## Impact Summary

| 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 Phase** | | | | | |
| Existing and Planned residential, premises, educational, industrial, clinic/ home for the aged, worship, government, institution and community (GIC) and Recreational/ Parks in the vicinity of KTN and FLN NDA<br><br>254 assessment points in KTN NDA and 176 assessment points in FLN NDA (refer to **Figures 3.2a – 3.4f**) | KTN NDA<br>• 1-hour Average TSP Conc.: 430 - 12631 µg/m3<br>• 24-hour Average TSP Conc.: 102 - 3667 µg/m3<br>• Annual Average TSP Conc.: 73.1 – 122.0 µg/m3<br><br>FLN NDA<br>• 1-hour Average TSP Conc.: 138 - 7494 µg/m3<br>• 24-hour Average TSP Conc.: 78 - 2321 µg/m3<br>• Annual Average TSP | • EIAO-TM and AQO<br>• 1-hr Average TSP Conc: 500 µg/m3<br>• 24-hr Average TSP Conc: 260 µg/m3<br>• Annual Average TSP Conc: 80 µg/m3 | KTN NDA<br>• Exceed EIAO-TM (1-hr) criterion by up to 12131 µg/m3<br>• Exceed AQO (24-hr) criterion by up to 3407 µg/m3<br>• Exceed AQO (Annual) criterion by up to 42.0 µg/m3<br><br>FLN NDA<br>• Exceed EIAO-TM (1-hr) criterion by up to 6994 µg/m3<br>• Exceed AQO (24-hr) criterion by up to 2061 µg/m3<br><br>Exceed AQO (Annual) | • Watering once per hour on the active works areas, exposed area; and paved haul roads to reduce dust emission<br>• Dust suppression measures stipulated in the Air Pollution Control (Construction Dust) Regulation and good site practices would be carried out to further minimise construction dust impact. | • Adverse residual impacts not anticipated |

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|---|---|---|---|---|---|
| | Conc.: 73.1 – 95.1 µg/m3 | | criterion by up to 15.1 µg/m3 | | |
| **Operational Phase** | | | | | |
| Existing and Planned residential and primes, educational, industrial, clinic/ home for the aged, worship, GIC and Recreational/ Parks in the vicinity of KLN and FLN NDA<br><br>79 assessment points (refer to **Figures 4.6.1-4.6.3**) | KTN NDA<br><br>$NO_2$<br>• 1-hour Average $NO_2$ Conc.: 55 – 133 µg/m3<br>• 24-hour Average $NO_2$ Conc.: 49 – 73 µg/m3<br>• Annual Average $NO_2$ Conc.: 48.7 – 59.2 µg/m3<br><br>RSP<br>• 24-hour Average RSP Conc.: 51 – 56 µg/m3<br><br>Annual Average RSP Conc.: 50.7 – 53.2 | • AQO<br>• 1-hr Average $NO_2$ Conc: 300 µg/m3<br>• 24-hr Average $NO_2$ Conc: 150 µg/m3<br>• Annual Average $NO_2$ Conc: 80 µg/m3<br>• 24-hr Average RSP Conc: 180 µg/m3<br>• Annual Average RSP Conc: 55 µg/m3 | • No exceedances are predicted at all ASRs. | • No mitigation measures are proposed as the predicted max. NO2 and RSP concentrations are all within the respective criteria. | • Adverse residual impacts not anticipated |

| 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) |
|---|---|---|---|---|---|
| | µg/m3<br><u>FLN NDA</u><br>$NO_2$<br>• 1-hour Average $NO_2$ Conc.: 59 – 106 µg/m3<br>• 24-hour Average $NO_2$ Conc.: 50 – 67 µg/m3<br>• Annual Average $NO_2$ Conc.: 49.0 – 67.3 µg/m3<br>RSP<br>• 24-hour Average RSP Conc.: 51 – 56 µg/m3<br>• Annual Average RSP Conc.: 50.7 – 53.6 µg/m3 | | | | |
| **Odour** | | | | | |
| Existing and Planned residential and primes, | • Not Applicable. | • EIAO-TM | • Not Applicable. | • The detailed design of Shek Wu Hui | • Adverse residual impacts not |

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|---|---|---|---|---|---|
| educational, industrial, clinic/ home for the aged, worship, GIC and Recreational/ Parks in the vicinity of KLN and FLN NDA<br><br>907 assessment points (refer to **Figures 3.1-3.4**) | | • 5-second Average Odour Unit: 5 OU | | Sewage Treatment Works - Further Expansion should incorporate the following odour impact mitigation measures.<br>• All odour emission sources should be covered and the emission should be delivered to deodorization facility prior to discharge.<br>• The odour removal efficiency of the deodorization facility is 90%.<br>• Discharge point should be 10m above ground with 10m/s exit velocity. | anticipated. |

**Impact Summary**

| 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) |
|---|---|---|---|---|---|
| **Cultural Heritage** | | | | | |
| **Construction Phase** | | | | | |
| Archaeology | • Direct construction impact<br>• Potential direct impact is anticipated due to various type of development. | • EIA recommendation;<br>• AMO Guidelines for Archaeological Reports;<br>• AMO Guidelines for Handling of Archaeological Finds and Archives;<br>• Guidelines for Cultural Heritage Impact Assessment<br>• EIAO-TM Annex 10 and Annex 19 | • Preservation in-situ with further archaeological survey if necessary<br>• Archaeological Impact Assessment | • Refinement of RODP to allow preservation in-situ<br>• Undertaking Survey-cum-Rescue Excavation;<br>• Undertaking Further Archaeological Survey;<br>• Induction training should be provided to the construction contractor before the commencement of the excavation works<br>• AMO should be informed immediately in case of discovery of antiquities or | • No adverse residual impacts anticipated. |

| 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) |
|---|---|---|---|---|---|
| | | | | supposed antiquities during the construction. | |
| Built Heritage | • Potential construction vibration impact<br>• Direct impact of removal<br>• Settlement of built heritage caused by the change of watertable induced by the construction works and development activities | • Guidelines for Cultural Heritage Impact Assessment<br>• EIAO-TM and<br>• AMO Guidelines on Photographic Record and Cartographic Record | • Not Applicable | • Refinement of RODP to avoid direct impact<br>• Undertaking baseline condition survey and baseline vibration impact assessment. A vibration limit at 7.5mm/s could be adopted for graded historical buildings<br>• Undertaking baseline condition survey and baseline vibration impact assessment. A vibration limit at 15mm/s could be adopted for other historical buildings<br>• Conducting Construction Vibration | • No adverse residual impacts anticipated. |

| 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) |
|---|---|---|---|---|---|
| | | | | Monitoring and Structural Strengthening Measures<br>• Conducting Photographic and Cartographic Records Prior to Removal/Relocation of Impacted Built Heritages<br>• Relocation of Impacted Built Heritages<br>• Watertable Monitoring<br>• Drainage System and Access Route Design | |
| **Operational Phase** | | | | | |
| Archaeology | • No direct or indirect operational impact is identified at this stage | • EIA recommendation;<br>• AMO Guidelines for Archaeological | • Not Applicable | • No mitigation required | • No adverse residual impacts anticipated |

| 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) |
|---|---|---|---|---|---|
| | | Reports;<br>• AMO Guidelines for Handling of Archaeological Finds and Archives;<br>• Guidelines for Cultural Heritage Impact Assessment<br>• EIAO-TM Annex 10 and Annex 19 | | | |
| Built Heritage | • No direct or indirect operational impact is identified at this stage | • Guidelines for Cultural Heritage Impact Assessment<br>• EIAO-TM and<br>• AMO Guidelines on Photographic Record and Cartographic Record | • Not Applicable | • No mitigation required | • No adverse residual impacts anticipated |

