Appendix C. Implementation Schedule

Table C.1: Implementation Schedule

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
Air Quality Impact – Construction Phase										
5.2.6.2	2.1	-	**Dust Control Measures** Water spraying for 12 times a day or once every two hours for 24-hour working at all active works area.	Within construction site / Duration of the construction phase	Contractor		✓			
5.2.6.3	2.1	-	Covering of at least 80% of the stockpiling area by impervious sheets. Water spraying of all dusty materials immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling.	Within construction site / Duration of the construction phase	Contractor		✓			
5.2.6.4	2.1	-	Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted. These practices include: Good Site Management ▪ Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of	Within construction site / Duration of the construction phase	Contractor		✓			

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						Des	C	O	Yes	No
			raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning. Disturbed Parts of the Roads ▪ Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or ▪ Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet. Exposed Earth ▪ Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. Loading, Unloading or Transfer of Dusty Materials ▪ All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet. Debris Handling ▪ Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides. ▪ Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. Transport of Dusty Materials ▪ Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards.					

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			Wheel washing ▪ Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. Use of vehicles ▪ The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site. ▪ Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. ▪ Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. Site hoarding ▪ Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.							
5.2.6.5	2.1	-	**Best Practices for Concrete Batching Plant** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include: Cement and other dusty materials ▪ The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden air or waste gas generated by the process operations shall be	Within Concrete Batching Plant / Duration of the construction phase	Contractor		✓			

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						Des	C	O	Yes	No
			properly extracted and vented to fabric filtering system to meet the required emission limit. ▪ Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high level alarms to warn of over-filling. The high-level alarm indicators shall be interlocked with the material filling line such that in the event of the silo approaching an overfilling condition, an audible alarm will operate, and after 1 minute or less the material filling line will be closed. ▪ Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit. ▪ Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit. ▪ Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery. Other raw materials ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a manner to prevent or minimize dust emissions. ▪ The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, stock piles and material discharge points. ▪ All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above the unloading point. In no case shall these hoppers be used as the material storage devices. ▪ The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same performance.							

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			▪ All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals. ▪ Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface. ▪ Conveyors discharged to stockpiles of relevant materials shall be arranged to minimize free fall as far as practicable. All free falling transfer points from conveyors to stockpiles shall be enclosed with chute(s) and water sprayed. ▪ Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure such as storage bin and should not be handled in open area. Where there is sufficient buffer area surrounding the concrete batching plant, ground stockpiling may be used. ▪ The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side. ▪ Aggregates with a nominal size greater than 5 mm should preferably be stored in a totally enclosed structure. If open stockpiling is used, the stockpile shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping. ▪ The opening between the storage bin and weighing scale of the materials shall be fully enclosed. Loading of materials for batching ▪ Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented: (a) Pre-mixing the materials in a totally enclosed concrete mixer before loading the materials into the concrete truck is recommended. All dust-laden air generated by the pre-mixing process as well as the loading process shall be totally vented to fabric filtering system to meet the required emission limit.							

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			(b) If truck mixing batching or other types of batching method is used, effective dust control measures acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to EPD that they are capable to collect and vent all dust-laden air generated by the material loading/mixing to dust arrestment plant to meet the required emission limit. ▪ The loading bay shall be totally enclosed during the loading process. Vehicles ▪ All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement. ▪ All access and route roads within the premises shall be paved and adequately wetted. Housekeeping ▪ A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground, support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any dumping of materials at open area shall be prohibited.							
5.2.6.6	2.1	-	**Best Practices for Asphaltic Concrete Plant** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted. These include: Design of Chimney ▪ The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater ▪ The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition ▪ The flue gas exit temperature shall not be less than the acid dew point ▪ Release of the chimney shall be directed vertically upwards and not be restricted or deflected	Within Asphaltic Concrete Plant / Duration of the construction phase	Contractor		✓			

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						Des	C	O	Yes	No
			Cold feed side ▪ The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed structure such as storage bin and shall not be handled in open area. ▪ Where there is sufficient buffer area surrounding the plant, ground stockpiling may be used. The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side. If these aggregates are stored above the feeding hopper, they shall be enclosed at least on top and three sides and be wetted on the surface to prevent wind-whipping. ▪ The aggregates with a nominal size greater than 5 mm should preferably be stored in totally enclosed structure. Aggregates stockpile that is above the feeding hopper shall be enclosed at least on top and three sides. If open stockpiling is used, the stockpiles shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping. ▪ Belt conveyors shall be enclosed on top and two sides and provided with a metal board at the bottom to eliminate any dust emission due to the wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can be achieve the same performance. ▪ Scrapers shall be provided at the turning points of all belt conveyors inside the chute of the transfer points to remove dust adhered to the belt surface. ▪ All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals. ▪ All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures. Hot feed side ▪ The inlet and outlet of the rotary dryer shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter. The							

