

APPENDIX I
EM&A Implementation Schedule

Appendix I Implementation Schedule of Recommended Mitigation Measures

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
Air Quality						
During Detailed Design:						
3.6.2.1	4.9.1	During the operational phase, the sewage generated by the proposed development will be discharged to the planned public sewerage system at Yau Pok Road, which is to be constructed under PWP No. 4235DS by Hong Kong SAR Government Drainage Services Department (DSD). The Project will not have population intake until the commissioning of the planned local public sewerage works.	Odour control during operation	Project architect and Project Proponent	During detailed design stage	EIA
3.6.2.1	4.9.2	The layout of the facilities for the proposed development will be carefully planned such that the refuse collection point (a potential odour source) will be away from the residential area but will be close to the main access area connecting the main road. During the detailed design phase, the minimisation of odour at the refuse collection point will be considered to further reduce any localized impact.	Odour control during operation	Project architect and Project Proponent	During detailed design stage	EIA
During Construction Phase:						
3.9.1	4.10.2	Good site management practices are important in reducing potential air quality impacts. As a general guidance, the contractor shall maintain high standard of housekeeping to prevent emission of	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction

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		fugitive dust emission. Loading, unloading, handling and storage of fuel, raw materials, products, wastes or by-products should be carried out in a manner so as to minimize the release of visible dust emission.				Dust) Regulation
3.9.1	4.10.3	The speed of the trucks travelling on haul roads within the Project Site will be controlled at 10 kph or below in order to reduce dust impact and for safe movement around the Project Site. Any piles of materials accumulated on or around the work areas shall be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas shall be carried out in a manner without generating fugitive dust emissions. The material shall be handled properly to prevent fugitive dust emission before cleaning.	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
3.9.1	4.10.5	All the relevant dust control measures stipulated in the <i>Air Pollution Control (Construction Dust) Regulation</i> would be fully implemented:	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
3.9.1	4.10.5	<ul style="list-style-type: none"> • The designated haul road should be hard paved to minimize fugitive dust emission; • During the site formation works, the active works areas should be water sprayed with water browser or 	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction

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		<p>sprayed manually eight times during day-time from 0800 to 1800 hours including holidays. The Contractor(s) should ensure that the amount of water spraying is just enough to dampen the exposed surfaces without over-watering which could result in surface water runoff;</p> <ul style="list-style-type: none"> • Dump trucks for material transport should be totally enclosed using impervious sheeting; • Any excavated dusty materials or stockpile of dusty materials should be covered entirely by impervious sheeting or sprayed with water so as to maintain the entire surface wet, and recovered or backfilled or reinstated as soon as possible; • Dusty materials remaining after a stockpile is removed should be wetted with water; • The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with e.g. concrete, bituminous materials or hardcore or similar; • The Contractor(s) shall only transport adequate amount of fill materials to the Project Site to minimize stockpiling of fill materials on-site, thus reducing fugitive dust emission due to wind erosion; • Should temporary stockpiling of dusty materials be required, it shall be either covered entirely by impervious sheeting, placed in an area sheltered on the top and the 3 sides; or sprayed with water so as to maintain 				Dust) Regulation

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3.9.1	4.10.5	<p>the entire surface wet;</p> <ul style="list-style-type: none"> • All dusty materials shall be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet; • Vehicle speed to be limited to 10 kph except on completed access roads; • The portion of road leading only to a construction site that is within 30 m of a designated vehicle entrance or exit should be kept clear of dusty materials; • Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites; • The load of dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle; • The working area of excavation should be sprayed with water immediately before, during and immediately after (as necessary) the operations so as to maintain the entire surface wet; 	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
3.9.1	4.10.5	<ul style="list-style-type: none"> • Use of effective dust screens, sheeting or netting to be provided to enclose dry scaffolding which may be provided from the ground floor level of the building or if a canopy is provided at the first floor level, from the first floor level, up to the highest level (maximum three floors high for this Project) of the scaffolding where scaffolding is erected around the perimeter of a building under 	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation

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		construction.				
3.9.1	4.10.6	In order to minimize potential cumulative dust impacts, the Contractor(s) shall carry out site formation works for the Northern Portion and Southern Portion of the Project Site separately without overlapping in construction programme. In addition, to minimize dust emission, the site formation works is expected to carry out in phases and there will be only one zone under construction in any one time. Once construction for a zone is completed, the works area will be compacted, covered by tarpaulin sheet and hydroseeded before construction of another zone. Watering will also be applied on regular basis. Works area shall be properly covered at the end of working day to minimize wind erosion.	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
3.9.1	4.10.8	No excavation of pond sediment is expected during the construction and no significant odour impact due to excavation of sediment is therefore anticipated. However, as a precautionary measure, should any excavation of sediment be required during the construction the followings measures shall be implemented:	Odour control during construction	Contractors	During excavation of sediment in the Northern Portion of the Project Site	EIA
3.9.1	4.10.8	<ul style="list-style-type: none"> • Exposed surface shall be immediately filled by filling materials; • All malodorous excavated material, if any, should be placed as far as possible from any ASRs; • The stockpiled malodorous materials should be removed from Project Area within 24 hours or as soon as practicable; • The stockpiled malodorous materials should be covered entirely by plastic 	Odour control during construction	Contractors	During excavation of pond sediment in the Northern Portion of the Project Site	EIA

