

Appendix 13.2 Summary of Environmental Impacts Associated with the Project

Sensitive Receivers / Assessment Points	Impact Prediction Results	Key Relevant Standards / Criteria	Extent of Exceedance (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
Air Quality Impact					
Construction Phase					
Existing and planned ASRs located within 500m from the Project boundary	<ul style="list-style-type: none"> No adverse air quality impact induced by the Project on nearby ASRs is anticipated. Max. 1-hour average TSP conc.: 147 - 254 $\mu\text{g}/\text{m}^3$ 10th highest 24-hour average RSP conc.: 66 - 75 $\mu\text{g}/\text{m}^3$ Annual average RSP conc.: 26 - 36 $\mu\text{g}/\text{m}^3$ 36th highest 24-hour average FSP conc.: 24 - 27 $\mu\text{g}/\text{m}^3$ Annual average FSP conc.: 15 - 17 $\mu\text{g}/\text{m}^3$ 	<ul style="list-style-type: none"> AQO EIAO-TM Annex 4 1-hour average TSP Conc.: 500 $\mu\text{g}/\text{m}^3$ 24-hour average RSP Conc.: 100 $\mu\text{g}/\text{m}^3$ (Number of exceedance allowed: 9) Annual average RSP Conc.: 50 $\mu\text{g}/\text{m}^3$ 24-hour average FSP Conc.: 50 $\mu\text{g}/\text{m}^3$ (Number of exceedance allowed: 35) Annual average FSP Conc.: 25 $\mu\text{g}/\text{m}^3$ 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Implementation of sufficient dust control measures as stipulated under the APCO, Air Pollution Control (Construction Dust) Regulation (Cap 311R) and good site practices Regular Watering on heavy construction work areas to reduce dust emission by 91.7% 	<ul style="list-style-type: none"> No adverse residual impact on nearby ASRs is anticipated
<ul style="list-style-type: none"> Operational Phase 					
Existing and planned ASRs located within 500m from the boundary of Proposed Marine Facilities	<ul style="list-style-type: none"> No adverse air quality impact induced by the proposed marine facilities on nearby ASRs is anticipated. 10th highest 24-hour average RSP conc.: 68 $\mu\text{g}/\text{m}^3$ 	<ul style="list-style-type: none"> AQO EIAO-TM Annex 4 24-hour average RSP Conc.: 100 $\mu\text{g}/\text{m}^3$ (Number of exceedance allowed: 9) Annual average RSP Conc.: 50 $\mu\text{g}/\text{m}^3$ 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> 100% adoption of zero emission vehicles on the whole of the ATCL link route Installation of electricity pedestal at each berthing facilities for use in order to minimise the vessel emissions 	<ul style="list-style-type: none"> No adverse residual impact on nearby ASRs is anticipated

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	<ul style="list-style-type: none"> Annual average RSP conc.: 29 µg/m³ 36th highest 24-hour average FSP conc.: 25 - 26 µg/m³ Annual average FSP conc.: 16 µg/m³ 19th highest 1-hour average NO₂ conc.: 130 - 154 µg/m³ Annual average NO₂ conc.: 29 -39 µg/m³ The highest 10-min average SO₂ conc.: 100 - 101 µg/m³ 4th highest 24-hour average SO₂ conc.: 15 - 17 µg/m³ 	<ul style="list-style-type: none"> 24-hour average FSP Conc.: 50 µg/m³ (Number of exceedance allowed: 35) Annual average FSP Conc.: 25 µg/m³ 1-hour average NO₂ Conc.: 200 µg/m³ (Number of exceedance allowed: 18) Annual average NO₂ Conc.: 40 µg/m³ 10-min average SO₂ Conc.: 500 µg/m³ (Number of exceedance allowed: 3) 24-hour average SO₂ Conc.: 50 µg/m³ (Number of exceedance allowed: 3) 			
Noise Impact					
Construction Phase					
Existing and Planned NSRs located within 300m from the Project boundary	<ul style="list-style-type: none"> Predicted unmitigated construction noise levels at the NAPs are in the range of 57 to 97 dB(A) 	<ul style="list-style-type: none"> EIAO-TM Annex 5 for non-restricted hours for domestic premises 75dB(A), for educational institution is 70dB(A) (65dB(A) during examination period) 	<ul style="list-style-type: none"> Exceedance of the EIAO-TM noise criterion by up to 19 dB(A) 	<ul style="list-style-type: none"> Quieter construction methods and quieter powered mechanical equipment shall be used and serviced regularly during the construction programme Noise barrier, noise enclosure and noise insulating fabric shall be used in the Project 	<ul style="list-style-type: none"> No adverse residual impact on nearby NSRs is anticipated

