Note: Chapters 1 to 2 of the EIA report present the background information of the Project, objectives and scope for various environmental aspects, and description on alternative options and construction description. Chapters 3 to 12 of the EIA report present the EIA findings and mitigation measures are described below with cross-reference to the EIA report. Chapters 13 to 15 describe the environmental monitoring requirements, summary of environmental outcomes and conclusion.

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
Construction	n Dust Imp	act					
S3.4.6	D1	Water spraying every hour on exposed worksites and haul road	Minimise dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	 APCO To control the dust impact to meet HKAQO and TM-EIAO criteria
S3.4.6	D2	The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation	Minimise dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	 APCO To control the dust impact to meet HKAQO and TM-EIAO criteria
\$3.4.6	D3	 The following dust suppression measures should be incorporated to control the dust nuisance throughout the construction phase: Water spraying on any dusty materials before loading and uploading, stockpile of dusty materials, area where demolition works is carried out, area where excavation or earth moving activities are carried out, and any unpaved main haul road Adoption of side enclosure and covering of any aggregate or dusty material storage piles to reduce 	Minimise dust impact at the nearby sensitive receivers	Contractor	All construction sites	Construction stage	 APCO To control the dust impact to meet HKAQO and TM-EIAO criteria

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
		emissions. Where this is not practicable owing to frequent usage, watering shall be used to aggregate fines					
		• Use of regular watering to reduce dust emissions from exposed site surfaces, unpaved roads, dusty construction areas					
		• Provide effective dust screens, sheeting, or netting to enclose any scaffolding built around the perimeter of a building					
		• Prevent placing dusty material storage piles near ASRs					
		• Cover or shelter any stockpile of dusty materials					
		• Provide vehicle washing facilities at all site exits to wash away any dusty materials from vehicle body and wheels before they leave the site					
		• Cover any dusty load on vehicles before they leave the site					
		• Loading, unloading, transfer, handling, or storage of bulk cement or dry pulverized fuel ash shall be carried out in a totally enclosed system or facility, and any vent or exhaust shall be fitted with an effective fabric filter or equivalent air pollution control system					
		• Properly treat exposed earth, such as by compacting or hydroseeding, within 6 months after the last construction activity					
		• When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the Project Site boundary with provision for public crossing					
\$3.4.6	D4	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitoring of dust impact	Contractor	Selected dust	Construction stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
					monitoring stations		
S 3.4.6	D5	A 3m high hoarding at the northern boundary of the Project Site during construction stage.	Minimise dust impact at the nearby sensitive receivers	Contractor	Northern boundary of the Project Site, extent shown in Figure 3.2a .	Construction stage	• APCO
S 3.4.6	D6	When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the Project Site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period	Minimise dust impact at the nearby sensitive receivers	Contractor	Along the Project Site boundary with provision for public crossing	Construction stage	• APCO
Operational	Phase						
\$3.5	D1	Install a deodouriser of 99.5% odour removal efficiency at the proposed Sewage Pumping Station (SPS)	Minimize potential odour nuisance	Operator	At the proposed SPS	Prior to operation of the Project	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
Construction	ı Noise						
S5.4.4	N1	 Implement the following good site management practices: only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme machines and plant (such as trucks, breakers) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby Noise Sensitive Receivers (NSRs) silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works mobile plant should be sited as far away from NSRs as possible and practicable material stockpiles, site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities 	Control construction noise	Contractor	All construction sites	Construction stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved		
S5.4.4	N2	Use of quiet plant which should be made reference to the Powered Mechanical Equipment (PME) listed in the Quality Powered Mechanical Equipment (QPME) / other commonly used PME listed in Environmental Protection Department (EPD) web pages as far as possible which includes the Sound Power Level (SWLs) for specific quiet PME.	Reduce the noise levels of plant items	Contractor	All construction sites	Construction stage	• TM-EIAO		
		Require the Contractor to independently verifies the noise level of the plant proposed to be used and demonstrate that the plant proposed to be used on the Project Site meets the requirements.							
S5.4.4	N3	Install movable temporary noise barriers (typical design is wooden framed barrier with a small-cantilevered upper portion of superficial density no less than 7kg/m^2 on a skid footing with 25mm thick internal sound absorptive lining) in order to achieve a minimum 5 dB(A) reduction for movable plant.	Screen the noisy plant items to be used at all construction sites	Contractor	All construction sites	Construction stage	• TM-EIAO		
S5.4.4	N4	Coordinate with contractors of other concurrent projects such as "Upgrading of Sewage Pumping Station and Sewerage along Ting Kok Road" to schedule and avoid overlapping of major noisy construction activities.	Avoid overlap of noisy activities	Contractor	All construction sites	Construction stage	• TM-EIAO		
S5.4.4	N5	Carry out construction noise monitoring in accordance with the EM&A Manual.	Monitor the construction noise impacts	Contractor	Selected noise monitoring stations	Construction stage	• TM-EIAO		
Operational	Derational Noise (Fixed Noise Sources)								

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
S5.5.4	N6	The maximum allowable sound power level for the planned fixed noise sources should be complied with during the selection of equipment and mitigation measures.	To comply with noise criteria of TM-EIAO and NCO	Operator	The Project Site	Prior to operation of the Project	• TM-EIAO • NCO
\$5.5.4	N7	 For NSRs which are located near to the proposed noise sources, the following noise mitigation measures are considered: All the pumps and noisy plants should be enclosed inside the building structure Proper selection of quiet plant aiming to reduce the tonality at NSRs Installation of silencer/acoustic louvre for the exhaust of ventilation system Openings of ventilation systems should be located away from NSRs as far as practicable and orientated away from the NSRs Installation of absorptive noise barrier (with density of absorption material of 48kg/m³) for the aerator which would duly shield the engine and other noisy parts of the aerator as far as practicable 	To comply with noise criteria of TM-EIAO and NCO	Operator	The Project Site	Prior to operation of the Project	• TM-EIAO • NCO
\$5.5.4	N8	Carry out noise commissioning test for fixed noise sources.	To comply with noise criteria of TM-EIAO and NCO	Operator	Selected noise monitoring stations	Prior to operation of the Project	• TM-EIAO • NCO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
Water Qualit	ty (Constru	action Phase)					
S6.4.3	W1	 General Site Operation To reduce the potential water quality impact due to construction site runoff, the following good site practices in accordance to Practice Note for Professional Persons on Construction Site Drainage, Environmental Protection Department, 1994 (ProPECC PN 1/94) should be implemented to avoid potential adverse water quality impacts: Installation of temporary storage tanks to treat construction surface runoff. Once one of the water storage tanks are completed, use the water storage tank for sedimentation. Construct perimeter cut-off drains to direct off-site water around the site and provide channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers on site to direct stormwater to silt removal facilities. Implementation of dikes or embankments for flood protection and provide temporary ditches to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap. Design efficient silt removal facilities based on the guidelines in Appendix A1 of ProPECC PN 1/94. Schedule construction works to minimize surface excavation works during the rainy seasons (April to September). Complete and vegetate all exposed earth areas as soon as possible after earthworks have been completed. 	To minimise water quality impact from construction site runoff, soil erosion and general construction activities	Contractor	All construction sites where applicable	Construction stage	 WPCO ProPECC PN1/94 TM-EIAO TM-DSS