**Impact Summary**

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|---|---|---|---|---|---|
| **Ecological Impact** | | | | | |
| **Pre-construction /Detailed Design Phase** | | | | | |
| Long Valley, wet and dry agricultural land and pond | • Not applicable | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Long Valley Nature Park (LVNP) designation, design, implementation, management and maintenance (planning stage). | • Not Applicable |
| Major Channelised Watercourse (Sheung Yue, Shek Sheung and Ng Tung Rivers) | • Not applicable | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Provision of alternative foraging ground at Long Valley and along river channels. | • Not applicable |
| Ma Tso Lung Stream and tributaries and marsh | • Not applicable | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Detailed design of development along lower reaches of Ma Tso Lung Stream and Ma Tso Lung San Tsuen Stream and detailed | • Not Applicable |

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|---|---|---|---|---|---|
| | | | | design of LMC Loop Eastern Connection Road with restoration of diverted stream and riparian corridor, permanent barrier and underpass on the at-grade section<br>• Pre-works commencement check on areas to be physically or hydrologically impacted by construction activities.<br>• Compensation for the loss of seasonally wet grassland at Ma Tso Lung by habitat restoration and enhancement along diverted section of Ma Tso Lung Stream | |

| 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) |
|---|---|---|---|---|---|
| Man Kam To Road egretry | Not applicable | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Compensatory habitat provision in area FLN A1-7 and measures to attract egrets to compensation sites.<br>• The condition of egretries before commencement and during works would be monitored. Additional mitigation measures would be formulated and implemented if necessary. | Not Applicable |
| Shrubland at Crest Hill | Not applicable | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Pre-works site check for presence of Eurasian Hobby and other species of conservation concern | • Not applicable |
| Hillside Plantation Woodland and *fung shui* woodland | Not applicable | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Pre-works site check for presence of species of conservation concern | • Not applicable |

| 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) |
|---|---|---|---|---|---|
| | | | | • | |
| Siu Hang San Tsuen Stream and other watercourses impacted directly by the Project.<br><br>Upland and lowland grassland, grassland-shrubland, shrubland directly impacted by the Project.<br><br>Seasonally wet grassland impacted directly by the Project.<br><br>Various fauna of conservation significance occupying the above habitats. | Not applicable | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Pre-works check for presence of any protected flora and fauna and flora of conservation significance or bat roosts in areas to be physically or hydrologically impacted by construction activities. Formulation and implementation of practicable and effective mitigation measures, if required, in consultation with AFCD. | • Not applicable |
| **Construction Phase** | | | | | |
| Long Valley, wet and dry agricultural land, pond, and Mitigation Wetland in FLN area | • No direct loss<br>• Disturbance of Long Valley habitats (**Low**).<br>• Hydrological disruption of Long | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Long Valley Nature Park (LVNP) implementation, management and | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| A1-7. | Valley habitats (**Low to High**)<br>• Dust deposition and increased sediment and nutrient load **Low** during construction and operational stages<br>• Pollution of Long Valley habitats (dependent upon type but most likely **Low to Moderate**).<br>• Fragmentation impact on Long Valley **Low to Moderate)**.<br>• Combined disturbance and fragmentation impacts **Low to Moderate** during construction, **Low** during operation.<br>• Permanent loss of 0.58ha of wet agricultural land (**Low to Moderate**) and 9.33ha of dry agricultural land | | | maintenance.<br>• Enhancement of wetland habitats in LVNP.<br>• Provision of alternative foraging ground along river channels.<br>• Phasing of works to avoid peak breeding season of waterbirds.<br>• Erection of temporary noise/visual barriers; timing of construction works; control access and numbers of visitors to LVNP<br>• Buffer planting at LVNP to minimise disturbance.<br>• Building setback of 30m in area KT B3-12 from road DP3.<br>• Stringent Planning | |

| 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) |
|---|---|---|---|---|---|
| | (**Low**).<br>• Loss of 3.08ha of Pond (**Low** for small fragmented ponds (0.59ha), **Low to Moderate** (2.12ha) and **Moderate** (0.37ha))<br>• Fragmentation impacts on FLN A1-7 (**Low to Moderate**). | | | Control in areas C2-1 and C2-2 to protect these areas and maintain flight-lines from Ho Sheung Heung egretry.<br>• Avoidance of hydrological disruption to LVNP.<br>• Environmental control measures proposed under relevant chapters of the EIA and prevention of pollutants impacting LVNP (dust, sediments, nutrient load). | |
| Major Channelised Watercourse (Sheung Yue, Shek Sheung and Ng Tung Rivers) | • Direct impact : **Low** severity during both construction and operation phases as area is <0.02ha)<br>• Disturbance of Sheung Yue River (**Moderate**). | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Design and erection of temporary noise visual/ barriers at any development sites adjacent to watercourses. | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| | • Disturbance of tidal Ng Tung River (**Low** ).<br>• Disturbance of Shek Sheung River (**Low**).<br>• Fragmentation impact between non-tidal Ng Tung and Long Valley (**Low to Moderate**); **Low** along tidal Ng Tung River; Run-off and pollution impacts on Ng Tung, Sheung Yue and Shek Sheung Rivers (**Low** in most circumstances but some construction phase could be of **Moderate** severity).<br>• Combined impacts on Sheung Yue River **Moderate**.<br>• Combined impacts on non-tidal section of Ng Tung River **Low to Moderate**.<br>• Combined impacts on tidal section of Ng | | | • Maximise building setback, retaining and provision of buffer planting in open space zones along watercourses.<br>• Phasing of works to avoid peak breeding season of waterbirds, and avoid overlap in construction timing of bridges.<br>• Measures to avoid/minimize fragmentation and hydrological impacts to river channels<br>• Establishment and long term maintenance of LVNP.<br>• Review of design and construction methods for all bridges especially | |