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				<ul style="list-style-type: none"> Construction Noise Management Plan(s) (CNMP) with reference to Section 8 and Annex 21 of the EIAO-TM should be prepared to submit before commencement of construction works, so that both the verification of the inventory of noise sources, and the assessment of the effectiveness and practicality of all identified measures for mitigating the construction noise impact of the Project, would be performed during the design, tendering and implementation stage of the construction works. A clear method statement of all the recommended mitigation measures for controlling the construction noise impacts should be formulated in the CNMP(s) to be prepared by future Contractors, such that all the recommended mitigation measures shall be implemented and executed properly. <p>Good site practices are recommended during construction phase. Measures include:</p> <ul style="list-style-type: none"> Only well-maintained plant should be operated on-site and 	

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				plants should be serviced regularly during the construction period; <ul style="list-style-type: none"> • Mobile plant, if any, should be sited as far from NSRs as possible; • Plant known to emit noise strongly in one direction should, wherever possible, be properly orientated so that the noise is directed away from the nearby NSRs; • Use of site hoarding as a noise barrier to screen noise at low level NSRs; • Machines and plant that may be used intermittently should be shut down between works periods or should be throttled down to a minimum; and • Any material stockpiles and other structures should be effectively utilised, wherever practicable, to screen the noise from on-site construction activities 	
Operational Phase					
<ul style="list-style-type: none"> • Existing and planned NSRs located within 300m from the project boundary 	<ul style="list-style-type: none"> • The zero emission vehicles would meet the maximum SWL, 100dB(A) or below, and no significant noise impact is anticipated. 	<ul style="list-style-type: none"> • EIAO-TM Annex 5 and IND-TM: ANL-5dB(A) or prevailing background for planned fixed noise sources whichever is lower 	<ul style="list-style-type: none"> • No exceedance is anticipated. 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A

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	<ul style="list-style-type: none"> Predicted operational noise levels at the NAPs are in the range of 54 to 65 dB(A) for day and evening time, and 44 to 55 dB(A) for night-time 				
Water Quality					
Construction Phase					
<p>Existing WSRs within the North Western Water Control Zone including:</p> <ul style="list-style-type: none"> Fishing/Spawning Grounds (1) Marine Parks (2) SSSIs (2) Horseshoe Crab Habitats / Mangrove Stands (4) Artificial Reef and Coral Communities (1) Coral Communities (3) Artificial Reef (5) Non-gazetted beach (2) Gazetted Beach (6) Seawater Intake (17) 	<ul style="list-style-type: none"> Sediment disturbance and wastewater generated from marine-based construction activities Construction site runoff and wastewater generated from land-based activities Generation of wastewater and sewage from workforce 	<ul style="list-style-type: none"> Water Pollution Control Ordinance Technical Memorandum Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-ICW) issued under Section 21 of the WPCO Annexes 6 and 14 of the EIAO-TM Practice Note for Professional Persons, Construction Site Drainage (ProPECC PN 1/94) WSD's Water Quality Criteria for Sea Water Intakes 	<ul style="list-style-type: none"> N/A 	<p>Standard measures and good site practices are recommended during construction phase. Measures include:</p> <ul style="list-style-type: none"> There will be at most 2 piles installed concurrently for the marine facilities. Similarly, there will be at most 2 piles installed concurrently for the marine viaduct Silt curtain would be set up to enclose the entire active work area before commencement of piling works to control sediment dispersion All vessels should be well maintained and inspected before use to limit any potential discharges to the marine environment All vessels must have a clean ballast system All vessels shall be sized such 	<ul style="list-style-type: none"> No adverse residual impacts is predicted

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<ul style="list-style-type: none"> Typhoon Shelter (1) 				<p>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</p> <ul style="list-style-type: none"> Marine 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. Wastewater from potentially contaminated area on working vessels should be minimized and collected. These kinds of wastewater should be brought back to port and discharged at appropriate collection and treatment system No solid waste is allowed to be disposed overboard Best Management Practices (BMPs) of mitigation measures in controlling water pollution and good site management, as specified in the <i>ProPECC PN 1/94 "Construction Site Drainage"</i> are followed, where applicable, to prevent runoff with high level of SS from entering the surrounding 	