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
		• Inspect and maintain all drainage facilities and erosion and sediment control structures regularly to ensure proper and efficient operation at all times and particularly following rainstorms.					
		• Implementation of measures to minimize the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, it should be dug and backfilled in short sections wherever practicable.					
		• Cover all construction materials at temporary storage area with tarpaulin or similar fabric during rainstorms and implementation of measures to prevent the washing away of construction materials, soil, silt or debris into any drainage system.					
		• Cover manholes (including newly constructed ones) adequately and seal temporarily to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers.					
		• Take precautions at any time of year when rainstorms are likely. The actions to be taken based on the guidelines in Appendix A2 of ProPECC PN 1/94.					
		• Clean all vehicles and plant before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads and provide adequately designed and sited wheel washing facilities at every construction site exit where practicable.					
		• Provide oil interceptors in the drainage system downstream of any oil/fuel pollution sources. Empty and clean the oil interceptors regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage.					

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
		 Collect, handle and dispose construction solid waste, debris and rubbish on site to avoid water quality impacts. Provide locks for all fuel tanks and storage areas and locate on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby. A 300mm bund wall is also recommended along the seawall. 					
\$6.4.3	W2	 <u>Accidental Spillage of Chemicals</u> To reduce the potential water quality impact due to accidental spillage of chemicals, the following mitigation measures should be implemented to avoid potential adverse water quality impacts: Properly sore and contain the chemicals used during construction, such as fuel, oil, solvents and lubricants in a designated area with secondary containment to prevent spillage and contamination of the nearby water environment. Locate any maintenance activities and workshops with chemicals use away from watercourses on hard standings within a bunded area and provide sumps and oil interceptors as appropriate. The Contractor shall register as a chemical waste producer and employ licensed collector for collection of chemical waste from the construction site. Any chemical waste generated shall be managed in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. 	To minimise water quality impact from accidental spillage of chemicals	Contractor	All construction sites where applicable	Construction stage	• WPCO • TM-DSS

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
S6.4.3	W3	 Sewage from workforce To mitigate the water quality impacts of sewage arising from the on-site construction workers, the following measures should be implemented: Provide temporary sanitary facilities, e.g. portable chemical toilets to collect the sewage. Regular collection by licensed collectors should be arranged. Post notices at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the surrounding environment during the construction phase of the Project. 	To minimise water quality impact from sewage from workforce	Contractor	All construction sites where applicable	Construction stage	• WPCO • TM-DSS
Water Qualit	ty (Operati	onal Phase)					
S.6.5.3	W4	 To reduce the water quality impact from the stormwater bypass to Tolo Harbour, the following mitigation measures are proposed: Design a drainage system to withstand rainstorms of a 50-year return period to reduce the chance of surface overflow. Design water storage tanks with a total volume of 30,000m³ to avoid and limit uncontrolled surface runoff. Proper location of outfall from water storage tanks to minimize the impacts of water pollution to the Water Sensitive Receivers (WSRs) in the vicinity from surface runoff. Installation of standard silt traps in drainage system and implementation of best management practices to reduce the impacts of water pollution from access road runoff. 	To minimize water quality impact from surface runoff and soil erosion	Operator	The Project Site	Detailed design and operational stages	• WPCO • TM-DSS

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
S.6.5.3	W5	 Emergency bypass from Sewage Pumping Station In order to avoid the occurrence for emergency bypass, the design of SPS will be cautiously reviewed to consider additional provisions including as follows: Dual feed power supply or backup power supply facilities such as diesel generator would be provided in case of power failure to sustain the function of pumping and treatment facilities. Standby pumps would be provided in case of unexpected breakdown of pumping facilities such that the standby pumps could take over and function to replace the broken pumps. Sewage tanker vehicles (each vehicle can remove 12m³ of sewage) could also be considered to remove sewage from the SPS to existing public sewer manhole located in front of main entrance of golf development on Ting Kak Paged at dwing among and the set of the second sever and second sever and second sever and the second sever and sever and sever and sever and function to replace the broken pumps. 	To prevent the impact on Tolo Harbour due to the emergency bypass	Operator	The Project Site	Detailed design and operational stages	• DSD's Sewerage Manual

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
Waste Mana	gement (Co	onstruction Phase)					
S7.3.3	WM1	 <u>Good Site Practices</u> The following good site practices are recommended throughout the construction activities: nomination of an approved personnel, such as a site manager, to be responsible for the implementation of good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling provision of sufficient waste disposal points and regular collection for disposal appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors prepare a Waste Management Plan (WMP) in accordance with the ADV-19 Practice Note for Authorized Persons and Registered Structural Engineers on Construction and Demolition Waste, which include the mitigation measures proposed in the EIA and EM&A Manual, and submit to the Engineer for approval 	Ensure proper waste management system throughout the construction	Contractor	The Project Site	Construction stage	• WDO • ADV-19

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
\$7.3.3	WM2	 <u>Waste Reduction Measures</u> Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to achieve reduction: segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling of materials and their proper disposal proper storage and site practices to minimize the potential for damage and contamination of construction materials plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable portions (i.e. soil, broken concrete, metal etc.) provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling 	Reduce waste generation	Contractor	The Project Site	Construction stage	• WDO
\$7.3.3	WM3	 <u>Storage, Collection and Transportation of Waste</u> The following recommendation should be implemented to minimize the impacts: non-inert C&D materials such as top soil should be handled and stored well to ensure secure containment of the materials stockpiling area should be provided with covers and water spraying system to prevent materials from windblown or being washed away 	Minimise impact to the environment due to storage, collection and transport of waste	Contractor	The Project Site	Construction stage	 WDO Land (Miscellaneous Provisions) Ordinance