| 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) |
|---|---|---|---|---|---|
| | Tung River **Low**.Combined impacts on Shek Sheung River **Low**. | | | those on the Sheung Yue and tidal Ng Tung Rivers and adoption of methods which will minimise impacts on rivers and disturbance and fragmentation impacts on fauna.<br>• Provision of alternative foraging site for waterbirds by establishment of LVNP and stocking of fish at suitable ponds on government land along river channels and in LVNP during the advanced works stage. | |
| Ho Sheung Heung *Fung Shui* Woodland & Secondary Woodland | • Loss of 0.23ha secondary woodland (**Low**).<br>• Disturbance of *fung shui* and secondary woodland (**Low to** | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Woodland compensatory planting.<br>• Avoid and minimize direct encroachment | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| | **Moderate**).<br>• Dust deposition on vegetation during construction (**Low**).<br>• Fragmentation impact on woodland (**Low to Moderate**).<br>• Combined impacts **Low to Moderate** during construction. | | | during detailed design and reinstate any temporary works area upon completion of works<br>• Design and install Noise/visual barrier at boundary of areas KTN D1-7 and D1-11.<br>• Adopt environmental control measures and avoidance of dust on vegetation.<br>• Temporary fauna barriers at Ho Sheung Heung works areas 30m from Ho Sheung Heung secondary and *fung shui* woodlands or works area whichever is greater. | |

| 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) |
|---|---|---|---|---|---|
| Shrubland at Crest Hill | • Loss of habitat (most likely **Low** but **Low to Moderate** in the unlikely event that Eurasian Hobby nest site is in the project area).<br>• Disturbance of shrubland at Crest Hill (Most likely **Low** but **Low to Moderate** in the unlikely event that Eurasian Hobby nest site is in the project area). | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Design and install noise/visual barrier at boundary of areas KTN D1-11, D1-12 and G1-5.<br>• Avoid and minimize direct encroachment during detailed design and reinstate any temporary works area upon completion of works<br>• Measures to control dust, construction run-off and pollution | • Adverse residual impacts not anticipated. |
| Man Kam To Road egretry | • Direct loss is **Low to Moderate.** | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Early implementation of compensatory habitat provision in area FLN A1-7 and measures to attract egrets to compensation site.<br>• Formulation and provision of additional | • Adverse residual impacts not anticipated. |

| 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) |
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| | | | | mitigation measure in view of the condition and location of the Egretry before commencement of works.<br>• Phasing of works away from peak foraging hours and breeding season<br>• Provision of alternative foraging ground at suitable sites along river channels<br>• Maintenance of existing ecological linkages between assessment area and Deep Bay.<br>• Design and erection of temporary noise/visual barriers adjacent to works areas along rivers. | |

| 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) |
|---|---|---|---|---|---|
| | | | | • Measures to avoid/minimize fragmentation impacts on existing Egretry (before removal) and on new egretry site and their flight-paths | |

| 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) |
|---|---|---|---|---|---|
| Ho Sheung Heung Egretry | • Disturbance to Ho Sheung Heung egretry: **Low**.<br>• Fragmentation impact on flight-lines between Ho Sheung Heung egretry and foraging areas: **Low to Moderate**. Combined impact: **Low to Moderate**. | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Maintenance of existing ecological linkages between assessment area and Deep Bay.<br>• Erection of temporary noise/visual barriers adjacent to works areas along rivers.<br>• Prohibition of works during ardeid breeding season.<br>• Provision of alternative foraging ground at suitable sites along river channels | • Adverse residual impacts not anticipated. |
| Ma Tso Lung Stream and tributaries and marsh | • Diversion of 130m of Ma Tso Lung Stream in its lower reaches (**Moderate**) and 120m of tributaries in their upper reaches (**Low**).<br>• Disturbance to Ma Tso Lung Stream and | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Permanent buffer zone of 15-30m as appropriate on (not less than 45m total width) along each bank of stream and tributaries except for LMC Loop Eastern Connection | • Adverse residual impacts not anticipated. |

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|---|---|---|---|---|---|
| | Marsh (**Low**).<br>• Run-off and hydrological impacts to Ma Tso Lung Stream (**Moderate**) and Marsh (**Low**)<br>• Fragmentation impact on Ma Tso Lung Stream riparian corridor (**Moderate**).<br>• Combined impacts **Moderate.**<br>• Cumulative disturbance impacts with LMC Loop Project **Low**.<br>• Cumulative run-off impacts with LMC Loop Project **Moderate** during construction.<br>• Cumulative hydrological disruption impacts with LMC Loop Project **Moderate.**<br>• Cumulative fragmentation impacts with LMC | | | Road crossing.<br>• Measures to control hydrological disruption, construction run-off and pollution<br>• Road crossing to be on viaduct, no construction works within watercourse.<br>• Areas of stream diversion minimized in relation to buffer requirements.<br>• Creation of permanent vegetated 15m minimum buffer between road and diverted watercourse, and 30m. minimum buffer between watercourse and project area operation in any area where works are required within 30m. of | |

| 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) |
|---|---|---|---|---|---|
| | Loop Project **Moderate**. | | | Ma Tso Lung stream and tributaries.<br>• Implementation of permanent terrestrial fauna barrier on at-grade section of LMC Loop Eastern Connection Road at Ma Tso Lung.<br>• Implementation of permanent fauna underpass.<br>• Temporary fauna barriers at Ma Tso Lung works areas KTN F1-1, F1-3, F1-4, F1-7, G1-1, G1-2 and G1-4 and SPS, 30m. from Ma Tso Lung stream or works area whichever is greater.<br>• Temporary solid barrier 30m from watercourse | |

| 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) |
|---|---|---|---|---|---|
| | | | | or edge of works area to protect riparian vegetation in any works area 30m or less from watercourse. | |

| 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) |
|---|---|---|---|---|---|
| Siu Hang San Tsuen Watercourse | • Re-channelization of approx. 180m length of lowest reaches (**Low**).<br>• Disturbance impacts (**Low**).<br>• Run-off and hydrological impacts (**Low**).<br>• Combined impacts **Low to Moderate** during construction) | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Provision and designation of buffer zone and maintenance of hydrological linkages during construction under and adjacent to Fanling Bypass. Provision and maintenance of shade-tolerant plantings along the buffer;<br>• Adoption of viaduct for road section encroach on the watercourse;<br>• Permanent buffer zone for natural section of stream (not in project area). | • Adverse residual impacts not anticipated. |
| Kau Lung Hang Watercourses | • No direct impact.<br>• Disturbance of approx. 50m during construction of | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • None required.<br>• Avoidance of construction works in | • Adverse residual impacts not anticipated. |

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|---|---|---|---|---|---|
| | Fanling Bypass (**Low**) | | | streambeds, prevention of pollutants entering watercourses. | |

| 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) |
|---|---|---|---|---|---|
| Hillside Plantation | • Disturbance (**Low to Moderate**).<br>• Dust deposition and fragmentation impacts on vegetation (**Low**).<br>• Combined impacts **Low to Moderate**. | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Establishment of about 16ha of Woodland compensatory planting.<br>• Avoid and minimize direct encroachment during detailed design and reinstate any temporary works area upon completion of works<br>• Erection of 2m high solid green site barrier fence between active works and adjacent natural habitats.<br>• Measures to control dust, construction run-off and pollution. | • Adverse residual impacts not anticipated. |
| Egretries and egretry flight lines | Direct loss of Man Kam To Road Egretry: **Low to Moderate**.<br>Disturbance to Ho Sheung Heung Egretry: | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Egretry Habitat Creation & Management Plan (EHCMP) and compensatory egretry habitat provision. | • Adverse residual impacts not predicted. |

