

Appendix 12.2 – Key Assessment Assumptions and Limitations of Assessment Methodologies

Assessment Methodology	Key Assessment Assumptions	Limitations of Assessment Methodologies / Assumptions	Prior Agreements with EPD / Other Authorities		Proposed Alternative Assessment Tools / Assumptions (if applicable)
			EIA Study Brief (ESB-334/2020) Clause Reference	Relevant Documentation	
Air Quality Impact Assessment					
The air quality impact assessment for the Project was conducted following Annex 4 and Annex 12 of the EIAOTM and requirements from the EIA Study Brief (ESB-334/2020). Qualitative assessment was conducted for the air quality impact during the construction phase.	<p><u>Construction Phase</u></p> <ul style="list-style-type: none"> The construction works and quantity of the excavated materials generated would be of small-scale and no concrete batching on-site. Proper dust suppression measures and good site practices will be enforced. <p><u>Operation Phase</u></p> <ul style="list-style-type: none"> Excessive silts, vegetation, debris and obstruction will be removed to maintain the hydraulic performance and structural integrity of the proposed channels. Moderate siltation will be allowed to accumulate, and removal of excess silt would be carried out at locations where it would impede water flow. Little or no maintenance would be necessary. 	N/A	Clause 3.4.4, Appendix B	N/A	N/A
Noise Impact Assessment					
The noise impact assessment for the Project was conducted following Annex 5 and Annex 13 of the EIAO-TM, and the requirement in the EIA Study Brief (ESB-334/2020). Quantitative assessment was conducted to predict the construction noise impact and operation noise impact.	<p><u>Construction Phase</u></p> <ul style="list-style-type: none"> Construction noise impact was predicted based on standard acoustic principles. Sound Power Levels (SWLs) of powered mechanical equipment (PME) were taken from Table 3 of the GW-TM, EPD’s Sound power levels of other commonly used PME, Quieter construction method / Quality Powered Mechanical Equipment (QPME) available at EPD’s website, and other similar studies or from measurements taken at other sites in Hong Kong. PME were assumed to be located at the notional source of the works sites. Noise reduction by temporary noise barriers are assumed to be 5dB(A) for movable PME and 10dB(A) for static PME. Noise enclosure for static PME are assumed to achieve 15dB(A) noise reduction. <p><u>Operation Phase</u></p> <ul style="list-style-type: none"> Operation noise impact was predicted based on standard acoustic principles. Sound Power Levels (SWLs) of powered mechanical equipment (PME) were taken from manufacture(s) catalogue. Noise reduction design measures should be incorporated into the Design and Contract Specifications to minimise the noise nuisance due to the operation of the proposed stormwater pumping station. 	<p><u>Construction Phase</u></p> <ul style="list-style-type: none"> The construction programme and plant inventory were indicative and subject to contractors’ actual operation. <p><u>Operation Phase</u></p> <ul style="list-style-type: none"> Subject to detail design of the Proposed Stormwater Pumping Station and SWLs of selected of PMEs 	Clause 3.4.5, Appendix C	Working paper for construction noise impact assessment.	N/A
Water Quality Impact Assessment					
The water quality impact assessment for the Project was conducted following Annex 6 and Annex 14 of the EIAOTM and the requirement in the EIA Study Brief (ESB-334/2020). Qualitative assessment was conducted for the water quality impact during the construction phase.	<p><u>Construction Phase</u></p> <ul style="list-style-type: none"> Temporary flow diversion and excavation works would be undertaken in dry conditions. Adequate portable toilets would be provided. Good construction practices and well-designed temporary drainage system. <p><u>Operation Phase</u></p> <ul style="list-style-type: none"> Small scale maintenance would require only light mechanical equipment such as a small loader and/or a small crane truck. Hand-held equipment will be used for maintenance. 	N/A	Clause 3.4.6, Appendix D	N/A	N/A
Waste Management					
The waste management implication assessment for the Project was conducted following Annex 7 and Annex 15 of the EIAO-TM and the requirements in the EIA Study Brief (ESB-334/2020).	<p><u>Construction Phase</u></p> <ul style="list-style-type: none"> Waste quantities to be generated from the Project were estimated based on the engineering assessment and Project design. <p><u>Operation Phase</u></p> <ul style="list-style-type: none"> Small scale maintenance works would only generate small volume of waste 	N/A	Clause 3.4.7, Appendix E	N/A	N/A
Ecological Impact					

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The ecological impact assessment for the Project was conducted following: <ul style="list-style-type: none"> Annex 8 and Annex 16 of the EIAO-TM; The requirements in the EIA Study Brief (ESB-334/2020); General approach and methodology for assessment of ecological impacts; and EIAO Guidance Note No. 6/2010, 7/2010 and 10/2010 for general guidelines and methodology for conducting ecological assessment and ecological baseline survey. 	<ul style="list-style-type: none"> The ecological impact assessment and evaluation were undertaken based on results of literature review and ecological field surveys 	N/A	Clause 3.4.8, Appendix F	N/A	N/A
Landscape and Visual Impact					
The landscape and visual impact assessment for the Project was conducted following: <ul style="list-style-type: none"> Annex 10 and Annex 18 of the EIAO-TM; The requirements in the EIA Study Brief (ESB-334/2020); EIA Guidance Note No. 8/2010 	<ul style="list-style-type: none"> Study Area includes all terrestrial and aquatic surface area that are within 500m of the Works Area Mitigation measures will be incorporated in the Construction Contract 	N/A	Clause 3.4.9, Appendix G	N/A	N/A
Cultural Heritage Impact					
The cultural heritage impact assessment for the Project was conducted following: <ul style="list-style-type: none"> A&M Ordinance (Cap. 53); Annex 10 and Annex 19 of the EIAO-TM; The requirements in the EIA Study Brief (ESB-334/2020); and Guidelines for CHIA. 	<ul style="list-style-type: none"> 300m study area was adopted for cultural heritage impact assessment 	N/A	Clause 3.4.10, Appendix H	N/A	N/A