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
		• different locations should be designated to stockpile each material to enhance reuse					
		• remove waste in timely manner					
		• employ the trucks with cover or enclosed containers for waste transportation					
		• obtain relevant waste disposal permits from the appropriate authorities					
		• disposal of waste should be done at licensed waste disposal facilities					
		• all dumping trucks engaged on site be equipped with GPS or equivalent system for tracking and monitoring of their travel routings and parking locations by Environmental Team (ET) and Independent Environmental Checker (IEC) to prohibit illegal dumping and landfilling of materials					
		• keep record and analysis of data collected by GPS or equivalent system relating to travel routings and parking locations of dump trucks engaged on site					
\$7.3.3	WM4	 <u>C&D Materials</u> Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at public fill reception facilities areas or reclamation sites. The following mitigation measures should be implemented in handling the C&D materials: maintain temporary storage locations and reuse excavated fill material for backfilling 	Minimise waste impacts from C&D materials	Contractor	The Project Site	Construction stage	 Land (Miscellaneous Provisions) Ordinance WDO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
		• make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate					
		• implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified					
		The recommended C&D materials handling should include:					
		• on-site sorting of C&D materials					
		• reuse of C&D materials					
		The acceptance criteria of inert C&D materials to public fill reception facilities are subject to the fill management authority of CEDD.					
\$7.3.3	WM5	Use of Standard Formwork and Planning of Construction Materials purchasing	Reduce waste generation	Contractor	The Project Site	Construction stage	• N/A
		• Standard formwork should also be used as far as practicable to minimise the arising of non-inert C&D materials					
		• Use of more durable formwork (e.g. metal hoarding) or plastic facing should be encouraged in order to enhance the possibility of recycling					
		• Purchasing of construction materials should be carefully planned in order to avoid over ordering and wastage					
S7.3.3	WM6	 <u>General Refuse</u> General refuse should be stored in enclosed bins separately from construction and chemical wastes. 	Minimise production of the general refuse and avoid odour, pest and litter impacts	Contractor	The Project Site	Construction stage	• WDO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
		 Recycling bins should also be placed to encourage recycling Preferably enclosed and covered areas should be provided for general refuse collection and routine cleaning for these areas should also be implemented to keep areas clean A reputable waste collector should be employed to remove general refuse on a daily basis 					
\$7.3.3	WM7	Chemical Waste Reduce the generation quantities or select a chemical type of less impact on environment, health and safety as far as possible If chemical wastes are produced at the construction site, the Contractors should register with EPD as chemical waste producer. Chemical wastes should be stored in appropriate containers and collected by a licensed chemical waste collector. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation	Control the chemical waste and ensure proper storage, handling and disposal	Contractor	The Project Site	Construction stage	 Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Waste

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
S7.3.3	WM8	<u>Felled Trees, Twigs and Branches</u> Felled trees, twigs and branches can be shredded into smaller particles of appropriate size which can be used as mulch. Mulch is applied to the soil surface modifying the soil environment and enhancing plant growth.	Reduce waste generation	Contractor	The Project Site	Construction stage	• N/A
Waste Mana	igement (C	Operational Phase)					
S7.4.3	WM9	<u>General Refuse</u> General refuse should be collected on a daily basis and delivered to the refuse transfer station accordingly. A reputable waste collector should be employed to remove general refuse regularly to avoid odour nuisance or pest/vermin problem. Sufficient recycling containers are recommended to be provided at suitable locations to encourage recycling of waste such as aluminium cans, plastics and waste paper.	Minimise production of the general refuse and avoid odour, pest and litter impacts	Operator	The Project Site	Operational stage	• WDO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
S7.4.3	WM10	 <u>Chemical Waste</u> If chemical wastes are expected to be produced during the operational phase, the Project Proponent should register with the EPD as a chemical waste producer and follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidising, irritant, toxic, harmful, corrosive, etc. Licensed chemical waste collector should be deployed to transport and dispose of the chemical wastes at the approved CWTC or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. 	Control the chemical waste and ensure proper storage, handling and disposal	Operator	The Project Site	Operational stage	 Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Waste

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
Land Conto	umination (Operational Phase)					
S8.9.1	LC1	Agrochemical Management All pesticides used on the golf course must be registered under the Pesticide Ordinance and be used by person with valid Pesticides Permit. The application, handling and storage of pesticides should follow AFCD's Code of Practice for the Safe and Efficient Use of Pesticides on Sports Turf, A Guide to Labelling of Pesticide and Safety Guidelines for Storage of Pesticides respectively, and the disposal of pesticides should follow the Waste Disposal (Chemical Waste) (General) Regulation as well as EPD's A Guide to the Chemical Waste Control Scheme.	Minimise the risk of chemicals from contaminating the land	Operator	The Project Site	Operational stage	 PO Waste Disposal (Chemical Waste) (General) Regulation Code of Practice for the Safe and Efficient Use of Pesticides on Sports Turf A Guide to Labelling of
							 Pesticide Safety Guidelines for Storage of Pesticides A Guide to the Chemical Waste Control Scheme

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
S8.9.1	LC2	<u>Chemical Spillage Control</u> In case of any chemical spillage, the operator should follow the instruction of the labels and take precautionary measures before handling the spillage. With reference to EPD's Code of Practice for the Packaging, Labelling and Storage of Chemical Wastes, in incidents where the spillage may result in significant contamination of an area or risk pollution, EPD should be informed immediately.	Minimise the risk of chemicals from contaminating the land	Operator	The Project Site	Operational stage	 Waste Disposal (Chemical Waste) (General) Regulation Code of Practice for the Packaging, Labelling and Storage of Chemical Wastes
S8.9.1	LC3	Environmental Conscious Turfgrass Management Plan (TMP) In order to prevent the agrochemicals from contaminating the land, an Environmental Conscious Turfgrass Management Plan (TMP) would be developed during the detailed design stage. The outline of the TMP is presented in Section 2.7 of the EIA Report. Details on the application, handling and storage of agrochemicals as well as measures to be carried out in the occurrence of chemical spillage will be provided in the TMP. The TMP will be prepared by the future operator and submitted to EPD as one of the EP conditions.	Prevent the agrochemicals from contaminating the land	Operator	The Project Site	Operation stage	 PO Waste Disposal (Chemical Waste) (General) Regulation Code of Practice for the Safe and Efficient Use of Pesticides on Sports Turf A Guide to Labelling of Pesticide Safety Guidelines for Storage of