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		tarpaulin sheets; and <ul style="list-style-type: none"> • Odour patrol during excavation of pond sediments to examine the effectiveness of the above control measures. • Should disposal of excavated sediment be required, it shall follow the requirements stated in Buildings Department's PNAP No. 252 for "Management Framework for Disposal of Dredged/ Excavated Sediment". 				
During Operational Phase:						
nil	nil	nil	nil	nil	nil	nil
Noise Quality						
During Detailed Design						
4.7.4	5.8.4	To summarise the findings, Figure 5-3 summarises the proposed noise mitigation measures during operational phase.	Noise control during operation	Project architect and Project Proponent	During detailed design stage	EIA, Noise Control Ordinance
During Construction Phase						
4.8.1	5.7.3	EPD's quality powered mechanical equipment (QPME) inventory is proposed to be used wherever possible as a noise mitigation measure. The Contractor of this Project should diligently seek equivalent models of quiet/ silenced PMEs.	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.2	5.7.5 & 5.7.6	Asides from QPMEs, additional noise mitigation measures in terms of movable noise barriers are also proposed to shield construction plants from NSRs (see plant	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-

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		<p>inventory in Table 5-4). The movable noise barriers should have sufficient surface density of at least 10 kg/m² or material providing equivalent acoustic performance to block the line of sight from the sensitive receivers. There should not be any gaps and openings at the noise barriers and site hoardings to avoid noise leakage. The design of the noise barriers shall be proposed by the work contractor(s), and approved by the Engineers Representative (RE) and the Environmental Team.</p>				TM.
4.8.3	5.7.7 & 5.7.8	<p>In addition to the above-mentioned noise mitigation measures, fixed temporary noise barrier is also proposed in adjacent to the school (i.e. NSR N10) in order to alleviate the elevated construction noise level over there. The existing NSR N3, N4 nearby will also be benefited by the proposed fixed temporary noise barrier.</p> <p>In order to ensure construction noise is controlled throughout the construction period, fixed noise barriers shall be erected before the commencement of construction works. It is estimated that 9m high temporary fixed noise barriers (with top level at 14.4mPD level) shall be sufficient to shield the concerned school from construction activities within the Project Site. Temporary fixed noise</p>	Noise control during construction	Contractors, ER	Construction areas near the specified locations during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.

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		<p>barrier (5.5m tall and with top level at 10.9mPD) can also provide additional noise shielding to adjacent NSRs such as N3 and N4. Also, standard site hoarding of 3m tall will also be erected along the site boundary. Since site hoarding will be erected along the site boundary, the concerned noise barrier may be combined with the site hoarding.</p>				
4.8.3	5.7.9	<p>Figure 5-2 shows the indicative location of the proposed temporary noise barriers. Since site hoarding will be erected along the site boundary, the concerned noise barrier may be combined with the site hoarding. The exact alignment and design is subject to the contractor(s) and the prior approval from the Resident Engineer (RE). As the proposed temporary fixed noise barrier will be 9m tall, there will be excavation and filling activities to level up the existing ground level for the foundation of the noise barrier. To minimize potential impact, erection of temporary fixed noise barriers will be carried out section by section and precast units will be used for the foundation of the noise barrier. These noise barriers shall be erected before the commencement of construction works.</p>	Noise control during construction	Contractors, ER	Construction areas near the specified locations during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.3	5.7.9	<p>To minimize potential impact, erection of temporary fixed noise barriers will be carried out by section, and precast units will be used for the foundation of the noise barrier. These noise barriers shall be erected before the commencement of construction works and prior to any site</p>	Noise control during construction	Contractors, ER	Construction areas near the specified locations during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.

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		formation works.				
4.8.3	5.7.11	The temporary fixed noise barriers should have sufficient surface density of at least 10 kg/m ² or material providing equivalent acoustic performance. There should not be any gaps and openings at the noise barriers and site hoardings to avoid noise leakage. The design of the noise barriers shall be proposed by the work contractor(s), and approved by the Engineers Representative (RE) and the Environmental Team in accordance with the Project EM&A Manual.	Noise control during construction	Contractors, ER	Construction areas near the specified locations during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	It is also recommended that good housekeeping activities shall also be carried out to further minimize the potential construction noise impact, and these are summarised below. The following good site practices are also recommended for incorporation into the contractual requirements:	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Contractor shall comply with and observe the Noise Control Ordinance (NCO) and its current subsidiary regulations; 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Before the commencement of any work, the Contractor shall submit to the Engineer for approval the method of working, equipment and sound-reducing measures intended to be used at the Project Site; 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Contractor shall devise and execute working methods that will minimize the noise impact on the surrounding environment; and shall provide experienced personnel with suitable training to ensure that these methods 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.

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		are implemented;				TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Only well-maintained plants should be operated on-site; 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Plants should be serviced regularly during the construction programme; 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Machines that may be in intermittent use should be shut down or throttled down to a minimum between work periods; 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Silencer and mufflers on construction equipment should be utilised and should be properly maintained during the construction programme; 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Noisy activities can be scheduled to minimize exposure of nearby NSRs to high levels of construction noise. For example, noisy activities can be scheduled for midday or at times coinciding with periods of high background noise (such as during peak traffic hours); 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Noisy equipment such as emergency generators shall always be sited as far away as possible from noise sensitive receivers; 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.

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						TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Provision of mobile noise barriers in adjacent to construction plants (e.g. Continuous Flight Auger) shall also be considered by the Contractor(s) where necessary; 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Mobile plants should be sited as far away from NSRs as possible; and 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> Material stockpiles and other structures should be effectively utilised as noise barrier, where practicable. 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.8.4	5.7.12	<ul style="list-style-type: none"> The contractor(s) is also encouraged to arrange construction activities with care so that concurrent construction activities are avoided as much as possible. The contractor(s) should closely liaise with the school so that noisy activities are not undertaken during school's examination period. 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
4.9.4	5.7.12	<ul style="list-style-type: none"> during the construction the Contractor will be required to avoid noisy works near N4 when there is any known concurrent construction due to the approved public sewer project. The Project Environmental Team shall closely monitor contractor(s)' performance and residual noise level at nearby sensitive receivers. Should unacceptable construction noise level be identified during the construction, 	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.

