Annex I

Implementation Schedule of the Environmental Protection Measures

Annex I *Implementation Schedule of the Environmental Protection Measures*

EIA Report Ref.	EM&A Ref.	Environmental Protection Measures	Location/Duration of Measures/Timing of Completion of Measures	Implementation Agent	Implementation Stage				Relevant Legislation & Guidelines
					Des	C	O	Dec	
AIR QUALITY									
Ecological Reserve									
		No measures required.							
Development Site									
S4.6.2	S3.2	Dust control measures: • A vehicle washing facility should be provided at the main exit of the construction site and water recaptured or discharged offsite via sand traps to the drainage paths away from the SSSI.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• Excavated spoils should be covered or wetted especially during the dry season.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• Exposed surfaces should be sprayed with water or covered entirely to avoid fugitive dust emissions.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2	S3.2	• Area where dusty work takes place should be sprayed with water immediately prior to, during and immediately after dusty activities so as to maintain the entire surface wet.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2	S3.2	• Temporary stockpiles of dusty materials, if any, should be covered entirely or sprayed with water.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• During transportation by truck, materials should not be loaded to a level higher than the side and tail boards, and should be dampened or covered before leaving the site.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• Dusty load transported by the trucks should be covered entirely to avoid any spillage on to public roads.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• During air flushing for soil nail drilling, dust screen should provided at the three sides of the drilling machine and the soil nailing area to avoid fugitive dust emissions.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• Diesel-powered equipment should be properly maintained to avoid black smoke emissions.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2	S3.3	• In-house management measures such as signage to remind visitors on the prohibition of burning effigy should be provided.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		*Air Pollution Control (Construction Dust) Regulation*
Sha Lo Tung Road Improvement									
S4.6.2 & 4.6.3	S3.2	Dust control measures: • Excavated spoils should be covered or wetted especially during the dry season.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• Exposed surface should be kept wet always or entirely covered to avoid fugitive dust emissions.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• During transportation by truck, materials should not be loaded to a level higher than the side and tail boards, and should be dampened or covered before leaving the site.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• Dusty loads transported by the trucks should be covered entirely to avoid any spillage on to public roads.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• During air flushing for soil nail drilling, dust screen should provided at the three sides of the drilling machine and the soil nailing area to avoid fugitive dust emissions.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Air Pollution Control (Construction Dust) Regulation*
S4.6.2 & 4.6.3	S3.2	• Diesel-powered equipment should be properly maintained to avoid black smoke	Within the Sha Lo Tung Road	Construction Contractor		✓			*Air Pollution Control (Construction*

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		emissions.	Improvement Site / Throughout the construction period						*Dust) Regulation*
NOISE									
Ecological Reserve									
		No measures required.							
Development Site									
S5.11.1	S4.2.1	• Weekly noise monitoring should be undertaken at the representative NSRs (N1 and N5) to ensure compliance with the noise criterion at the NSRs	NSRs N1 and N5/ Throughout the construction period	Environmental Team		✓			*Noise Control Ordinance* (NCO)
S5.8.1	S4.2.1	Good Site Practice • Only well-maintained plant should be operated on-site and plant should be serviced regularly	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Silencers or mufflers on construction equipment should be utilized and should be properly maintained	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Mobile plant, if any, should be sited as far away from NSRs as possible	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Liaise with the school regarding the examination periods. Noisy construction activities, including piling, excavation and earth-breaking works, will be carried out outside the examination	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Use of Quiet PME having actual SWL lower than the value specified in the *GW-TM*	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Technical Memorandum on Noise from Construction Work other than Percussive Piling*
S5.8.2	S4.2.2	• Choose quieter equipment	Within the Development Site / Operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S5.8.2	S4.2.2	• Include noise levels specification when ordering new plant items	Within the Development Site / Operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S5.8.2	S4.2.2	• Locate fixed plant items or noise emission points away from the NSRs as far as practicable	Within the Development Site / Operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S5.8.2	S4.2.2	• Locate noisy machines in completely enclosed plant rooms or buildings with suitable and practicable noise remedies	Within the Development Site / Operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S5.8.2	S4.2.2	• Develop and implement a regularly scheduled plant maintenance programme so that plant items are properly operated and serviced. The programme should be implemented by properly trained personnel	Within the Development Site / Operational phase	Sha Lo Tung Development Co., Ltd			✓		-
Sha Lo Tung Road Improvement									
S5.11.1	S4.2.1	• Weekly noise monitoring should be undertaken at the representative NSRs (N1 and N5) to ensure compliance with the noise criterion at the NSRs	NSRs N1 and N5/ Throughout the construction period	Environmental Team		✓			*Noise Control Ordinance* (NCO)
S5.8.1	S4.2.1	Good Site Practice • Only well-maintained plant should be operated on-site and plant should be serviced regularly	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-

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S5.8.1	S4.2.1	• Silencers or mufflers on construction equipment should be utilized and should be properly maintained	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Mobile plant, if any, should be sited as far away from NSRs as possible	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum;	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Liaise with the school regarding the examination periods. Noisy construction activities, including piling, excavation and earth-breaking works, will be carried out outside the examination	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S5.8.1	S4.2.1	• Use of Quiet PME having actual SWL lower than the value specified in the *GW-TM*	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Technical Memorandum on Noise from Construction Work other than Percussive Piling*
S5.8.1	S4.2.1	• Adoption of movable noise barriers (3 m in height with skid footing). They should be located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height.	Sha Lo Tung Road Improvement Phase 1 Construction Area / Throughout the Phase 1 construction period of Sha Lo Tung Road Improvement	Construction Contractor		✓			-
WATER QUALITY									
Ecological Reserve									
S6.6.1	-	Good Construction Practice • Conduct all the works during dry season and using hand tools • Locate the footing of the temporary footbridge at bare land and avoid vegetated areas as much as practical • Avoid or minimize vegetation removal as much as possible • Restricting the number of workers within the Ecological Reserve • Regularly check the work site boundaries to ensure that they are not breached and that damage does not occur to surrounding habitats in particular the secondary woodland and Sha Lo Tung streams; and • No pesticide or herbicide be used for pest and weed control	Within the Ecological Reserve / Throughout the construction period	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-
Development Site									
S6.6.2	-	Prevention of Construction Runoff from Polluting the Nearby Watercourse and Ecological Sensitive Areas • Minimisation of the Development Footprint. The preliminary Master Layout Plan minimised the development footprint within the Development Site (of approximately 1.625 ha and comprised only about 39.6% of the total site area) so as to reduce the extent of site formation and earth work activities, and the subsequent potential risk of construction runoff.	Within the Development Site / Prior to the commencement of construction works	Design Team of Sha Lo Tung Development Co., Ltd	✓	✓			-
S6.6.2	-	• Completion of Sha Lo Tung Road Improvement in advance. Before any construction works are undertaken within the Development Site, the Sha Lo Tung Road should be	Within the Development Site / Prior to the commencement of construction	Construction Contractor		✓			-

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		improved with well designed drainage systems. All of the surface run-off will be collected by the temporary drainage system with sufficient number of sandtraps (with sufficient capacity) and then discharged to the newly constructed stormwater drainage system along the improved Sha Lo Tung Road.	works for the Development Site						
S6.6.2	-	• Restrict Earthworks to the Dry Season. Earthworks within the Development Site will only be undertaken during the dry season (November through March) in order to avoid the risk of construction runoff reaching ecological sensitive areas. With the implementation of this measure, the risk from excessive construction runoff in the event of a heavy rainstorm can be reduced. Major earthworks will be strictly prohibited during the wet season to minimise ecological risk to the Sha Lo Tung Valley.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.2 & S6.6.3	-	• Adoption of Construction Sequences. Given that the Development Site is elongated in shape and hilly in nature, the construction sequence should be well managed in order to limit the volume of surface runoff and treated effluent generated on-site, in particular during the wet season (works other than earthworks). In order to limit the size of exposed areas and volume of the surface runoff, the construction activities will be carried out sequentially (phase by phase and sub-area to sub-area) rather than in parallel (refer to Site Formation Construction Sequence as shown in *Figure 3.13* in the *EIA Report* and Road Improvement Work Plan as shown in *Figure 3.22* in the *EIA Report*). The site formation works in the northern part of the Development Area will be carried out at a later phase in order to avoid early exposure of the soil and hence to prevent muddy water from spilling over into the Sha Lo Tung SSSI and Sha Lo Tung Stream as well as the wet abandoned agricultural land. Such arrangement will assist in ensuring that construction runoff is not discharged into Sha Lo Tung Stream.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.2 & 6.6.3	-	• Provision of Temporary Drainage Channels. Peripheral temporary drainage channels (special designed U-channel, like a "J" shape will be used) (see Figure 6.3) should be constructed along the lower side of all of the works areas within the Development Site prior to the commencement of the construction works. All of the natural surface run-off will be collected by the temporary drainage system with a sufficient number of sandtraps and oil interceptors and then discharged to the newly constructed stormwater drainage system along Sha Lo Tung Road. The drainage system capacity shall be designed for a 1:20 year storm event. A sandtrap of large capacity is proposed to connect between the temporary drainage system within the Development Site and the newly constructed stormwater drains beneath Sha Lo Tung Road. All surface runoff within the site will be continuously pumped to this sandtrap through a bendable water pipe (e.g. rubber pipe) before it is discharged from the site. Due to the lower level at the surface water collection point within the Development Site, the surface water within the Site will be transferred to temporary storage tanks (after passing through sandtraps) in which a submersible pump will operate to continuously pump the surface runoff to the proposed sandtrap. A spare submersible pump will be put in place in the storage tank for contingency purpose.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.2	-	• Provision of Silt Removal Facility. Sandtraps will be provided on site for wastewater treatment before discharge. The Contractor will ensure that the sandtraps will be large enough to handle the site runoff / discharges and will be properly maintained. The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94. The effectiveness of the sand trap will be checked and maintained regularly. The sand traps should be cleaned out when the volume of settled sediments amounts to 10% of the total volume of the trap.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.2	-	• Separate Temporary Drainage System for Natural Runoff. The temporary drainage system may not be able to handle high volume of natural surface runoff from the surrounding hills during heavy rainfalls. The surface runoff from the Site will be separated from the natural hinterland surface runoff by deployment of two drainage systems. To cater for the surface water running from the hinterland in particular at the southern end to the low profile of the Site, a separate temporary drainage system	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)