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
							Pesticides • A Guide to the Chemical Waste Control Scheme
							Code of Practice for the Packaging, Labelling and Storage of Chemical Wastes

EIA EM Ref. Log	I&A g Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
Landfill Gas Haz	Landfill Gas Hazards (Construction Phase)						
\$9.3.7 LFC	G1	 <u>General Site Safety</u> Appointment of Safety Officer, who has been trained in use of gas detection equipment and LFG related hazards, should be present on site throughout the ground works phase. The Safety Officer should be provided with an intrinsically safe portable instrument appropriately calibrated and capable of measuring the following gases: CH4: 0-100% LEL and 0-100% v/v; CO₂: 0-100% v/v; and O₂: 0-100% v/v. Those staff who work in, or have responsibility for "at risk" areas, including all excavation workers, supervisors and engineers working within the Consultation Zone, should receive appropriate training on working in areas susceptible to LFG, fire and explosion hazards. An excavation procedure or code of practice to minimise LFG related risk should be devised and carried out by the Safety Officer. No worker should be allowed to work alone at any time in or near to any excavation. At least one other worker should be available to assist with a rescue if needed. Smoking, naked flames and other source of ignition should be prohibited within 15m of any excavation or ground-level confined space. "No Smoking", "No 	Minimise the risk of LFG hazards to personnel in landfill site	Contractor	The Project Site	Construction stage	 Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/97) F&IU (Confined Spaces) Regulations Code of Practice on Safety and Health at Work in Confined Spaces

EIA Ref.	EM&A Log Ref		Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
			notices in Chinese and English should be posted prominently around the Project Site.					
		•	Welding, flame-cutting or other hot works may only be carried out in trenches or confined spaces when controlled by a "permit to work" procedure, properly authorised by Safety Officer.					
		•	Ground level construction plant should be fitted with vertical exhausts at least 0.6m above ground level and with spark arrestors.					
		•	Any electrical equipment, such as motors and extension cords, should be intrinsically safe.					
		•	During piping assembly or conduiting construction, all valves/seals should be closed immediately after installation. As construction progresses, all valves/seals should be closed as installed to prevent the migration of gases through the pipeline/conduit. All piping/conduiting should be capped at the end of each working day.					
		•	Frequency and location of LFG monitoring within excavation area should be determined prior to commencement of works. LFG monitoring in excavations should be conducted at no more than 10mm from exposed ground surface.					
		•	Temporary facilities such as mobile site offices, equipment stores, mess rooms etc. should be raised clear of the ground. If buildings are raised clear of the ground, a minimum, clear separation distance (as measured from the highest point on the ground surface to the underside of the lowest floor joist) should be 500mm.					

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
		• Adequate fire extinguishers and breathing apparatus sets should be made available on site and appropriate training given in their use.					
		• Fire drills should be organised at not less than six months intervals.					
S9.3.7	LFG2	 <u>Site Safety for Drilling</u> Specialist Contractor should provide proper personal protective equipment (PPE) to the construction workers. 	Minimise the risk from drilling to personnel in landfill site	Contractor	The Project Site	Construction stage	
		• The following safety equipment shall also be provided by Specialist Contractor at all times during the drilling:					
		 no smoking signs, to be placed prominently adjacent to the drilling area; 					
		• portable fire extinguisher;					
		• high visibility clothing to be worn by all drilling operatives; and					
		• additional protective clothing should include stout industrial boots (with steel toe cap and insole), plastic hard hats, heavy duty waterproof industrial groves.					
		• When drilling on landfill sites, all spoil obtained from the borehole should be stockpiled alongside the borehole and disposed of (to an appropriately licensed disposal site) at the end of the working day. At the end of the working day all vehicles, the drilling rig and any hand tools should be hosed-down with clean water to remove deposits of excavated spoil. Suitable guards or barriers should be placed around the excavation or borehole to prevent access by unauthorised persons.					

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		•	One person should be present at all times during drilling operations, with the sole responsibility of assuring the observance of all safety procedures. This person should be trained in the use of all recommended safety equipment.					
		•	Smoking should be prohibited anywhere on a landfill site and within 15 metres of a boring or excavation at any locations within the Consultation Zone.					
		•	For large diameter boreholes, a working platform should be placed over the hole which will prevent accidental entry into the hole by operatives.					
		•	No worker should be allowed to work alone at any time near the edge of the well under construction. Another worker should always be present, beyond the area considered to be subject to the possible effects of landfill gas or cave-in.					
		•	Periodically during the well construction, the work areas should be monitored for levels of methane.					
		•	If the well construction is not completed by the end of the working day, the hole should be covered with a plate of sufficient overlap to prevent access to the hole and sufficient structural strength to support expected loads. The plate should be weighted down to discourage removal and, on landfill sites, the edges of the plate should be covered with sufficient depth of wet soil to prevent escape of gas.					
		•	All pipes or casings should be capped at the end of each working day.					
		•	Engine-driven rigs should have vertical exhaust stacks discharging not less than 1.5m above ground level and					

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		 should have speed limits to prevent engine run away on ingested gas. Diesel engine air-intakes should also be located not less than 1.5m above ground level. Any electrical equipment should be intrinsically safe. 					
\$9.3.7	LFG3	 Site Safety for Well Installation To prevent uncontrolled gas release and to protect personnel from the risk of falling into the borehole, the open borehole should be covered with a sheet or plate strong enough to support personnel and having an overlap all round the borehole. The drilling rig, boring machine or excavator should remain in place over the borehole and could be used as a support to assist placement of the casing. The upper end of the well casing should be sealed, preferably with a fused or screwed end cap or alternatively with an inflatable bag type flow stopper, until the permanent headworks/monitoring tap is fitted. Landfill gas must not be allowed to vent freely at the site surface. 	Minimise the risk of LFG hazards to personnel in landfill site	Contractor	The Project Site	Construction stage	
Landfill Ga	s Hazards (Operational Phases)					
S9.4.6	LFG4	 Development Protection Design Specified LFG protection measures which can be applied to building design have been mentioned in Section 9.4.6 of the EIA Report. They generally include active gas control, semi-active gas control, passive control, gas detection system, and good site management. 	Cut off any LFG migration from the restored Shuen Wan Landfill to the targets.	Project architects	The Project Site	Design and planning stage	• Landfill Gas Hazard Assessment Guidance Note (EPD/TR8/ 97)