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						Des	C	O	Yes	No
			particulate and gaseous concentration at the exhaust outlet of the dust collector shall not exceed the required limiting values. ▪ The bucket elevator shall be totally enclosed and the air be extracted and ducted to a dust collection system to meet the required particulates limiting value ▪ All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. ▪ Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside. They shall be inspected daily for leakages. ▪ All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value. ▪ Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units). Material transportation ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions. ▪ Roadways from the entrance of the plant to the product loading points and/or any other working areas where there are regular movements of vehicles shall be paved or hard surfaced. ▪ Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers. Control of emissions from bitumen decanting						

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						Des	C	O	Yes	No
			▪ The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note. ▪ Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in case the upper limit for bitumen temperature is reached. ▪ Proper chimney for the discharge of bitumen fumes shall be provided at high level. ▪ The emission of bitumen fumes shall not exceed the required emission limit. ▪ The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles. Liquid fuel ▪ The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air. Housekeeping ▪ A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis.						
5.2.6.7	2.1	-	**Best Practices for Rock Crushing Plants** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include: Crushers ▪ The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably	Within Crushing Plant / Duration of the construction phase	Contractor		✓			

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						Des	C	O	Yes	No
			dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter. ▪ The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping. ▪ Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers. ▪ Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure. Vibratory screens and grizzlies ▪ All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided. ▪ All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas. Belt conveyors ▪ Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides. ▪ Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the						

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						Des	C	O	Yes	No
			return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt. ▪ Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals. Storage piles and bins ▪ Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required. ▪ The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable. ▪ All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable. ▪ The stockpiles of aggregates 5 mm in size or less shall be enclosed on 3 sides or suitably located to minimize wind-whipping. Save for fluctuations in stock or production, the average stockpile shall stay within the enclosure walls and in no case the height of the stockpile shall exceed twice the height of the enclosure walls. ▪ Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly. Rock drilling equipment ▪ Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities.						

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Air Quality Impact – Operation Phase										
5.5.2.8	2.2.5.3	-	AAHK's measures and initiatives aimed at further reducing air pollutant emissions from airport activities and operations as detailed in the EIA Report, will be reviewed to identify if there are any issues about implementation of such measures/ initiatives, including: • Banned all idling vehicle engines on the airside since 2008, except for certain vehicles that are exempted (This measure has already been incorporated in the model for 2031 3RS scenario simulation) • Banning the use of APU for all aircraft at frontal stands by end 2014 (This measure has already been incorporated in the model for 2031 3RS scenario simulation) • Requiring all saloon vehicles as electric vehicles by end 2017 (This measure has already been incorporated in the model for 2031 3RS scenario simulation) • Increasing charging stations for EVs and electric GSE to a total of 290 by end 2018 • Conducting review on existing GSE emission performance and explore measures to further control air emissions • Exploring with franchisees feasibility of expediting replacement of old airside vehicles and GSE with cleaner ones during tender or renewal of contracts • Requiring all new airside vehicles to be fuel-efficient and making it a prerequisite for the licensing process; • Providing the cleanest diesel and gasoline at the airfield; • Requiring all of the AAHK's diesel vehicles to use biodiesel (B5); • Promoting increased use of electric vehicles and electric ground service equipment at HKIA by provision of charging infrastructure; and • Providing a liquefied petroleum gas (LPG) fuelling point for airside vehicles and ground service equipment.	Airport operation/ Operation Period	AAHK			✓		

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						Des	C	O	Yes	No
Hazard to Human Life – Construction Phase										
Table 6.40	3.2	-	Precautionary measures should be established to request barges to move away during typhoons	Construction Site / Construction Period	Contractor		✓			
Table 6.40	3.2	-	An appropriate marine traffic management system should be established to minimize risk of ship collision	Construction Site / Construction Period	Contractor		✓			
Table 6.40	3.2	-	Location of all existing hydrant networks should be clearly identified prior to any construction works	Construction Site / Construction Period	Contractor		✓			
Hazard to Human Life – Operation Phase										
Table 6.40	3.2	-	A similar coating standard shall be applied to the new submarine pipeline as for the existing pipeline	Jet Fuel Submarine Pipeline / Submarine Pipeline Design and Construction Period	Design Engineer & Contractor	✓	✓			
Table 6.40	3.2	-	Checking on the integrity of the new submarine pipeline, e.g. by pigging, should be conducted during testing and commission	Jet Fuel Submarine Pipeline / Testing and Commission-ing	Contractor		✓	✓		
Table 6.40	3.2	-	After the fuel hydrant system is in operation, the as-built drawings of the underground jet fuel pipeline will be kept by AAHK. Before the commencement of any construction works, as-built drawings showing	Jet Fuel Underground Pipeline / Operation	AAHK / Contractor			✓		