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|---|---|---|---|---|---|
| | **Low**.<br>Fragmentation impact on flight-lines between Ho Sheung Heung Egretry and foraging areas: **Low to Moderate**.<br>Fragmentation impact on flight-lines between Man Kam To egrety and foraging areas: **Low to Moderate** during construction prior to clearance of egretry site.<br>Combined impact: **Moderate** during construction. | | | • Stringent planning control requirements in Long Valley north and west of Sheung Yue River, including Ho Sheung Heung Egretry (**5.9.2**).<br>• Planning for creation of Green Corridors along larger watercourses and detailed design of Open Space areas and development areas along river corridors (**5.9.3**).<br>• No construction during ardeid breeding season (1st March to 31st July) along Sheung Yue River north or east of KTN D1-5 and east of D1-9 and C2-3 and restriction of working hours on new pedestrian bridges over the Sheung Yue River and tidal Ng Tung River to 09.00 to 17.30 during the ardeid breeding | |

| 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) |
|---|---|---|---|---|---|
| | | | | season.<br>• Unavoidable clearance of Man Kam To Road Egretry scheduled outside breeding season.<br>• Review of bridge design and construction methods during detailed design phase to ensure that disturbance impacts from these sources are minimised.<br>Creation and operation of of Long Valley Nature Park and creation and enhancement of wetland within LVNP including redistribution of wetland habitats in LVNP to concentrate closed wetland habitats (marsh and reedmarsh) in more disturbed areas and to undertake supplementary stocking of fish to mitigate for any loss of foraging habitat | |

| 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) |
|---|---|---|---|---|---|
| | | | | for large waterbirds in disturbed areas including the Sheung Yue River, especially during the construction phase.<br>• Erection of 2m high solid dull green site barrier fence between river channel and any active works area along or adjacent to Ng Tung, Sheung Yue and Shek Sheung Rivers.<br>• Avoidance of removal and interference with screen planting undertaken under the Construction of Cycle Tracks and Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung. | |

| 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) |
|---|---|---|---|---|---|
| Other wetland-dependent bird species | Direct loss of wetland habitats: **Low**.<br>Indirect loss of wetland habitats: **Low to Moderate** on birds using the Sheung Yue River and non-tidal Ng Tung River, but **Low** elsewhere, during the construction phase.<br>**Low** on birds using the Sheung Yue River; Low to Moderate on non-tidal Ng Tung Rivers, but not significant elsewhere, during operational phase.<br>Fragmentation impact: **Low to Moderate** severity during construction on the linkage between Long Valley and the long non-tidal Ng Tung River; **Low** severity on the linkage between Long Valley and the Deep Bay wetland | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • As per details for Long Valley Nature Park (LVNP) implementation, management and maintenance.<br>• Maintenance of existing ecological linkages between assessment area and Deep Bay.<br>• Stringent planning control in Long Valley north and west of Sheung Yue River, including Ho Sheung Heung Egretry.<br>• Planning for creation of Green Corridors along larger watercourses, detailed design of Open Space areas and development areas along river corridors to provide screening of rivers.<br>• Building setback from | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| | ecosystem along the tidal Ng Tung River during construction but not significant during operation; no other significant fragmentation impacts.<br>Combined impacts of habitat loss, disturbance and fragmentation: **Low** overall but **Low to Moderate** for freshwater wetland/wet agricultural land habitat-specialist species and species using the Sheung Yue River and non-tidal section of Ng Tung River in significant numbers (especially breeding Little Egrets and Chinese Pond Herons). | | | Long Valley.<br>• Erection of 2m high solid dull green site barrier fence between river channel and any active works area along or adjacent to Ng Tung, Sheung Yue and Shek Sheung Rivers, and areas and all areas/habitats of ecological importance on edge of development areas, including along any roads adjacent to or penetrating into areas/habitats of ecological importance.<br>• Review of bridge design and construction methods during detailed design phase to ensure that disturbance impacts from these sources are minimised.<br>• Avoidance of removal and interference with screen planting | |

| 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) |
|---|---|---|---|---|---|
| | | | | undertaken under the Construction of Cycle Tracks and Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung.<br>• Some phasing of construction such that bridges over watercourses are not constructed simultaneously. | |
| Other species of conservation importance | • Direct loss of habitats: **Low - Moderate**.<br>• Indirect loss of wetland habitats: **Low-Moderate.**<br>• Fragmentation impact: **Low**.<br>• Mortality Impacts during site clearance: **Low-Moderate**.<br>• Cumulative impact of habitat loss, disturbance and fragmentation: **Low** overall but **Moderate** | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • As per details for Long Valley Nature Park (LVNP) implementation, management and maintenance.<br>• Minimise mortality to bats and disturbance to bat roosts.<br>• Minimise impacts on species of conservation significance in development areas by translocation from works | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| | for freshwater wetland/wet agricultural land habitat-specialist species.<br>• Combined impacts: **Moderate** overall but **Moderate to High** for freshwater wetland/wet agricultural land habitat-specialist species). | | | area. | |
| **Operational Phase** | | | | | |
| Long Valley | • Disturbance of Long Valley habitats (**Low**).<br>• Hydrological disruption of Long Valley habitats (**Low**)<br>• Pollution of Long Valley habitats (dependent upon type but most likely **Low**).<br>• Fragmentation impact on Long Valley **Low**.<br>• Combined disturbance and | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Long Valley Nature Park (LVNP) management and maintenance.<br>• Enhancement of wetland habitats in LVNP.<br>• Buffer planting at LVNP to minimise disturbance.<br>• Building setback of 20m in area KT B3-12 from | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| | fragmentation impacts **Low**.<br>• Cumulative disturbance and fragmentation with Sha Po Tsuen to Shek Sheung River Cycle Track project **Low**. | | | road DP3.<br>• Stringent Planning Control in areas C2-1and C2-2 to protect these areas and maintain flight-lines from Ho Sheung Heung egretry.<br>• Avoidance of hydrological disruption to LVNP. | |
| Major Channelised Watercourse (Sheung Yue, Shek Sheung and Ng Tung Rivers) | • Disturbance of Sheung Yue River (**Low**).<br>• Disturbance of Ng Tung River (**Low**).<br>• Disturbance of Shek Sheung River (**Low**).<br>• Fragmentation impact on non-tidal Ng Tung River (**Low to Moderate**)<br>• Fragmentation impact on tidal Ng Tung | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Erection of temporary noise visual/ barriers at any development sites adjacent to watercourses.<br>• Planting buffers in open space zones along watercourses. | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| | River (**Low**)<br>• Fragmentation impact on Sheung Yue and Shek Sheung Rivers (**Low**).<br>• Run-off and pollution impacts on Ng Tung, Sheung Yue and Shek Sheung Rivers (**Low**).<br>• Combined operational impacts on all rivers **Low**. | | | | |
| Ho Sheung Heung *Fung Shui* Woodland & Secondary Woodland | • Disturbance of *fung shui* and secondary woodland (**Low**).<br>• Fragmentation impact on woodland (**Low**).<br>• Combined impacts **Low**. | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • None required. | • Adverse residual impacts not anticipated. |
| Shrubland at Crest Hill | Disturbance of shrubland at Crest Hill (**Low** during operation) | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Ho Sheung Heung Egretry | • Disturbance to Ho Sheung Heung egretry: **Low**.<br>• Fragmentation impact | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Long Valley Nature Park (LVNP) implementation, management and | • Adverse residual impacts not |