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		• For building services including pipes and underground utilities, protection measures, such as LFG barriers, gas vents and location of service entry point above ground, should be considered wherever appropriate.					• F&IU (Confined Spaces) Regulation
S9.4.6	LFG5	 Entry Safety Procedures (Confined Space) In confined spaces which is large enough to permit access to, personnel should be subject to entry safety procedures as stipulated in the Factory and Industrial Undertakings (F&IU) (Confined Spaces) Regulation. 	Minimise the risk of LFG hazards to personnel in landfill site	Operator	The Project Site	Operational stage	• Code of Practice on Safety and Health at Work in Confined Spaces
		• A permit-to-work system for entry into confined spaces should be developed by appropriate qualified person such as Safety Officer who is consistently employed.					
		• When work is being undertaken in confined spaces, sufficient approved resuscitation equipment, breathing apparatus and safety torches should be available.					
		• The entry or access point should be clearly marked with a warning notice (in English and Chinese) which states that there is the possibility of flammable and asphyxiating gas accumulating within.					
		• The warning notice should also give the telephone number of an appropriate competent person who can advise on the safety precautions to be followed before entry and during occupation of the manhole.					
		• Prior to entry, the atmosphere within the chamber should be checked for the levels of methane, carbon dioxide and oxygen. The chamber may then only be entered if oxygen is greater than 18% v/v, methane is less than 10% of the LEL (0.5% v/v) and carbon dioxide is less than 0.5% v/v.					

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		• If either carbon dioxide or methane is higher, or oxygen lower, than the values given above, then entry to the chamber should be prohibited and expert advice sought.					
		• Even if conditions are safe for entry, no worker should be permitted to enter the chamber without having another worker present at the surface. The worker who enters the chamber should wear an appropriate safety/recovery harness and be provided with a portable methane, carbon dioxide and oxygen metre.					

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Ecology (Co	nstruction	Phase)					
\$10.9.2.21- \$10.9.2.27, \$10.9.2.31- \$10.9.2.33	EC1	Preservation of existing tree groups at various locations within the Project Site, covering some of the tree groups used by Collared Crow and Black Kite as roosting sites. These included a major tree group at the southern end of the Project Site which was more frequently used by Collared Crows.	Minimise impacts due to loss/disturbance of night roosts of Collared Crow and Black Kite	Project Proponent	The Project Site	Design and planning stage	• TM-EIAO
S10.9.2.30	EC2	Erection of protective fencing without foundations for the major preserved tree groups	To further protect the preserved tree groups from construction disturbance	Construction contractor	Around the major preserved tree groups	Construction phase	• TM-EIAO
S10.9.2.34- S10.9.2.36	EC3	Phasing of construction works and works areas	To minimise duration of impact	Construction contractor	Works area	Construction phase	• TM-EIAO
S10.9.2.37	EC4	The use of powered mechanical equipment will be stopped at one hour before sunset at Area 3, eastern part of area 2 and the Ancillary Facilities	To minimise the construction phase impact to utilisation of the preserved plantations by Collared Crow and Black Kite as night roosts	Construction contractor	Works area	Construction phase	• TM-EIAO
S10.9.2.38;	EC5	In situ preservation of the two individuals of Incense Tree <i>Aquilaria sinensis</i> recorded within the Project Site Should further individuals of Incense Trees be found and having direct conflict with the golf course layout, preparation of transplantation plan prior to site formation;	To minimise the construction phase impact to this plant species of conservation importance	Construction contractor	Works area	Prior to commencement of Phase 1 site formation	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved
\$10.9.2.35; \$10.9.3.1- \$10.9.3.5	EC6	Planting of new trees: Upon completion of site formation at each phase, landscape planting will be implemented immediately before the beginning of next phase such that new tree groups aiming for roosting site provision will be planted before site clearance in the next phase.	To compensate plantation loss and provide roosting sites for Black Kite and Collared Crow	Construction contractor	The Project Site	Construction stage	• TM-EIAO
\$10.9.1.3	EC7	There will be no marine works and marine traffic arising from the Project to avoid potential impact on the marine habitats of conservation importance (e.g. Ting Kok SSSI).	Avoid impact to the marine habitats of conservation importance	Project Proponent and Contractor	Marine waters of Tolo Harbour	Design and planning stage, construction stage	• N/A
S10.9.2.39	EC8	Implementation of good site practices as described in Practice Note for Professional Persons on Construction Site Drainage, EPD, 1994 (ProPECC PN 1/94).	Minimise potential impact to marine ecology	Project Proponent and Contractor	Works area	Construction stage	• ProPECC PN 1/94
S10.9.2.40	EC9	A temporary drainage system should be installed to intercept all construction runoff and divert it to water storage tanks.	Minimise potential impact of runoff to marine ecology	Project Proponent and Contractor	Works area	Construction stage	• N/A
S10.9.2.42	EC10	Schedule construction works to minimise surface excavation works during the rainy seasons (April to September). Complete and vegetate all exposed earth areas as soon as possible after earthworks have been completed.	Minimise potential impact of runoff to marine ecology	Project Proponent and Contractor	Works area	Construction stage	• N/A
S10.11.1.1	EC11	During construction phase, roost surveys should be conducted on the Project Site to monitor utilisation of the preserved tree groups by Collared Crow and Black Kite.	Verification of the effectiveness of the mitigation measures to marine ecology	Project Proponent and Contractor	Preserved and new planting plantation	Construction stage	• N/A
S10.7.2.1 – S10.7.2.6	EC12	The mitigation mentioned in water quality impact assessment should be implemented to avoid/ minimize impact to marine ecology due to deterioration of water quality.	Minimize potential impacts to marine ecology	Project Proponent and Contractor	Marine waters of Tolo Harbour	Construction stage	• See water quality chapter

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S10.11.2.1	EC13	Site inspections and water quality monitoring during construction phase shall be carried out to monitor any malpractice leading to deterioration of water quality of the surrounding which may in turn affect marine ecology.	Verification of the effectiveness of the mitigation measures to marine ecology	Project Proponent and Contractor	Marine waters of Tolo Harbour	Construction stage	• See water quality chapter
Ecology (Op	perational _l	phase)					
S10.9.3.3	EC14	Plantation works incorporated with bird-attracting and butterfly-attracting plant species	The new plantation areas will provide higher ecological functions than the existing plantation which are of low diversity	Management company	The Project Site	Operation stage	• TM-EIAO
S10.9.2.44	EC15	A drainage system will be designed to collect surface runoff from turf area and landscaped areas, which will be collected by surface channels and diverted to the water storage tanks.	Minimise potential impact of runoff to marine ecology	Project Proponent	Turf area	Design and planning stage, operational stage	• See water quality chapter
\$10.9.2.45- \$10.9.2.47	EC16	Management practices provided by the future Turfgrass Management Plan	Reduce the amount of agrochemical application and thus the residual agrochemicals	Management company	The Project Site	Operation stage	• N/A
S10.9.2.48- S10.9.2.49	EC17	Management practices on the water storage and usage provided by Water Management Plan	Reduce the bypass of rainfall and thus the residual agrochemicals to Tolo Harbour	Management company	The Project Site	Operation stage	• N/A
S10.11.1.2	EC18	Collared Crow and Black Kite roost surveys are recommended to be carried out at least monthly for first year operations of the Project to review the status of these bird species of conservation importance.	Verification of the effectiveness of the mitigation measures to terrestrial ecology	Management company	The Project Site	Operation stage	• N/A

