

Appendix 15.2 Summary of Environmental Impacts

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance (Without Mitigation)	Impact Avoidance Measures/ Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
Air Quality Impact					
Construction Impact					
<ul style="list-style-type: none"> Existing residential premises, industrial buildings, educational institutions, offices within the Project area and in the vicinity of the Project 	<ul style="list-style-type: none"> Dust generated from construction vehicles for materials handling Fuel combustion from the use of PMEs Potential odour nuisance from desilting at downstream tidal zone 	<ul style="list-style-type: none"> AQO EIAO-TM 	<ul style="list-style-type: none"> N/A 	<p><u>Dust</u></p> <ul style="list-style-type: none"> Sufficient dust suppression measures as stipulated under the Air Pollution Control (Construction Dust) Regulation (Cap 311R) and good site practices should be properly implemented. Guidelines stipulated in EPD's Recommended Pollution Control Clauses for Construction Contracts should also be incorporated in the contract documents to abate dust impacts. <p><u>Fuel combustion</u></p> <ul style="list-style-type: none"> Air Pollution Control (Fuel Restriction) Regulation and Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation are introduced to regulate SO₂ emissions from commercial and industrial processes, and emissions from machines and non-road vehicles respectively. In addition, all construction plants are required to use ultra-low-sulphur diesel (ULSD) (defined as diesel fuel containing not more than 0.005% sulphur by weight) as stipulated in Environment, Transport and Works Bureau Technical Circular (ETWB-TC(W)) No. 19/2005 on Environmental Management on Construction Sites In order to minimise the exhaust emissions from NRMMs during construction phase, it is recommended to connect construction plant and equipment to mains electricity supply and avoid use of diesel generators and diesel-powered equipment; deploy electrified NRMMs as far as practicable; and use of exempted NRMMs not allowed. <p><u>Odour</u></p> <ul style="list-style-type: none"> The odorous materials from desilting works and excavation at nullah bed should be well covered on site with tarpaulin and placed as far away from the ASRs as possible. These odorous materials should be removed off-site for disposal as soon as possible within 24 hours to avoid any odour nuisance. During transportation, these odorous materials on the trucks should be properly covered by tarpaulin sheets to minimise the release of any potential odour. 	<ul style="list-style-type: none"> No adverse residual impacts anticipated

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Operational Impact					
<ul style="list-style-type: none"> Existing and planned residential premises, industrial buildings, educational institutions, offices within the Project area and in the vicinity of the Project 	<ul style="list-style-type: none"> The odour nuisance of FTN is anticipated to be alleviated with the implementation of DWFI system under the Project to intercept the polluted discharges from drainage outlets along the nullah Minor potential odour nuisance exposed desilted materials during regular maintenance desilting at the nullah and maintenance works for the DWFI system. 	<ul style="list-style-type: none"> AQO EIAO-TM 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> The temporary stockpile of desilted materials from maintenance works should be located as far away from the ASRs as possible. The desilted materials should be properly covered with tarpaulin / contained in watertight container on-site immediately and be removed off-site within 24 hours to avoid any odour nuisance arising. 	<ul style="list-style-type: none"> No adverse residual impacts anticipated
Noise Impact					
<ul style="list-style-type: none"> Representative Existing NSRs within 300m from the boundary of the Project Site 	<ul style="list-style-type: none"> 71 – 95 dB(A) 	<ul style="list-style-type: none"> Annex 5 and 13 of EIAO-TM Leq_(30 min) 75dB(A) at 1m from the façade of residential dwellings Leq_(30 min) 70dB(A) at 1m from the façade of schools during normal teaching hour Leq_(30 min) 65dB(A) at 1m from the façade of schools during examination period 	<ul style="list-style-type: none"> Residential NSRs: exceed the noise criteria by up to 20 dB(A) Educational Institution exceed the noise criteria by up to 6 dB(A) and 11 dB(A) during normal teaching hour and examination period respectively 	<ul style="list-style-type: none"> Good site practices to limit noise emissions at the sources Use of quality powered mechanical equipment (QPME) / quieter construction method such as silent piling by Press-in method as an alternative of traditional sheet piling Use of movable construction noise barriers to screen noise from construction plant Avoidance of concurrent use of breaker and roller for construction of viewing deck / pavillion, renovation of existing footbridges at Work Section 3 near NAP4 (57 Fo Tan Village). 	<ul style="list-style-type: none"> The mitigated predicted construction noise levels would range from 59 to 75 dB(A) within the criterion. With the implementation of all feasible noise mitigation measures, no residual impacts are predicted at the representative NAPs from the various construction activities of the Project.