| 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) |
|---|---|---|---|---|---|
| | on flight-lines between Ho Sheung Heung egretry and foraging areas: **Low**. | | | maintenance.<br>• Implementation of stringent planning controls to maintain ecological linkages between assessment area and Deep Bay, egretry and Long Valley | anticipated. |
| Compensatory egretry at FLN A1-7 | • Disturbance (**Low**). | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • . None required. | • Adverse residual impacts not anticipated |
| Ma Tso Lung Stream and tributaries and Marsh | • Disturbance to Ma Tso Lung Stream (**Low**).<br>• Run-off and hydrological impacts to Ma Tso Lung Stream (**Low**)<br>• Fragmentation impact on Ma Tso Lung Stream riparian corridor (**Moderate**).<br>• Combined impacts **Moderate**. | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Permanent buffer zone of 15-30m as appropriate on (not less than 45m total width) along each bank of stream and tributaries except for LMC Loop Eastern Connection Road crossing.<br>• Measures to control hydrological disruption, | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| | • Cumulative disturbance impacts with LMC Loop Project **Low**.<br>• Cumulative run-off impacts with LMC Loop Project **Low to Moderate**.<br>• Cumulative hydrological disruption impacts with LMC Loop Project **Moderate.**<br>• Cumulative fragmentation impacts with LMC Loop Project **Moderate**. | | | run-off and pollution<br>• Permanent terrestrial fauna barrier on at-grade section of LMC Loop Eastern Connection Road at Ma Tso Lung.<br>• Permanent fauna underpass. | |
| Siu Hang San Tsuen and Kau Lung Hang Watercourses | • Disturbance impacts (**Low**).<br>• Run-off and hydrological impacts (**Low**).<br>• Combined operational phase impacts **Low**. | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Permanent buffer zone for natural section of stream (not in project area). | • Adverse residual impacts not anticipated |
| Hillside Plantation woodland | • Disturbance (**Low to Moderate**). | • EIAO-TM Annex 8 | • Not applicable | • Establishment of about | • Adverse residual |

| 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) |
|---|---|---|---|---|---|
| | • Dust deposition on vegetation (**Low**).<br>• Combined impacts **Low**. | and Annex 16 | | 16ha of Woodland compensatory planting. | impacts not anticipated |
| Other wetland-dependent bird species (excluding those associated with main river channels (see above)) | • Combined fragmentation impact for freshwater wetland / wet agricultural land habitat specialists: **Low to Moderate**. | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Long Valley Nature Park (LVNP) implementation, management and maintenance.<br>• Building setback from Long Valley<br>• Use of 2m high dull green site barriers adjacent to habitats of ecological importance.<br>• Maintenance of existing ecological linkages between assessment area and Deep Bay.<br>• Green Corridors along larger watercourses provided and maintenance of river | • Adverse residual impacts not anticipated |

| 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) |
|---|---|---|---|---|---|
| | | | | screen planting. | |
| Other species of conservation importance | • Fragmentation impact: **Low-Moderate**.<br>• Light and glare impacts: **Low** for most species but may be **Low to Moderate** for migrating birds<br>• Mortality impacts arising from collision: **Low**, largely smaller birds<br>• Cumulative impact of habitat loss, disturbance and fragmentation: **Low** overall but **Moderate** for freshwater wetland/wet agricultural land habitat-specialist species.<br>• Combined impacts: **Moderate** overall but **Moderate to High** for freshwater wetland/wet | • EIAO-TM Annex 8 and Annex 16 | • Not applicable | • Guidelines for building design measures to minimize light and glare impacts on mammals and birds applied.<br>• Noise barriers designed to minimize avian collision mortality. | • Adverse residual impacts not anticipated |

| 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) |
|---|---|---|---|---|---|
| | agricultural land habitat-specialist species). | | | | |

**Impact Summary**

| 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) |
|---|---|---|---|---|---|
| **Fisheries Impact** | | | | | |
| **Construction Phase** | | | | | |
| Active Fish Ponds | • Direct loss: Low | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Inactive Fish Ponds | • No Fisheries Impacts. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Abandoned Fish Ponds | • Direct loss of these ponds: Very Low Fisheries Impact. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Fisheries resources/ production | • Loss of fish fry ponds:<br>• Moderate. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • Early notification of operator of resumption programme to permit timely relocation of fish fry farm to an alternative location. | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| Nursery and spawning grounds | • No Fisheries Impacts. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Impact on fishing activity | • No Fisheries Impacts | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Aquaculture activity. | • Loss of fish fry ponds: Moderate. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • Early notification of operator of resumption programme to permit timely relocation of fish fry farm to an alternative location. | • Adverse residual impacts not anticipated. |
| Pollution of watercourses resulting in downstream impacts to fisheries | • Low | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • Standard on-site measures to minimize impacts of run-off and pollution events.<br>• Monitoring station to be established at Ma Tso Lung Stream. | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| **Operational Phase** | | • EIAO-TM Annex 9 and Annex 17 | | | |
| Active Fish Ponds | • No Fisheries Impacts. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Inactive Fish Ponds | • No Fisheries Impacts. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Abandoned Fish Ponds | • No Fisheries Impacts. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Fisheries resources/ production | • No Fisheries Impacts | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Nursery and spawning grounds | • No Fisheries Impacts. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |

| 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) |
|---|---|---|---|---|---|
| Impact on fishing activity | • No Fisheries Impacts | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Aquaculture activity. | • No Fisheries Impacts | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |
| Pollution of watercourses resulting in downstream impacts to fisheries | • No Fisheries Impacts. | • EIAO-TM Annex 9 and Annex 17 | • Not applicable | • None required | • Adverse residual impacts not anticipated. |

**Impact Summary**

| 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) |
|---|---|---|---|---|---|
| **Hazard to Life** | | | | | |
| **Construction Phase** | | | | | |
| Future population in vicinity of transport, storage and use of chlorine associated with the operations at Sheung Shui Water Treatment Works | • The risk levels of transport, storage and use of chlorine associated with the operations at Sheung Shui Water Treatment Works during construction phase of the Project to the future are considered "acceptable" according to the risk guidelines and no adverse impact is expected. | • EIAO-TM Annex 4 and Annex 22 | • Not Applicable | • Not Applicable | • No adverse residual impacts anticipated. |
| **Operational Phase** | | | | | |
| Future population in vicinity of transport, storage and use of | • The risk levels of transport, storage and use of chlorine | • EIAO-TM Annex 4 and Annex 22 | • Not Applicable | • Not Applicable | • No adverse residual impacts anticipated. |

| 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) |
|---|---|---|---|---|---|
| chlorine associated with the operations at Sheung Shui Water Treatment Works | associated with the operations at Sheung Shui Water Treatment Works during operation phase of the Project to the future population are considered "acceptable" according to the risk guidelines and no adverse impact is expected. | | | | |

