	Y	EI/04
T23-5	Consumption of paints and lacquer	x									0		0	1	-	Y	EI/04

Legend : 0 = No 1 = Yes Y = Yes N = No

Table 6 - Trade Specific Works

Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
B) Railings and beam barriers																
T23-6	Consumption of metal railings and beam barriers	x								0		0	1	-	Y	EI/04
T23-7	Consumption of cement mortar (cement, sand, water)	x								0		0	1	-	Y	EI/04
T23-8	Consumption of acetylene and compressed oxygen for welding	x								0		0	0	0	N	
T23-9	Consumption of welding rods (with flux)	x								0		0	0	0	N	
T23-10	Air emission during welding and flame cutting			x						0		0	0	0	N	
T23-11	Visual impact on natural landscape								x	0		0	0	0	N	
C) Traffic road signs																
T23-12	Consumption of metal components for road signs	x								0		0	1	-	Y	EI/04
T23-13	Consumption of paints and lacquer for road signs	x								0		0	1	-	Y	EI/04
T23-14	Consumption of plastic sheets for road signs	x								0		0	1	-	Y	EI/04
D) Road markings																
T23-15	Consumption of thermoelastic materials for road markings	x								0		0	1	-	Y	EI/04
T23-16	Consumption of glass beads for road markings	x								0		0	0	0	N	
T24) Landscaping																
T24-1	Consumption of materials (e.g. hessian, straw, tarpaulin) for wrapping rootball/canopy of plants	x								0		0	1	-	Y	EI/04
T24-2	Damage to plants by unsuitable environmental conditions (preserved in-situ or temporary nursery)							x		0		1	-	-	Y	EI/04
T24-3	Damage to plants or turf during transportation							x		0		1	-	-	Y	EI/04
T24-4	Damage to plants, turf or seeds when temporarily stored on site							x		0		1	-	-	Y	EI/04
T24-5	Consumption of fertilizer, soil conditioners and soil binder	x								0		0	1	-	Y	EI/04
T24-6	Over application of fertilizers or soil conditioners leading to leaching				x	x				0		1	-	-	Y	EI/04
T24-7	Erosion of soil			x	x					0		1	-	-	Y	EI/04
T24-8	Consumption of water for irrigation	x								0		0	1	-	Y	EI/04

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Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
T24-9	Consumption of supporting structure or protective fences for planting	x								0		0	0	0	N	
T24-10	Consumption of protective cover for grassing	x								0		0	0	0	N	
T24-11	Consumption of landscaping/garden furniture	x								0		0	0	0	N	
T25) Testing																
T25-1	Energy consumption by sampling equipment	x								0		0	0	1	Y	EI/04
T25-2	Noise from sampling equipment					x				1	B1	-	-	-	Y	EI/04
T25-3	Dust emission during sample collection			x	x					1	A3	-	-	-	Y	EI/04
T25-4	Discharge of wastewater arising from sample collection				x		x			1	D1, D3, D8	-	-	-	Y	EI/04
T25-5	Disposal of test cores and debris from site lab		x							1	C1, C4, C16, C17, C19, C20, C22	-	-	-	Y	EI/04
T25-6	Consumption of grout for filling into cavities after testing	x								0		0	1	-	Y	EI/04
T25-7	Consumption of water (e.g. for flushing)	x								0		0	1	-	Y	EI/04
T25-8	Consumption of chemicals (e.g. FEBFLOW, solvent for bituminous road testing)	x								0		0	0	0	N	
T25-9	Discharge of wastewater from site lab				x					1	D1, D3	-	-	-	Y	EI/04
T25-10	Disposal of spent chemicals from site		x							1	C2, C3, C8, C10, C11	-	-	-	Y	EI/04
T26) Bridgeworks																
T26-1	Consumption of cement mortar and grout (cement, sand, water) for bridge bearings and vehicular parapets	x								0		0	1	-	Y	EI/04
T26-2	Consumption of chemical resin mortar for bridge bearings	x								0		0	1	-	Y	EI/04
T26-3	Consumption of prefabricated components for bridge bearings and/or vehicle parapets	x								0		0	1	-	Y	EI/04
T26-4	Consumption of joint units for installation of fabricated movement joints	x								0		0	0	0	N	