<ul style="list-style-type: none"> Representative existing and planned NSRs within 300m from the boundary of the proposed mid-stream water pumps 	<ul style="list-style-type: none"> 22 – 34 dB(A) 	<ul style="list-style-type: none"> Annex 5 of EIAO-TM and IND-TM issued under NCO 5 dB(A) below the appropriate ANL shown in Table 3 of the IND-TM, or the prevailing background noise levels (for quiet areas with level 5 dB(A) below the ANL) 	<ul style="list-style-type: none"> No exceedance of fixed plant noise criteria 	<ul style="list-style-type: none"> Quieter plant should be chosen as far as practicable; Include noise levels specification when ordering new plant items; 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. 	<ul style="list-style-type: none"> No residual noise impact is anticipated during the operational phase of the Project
Water Quality Impact					
Construction Impact					
<ul style="list-style-type: none"> WSR1: Shing Mun River; WSR2: Fo Tan Nullah; WSR3: Siu Lek Yuen Nullah; WSR4-WSR6: Natural watercourses upstream of Fo Tan Nullah (also referred to as natural watercourses S1 – S3 in Section 9); WSR7: Water gathering ground upstream of Fo Tan Nullah; and W1: WSD Flushing Water Intakes at Shatin. 	<ul style="list-style-type: none"> Wastewater from general construction activities; Construction site run-off; Construction works in close proximity to inland water; Construction works at Fo Tan Nullah; Sewage from construction workforce; and Accidental spillage of chemicals. 	<ul style="list-style-type: none"> Annexes 6 and 14 of the EIAO-TM Water Quality Objectives (WQO) for Tolo Harbour and Channel Water Control Zone (WCZ) Technical Memorandum on Standards for Effluent Discharge into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS) The Practice Note (PN) for Professional Persons on Construction Site Drainage (ProPECC PN 1/94) 	<ul style="list-style-type: none"> Wastewater generated from construction activities, including general cleaning and polishing, wheel washing, dust suppression and utility installation may contain high SS concentrations. Release of uncontrolled site run-off would increase the SS levels and turbidity in the nearby marine environment. Discharge of construction materials, wastewater, excavated sediment, spillage and contaminants to the downstream receiving waters. 	<ul style="list-style-type: none"> Implementation of the Best Management Practices (BMPs) of construction site and guidelines for handling and disposal of construction site discharges outlined in ProPECC PN 1/94 Construction Site Drainage should be implemented. All effluent discharged from the construction site should comply with the standards stipulated in the TM-DSS. Mitigation measures stated in ETWB TC (Works) No. 5/2005 Protection of natural streams / rivers from adverse impacts arising from construction works. Construction works should be programmed to minimise soil 	<ul style="list-style-type: none"> With proper implementation of mitigation measures, no adverse residual water quality impact is expected.

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		<ul style="list-style-type: none"> WSD Water Quality Criteria for Flushing Water Intakes Hong Kong Planning Standards and Guidelines (HKPSG) 		<ul style="list-style-type: none"> excavation works in rainy seasons (April to September). Diversion of the dry weather flow to the nearby sewerage system during maintenance so that the water quality at Fo Tan Nullah would not be adversely affected. The Waste Disposal Ordinance (Cap 354) (WDO) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation, should be observed and complied with for control of chemical wastes. Disposal of chemical wastes should be carried out in compliance with the WDO. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the WDO details the requirements to deal with chemical wastes. For construction works within the nullah, including installation of DWFI system, mid-stream water pumping facilities and channel bed modification at each section, as well as desilting works downstream tidal zone, should be scheduled in dry season when the flow is low. All the construction works should be undertaken in dry conditions and physically separated from the watercourses downstream. Precautionary measures in Appendix D of ETWB TC No. 5/2005, such as temporary isolation to other connected watercourse using concrete blocks, sandbag barriers or other appropriate measures, shall be applied. Details of the containment structures, flow diversion pathway and water treatment method should be provided by the Contractor to the Engineer for approval before commencement of construction works for the Project. 	