**Impact Summary**

| 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) |
|---|---|---|---|---|---|
| **Land contamination** | | | | | |
| **Construction Phase** | | | | | |
| Potential land contamination sites within the Project Area | • Anomalistic high arsenic was detected in 3 potentially contaminated sites in government land in KTN.<br>• 47 potentially contaminated sites in KTN, 24 potentially contaminated sites in FLN and 4 potentially contaminated sites near FLB were not granted access for conducting site investigation (SI).<br>• Re-appraisal of 158 surveyed sites in KTN, 25 surveyed sites in FLN and 13 | • Section 3 (Potential Contaminated Land Issues) of Annex 19 "Guidelines for Assessment of Impact on Sites of Cultural Heritage and Other Impacts" of the EIAO-TM.<br>• Guidance Note for Contaminated Land Assessment and Remediation.<br>• Practice Guide for Investigation and Remediation of Contaminated Land<br>• Guidance Manual for Use of Risk-based | • Not applicable | • A Health Risk Assessment has been conducted and results indicate that the health risk of arsenic through inhalation of arsenic-containing dust during construction stage of KTN development is non-significant for both Cancer Risk Level and Non-cancer Risk Level.<br>• Project Proponent would carry out further site visit and prepare and submit the supplementary CAP to EPD prior to the commencement | • No adverse residual impacts would be anticipated. |

| 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) |
|---|---|---|---|---|---|
| | surveyed sites in FLB would be required to ensure any potential contamination activities from land use changes after the approval of this land contamination assessment study. | Remediation Goals for Contaminated Land Management | | of SI works. | |
| **Operational Phase** | | | | | |
| Not Applicable | • Not Applicable | • Not Applicable | • Not Applicable | • Not Applicable | • Not Applicable |

**Impact Summary**

| 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) |
|---|---|---|---|---|---|
| **Landfill Gas Impact** | | | | | |
| **Construction Phase** | | | | | |
| MTLL and its 250m Consultation Zone | • The potential risk of MTLL during construction phase is "high" | • Section 1.1(f) in Annex 7 of the EIA Technical Memorandum (TM);<br>• Section 3.3 in Annex 19 of the EIA TM;<br>• Landfill Gas Hazard Assessment Guidance Note (1997) (EPD/TR8/97); and<br>• Landfill Gas Hazard Assessment for Development Adjacent to Landfills (ProPECC PN 3/96). | • Not applicable. | • Precautionary measures stipulated in the landfill Gas Hazard Assessment Guidance Note. | • No residual impacts would be anticipated |

| 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) |
|---|---|---|---|---|---|
| **Operational Phase** | | | | | |
| MTLL and its 250m Consultation Zone | • The potential risk of MTLL during operational phase is 'low' to 'high' | • Section 1.1(f) in Annex 7 of the EIA Technical Memorandum (TM);<br>• Section 3.3 in Annex 19 of the EIA TM;<br>• Landfill Gas Hazard Assessment Guidance Note (1997) (EPD/TR8/97); and<br>• Landfill Gas Hazard Assessment for Development Adjacent to Landfills (ProPECC PN 3/96). | • Not applicable. | • Utility companies to take appropriate precautions at all times when entering enclosed spaces or plant rooms.<br>• Building management<br>• Monitoring requirement | • No residual impacts would be anticipated |

## Impact Summary

| 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 Impact Assessment** | | | | | |
| **Construction Phase** | | | | | |
| • Landscape Resources (LRs) and Landscape Character Area (LCAs) within the Study Areas<br>• Visually Sensitive Receivers (VSRs) within the Primary Zones of Visual Influence | • Substantial to insignificant adverse impacts on LRs within the KTN and FLN NDA Study Areas<br>• Substantial to insignificant adverse impacts on LCAs within the KTN NDA Study Area<br>• Substantial to slight adverse impacts on LCAs within the FLN NDA Study Area<br>• Substantial to insignificant adverse | • EIAO (Cap. 499. S16) and the Technical Memorandum on EIA Process (EIAO-TM);<br>• EIAO GN 8/2010 (Preparation of Landscape and Visual Impact Assessment under the Environmental Impact Assessment Ordinance);<br>• Town Planning Ordinance (Cap131) and Town Planning (Amendment) | • Not Applicable | • Minimum Topographical Change<br>• Detailed Design - Visual<br>• Tree Protection & Preservation<br>• Tree Transplantation<br>• Slope Landscaping<br>• Compensatory Planting<br>• Woodland Compensatory Planting | • Moderate to insignificant adverse impacts on LRs within the KTN and FLN NDA Study Areas<br>• Moderate to insignificant adverse impacts on LCAs within the KTN NDA Study Area<br>• Moderate to insignificant adverse impacts on LCAs within the FLN NDA Study Area<br>• Moderate to |

| 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) |
|---|---|---|---|---|---|
| | impacts on VSRs due to KTN NDA | Ordinance;<br>• Hong Kong Planning Standards and Guidelines (HKPSG);<br>• Land Administration Office Instruction (LAOI) Section D-12 Tree Preservation;<br>• DEVB TCW No. 2/2012 – Allocation of Space for Quality Greening on Roads;<br>• DEVB TCW No. 3/2012 – Site Coverage of Greenery for Government Building Projects;<br>• DEVB, Greening, Landscape and Tree Management Section (GLTM) April 2012 – Guidelines on | | • Vertical Greening<br>• Green Roof<br>• Screen Planting<br>• Road Greening<br>• Marsh/Wetland Compensation<br>• Watercourse Impact Mitigation - Reprovision of Natural Stream<br>• Watercourse Impact Mitigation - Stream Buffer Planting<br>• Watercourse Impact Mitigation- Enhancement Planting along Embankment<br>• Watercourse Impact Mitigation – Avoid Affecting | insignificant adverse impacts on VSRs due to KTN NDA<br>• Moderate to insignificant adverse impacts on VSRs due to FLN NDA |

| 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) |
|---|---|---|---|---|---|
| | | Greening of Noise Barriers;<br>• DEVB TCW No. 2/2013 – Greening on Footbridges and Flyovers;<br>• DSD PN No.1/2005 – Guidelines on Environmental Considerations for River Channel Design;<br>• ETWB TCW No. 2/2004 – Maintenance of Vegetation and Hard Landscape Features;<br>• ETWB TCW No. 11/2004 – Cyber Manual for Greening;<br>• ETWB TCW No. 29/2004 – Registration of Old | | Watercouses<br>• Pond Replacement<br>• Screen Hoarding<br>Light Control | |