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Ref	Environmental Aspects	Potential Environmental Impacts								Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material		Corporate
T26-5	Consumption of bolts for installation of fabricated movement joints	x								0		0	0	0	N	
T26-6	Consumption of joint sealant, joint fillers, etc. for forming moving joints in-situ	x								0		0	0	0	N	
T27) Marine Works																
T27-1	Disturbance to sea bed resulting in increased suspended solid level in water column during dredging, reclamation and construction of marine structure				x			x		0	A23,H2	1	-	-	Y	EI/04
T27-2	Release of contaminated sediment during dredging				x			x		0	A23,H2	1	-	-	Y	EI/04
T27-3	Excessive release of contaminated/uncontaminated mud from grab (e.g. overflow, procedure not followed) during dredging				x			x		0	A23,H2	1	-	-	Y	EI/04
T27-4	Generation of floating debris from dredging		x		x					0	A23,H2	1	-	-	Y	EI/04
T27-5	Consumption of rock fill for reclamation and construction of marine structure	x								0	H2	0	1	-	Y	EI/04
T27-6	Consumption of sand (as fill) for reclamation and construction of marine structure	x								0	H2	0	1	-	Y	EI/04
T27-7	Consumption of prefabricated units for reclamation and construction of marine structure	x								0	H2	0	1	-	Y	EI/04
T27-8	Consumption of other components (steel, rubber units) for reclamation and construction of marine structure	x								0	H2	0	1	-	Y	EI/04
T27-9	Consumption of water for cleaning stone surfaces	x								0	H2	0	0	0	N	
T27-10	Consumption of concrete (for making precast units on site, for seawall construction)	x								0	H2	0	1	-	Y	EI/04, O&T-2006-1
T27-11	Consumption of fenders for reclamation and construction of marine structure	x								0	H2	0	1	-	Y	EI/04
T27-12	Consumption of wood preservatives or protective coatings for construction of marine structure	x								0	H2	0	1	-	Y	EI/04
T27-13	Pollution from ship operations (subcontractor)	x	x	x	x	x		x		0	C7,H2	0	0	1	Y	EI/03
T28) Railway Works																
T28-1	Consumption of ballast for track bed	x								0		0	1	-	Y	EI/04
T28-2	Consumption of prefabricated units for rail tracks, joints and shoulders	x								0		0	1	-	Y	EI/04
T28-3	Consumption of other components (steel, rubber units)	x								0		0	0	0	N	
T28-4	Consumption of concrete (for making precast units on site)	x								0		0	1	-	Y	EI/04, O&T-2006-1
T28-5	Consumption of metals for galvanising rail clips and rail pads	x								0		0	0	0	N	

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Ref	Environmental Aspects	Potential Environmental Impacts									Evaluation of Significance					Operational Control/ O&T Reference	
		Resource Use	Waste Management	Air Emissions	Water Pollution	Noise and Vibrational Effects	Land Contamination	Flora and Fauna	Historic Heritage	Community Impacts	Legal	Relevant EA	Consequences	Material	Corporate		SEA
T28-6	Consumption of sulphur for fixing bolts in sleepers	x									0		0	1	-	Y	EI/04
T28-7	Heating sulphur upon application			x							0		1	-	-	Y	EI/04
T28-8	Consumption of adhesives, lubricants and priming paints for rail tracks	x									0		0	1	-	Y	EI/04
T29) Tunnelling works																	
T29-1	Consumption of water for cooling and dust suppression	x									0		0	1	-	Y	EI/04
T29-2	Consumption of explosive	x									0		0	1	-	Y	EI/04
T29-3	Dust emission from tunnel boring or blasting			x	x						1	A3	-	-	-	Y	EI/04
T29-4	Noise and ground vibration from tunnel boring and blasting					x					1	B1, B2, B6, B8, B9, B11, B12, B16, B17	-	-	-	Y	EI/04
T29-5	Radon release from rock and groundwater			x							0		0	0	0	N	
T29-6	Change in groundwater level							x			0		0	0	0	N	
T30) Temporary Works																	
T30-1	Consumption of new scaffolding materials	x									0		0	1	-	Y	EI/04
T30-2	Consumption of steel sheet piles	x									0		0	1	-	Y	EI/04
T30-3	Consumption of materials for falsework	x									0		0	1	-	Y	EI/04
T30-4	Consumption of acetylene and oxygen for flame cutting (for metal hoardings)	x									0		0	0	0	N	
T30-5	Consumption of welding flux and welding rods	x									0		0	1	-	Y	EI/04
T30-6	Consumption of fixers (nylon ties, bolts, nuts) for scaffolding	x									0		0	1	-	Y	EI/04

Reviewed and Approved by : K.T. Wong

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