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				<p>waters</p> <ul style="list-style-type: none"> At the start of site establishment, perimeter cut-off drains to direct off-site water around the site should be constructed with internal drainage works. Channels, earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities Diversion of natural stormwater should be provided as far as possible. The design of temporary on-site drainage should prevent runoff going through site surface, construction machinery and equipment in order to avoid or minimize polluted runoff. Sedimentation tanks with sufficient capacity, constructed from pre-formed individual cells of approximately 6 to 8 m³ capacities, are recommended as a general mitigation measure which can be used for settling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent 	

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				<p>is pumped</p> <ul style="list-style-type: none"> The dikes or embankments for flood protection should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt/sediment trap. The silt/sediment traps should be incorporated in the permanent drainage channels to enhance deposition rates The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of <i>ProPECC PN 1/94</i>. The detailed design of the sand/silt traps should be undertaken by the contractor 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 following rainstorms. Deposited silt and grit should be removed 	

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				<p>regularly and disposed of by spreading evenly over stable, vegetated areas</p> <ul style="list-style-type: none"> • All open stockpiles of construction materials (for example, aggregates, sand and fill material) should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. • Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and storm runoff being directed into foul sewers • The precautions to be taken at any time of year when rainstorms are likely together with the actions to be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarised in Appendix A2 of ProPECC PN 1/94 	

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				<ul style="list-style-type: none"> • 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 facilities should be provided at every construction site exit where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis 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. • Construction solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts. • Appropriate numbers of chemical toilets will be provided by a licensed contractor to serve the construction workers over the 	

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				<p>construction sites to prevent direct disposal of sewage into the water environment. No onsite discharge from these chemical toilets will be allowed.</p> <ul style="list-style-type: none"> All fuel tanks and chemical storage areas will be provided with locks and be sited on sealed areas. The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank. The contractors shall ensure that leakages or spillages are contained and cleaned up immediately 	
Operational Phase					
<p>Existing and Planned WSRs within the North Western Water Control Zone including:</p> <ul style="list-style-type: none"> Fishing/Spawning Grounds (1) Marine Parks (2) SSSIs (2) Horseshoe Crab Habitats / Mangrove Stands (4) 	<ul style="list-style-type: none"> Change in flow regime due to the presence of floating structure and bridge piles of the Project Change in water quality due to maintenance dredging including SS elevation and increased sedimentation, dissolved oxygen depletion and release of sediment-bounded 	<ul style="list-style-type: none"> Water Pollution Control Ordinance Technical Memorandum Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-ICW) issued under Section 21 of the WPCO Annexes 6 and 14 of the EIAO-TM 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Cage type silt curtain will be provided during maintenance dredging. The maximum working rate for maintenance dredging is limited to be 40m³ per hour and only one closed grab dredger will be working in any time. Other good site practices to be implemented in construction phase for marine construction works would be applicable for maintenance dredging during operational phase. 	<ul style="list-style-type: none"> No significant residual impact is predicted

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<ul style="list-style-type: none"> • Artificial Reef and Coral Communities (1) • Coral Communities (3) • Artificial Reef (5) • Non-gazetted beach (2) • Gazetted Beach (6) • Seawater Intake (17) • Typhoon Shelter (1) 	<p style="text-align: right;">nutrients and contaminants.</p> <ul style="list-style-type: none"> • Generation of wastewater and sewage from staff, visitors and passengers • Potential oil spillage associated with the operation of the marine facilities 	<ul style="list-style-type: none"> • Practice Note for Professional Persons, Construction Site Drainage (ProPECC PN 1/94) 		<ul style="list-style-type: none"> • Local connections to the public sewer would be installed and no direct discharge of sewage and wastewater to the nearby drainage system and marine waters would be allowed. • Regular cleaning and removal of floating refuse should be conducted within marine water and coastal area within and around the Project to avoid excessive accumulation. Also, any new drainage outfall(s) under this Project will be located outside of the marine facilities. • Spillage clean up equipment should be provided at the marine facilities to allow quick response in case of emergency. • A surface water drainage system of the ATCL should be provided to collect road runoff to the new drainage system with new storm water outfall and adequate designed pollution removal devices such as silt trap and, as necessary, oil/grease trap, which should be regularly cleaned and maintained to ensure proper functioning. 	