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S10.11.2.1	EC19	Water monitoring are also required during operational phase to verify the prediction of no anticipated adverse impact.	Verification of the effectiveness of the mitigation measures to marine ecology	Management company	Marine waters of Tolo Harbour	Operation stage	• See water quality chapter

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Fisheries (Co	onstruction	n phase)					
S11.8.2.1 - S11.8.2.6	F1	The mitigation mentioned in water quality impact assessment should be implemented to avoid/ minimize impact to fisheries resources due to deterioration of water quality.	Minimize potential impacts to fisheries resources	Project Proponent and Contractor	Marine waters of Tolo Harbour	Design and planning stage, construction stage	 See water quality chapter
S11.10.1.1	F2	Site inspections during construction phase shall be carried out at least once per week to monitor any malpractice leading to deterioration of water quality of the surrounding which may in turn affect the fisheries resources. The proposed construction phase water quality monitoring programme stated in Section 6 should cover the closest FCZ (i.e. Yim Tin Tsai FCZ)	Verification of the effectiveness of the mitigation measures to fisheries resources	Project Proponent and Contractor	Marine waters of Tolo Harbour	Construction stage	 See water quality chapter
Fisheries (Op	erational _l	phase)					
S11.8.2.7 – S11.8.2.12	F3	The mitigation mentioned in water quality impact assessment should be implemented to avoid/ minimize impact to fisheries resources due to deterioration of water quality.	Minimize potential impacts to fisheries resources	Project Proponent	Marine waters of Tolo Harbour	Operational stage	• See water quality chapter
S11.10.1.1	F4	The proposed operational phase water quality monitoring programme stated in Section 6 should cover the closest FCZ (i.e. Yim Tin Tsai FCZ)	Verification of the effectiveness of the mitigation measures to fisheries resources	Management company	Marine waters of Tolo Harbour	Operation stage	• See water quality chapter

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Landscape	(Constructio	on Phase) (Scenario 1 and Scenario 2)					
\$12.9.5	CP1	Preservation of Existing Vegetation					
S12.9.5	CP1.1	Avoid disturbance to the existing trees and vegetation as far as practicable within the Project Site.	Coordinate with the Project layout and design of the engineering and architectural works to minimise the disturbance on existing trees.	Project Architect/ Landscape Architects (Detailed Design Consultant)/ Contractor	The Project Site	Design and planning stage, construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.5	CP1.2	Creation of "Tree Protection Zone" around trees/tree groups to be retained and to be fenced off from construction works.	To ensure the success of the tree preservation proposals.	Contractor	Site area with preserved trees	Set up at the areas with preserved trees before construction works commence and maintained throughout construction phase	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.5	CP1.3	Prohibition of the runoff from construction activities, the storage of materials including fuel, the movement of construction vehicles, and the refuelling and washing of equipment including concrete mixers within the Tree Protection Zone.	To ensure the success of the tree preservation proposals.	Contractor	The Project Site	Construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A

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S12.9.5	CP1.4	All works affecting the trees identified for retention and transplantation will be carefully monitored. This includes the key stages in the preparation of the tree transplanting, the implementation of protection measures and health monitoring throughout the construction period.	To ensure the success of the tree preservation proposals.	Contractor	The Project Site	Construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.5	CP1.5	Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval.	To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that the landscape resources are preserved where appropriate.	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stages	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.5	CP1.6	The tree preservation works should be implemented by qualified softworks contractor. Works will be inspected by a competent person of the ET. A tree protection specification would be included within the contract documents.	To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that the landscape resources are preserved where appropriate.	Project Proponent/ Project Management Team	The Project Site	Design and planning stage, construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN No. 7/2007& 7/2007A

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S12.9.5	CP2	Implementation of Mitigation Planting and Planting Species Selection					
S12.9.5	CP2.1	Replanting of existing/disturbed vegetation will be undertaken at the earliest possible stage of the construction phase of the Project.	To minimise the disturbance to existing landscape resources and minimise the impacts on the visual amenity of the area.	Contractor	The Project Site	After the site formation or when planting area is ready	• TM-EIAO
\$12.9.5	CP2.2	Predominantly use of native or locally adopted tree species supplement with ornamental species and broadleaf plant species in the planting design.	To enhance the local landscape and ecological value.	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.5	СР2.3	Proposed mitigation planting will not only be limited to conventional amenity planting, but also consider alternative greening measures such as vertical greening for screening and softening of the built structures and green roof on built structures for enhancing the visual amenity. Small shrub, climbing plants, turf and groundcover shall be used in specific locations where technically feasible.	To maximise the greening opportunities and screening effects.	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.5	CP2.4	The tree planting works should be implemented by qualified softworks contractor and inspected by the ET/competent person with horticultural works experiences. A tree planting specification would be included within the contract documents.	To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that valuable landscape.	Project Proponent/ Project Management Team/ Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage, construction stage	• TM-EIAO

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\$12.9.5	СР3	Transplantation of Existing Trees					
S12.9.5	СРЗ.1	The tree transplanting works should be implemented by qualified softworks contractors and inspected by the ET/competent person with horticultural works experiences. A tree protection / transplanting specification would be included within the contract documents.	To ensure the success of tree transplanting.	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage, construction stage	• TM-EIAO
S12.9.5	СРЗ.2	Approximately 326 nos. existing trees to be transplanted, majority of them shall be relocated to future planting areas within the Project Site near the preserved trees.	To retain their contribution to the local landscape context.	Project Landscape Architect (Detailed Design Consultant)/ Contractor	The Project Site	Design and planning stage, construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.5	СРЗ.З	Trees will be directly transplanted to the final recipient site. Advance tree transplanting works before construction or at early stage of construction phase.	To enhance the survival rate of the transplanted trees.	Project Landscape Architects (Detailed Design Consultants)/ Contractor	The Project Site	Construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
\$12.9.5	CP3.4	Phased segmental root pruning for preparation of tree transplanting over a suitable period (determined by species and size).	To ensure the success of tree transplanting.	Contractor	The Project Site	Construction stage and advance tree transplanting work stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A