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			the alignment and level of the underground fuel pipelines for the work area will be provided to the third party construction contractors.	Period of the Pipeline						
Table 6.40	3.2	-	After the fuel hydrant system is in operation, third party construction contractors are required to undertake underground pipeline detection works to ascertain the exact alignment of the underground pipeline before the commencement of works.	Jet Fuel Underground Pipeline / Operation Period of the Pipeline	AAHK / Contractor			✓		
Table 6.40	3.2	-	Monitoring of underground pipelines by the Leak Detection System which will give signal to the operator should fuel leakage occur.	Jet Fuel Underground Pipeline / Operation Period of the Pipeline	Aviation Fuel System Operator			✓		
Table 6.40	3.2	-	Study should be conducted to ensure the new pipeline can withstand the planned future loading.	Jet Fuel Underground Pipeline / Pipeline Design Period	Design Engineer	✓				
Table 6.40	3.2	-	New pressure surge calculations are required because of the changed characteristics of the hydrant network	Jet Fuel Hydrant System / Pipeline Design Period	Design Engineer	✓				
Table 6.40	3.2	-	There is a need to check the appropriate pressure drop calculations have been undertaken for the new system	Jet Fuel Hydrant System / Pipeline Design Period	Design Engineer	✓				

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Table 6.41	3.2	-	Improvement audit to reinforce existing refuelling practices and to achieve better compliance	Jet Fuel Hydrant System / Operation Period	AAHK			✓		
Table 6.41	3.2	-	During refuelling process, four cones are to be put in place to indicate the 6 m refuelling zone from aircraft fuelling point for the new fuel hydrant system where practicable. AAHK will communicate this recommendation to airlines and their refuelling operators as appropriate. Proper implementation of this recommendation will be checked in AAHK's future safety audits.	Hydrant pit valve / Aircraft refuelling operation	AAHK / Airlines / Into-plane operator			✓		
Noise Impact – Aircraft Noise										
7.3.5.3	4.1	-	**Aircraft Noise Mitigation Measures under Primary Operating Mode** Aircraft noise mitigation measures as listed below shall be implemented to minimise the impact of aircraft noise on NSRs situated near the flight paths or in the vicinity of HKIA: ▪ Putting the existing south runway on standby where possible at night between 2300 and 0659; ▪ Requiring departures to take the southbound route via West Lamma Channel during east flow at night from 2300 to 0659, subject to acceptable operational and safety consideration; ▪ Assigning a new arrival Required Navigation Performance Track 6 for preferential use in the runway 25 direction between 2300 and 0659; and ▪ Implementing a preferential runway use programme when wind conditions allow such that west flow is used when departures dominate while east flow is used when arrivals dominate during night-time.	Airport operation/ Operation Period	AAHK, CAD			✓		
7.3.5.3	4.1	-	**Consideration of Aircraft Noise in developing MLP for planned development at CDA site in Lok On Pai**	CDA site in Lok On Pai / during	Planning Department	✓				

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			In developing the MLP for the CDA site in Lok On Pai, the alignment of the NEF 25 contour line should be taken into account to ensure that no noise sensitive uses are situated within the NEF 25 contour in the planned development.	preparation of MLP						
Noise Impact – Fixed Noise Sources										
7.4.9.1	4.2	-	Ground Noise Source (Operation of Aircraft Engine Run-up Facilities) Noise enclosure with required noise reduction of at least 15 dBA at the ERUFs should be incorporated.	Within the Project site / During operation phase / Throughout operation phase	Design Architect / Contractor	✓		✓		
Noise Impact – Construction Phase										
7.5.6	4.3	-	**Good Site Practice** Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction: ▪ only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; ▪ machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; ▪ plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; ▪ mobile plant should be sited as far away from NSRs as possible; and ▪ material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.	Within the Project site / During construction phase / Prior to commence-ment of operation	Contractor		✓			

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7.5.6	4.3	-	**Adoption of QPME** QPME should be adopted as far as applicable.	Within the Project site / During construction phase / Prior to commence-ment of operation	Contractor		✓			
7.5.6	4.3	-	**Use of Movable Noise Barriers** Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs.	Within the Project site / During construction phase / Prior to commence-ment of operation	Contractor		✓			
7.5.6	4.3	-	**Use of Noise Enclosure/ Acoustic Shed** Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.	Within the Project site / During construction phase / Prior to commence-ment of operation	Contractor		✓			
Water Quality Impact – Construction Phase										
8.8.1.2 and 8.8.1.3	5.1	2.26	**Marine Construction Activities** General Measures to be Applied to All Works Areas	Within construction site / Duration of the	Contractor		✓			