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		including catchpits and drainage pipes will be used to direct the natural surface runoff without any contamination due to site activities to north side of the site (*Figure 6.3* in the *EIA* Report).							
S6.6.2	-	• Erection of Site Hoardings and Chain-link Fence with Seal. Continuous site hoarding and chain-link fence will be erected along the temporary drainage system enclosing the entire Development Site (*Figure 6.4* in the *EIA Report*). The hoardings and chain-link fence should be firmly attached to the channel (any gaps are to be filled and cemented) in order to avoid any accidental spilling over the peripheral channel to the nearby streams. All of the excessive runoff due to heavy rainfall or overflow of storage tanks/ sandtraps could be retained within the Site and avoid any accidental discharges into the Sha Lo Tung SSSI Stream as well as the wet abandoned agricultural land. The erection of the hoardings and chain-link fence will avoid any additional impacts to the existing trees.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S6.6.2	-	• Daily Inspection. Green Power will provide a Conservation Specialist to stay on-site during the construction phase. The Green Power representative will inspect the site daily to inspect of the sandtraps and channels and check the implementation and effectiveness of the runoff control measures. The person will have the authority to stop the construction works should the implementation and effectiveness of the runoff control measures not be satisfactory.	Within the Development Site / Throughout the construction period	Conservation Specialist		✓			-
S6.6.4	-	Good Site Practices • Discharges to the natural water courses shall only take place when the effluent complies with the requirements under the *Water Pollution Control Ordinance*. Discharges in the water gathering ground should meet Group A standards for inland waters specified in the Technical Memorandum, Standards for Effluent Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters. • All exposed earth areas will be paved or hydroseeded as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks, where practicable. In the event of rain or at any time when rainstorms are likely to happen, exposed surfaces should be covered by tarpaulin or by other means. • All drainage facilities and erosion and sediment control structures will be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit will be removed regularly and disposed of by spreading evenly over stable, vegetated areas. • Measures will be taken to reduce the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, they will be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations will be discharged into storm drains via silt removal facilities. • Open stockpiles of construction materials (for example, aggregates, sand and fill material) should be covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. • The wheels of all vehicles leaving and entering the construction site shall be washed to minimise the carry over of mud onto Sha Lo Tung Road and into the water gathering grounds. Wheel wash water shall be recycled and only discharged into the temporary drainage system. • Manholes (including newly constructed ones) will always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system. • Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)

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		after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention will be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. • Oil interceptors will be provided in the drainage system and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillages. The oil interceptors should be cleaned when the volume of oil amounts to 30% of the total volume of the oil interceptor. The interceptor will have a bypass to prevent flushing during periods of heavy rain. • The sandtraps should be cleaned out when the volume of settled sediments amounts to 10% of the total volume of the traps.							
S6.6.4	-	General Construction Activities • Debris and rubbish generated on-site will be collected, handled and disposed of properly to avoid entering the nearby stormwater drains and open drainage channels. The refuse collection point will be properly constructed with covers and will be bunded and drained to the sewerage system. • Open storm water drains and culverts near the works area will be covered to block the entrance of large debris and refuse. • Earthworks will be schedule in the dry season (November to March) only and construction sequenced accordingly.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.4	-	Storage and Handling of Oil, Other Petroleum Products and Chemicals • Waste streams classifiable as chemical wastes will be properly stored, collected and treated for compliance with Waste Disposal Ordinance or Disposal (Chemical Waste) (General) Regulation requirements. • All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas and at the south of the Development Site. • The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters. • Oil leakage or spillage will be contained and cleaned up immediately. Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance. The Contractors will prepare guidelines and procedures for immediate clean-up actions following any spillages of oil, fuel or chemicals.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94) *Waste Disposal Ordinance* *Disposal (Chemical Waste) (General) Regulation*
S6.6.4	-	Sewage Effluent • Appropriate sanitary facilities, such as portable chemical toilets, will be employed at the areas where the temporary connection is not feasible. Only portable chemical toilets should be used and they will be deployed at a location as far away from the SSSI as possible and at least 320m away from Sha Lo Tung Stream. The toilets should also be surrounded by temporary interceptor drains and appropriately mounted. A licensed contractor would be responsible for appropriate disposal (by replacing the used portable chemical toilets and no on site cleansing to be allowed) and maintenance of portable toilets.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.9.1, 6.9.2, 6.10.3	S5.2 & 5.3	• Water Quality Monitoring should be conducted at three monitoring stations of the Sha Lo Tung Perennial Stream (R1-U, R1-M and R1-D) (see *Figure 12.2* in *EIA Report* for their locations). The monitoring parameters are detailed in *Sections 5.2.1* and *5.3.1* of this Manual. i. The baseline monitoring should be undertaken 3 days per week for at least four weeks at the designated stations prior to the commencement of the construction	Sha Lo Tung Perennial Stream / Before construction of the Project	Environmental Team /Conservation Specialist					-

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		works. Baseline monitoring schedule prepared by the ET should be faxed to the IEC, EPD and WSD 1 week prior to the commencement of baseline monitoring.							
		ii. Impact monitoring for *in-situ* parameters and SS should be undertaken 3 days per week during the course of construction works. Impact monitoring for oil and grease, ammonia nitrogen, total reactive phosphorus and 5-day biochemical oxygen demand should be carried out once per month during the construction phase. The proposed water quality monitoring schedule prepared by the ET should be faxed to the IEC, EPD and WSD on or before the first day of the monitoring month. The IEC, EPD and WSD should be notified immediately of any changes in schedule by fax.	Sha Lo Tung Perennial Stream / Throughout the construction of the Project		✓				
		iii. Post-project monitoring should be undertaken for 3 days at the designated stations within a week after the completion of the construction works. Post-project monitoring schedule prepared by the ET should be faxed to the IEC, EPD and WSD 1 week prior to the commencement of post-project monitoring. The purpose of the monitoring is to verify that contamination to the watercourses by sewage, oil or chemicals arising from the operational activities is not occurring. The monitoring results will be submitted to EPD, AFCD and WSD after each monitoring event. After the first twelve-months of monitoring, the monitoring results will be reviewed by the Sha Lo Tung Development Co., Ltd to determine whether it is necessary to extend the monitoring. The review results will be provided to EPD and WSD for agreement.	Sha Lo Tung Perennial Stream (R1-U, R1-M and R1-D) / monthly basis during the first twelve months of the operational phase. Two of the monitoring events should be scheduled on the day just after the Ching Ming Festival Day and Chung Yeung Festival Day.			✓	✓	✓	
S6.6.2	-	Surface Runoff and Drainage After identifying the sub-divisions in the natural topography based on their drainage characteristics it is possible to develop mitigation measures to minimize the impact of the development on the existing drainage system and in particular the discharge into Sha Lo Tung Stream. The approach to drainage impact mitigation measures has as an overriding objective to retain and maintain the existing quality and quantity of water flow into the Sha Lo Tung natural stream systems downstream of the Development Site. In doing so it is intended to draw clear distinctions between the following run-off and drainage circumstances: • Development Site subject to vehicular traffic ("development vehicular zones") – where the run-off will be collected using back of kerb filter drains, trapped road gullys and a piped stormwater system. This will discharge run-off to a pumping station located beneath the car park area with all flows being discharged back over the crest of the access road and into the structured road drainage to be provided as part of the road improvements ; • Developments Site with no vehicular traffic ("development non-vehicular zones") – where porous or semi permeable paved surfaces will be used in association with grassed swales and soakaways to attenuate run-off. Terraced construction will control the rate of surface runoff with catchpits providing oxygenation and solids removal at the steps formed. The run-off from the development non-vehicular zone will be routed to pass through vortex grit separator beneath the proposed car park (location refer to *Figure 3.8* of the *EIA Report*) to remove sediments associated with "first flush" flow (details refer to *Annex C* of the *EIA Report*). After removal of sediments clear water can be discharged via a storage tank and non-developed buffer zones (undeveloped naturally vegetated land between the development boundary and the existing stream system) into the existing stream system, which act to reduce the energy and volume of run-off flows before they enter the existing Sha Lo Tung stream system. The vortex grit separator will be regularly cleaned and maintained in good working condition. The initial frequency for clearing the vortex grit separator would be based on systematic monitoring at the start of the wet season, after each significant rainfall event (amber/T3 or above) and at intervals not exceeding one month between April	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		*Waste Disposal Ordinance* *ProPECC PN 5/93*

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		and October. Removal with clearing/disposal as required. This will provide the required information on the volume of washed down material and this can be used to determine an effective and efficient clearing frequency programme.							
S6.6.2	-	• Areas within the development site that are either naturally vegetated, landscaped and/or undisturbed area ("non-development zones") where run-off will not have any interaction with the development and can pass into the existing stream system via buffer zones.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		*Waste Disposal Ordinance* *ProPECC PN 5/93*
S6.6.2	-	• The hazards and risk associated with accidental oil spillage and leakage are negligible because all storm water run-off from the access road and car park within the Development Site will be isolated, collected in pumping station located beneath the proposed car park and then pumped back into the stormwater drainage system for the upgraded access road where it will re-enter the existing main storm water drainage system for the Ting Kong Road.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S6.6.2	-	• Adoption of the proposed measures in *Annex C* of the *EIA Report* (Drainage Assessment and Mitigation Measures).	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S6.6.2	-	Domestic Sewage Effluent It should be noted that no restaurant will be provided within the Development Site, and no trade effluent discharge will be generated during the operational phase. • To cater for this increase in generated sewage during the festival days, the sewage storage tank will be emptied before the festivals and immediately after the festivals. Several portable toilets will also be erected at the pick up/ drop off point at the entrance of Sha Lo Tung Road (next to Ting Kok Road) during those days. All of them will be surrounded by temporary intercept drains and appropriately mounted for contingency purpose. The sewerage storage (equalisation) tank should also be emptied before and immediately after the festivals and should be maintained regularly.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		*Water Pollution Control Ordinance*
S6.6.2 & 6.6.3	-	• The sewage will be discharged into the foul sewer. The pumping station, storage tank and all sewers within the water gathering ground will be designed and constructed to comply with the *Buildings (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations (Cap 123I) reg. 47A* to ensure that they are watertight. Other requirements of WSD on the design and details of construction will be complied with through the circulation of drainage plans to the Building Authority. The sewage tank should be fitted with a level indicator and a high level alarm system. The detailed design of the sewage tank and the associated facilities will submit to WSD for approval prior the construction. The sewage storage tank will be located at least 40 m away from Sha Lo Tung Stream. An adequately maintained duty pump with a 100% standby pumping capacity and alternative power supply is considered to be adequate to address pumping requirements in emergency situations. An approximately 2 km long 225 mm diameter twin sewerage rising mains will be installed from the Development Site running along Sha Lo Tung Road to the existing sewerage network at Ting Kok Road. The sewage will be discharged regularly to the Tai Po STW.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		*Buildings (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations (Cap 123I) reg. 47A*
S6.6.2 & 6.6.3	-	• Regular inspection and maintenance for the storage tanks, piping materials and joints of sewers will be conducted to ensure that leakage of sewage effluent from the tank and pipeline does not occur.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S6.6.2	-	• If leakage or spillage of sewerage does occur, it should be contained and cleaned up promptly.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
Sha Lo Tung Improvement									