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Waste management					
Construction Phase					
<p>C&D materials, general refuse, marine sediment, floating refuse and chemical waste</p>	<ul style="list-style-type: none"> It is estimated that 15,416m³ C&D materials (public fill) to be disposed of at public fill reception facility at Tuen Mun Area 38 Fill Bank or Chai Wan Public Fill Barging Point for other beneficial uses, 5,963m³ of inert C&D material to be reused on site, 1,950m³ of non-inert C&D materials shall be recycled as far as possible, and the remaining to be disposed at WENT landfill, approximate <100L per month of chemical wastes would be generated and shall be collected and disposed of by licensed collector. 198 tonnes of general refuse would be generated, 9 tonnes to be recycled and 189 tonnes to be disposed at WENT landfill. For marine sediment, it is estimated that 	<ul style="list-style-type: none"> Annexes 7 and 15 of EIAO-TM Waste Disposal Ordinance (Cap 354) Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C) Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap 354N) Dumping at Sea Ordinance (Cap 466) Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers ADV-21 - Management Framework for Disposal of Dredged/Excavated Sediment WBTC No. 12/2000 Fill Management Land (Miscellaneous Provisions) Ordinance (Cap 28) 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> The reuse/ recycling of all materials on-site shall be investigated prior to treatment/ disposal off-site; Implementation of good site practices, waste reduction measures and proper storage, collection and transport of waste A trip-ticket system shall be implemented and GPS or equivalent system shall be installed in dump trucks for delivery of inert C&D materials from the site to disposal locations to avoid illegal dumping and landfilling The Contractor shall comply with all relevant statutory requirements and guidelines and their updated versions that may be issued during the course of Project construction Sediment should be excavated, transported and disposed of in a manner to minimize adverse environmental impacts Proper storage, handling and disposal of chemicals Proper storage, recycling and 	<ul style="list-style-type: none"> No adverse residual impact is predicted

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	<p>2,803m³ of sediment will be generated and 375m³ of marine sediment will be reused on site. Reuse of sediment on site would be explored as far as possible and marine disposal would be only considered at last resort.</p> <ul style="list-style-type: none"> Approximate 3m³ of floating refuse will be collected annually. If any floating refuse is found within the Project area, it will be collected and recycled as far as possible, the remaining waste will be disposed of as general refuse 	<ul style="list-style-type: none"> Public Health and Municipal Services Ordinance (Cap 132) – Public Cleansing and Prevention of Nuisances Regulations 		<p>disposal of general refuse shall follow the Waste Disposal (Chemical Waste) (General) Regulation</p>	
Operational Phase					
<p>General refuse, chemical waste, floating refuse and marine sediment</p>	<ul style="list-style-type: none"> It is estimated that about 11 tonnes of general waste would be generated annually It is estimated that maximum of a hundred litres of chemical waste would be generated per month 	<ul style="list-style-type: none"> Annexes 7 and 15 of the EIAO-TM Waste Disposal Ordinance (Cap 354) Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C) 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> All chemical waste should be properly stored, labelled and removed by licensed waste collectors in accordance with Waste Disposal (Chemical Waste) (General) Regulation Reputable waste collector should be employed to remove municipal solid waste regularly 	<ul style="list-style-type: none"> No adverse residual impact is predicted

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	<ul style="list-style-type: none"> Approximate 3m³ of floating refuse will be collected annually. If any floating refuse is found within the Project area, it will be collected and recycled as far as possible, the remaining waste will be disposed of as general refuse In order to restore the seabed level to the current level every two years, maximum 500mm depth marine sediment will be dredged during maintenance dredging. The maximum maintenance dredging area is about 70,000m², which equivalent to the dredging volume of 35,000m³ 	<ul style="list-style-type: none"> Public Health and Municipal Services Ordinance (Cap 132BK) – Public Cleansing and Prevention of Nuisances Regulation Dumping at Sea Ordinance (Cap 466) Practice Notes for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers ADV-21 - Management Framework for Disposal of Dredged/Excavated Sediment WBTC No. 12/2000 Fill Management 		<ul style="list-style-type: none"> Requirements given in the Code of Practice on Packaging, Labelling and Storage of Chemical Wastes should be followed Use good quality containers compatible with the chemical waste and store incompatible chemicals separately Implementation of good site practices and waste reduction measures Prepare an Emergency Response Plan (ERP) to prevent and handle chemical spillages caused by the operations of depot during the operational stage The Contractor shall comply with all relevant statutory requirements and guidelines and their updated versions that may be issued during the course of Project operation Sediment should be excavated, transported and disposed of in a manner to minimize adverse environmental impacts 	
Ecology					
Construction Phase					
The terrestrial ecological sensitive	For Terrestrial ecology:	<ul style="list-style-type: none"> Annexes 8 and 16 of EIAO-TM 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> Adoption of good site practice to minimise the indirect 	For terrestrial ecology:

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<p>receivers within the 500m Project boundary. Identified terrestrial ecological sensitive receivers include:</p> <ul style="list-style-type: none"> • Scenic Hill • Romer’s Tree Frog 	<ul style="list-style-type: none"> • Habitat Loss – minor impact • Potential Direct Impacts on Flora and Fauna Species of Conservation Importance – negligible impact • Indirect Disturbances to Surrounding Habitats and Associated Wildlife – minor impact • Indirect Impact (Pollution) on Watercourses – negligible impact 	<ul style="list-style-type: none"> • Wild Animals Protection Ordinance (Cap 170) • Protection of Endangered Species of Animals and Plants Ordinance (Cap 586) • Town Planning Ordinance (Cap 131) • Water Pollution Control Ordinance (Cap 358) • Chapter 10 of the Hong Kong Planning Standard and Guidelines (HKPSG) • Development Bureau (DEVB) TC(W) No. 4/2020 Tree Preservation; and 		<p>disturbances to surrounding habitats and associated wildlife</p>	<ul style="list-style-type: none"> • The residual impact includes ~0.31ha woodland during construction phase, of disturbance to marine ecological habitat with low to moderate ecological value in general. No unacceptable residual terrestrial ecological impacts are therefore anticipated.
<p>The marine ecological sensitive receivers within the 500m Project boundary. Identified marine ecological sensitive receivers include:</p> <ul style="list-style-type: none"> • The Brothers Marine Parks • Proposed North Lantau Marine Park • Tai Ho Stream SSSI • San Tau Beach SSSI 	<p>For marine ecology:</p> <ul style="list-style-type: none"> • Habitat loss and disturbance – minor impact • Habitat loss and loss of prey resources – minor impact • Change in marine traffic volume and underwater sound from marine construction activities and marine vessels – minor impact 	<ul style="list-style-type: none"> • Drainage Services Department Practice Note No. 1/2015 Guidelines on Environmental and Ecological Considerations for River Channel Design • Forests and Countryside Ordinance (Cap 96) 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • The mitigation measures designed to mitigate impacts to water quality to acceptable levels (compliance with assessment criteria), such as deployment of silt curtain during construction and good site practice, are expected to mitigate impacts to marine ecological resources. • All the marine vessels will strictly follow the 10-knot vessel speed limit of the Marine Parks and Reserves Regulations (Cap 476A) and any anchoring/ anchor spread requirements will avoid encroachment into 	<p>For marine ecology:</p> <ul style="list-style-type: none"> • The residual impact includes ~9.00ha sea area during construction phase, of disturbance to marine ecological habitat with low ecological value in general. No unacceptable residual marine ecological impacts are therefore anticipated.

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<ul style="list-style-type: none"> • Mangroves, seagrasses and horseshoe crabs at Tung Chung Bay • Horseshoe crabs at Hau Hok Wan • Corals at The Brothers Island (West Brothers) and at seawall outside Siu Ho Wan • Chinese White Dolphins at North Lantau waters 				<p>the existing and proposed marine parks.</p> <ul style="list-style-type: none"> • Use of bored piling instead of impact piling • Use of designated fairways 	
Operational Phase					
<p>The terrestrial ecological sensitive receivers within the 500m Project boundary. Identified terrestrial ecological sensitive receivers include:</p> <ul style="list-style-type: none"> • Scenic Hill • Romer's Tree Frog 	<p>For Terrestrial ecology:</p> <ul style="list-style-type: none"> • Habitat Loss – minor impact • Indirect Disturbances to Surrounding Habitats and Associated Wildlife – minor impact 	<ul style="list-style-type: none"> • Annexes 8 and 16 of EIAO-TM and the EIAO Guidance Notes (No. 3/2010, 6/2010, 7/2010, and 10/2010) • Forests and Countryside Ordinance (Cap 96) • Wild Animals Protection Ordinance (Cap 170) • Protection of Endangered Species of Animals and Plants Ordinance (Cap 586) 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A 	<p>For terrestrial ecology:</p> <ul style="list-style-type: none"> • The residual impact includes ~0.31 ha woodland during operational phase, of disturbance to terrestrial ecological habitat with low to moderate ecological value in general. No unacceptable residual terrestrial ecological impacts are therefore anticipated.
<p>The marine ecological sensitive receivers</p>	<p>For marine ecology:</p>	<ul style="list-style-type: none"> • Town Planning Ordinance (Cap 131) 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • The mitigation measures designed to mitigate impacts to 	<p>For marine ecology:</p> <ul style="list-style-type: none"> • The residual impact