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S12.9.5	CP3.5	Pruning of the branches of transplanted trees to be based on the principle of crown thinning that would maintain their original tree form and amenity value.	To ensure the success of tree transplanting.	Contractor	The Project Site	Construction stage and advance tree transplanting work stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.5	СРЗ.6	The implementation programme for the Project will reserve enough time for the advance tree transplanting preparation works.	To enhance the survival rate of the transplanted trees.	Project Landscape Architect (Detailed Design Consultant)/ Contractor	The Project Site	Design and planning stage, construction stage	• TM-EIAO
S12.9.5	СР3.7	Detailed tree transplanting proposals will be submitted to the relevant government departments for approval.	To enhance the survival rate of the transplanted trees.	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage, construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
\$12.9.5	CP4	Minimisation of Topographical Changes					
\$12.9.5	CP4.1	Potential impact on slope profile of the Project Site will be minimised as far as possible through import of soil mix for necessary site levelling of golf playing area and association of planting works and to minimise adding extensive loading and affect the protective layer of land fill underneath.	To reduce the impact on the existing landscape resource and minimise tree felling.	Project Engineer/ Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO

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\$12.9.5	CP5	Protection of Coastline					
S12.9.5	CP5.1	The existing coastline will be maintained without any alteration. Responsive access road alignment of using the existing maintenance track at seashore to minimise disturbance of vegetation and the coastline.	To reduce the impact on the existing landscape resource.	Project Engineer/ Architect (Detailed Design Consultant)	The Project Site	Design and planning stage, construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
Landscape	(Operationa	el Phase) (Scenario 1 and Scenario 2)					
S12.9.6	OP1	Roadside and Amenity Planting					
S12.9.6	OP1.1	The planting proposals will predominantly utilise native or locally adopted tree species, supplement with ornamental species and broadleaf trees in combination of wind and salinity tolerant plant species along access road and in proposed landscape buffer to soften the horizontal emphasis of fence wall. It will form a continuous landscape buffer at the periphery of the Project Site in combination with tree preservation proposal.	Provide a linkage with the existing roadside and waterfront landscape context and create a more coherent landscape framework	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.6	OP1.2	Enough soil depth of 1200mm will be reserved for tree planting to ensure healthy planting establishment. High clearance tree planting will be utilised alongside of internal road and not to interfere the EVA requirement.	Healthy Tree Establishment	Project Landscape Architect (Detailed Design Consultant)/ Project Proponent	The Project Site	Design and planning stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A

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S12.9.6	OP1.3	Larger size of tree stock will be planted at strategic location.	To create instant greening effect and landscape vista	Project Landscape Architect (Detailed Design Consultant)/ Project Proponent	The Project Site	Design and planning stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.6	OP1.4	The implementation of new planting shall be undertaken as soon as technically feasible after completion of road and building works upon works completion in phase and planting area are ready to ensure the effectiveness of this mitigation during operational phase.	To enhance the greening effect and shortening the duration of impact.	Contractor	The Project Site	Construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.6	OP2	Compensatory Planting Proposals					
S12.9.6	OP2.1	Utilise all available spaces for new tree and shrub planting to create a comprehensive landscape framework which is connected to areas of retained and preserved vegetation and designed to integrate the proposals within their future landscape setting.	To restore and enhance the local landscape context and ecological value.	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.6	OP2.2	The new planting will be maintained in accordance with good horticultural practice in order to realise the objectives of the mitigation measures. This includes the replacement of defective and invasive plant species in the new planting areas to enhance the aesthetic, landscape and ecological quality of the context.	To restore and enhance the local landscape context and ecological value.	Contractor	The Project Site	Construction stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A

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S12.9.6	OP2.3	The planting proposals for the Project will achieve compensatory planting ratio of minimum 1:1 (Total number of tree loss: Total number of compensatory trees and whips) in term of quantity. The Project has sought to preserve approximately 2,200 existing trees (19.6%) through retention in their current locations or tree transplanting and plant 4,180 compensatory trees and 4,818whips. Upon the completion of the tree preservation and planting proposal, proposed development could accommodate approximately 11,198 trees in combination of tree preservation and new tree /whips planting, which will formulate a landscape context with good quality.	To compensate the loss of existing trees and restore the landscape context.	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.6	OP2.4	New tree planting will utilise various tree stock sizes from heavy standard to light standard in general landscape and roadside planting areas. Smaller planting stock, such as whips, will be used on slope/ landscape buffer. Large (mature) tree stock / feature trees will be utilised at selected locations, around the lakeside areas and alongside of the access road at where possible.	To ensure the planting proposals will create a naturalistic effect that responds to the existing and planned landscape context.	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A
S12.9.6	CP2.5	Detailed compensatory planting proposals will be submitted to the relevant government departments for approval.	To ensure the loss of trees will be properly compensated.	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	 TM-EIAO DEVB TCW No. 7/2015 LAO PN Nos. 7/2007& 7/2007A

