

Appendix 14.2 Key Assessment Assumptions and Limitations of Assessment Methodologies

Air Quality Impact

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-322/2019) Clause Reference	Relevant Documentation	
Construction Phase					
<p>The air quality impact assessment for the Project was conducted following Annex 4 and Annex 12 of the EIAO-TM and requirements from the EIA Study Brief (ESB-322/2019). Qualitative assessment was conducted for the air quality impact during the construction phase.</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. 	N/A	Clause 3.4.10, Appendix H	N/A	N/A
Operation Phase					
<p>The air quality impact assessment for the Project was conducted following Annex 4 and Annex 12 of the EIAO-TM and requirements from the EIA Study Brief (ESB-322/2019). Qualitative assessment was conducted for the air quality impact during the construction phase.</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 3.4.10, Appendix H	N/A	N/A

Noise Impact

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-322/2019) Clause Reference	Relevant Documentation	
Construction Phase					
<p>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-322/2019). Quantitative assessment was conducted to predict the construction noise impact</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 <i>Sound power levels of other commonly used PME</i>, 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. At most 3 work fronts will be conducted at the same time for each sub-section. As for construction works at Ping Che Road and Ping Yeung Village, only one work front will be conducted at the same time for each sub-section. 	<p>The construction programme and plant inventory were indicative and subject to contractors' actual operation.</p>	<p>Clause 2.2.1(d) and 2.3.1 of Appendix I</p>	<p>A methodology paper for environmental impact assessment was submitted in Sept 2021</p>	<p>N/A</p>

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-322/2019) Clause Reference	Relevant Documentation	
Operation Phase					
<p>The noise impact assessment for the Project was conducted following Annex 5 and Annex 13 of the EIAO-TM, the requirement in the EIA Study Brief (ESB-322/2019). Qualitative assessment has been conducted as the Project does not have a noise pollution source during operation.</p>	<ul style="list-style-type: none"> The Project does not have a noise pollution source during operation. 	N/A	Clause 3.4.11.2	A methodology paper for environmental impact assessment was submitted in Sept 2021	N/A

Water Quality Impact

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-322/2019) Clause Reference	Relevant Documentation	
Construction Phase					
<p>The water quality impact assessment for the Project was conducted following Annex 6 and Annex 14 of the EIAO-TM and the requirement in the EIA Study Brief (ESB-322/2019). Qualitative assessment was conducted for the water quality impact during the construction phase.</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. 	N/A	Clause 3.4.4, Appendix B	N/A	N/A
Operation Phase					
<p>The water quality impact assessment for the Project was conducted following Annex 6 and Annex 14 of the EIAO-TM and the requirement in the EIA Study Brief (ESB-322/2019). Qualitative assessment was conducted for the water quality impact during the operation phase.</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 vegetation removal. 	N/A	Clause 3.4.4, Appendix B	N/A	N/A

Waste Management

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-322/2019) Clause Reference	Relevant Documentation	
Construction Phase					
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-322/2019).	Waste quantities to be generated from the Project were estimated based on the engineering assessment and Project design.	N/A	Clause 3.4.7 and Appendix E	N/A	N/A
Operational Phase					
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-322/2019).	Small scale maintenance works would only generate small volume of waste.	N/A	Clause 3.4.7 and Appendix E	N/A	N/A

Land Contamination

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-322/2019) Clause Reference	Relevant Documentation	
<p>The land contamination assessment for the Project was conducted following Annex 19 of the EIAO-TM and the requirements in the EIA Study Brief (ESB-322/2019).</p> <p>Contamination Assessment Plan (CAP) was conducted following Annex 19 of the EIAO-TM and the requirements in the EIA Study Brief (ESB-322/2019).</p>	<p>The CAP was undertaken based on the review of historical spillage and leakage records, (hydro) geology and underground soil profile, current and past land uses, historical aerial photographs and maps at the concerned areas and the adjacent areas.</p>	N/A	<p>Clause 3.4.8 and Appendix F</p>	N/A	N/A

Ecological Impact

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-322/2019) Clause Reference	Relevant Documentation	
<p>The ecological impact assessment for the project was conducted following:</p> <ul style="list-style-type: none"> - Annex 8 and Annex 16 of the EIAO-TM for the criteria, general approach and methodology for assessment of ecological impacts; - EIAO Guidance Note No. 6/2010, 7/2010 and 10/2010 for general guidelines and methodology for conducting ecological assessment and ecological baseline survey 	<p>The ecological impact assessment and evaluation were undertaken based on results of literature review and ecological field surveys.</p>	N/A	<p>Clause 3.4.5 and Appendix C</p>	<p>Methodology Paper for Ecological Survey</p>	N/A

Fisheries Impact

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-322/2019) Clause Reference	Relevant Documentation	
The fisheries impact assessment for the Project was conducted following Annex 9 and Annex 17 of the EIAO-TM and the requirements in the EIA Study Brief (ESB-322/2019).	The fisheries impact assessment was undertaken based on results of literature review and field surveys.	N/A	Clause 3.4.6 and Appendix D	Methodology Paper for Ecological Survey	N/A

Cultural Heritage Impact

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-322/2019) Clause Reference	Relevant Documentation	
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; • Guidelines for CHIA; and • Requirements in the EIA Study Brief (ESB-322/2019). 	<ul style="list-style-type: none"> • 300m study area was adopted for Archaeological Impact Assessment and Built Heritage Impact Assessment. 	N/A	Clause 3.4.12, Appendix J	N/A	N/A

Landscape and Visual Impact

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-322/2019) Clause Reference	Relevant Documentation	
The landscape and visual impact assessment was prepared in accordance with Annex 10 and Annex 18 of the TM and EIAO Guidance Note No. 8/2010 on “Preparation of Landscape and Visual Impact Assessment under the Environmental Impact Assessment Ordinance” for evaluating and assessing combined landscape and visual impacts of the Project and associated works.	<ul style="list-style-type: none"> Study Area includes all terrestrial and aquatic surface areas that are within 500 m of the Works Area Mitigation measures will be incorporated in the Construction Contract. 	N/A	Section 3.4.9, Appendix G	N/A	N/A