| 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) |
|---|---|---|---|---|---|
| | | and Valuable Trees, and Guidelines for their Preservation;<br>• ETWB TCW No. 36/2004 – The Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS);'<br>• ETWB TCW No. 5/2005 – Protection of Natural Streams/Rivers from Adverse Impacts Arising from Construction Works;<br>• ETWB TCW No. 3/2006 – Tree Preservation;<br>• HyD HQ/GN/13 Interim Guidelines for | | | |

| 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) |
|---|---|---|---|---|---|
| | | Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit;<br>• HQ/GN/15 - Guidelines for Greening Works along Highways;<br>• Urban Design Guidelines for Hong Kong issued by the Planning Department (2003);<br>• Study on Landscape Value Mapping of Hong Kong;<br>• WBTC No. 25/92 – Allocation of Space for Urban Street Trees;<br>• WBTC No. 7/2002 – | | | |

| 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) |
|---|---|---|---|---|---|
| | | Tree Planting in Public Works;<br>• GEO publication (1999) – Use of Vegetation as Surface Protection on Slopes; and<br>GEO 1/2011 – Technical Guidelines on Landscaping Treatment for Slopes | | | |
| **Operational Phase** | | | | | |
| • Landscape Resources (LRs) and Landscape Character Area (LCAs) within the Study Area<br>• Visually Sensitive Receivers (VSRs) within the Primary Zone of Visual | • Substantial to insignificant adverse impacts on LRs within the KTN and FLN NDA Study Areas<br>• Substantial to insignificant adverse impacts on LCAs within the KTN NDA | • EIAO (Cap. 499. S16) and the Technical Memorandum on EIA Process (EIAO-TM);<br>• EIAO GN 8/2010 (Preparation of Landscape and Visual Impact Assessment under | • Not Applicable | • Minimum Topographical Change<br>• Detailed Design - Visual<br>• Tree Protection & Preservation<br>• Tree Transplantation | • Moderate to insignificant adverse impacts on LRs within the KTN and FLN NDA Study Areas<br>• Moderate to insignificant adverse impacts on LCAs within the KTN NDA |

| 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) |
|---|---|---|---|---|---|
| Influence | Study Area<br>• Substantial to slight adverse impacts on LCAs within the FLN NDA Study Area<br>• Substantial to insignificant adverse impacts on VSRs due to KTN NDA<br>• Substantial to slight adverse impacts on VSRs due to FLN NDA | the Environmental Impact Assessment Ordinance);<br>• Town Planning Ordinance (Cap131) and Town Planning (Amendment) Ordinance;<br>• Hong Kong Planning Standards and Guidelines (HKPSG);<br>• Land Administration Office Instruction (LAOI) Section D-12 Tree Preservation;<br>• DEVB TCW No. 2/2012 – Allocation of Space for Quality Greening on Roads;<br>• DEVB TCW No. 3/2012 – Site Coverage of Greenery for | | • Slope Landscaping<br>• Compensatory Planting<br>• Woodland Compensatory Planting<br>• Vertical Greening<br>• Green Roof<br>• Screen Planting<br>• Road Greening<br>• Marsh/Wetland Compensation<br>• Watercourse Impact Mitigation - Reprovision of Natural Stream<br>• Watercourse Impact Mitigation - Stream Buffer Planting<br>• Watercourse Impact | Study Area<br>• Moderate to insignificant adverse impacts on LCAs within the FLN NDA Study Area<br>• Moderate to insignificant adverse impacts on VSRs due to KTN NDA<br>• Moderate to insignificant adverse impacts on VSRs due to FLN NDA |

| 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) |
|---|---|---|---|---|---|
| | | Government Building Projects;<br>• DEVB, Greening, Landscape and Tree Management Section (GLTM) April 2012 – Guidelines on Greening of Noise Barriers;<br>• DEVB TCW No. 2/2013 – Greening on Footbridges and Flyovers;<br>• DSD PN No.1/2005 – Guidelines on Environmental Considerations for River Channel Design;<br>• ETWB TCW No. 2/2004 – Maintenance of Vegetation and Hard | | Mitigation- Enhancement Planting along Embankment<br>• Watercourse Impact Mitigation – Avoid Affecting Watercouses<br>• Pond Replacement<br>• Light Control | |

| 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 Features;<br>• ETWB TCW No. 11/2004 – Cyber Manual for Greening;<br>• ETWB TCW No. 29/2004 – Registration of Old and Valuable Trees, and Guidelines for their Preservation;<br>• ETWB TCW No. 36/2004 – The Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS);'<br>• ETWB TCW No. 5/2005 – Protection of Natural Streams/Rivers from Adverse Impacts | | | |

| 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) |
|---|---|---|---|---|---|
| | | Arising from Construction Works;<br>• ETWB TCW No. 3/2006 – Tree Preservation;<br>• HyD HQ/GN/13 Interim Guidelines for Tree Transplanting Works under Highways Department's Vegetation Maintenance Ambit;<br>• HQ/GN/15 - Guidelines for Greening Works along Highways;<br>• Urban Design Guidelines for Hong Kong issued by the Planning Department (2003);<br>• Study on Landscape | | | |

| 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) |
|---|---|---|---|---|---|
| | | Value Mapping of Hong Kong;<br>• WBTC No. 25/92 – Allocation of Space for Urban Street Trees;<br>• WBTC No. 7/2002 – Tree Planting in Public Works;<br>• GEO publication (1999) – Use of Vegetation as Surface Protection on Slopes; and<br>• GEO 1/2011 – Technical Guidelines on Landscaping Treatment for Slopes | | | |

**Impact Summary**

| 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) |
|---|---|---|---|---|---|
| **Noise Impact** | | | | | |
| Construction Phase | | | | | |
| Existing and planned residential premises and schools in the vicinity of KTN and FLN NDA.<br>Assessment points (refer to **Appendix 4.1a**) | • Without mitigation measures, the predicted cumulative noise levels would range from 66 to 93 dB(A). Most of the sensitive receivers will be higher than 80 dB(A). Around 6 sensitive receivers will greater than or equal to 90 dB(A). | • TM-EIAO Annex 5 for non-restricted hours for domestic premises: 75 dB(A), for educational institution is 70 dB(A) (65 dB(A) during examination period). | • Exceed the TM-EIAO noise criterion by up to 18 dB(A) for residential premises and 12 dB(A) for schools (17 dB(A) during examination period.) | • Adoption of good site practices, optimization of construction methodology, quieter plant, temporary movable noise barriers enclosure and acoustic mat to minimize construction noise impact | • The mitigated predicted cumulative noise levels would range from 56 to 77 dB(A). The exceedance of 1-2 dB(A) for 3-24 months for residential premises and 1-5 dB(A) for 2-5 months for school during examination period. Most of the sensitive receiver will comply the noise criteria, 5 sensitive receivers will greater than 75 dB(A).<br>• It is considered that all practicable measures have been |

