Appendix 10 Summary of Environmental Impacts

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)
Major dust impact	- AQO & Annex 4 of EIAO-TM: 1-hr average TSP: 500 μg/m ³ 24-hr average RSP: 100 μg/m ³ Annual average RSP: 50 μg/m ³ Annual average FSP: 35 μg/m ³	N/A	 Construction of cycle/foot bridges and demolition of Old Bridge will be carried out in different phases Adopt less heavy construction method (minipiling instead of bored piling) Implement dust control measures under Air Pollution Control (Construction Dust) Regulation 	No residual impact
impact anticipated				
84 dB(A)	- Annex 5 of EIAO-TM: Leq 30min 75 dB(A)	9 dB(A)	 Adopt silenced plants or quality powered mechanical equipment (QPME) Screen noise by mobile noise barriers Adopt good site practices and noise management 	Mitigated noise level: 72 dB(A), no residual impact
impact anticipated				
Major water quality impact due to release of suspended solids	 WQO for Marine Waters: Suspended solids <30% increase from baseline WQO for Inland Waters: Suspended solids <25mg/L TM on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS) Practice Note for Professional Persons (ProPECC) PN 1/94 	N/A	 Dredge and excavate inside watertight cofferdam Construct solid working platform with toe board above Wang Tong River underneath the working areas Adopt good site practices 	No residual impact
	Results (Without Mitigation) Major dust impact impact anticipated 84 dB(A) impact anticipated Major water quality impact due to release	Results (Without Mitigation) - AQO & Annex 4 of EIAO-TM: 1-hr average TSP: 500 μg/m³ 24-hr average RSP: 100 μg/m³ Annual average RSP: 50 μg/m³ Annual average FSP: 35 μg/m³ impact anticipated - Annex 5 of EIAO-TM: Leq 30min 75 dB(A) - WQO for Marine Waters: Suspended solids <30% increase from baseline - WQO for Inland Waters: Suspended solids <25mg/L - TM on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS) - Practice Note for Professional Persons (ProPECC) PN 1/94	AQO & Annex 4 of EIAO-TM: 1-hr average TSP: 500 μg/m³ 24-hr average RSP: 100 μg/m³ Annual average RSP: 50 μg/m³ Annual average FSP: 35 μg/m³ N/A WQO for Marine Waters: Suspended solids <30% increase from baseline WQO for Inland Waters: Suspended solids <25mg/L TMO Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS) Practice Note for Professional Persons (ProPECC) PN 1/94 Proceedings Proceedings Proceded (Without Mitigation) N/A WQO for Marine Waters: Suspended solids <30% increase from baseline WQO for Inland Waters: Suspended solids <25mg/L TM on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS) Practice Note for Professional Persons (ProPECC) PN 1/94 Proceded (Without Mitigation) N/A Proceded (Without Mitigation) Proceded (Without Mitigation) N/A Proceded (Without Mitigation) Proceded (Without Mitigation) N/A Proceded (Without Mitigation) N/A Proceded (Without Mitigation) N/A Proceded (Without Mitigation) N/A Proceded (Without Mitigation) Proceded (Without Mitigation) N/A Proceded (Without Mitigation) Proceded (Without Mitigat	Results (Without Mitigation) Extents of Exceedance (Without Mitigation) Impact Avoidance Measures (Without Mitigation)