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12.9.6	OP3	Design of Engineering Structures					
S12.9.6	OP3.1	Alternative greening measures including greening on the roof and/or vertical greening on the structures and the retaining wall will be used wherever possible to disguise their function appearance in both medium and long distance views and maximise the greening opportunities.	To ensure the proposals are integrated with the existing landscape and visual context, and avoid cluster effect.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.6	OP3.2	Treatment of slopes should be aesthetically enhanced through the use of soft landscape works including tree and shrub planting to give man-made slopes a more natural appearance blending into the local rural landscape.	To ensure the proposals are integrated with the existing landscape and visual context, and avoid cluster effect.	Project Engineer and Architect/ Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.6	OP4	Creation of Landscape Buffer					
S12.9.6	OP4.1	Predominantly planting native or locally adopted tree species and shrub planting to create of landscape buffer.	To enhance the aesthetic and landscape diversity of the local context.	Project Architect/ Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.6	OP4.2	Treatment of retaining walls should be aesthetically enhanced through the use of soft landscape works including tree and shrub planting	To create a more natural appearance blending into the local rural landscape	Project Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	ObjectivesoftheRecommendedMeasures& MainConcerns to address	Implementation Agent	Location	Implementation Stage	Requirements and / or standards to be achieved
S12.9.6	OP5	Creation of Landscape Ponds / Lakes / Water Features					
S12.9.6	OP5.1	Introduction of ponds/lakes will create watered habitat and plantation.	To enhance landscape amenity and biodiversity of the context.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location	Implementation Stage	Requirements and / or standards to be achieved
Visual (Con	nstruction P	hase) (Scenario 1 and Scenario 2)					
S12.9.7	CPV1	Preservation of Existing Vegetation					
S12.9.7	CPV1.1	The tree preservation proposals will coordinate with the layout and design of the engineering and architectural layout at detailed design stage.	To provide instant greening and screening effect for the Project	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.7	CPV2	Works Area and Temporary Works Areas					
S12.9.7	CPV2.1	The landscape of the works areas will be restored to their original condition or enhanced through the introduction of new amenity planting areas following the completion of the construction phase or in phase when the planting areas are ready	To minimise the duration of impact.	Contractor	The Project Site	Construction stage	• TM-EIAO
S12.9.7	CPV2.2	Optimise the construction sequence and construction programme.	To minimise the duration of impact.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)/ Project Management Team	The Project Site	Construction stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location	Implementation Stage	Requirements and / or standards to be achieved
S12.9.7	CPV2.3	Construction site controls will be enforced including the storage of materials, the location and appearance of site accommodation and site storage; and the careful design of site lighting.	To minimise the source of visual impact.	Contractor/ Project Management Team	The Project Site	Construction stage	• TM-EIAO
S12.9.7	CPV2.4	Hoarding designed with recessive colour shall be set up around the construction site providing screening effect for the construction works.	To minimise disturbance to the visual context.	Contractor/ Project Management Team	The Project Site	Construction stage	• TM-EIAO
S12.9.7	CPV2.5	The site office or temporary above-ground structures shall be sited at less visual prominent locations.	To minimise the source of visual impact.	Contractor/ Project Management Team	The Project Site	Construction stage	• TM-EIAO
\$12.9.7	CPV3	Coordination with Concurrent Projects					
S12.9.7	CPV3.1	Coordinated implementation programme with concurrent projects.	To minimise cumulative impacts to the visual context	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)/ Contractor	The Project Site	Design and planning stage, construction stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location	Implementation Stage	Requirements and / or standards to be achieved
Visual (Ope	erational Ph	ase) (Scenario 1 and Scenario 2)					
S12.9.8	OPV1	Responsive Design of Buildings					
S12.9.8	OPV1.1	Integrated Design Approach The design of the proposed building structures, access road and utilities will incorporate following features as part of visual mitigation measures. The disposition and height profile of the building and above ground utilities structures at less visually prominent location respond to the seashore context. Design measures include the low profile and small building mass to reduce the apparent visual mass and to enhance the sense of visual integration with the existing low profile context.	To soften the development mass and enhance their visual integration within the future landscape context.	Project Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.8	OPV1.2	<u>Building Treatment</u> The architectural design seeks to reduce the apparent visual mass of the structures further through the use of recessive colour palette and earth sheltered design approach. Incorporation of alternative greening measures such as green roof /vertical greening on built structures where condition allows and particularly at where fronting to the public realm and waterfront. Non-reflective finishes also recommended to reduce the potential glare effect.	To restore and enhance existing landscape context and visual amenity.	Project Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location	Implementation Stage	Requirements and / or standards to be achieved
S12.9.8	OP2	Design of Engineering Structures					
S12.9.8	OPV2.1	Particularly attention on the design, the appearance and construction methods of the structures of proposed engineering structures such as fence wall, retaining wall, slope regarding and utilities installation.	To ensure the Project are integrated with the existing landscape and visual context.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.8	OPV2.2	The architect and landscape consultant shall work in liaison with the engineer on the aesthetic aspects of the structures and their relationship with the landscape and built structures.	To ensure the Project is integrated with existing landscape and visual context.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.8	OPV2.3	Alternative greening measures including greening on the roof and/or vertical greening on the structures and on regarded sloping areas will be used wherever possible.	To disguise function appearance of built structures in both medium and long distance views and maximise the greening opportunities.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location	Implementation Stage	Requirements and / or standards to be achieved
S12.9.8	OPV2.4	Tree preservation, new tree planting and alternative greening measures on and adjacent to the engineering structures	To create an instant greening effect soften the visual mass. To ensure the Project is integrated with the existing landscape and visual context.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
\$12.9.8	OPV3	Creation of Landscape Buffer					
S12.9.8	OPV3.1	Predominantly planting native or locally adopted tree species and shrub planting to create landscape buffer along the periphery of the Project Site. Appropriate height and form of the landscape buffer to create a naturalistic amenity.	To ensure the Project are integrated with the existing landscape and visual context, and avoid cluster effect.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.8	OPV3.2	Treatment of slopes should be aesthetically enhanced through use of soft landscape works including tree and shrub planting	To create a more natural appearance blending into the recreational landscape. To ensure the Project are integrated with the existing landscape and visual context.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location	Implementation Stage	Requirements and / or standards to be achieved
S12.9.8	OPV3.3	The creation of landscape buffer at the periphery of the Project Site, the height and form of the planting proposals have key role in screening as well as to enhance visual amenity.	To ensure the Project are integrated with the existing landscape and visual context.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
\$12.9.8	OPV4	Control of Operation Lights					
S12.9.8	OPV4.1	Through management of operation of the Project at night time, use of direction lights and limited lux level to meet safety standard.	To reduce glare effect on the surrounding receivers induced by the operation lighting.	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO
S12.9.8	OPV5	Creation of Landscape Ponds / Lakes / Water Features					
S12.9.8	OPV5.1	Create variety of visual elements and landscape vistas.	To enhance the visual amenity and context	Project Engineer and Architect and Landscape Architect (Detailed Design Consultant)	The Project Site	Design and planning stage	• TM-EIAO

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Implementation Agent	Location / Timing	Implementation Stage	Requirements and / or standards to be achieved				
EM&A Project											
S13.2	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual	Control EM&A Performance	Project Proponent	The Project Site	Construction stage and first 2 years of the operational stage	 EIAO Guidance Note No.4/2010 TM-EIAO 				
\$13.2 – \$13.4	EM2	 An Environmental Team needs to be employed as per the EM&A Manual An environmental impact monitoring needs to be implementing by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with 	Perform EM&A	Project Proponent	The Project Site	Construction stage and first 2 years of the operational stage	 EIAO Guidance Note No.4/2010 TM-EIAO 				