| 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) |
|---|---|---|---|---|---|
| | | | | | exhausted to minimize the adverse residual impact. |
| Operational Phase (Traffic Noise) | | | | | |
| Existing and Planned residential premises, schools, clinics, temple in the vicinity of KTN NDA and FLN NDA<br><br>Assessment points (refer to **Appendix 4.1b**) | • Without noise mitigation measures, the predicted noise levels would be in the range of 24 to 84 dB(A);<br>• The noise contribution from Project Roads would be up to 84 dB(A) | • TM-EIAO Annex 5 | • Exceed the TM-EIAO noise criterion by up to 22 dB(A) | • Implementation of low noise road surfacing, vertical noise barrier, vertical noise barrier with cantilevered arm, semi-enclosure and full enclosure before the operational stage;<br>• Provision of acoustic insulation with air conditioning system | • Some of the noise sensitive receivers will exceed the noise criteria, however, the noise contribution from Project Roads is less than 1.0 dB(A). |

| 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) |
|---|---|---|---|---|---|
| Operational Phase (Fixed Noise) | | | | | |
| Existing and Planned residential premises, schools and temple in the vicinity of KTN NDA and FLN NDA<br><br>Assessment points (refer to **Appendix 4.1c**) | • Without noise mitigation measures, the predicted noise levels would be in the range of 30 to 72 dB(A);<br><br>• Maximum allowable sound power level of the proposed fixed plants such as district cooling system, sewage pumping station, pumping station, sewage treatment works were predicted to meet the relevant noise criteria | • TM-EIAO Annex 5: ANL-5dB(A) or prevailing noise level | • Exceed the noise criterion by up to 18 dB(A) | • Direct noise mitigation measures including silencers, noise barrier and acoustic enclosure should be allowed;<br><br>• Provision of acoustic insulation with air conditioning system | • No adverse residual impacts would be anticipated. |

| 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) |
|---|---|---|---|---|---|
| Operational Phase (Helicopter Noise) | | | | | |
| Planned residential premises and schools in the vicinity of KTN NDA<br>Assessment points (refer to **Appendix 4.1d**) | • Without noise mitigation measures, the predicted noise levels would be in the range of 69 to 118 dB(A) | • TM-EIAO Annex 5 | • Exceed the TM-EIAO noise criterion by up to 33 dB(A) for KTN NDA | • Provision of acoustic insulation with air conditioning system | • No adverse residual impacts would be anticipated. |

**Impact Summary**

| 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) |
|---|---|---|---|---|---|
| **Sewage Impact** | | | | | |
| **Construction Phase** | | | | | |
| | • No applicable | • No applicable | • No applicable | • No applicable | • No applicable |
| **Operational Phase** | | | | | |
| Existing sewage system and sewage treatment | • Projected flow in year 2031 to Shek Wu Hui Sewage Treatment Works (SWHSTW) would be about 190,000$m^3$/day.<br>• Contribution from KTN NDA and FLN NDA is projected to be 51,507 $m^3$/day | • Technical Memorandum - Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters, the Water Pollution Control Ordinance (Cap 358)<br>• "No Net Increase in Pollutant Loading to Deep Bay Policy"<br>• Treatment capacity of the existing SWHSTW is about | • Additional Pollutant loading violates the "No Net Increase Policy".<br>• Projected flow from KTN NDA and FLN NDA together with natural growth and other committed and planned development within the sewage catchment, exceeds the current treatment capacity of SWHSTW by | • Upgrading and expansion of the SWHSTW | • No residual impacts would be anticipated. |

| 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) |
|---|---|---|---|---|---|
| | | 93,000$m^3$/day | 97,000$m^3$/day | | |
| TSE reuse | Not applicable.<br>TSE if not reused will be discharged to Deep Bay. | Not applicable. | Not applicable | • Proper polishing of TSE for routine monitoring prior to distribution<br>• Separate distribution system from that of potable water. | • No residual impacts would be anticipated. |

**Impact Summary**

| 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) |
|---|---|---|---|---|---|
| **Waste** | | | | | |
| **Construction Phase** | | | | | |
| Water quality, air and noise sensitive receivers at or near the Project Site, the waste transportation routes and the waste disposal site. | • Typical wastes include site clearance waste, excavated materials, construction and demolition (C&D) materials, asbestos containing materials, chemical wastes, general refuse and sewage will be generated. | • Waste Disposal Ordinance (Cap. 354);<br>• EIAO-TM Annex 7 and Annex 15<br>• Public Health and Municipal Services Ordinance (Cap. 132) - Public Cleansing and Prevention of Nuisances Regulation;<br>• Dumping at Sea Ordinance (Cap. 466). Land<br>• (Miscellaneous Provisions) Ordinance (Cap. 28); | • Not applicable. | • The opportunity for on-site sorting, reusing excavated fill materials, etc., are devised in the construction methodology to minimise the surplus materials to be disposed.<br>• Recommendations have been made for implementation by the Contractor to minimise waste generation and off-site disposal. | • No residual impacts would be anticipated. |

| 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) |
|---|---|---|---|---|---|
| **Operational Phase** | | | | | |
| Water quality, air and noise sensitive receivers at or near the Project Site, the waste transportation routes and the waste disposal site. | • 263 tpd of Municipal solid waste<br>• chemical waste<br>• sewage sludge | • Waste Disposal Ordinance (Cap. 354); and<br>• Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C). | • Not applicable. | • Proper treatment and disposal of wastes. | • No residual impacts would be anticipated |

**Impact Summary**

| 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) |
|---|---|---|---|---|---|
| **Water Quality Impact** | | | | | |
| *Construction Phase* | | | | | |
| Rivers, watercourses, agricultural land, marshland, ponds, wetlands<br><br>KTN NDA: 24 assessment points;<br>FLN NDA: 28 assessment points<br>(refer to **Figures 5.3** & **5.4**) | • Potential deterioration in water quality | • TM-EIAO;<br>• Water Pollution Control Ordinance (WPCO) (Cap. 358);<br>• Technical Memorandum on Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters (TM-DSS);<br>• Practice Note for Professional Persons (ProPECC) PN 1/94 | • No exceedance was predicted. | • Appropriate mitigation measures has been proposed (see Section 5.7.1) to control the following:<br>- Construction runoff and drainage<br>- Alternation of natural streams<br>- Groundwater from contaminated area<br>- Sewage from workforce | • No unacceptable water quality impacts would be anticipated.<br>• No residual impact would be anticipated. |

| 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) |
|---|---|---|---|---|---|
| Operational Phase | | | | | |
| Rivers, watercourses, agricultural land, marshland, ponds, wetlands<br><br>KTN NDA: 24 assessment points;<br>FLN NDA: 28 assessment points<br>(refer to **Figures 5.3** & **5.4**) | Water quality would be deteriorated by:<br>- Sewage and sewerage system<br>- Discharge from District Cooling System<br>- Runoff from roads/open areas<br>- Drainage system | • Relevant standards/ criteria stipulated under the EIAO-TM, WPCO, TM-DDS and ProPECC 5/93 | • No exceedance was predicted | • Appropriate and practicable mitigation measures have been proposed to control potential adverse water quality impact during operational phase (see Section 5.7.2) | • No unacceptable water quality impacts would be anticipated.<br>• No residual impact would be anticipated. |