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			▪ Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; ▪ Use of Lean Material Overboard (LMOB) systems shall be prohibited; ▪ Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; ▪ Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; ▪ Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; ▪ All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; ▪ The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and ▪ For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted. <u>Specific Measures to be Applied to All Works Areas</u> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA Report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document; ▪ An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high	construction phase						

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						Des	C	O	Yes	No
			tide mark and filter layer on the inner side) prior to commencement of marine filling activities. <u>Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works</u> ▪ Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains[#]; ▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction[#]; and ▪ The silt curtains and silt screens should be regularly checked and maintained. <u>Specific Measures to be Applied to Land Formation Activities during Marine Filling Works</u> ▪ Double layer 'Type II' or 'Type III' silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides[#]; ▪ Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities[#]; ▪ Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities[#]; and ▪ The silt curtains and silt screens should be regularly checked and maintained. <u>Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion</u> ▪ Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials						

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			shall be disposed at designated marine disposal area in accordance with the Dumping and Sea Ordinance (DASO) permit conditions; and ▪ Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.							
8.8.1.4	5.1	-	**Modification of the Existing Seawall** Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works.	At the existing northern seawall / Duration of the construction phase	Contractor		✓			
8.8.1.5	5.1	-	**Construction of New Stormwater Outfalls and Modifications to Existing Outfalls** During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations.	Within construction site / Duration of the construction phase	Contractor		✓			
8.8.1.6 8.8.1.7	5.1	2.27	**Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons** Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment. <u>For construction of the eastern approach lights at the CMPs</u> ▪ Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; ▪ Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; ▪ The excavated materials shall be removed using a closed grab within the steel casings;	Within construction site / Duration of the construction phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			▪ No discharge of the cement mixed materials into the marine environment will be allowed; and ▪ Excavated materials shall be treated and reused on-site.							
8.8.1.8	5.1	-	**Construction Site Runoff and Drainage** The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended: ▪ Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform); ▪ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction; ▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly; ▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections	Within construction site / Duration of the construction phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities; ▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; ▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge; ▪ Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the construction materials, soil, silt or debris from washing away into the drainage system; ▪ Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and to prevent stormwater runoff being directed into foul sewers; and ▪ Precautionary measures should be taken at any time of the year when rainstorms are likely. Actions to be taken when a rainstorm is imminent or forecasted are summarized in Appendix A2 of ProPECC Note PN 1/94. This includes actions to be taken during and/or after							