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)
Generation of: - 1,069m³ inert C&D materials - 82m³ non-inert C&D materials - 87m³ marine sediment - 1m³ chemical waste - 8m³ general refuse	 EIAO-TM Annexes 7 & 15 Waste Disposal Ordinance (Cap. 354) and subsidiary legislation Public Health and Municipal Services Ordinance (Cap. 132) Land (Miscellaneous Provisions) Ordinance (Cap. 28) Dumping at Sea Ordinance (Cap. 466) 	N/A	 The Contractor should prepare and implement a Waste Management Plan in accordance with ETWB TCW No. 19/2005 Marine sediment shall be treated by cement solidification and reused onsite by backfilling on land. Handling, storage, collection and disposal of waste shall be proposed in accordance with Waste Disposal Ordinance 	No residual impact
impact anticipated				
impact anticipated				
impact anticipated				
Permanent loss of: - Sandy Shore (226m²) Temporary loss of: - Wang Tong River (91m²) - Developed Area (204m²) - Sandy Shore (676m²)	 EIAO-TM Annexes 8 & 16 Forests and Countryside Ordinance (Cap. 96) and its subsidiary legislation in the Forestry Regulations Wild Animals Protection Ordinance (Cap. 170) Country Parks Ordinance (Cap. 208) Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) Town Planning Ordinance (Cap. 131) Hong Kong Planning Standard and Guidelines (Chapter 10) 	N/A	 Implement noise and water quality mitigation measures Before site clearance, the works area should be inspected by ecologist to confirm no active bird nest is present. If any active bird nest is identified, suitable size of buffer area should be established until the nest is abandoned. 	No unacceptable residual impact
	Results (Without Mitigation) Generation of: - 1,069m³ inert C&D materials - 82m³ non-inert C&D materials - 87m³ marine sediment - 1m³ chemical waste - 8m³ general refuse impact anticipated impact anticipated Permanent loss of: - Sandy Shore (226m²) Temporary loss of: - Wang Tong River (91m²) - Developed Area (204m²) - Sandy Shore (676m²)	Generation of: - 1,069m³ inert C&D materials - 82m³ non-inert C&D materials - 87m³ marine sediment - 1m³ chemical waste - 8m³ general refuse Dimpact anticipated Permanent loss of: - Sandy Shore (226m²) Temporary loss of: - Wang Tong River (91m²) - Developed Area (204m²) - Sandy Shore (676m²) Fig. 1069m³ inert C&D materials - EIAO-TM Annexes 7 & 15 - Waste Disposal Ordinance (Cap. 132) - Land (Miscellaneous Provisions) Ordinance (Cap. 28) - Dumping at Sea Ordinance (Cap. 466) Forests and Countryside Ordinance (Cap. 96) and its subsidiary legislation in the Forestry Regulations - Wild Animals Protection Ordinance (Cap. 170) - Country Parks Ordinance (Cap. 208) - Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) - Town Planning Ordinance (Cap. 131) - Hong Kong Planning Standard and Guidelines (Chapter 10)	Results (Without Mitigation) Generation of: - 1,069m² inert C&D materials - 82m³ non-inert C&D materials - 87m³ marine sediment - 1m³ chemical waste - 8m³ general refuse Dimpact anticipated Permanent loss of: - Sandy Shore (226m²) - Temporary loss of: - Wang Tong River (91m²) - Developed Area (204m²) - Sandy Shore (676m²) - Sandy Shore (676m²) Results (Key Relevant Standards/Criteria (Without Mitigation) Extents of Exceedance (Without Mitigation) Falson (Cap. 132) - Waste Disposal Ordinance (Cap. 132) - Vaste Disposal Ordinance (Cap. 28) - Dumping at Sea Ordinance (Cap. 28) - Dumping at Sea Ordinance (Cap. 28) - Dumping at Sea Ordinance (Cap. 29) - Forests and Countryside Ordinance (Cap. 96) and its subsidiary legislation in the Forestry Regulations - Wild Animals Protection Ordinance (Cap. 170) - Country Parks Ordinance (Cap. 208) - Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) - Town Planning Ordinance (Cap. 131) - Hong Kong Planning Standard and Guidelines (Chapter 10)	Results (Without Mitigation) Standards/Criteria Extents of Exceedance (Without Mitigation) Mitigation Measures

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)
Landscape and Visual					
Construction Phase			T		
Landscape Resources (LR) and Landscape Character Areas (LCA) within 500m Study Area, Visually Sensitive Receivers (VSR) within Zones of Visual Influence	- LR: moderate impact on existing trees in vicinity of Wang Tong River Bridge due to removal of 7 trees - LCA: slight impact on bay landscape and rural township landscape - VSR: moderate impact on residents in Chung Hau, users of Silver Mine Bay Waterfront and workers in commercial outlets along Silver Mine Bay Beach	- EIAO-TM Annexes 3, 10, 11, 18, 20 and 21 - Hong Kong Planning Standard and Guidelines (Chapters 4, 10, 11) - Town Planning Ordinance (Cap 131) and Town Planning (Amendment) Ordinance 2004 - Relevant guidelines and practices on tree management published by Greening, Landscape and Tree Management Section (GLTM) of the DEVB (e.g. TC(W) No. 2/2013, No. 6/2015, No. 7/2015)	N/A	 Minimize the construction area and contractor's temporary works areas to avoid impacts on adjacent landscape. Reduce construction period to practical minimum. Construction traffic (land and sea) including construction plant, construction vessels and barges should be kept to a practical minimum. Erect decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours. Avoid excessive height and bulk of site buildings and structures. Control night-time lighting by hooding all lights and through minimisation of night working periods. All existing trees shall be carefully protected before, during construction and after construction. A Detailed Tree Protection Specification shall be provided in the Contract Specification. Early preparation of trees to be transplanted shall be undertaken to increase their likely survival rate following transplanting. Minimisation of Impacts to Wang Tong River through minimised and carefully controlled dredging for pile/abutment removal/construction works 	No substantial residual 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)
Landscape Resources (LR) and Landscape Character Areas (LCA) within 500m Study Area, Visually Sensitive Receivers (VSR) within Zones of Visual Influence	- LR: slight impact on existing trees in vicinity of Wang Tong River Bridge due to the transplanting of 2 no. of the trees and the planting of 6 no. compensatory trees - LCA: insubstantial impact on bay landscape and rural township landscape - VSR: moderate impact on residents in Chung Hau, users of Silver Mine Bay Waterfront and workers in commercial outlets along Silver Mine Bay Beach	- EIAO-TM Annexes 3, 10, 11, 18, 20 and 21 - Hong Kong Planning Standard and Guidelines (Chapters 4, 10, 11) - Town Planning Ordinance (Cap 131) and Town Planning (Amendment) Ordinance 2004 - Relevant guidelines and practices on tree management published by Greening, Landscape and Tree Management Section (GLTM) of the DEVB (e.g. TC(W) No. 2/2013, No. 6/2015, No. 7/2015)	N/A	 Sensitive design of bridge in terms of scale, height and bulk (visual weight). Use of appropriate building materials and colours for bridge to complement surroundings. Lighting units to be directional and minimise unnecessary light spill and glare. Integration of bridge with existing abutments and promenades. 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. Streetscape (e.g. paving, signage, street furniture, lighting etc.) shall be sensitively designed in a manner that responds to the existing village context, and minimises potential adverse landscape and visual impacts. 	No substantial residual impacts