Operational Impact					
<ul style="list-style-type: none"> WSR1: Shing Mun River; WSR2: Fo Tan Nullah; WSR3: Siu Lek Yuen Nullah; WSR4-WSR6: Natural watercourses upstream of Fo Tan Nullah (also referred to as natural watercourses S1 – S3 in Section 9); WSR7: Water gathering ground upstream of Fo Tan Nullah; and W1: WSD Flushing Water 	<ul style="list-style-type: none"> Non-point source surface run-off / irrigation runoff from the proposed greening elements and landscaping; Routine maintenance works for the drainage and sewerage systems along FTN, including desilting along the nullah and minor maintenance to the DWFI system, by the DSD to remove excessive / accumulated silt, vegetation, debris and obstructions within the channel (similar to the ones undertaken by DSD along FTN under existing arrangement), which may lead to disturbance and re- 	<ul style="list-style-type: none"> Annexes 6 and 14 of the EIAO-TM Water Quality Objectives (WQO) for Tolo Harbour and Channel Water Control Zone (WCZ) Technical Memorandum on Standards for Effluent Discharge into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS) 	<ul style="list-style-type: none"> The surface / irrigation runoff may contain small amount of suspended solids and fertiliser / pesticides (if required to sustain healthy growth of the proposed plantings) that may cause water quality impacts to the nearby receiving waters. Whilst possible changes to water quality may be expected during the silt removal works, such as increases in SS due to disturbance of nullah bed material and subsequently increased sedimentation 	<ul style="list-style-type: none"> The ProPECC PN 5/93 “Drainage Plans subject to Comments by Environmental Protection Department” provides guidelines and practices for handling, treatment and disposal of various effluent discharges to stormwater drains and foul sewers. The design of site drainage should follow the relevant guidelines and practices as given in the ProPECC PN 5/93. Best Management Practices (BMPs) for storm water discharge and management 	<ul style="list-style-type: none"> No unacceptable residual impact would be anticipated.

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Intakes at Shatin.	suspension of river sediments and thereby affecting water quality; and <ul style="list-style-type: none"> Potential changes in hydrodynamics properties and hydrology. 	<ul style="list-style-type: none"> WSD Water Quality Criteria for Flushing Water Intakes Hong Kong Planning Standards and Guidelines (HKPSG) Pesticide Ordinance Code of Practice for the Safe and Proper Use of Pesticides in Public Areas 	onto the nullah bed, it is expected that these changes will be short-term and occur only within the area of maintenance works and for a short distance downstream due to rapid settling out of any disturbed nullah bed material <ul style="list-style-type: none"> During operation of the Project, DWFI system will be in place along the nullah to convey drainage branches to Sha Tin Sewage Treatment Works for treatment, leading to reduced flowrate and amount of freshwater input into FTN and downstream receiving water (Shing Mun River Main Channel). Due to the natural sloping gradient along FTN and wetland habitats created within the nullah, average flow rate will remain similar to baseline condition and no unacceptable impacts on hydrodynamics properties and hydrology are anticipated. 	are recommended for the Project to mitigate potential adverse water quality impacts. <ul style="list-style-type: none"> Good management practices should be adopted to properly manage the water application rate and time during irrigation to minimise chance of run-off. Use of fertilisers, if required, should be properly controlled, e.g. applications prior to forecasted heavy rain event should also be avoided to minimise the potential for run-off of residual fertiliser. Priority would be given to remove infected/sick plantings over the use of pesticides. Good site practices should be included in planning for the maintenance works. Maintenance desilting of the nullah should be carried out on an annual basis during dry season (November to March) when the water flow is low, with the exception of during emergency situations where the accumulated silt would adversely affect the hydraulic capacity of the nullah or where flooding risk is imminent, or when complaints on environmental nuisance associated with the accumulated silt are received. Desilting should be carried out by hand-held or light machinery at low tide. 	
Waste Management Implications					
Construction Impact					
<ul style="list-style-type: none"> C&D waste, desilted materials from desilting at downstream tidal zone, chemical waste, general refuse 	<ul style="list-style-type: none"> Approximately 44,400 m³ of C&D materials would be generated, approximately 36,600 m³ of inert C&D materials (mainly soil) could be reused on-site as backfill materials whilst approximately 4,800 m³ of surplus inert C&D materials would be disposed of at public fill reception facility (PFRF) for reuse. that approximately 3,000 m³ of non-inert C&D materials would be generated. Around 19.5 kg per day of general refuse will be generated from construction works and site-based staff and workers The amount of desilted materials would total 4,000 m³ Only few cubic meters per month of chemical waste will be generated from plant maintenance and operation of equipment and machineries The amount of asbestos to be disposed of would be verified on site. 	<ul style="list-style-type: none"> Areas within the boundary of the Project sites Annexes 7 and 15 of the EIAO-TM Waste Disposal Ordinance (Cap.354) Waste Disposal Ordinance (Chemical Waste) (General) (Cap.354C) Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap.354N) Land (Miscellaneous Provisions) Ordinance (Cap.28) Public Health and Municipal Services Ordinance (Cap.132BK) – Public Cleansing and Prevention of Nuisances Regulation Dumping at Sea Ordinance (Cap.466) 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implementation of good site practices and waste reduction measures A Registered Asbestos Consultant and Registered Asbestos Laboratory shall be engaged to conduct investigation for the presence of asbestos containing materials. 	<ul style="list-style-type: none"> No unacceptable residual impact is predicted

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		<ul style="list-style-type: none"> Code of Practice on the Handling, Transportation and Disposal of Asbestos Waste ProPECC PN 2/97 Handling of Asbestos Containing Materials in Buildings 			
Operational Impact					
<ul style="list-style-type: none"> Silt, debris and screenings, desilted material and chemical waste 	<ul style="list-style-type: none"> Small amount of silt, debris and screenings generated from maintenance works of the DWFI and stormwater storage tank Up to 100 m³ desilted materials from each maintenance desilting works Very small amount of chemical waste of less than a cubic meter each time generated from maintenance works of the stormwater storage tank 	<ul style="list-style-type: none"> Annexes 7 and 15 of the EIAO-TM Waste Disposal Ordinance (Cap.354) Waste Disposal Ordinance (Chemical Waste) (General) (Cap.354C) Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap.354N) Land (Miscellaneous Provisions) Ordinance (Cap.28) Public Health and Municipal Services Ordinance (Cap.132BK) – Public Cleansing and Prevention of Nuisances Regulation 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> The silt materials, debris and screenings should be properly packed and transported to the designated landfill for disposal as soon as possible All chemical waste generated should be properly stored, labelled and removed by licensed waste collectors 	<ul style="list-style-type: none"> No unacceptable residual impact is predicted
<ul style="list-style-type: none"> General refuse from pedestrian / user along the revitalised FTN 	<ul style="list-style-type: none"> Provided that sufficient number of trash bins and recycling bins would be provided / retained for the collection of general refuse generated by pedestrians / users along the revitalized FTN, no unacceptable environmental impact and public transport impact would be anticipated. 	<ul style="list-style-type: none"> Annex 19 of the EIAO-TM Guidance Note for Contaminated Land Assessment and Remediation Practice Guide for Investigation and Remediation of Contaminated Land Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Sufficient number of trash bins and recycling bins would be provided / retained for the collection of general refuse generated by pedestrians / users 	<ul style="list-style-type: none"> No unacceptable residual impact is predicted
Land Contamination					
<ul style="list-style-type: none"> Onsite construction workers and future occupants 	<ul style="list-style-type: none"> No potential contaminating land use/activities were identified. 	<ul style="list-style-type: none"> Annex 19 of the EIAO-TM Guidance Note for Contaminated Land Assessment and Remediation Practice Guide for Investigation and Remediation of Contaminated Land Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management 	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> Nil
Sewage and Sewerage Impact					
<ul style="list-style-type: none"> Existing and planned sewerage system, sewage treatment and disposal facilities 	<ul style="list-style-type: none"> An additional 2,700 m³/day dry weather flow to existing sewerage system 	<ul style="list-style-type: none"> DSD Sewerage Manual Part 1 (2013 Version) DSD Sewerage Manual Part 2 (2013 Version) DSD Technical Circulars and Practice Notes EPD Guideline for Estimating Sewage Flows for Sewage 	<ul style="list-style-type: none"> Under current condition, the percentage utilisation of the concerned sewerage system is 61%. The percentage goes up to 63% with the additional dry weather flows, which still leaves roughly 37% spare capacity. 	<ul style="list-style-type: none"> No mitigation measures are anticipated. 	<ul style="list-style-type: none"> No adverse residual impact anticipated

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		Infrastructure Planning Version 1.0 (Report No. EPD/TP 1/05) • Annex 14 of EIAO-TM			
Ecological Impact (Terrestrial and Marine)					
Construction Impact – Direct					
<ul style="list-style-type: none"> Sites of Conservation Importance Natural Habitats Marine Habitats Habitats within Project Area 	<p><i>No direct impacts</i></p> <ul style="list-style-type: none"> Sites of conservation importance, natural habitats and marine habitats <p><i>Temporary habitat loss</i></p> <ul style="list-style-type: none"> Loss of 4.2 ha of highly disturbed habitats with low ecological value Loss of 3.0 ha of modified watercourse with low to moderate ecological value 	<ul style="list-style-type: none"> Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) EIAO-TM Annex 8 & 16 	• N/A	<ul style="list-style-type: none"> Reinstatement and enhancement of temporarily affected habitats 	• Nil
<ul style="list-style-type: none"> Ardeids Day-roost Avifauna and mammal 	<ul style="list-style-type: none"> No direct impact of habitat loss is anticipated for ardeids No significant adverse impact on direct injury / mortality of wildlife No direct impact on the habitat for day roosting of short-nosed fruit bat 	<ul style="list-style-type: none"> Environmental Impact Assessment Ordinance (EIAO) (Cap. 499) EIAO-TM Annex 8 & 16 	• N/A	<ul style="list-style-type: none"> Tree retainment Avoidance of works in natural watercourse habitat 	• Nil
Construction Impact – Indirect					
<ul style="list-style-type: none"> Recognised Sites of Conservation Importance 	<ul style="list-style-type: none"> No recognised sites of conservation importance were identified within the terrestrial ecology Assessment Area 	• N/A	• N/A	• N/A	• N/A
<ul style="list-style-type: none"> Waterbirds and Bats 	<p>No significant disturbance on waterbirds and bats</p> <p><i>Construction Noise</i></p> <ul style="list-style-type: none"> As avifauna are highly mobile animals expected to utilise a larger area of the habitats instead of confining to a particular locality plus the highly disturbed surrounding area, it is unlikely to have significant adverse disturbance impacts on waterbirds. Potential behaviour of roost abandonment, avoidance of foraging areas and signal masking on bat species when interference with information transfer during echolocation is significant. However, the existing habitat is already subjected to high disturbance and no night-time construction would be carried out for the Project, which would not overlap with bat species' foraging time. In addition, construction noise does not share the same frequency with most bat echolocation calls or their hearing, it is therefore unlikely to have significant disturbance impact on the recorded bat species <p><i>Increased Human Activities</i></p> <ul style="list-style-type: none"> Increased number of people or visual stimuli associated with activities like movement of plants. However, as the surrounding areas of the Project Area is already highly disturbed, it is unlikely to have significant disturbance impact on waterbirds due to 	<ul style="list-style-type: none"> Wild Animals Protection Ordinance (Cap. 170) EIAO-TM Annex 8 	• N/A	<ul style="list-style-type: none"> No night-time works Good site practices General minimisation measures Reduction of glare / lighting Minimisation of dust Impacts Minimisation of noise Impacts 	• Nil

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	<p>increased human activities within the Assessment Area</p> <p><i>Artificial lighting / glare</i></p> <ul style="list-style-type: none"> potentially affect light sensitive/ nocturnal wildlife by attracting, disorienting or disrupting their light-sensitive cycles (e.g. bats). This could consequently affect their migration, foraging and breeding success of the species and causing reduction of faunal density in the area. However, the Project Area are already urbanised and surrounding developed area habitats were under high level of disturbance by artificial lighting from existing nearby industrial, residential building, roads and public facilities. No unexpected disturbance impacts by glare however are anticipated given that no night-time construction works or additional lighting would be required for the Project, and recorded nocturnal species are common and habituated to various levels of disturbance. <p><i>Dust</i></p> <ul style="list-style-type: none"> Dust could degrade the habitats adjacent to works areas Dust could cover plant leaves and may affect photosynthesis, respiration and transpiration 				
<ul style="list-style-type: none"> Aquatic flora and fauna Avifauna Freshwater crab (<i>Somanniathelphusa zanklon</i>) 	<p><i>Channel Bed Modification</i></p> <ul style="list-style-type: none"> Potentially impact downstream water quality and affect aquatic communities in the area, which in turn could decrease the value of these habitats to foraging avifauna <p><i>Discharge and runoff</i></p> <ul style="list-style-type: none"> Potentially release wastewater discharge and contaminated construction site runoff into the waters which generally consist of high concentration of suspended solids (SS) and elevated pH. 	<ul style="list-style-type: none"> Water Pollution Control Ordinance (Cap. 358) 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Scheduling of works Good site practice mitigation measures for water quality 	<ul style="list-style-type: none"> Minor
Operational Impact – Direct					
<ul style="list-style-type: none"> Aquatic flora and fauna 	<p><i>Routine maintenance desilting works</i></p> <ul style="list-style-type: none"> No unacceptable direct impact is anticipated 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Nil
Operational Impact – Indirect					
<ul style="list-style-type: none"> Along Fo Tan Nullah Aquatic habitats 	<ul style="list-style-type: none"> Potential beneficial impact from water quality improvement and ecological enhancement features 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Beneficial
<ul style="list-style-type: none"> Aquatic habitats 	<ul style="list-style-type: none"> Potential water quality impacts from maintenance and desilting works increasing SS levels. Impact is however temporary and only affect the works area of small scale with no unacceptable impacts to water quality 	<ul style="list-style-type: none"> Water Pollution Control Ordinance (Cap. 358) 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Nil
<ul style="list-style-type: none"> Ecological receiver at Shing Mun River Channel 	<ul style="list-style-type: none"> Average flow rate on part of the Fo Tan Nullah would be reduced, thereby reducing amount of freshwater input to Shing Mun River 	<ul style="list-style-type: none"> EIAO-TM Annex 17 Water Pollution Control Ordinance (Cap. 358) 	<ul style="list-style-type: none"> Shing Mun River is tidally influenced and salinity varied significantly from wet season to dry season, as well as the insignificant amount of freshwater in FTN compared to the main channel, such reduction in freshwater input resulting 	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> No adverse impacts on these marine ecological receivers due to change in hydrodynamic conditions are anticipated

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			from Project operation is not likely to cause adverse impacts to fauna species utilising it		
<ul style="list-style-type: none"> Species of Conservation Importance (ardeids and <i>Somanniathelphusa zanklon</i>) 	<ul style="list-style-type: none"> Maintenance works such as desilting may disturb both fauna species and prevent them from using the habitat. However, given that ardeids in the area are relatively disturbance-tolerant, <i>Somanniathelphusa zanklon</i> has high tolerance to organic pollutants and the works are temporary in nature of small scale which have been carried out regularly, no unacceptable impacts from maintenance works on species of conservation importance are anticipated. 	<ul style="list-style-type: none"> Wild Animals Protection Ordinance (Cap. 170) 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Nil
<ul style="list-style-type: none"> Fauna 	<ul style="list-style-type: none"> No changes in hydrodynamic properties or hydrology are anticipated for the watercourses and associated riparian habitats during operational phase of the Project 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Nil
Fisheries Impact					
Construction Impact					
<ul style="list-style-type: none"> Fishing ground and mariculture area 	<ul style="list-style-type: none"> Wastewater generated from construction site runoff, general land-based construction works, accidental spillage and potential contamination of surface water could potentially pose indirect impacts on water quality within Fo Tan Nullah, adjoining Shing Mun River Main Channel and Sha Tin Hoi 	<ul style="list-style-type: none"> EIAO-TM Annex 17 Water Pollution Control Ordinance (Cap. 358) 	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> Mitigation measures adopted for water quality impact 	<ul style="list-style-type: none"> As the closest fishing ground (i.e. Sha Tin Hoi) and mariculture area (i.e. Yim Tin Tsai (East) FCZ) are at least 2.7 km and 7.0 km away from downstream of the Project area, no unacceptable adverse is anticipated Fisheries impacts arising from water quality deterioration due to land-based construction works are expected to be negligible
Operational Impact					
<ul style="list-style-type: none"> Fishing ground and mariculture area 	<ul style="list-style-type: none"> Slight water quality improvement with proposed DWFI 	<ul style="list-style-type: none"> EIAO-TM Annex 17 Water Pollution Control Ordinance (Cap. 358) 	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> Insignificant
Cultural Heritage					
<ul style="list-style-type: none"> Declared monument – The Old House, Wong Uk Village 	<ul style="list-style-type: none"> No direct or indirect impact is anticipated given the large separation distance between the site boundary and the Declared Monument 	<ul style="list-style-type: none"> EIAO-TM Annexes 10 and 19 Antiquities and Monuments Ordinance (A&MO) (Cap.53) Guidance Note on Assessment of Impact on Sites of Cultural Heritage in Environmental Impact Assessment Studies 	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> Nil 	<ul style="list-style-type: none"> Nil
Landscape and Visual Impact					
Construction Impact					
<ul style="list-style-type: none"> Existing Landscape Resources (LRs) and Landscape Character Areas (LCAs) and Visually Sensitive 	<ul style="list-style-type: none"> Key affected LRs: <ul style="list-style-type: none"> LR 1 Watercourse of Shing Mun River Channel and Fo Tan Nullah LR 3 Waterside Landscape Amenity along Fo 	<ul style="list-style-type: none"> EIAO TM Annexes 10 and 18 EIAO Guidance Note No. 8/2010 on Preparation of 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> CM1 – Preservation of Existing Trees and Other Vegetation CM2 – Erection of Decorative Screen Hoardings 	<ul style="list-style-type: none"> There will be slight impact on LRs There will be slight impact on LCAs

Appendix 15.2 Summary of Environmental Impacts

Sensitive Receivers / Assessment Points	Impact Prediction Results (Without Mitigation)	Key Relevant Standards/Criteria	Extents of Exceedance (Without Mitigation)	Impact Avoidance Measures/ Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
<p>Receivers (VSRs) within the assessment area</p>	<p>Tan Nullah</p> <ul style="list-style-type: none"> • LR 4 Kwei Tei Street Garden <p>Key affected LCAs:</p> <ul style="list-style-type: none"> • LCA 1 Settled Valley Landscape • LCA 2 Miscellaneous Urban Fringe Landscape • LCA 3 Industrial Urban Landscape <p>Key affected VSRs:</p> <ul style="list-style-type: none"> • C1 Shatin Galleria • C2 Fo Tan Railway House • G1 Hong Kong Sports Institute • G3 Jockey Club Ti-I College Dormitory • I1 Industrial Development along Fo Tan Road • R1 The Palazzo Tower • R2 Fo Tan Village • R3 Chun Yeung Estate • R4 Yuk Wo Court • R5 Planned residential development under construction (The Arles) • REC1 Shing Mun River Promenade Garden No.3 • REC 2 Shan Mei Street Children's Playground • REC 3 Kwei Tei Street Garden • T1 Travelers along Sha Tin Road, Lok King Street & Fo Tan Road • T3 Travelers along Fo Tan Nullah 	<p>Landscape and Visual Impact Assessment under the EIAO</p> <ul style="list-style-type: none"> • DEVB (GLTM) – Guidelines on Tree Preservation during Development • DEVB (GLTM) – Guidelines on Tree Transplanting • ETWB TCW No. 5/2005 Protection of streams/rivers from adverse impacts arising from construction works • HyD Guidelines HQ/GN/13 – Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit • DEVB TCW No. 7/2015 – Tree Preservation 		<ul style="list-style-type: none"> • CM3 – Control of Night time Lighting Glare • CM4 – Management of Construction activities and Facilities • CM 5 – Reinstatement of Temporarily Disturbed Landscape Areas • CM 6 – Reinstatement of Temporarily Disturbed Watercourses 	<ul style="list-style-type: none"> • There will be "Slight" to "Moderate" (for REC3 only) impact on VSRs
Operational Impact					
<ul style="list-style-type: none"> • Existing Landscape Resources (LRs) and Landscape Character Areas (LCAs) and Visually Sensitive Receivers (VSRs) within the assessment area 	<ul style="list-style-type: none"> • Same as those for construction phase • The overall visual character along the Fo Tan Nullah would be completely changed by the proposed development after construction 	<ul style="list-style-type: none"> • EIAO TM Annexes 10 and 18 • EIAO Guidance Note No. 8/2010 on Preparation of Landscape and Visual Impact Assessment under the EIAO • DEVB TCW No. 7/2015 – Tree Preservation • DEVB (GLTM) – Management Guidelines for Mature Trees 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • OM1 – Greening Enhancement along Channel Bed and Embankment • OM2 – Provision of Recreational Opportunity along Nullah • OM3 – Compensatory Tree Planting • OM4 – Sensitive and Aesthetically Pleasing Design • OM5 – Re-provision of Affected Open Space • OM6 – Transplantation 	<ul style="list-style-type: none"> • Only slight impacts are anticipated on Day 1 of operation • Insubstantial impacts are anticipated in Year 10 of operation