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			rainstorms. Particular attention should be paid to the control of silty surface runoff during storm events.							
8.8.1.9	5.1	-	**Sewage Effluent from Construction Workforce** ▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Within construction site / During construction phase	Contractor		✓			
8.8.1.10 8.8.1.11	5.1		**General Construction Activities** ▪ Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used. ▪ Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event.	Within construction site / During construction phase	Contractor		✓			
8.8.1.12 8.8.1.13	5.1	2.28	**Drilling Activities for the Submarine Aviation Fuel Pipelines** To prevent potential water quality impacts at Sha Chau, the following measures shall be applied: ▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; ▪ No bulk storage of chemicals shall be permitted; and ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas. At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater:	Within construction site / During construction phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			▪ During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge. ▪ Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.							
Water Quality Impact – Operation Phase										
8.8.2.2	5.2	-	**Floating Refuse** Regular inspection should be carried out along the artificial seawall to check for any accumulation of floating refuse, and if necessary, regular removal of accumulated / floating refuse should be undertaken.	During operation phase	Contractor			✓		
8.8.2.3	5.2	-	**Storm Water Discharges** For stormwater discharges, the following measures should be applied to minimise contaminants in runoff: ▪ Install and maintain roadside gullies to trap and remove silt and grit from stormwater; ▪ Install and maintain oil/grease interceptors for removal of oil and fuel from stormwater; and ▪ Runoff from aircraft and vehicle washing activities should be intercepted and discharged to foul sewer or diverted to temporary storage for subsequent removal and treatment offsite.	During design and operation phase	Design Consultant / AAHK	✓		✓		
8.8.2.4	5.2	2.29	**Fuel Spillage** Precautionary measures for fuel management and spill response should include the following: ▪ Fuel pipelines and hydrant systems should be designed with adequate protection and pressure / leakage detection systems;	During design and operation phase	Design Consultant / AAHK	✓		✓		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			▪ A 'spill trap containment system' should be designed and provided at aircraft apron and stand areas; ▪ An emergency spill response plan should be in place to provide timely and effective response and remediation of spillage events; ▪ Spill response equipment should be available on site and regularly checked and maintained; ▪ Operation of the fuel supply and refuelling systems should be restricted to qualified and trained personnel with adequate knowledge of the spill response procedures in place; ▪ A penalty system should be set up to discourage poor practices associated with maintenance of aircraft, vehicle and refueling systems by Airport tenants and franchisees; and ▪ Detailed records of all spillage events should be kept and maintained.							
Sewerage and Sewage Treatment Implication – Operation Phase										
9.7.1	6.2	-	The planned sewerage system will be designed in accordance with all the relevant standards and guidelines published by DSD. The planned and existing sewerage network are maintained and operated by AAHK in accordance with the Sewerage Manual published by DSD. In addition to continuing the odour control arrangements currently undertaken by AAHK, maintaining the design maximum retention time of the planned pumping station to not more than 2 hours, monitoring the H2S level once the 3RS is in operation and adoption of active septicity management measures that can effectively contain any future septicity problems will be included in the design for the planned 3RS sewerage system.	Sewerage system for 3RS within the expanded airport island / during design and operation phase	Design Consultant / AAHK	✓		✓		
9.7.2	6.2	-	AAHK undertakes to upgrade the existing gravity sewer by constructing a new gravity sewer with a diameter of 1,200 mm adjacent to the existing gravity sewer (1,050 mm in diameter) and then diverting the sewage flow arising from the airport and other sub-catchment in Tung Chung to the new gravity sewer. The recommended measures to mitigate the secondary impacts on air quality, noise, waste management, water quality and trees arising	Gravity sewers from the airport discharge manhole to TCSPS / 2026	Design Consultant / Contractor			✓		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			from the construction works associated with the sewer upgrading works should also be implemented.							
9.7.3	6.2	-	TCSPS is being upgraded to increase its design capacity to cater for the future sewage arising from the catchment including the project.	TCSPS/ by end 2022	DSD (Design and construction of TCSPS upgrading is currently underway under the DSD's Agreement No. 6/2012)			✓		
9.7.4	6.2	-	SHWSTS will be upgraded to increase its design capacity to cater for the future sewage arising from the catchment including the project.	SHWSTS/ by 2026				✓		
Waste Management Implication – Construction Phase					EPD					
10.5.1.1	7.1	-	Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended: ▪ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials. ▪ Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works. ▪ Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work.	Project Site Area / During design and construction phase	Design Consultant / Contractor	✓	✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			▪ Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments. ▪ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials in accordance with the Proposal of Further Development on Treatment Level / Details and Reuse Mode for Marine Sediment.							
10.5.1.2	7.1	-	The following good site practices should be performed during the construction activities include: ▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site. ▪ Training of site personnel in proper waste management and chemical waste handling procedures. ▪ Provision of sufficient waste disposal points and regular collection for disposal. ▪ Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards. ▪ Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust. ▪ All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas.	Project Site Area / Construction Phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			▪ C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust. ▪ The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site. ▪ To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.							
10.5.1.3	7.1	-	The following practices should be performed to achieve waste reduction include: ▪ Use of steel or aluminium formworks and falseworks for temporary works as far as practicable. ▪ Adoption of repetitive design to allow reuse of formworks as far as practicable ▪ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal. ▪ Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force. ▪ Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable. ▪ Proper storage and site practices to minimise the potential for damage or contamination of construction materials. ▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	Project Site Area / Construction Phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
10.5.1.5	7.1		Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	Contractor		✓			
10.5.1.5	7.1	-	Any recyclable materials should be segregated from the non-inert C&D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Project Site Area / Construction Phase	Contractor		✓			
10.5.1.6	7.1	-	A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	Contractor		✓			
10.5.1.6	7.1	2.32	The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	Contractor		✓			
10.5.1.16	7.1	-	The following mitigation measures are recommended during excavation and treatment of the sediments: ▪ On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions; ▪ The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions; ▪ All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission; ▪ Good housekeeping should be maintained at all times at the sediment treatment facility and storage area; ▪ Treated and untreated sediment should be clearly separated and stored separately; and ▪ Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge.	Project Site Area / Construction Phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
10.5.1.18	7.1	-	The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal: ▪ Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material. ▪ Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by EPD. ▪ Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation.	Project Site Area / Construction Phase	Contractor		✓			
10.5.1.19	7.1	-	Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented: ▪ Good quality containers compatible with the chemical wastes should be used; ▪ Incompatible chemicals should be stored separately; ▪ Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc; ▪ The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Project Site Area / Construction Phase	Contractor		✓			
10.5.1.20	7.1	-	General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area	Project Site Area / Construction Phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			should be provided to reduce the occurrence of 'wind blown' light material.							
10.5.1.21	7.1	-	The future artificial seawall of the proposed Airport expansion area should be designed to achieve a shoreline that does not have any sharp turns or abrupt indentation in order to avoid or minimise any trapped or accumulated refuse.	Design Stage	Design Consultant	✓				
10.5.1.21	7.1	-	The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse.	Project Site Area / Construction Phase	Contractor		✓			
Waste Management Implication – Operation Phase										
10.5.2.1	7.2	-	General refuse should be temporarily stored in proper container with covers, which should be regularly cleaned and checked for maintenance. General refuse should be collected on daily basis and delivered to the refuse collection point accordingly. A reputable waste collector should be employed to remove the general refuse regularly for off-site disposal at designated landfill sites in order to avoid odour nuisance or pest/vermin problem. The following waste recycling initiatives should be implemented at the expanded airport: ▪ Recycling facilities should be provided in prominent areas in passenger terminal buildings to facilitate separation of recyclable waste by passengers; ▪ Recycling facilities should also be provided in refuse rooms of the passenger terminal buildings to facilitate separation of recyclable waste by tenants; ▪ Food waste recycling programme should be implemented at the airport to collect and recycle food waste; ▪ Food waste can be delivered to EPD's Organic Waste Treatment Facilities for recycling as compost; ▪ Food & beverage tenants are encouraged to recycle waste cooking oil (e.g., recycling of waste cooking oil to biodiesel);	Project Site Area / Operation Phase	AAHK			✓		