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<p>within the 500m Project boundary. Identified marine ecological sensitive receivers include:</p> <ul style="list-style-type: none"> • The Brothers Marine Parks • Proposed North Lantau Marine Park • Tai Ho Stream SSSI • San Tau Beach SSSI • Mangroves, seagrasses and horseshoe crabs at Tung Chung Bay • Horseshoe crabs at Hau Hok Wan • Corals at The Brothers Island (West Brothers) and at seawall outside Siu Ho Wan • Chinese White Dolphins at North Lantau waters 	<ul style="list-style-type: none"> • Permanent habitat loss and disturbance – minor impact • Habitat loss and loss of prey resources – minor impact • Change in marine traffic volume and underwater sound from marine construction activities and marine vessels – minor impact • Changes in water quality / hydrodynamics properties – minor impact 	<ul style="list-style-type: none"> • Water Pollution Control Ordinance (Cap 358) • Chapter 10 of the Hong Kong Planning Standard and Guidelines (HKPSG) • Development Bureau (DEVB) TC(W) No. 4/2020 Tree Preservation • Drainage Services Department Practice Note No. 1/2015 Guidelines on Environmental and Ecological Considerations for River Channel Design 		<p>water quality to acceptable levels (compliance with assessment criteria), such as deployment of silt curtain during maintenance dredging and good site practice, are expected to mitigate impacts to marine ecological resources.</p> <ul style="list-style-type: none"> • All the marine vessels will strictly follow the 10-knot vessel speed limit of the Marine Parks and Reserves Regulations (Cap 476A) and any anchoring/ anchor spread requirements will avoid encroachment into the existing and proposed marine parks. 	<p>includes ~8.33ha sea area during operation phase, of disturbance to marine ecological habitat with low ecological value in general. No unacceptable residual marine ecological impacts are therefore anticipated.</p>
Fisheries					
Construction Phase					

Sensitive Receivers / Assessment Points	Impact Prediction Results	Key Relevant Standards / Criteria	Extent of Exceedance (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
In the vicinity of marine facilities and viaduct structures	<ul style="list-style-type: none"> • Direct disturbances of fisheries habitat and fishing ground • Underwater sound • Changes in water quality from discharges and runoff from land-based construction activities 	<ul style="list-style-type: none"> • Annexes 9 and 17 of EIAO-TM 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Water Quality Impact Assessment mitigation measures will be sufficient to mitigate the impact on fisheries (e.g. Deployment of cage-type silt curtain during construction, good site practice). No fisheries-specific mitigation measures are required. 	<ul style="list-style-type: none"> • The residual impact includes ~9.00 ha of temporary fisheries habitat disturbance and loss of access to fishing ground. The affected fisheries habitat and access to fishing grounds are of low to moderate fisheries production level, low level of fishing operations and low commercial value of fisheries resources. No unacceptable residual fisheries impacts are therefore anticipated.
Operational Phase					
In the vicinity of marine facilities and viaduct structures	<ul style="list-style-type: none"> • Direct disturbances of fisheries habitat and fishing ground • Underwater sound • Marine water quality perturbation due to maintenance dredging 	<ul style="list-style-type: none"> • Annexes 9 and 17 of EIAO-TM 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Appropriate notification, communications, site protection and marking would be adopted to reduce navigation risks with fishing vessels. • No fisheries-specific mitigation measures are required. 	<ul style="list-style-type: none"> • The residual impact includes < 0.01 ha loss of fishing ground for pile structures of marine viaduct section and marine facilities and permanent loss of access to fishing ground of ~8.33 ha for marine facilities. The affected fishing