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S6.6.3	-	Prevention of Construction Runoff from Polluting the Nearby Watercourse and Ecological Sensitive Areas • Arrange the Earthworks to maximise avoidance of the Wet Season. All the earthworks under Phases 1, 2 and 3, particularly close to the WSRs including Sha Lo Tung SSSI, stream and Fung Yuen Valley SSSI, will be undertaken during the dry season (November to March) in order to avoid the risk of construction runoff overflow to the downstream ecological sensitive areas.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.2 & S6.6.3	-	• Adoption of Construction Sequences. Given that the total length of Sha Lo Tung Road is approximately 2.3km, the construction sequence will be well managed in order to limit the volume of surface runoff and treated effluent generated on-site, in particular during the wet season (works other than earthworks). In order to limit the size of exposed areas and volume of the surface runoff, the construction activities will be carried out sequentially (phase by phase) rather than in parallel (refer to Road Improvement Work Plan as shown in *Figure 3.22* of the *EIA Report*.	Within the Sha Lo Tung Improvement Site/ Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.2 & 6.6.3	-	• Provision of Temporary Drainage Channels. To prevent the discharge of silty surface run-off to the existing watercourse, an effective temporary drainage system will be introduced for the road improvement work. Prior to the construction, temporary hoarding will be erected and sandbags be placed at toe of the hoarding within the works site (refer to *Figure 6.4* in the *EIA Report*) as to prevent any silty water flowing out of the works site. As shown in *Figure 3.22* in the *EIA Report*, at least two temporary sandtraps connecting with temporary surface drainage will be proposed at each phase of road improvement works (except Phase 3) prior to discharging into the nearest watercourse to avoid any excessive sediment or blockage of existing natural drainage system. Similar to the construction activities within the Development Site, all of the surface run-off generated along the section close to Sha Lo Tung Valley (approximately half of the *Phase 3*) will be collected by the temporary drainage system with a sufficient number of sandtraps (with sufficient capacity) and oil interceptors and then discharged to the newly constructed stormwater drainage system along the improved Sha Lo Tung Road. The drainage system capacity shall be designed for a 1:20 year storm event. A sandtrap of large capacity is proposed to connect between the temporary drainage system within the Development Site and the newly constructed stormwater drains beneath Sha Lo Tung Road. All surface runoff within the site will be diverted to this sandtrap before it is discharged out from the site. Due to the lower level at the surface water collection point within the Development Site, the surface water within the Site will be stored in temporary storage tanks (after passing through sandtrap) in which a submersible pump will operate to continuously pump the surface runoff to the proposed upstream sandtrap. A spare submersible pump will be put in place in the storage tank for contingency purpose.	Within the Sha Lo Tung Road Improvement/ Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.4	-	Good Site Practices • Discharges to the natural water courses shall only take place when the effluent complies with the requirements under the Water Pollution Control Ordinance. Discharges in the water gathering ground should meet Group A standards for inland waters specified in the Technical Memorandum, Standards for Effluent Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters. • All exposed earth areas will be paved or hydroseeded as soon as possible after earthworks have been completed, or alternatively, within 14 days of the cessation of earthworks, where practicable. In the event of rain or at any time when rainstorms are likely to happen, exposed surfaces should be covered by tarpaulin or by other means. • All drainage facilities and erosion and sediment control structures will be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit will be removed regularly	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)

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		and disposed of by spreading evenly over stable, vegetated areas. • Measures will be taken to reduce the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, they will be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations will be discharged into storm drains via silt removal facilities. • Open stockpiles of construction materials (for example, aggregates, sand and fill material) should be covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. • The wheels of all vehicles leaving and entering the construction site shall be washed to minimise the carry over of mud onto Sha Lo Tung Road and into the water gathering grounds. Wheel wash water shall be recycled and only discharged into the temporary drainage system. • Manholes (including newly constructed ones) will always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system. • Precautions to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94. Particular attention will be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. • Oil interceptors will be provided in the drainage system and regularly emptied to prevent the release of oil and grease into the storm water drainage system after accidental spillages. The oil interceptors should be cleaned when the volume of oil amounts to 30% of the total volume of the oil interceptor. The interceptor will have a bypass to prevent flushing during periods of heavy rain. • The sandtraps should be cleaned out when the volume of settled sediments amounts to 10% of the total volume of the traps.						
S6.6.4	-	General Construction Activities • Debris and rubbish generated on-site will be collected, handled and disposed of properly to avoid entering the nearby stormwater drains and open drainage channels. The refuse collection point will be properly constructed with covers and will be bunded and drained to the sewerage system. • Open storm water drains and culverts near the works area will be covered to block the entrance of large debris and refuse. • Earthworks will be schedule in the dry season (November to March) only and construction sequenced accordingly.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.4	-	Storage and Handling of Oil, Other Petroleum Products and Chemicals • Waste streams classifiable as chemical wastes will be properly stored, collected and treated for compliance with Waste Disposal Ordinance or Disposal (Chemical Waste) (General) Regulation requirements. • All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas and at the south of the Development Site. • The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters. • Oil leakage or spillage will be contained and cleaned up immediately. Waste oil	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94) *Waste Disposal Ordinance* *Disposal (Chemical Waste) (General) Regulation*

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		should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance. The Contractors will prepare guidelines and procedures for immediate clean-up actions following any spillages of oil, fuel or chemicals.							
S6.6.4	-	Sewage Effluent • Appropriate sanitary facilities, such as portable chemical toilets, will be employed at the areas where the temporary connection is not feasible. Only portable chemical toilets should be used and they will be deployed at a location as far away from the SSSI as possible and at least 320m away from Sha Lo Tung Stream. The toilets should also be surrounded by temporary interceptor drains and appropriately mounted. A licensed contractor would be responsible for appropriate disposal (by replacing the used portable chemical toilets and no on site cleansing to be allowed) and maintenance of portable toilets.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S6.6.3	-	Surface Runoff and Drainage • It has been demonstrated that the majority of contaminants in stormwater runoff are transported on sediments. The runoff from the concrete paved areas including the improved Sha Lo Tung Road and car park will be collected using back of kerb filter drains and trapped roads gullies to Highways Department's standard drawings H3110. The gullies on the access road and car park within the Development Site will discharge to a piped drainage system linked by backdrop catchpits and collected in a pumping station located beneath the car park. The collected run-off will then be pumped back over the crest of the access road and back into the structured highway drainage system that ultimately connects to the existing stormwater system in Ting Kok Road.	Within the Sha Lo Tung Road Improvement Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94) *ProPECC PN 5/93*
S6.6.3	-	• Any oil leakage or spillage will be contained and cleaned up immediately.	Within the Sha Lo Tung Road Improvement Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S6.6.3	-	• Surface runoff will be diverted and discharged into the newly constructed stormwater drainage system along the improved Sha Lo Tung Road to Tai Po.	Within the Sha Lo Tung Road Improvement Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S6.6.2 & 6.6.3	-	Domestic Sewage Effluent • The sewage will be discharged into the foul sewer. The pumping station, storage tank and all sewers within the water gathering ground will be designed and constructed to comply with the *Buildings (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations (Cap 123I) reg. 47A* to ensure that they are watertight. Other requirements of WSD on the design and details of construction will be complied with through the circulation of drainage plans to the Building Authority.	Within the Sha Lo Tung Road Improvement Site/ Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		*Buildings (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations (Cap 123I) reg. 47A*
S6.6.2 & 6.6.3	-	• Regular inspection and maintenance for the storage tanks, piping materials and joints of sewers will be conducted to ensure that leakage of sewage effluent from the tank and pipeline does not occur.	Within the Sha Lo Tung Road Improvement Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
Water Gathering Ground									
S6.6.5	-	• No earth, building materials, fuel, soil or toxic materials or any other materials which may cause contamination to the WGG are allowed to be stockpiled close to any watercourses within the WGG. • No discharge of flammable or toxic solvents, petroleum oil or tar and other toxic substances will be allowed within the WGG. Any chemicals to be stored or used within the WGG will be subject to the approval of the Director of Water Supplies. The chemicals stored for use during building construction will include paints, varnishes and the like for application to steel, timber and plywood formwork, concrete additives, solvents and thinners, adhesive, bituminous compounds and tars. Since they will be stored in small quantities and will be properly stored, collected and treated for compliance with *Waste Disposal Ordinance* or *Disposal (Chemical Waste) (General)*	Within the Water Gathering Ground / Throughout the construction period of the Project	Construction Contractor		✓			-

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		Regulation requirements. All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas and located next to the temporary stockpiling area at the south of the Development Site (*Figure 3.11*). The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters. As such, the risk of the chemical spillage to the water sensitive receivers, especially the WGG, is expected to be low. The storage area will be located at the southern side and the lower part of the Development Site to provide at least 320m buffer distance from the SSSI and Sha Lo Tung Stream. • In order to prevent the washing away of construction materials, soil, silt or debris into any drainage system and the watercourses within the WGG, the stockpile of such materials will be placed within a designated area measuring about 3m x 20m in the southern part of the Development Site (*Figure 6.3* in the *EIA Report*). The designated stockpile area will occupy a proposed cut platform formed within the first phase works area and is located at a substantial distance of approximately 320m from Sha Lo Tung SSSI and streams. The area will be provided with concrete paving, concrete bunds and interceptor drains along its perimeter to prevent the loss of materials such as soil, silt or debris to the surrounding area. The stockpile will also be covered with tarpaulin or similar impermeable covering materials during rainstorms to ensure that no impact on the water gathering ground, Sha Lo Tung SSSI and streams will arise. All unavoidable surplus excavated materials will be removed from the works area and delivered by truck on a daily basis to one of the Government's public fill reception facilities, eg Tuen Mun Area 38 Fill Bank. • Regular cleaning of the silt/grease traps will be carried out to ensure that they function properly at all times. • All excavated or filled surfaces which have the risk of erosion will always be protected from erosion. • Facilities for washing the wheels of vehicles before leaving the site will be provided. • No maintenance activities which may generate chemical wastes shall be undertaken in the water gathering grounds • Any construction plant which causes pollution to catchwaters or catchment due to leakage of oil or fuel will be removed off site immediately. • Any soil contaminated with fuel leaked from plant will be removed off site and the voids arising from removal of contaminated soil will be replaced by suitable material to the approval of the Director of Water Supplies. • Temporary toilet facilities (only portable toilets to be allowed) will be provided at a designated area located at the southern part of the Development Site (next to the temporary stockpiling area). The toilets will be located at a substantial distance of approximately 320m away from the SSSI and the watercourse within the WGG (see *Figure 6.3* in the *EIA Report*) and will also be surrounded by temporary interceptor drains and appropriately mounted. The details of the chemical toilets shall be submitted to WSD prior to the construction commencement. A licensed contractor will be appointed to carry out appropriate disposal (by replacing the used portable chemical toilets and no on site cleansing to be allowed) and maintenance of these facilities. All waste shall be cleared away daily and disposed of outside the WGG. • All mud and debris will be removed from any waterworks access roads and associated drainage systems. • For drainage and sewerage diversions within or affecting the WGG, the agreement of the Director of Water Supplies will be required prior to the commencement of the diversion works.							