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						Des	C	O	Yes	No
			▪ AAHK has stepped up on-site waste separation and recycling at the Airside Waste Station to raise the amount of recyclable materials recovered from aircraft cabin waste.							
10.5.2.2	7.2	-	Operators of the relevant facilities should register with EPD as a chemical waste producer and follow the guidelines stated in the "Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes". Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. Licensed collector should be deployed to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Project Site Area / Operation Phase	AAHK / Operators			✓		
10.5.2.3 to 10.5.2.5	7.2	-	Regular cleaning and inspection of seawall. If refuse is found during inspection, arrangements should be made to remove the refuse.	Project Site Area / Operation Phase	Contractor			✓		
Land Contamination – Construction Phase										
11.10.1.2 to 11.10.1.3	8.1	2.32	For areas inaccessible during site reconnaissance survey: ▪ Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas. ▪ Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas. ▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	AAHK/ Contractor	✓				

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room. ▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively.							
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any): ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal	Project Site Area / Construction Phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			(Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements.							
Terrestrial Ecological Impact – Construction Phase										
12.10.1.1	9.2	2.14	**Pre-construction Egretry Survey** ▪ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of HDD drilling works at HKIA	Environmental Team*		✓			
12.7.2.3 and 12.7.2.6	9.1	2.30	**Avoidance and Minimisation of Direct Impact to Egretry** ▪ The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretry. ▪ In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island.	During construction phase at Sheung Sha Chau Island	AAHK /Contractor	✓	✓			
12.7.2.5	9.1	2.30	**Preservation of Nesting Vegetation** ▪ The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved.	During construction phase at Sheung Sha Chau Island	Contractor		✓			
12.7.2.4 and 12.7.2.6	9.1	2.30	**Timing the Pipe Connection Works outside Ardeid's Breeding Season** ▪ All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between	During construction phase at Sheung Sha Chau Island	AAHK/ Contractor	✓	✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons.							
12.10.1.1	9.3	-	**Ecological Monitoring** ▪ During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found.	at Sheung Sha Chau Island	Environmental Team*		✓			
Marine Ecological Impact – Pre-construction Phase										
13.11.4.1	10.2.2	-	Pre-construction phase Coral Dive Survey	HKIAAA artificial seawall	Environmental Team*	✓				
Marine Ecological Impact – Construction Phase										
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase to completion of construction	Design Engineer and Contractor	✓	✓			
13.11.1.7 to 13.11.1.10	-	2.31	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; ▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment;	During construction phase at marine works area	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; ▪ Avoid bored piling during CWD peak calving season (Mar to Jun); and ▪ Use of HDD method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.							
13.11.2.1 to 13.11.2.7	-	-	**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices; ▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains); ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and ▪ Use of HDD method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.	All works area during the construction phase	Contractor		✓			
13.11.1.12	-	-	**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.	All works area during the construction phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
13.11.1.13	-	-	**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines. ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	Contractor		✓			
13.11.5.4 to 13.11.5.13	10.3.1	-	**SkyPier High Speed Ferries' Speed Restrictions and Route Diversions** ▪ SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in **Drawing No. MCL/P132/EIA/13-023** of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers. ▪ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.	Area between the footprint and SCLKC Marine Park during construction phase	AAHK	✓	✓			
13.11.5.14 to 13.11.5.18	10.3.1	2.31	**Dolphin Exclusion Zone** Establishment of a 24 hr DEZ with a 250 m radius around the land formation works areas. ▪ A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction. ▪ A DEZ would also be implemented during bored piling work but as a precautionary measure only.	Marine waters around land formation works area during construction phase	Environmental Team*	✓	✓			
13.11.5.19	10.4	2.31	**Acoustic Decoupling of Construction Equipment**	Around coastal works	Contractor	✓	✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres. ▪ Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.	area during construction phase						
13.11.5.20	10.6.1	2.29	**Spill Response Plan** ▪ An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage.	Construction phase	Contractor	✓	✓			
13.11.5.21 to 13.11.5.23	10.6.1	-	**Construction Vessel Speed Limits and Skipper Training** ▪ A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities (as currently indicated by the 1 x 1 km grid squares in Figure 6 of **Appendix 13.2**). ▪ Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing.	All areas north and west of Lantau Island during construction phase	Contractor	✓	✓			