Sensitive Receivers / Assessment Points	Impact Prediction Results	Key Relevant Standards / Criteria	Extent of Exceedance (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
					ground and access to fishing grounds are of low to moderate fisheries production level, low level of fishing operations and low commercial value of fisheries resources. No unacceptable residual fisheries impacts are therefore anticipated.
Cultural Heritage					
Construction Phase					
<p>Ha Law Wan Site of Archaeological Interest (SAI)</p> <p>Areas of proposed marine work sites</p>	<ul style="list-style-type: none"> The SAI located far from the proposed work. No impact is anticipated. Sonar contacts and magnetic anomalies identified from geophysical survey are of no marine archaeological potential, no marine archaeological impact is anticipated. 	<ul style="list-style-type: none"> EIAO-TM Annexes 10 and 19 Guidelines for CHIA in Appendix H of EIA Study Brief (ESB-342/2021) Antiquities and Monuments Ordinance (A&MO) (Cap53) Guidelines for Marine Archaeological Investigation Hong Kong Planning Standards and Guidelines (HKPSG) 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> As a precautionary measure, the project proponent and his/her contractor are required to inform AMO immediately when any antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap 53) are discovered during the seabed disturbance works in the MF Site and the ATCL Site 	<ul style="list-style-type: none"> No adverse residual impacts is predicted
Operational Phase					
<p>Ha Law Wan Site of Archaeological</p>	<ul style="list-style-type: none"> The SAI located far from the proposed work. No impact is anticipated. 	<ul style="list-style-type: none"> EIAO-TM Annexes 10 and 19 	<ul style="list-style-type: none"> N/A 	<ul style="list-style-type: none"> No mitigation measures are required 	<ul style="list-style-type: none"> No adverse residual impacts is predicted

Sensitive Receivers / Assessment Points	Impact Prediction Results	Key Relevant Standards / Criteria	Extent of Exceedance (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
Interest (SAI) Areas of proposed marine work sites	<ul style="list-style-type: none"> No adverse marine archaeological impact is anticipated in operational phase of the Project. 	<ul style="list-style-type: none"> Antiquities and Monuments Ordinance (A&MO) (Cap53) Guidelines for Cultural Heritage Impact Assessment (CHIA) in Appendix H of the EIA Study Brief (ESB-342/2021) Guidelines for Marine Archaeological Investigation Hong Kong Planning Standards and Guidelines (HKPSG) 			
Landscape and Visual Impact					
Construction Phase					
Existing Landscape Resources (LRs) and Landscape Character Areas (LCAs) and Visually Sensitive Receivers (VSRs) within the assessment area	<ul style="list-style-type: none"> Temporary disturbance to surrounding landscape and visual amenity Landscape Impacts during the construction phase will be primarily due to the construction activities including associated temporary works 	<ul style="list-style-type: none"> EIAO-TM Annexes 10 and 18 Environmental Impact Assessment Ordinance Guidance Note No. 8/2010 Town Planning Ordinance (Cap 131) Protection of Endangered Species of Animals and Plants Ordinance (Cap 586) Forests and Countryside Ordinance (Cap 96) and 	<ul style="list-style-type: none"> Alienation of some planting areas in Tung Chung Waterfront Promenade and ECSA Loss of some roadside buffer planting strips along Tat Tung Road, Airport Road, Kwo Lo Wan Road and 	<ul style="list-style-type: none"> CM1 - Preservation of Existing Trees and Other Vegetation CM2 - Transplanting of Affected Trees CM3 - Compensatory Tree Planting CM4 - Control of Night-time Lighting Glare CM5 - Erection of Decorative Screen Hoardings CM6 - Management of Construction Activities and Facilities 	<ul style="list-style-type: none"> Except for the Amenity Landscape Areas along Airport Road and Chek Lap Kok Road (LR5) and Transport Corridor Landscape (LCA1), the residual landscape impacts on all the other concerning LRs, LCAs, and VSRs will be slight and insubstantial only