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		<p>the concerned construction works shall be stopped temporarily and necessary actions following the standard Event and Action Plan specified in the Project EM&A Manual, shall be implemented. The above requirement will be included in the EM&A manual of this Project for implementation.</p>				
4.9.4	5.7.10	<p>A short section of fixed temporary noise barrier (5.5m tall above a site formation level of 5.4mPD) (i.e. dotted green line as shown in Figure 4-6 of EIA), is also proposed in adjacent to N4 in order to alleviate cumulative noise impact due to the approved projects of public sewer and cycle track.</p> <p>The temporary fixed noise barriers should have sufficient surface density of at least 10 kg/m² or material providing equivalent acoustic performance. There should not be any gaps and openings at the noise barriers to avoid noise leakage and can be combined with the site hoarding of Project Site. The design of the noise barriers shall be proposed by the work contractor(s), and approved by the Engineers Representative (RE) and the Environmental Team in accordance with the Project EM&A Manual.</p> <p>It shall be noted that the concerned noise barrier will only be required should there be concurrent construction activities with the approved projects of public sewer and cycle track. This is also stated in Figure 4-6 of EIA as well.</p>	Noise control during construction	Contractors, ER	Construction areas during the construction period	EIA, Contractual requirements, Annex 5 and Annex 13 of EIAO-TM.
During Operational Phase:						

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4.7.4	5.8.5	To summarise the findings, Figure 5-3 summarises the proposed noise mitigation measures during operational phase.	Noise control during operation	Project Proponent	During operational stage	EIA, Noise Control Ordinance
<u>Water Quality</u>						
During Design Stage:						
5.6.2.1	6.3.2	The drainage system shall be designed to avoid any case of flooding with provision of sand traps. The proposed schematic drainage system is shown in Figure 5-4 . The proposed new drainage channels and pipes surrounding the Project Site shall collect surface runoff within the Site for direct discharge into the Ngau Tam Mei Drainage Channel and Fairview Park Nullah after passing through sand traps. The drainage outlet of the indoor car parks shall be connected to foul sewers via petrol interceptors or similar facilities.	Drainage system during operation	Project architect and Project Proponent	During detailed design stage	EIA, WPCO, Contractual requirements,
5.6.2.2	6.3.2	Water in the proposed landscape pond shall be self-contained with no outlet connecting to nearby channel/inland water. During operation, pond water will be contained within the pond and there shall be no discharge from the pond. Surface runoff from the adjacent area shall be diverted away from the pond area by drainage channels in order to avoid overflow of the pond under extreme weather condition (e.g. heavy rainfall).	Drainage system during operation	Project architect and Project Proponent	During detailed design stage	EIA, WPCO, Contractual requirements,

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During Construction Phase						
5.6.1	6.3.5	During the construction of the landscape water pond in the Northern Portion of the Project Site, proper temporary drainage system (e.g. following those in the Practice Notes for Professional Persons on "Construction Site Drainage" (ProPECC PN 1/94)) shall be constructed to divert surface runoff away from the existing abandoned pond for discharge into the Fairview Nullah or NTMDC through sand traps	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.6	Site formation works at the existing abandoned pond should be carried out during dry season as far as possible. Water contained at the existing abandoned pond shall be temporarily drained to the newly constructed pond	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	Best Management Practices (BMPs) given in the ProPECC PN 1/94 shall be implemented in controlling water pollution during the construction phase. The main practices provided in the above-mentioned document (i.e. ProPECC PN 1/94) are also summarized in the following paragraphs which should be implemented by the contractor during the execution of the site formation and road works, where practicable :	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> High loading of suspended solids (SS) in construction site runoff shall 	Stormwater and Non-point Source Pollution	Contractors	At all construction areas of the site	ProPECC PN1/94, WPCO, EIA,

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		be prevented through proper site management by the contractor;	Control		during the entire construction period	Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> The boundary of critical work areas shall be surrounded by ditches or embankment. Accidental release of soil or refuse into the adjoining land should be prevented by the provision of site hoarding or earth bunds, etc. at the site boundary. These facilities should be constructed in advance of site formation works and roadworks; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Consideration should be given to plan construction activities to allow the use of natural topography of the Project Site as a barrier to minimize uncontrolled non-point source discharge of construction site runoff; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Temporary ditches, earth bunds should be provided to facilitate directed and controlled discharge of runoff into storm drains via sand/ silt removal facilities such as sand traps, silt traps and sediment retention basin. Oil and grease removal facilities should also be provided where appropriate, for example, in area near plant workshop/ maintenance areas; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Sand and silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly by the contractor, and at the onset of and after each rainstorm to ensure that these facilities area functioning properly; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Slope exposure should be minimized where practicable especially during 	Stormwater and Non-point Source Pollution	Contractors	At all construction areas of the site	ProPECC PN1/94, WPCO, EIA,

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		the wet season. Exposed soil surfaces should be protected from rainfall through covering temporarily exposed slope surfaces or stockpiles with tarpaulin or the like;	Control		during the entire construction period	Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Haul roads should be protected by crushed rock, gravel or other granular materials to minimize discharge of contaminated runoff; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Slow down water run-off flowing across exposed soil surfaces; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Plant workshop/ maintenance areas should be bunded and constructed on a hard standing. Sediment traps and oil interceptors should be provided at appropriate locations; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Manholes (including newly constructed ones) should be adequately covered or temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Construction works should be programmed to minimize soil excavation works where practicable during rainy conditions; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Chemical stores should be contained (bunded) to prevent any spills from contact with water bodies. All fuel tanks and/ or storage areas should be provided with locks and be sited on hard surface; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements

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5.6.1	6.3.7	<ul style="list-style-type: none"> Chemical waste arising from the Project Site should be properly stored, handled, treated and disposed of in compliance with the requirements stipulated under the Waste Disposal (Chemical Waste) (General) Regulation; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Drainage facilities must be adequate for the controlled release of storm flows. 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Appropriate peripheral drainage system shall be constructed along the Project Site boundary to divert away surface runoff in accordance with requirements stipulated in ProPECC PN 1/94 to collect surface runoff and discharge it into the nearby existing stormwater drains near roadside of Yau Pok Road, and via which into the existing NTMDC. 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Temporary drains, sedimentation basins, sand traps and similar facilities shall be provided during the construction works in accordance with the ProPECC PN 1/94. 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> The Contractor shall apply for a discharge licence under the WPCO and the discharge shall comply with the terms and conditions of the licence. 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Sewage generated from the construction workforce should be contained in chemical toilets before connection to public foul sewer becomes available. Chemical toilets should be provided at a minimum 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		rate of about 1 per 50 workers. The facility should be serviced and cleaned by a specialist contractor at regular intervals;				
5.6.1	6.3.7	<ul style="list-style-type: none"> Vehicle wheel washing facilities should be provided at the site exit such that mud, debris, etc. deposited onto the vehicle wheels or body can be washed off before the vehicles are leaving the site area; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Section of the road between the wheel washing bay and the public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains; 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Although use of bentonite in diaphragm wall and bore-pile construction is not expected, in case bentonite slurries is generated it should be reconditioned and reused as far as practicable. Spent bentonite should be kept in a separate slurry collection system for disposal at a marine spoil grounds subject to obtaining a marine dumping licence from EPD. If used bentonite slurry is to be disposed of through public drainage system, it should be treated to meet the respective applicable effluent standards for discharges into sewers, storm drains or the receiving waters. 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, WPCO, EIA, Contractual requirements
5.6.1	6.3.7	<ul style="list-style-type: none"> Spillage of fuel oils or other polluting fluids should be prevented at source. It is recommended that all stocks should be stored inside 	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire	ProPECC PN1/94, WPCO, EIA, Contractual

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		proper containers and sited on sealed areas, preferably surrounded by bunds.			construction period	requirements
During Operational Phase:						
5.6.2	6.3.8, 6.3.13	<p>During the operation of the Project, all sewage generated shall be discharged to the public sewerage at Yau Pok Road as the Project will not have population intake until the commissioning of the planned local public sewerage works.</p> <p>The sewage generated by the club house and swimming pool in the Southern Portion as well as the food and beverage and public toilets in the Northern Portion of the Project Site is proposed to be discharged into the public sewerage system at Yau Pok Road. The discharge from these facilities shall apply for a discharge licence under the WPCO, and the discharge shall comply with the terms and conditions of a licence as well as the standards for effluents specified in the TM-Effluents.</p>	Stormwater and Non-point Source Pollution Control	Project Proponent	During operation	EIA, WPCO, Contractual requirements
5.6.2	6.3.9	The proposed new drainage channels and pipes surrounding the Project Site shall collect surface runoff within the Site for direct discharge into the Ngau Tam Mei Drainage Channel and Fairview Park Nullah after passing through sand traps. The drainage outlet of the indoor car parks shall be connected to foul sewers via petrol interceptors or similar facilities	Stormwater and Non-point Source Pollution Control	Project Proponent	During operation	EIA, WPCO, Contractual requirements
5.6.2	6.3.10	Regular cleaning and sweeping of the access road and other paved areas are suggested so as to minimize exposure of pollutants to stormwater	Stormwater and Non-point Source Pollution Control	Project Proponent	During operation	EIA, WPCO, Contractual requirements
5.6.2	6.3.11	Stormwater gullies and ditches provided among the residential development will	Stormwater and Non-	Project Proponent	During operation	EIA, WPCO,

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		be regularly inspected to ensure these facilities function properly.	point Source Pollution Control			Contractual requirements
5.6.2	6.3.12	Soft landscaping will be provided around the residential development where practicable. In the event of emergency (e.g. car accident) where there is a major spillage of oil, chemical or fuel, dispersants or fire fighting foam, etc., a system of contaminant bunding is recommended as far as practicable	Stormwater and Non-point Source Pollution Control	Project Proponent	During operation	EIA, WPCO, Contractual requirements
5.6.2.2	6.3.14	Water in the proposed landscape pond shall be self-contained with no outlet connecting to nearby channel/inland water. The concerned landscape pond will be water sealed so that there is no seepage of water into underground. During operation, pond water will be contained within the pond and there shall be no discharge from the pond. Surface runoff from the adjacent area shall be diverted away from the pond area by drainage channels in order to avoid overflow of the pond under extreme weather condition (e.g. heavy rainfall). There will be no chemicals/ pesticides to be applied during operation.	Stormwater and Non-point Source Pollution Control	Project Proponent	During operation	EIA, WPCO, Contractual requirements
Waste Management						
During Detailed Design:						
7.5	8.2.1	The demolition and construction work shall be considered in the planning and design stages to reduce the generation of C&D waste where possible. Landfill disposal shall only be considered as the last resort.	Waste management during construction	Project architect/ engineer, Project Proponent	During detailed design stage	EIA, Contractual requirements
7.5	8.2.2	Construction methods with minimum	Waste management	Project architect/	During detailed design stage	EIA, Contractual

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		waste generation quantity and other environmental impacts shall be considered in the detailed design	during construction	engineer, Project Proponent		requirements
7.6	8.2.3	Refuse collection chambers (RCC) will be provided for the residential development as well as the passive recreational facilities in the Northern Portion of the Project Site. A licensed waste collector shall be employed to collect domestic waste on daily basis. In order to comply with Building Regulation, mechanical ventilation will be provided. The odour nuisance to the public can be minimized by incorporating the odour absorption system.	Waste management during construction	Project architect/ engineer, Project Proponent	During detailed design stage	EIA, Contractual requirements
During Construction Phase:						
7.4.4.	8.3.31	Chemical waste that could be generated from construction works would primarily arise from chemicals used in operation and maintenance of on-site equipment. These may include fuel, oil, lubricants, cleaning fluids, and solvents arising from leakage or maintenance of on-site equipment and vehicles. Chemical generated from daily operation of the construction works shall be recycled/ reused on-site as far as practicable	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal (Chemical Waste) (General) Regulation
7.4.4.	8.3.32	If off-site disposal of chemical waste is required, they should be collected and delivered by a licensed contractor, and disposed of strictly following the Waste	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal (Chemical Waste) (General) Regulation

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		Disposal (Chemical Waste) (General) Regulation				
7.4.4.	8.3.33	The contractors shall register with EPD as chemical waste producers when disposal of chemical waste is anticipated to be required	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal (Chemical Waste) (General) Regulation
7.4.4.	8.3.34	Chemical waste generated has to be stored in suitable containers and away from water bodies so that leakage or spillage is prevented during the handling, storage, and subsequent transportation	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal (Chemical Waste) (General) Regulation
7.4.4.	8.3.35	The Contractor shall prevent fuel and lubricating oil leakage from plant and storage sites from contaminating the construction site. All compounds in work areas shall be positioned on areas with hard paving and served by drainage facility. Sand/ silt traps and oil interceptors shall be provided at appropriate locations prior to the discharge points	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal (Chemical Waste) (General) Regulation
7.4.4.	8.3.36	Fossil fuel and used lubricants from trucks and machinery are classified as chemical waste. The Contractor shall register with EPD as a chemical waste producer and observe all the requirements under the storage, labelling, transportation and disposal of chemical waste	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal (Chemical Waste) (General) Regulation
7.4.4.	8.3.37	The Contractor shall prevent fuel and lubricating oil leakage from plant and	Waste management during construction	Contractors	At all construction areas of the site	Waste Disposal (Chemical Waste)

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		storage sites from contaminating the construction site. All compounds in work areas shall be positioned on areas with hard paving and served by drainage facility. Sand/ silt traps and oil interceptors shall be provided at appropriate locations prior to the discharge points			during the entire construction period	(General) Regulation
7.4.5	8.3.9	General refuse generated at the construction site should be stored separately from construction and chemical wastes to avoid cross contamination. A reliable waste collector shall be employed by the Contractor to remove general refuse from the construction site on a daily basis where appropriate to minimize the potential odour, pest and litter impacts	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance, Air Pollution Control (Open Burning) Regulation
7.4.5	8.3.10	Open burning for the disposal of construction waste or the clearance of the Project Site in preparation for construction work is prohibited under the Air Pollution Control (Open Burning) Regulation	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance, Air Pollution Control (Open Burning) Regulation
7.5	8.3.11	To ensure the appropriate handling of the C&D materials, it is recommended that a Waste Management Plan (WMP) shall be developed by the contractor and incorporated in the Environmental Management Plan (EMP) in accordance with ETWB TCW No. 19/2005 – Environmental Management on	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		Construction Sites at the commencement of the construction works.				
7.5	8.3.12	The EMP shall be submitted to the Engineers' Representative (RE) and the Project Environmental Team Leader (ETL) for approval, and shall be implemented throughout the Project.	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material"
7.5	8.3.14	Such a management plan should incorporate site specific factors, such as the designation of areas for segregation and temporary storage of reusable and recyclable materials. The EMP shall be submitted to the Engineers' Representative (RE) and the Project Environmental Team Leader (ETL) for approval before commencement of construction, and shall be implemented throughout the Project. The EMP shall cover the followings and developed taking into account the recommended control measures given in this Chapter where appropriate:	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material"
7.5	8.3.14	<ul style="list-style-type: none"> A waste management policy, organization chart, and responsibility 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material"
7.5	8.3.14	<ul style="list-style-type: none"> An estimation on the location, type, nature, quality and quantity of different waste streams to be generated from the Project works, 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for"

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		and the corresponding waste management methodology.				Disposal of Construction and Demolition Material
7.5	8.3.14	<ul style="list-style-type: none"> A method statement for demolition and transportation of the excavated materials and other construction wastes. 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material"
7.5	8.3.14	<ul style="list-style-type: none"> Potential for recycling or reuse should be explored and opportunities taken if waste generation is unavoidable. 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material"
7.5	8.3.14	<ul style="list-style-type: none"> Recommendations for appropriate disposal routes if waste cannot be recycled. 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material"
7.5	8.3.14	<ul style="list-style-type: none"> A system to control the disposal of C&D materials and C&D waste to public fill reception facilities, sorting facilities and landfills respectively through a trip-ticket system in accordance with the ETWB TC(W) No. 31/2004. 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition"

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
						Material
7.5	8.3.15	<ul style="list-style-type: none"> The Project Proponent/ RE will ensure that the day-to-day operations comply with the approved EMP. The Project Proponent/ RE shall require the contractor to separate public fill from C&D waste for disposal at appropriate facilities. In addition, the Project Proponent/ RE shall regularly audit Contractor(s)' records for the disposal, reuse and recycling of C&D materials for monitoring purposes 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material
7.5	8.3.16	<ul style="list-style-type: none"> Based on the above waste management recommendations, a detailed management and control plan shall be formulated during the detailed design stage. A good management and control can prevent the generation of significant amount of waste. On-site sorting of construction wastes will be recommended. Secondary on-site sorting can be achieved by avoiding the generation of "mixed waste" through good site control. Construction wastes shall be sorted to remove contaminants, with the inert materials broken up into small pieces before being transported to Refuse Transfer Station (RTS) for subsequent delivery to landfill sites 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material
7.5	8.3.17	In addition, the contractor(s) shall be required to reuse inert C&D materials (e.g. excavated soil) or in other suitable construction sites as far as possible, in order to minimize the disposal of C&D materials to public fill reception facilities	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
						Material
7.5	8.3.18	The project proponent shall encourage the contractor to maximize the use of recycled or recyclable C&D materials, as well as the use of non-timber formwork to further minimize the generation of construction waste	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material
7.5	8.3.38	Chemical and oily wastes generated from the construction activities, vehicle and plant maintenance and oil interceptors should be disposed of as chemical waste in strict compliance with the Waste Disposal (Chemical Waste) (General) Regulations	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material
7.5	8.3.13	In formulating the EMP in respect to waste management, the following hierarchy should be considered: <ul style="list-style-type: none"> • Avoidance and minimization to reduce the potential quantity of C&D materials generated; • Reuse of materials as practical as possible; • Recovery and Recycling as practical as possible; and • Proper treatment and disposal in respect to relevant laws, guidelines and good practice. 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material
7.5	8.3.19	The following additional control/ mitigation measures are recommended to be followed by the Contractor	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
						Construction and Demolition Material
7.5	8.3.19	<ul style="list-style-type: none"> Storage of different waste types – different types of waste should be segregated and stored in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. An on-site temporary storage area equipped with required control measures (e.g. dust control) should be provided; 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 “Trip Ticket System for Disposal of Construction and Demolition Material
7.5	8.3.19	<ul style="list-style-type: none"> Trip-ticket system – in order to monitor the proper disposal of non-inert C&D waste to landfills and to control fly-tipping, a trip-ticket system should be included as one of the contractual requirements and audited by the Environmental Team; 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 “Trip Ticket System for Disposal of Construction and Demolition Material
7.5	8.3.19	<ul style="list-style-type: none"> Records of Wastes – a recording system should be proposed to record the amount of wastes generated, recycled and disposed of (including the location of disposal sites); 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 “Trip Ticket System for Disposal of Construction and Demolition Material
7.5	8.3.19	<ul style="list-style-type: none"> Training – The contractor should provide his workers with proper training of appropriate waste management procedure to achieve waste reduction as far as practicable and cost-effective through recovery, 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 “Trip Ticket System for Disposal of Construction and

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		reuse and recycling and avoid contamination of reusable C&D materials;				Demolition Material
7.5	8.3.19	<ul style="list-style-type: none"> Incorporate good practice in "Recommended Pollution Control Clauses for Construction Contracts" published by EPD in respect to removal of waste material from the construction site into the contract of the contractor. 	Waste management during construction	ER, Project Proponent	Throughout the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material
7.5	8.3.20 – 8.3.27	In additional to the above, the following construction waste pollution clauses shall be included in construction contracts:	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.
7.5.1	8.3.20	<ul style="list-style-type: none"> The Contractor shall submit to the Engineer for approval a waste management plan with appropriate mitigation measures including the allocation of an area for waste segregation and shall ensure that the day-to-day site operations comply with the approved waste management plan. 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.
7.5.1	8.3.21	<ul style="list-style-type: none"> The Contractor shall minimize the generation of waste from his work. Avoidance and minimisation of waste generation can be achieved through changing or improving design and practices, careful planning and good site management. 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.
7.5.1	8.3.22	<ul style="list-style-type: none"> The Contractor shall ensure that different types of wastes are segregated on-site and stored in 	Waste management during construction	Contractor	Throughout the entire construction	Waste Disposal Ordinance, WBTC

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		different containers, skips or stockpiles to facilitate reuse/recycling of waste and, as the last resort, disposal at different outlets as appropriate			period	31/2004, and ETWB TC(W) No. 19/2005.
7.5.1	8.3.23	<ul style="list-style-type: none"> The reuse and recycling of waste shall be practised as far as possible. The recycled materials shall include paper/cardboard, timber and metal etc. 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.
7.5.1	8.3.24	<ul style="list-style-type: none"> The Contractor shall ensure that Construction and Demolition (C&D) materials are sorted into public fill (inert portion) and C&D waste (non-inert portion). The public fill which comprises soil, rock, concrete, brick, cement plaster/mortar, inert building debris, aggregates and asphalt shall be reused in earth filling, reclamation or site formation works. The C&D waste which comprises metal, timber, paper, glass, junk and general garbage shall be reused or recycled and, as the last resort, disposal of at landfills. 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.
7.5.1	8.3.25	<ul style="list-style-type: none"> The Contractor shall record the amount of wastes generated, recycled and disposed of (including the disposal sites) 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.
7.5.1	8.3.26	<ul style="list-style-type: none"> The Contractor shall implement a trip ticket system in accordance with the ETWB TC(W) No. 31/2004 for public fill, C&D materials and C&D waste to public fill reception facilities, sorting facilities and landfills respectively 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
7.5.1	8.3.27	<ul style="list-style-type: none"> Training shall be provided for workers about the concepts of site cleanliness and appropriate waste management procedure, including waste reduction, reuse and recycling 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.
7.5.2	8.3.28	<ul style="list-style-type: none"> The Contractor shall not permit any sewage, wastewater or effluent containing sand, cement, silt or any other suspended or dissolved material to flow from the Project Site onto any adjoining land or allow any waste matter [or refuse] which is not part of the final product from waste processing plants to be deposited anywhere within the Project Site [or onto any adjoining land]. He shall arrange removal of such matter from the Project Site [or any building erected or to be erected thereon] in a proper manner to the satisfaction of the Engineer in consultation with the Director of Environmental Protection 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.
7.5.3	8.3.29	<ul style="list-style-type: none"> The Contractor shall observe and comply with the Waste Disposal (Chemical Waste) (General) Regulation 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.
7.5.3	8.3.30	<ul style="list-style-type: none"> The Contractor shall apply for registration as chemical waste producer under the Waste Disposal (Chemical Waste) (General) Regulation when chemical waste is produced. All chemical waste shall be properly stored, labelled, packaged and collected in accordance with the Regulation 	Waste management during construction	Contractor	Throughout the entire construction period	Waste Disposal Ordinance, WBTC 31/2004, and ETWB TC(W) No. 19/2005.

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During Operational Phase:						
7.6	8.4.1	Refuse collection chambers (RCC) will be provided for the residential development as well as the passive recreational facilities in the Northern Portion of the Project Site. A licensed waste collector shall be employed to collect domestic waste on daily basis. In order to comply with Building Regulation, mechanical ventilation will be provided. The odour nuisance to the public can be minimized by incorporating the odour absorption system.	Waste management during operation	Project Proponent	During operation	EIA, Waste Disposal Ordinance
7.6	8.4.2	separate collection bins for used aluminum cans, waste paper and plastic bottles should be provided at strategic locations within the residential development area and adjacent to the passive recreational facilities in order to promote and encourage recycling during the operational phase	Waste management during operation	Project Proponent	During operation	EIA, Waste Disposal Ordinance
Ecology						
During Construction Phase:						
8.8	10.1	In order to prevent noise and visual impact, the use of screening materials during the construction will be adopted. A site hoarding will be in place before the peak winter bird season between October and March to ensure that disturbance from the proposed development is minimized. The workers should also be briefed, before the commencement of the works, the sensitivity of the areas, and they	To further mitigate construction noise impact.	The Contractor	Within the PS, during the construction phase.	EIA

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		should be requested not to disturb any areas nearby Furthermore, the site boundary should be clearly defined (i.e. fenced with the screening materials mentioned above) and any works beyond the boundary should be strictly prohibited.				
8.8	10.1	Standard site practice during the construction phase shall be deployed, which will minimize the chance of site run-off and the chance of pollution to watercourses downstream.	To further mitigate construction noise impact.	The Contractor	Within the PS, during the construction phase.	EIA
8.9	10.1	Undertake baseline ecological monitoring prior to site clearance.	Update faunal usage of the site.	Project Proponent	Four months prior to site clearance and construction.	EIA
8.9	10.1	Undertake ecological monitoring	A precautionary measure and also to verify the accuracy of impact assessment and detect any unpredictable impact arising from the proposed development.	Project Proponent	Adjacent habitats of high ecological value including but not limited to the Ngau Tam Mei Drainage Channel and the adjacent agricultural land.	EIA
During Operational Phase:						
Nil	Nil	Nil	Nil	Nil	Nil	Nil
Fisheries						
During Construction Phase:						
9.7	10.5	With the measures for mitigating the impacts from construction activities (as	To prevent runoff and other water quality	The Contractor	Within the PS, during the	EIA

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		described in Table 14-1 of the submitted EIA report), indirect impacts during the construction phase would be insignificant.	impacts affecting surrounding watercourses and ponds downstream.		construction phase.	
During Operational Phase:						
Nil	Nil	Nil	Nil	Nil	Nil	Nil
Cultural Heritage						
During Construction Phase:						
Nil	Nil	Nil	Nil	Nil	Nil	Nil
During Operational Phase:						
Nil	Nil	Nil	Nil	Nil	Nil	Nil
Landscape and Visual						
During Detailed Design						
11.10.2 to 11.11.1	9.2	The landscape and visual mitigation measures listed in Tables 11-5A, 11-5B, 11-7A and 11-7B of the EIA shall be adopted during the detailed design, and be built as part of the construction works so that they are in place at the date of commissioning of the Project.	Avoid impacts on adjacent landscape and visual.	Project architect and Project Proponent	During detailed design stage	EIA
During Construction Phase:						
11.10.2 & 11.11.1	9.2	Mitigation measures including strategies for reducing, offsetting and compensating for impacts have been designed into the Project, to be implemented during construction and operation phases, and are also included in Tables 11-5A, 11-5B (landscape mitigation measure) and Table 11-7A, 11-7B (visual mitigation measure) of the EIA report as followings:	Avoid landscape and visual impacts	Project Proponent (via Contractor)	At all construction areas of the site during the entire construction period.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
11.10.2	9.2	<p>CM1- Proper protection of existing trees designated to be retained in-situ</p> <p>Existing trees designated to be retained in-situ will be properly protected. This may include the clear demarcation and fencing-off of tree protection zones, tight site supervision and monitoring to prevent tree damage by construction activities, and periodic arboricultural inspection and maintenance to uphold tree health. A total of around 60 nos. of trees will be retained in-situ.</p>	Avoid impacts on adjacent existing trees.	Project Proponent (via Contractor)	At boundary of the site during the entire construction period. CM1 in Figures 11-16 to 11-18.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM ETWB TC 3/2006 LAO GN 7/2007
11. 10.2	9.2	<p>CM2 - 'One-go' Tree Transplanting within Site</p> <p>Affected existing trees designated to be transplanted will be transplanted 'one-go' within the Site instead of typically to an offsite holding nursery. The transplanted trees will provide some instant greenery during construction. In total, 8 nos. of trees will be transplanted.</p>	Avoid impacts on trees.	Project Proponent (via Contractor)	Within boundary of the site during the entire construction period. CM2 in Figures 11-16 to 11-18.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM ETWB TC 3/2006 LAO GN 7/2007
11. 10.2	9.2	<p>CM3 - Innovative Construction Method of Pond Expansion</p> <p>Existing abandoned pond (approx. 0.5ha) with pond edge (approx. 0.2ha) will be slightly expanded and enhanced into a larger landscape pond (0.6ha pond and 0.3ha pond edge). Conventional method of pond expansion by excavating at the existing pond edge will substantially pollute the existing pond. An innovative design and construction method will be employed in this project: (1) excavating a new pond at a slightly higher elevation adjacent to the existing pond without breaking the existing pond edge, (2) suitably prepare the surface of the new pond bottom, (3) fill the new pond with</p>	Avoid impacts on adjacent water bodies	Project Proponent (via Contractor)	At boundary of the site during the entire construction period. CM3 in Figures 11-16 to 11-18.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		<p>water and let it stabilized for several weeks, (4) connect the recirculation system to the existing pond, (5) create a gentle water cascade between the existing pond and the new pond by increasing the new pond water level to flood over and water will be circulated between these two ponds. As a result, two ponds functionally and aesthetically appear as one will be created. (The gentle water cascade will also provide aeration to ensure water quality and details of the construction method of pond will be subject to detailed design).</p>				
11. 10.2	9.2	<p>CM4 - Early Commencement & Completion of the Recreational Ground</p> <p>The proposed basements and houses in the southern portion of the site will require an extensive construction period while the proposed works in the recreational ground in the northern portion of the site is relatively simpler. Upon possession of the site, the proposed works in the recreational ground will be fast-tracked. It is expected that the recreational ground will be properly vegetated within a short period, offsetting the negative impact arising from the construction works in the rest of the Project Site. Approximately 200 nos. of heavy-standard to semi-mature size trees will be planted in the recreational ground. Moreover, there will be around 2 ha of lawn area.</p>	Avoid impacts on trees.	Project Proponent (via Contractor)	Within boundary of the site during the entire construction period. CM4 in Figures 11-16 to 11-18.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM ETWB TC 3/2006 LAO GN 7/2007
11. 11.1	9.2	<p>CM5 - Height of temporary noise barriers along boundary facing Bethel High School and some residences in Fairview</p>	Minimise visual impacts of works area.	Project Proponent (via Contractor)	At boundary of the site during the entire construction	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		Park be to minimum required. Barrier finishes be sensitively selecting and designing to reduce visual impact. Materials to be opaque and non-reflective material with colour blending in with the environment to minimize visual impact and to avoid bird strike..			period. CM5 in Figures 11-16 to 11-18.	
11. 11.1	9.2	CM6 - Advance screen planting of fast growing tree and shrub species to noise barriers and hoardings. Trees shall be capable of reaching a height >10m within 10 years.	Minimise visual impacts of works area.	Project Proponent (via Contractor)	At boundary of the site during the entire construction period. CM6 in Figures 11-16 to 11-18.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM ETWB TC 3/2006 LAO GN 7/2007
11. 11.1	9.2	CM7 - Control night-time lighting by hooding all lights.	Minimise night-time visual impacts.	Project Proponent (via Contractor)	At all construction areas of the site during the entire construction period. CM8 in Figures 11-16 to 11-18.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM
11. 11.1	9.2	CM8 - Reduction of construction period to practical minimum.	Minimise duration of landscape and visual impacts.	Project Proponent (via Contractor)	At all construction areas of the site during the entire construction period. CM9 in Figures 11-16 to 11-18.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM
During Operational Phase:						
11. 10.2	9.2	OM1 - Maximizing Tree Preservation Effort Healthy existing trees that are not affected by the proposed development will be retained in-situ. Affected existing trees that are of high to medium amenity value and high to medium survival rate after transplanting will be transplanted.	Enhance landscape and visual resources of the site.	Project Proponent	Whole site, implemented at beginning of construction and maintained throughout operation period. OM1 in Figures 11-16 to 11-18.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM ETWB TC 3/2006 LAO GN 7/2007
11. 10.2	9.2	OM2 – Provision of New Trees	Compensate for loss of existing trees.	Project Proponent	Site boundary, implemented at	EIAO & Annex 10, 11, 18, 20 and 21

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		Compensatory tree planting shall be provided for soft landscape in the proposed development. The tree compensation to tree loss ratio shall be at least 1:1 in term of quantity and quality within the Project Site. Furthermore, a continuous belt of landscape planting, featuring trees and shrubs, will be provided along the boundary of the development.			early stage of operation period and maintained throughout operation period. OM2 in Figures 11-16 to 11-18 .	of EIAO-TM ETWB TC 3/2006 LAO GN 7/2007
11. 10.2	9.2	OM3 – Suitable Design for Recreational Ground The landscape design for the recreational area in the northern portion of the Site will adopt a rural, naturalistic approach with vast open space to match the original landscape character. Emphasis will be placed on a balanced approach between trees and grass/herbs. Use of native species will be the planting design theme. Natural materials, such as timbers, will be mostly used for landscape hardworks.	Minimise visual impact of the Project and enhance landscape and visual resources of the site	Project Proponent	Site boundary, implemented at early stage of operation period and maintained throughout operation period. OM3 in Figures 11-16 to 11-18 .	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM ETWB TC 3/2006 LAO GN 7/2007
11. 11.1	9.2	OM4 - Use appropriate (visually unobtrusive and non-reflective) building materials and colours in built structures.	Minimise visual impact of the Project.	Project Proponent	Whole site, during detailed design. OM5 in Figures 11-16 to 11-18 .	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM HKPSG
11. 11.1	9.2	OM5 - Streetscape elements (e.g. paving, signage, street furniture, lighting etc.) sensitively designed in a manner that responds to the local context, and minimises potential negative landscape and visual impacts. Lighting units to be directional and minimising unnecessary light spill.	Minimise visual impact of the Project, including night-time impacts.	Project Proponent	Whole site, implemented during detailed design. OM6 in Figures 11-16 to 11-18 .	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM HKPSG

EIA Ref.	EM&A Manual Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
11.11.1	9.2	<p>OM6 – Suitable Design and Landscape Treatment of Noise Barrier and Along Boundary</p> <p>Height of permanent noise barriers along boundary be to minimum required. Barrier finishes be sensitively selecting and designing to reduce visual impact. Materials to be opaque and non-reflective material with colour blending in with the environment to minimize visual impact and to avoid bird strike. Screen tree, shrub and climber planting to be provided in front of permanent noise barrier to minimise visual intrusion.</p>	Minimise visual impact of the Project .	Project Proponent	Site boundary, implemented at early stage of operation period and maintained throughout operation period. OM6 in Figures 11-16 to 11-18.	EIAO & Annex 10, 11, 18, 20 and 21 of EIAO-TM HKPSG