Marine Ecological Impact – Operation Phase										
13.11.5.24 to 13.11.5.43	10.6.2.1	-	**Establishment of New Marine Protected Areas/Linking of Existing Marine Parks** ▪ establishment of a new marine park matrix that would comprise a new marine protection area around HKIA, adding an area of 2,400 ha and also providing critical linkages between the SCLKCMP (an area of 1,200 ha) and the BMP (an area of 850 ha). Together, all three marine parks would make up 4,450 ha of CWD marine park area. ▪ A speed limit of 10 knots for all vessels to travel within the marine parks areas. ▪ A detailed study initiated and led by AAHK will be carried out during the construction phase to review relevant previous studies and collate	Around the airport island / Operational Phase	AAHK	✓		✓		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			available information on the ecological characters of the proposed area for marine park designation and review available survey data marine traffic and planned development projects in the vicinity. Based on the findings, ecological profiles of the proposed area for marine park designation would be established and the extent and location of the proposed marine park be determined. ▪ A management plan for the proposed marine park will be proposed in consultation with AFCD, covering information on the responsible departments for operation and management (O&M) of the marine park, as well as the O&M duties of each of the departments involved. The management plan will be submitted to Director of Environmental Protection (DEP) for approval before the commissioning of the 3RS project.							
13.11.5.44 to 13.11.5.50	10.6	-	**SkyPier High Speed Ferries' Speed Restrictions and Route Diversions** ▪ A speed limit of 15 knots for SkyPier HSFs operating to and from Zhuhai and Macau continue to divert north of SCLKCMP transiting through those areas with the relatively-high CWD densities. ▪ A speed limit of 10 knots for all vessels to travel within the marine parks areas.	Around the airport island / Operational Phase	AAHK (outside Marine Park) AFCD (inside Marine Park)			✓		
13.11.5.51 to 13.11.5.52	10.6.2.1	-	**Operational Spill Response Plan** ▪ Fuel pipelines and hydrant systems should be designed with adequate protection and pressure / leakage detection systems. ▪ A 'spill trap containment system' should be designed and provided at aircraft apron and stand areas. ▪ An emergency spill response plan should be in place to provide timely and effective response and remediation of spillage events. ▪ Spill response equipment should be available on site and regularly checked and maintained. ▪ Operation of the fuel supply and refuelling systems should be restricted to qualified and trained personnel with adequate knowledge of the spill response procedures in place.	Operational Phase	AAHK			✓		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			▪ A penalty system should be set up to discourage poor practices associated with maintenance of aircraft, vehicle and refuelling systems by airport tenants and franchisees. ▪ Detailed records of all spillage events should be kept and maintained.							
Fisheries Impact – Construction Phase										
14.9.1.2 to 14.9.1.5	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources.	Land formation footprint / during detailed design phase to completion of construction	Design Engineer and Contractor	✓	✓	✓		
14.9.1.6	-	-	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF; ▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment; ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and ▪ Use of HDD method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.	During construction phase at marine works area	Contractor		✓			
14.9.1.11	-		**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area;	All works area during the construction phase	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
			▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.							
14.9.1.12	-		**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines. ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	Contractor		✓			
14.9.1.13 to 14.9.1.18	-		**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices. ▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains) ▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; ▪ Use of HDD method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.	All works area during the construction phase	Contractor		✓			
			Fisheries Impact – Operation Phase							

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
14.9.1.19 to 14.9.1.30	11.2		**Compensation for the Loss of Fisheries Habitats (and Resources) and Fishing Ground** ▪ Establishment of marine park at north, west and east of the proposed land formation footprint and HKIAAA extension. ▪ All these marine protected areas with regulation of fishing activities. The potential fisheries resources recovery due to the enhanced protection measures apply for Marine Park and the synergic effect of the connected marine protected areas will benefit to the adjacent fishing grounds.	Operational Phase	AAHK	✓		✓		
Landscape and Visual Impact – Construction Phase										
Table 15.6	12.3	-	**CM1 -** The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	Contractor		✓			
Table 15.6	12.3	-	**CM2 -** Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	Contractor		✓			
Table 15.6	12.3	-	**CM3 -** Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and	Contractor		✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
				completion of works.						
Table 15.6	12.3	-	**CM4 -** Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	Contractor		✓			
Table 15.6	12.3	-	**CM5 -** Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	Contractor		✓			
Table 15.6	12.3	-	**CM6 -** Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project;	Design Engineer	✓				