Sensitive Receivers / Assessment Points	Impact Prediction Results	Key Relevant Standards / Criteria	Extent of Exceedance (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
		<p>its subsidiary legislations</p> <ul style="list-style-type: none"> • Plant Varieties Protection Ordinance (Cap 490) • Hong Kong Planning Standards and Guidelines (HKPSG) Chapters 4, 10 and 11; • AFCD Nature Conservation Practice Note No. 2 - Measurement of Diameter at Breast Height (DBH) • AFCD Nature Conservation Practice Note No. 3 – The Use of Plant Names • DEVB TC(W) No. 2/2012 - Allocation of Space for Quality Greening on Roads • DEVB TC(W) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features • DEVB TC(W) No. 4/2020 - Tree Preservation • DEVB TC(W) No. 5/2020 - Registration and Preservation of Old and Valuable Trees 	<p>HZMB Hong Kong Link Road</p> <ul style="list-style-type: none"> • Alteration of a minimal portion of woodland and shrubland in Scenic Hill 	<ul style="list-style-type: none"> • CM7 - Reinstatement of Temporarily Disturbed Landscape Areas 	

Sensitive Receivers / Assessment Points	Impact Prediction Results	Key Relevant Standards / Criteria	Extent of Exceedance (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
		<ul style="list-style-type: none"> • DEVB TC(W) No. 9/2020 Blue-Green Drainage Infrastructure • LAO PN 2/2020 and 2/2020A - Removal Proposal for Building Development in Private Projects Compliance of Tree Preservation Clause under Lease • Guidelines on Tree Transplanting (September 2014) issued by Greening, Landscape and Tree Management (GLTM) Section of DevB • Guidelines on Tree Preservation during Development (April 2015) issued by GLTM Section of DevB • Study on Landscape Value Mapping of Hong Kong 			
Operational Phase					
Existing and planned Landscape Resources (LRs) and Landscape Character Areas (LCAs) and Visually Sensitive Receivers (VSRs)	<ul style="list-style-type: none"> • Change in landscape and visual amenity along the proposed ATCL alignment • Landscape impacts during the operational 	<ul style="list-style-type: none"> • EIAO-TM Annexes 10 and 18 • Town Planning Ordinance (Cap 131) • Protection of Endangered Species of 	<ul style="list-style-type: none"> • The Tung Chung Bay seawater, and sections of the artificial seawall at Airport Island 	<ul style="list-style-type: none"> • OM1 - Aesthetically Pleasing Design of Aboveground / Above Sea Structures • OM2 - Provision of Amenity Planting and Landscape Features 	<ul style="list-style-type: none"> • Except for the Amenity Landscape Areas along Airport Road and Chek Lap Kok Road (LR5) and Transport Corridor

Sensitive Receivers / Assessment Points	Impact Prediction Results	Key Relevant Standards / Criteria	Extent of Exceedance (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
within the assessment area	phase will be primarily due to the operation of the ATCL facilities	<p>Animals and Plants Ordinance (Cap 586)</p> <ul style="list-style-type: none"> • Forests and Countryside Ordinance (Cap 96) and its subsidiary legislations; • Plant Varieties Protection Ordinance (Cap 490) • Hong Kong Planning Standards and Guidelines (HKPSG) Chapters 4, 10 and 11 • AFCD Nature Conservation Practice Note No. 2 - Measurement of Diameter at Breast Height (DBH) • AFCD Nature Conservation Practice Note No. 3 – The Use of Plant Names • DEVB TC(W) No. 2/2012 - Allocation of Space for Quality Greening on Roads • DEVB TC(W) No. 6/2015 - Maintenance of Vegetation and Hard Landscape Features; • DEVB TC(W) No. 4/2020 - Tree Preservation; 	are disturbed by the operation of the ATCL alignment		Landscape (LCA1), the residual landscape impacts on all the other concerning LRs, LCAs, and VSRs will be slight and insubstantial only

Sensitive Receivers / Assessment Points	Impact Prediction Results	Key Relevant Standards / Criteria	Extent of Exceedance (Without Mitigation)	Impact Avoidance Measures / Mitigation Measures	Residual Impacts (After Implementation of Mitigation Measures)
		<ul style="list-style-type: none"> • DEVB TC(W) No. 5/2020- Registration and Preservation of Old and Valuable Trees • DEVB TC(W) No. 9/2020 Blue-Green Drainage Infrastructure; • LAO PN 2/2020 and 2/2020A - Tree Preservation and Removal Proposal for Building Development in Private Projects Compliance of Tree Preservation Clause under Lease; • Guidelines on Tree Transplanting (September 2014) issued by Greening, Landscape and Tree Management (GLTM) Section of DevB • Guidelines on Tree Preservation during Development (April 2015) issued by GLTM Section of DevB 			