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		• The use of pesticide, herbicides or fertilisers will not be allowed within the WGG without the prior approval from the Director of Water Supplies. • Disposal of the containers for fuel, oil and other chemicals or their residues within the WGG is strictly prohibited. They must be disposed of properly outside the WGG. • Watertight and leak-proof sewers will be used in the WGG in order to prevent any leakage of sewage. • In the unlikely event of spillage of oil and fuel, oil spill control measures and decontamination kit will be deployed to confine the spreading. Please note that oil will not be stored on site. • Construction site runoff will not be allowed to be discharged to the existing water courses within the WGG.							
Sewerage & Sewage Treatment Implications									
Ecological Reserve and Sha Lo Tung Road Improvement									
		No measures required.							
Development Site									
S7.8	S6.2	Assuming Option 1 Sewage Disposal Scheme is adopted, the following mitigation measures are proposed: • Installation of an approximately 2 km long 225 mm diameter twin sewerage rising mains from the Development Site running along Sha Lo Tung Road to the existing sewerage network at Ting Kok Road; • Installation of a stand-by pump of 100% pumping capacity in case of mal-function of the working pump; and • Construction of a storage tank (fitted with a level indicator and a high level alarm system, designed and constructed to comply with the *Buildings (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations* (Cap 123I) reg. 47A) of minimum 180 m^3 capacity, to give approximately three days withholding time over maximum visitor attendance over festival periods to cater for the situation if the pumping facilities malfunctioned.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S7.8	S6.3	Measures to manage the increase in sewage generation • Provision of adequate permanent water closets and urinals in the complex; • Emptying of the sewage storage tank before and immediately after the festivals; and • Provision of portable toilets at the entrance of Sha Lo Tung road, next to Ting Kok Road for contingency purpose.	Within the Development Site / Throughout the operation period	Sha Lo Tung Development Co., Ltd			✓		-
WASTE MANAGEMENT									
Ecological Reserve									
S8.4.2	S7.2 & 7.3	<u>Enhancement Works and Maintenance and Operation</u> • Wastes should be handled and stored in a manner which ensures that they are held securely without loss or leakage thereby minimising the potential for pollution.	Within the Ecological Reserve / Throughout the enhancement works, and maintenance and operation	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-
S8.4.2	S7.2 & 7.3	• Appropriate measures should be employed to minimise windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers.	Within the Ecological Reserve / Throughout the enhancement works, and maintenance and operation	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-
S8.4.2	S7.2 & 7.3	• Temporary green waste storage areas should be well maintained and cleaned regularly.	Within the Ecological Reserve / Throughout the enhancement works, and maintenance and operation	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-

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Development Site									
S8.4.3	S7.2	Good Site Management Programme • The *in-situ* excavated materials should be optimised to be reused for the backfilling during detailed design stage.	Within the Development Site / Detailed design stage	Sha Lo Tung Development Co., Ltd	✓				-
S8.4.3	S7.2	• The cutting and filling activities for the site formation and slope works should be planned and arranged in such a way that the requirement for stockpiling will be minimized.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			
S8.4.3	S7.2	• Should there be any requirement for the temporary storage of excavated materials destined for reuse within the Project, the stockpile of such materials will be placed within a designated area measuring about 3m x 20m in the southern part of the Development Site (*Figure 3.11* in the *EIA Report*). The designated stockpile area will occupy a proposed cut platform formed within the first phase works area and is located at a substantial distance of 320 m from Sha Lo Tung SSSI and streams. The area will be provided with concrete paving, concrete bunds and interceptor drains along its perimeter to prevent the loss of materials such as soil, silt or debris to the surrounding area. The stockpile will also be covered with tarpaulin or similar impermeable covering materials during rainstorms to ensure that no impact on the water gathering ground, Sha Lo Tung SSSI and streams will arise. All unavoidable surplus excavated materials will be removed from the works area and delivered by truck on a regular basis to one of the Government's public fill reception facilities, eg Tuen Mun Area 38 Fill Bank. The Contractor should consult the EPD (and CEDD) for the final disposal of wastes.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• Good management and control can prevent generation of significant amount of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: i. Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal; ii. Encourage collection of aluminium cans and waste paper by individual collectors during construction with separate labelled bins being provided to allow the segregation of these wastes from other general refuse generated by the workforce; iii. Any unused chemicals and those with remaining functional capacity be recycled as far as possible; iv. Use of reusable non-timber formwork to reduce the amount of C&D materials; v. Prior to disposal of construction waste, wood, steel and other metals should be separated, to the extent practical for re-use and/or recycling to reduce the quantity of waste to be disposed at landfills; vi. Proper storage and site practices to reduce the potential for damage or contamination of construction materials; and vii. Plan and stock construction materials carefully to reduce amount of waste generated and avoid unnecessary generation of waste.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3 & 8.4.4	S7.2 & 7.3	• Wastes should be handled and stored in a manner which ensures that they are held securely without loss or leakage thereby minimising the potential for pollution.	Within the Development Site / Throughout the construction and operation period	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-
S8.4.3	S7.2	• Only reputable waste collectors authorised to collect the specific category of waste concerned should be employed.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• Appropriate measures should be employed to minimise windblown litter and dust	Within the Development Site /	Construction Contractor		✓			-

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		during transportation by either covering trucks or transporting wastes in enclosed containers.	Throughout the construction period						
S8.4.3 & 8.4.4	S7.2 & 7.3	• The necessary waste disposal permits should be obtained from the appropriate authorities, if they are required, in accordance with the *Waste Disposal Ordinance Cap 354*, *Waste Disposal (Chemical Waste) (General) Regulation Cap 354* and the *Land (Miscellaneous Provision) Ordinance Cap 28*.	Within the Development Site / Throughout the construction and operation period	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		*Waste Disposal Ordinance Cap 354*, *Waste Disposal (Chemical Waste) (General) Regulation Cap 354* and *Crown Land Ordinance Cap 28*
S8.4.3	S7.2	• Chemical waste shall be handled and stored in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes to minimise any danger to health of risk and pollution to the environment. Under the Chemical Waste Regulations, all producers of chemical waste should register with EPD.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*
S8.4.3	S7.2	• Collection of general refuse should be carried out frequently, preferably daily.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3 & 8.4.4	S7.2 & 7.3	• Waste should only be disposed of at licensed sites, and site staff and the Contractor should develop procedures to ensure that illegal disposal of wastes does not occur.	Within the Development Site / Throughout the construction and operation period	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-
S8.4.3	S7.2	• Waste storage areas should be well maintained and cleaned regularly.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• Records of the quantities of wastes generated, recycled and disposed, determined by weighing each load or other method, should be maintained to check whether any targets for waste recycling, reduction etc are being met.	Within the Development Site /Throughout the construction period	Construction Contractor		✓			-
S8.4.3 & 8.4.4	S7.2 & 7.3	• Training and instruction of site staff should be given at the site to increase awareness and draw attention to waste management issues and the need to minimise waste generation.	Within the Development Site / Throughout the construction and operation period	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-
S8.4.3	S7.2	• The *Construction Waste Disposal Charging Scheme* was launched on 1 December 2005 and the charging for disposal of construction waste commenced on 20 January 2006. Through the Charging Scheme, construction waste producers (i.e. contractors) are encouraged to reduce, sort and recycle construction waste, in particular the wood materials, so that their disposal costs can be minimised and valuable landfill space can be preserved.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Waste Disposal (Charges for Disposal of Construction Waste) Regulation, December 2005* *ETWBTC No 31/2004, Trip Ticket System for Disposal of Construction and Demolition Materials*
S8.4.3	S7.2	• The Contractor should separate public fill from non-inert construction waste for disposal at appropriate locations and to sort the construction waste by category on-site to facilitate reuse/recycling and reduce the quantity of waste to be disposed of. The Contractor will be required to break down any over-sized public fill to less than 250 mm in size for disposal so as to facilitate its re-use by other reclamation or earth-filling projects.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• A trip-ticket system (TTS) will also be established in accordance with Works Bureau Technical Circular No.31/2004 to monitor the disposal of construction waste at the Tuen Mun Area 38 Fill Bank or other approved designated public fill facilities, and to control fly-tipping. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• In order to fully implement the TTS, it is recommended that warning signs should be put up at all vehicle accesses to remind the drivers of dump truck of the proper designated disposal outlet and the penalties of offence. Close-circuited television (CCTV) is recommended to be installed at the access points to monitor and prevent illegal dumping, especially during night time. Site fences should be installed to prevent illegal dumping at non-designated area within the Site.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• A Waste Management Plan (WMP) as a part of Environmental Management Plan (EMP) should be prepared by the Contractor prior to the commencement of construction as part of the contractual requirement. The WMP should be prepared in accordance with	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-

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		ETWB TCW No. 19/2005 which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities. The plan should incorporate site-specific factors, such as the designation of areas for the segregation and temporary storage of reusable and recyclable materials. The Contractor should implement the waste management practices in the WMP throughout the construction stage of the Project. The WMP should be reviewed regularly and updated by the Contractor, preferably in a monthly basis, to incorporate any revisions, measures or suggestions discovered during the construction periods for implementation							
S8.4.4	S7.2	• Waste reduction and minimisation should be considered at the planning and design stage.	Within the Development Site / Prior to the commencement of the operation of the Project	Sha Lo Tung Development Co., Ltd	✓				-
S8.4.4	S7.3	• Different types of wastes (i.e. general refuse and office waste) should be segregated and stored separately.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S8.4.4	S7.3	• Wastes should be handled and stored in a manner which ensures that they are held securely without loss or leakage thereby minimising the potential for pollution.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S8.4.4	S7.3	• The necessary waste disposal permits should be obtained from the appropriate authorities, if they are required, in accordance with the Waste Disposal Ordinance Cap 354, Waste Disposal (Chemical Waste) (General) Regulation Cap 354 and the Land (Miscellaneous Provision) Ordinance Cap 28	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		*Waste Disposal Ordinance Cap 354, Waste Disposal (Chemical Waste) (General) Regulation Cap 354 and the Land (Miscellaneous Provision) Ordinance Cap 28*
S8.4.4	S7.3	• Collection of general refuse should be carried out on a daily basis.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S8.4.4	S7.3	• General refuse should be collected from lidded bins and delivered to a central collection point and should be stored in enclosed containers to prevent odour, windblown litter, vermin, water pollution and visual impacts.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S8.4.4	S7.3	• A properly constructed covered refused collection point that is bunded and drained to the sewerage system should be provided.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S8.4.4	S7.3	• Waste should only be disposed of at licensed sites. The Contractor should develop procedures to ensure that illegal disposal of wastes does not occur.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S8.4.4	S7.3	• Waste storage areas should be well maintained and cleaned at least once a day.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S8.4.4	S7.3	• Separation of recyclables from waste stream should be encouraged and may occur before or after the delivery of the wastes to the central collection point.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
S8.4.4	S7.3	• Chemical waste should be handled in accordance with Chemical Waste Regulations and the *Code of Practice on the Packaging, Labelling and Storage of Chemical Waste*. Chemical waste should be placed in approved containers, stored in a secure area and sent to a facility licensed to receive chemical waste by the EPD, such as the Clinical Waste Treatment Centre in Tsing Yi. Under the Chemical Waste Regulations, all producers of chemical waste should register with the EPD.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		*Waste Disposal (Chemical Waste) (General) Regulation* *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*
S8.4.4	S7.3	• Training and instruction of staff should be given to increase awareness and draw attention to waste management issues and the need to minimise waste generation.	Within the Development Site / Throughout the operational phase	Sha Lo Tung Development Co., Ltd			✓		-
Sha Lo Tung Road Improvement									
S8.4.3	S7.2	Good Site Management Programme • The *in-situ* excavated materials should be optimised to be reused for the backfilling during detailed design stage.	Within the Sha Lo Tung Road Improvement Site / Detailed design stage	Sha Lo Tung Development Co., Ltd	✓				-

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S8.4.3	S7.2	• The cutting and filling activities for the site formation and slope works should be planned and arranged in such a way that the requirement for stockpiling will be minimized.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			
S8.4.3	S7.2	• Should there be any requirement for the temporary storage of excavated materials destined for reuse within the Project, the stockpile of such materials will be placed within a designated area measuring about 3m x 20m in the southern part of the Development Site (*Figure 3.11* in the *EIA Report*). The designated stockpile area will occupy a proposed cut platform formed within the first phase works area and is located at a substantial distance of 320 m from Sha Lo Tung SSSI and streams. The area will be provided with concrete paving, concrete bunds and interceptor drains along its perimeter to prevent the loss of materials such as soil, silt or debris to the surrounding area. The stockpile will also be covered with tarpaulin or similar impermeable covering materials during rainstorms to ensure that no impact on the water gathering ground, Sha Lo Tung SSSI and streams will arise. All unavoidable surplus excavated materials will be removed from the works area and delivered by truck on a regular basis to one of the Government's public fill reception facilities, eg Tuen Mun Area 38 Fill Bank. The Contractor should consult the EPD (and CEDD) for the final disposal of wastes..	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• Good management and control can prevent generation of significant amount of waste. Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: i. Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of material and their proper disposal; ii. Encourage collection of aluminium cans and waste paper by individual collectors during construction with separate labelled bins being provided to allow the segregation of these wastes from other general refuse generated by the workforce; iii. Any unused chemicals and those with remaining functional capacity be recycled as far as possible; iv. Use of reusable non-timber formwork to reduce the amount of C&D materials; v. Prior to disposal of construction waste, wood, steel and other metals should be separated, to the extent practical for re-use and/or recycling to reduce the quantity of waste to be disposed at landfills; vi. Proper storage and site practices to reduce the potential for damage or contamination of construction materials; and vii. Plan and stock construction materials carefully to reduce amount of waste generated and avoid unnecessary generation of waste.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3 & 8.4.4	S7.2 & 7.3	• Wastes should be handled and stored in a manner which ensures that they are held securely without loss or leakage thereby minimising the potential for pollution.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction and operation period	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-
S8.4.3	S7.2	• Only reputable waste collectors authorised to collect the specific category of waste concerned should be employed.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• Appropriate measures should be employed to minimise windblown litter and dust during transportation by either covering trucks or transporting wastes in enclosed containers.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3 & 8.4.4	S7.2 & 7.3	• The necessary waste disposal permits should be obtained from the appropriate authorities, if they are required, in accordance with the *Waste Disposal Ordinance Cap*	Within the Sha Lo Tung Road Improvement Site / Throughout the	Construction Contractor and Sha Lo Tung		✓	✓		*Waste Disposal Ordinance Cap 354*, *Waste Disposal (Chemical Waste)*

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		354, *Waste Disposal (Chemical Waste) (General) Regulation Cap 354* and the *Land (Miscellaneous Provision) Ordinance Cap 28*.	construction and operation period	Development Co., Ltd					*(General) Regulation Cap 354* and *Crown Land Ordinance Cap 28*
S8.4.3	S7.2	• Chemical waste shall be handled and stored in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes to minimise any danger to health of risk and pollution to the environment. Under the Chemical Waste Regulations, all producers of chemical waste should register with EPD.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*
S8.4.3	S7.2	• Collection of general refuse should be carried out frequently, preferably daily.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3 & 8.4.4	S7.2 & 7.3	• Waste should only be disposed of at licensed sites, and site staff and the Contractor should develop procedures to ensure that illegal disposal of wastes does not occur.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction and operation period	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-
S8.4.3	S7.2	• Waste storage areas should be well maintained and cleaned regularly.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• Records of the quantities of wastes generated, recycled and disposed, determined by weighing each load or other method, should be maintained to check whether any targets for waste recycling, reduction etc are being met.	Within the Sha Lo Tung Road Improvement Site /Throughout the construction period	Construction Contractor		✓			-
S8.4.3 & 8.4.4	S7.2 & 7.3	• Training and instruction of site staff should be given at the site to increase awareness and draw attention to waste management issues and the need to minimise waste generation.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction and operation period	Construction Contractor and Sha Lo Tung Development Co., Ltd		✓	✓		-
S8.4.3	S7.2	• The Construction Waste Disposal Charging Scheme was launched on 1 December 2005 and the charging for disposal of construction waste commenced on 20 January 2006. Through the Charging Scheme, construction waste producers (i.e. contractors) are encouraged to reduce, sort and recycle construction waste, in particular the wood materials, so that their disposal costs can be minimised and valuable landfill space can be preserved.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			*Waste Disposal (Charges for Disposal of Construction Waste) Regulation, December 2005* *ETWBTC No 31/2004, Trip Ticket System for Disposal of Construction and Demolition Materials*
S8.4.3	S7.2	• The Contractor should separate public fill from non-inert construction waste for disposal at appropriate locations and to sort the construction waste by category on-site to facilitate reuse/recycling and reduce the quantity of waste to be disposed of. The Contractor will be required to break down any over-sized public fill to less than 250 mm in size for disposal so as to facilitate its re-use by other reclamation or earth-filling projects.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• A trip-ticket system (TTS) will also be established in accordance with Works Bureau Technical Circular No.31/2004 to monitor the disposal of construction waste at the Tuen Mun Area 38 Fill Bank or other approved designated public fill facilities, and to control fly-tipping. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• In order to fully implement the TTS, it is recommended that warning signs should be put up at all vehicle accesses to remind the drivers of dump truck of the proper designated disposal outlet and the penalties of offence. Close-circuited television (CCTV) is recommended to be installed at the access points to monitor and prevent illegal dumping, especially during night time. Site fences should be installed to prevent illegal dumping at non-designated area within the Site.	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-
S8.4.3	S7.2	• A Waste Management Plan (WMP) as a part of Environmental Management Plan (EMP) should be prepared by the Contractor prior to the commencement of construction as part of the contractual requirement. The WMP should be prepared in accordance with ETWB TCW No. 19/2005 which describes the arrangements for avoidance, reuse, recovery, recycling, storage, collection, treatment and disposal of different categories of waste to be generated from the construction activities. The plan should incorporate	Within the Sha Lo Tung Road Improvement Site / Throughout the construction period	Construction Contractor		✓			-

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		site-specific factors, such as the designation of areas for the segregation and temporary storage of reusable and recyclable materials. The Contractor should implement the waste management practices in the WMP throughout the construction stage of the Project. The WMP should be reviewed regularly and updated by the Contractor, preferably in a monthly basis, to incorporate any revisions, measures or suggestions discovered during the construction periods for implementation							
ECOLOGY									
Ecological Reserve									
S9.10.2	-	Good Site Practice • Conduct all the works during dry season and using hand tools; • Stockpile materials offsite; • Locate the footing of the temporary footbridge at bare land and avoid vegetated areas as much as practical; • Avoid or minimize vegetation removal as much as possible; • Restrict the number of workers within the Ecological Reserve during construction; and, • Regularly check the work site boundaries to ensure that they are not breached and that damage does not occur to surrounding habitats in particular the secondary woodland and Sha Lo Tung streams.	Within the Ecological Reserve / Throughout the construction Phase	Construction Contractor		✓			-
S9.10.2	-	Visitor Control • Undertake trail maintenance, provision of signage and guided tour (provided by the Green Power/ Nature Interpretation Centre), as proposed under CMP, as well as staff patrolling (eg for vandalism) and monitoring of the site, in order to control and manage the human activities due to the additional visitors attracted to the valley. • Provide sufficient Conservation Ambassadors (ie 30 people, organised by Green Power), who will serve as reserve guards to advise, control and educate visitors of the regulations in the Ecological Reserve, during special festivals, ie Ching Ming or Chung Yeung. • Although Pat Sin Leng Country Park is open for public enjoyment all the time, the Nature Interpretation Centre will also be closed during festival days to avoid attracting people who might wander within the Ecological Reserve.	Within the Ecological Reserve / Throughout the operation phase	Sha Lo Tung Development Co., Ltd			✓		-
S9.10.2	-	Maintenance Work • Any footpath maintenance work will be carried out manually or by small scale machines.	Within the Ecological Reserve / Throughout the operation period	Sha Lo Tung Development Co., Ltd			✓		-
Development Site									
S9.10.2	-	Minimisation of the Development Footprint • The preliminary Master Layout Plan minimised the development footprint within the Development Site. Although the total area of the Development Site is approximately 4.1 ha, the land take for the development including building structures, areas for site office and stockpile during construction, cut slope and sitting out areas, as well as the proposed landscape hardworks, is approximately 1.625 ha (comprised only about 39.6% of the total site area).	Within the Development Site / Prior to the commencement of construction works	Design Team of Sha Lo Tung Development Co., Ltd	✓	✓			-
S9.10.2	-	Detailed Engineering Design Avoiding Habitat and Vegetation Loss • The preliminary Master Layout Plan minimised the impacts on the secondary woodland and trees within the Development Site. The detailed engineering design should adopt the principle of balancing the minimising loss of trees (therefore	Within the Development Site / Prior to the commencement of construction works	Design Team of Sha Lo Tung Development Co., Ltd	✓	✓			-

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		secondary woodland) and ecological habitats with the visual impact of the Project. This has been demonstrated in the preliminary Master Layout Plan which preserved majority of the secondary woodland (in which only approximately 0.03 ha would be affected). Provision of an additional 20 m wide non-building buffer between the Sha Lo Tung SSSI and construction activities in Development Site should be strictly implemented.							
S9.10.2	-	Prevention of Construction Runoff from Polluting the Nearby Watercourse and Ecological Sensitive Areas • Completion of Sha Lo Tung Road Improvement in advance. Before any construction works are undertaken within the Development Site, the Sha Lo Tung Road should be improved with well designed drainage systems. All of the construction run-off will be collected by the temporary drainage system with sandtrap (with sufficient capacity) and then discharged to the newly constructed stormwater drainage system along the improved Sha Lo Tung Road.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94) published by EPD
S9.10.2	-	• Restricted Earthworks to the Dry Season. Major Earthworks within the Development Site will only be undertaken in the dry season (November to March) in order to avoid the risk of construction runoff reaching ecological sensitive areas. With the implementation of this measure, the risk from excessive construction runoff in the event of a heavy rainstorm could be prevented. Major earthworks will be strictly prohibited during the wet season to minimise any ecological risk to the Sha Lo Tung Valley.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			
S9.10.2	-	• Adoption of Construction Sequences. Given that the Development Site is elongated in shape and hilly in nature, the construction sequence should be well managed in order to limit the volume of surface runoff and treated effluent generated on-site, in particular during the wet season (works other than earthworks). In order to limit the size of exposed area and volume of the surface runoff, the construction activities will be carried out sequentially (phase by phase and sub-area to sub-area) rather than in parallel (refer to Site Formation Construction Sequence as shown in *Figure 3.13* in the EIA Report). Such arrangement will help ensure that no construction runoff will discharge into Sha Lo Tung Stream.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94) published by EPD
S9.10.2	-	• Provision of Temporary Drainage Channels. Peripheral temporary drainage channels (special designed U-channel, like a "J" shape will be used) should be constructed along low side of all of the works areas within the Development Site prior to the commencement of the construction works (refer to *Figure 6.3* in the *EIA Report*). All of the construction run-off will be collected by the temporary drainage system with a sufficient number of sandtraps and oil interceptors and then discharged to the newly constructed stormwater drainage system along the Sha Lo Tung Road. A sandtrap of large capacity is proposed to connect between the temporary drainage system within the Development Site and the newly constructed stormwater drains beneath the Sha Lo Tung Road. All surface runoff within the site will be diverted to this sandtrap before it is discharged from the site. Due to the lower level at the surface water collection point within the Development Site, the surface water within the Site will be stored to temporary storage tank (after passing through sandtrap) in which a submersible pump will operate to continuously pump the surface runoff to the proposed sandtrap. A spare submersible pump will be put in place in the storage tank for contingency purpose. Dual power supply or ring main supply and standby submersible pumps will also be provided to prevent the occurrence of emergency discharge of surface runoff into nearby SSSI and CA zones. In accordance with Section 8.2.4 of Geotechnical Manual for Slopes, the design of temporary drainage system was based on 1 in 20 years return period.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S9.10.2	-	• Provision of Silt Removal Facility. Sandtraps will be provided on site for wastewater treatment before discharge. The Contractor should ensure that the sandtraps will be large enough to handle the site runoff / discharges and will be properly maintained.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)

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		The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94. The effectiveness of the sand traps should be checked and maintained regularly.							
S9.10.2	-	• Separate Temporary Drainage System for Natural Runoff. The temporary drainage system may not be able to handle high volume of natural hinterland surface runoff from the surrounding hills during heavy rainfalls. The surface runoff from the Site could be separated from the natural hinterland surface runoff by deployment of two drainage systems. To cater for the surface water running from the hinterland in particular at the southern end to the low profile of the Site, a separate temporary drainage system including catchpits and drainage pipes is proposed to direct the natural surface runoff without any contamination due to site activities to north side of the site (refer to *Figure 6.3* in the *EIA Report*).	Within the Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S9.10.2	-	• Erection of Site Hoardings and Chain-link Fence with Seal. Site hoardings and chain-link fence will be erected along the temporary drainage system enclosing the whole Development Site (refer to Figures 6.3 & 6.4). The hoardings and chain-link fence should be erected firmly attached to the channel (any gaps are to be filled and cemented) in order to avoid any accidental spilling over the peripheral channel to the nearby streams. All of the excessive runoff due to heavy rainfall or overflow of sandtraps/ storage tanks could be retained within the Site and avoid any accidental discharges into the Sha Lo Tung Stream. The erection of the hoardings and chain-link fence should avoid any additional impacts to the existing trees.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S9.10.2	-	• Daily Inspection. Green Power will provide a Conservation Specialist to stay on-site during the construction phase. The Green Power representative will inspect the site daily to check the implementation and effectiveness of the runoff control measures. The person will have the authority to stop the construction works should the implementation and effectiveness of the runoff control measures not be satisfactory.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S9.10.2	-	Avoidance of Encroachment onto Country Park and SSSI • Demarcate the boundary of Pat Sin Leng Country Park, Conservation Area, Sha Lo Tung SSSI and the Development Site prior the commencement of construction activities. The works site should be enclosed by site hoarding which will restrict all of the work activities within the Development Site boundary.	Within the Development Site / Throughout the construction period	Design Team of Sha Lo Tung Development Co., Ltd		✓			-
S9.10.2	S8.2.1	Vegetation Transplantation • Bamboo Orchid and Willow-leaved Camellia were identified as being of conservation interest within the Development Site. As a mitigation measure, the affected individuals (if confirmed as necessary during detailed engineering design) will be transplanted to suitable nearby habitats prior to the construction phase as far as practicable. A detailed vegetation survey on the plant species will be conducted within the Development Site by a suitably qualified botanist/ ecologist to identify and record the affected individuals prior to the commencement of site clearance works. The survey will also serve to identify any other plants of conservation interest which may be present in the Development Site (eg *Viburnum hanceanum*) which also need transplanting. Feasibility and suitability of transplanting the affected plant species will be carefully studied and suitable receptor sites will be identified. A detailed transplantation proposal providing information on transplantation methodology, recipient site, implementation programme, watering requirement, post-transplantation monitoring and personnel involved shall be submitted to and approved by EPD, AFCD and District Lands Office. Transplantation will be supervised by a suitably qualified botanist/ horticulturist. After transplantation, monitoring will be undertaken to check the performance and health conditions of the transplanted individuals on a weekly basis for the first month after transplantation and on a monthly basis for an additional eleven months. Remedial actions will be discussed with EPD, AFCD and District	Within the Development Site / Vegetation survey – prior to the commencement of site clearance works Post-transplantation monitoring – after transplantation	Environmental Team employs a qualified botanist/ecologist		✓			-

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		Lands Office in the event of unsuccessful transplantation.							
S9.10.2	-	Good Site Practice • Erect fences along the boundary of the works area before the commencement of works to prevent vehicle movements, and encroachment of personnel, onto adjacent areas in particular the Pat Sin Leng Country Park, Conservation Area and Sha Lo Tung Valley (including Sha Lo Tung SSSI and streams); • Restrict the number of workers within the Development Site during construction and request workers do not enter the ecologically sensitive areas, such as the Sha Lo Tung SSSI (unless necessary for the works to be undertaken in the Ecological Reserve) during working hours, throughout the construction phase; • Regularly check the work site boundaries to ensure that they are not breached and that damage does not occur to surrounding areas in particular the Pat Sin Leng Country Park, Conservation Area and Sha Lo Tung Valley (including Sha Lo Tung SSSI and streams); • Reinstate temporarily affected areas immediately after completion of construction works, through on-site tree/shrub planting. The tree/shrub species will be chosen with reference to those in the surrounding area and/or *Annex F2* in *EIA Report*; and, • No night time construction works within the Development Site.	Within Development Site / Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S9.12.1	S8.2.2	Daily Stream Monitoring • Daily stream monitoring should be undertaken along Sha Lo Tung Stream next to the Development Site (the stream monitoring section) as shown in *Figure 12.2* in the *EIA Report* during the construction phase. No more than three weeks prior to the commencement of the construction phase and the impact monitoring, a baseline stream monitoring will be undertaken on three occasions (days) for a week. Within a week after the completion of the construction works, a post-project stream monitoring will be carried out on three occasions (days). • The qualified person (Environmentalist/ Ecologist with at least 3 years relevant experience in field surveys) should walk along the stream bank of the stream monitoring section to identify the signs of the impact. Stream photographic records at five fixed locations along the stream should be established during baseline, impact and post-project monitoring. The stream photographic records should be reviewed and compared so as to identify any daily changes of the stream condition. Should any signs of the impact observed during the stream monitoring and confirmed or suspected to be related to the construction work activities, the construction works should be halted immediately until the pollution source(s) can be identified. A Preliminary Daily Stream Monitoring Checklist is presented in *Annex C* of the *EM&A Manual*. • Should any signs of the impact be observed during the stream monitoring, the actions listed in the Event and Action Plan in Table 8.2 in this Manual should be carried out.	Sha Lo Tung Perennial Stream / Baseline monitoring: No more than 3 weeks prior to construction commencement Impact monitoring: throughout the construction period	Environmental Team employs a qualified person (Environmentalist/ Ecologist with at least 3 years relevant experience in field surveys)	✓	✓			-
S9.12.1	S8.2.3	Biological Monitoring • The species composition and relative abundance of riparian vegetation, adult odonate and fish communities along Sha Lo Tung perennial streams (particularly in the proximity to the development site) and the wet abandoned agricultural land are considered as biological indicators of the aquatic habitat conditions. Any stream pollution due to uncontrolled surface runoff from the proposed development would influence the water quality of Sha Lo Tung perennial streams and / or pools within the wet abandoned agricultural land at the northeast of but outside the Development Site, and therefore also the associated floral and faunal communities. • A baseline biological monitoring for the riparian vegetation, adult odonate and fish communities should be conducted once during the wet season and once during the dry	Sha Lo Tung Perennial Stream & pools within the wet abandoned agricultural land within the Development Site / Baseline survey – prior to the commencement of construction works Impact monitoring – throughout the construction period Operational monitoring: first 12 months of operation	Environmental Team employs a qualified botanist/ecologist	✓	✓	✓		-

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		season along the Sha Lo Tung Stream and the wet abandoned agricultural land (exact location refer to *Figure 12.2* in the *EIA report*) prior to the commencement of any construction works. The species diversity, relative abundance and community structure of the riparian vegetation, adult odonate and fishes should be recorded during the monitoring. Riparian vegetation, as well as the aquatic plants, encountered and their relative abundance will be recorded with special attention to the signs of pollution, ie mud, observed on the leave surface. Adult odonate (with particular focus on stream specialists) will be surveyed using the transect count method (*Figure 12.2* in the *EIA Report*). Any adult odonate within 10 m from either side of the survey transect (stream monitoring section as shown in *Figure 12.2* in the *EIA Report*) will be identified and counted. The fishes (with particular focus on Hong Kong Paradise Fish, Small Snakehead and Predaceous Chub) will be surveyed of by direct observation and active searching/ trapping if necessary. The fishes encountered and their relative abundance will be recorded along the stream monitoring section. The biological monitoring shall be conducted by experienced ecologist(s) of more than 3 years experience on riparian vegetation, adult odonate and fish communities. • The impact biological monitoring for the riparian vegetation, adult odonate and fish communities should be conducted biweekly through out the construction period. Baseline and impact monitoring data, in particular the species composition, diversity and relative abundance, should be compared, any substantial differences in habitat characteristics (e.g., water quality, riparian and aquatic vegetation) and the seasonality of the fauna should be noted. • Operational monitoring, following the methodology of the baseline stream hydrology and biological monitoring, should be conducted quarterly within the first three years after the completion of construction works (a total twelve occasions). Remedial actions will be discussed with the EPD and AFCD in the event of a change in stream hydrology (ie less stream flow) or decline in species diversity and relative abundance of adult dragonflies and fishes. Seasonal changes should be taken into account in identifying the change in stream hydrology (ie reduction in stream flow) or decline in species diversity and relative abundance of adult dragonflies and fishes).						
S9.10.3	S8.2.1	Compensation • The Project will provide approximately 2 ha of on-site compensatory tree and shrub planting for the loss of secondary woodland (approximately 0.03 ha due to the Development Site and approximately 0.2 ha due to the Sha Lo Tung Road Improvement) and plantation (approximately 0.43 ha due to the Sha Lo Tung Road Improvement). The compensatory planting will be planted on-site, within the Development Site and the Ecological Reserve. The concept of the proposed compensatory planting at the Development Site is presented in *Figures 10.5a-c* in the *EIA Report*. The proposed planting area within the Ecological Reserve is recommended in grassland shrubland mosaic to the north of Lei Uk and the northeast of the Development Site (refer to *Figures 9.2* and *10.5b* in the *EIA Report*). It should be noted that the location and size of the compensatory planting should be approved by AFCD and EPD. The selection of planting species shall be made with reference to the species identified in *Annex F2* in the *EIA Report* and be native to Hong Kong or the South China region. The arrangement of the on-site compensatory planting, i.e. tree/ shrub mix and exact location, will be subject to the detailed landscape design. The cut slopes along the improved Sha Lo Tung Road (with approximately 0.47 ha in total) will also be planted with native shrubs and trees or hydroseeded subject to the gradients.	Within the Development Site / Compensation plans developed during detailed design stage Compensatory planting provided at the end of construction period Compensatory planting maintained through the operational phase	Sha Lo Tung Development Co., Ltd	✓	✓	✓		-
S9.10.2	-	Visitor Control • During the Festive periods, ie Ching Ming or Chung Yeung, only the proponent's shuttle buses and emergency vehicles will be allowed to use Sha Lo Tung Road.	Within the Development Site /Throughout the operation phase	Sha Lo Tung Development Co., Ltd			✓		-

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		Visitors to the columbarium will not be allowed to walk up Sha Lo Tung Road unless directed by the Police when need arises. Visitors will only be allowed to leave the columbarium through the shuttle buses so as to avoid human disturbance to Sha Lo Tung Valley. It should be noted that the above arrangement only applies to visitors to the columbarium; visitors to trails and Country Park will not be affected; • Manage and restrict visitors' activities within the site by provision of fencing and landscape planting around the Multi-Cultural Education Retreat and Columbarium and encourage them not to wander into the adjacent Ecological Reserve, Conservation Area and Sha Lo Tung SSSI, particularly during festival days; and • Provide sufficient Conservation Ambassadors (ie 30 people, organised by Green Power), who will serve as reserve guards to advise, control and educate visitors of the regulations in the Ecological Reserve, during special festivals, ie Ching Ming or Chung Yeung. • Special traffic arrangements will be implemented during important Festivals (ie Ching Ming or Chung Yeung) to control the number of vehicles and people to the Development Site. Buyers of Class A niches (20,000) might visit the Columbarium at any time but prior booking would be required during festival days. Access to the Development Site by vehicle during festival days would be limited to shuttle coach services provided by the SLTDC. Only eligible ticket holders with prior booking would be allowed to take the shuttle. Buyers of Class B niches (40,000) would not be allowed to visit the Columbarium during the festival days. Control points would be set up and visitors who walk up the SLT Road without valid tickets would not be allowed to enter the Columbarium. Sufficient staff would be deployed by the SLTDC in the Columbarium for crowd control purpose. It should be noted that the above arrangement only applies to visitors to columbarium, visitors to the trails and Country Park will not be affected.						
S9.9.2	-	Lighting Scheme • To the extent practical, structures will utilise appropriate design to complement the surrounding landscape. Materials and finishes will be considered during detailed design (eg finishing of the building surfaces will be in non-reflective, subdued colours to match the surrounding natural environment). There will be minimal public areas lighting and the major lighting sources will be pointed inward and downwards, and non-essential lighting will also be switched off in the middle of the night to avoid disturbance to wildlife.	Within the Development Site /Throughout the operation phase	Sha Lo Tung Development Co., Ltd			✓		-
S9.9.2	-	Hill Fire Control • A Quick Fire Response Team will be set up during the operation of the Multi-Cultural Education Retreat cum Columbarium and it should also be noted that emergency access for fire engines will be available after the improvement of Sha Lo Tung Road has been completed. • Under the Sha Lo Tung pilot project, an aggressive fire-suppression programme will be implemented to prevent the occurrence of hill fires. Disturbance due to hillfire, visitors and vandalism would be controlled by pro-active management, including patrolling and conservation education.	Within the Development Site /Throughout the operation phase	Sha Lo Tung Development Co., Ltd			✓		-
S3.4.8	-	• Application of pesticides, insecticides and normal chemical fertilizers for the landscaping purposes and vegetation maintenance will be prohibited during operation of the Development Site. Should organic fertilizers or slow release chemical fertilizers be required for encouraging the growth of planted vegetation, prior approval from WSD, EPD and AFCD will be required.	Within the Development Site /Throughout the operation phase	Sha Lo Tung Development Co., Ltd			✓		-
S9.10.2	-	Water Quality Control for Runoff/Storm (see Water Quality section for details)	Within the Development Site /Throughout the operation phase	Sha Lo Tung Development Co., Ltd			✓		-

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S9.10.2	-	Maintenance Work • Any footpath maintenance work will be carried out manually or by small scale machines.	Within the Development Site / Throughout the operation period	Sha Lo Tung Development Co., Ltd			✓		-
Sha Lo Tung Road Improvement									
S9.10.2	-	Detailed Engineering Design Avoiding Habitat and Vegetation Loss • Minimise the loss of secondary woodland as well as the associated mature trees by adjusting/ fine-tuning the detailed engineering design of the improvement of Sha Lo Tung Road whenever possible, in particular soil nailing in conjunction with temporary cutback, during the detailed design stage. • Avoid the loss of plant species of conservation interest including Incense Tree, Lamb of Tartary, Hong Kong Pavetta, Cycad Fern, Common Tutcheria and Rhodoleia by adjusting/ fine-tuning the detailed engineering design of the improvement of Sha Lo Tung Road whenever possible during the detailed design stage. • If the plant species of conservation interest cannot be avoided due to the engineering constraint, the affected individuals will be transplanted to a similar habitat in the vicinity or within the Development Site or Ecological Reserve. See Vegetation Transplantation for details.	Within the Sha Lo Tung Road Improvement Site / Prior to the commencement of construction works	Design Team of Sha Lo Tung Development Co., Ltd	✓	✓			-
S9.10.2	-	Prevention of Construction Runoff from Polluting the Nearby Watercourse and Ecological Sensitive Areas • Arrange the Earthworks to maximise avoidance of the Wet Season. All the earthworks under Phases 1, 2 and 3, particularly close to the WSRs including Sha Lo Tung SSSI, stream and Fung Yuen Valley SSSI, will be undertaken during the dry season (November to March) in order to avoid the risk of construction runoff overflow to the downstream ecological sensitive areas.	Within the Sha Lo Tung Road Improvement Site / Prior to the commencement of construction works for the Development Site	Construction Contractor		✓			-
S9.10.2	-	• Adoption of Construction Sequences. Given that the total length of the Sha Lo Tung Road is approximately 2.3 km, the construction sequence will be well managed in order to limit the volume of surface runoff and treated effluent generated on-site, in particular during the wet season (works other than earthworks). In order to limit the size of the exposed area and volume of the surface runoff, the construction activities will be carried out sequentially (phase by phase) rather than in parallel (refer to Road Improvement Work Plan as shown in *Figure 3.22* in the *EIA Report*).	Within the Sha Lo Tung Road Improvement Site/ Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94) published by EPD
S9.10.2	-	• Provision of Temporary Drainage Channels. To prevent the discharge of silty surface run-off to the existing watercourse, an effective temporary drainage system will be introduced for the road improvement work. Prior to the construction, temporary hoarding will be erected and sandbags be placed at the toe of the hoarding within the works site (refer to *Figures 6.3 & 6.4* in the *EIA Report*) to prevent any silty water flowing out of the works site. As shown in Figure 3.22 in the EIA Report, at least two temporary sandtraps connecting with temporary surface drainage will be proposed at each phase of road improvement works (except Phase 3) prior to discharging into the nearest watercourse to avoid any excessive sediment or blockage of existing natural drainage system. Similar to the construction activities within the Development Site, all of the surface run-off generated along the section close to Sha Lo Tung Valley (approximately half of the Phase 3) will be collected by the temporary drainage system with a sufficient number of sandtraps (with sufficient capacity) and then discharged to the newly constructed stormwater drainage system along the improved Sha Lo Tung Road. A sandtrap is proposed to connect between the temporary drainage system within the Development Site and the newly constructed stormwater drains beneath the Sha Lo Tung Road. All surface runoff within the site will be diverted to this sandtrap before it is discharged from the site. Due to the lower level at the surface water collection point within the Development Site, the surface water within the Site will be	Within the Sha Lo Tung Road Improvement/ Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)

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		stored in temporary storage tanks (after passing through sandtraps) in which a submersible pump will operate to continuously pump the surface runoff to the proposed sandtrap. A spare submersible pump will be put in place in the storage tank for contingency purpose.							
S9.10.2	S8.2.1	Vegetation Transplantation • The Incense Tree, Lamb of Tartary, Hong Kong Pavetta, Rhodoleia, Common Tutcheria and Cycad Fern were identified as being of conservation interest along the Sha Lo Tung Road. These species will have the potential to be affected by the improvement of Sha Lo Tung Road. As a mitigation measure, the affected individuals will be transplanted (if confirmed as necessary during detailed engineering design) to suitable nearby habitats prior to the construction phase as far as practicable. A detailed vegetation survey on these plant species will be conducted along the Sha Lo Tung Road by a suitably qualified botanist/ ecologist to identify and record the affected individuals prior to the commencement of site clearance works. The survey will also serve to identify any other plants of conservation interest which may be present in along the Sha Lo Tung road (eg *Viburnum hanceanum*) which also need transplanting. Feasibility and suitability of transplanting the affected plant species will be carefully studied and suitable receptor sites will be identified. Detailed transplantation proposal providing information of transplantation methodology, recipient site, implementation programme, watering requirement, post-transplantation monitoring and personnel involved shall be submitted to and approved by EPD, AFCD and District Lands Office. Transplantation will be supervised by a suitably qualified botanist/ horticulturist. After transplantation, monitoring will be undertaken to check the performance and health conditions of the transplanted individuals on a weekly basis for the first month after transplantation and on a monthly basis for an additional eleven months. Remedial actions will be discussed with EPD, AFCD and District Lands Office in the event of unsuccessful transplantation.	Within the Sha Lo Tung Road Improvement / Vegetation survey – prior to the commencement of site clearance works Post-transplantation monitoring – after transplantation	Environmental Team employs a qualified botanist/ecologist		✓			-
S9.10.2	-	Good Site Practice • Erect fences along the boundary of the works area before the commencement of works to prevent vehicle movements, and encroachment of personnel, onto adjacent areas in particular the Pat Sin Leng Country Park, Conservation Area and Sha Lo Tung Valley (including Sha Lo Tung SSSI and streams); • Regularly check the work site boundaries to ensure that they are not breached and that damage does not occur to surrounding areas in particular the Pat Sin Leng Country Park, Conservation Area and Sha Lo Tung Valley (including Sha Lo Tung SSSI and streams); and, • Reinstate temporarily affected areas immediately after completion of construction works, through on-site tree/shrub planting. The tree/shrub species will be chosen with reference to those in the surrounding area and/or *Annex F2* in *EIA Report*.	Within Sha Lo Tung Improvement Site/ Throughout the construction period	Construction Contractor		✓			*Practice Note for Professional Persons, Construction Site Drainage* (ProPECC PN 1/94)
S9.10.3	S8.2.1	Compensation • The Project will provide approximately 2 ha of on-site compensatory tree and shrub planting for the loss of secondary woodland (approximately 0.03 ha due to the Development Site and approximately 0.2 ha due to the Sha Lo Tung Road Improvement) and plantation (approximately 0.43 ha due to the Sha Lo Tung Road Improvement). The compensatory planting will be planted on-site within the Development Site and the Ecological Reserve. The concept of the proposed compensatory planting at the Development Site is presented in *Figures 10.5a-c* in the *EIA Report*. The proposed planting area within the Ecological Reserve is recommended in grassland shrubland mosaic to the north of Lei Uk and the northeast of the Development Site (refer to *Figures 9.2* and *10.5b* in the *EIA Report*). It should be noted that the location and size of the compensatory planting should be approved by	Within the Development Site / Compensation plans developed during detailed design stage Compensatory planting provided at the end of construction period Compensatory planting maintained through the operational phase	Sha Lo Tung Development Co., Ltd	✓	✓	✓		-

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		AFCD and EPD. The selection of planting species shall be made with reference to the species identified in *Annex F2* in the *EIA Report* and be native to Hong Kong or the South China region. The arrangement of the on-site compensatory planting, i.e. tree/ shrub mix and exact location, will be subject to the detailed landscape design. The cut slopes along the improved Sha Lo Tung Road (with approximately 0.47 ha in total) will also be planted with native shrubs and trees or hydroseeded subject to the gradients.							
LANDSCAPE AND VISUAL									
Ecological Reserve and Sha Lo Tung Improvement									
		No measures required.							
Development Site									
S10.9	S9.2	DM = Design Measures (to be undertaken prior to construction), CM = Construction Measure (to be carried out during construction). The landscape mitigation measures are shown in *Figures 10.5a, b and c* in the *EIA Report*. • DM1 - Design of Structures. The structures shown in the photomontages are to illustrate the mass of the structures only. During the design phase of the development, architectural features such as the, eaves, cladding, materials and finishes etc. will be detailed. All of these elements will greatly improve the appearance of the structures. Built structures will utilise appropriate designs to complement the surrounding landscape, including a stepped form that respects the site contours.	Development Site/Design phase	Design Team of Sha Lo Tung Development Co., Ltd	✓				-
S10.9	S9.2	• DM2 - Colours. Colours for the structures can be used to complement the surrounding area. Lighter colours such as shades of light grey, off-white and light brown may be utilised to reduce the visibility of the structures.	Development Site/Design phase	Design Team of Sha Lo Tung Development Co., Ltd	✓				-
S10.9	S9.2	• DM3- Green Roofs. Green roofs and vertical greening shall be designed and constructed to integrate the new buildings into the surrounding environment.	Development Site/Design phase	Design Team of Sha Lo Tung Development Co., Ltd	✓				-
S10.9	S9.3	• CM 1 – Car Park Tree Planting. Advanced trees are to be planted to provide shade to the car park areas and to reduce the mass of the paved areas.	Within the Development Site / Prior to the commencement of the operational phase	Construction Contractor		✓			-
S10.9	S9.3	• CM2–Retention of Existing Trees. Existing trees without conflict with the building structures will be retained to reduce impacts on the site.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S10.9	S9.3	• CM3 – Compensatory Planting. Where vegetation must be removed, the felled trees within the Development Site and along Sha Lo Tung Road will be compensated with new planting tree numbers at a minimum ratio of 3:1. The exact number of compensatory trees will subject to the results of Tree Felling Application.	Within the Development Site / Prior to the commencement of the operational phase	Construction Contractor		✓			-
S10.9	S9.3	• CM4 – Columbarium Courtyard Plantings. The internal courtyards and areas surrounding the new development will be landscaped to integrate the buildings into the landscape.	Within the Development Site / Prior to the commencement of the operational phase	Construction Contractor		✓			-
S10.9	S9.3	• CM5 – Open Grassland and Lawn Areas. Areas of open grassland/lawns will be created to provide areas for passive recreation and to complement the surrounding grassland areas.	Within the Development Site / Prior to the commencement of the operational phase	Construction Contractor		✓			-
S10.9	S9.3	• CM6 – Buffer Planting. Trees and shrubs will be planted around much of the site boundaries to screen the development and help integrate the development into the surrounding landscape.	Within the Development Site / Throughout the construction period	Construction Contractor		✓			-
S10.9	S9.3	• CM7 – Stream Creation. Streams containing pools and riffles will be created to create a natural and harmonious landscape within the development. It must be noted that these features will not be connected in any way to the natural stream bordering the site.	Within the Development Site / Prior to the commencement of the operational phase	Construction Contractor		✓			-
S10.9	S9.3	• CM8 – Early Planting Works. New plantings are to be installed in available and formed lands during the construction works to reduce landscape impacts.	Within the Development Site / Early stage of the construction period	Construction Contractor		✓			-

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S10.9	S9.3	• CM9 – Transplantation of Plants. In addition, plant materials that are in conflict with the development, that are in suitably good condition and of ecological value will also be transplanted.	Within the Development Site / Early stage of the construction period	Construction Contractor		✓			-
S10.9	S9.3	• CM10 - Soil Stabilisation and Embankment Planting. During the design process a soil stabilisation and embankment planting strategy should ensure that land affected by slope excavation can be replanted. Soil preparation and the selection and provision of suitable growing medium is to be completed in accordance with the relevant best practice guidelines	Within the Development Site / Early stage of the construction period	Construction Contractor		✓			-
S10.9	S9.3	• CM11 - Cut Stabilisation Areas of cut to be stabilized for operational requirements. Materials and finishes of stabilization to be selected to complement the surrounding landscape. All landscape stabilisation measures must conform to GEO 1/2000 – Technical Guidelines on Landscape Treatment and Bio-engineering of Man-made Slopes and Retaining Walls.	Within the Development Site / Early stage of the construction period	Construction Contractor		✓			-
S10.9	S9.3	• CM12 - Colour of Site Hoardings. In order to mitigate the visual impact of these temporary hoardings, it is recommended that the hoardings be erected at a uniform height, with a uniform colour that complements the existing landscape.	Within the Development Site / Early stage of the construction period	Construction Contractor		✓			-
S10.9	S9.3	Good site practices • Cultivation of areas impacted during construction - Areas impacted during the construction phase that are not required during the operational phase, are to be cultivated to a depth of 300mm in accordance with accepted Hong Kong practice and guidelines. The cultivation shall involve ripping of compacted soil by mechanical means and the addition of gypsum and/or organic fertiliser if required.	Within the Development Site / Prior to the commencement of the operational phase	Construction Contractor		✓			-
S10.9	S9.3	• Quality control of imported materials - Appropriate quality control measures are to be used to ensure that all imported materials including but not limited to soils, mulches, plants etc. are to be free of pests and contaminates that may adversely affect the surrounding environment. All landscape construction works are to be supervised by suitably trained professionals.	Within the Development Site / Early stage of the construction period	Construction Contractor		✓			-
S10.10.2	S9.3	• Provision of a visually transparent fence at Lei Uk village.	Within the Ecological Reserve/ Early stage of the construction period	Construction Contractor	✓	✓			-
S3.3.3	S9.3	• The footbridge will be made mainly of wooden materials and will be removed manually after the erection of fencing around Lei Uk.	Within the Ecological Reserve/ Early stage of the construction period	Construction Contractor	✓	✓			-
Cultural Heritage									
Ecological Reserve & Development Site									
		No measures required.							
Sha Lo Tung Road Improvement									
S11.6	S10.2	• If laying of drainage pipes is considered necessary adjacent to LF01, it is recommended that the construction method be reviewed to avoid and minimise potential construction vibration impact to LF01. If potential construction vibration is considered unavoidable, a vibration monitoring should be conducted by the construction contractor during the construction work adjacent to LF01. The monitoring should include: i. A pre-condition survey for LF01 conducted by a structural engineer to record the state of the feature (including all cracks) before construction work commences; ii. Trial test of vibration generated from ground borne vibration related works; iii. Evaluation and review of the construction method to avoid and minimise the potential impact; and iv. Recommendation of vibration monitoring and protection measures. This would include the establishment of a vibration limit, monitoring frequency and protective measures to be agreed with the Engineer and AMO. • In addition, during the construction stage of the Sha Lo Tung Road Improvement	Construction of drainage pipes adjacent to LF01/construction period of the drainage pipes adjacent to LF01	Structural Engineer from Contractor		✓			-

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		adjacent to LF01, the construction contractor should ensure visitors' safe access to the shrine. A temporary fence with access entrance should be erected to prevent any direct impact to LF01 during the construction work.		Construction Contractor					
S11.6	S10.2	• An archaeological monitoring at the southern section of the proposed Sha Lo Tung Road Improvement alignment (see *Figure 11.13)* is recommended to preserve potentially impacted archaeological resources by record. The need and scope of the archaeological monitoring is subject to the detailed design of the construction works.	Southern section of the proposed Sha Lo Tung Road / detailed design stage and construction stage of the Southern section of the proposed Sha Lo Tung Road Improvement	Professional Archaeologist to be engaged by the Project Proponent or environmental team	✓	✓			*Antiquities and Monuments Ordinance (Cap.53)*

Notes: (1) Implementation Stage Des = Detail Design Phase; C = Construction phase; O = Operational Phase; Dec = Post Construction Phase