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
				Upon handover and completion of works.						
Table 15.6	12.3	-	**CM7** - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	Contractor		✓			
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	Contractor	✓	✓			
Table 15.6	12.3	-	**CM9 -** Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	Contractor	✓	✓			
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around	Contractor	✓	✓			

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
				runways and verges/Duration of works; Upon handover and completion of works.						
Landscape and Visual Impact – Operation Phase										
Table 15.7	12.3	-	**OM1** - Sensitive landscape design of reclamation edge by incorporating different angles of gradient and the use of a range of armour rock sizes placed randomly in a riprap approach for an irregular appearance. Planting of native coastal plants shall be incorporated.	New land formation edge; Completion of Design Stage.	Design Engineer	✓				
Table 15.7	12.3	-	**OM2** - All above ground structures, including, Vent Shafts, Emergency and Firemen's' Accesses etc. shall be, either fully integrated with the planned buildings, or sensitively designed in a manner that responds to the existing and planned urban context, and minimises potential adverse landscape and visual impacts.	All locations of above ground structures; Completion of Design Stage.	Design Engineer	✓				
Table 15.7	12.3	-	**OM3** - Sensitive design of buildings and structures in terms of scale, height and bulk (visual weight).	All locations of above ground structures; Completion of Design Stage.	Design Engineer	✓				
Table 15.7	12.3	-	**OM4** - Use appropriate building materials and colours in built structures to create cohesive visual mass	All locations of above ground structures; Completion of Design Stage.	Design Engineer	✓				

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
Table 15.7	12.3	-	**OM5** - Lighting units to be directional and minimise unnecessary light spill and glare.	All locations within the project site boundary; Completion of Design Stage.	Design Engineer	✓				
Table 15.7	12.3	-	**OM6** - Greening measures, including vertical greening, green roofs, road verge planting and peripheral screen planting shall be implemented.	All locations within the project site boundary where greening measures can be implemented as far as possible; Ongoing duration.	Contractor	✓		✓		
Table 15.7	12.3	-	**OM7** - Compensatory Tree Planting for all felled trees shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under the relevant technical circulars.	All trees effected by the works; Upon handover and completion of works.	Contractor	✓	✓	✓		
Table 15.7	12.3	-	**OM8** - Streetscape (e.g. paving, signage, street furniture, lighting etc.) shall be sensitively designed in a manner that responds to the existing and planned urban context, and minimises potential adverse landscape and visual impacts.	All locations of streetscape treatment works; Completion of Design Stage.	Design Engineer	✓				

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Implementation Agent	Implementation Stage			Mitigation Measures Implemented ? ^	
						Des	C	O	Yes	No
Table 15.7	12.3	-	**OM9** - All streetscape areas and hard and soft landscape areas disturbed during construction shall be reinstated to equal or better quality (due to implementation of screen planting, road verge planting etc.), to the satisfaction of the relevant Government departments.	All locations of streetscape treatment works; Upon handover and completion of works.	Contractor		✓			
Table 15.7	12.3	-	**OM10** - Aesthetic improvement planting of viaduct structure through greening of structure to mitigate visual impact of viaduct form.	All locations of viaduct structures; Ongoing duration.	Design Engineer	✓	✓			
Table 15.7	12.3	-	**OM11 -** Sensitive design of footbridges, noise barriers and enclosures with greening (screen planting/climbers/planters) and chromatic measures.	All locations of viaduct structures; Ongoing duration.	Design Engineer	✓				
Cultural Heritage Impact – Construction Phase										
Not applicable										
Cultural Heritage Impact – Operation Phase										
Not applicable										
Health Impact – Aircraft Emissions										
Not applicable										
Health Impact – Aircraft Noise										
Not applicable										

Notes:

Des=Design; C=Construction; O=Operation

" * " Environmental Team (ET) represents the ET specified in the Environmental Monitoring and Audit Manual.

" ^ " Checking of the implementation stage for each mitigation measure by ET during site inspection. Updated information on implementation status is provided in Environmental Mitigation Implementation Schedule for construction and operation phase presented in the EM&A Reports according to project progress.

" – " For items denoted as " - "provided under the columns of EM&A Ref. or EP Condition, environmental protection measures should be referred to the relevant paragraph(s) / table(s) in the approved EIA Report.

" # " The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan.