

Appendix 2.2 Responses to Key Public Comments

Item No.	Discipline	Summary of Public Comments	Responses to Public Comments
1	Ecology	It is very important for the project proponent to identify and assess all associated impacts on Collared Crow.	All associated impacts on Collared Crow have been identified and assessed in Section 5 of this EIA Report.
2	Ecology	Roof tops of buildings in the Tai Po Sewage Treatment Works were identified from a past study as the major pre-roost location of Collared Crows.	<p>Surveys from this updated EIA study (conducted by AEC Ltd.) reveal that the pre-roost sites for Collared Crows are the open grassy areas and taller trees in the Shuen Wan Restored Landfill (SWRL) where birds would gather in large numbers immediately before heading into the night roost in plantation trees of SWRL.</p> <p>Contrary to the findings of that past study, no proper pre-roost gathering was recorded within the Project site. Although Collared Crows have been recorded in Tai Po Sewage Treatment Works (TPSTW), they were of birds following their usual daytime activities. Pre-roosting sites are in the adjacent SWRL.</p> <p>The pre-roost site is exactly that, where birds congregate immediately prior to roosting. Buildings in the TPSTW are used by loafing birds through the course of the day. Birds that are gathering at the TPSTW are then dispersing to the pre-roosting sites. These birds were observed to move to the grassy areas and/or tall trees of SWRL where they would be joined by birds travelling from the wider area forming a larger pre-roost gathering. Birds would then generally departed to the main night roost location (tall plantation trees of the SWRL) as a single group that flew above the congregation, circling the final roost locations for several minutes.</p> <p>Buildings in TPSTW are therefore not pre-roost sites.</p> <p>Collared Crow has been taken into consideration during the EIA process for this Project. Specific surveys on pre-roosts and roosts of Collared Crow were conducted in this updated EIA study. Monitoring of the Collared Crow roost during construction phase is recommended given its conservation importance. Details are provided in Section 5 of this EIA Report.</p>
3	Ecology	Collared Crow congregates at pre-roosting site during evening hours and then fly to final roosting site adjacent Shuen Wan Restored landfill around sunset. The potential adverse impact on pre-roosting site at Tai Po Sewage Treatment Works would disturb the flight of Collared Crow to final roosting site.	<p>Pre-roost sites are currently in the Shuen Wan Restored Landfill (SWRL) site, as well as the main nocturnal roost. No impacts to these flightlines are anticipated. Buildings in the Tai Po Sewage Treatment Works (TPSTW) are used by Collared Crows through the course of the day. The eastern existing facilities of TPSTW do not involve any new buildings, thus no obstruction of Collared Crow movement between TPSTW and the SWRL will occur.</p> <p>'Local movement corridors' are different to flightlines as they are not (or do not appear to be)</p>

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			<p>directly between roosting site and foraging, but instead form part of the birds' daily movements/behaviour. Daytime surveys recorded Collared Crow throughout TPSTW, loafing on lampposts, planted trees, rooftop or sedimentation tanks.</p> <p>New buildings of this Project will not exceed heights of surrounding industrial estate and crows flying to pre-roosts sites will not be inhibited by this development.</p>
4	Ecology	All ecological sensitive receivers, particularly the pre-roosting sites at the project site, pre-roosting and final roosting sites of Collared Crow in Shuen Wan Restored Landfill, should be included in the statutory EIA process.	<p>All identified ecological sensitive receivers have been included in the current EIA study. In this study, no pre-roosts were observed in the Tai Po Sewage Treatment Works. Please see response in Item 2 above.</p> <p>Phasing of the construction works is required for this Project, which would minimize the total disturbance level at a time (see Sections 2.2.13 and 2.2.14 of this EIA Report). Mitigation measures to minimize the construction disturbance including the use of quieter construction method and good site practices are recommended in Section 5.11 of this EIA Report. The proposed works area of demolition and redevelopment is approximately 200m away from the nearest pre-roosting site of Collared Crow, and more than 650m away from the nearest roosting site of Collared Crow and Black Kite (see Figure 5.5). No direct impact to the pre-roosting/roosting sites of Collared Crow and roosting site of Black Kite within the SWRL is expected. With implementation of the recommended mitigation measures, no unacceptable indirect disturbance to these distant receivers would be expected.</p>
6	Ecology	Appropriate measures, such as phasing or timing of construction schedule, should be proposed to avoid/minimize or mitigate any potential adverse ecological impacts.	<p><u>Construction Phasing</u> Phasing of the construction works is essential and required for this Project to maintain normal services of Tai Po Sewage Treatment Works (TPSTW). Please see Sections 2.2.13 and 2.2.14 of this EIA Report for details. This would minimize the total disturbance level at a time.</p> <p><u>Construction Schedule and Mitigation Measures</u> An occasional night roost for non-breeding ardeids is identified in the Project site. It is located at the southwestern tree group of the existing TPSTW (adjacent to the proposed expansion area). Noisy construction works within 100m of the concerned tree group (with occasional ardeid night roost) should cease at least 1 hour before sunset before the removal/transplantation of the tree group. All noisy construction works within 100m of the relevant transplantation/compensation planting area should also cease at least 1 hour before sunset after transplantation/compensatory planting. No night-</p>

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			<p>time construction works are proposed under this Project. Unnecessary lighting outside working hours (07:00 – 19:00) of the construction sites should be turned off.</p> <p>Mitigation measures to minimize the direct ecological impact and indirect ecological disturbance are recommended in Section 5.11 of this EIA Report.</p> <p><u>Ecological Monitoring</u> Monthly ecological monitoring focusing on avifauna species of conservation importance (e.g. Collared Crows and ardeids) utilizing habitats within the 500m assessment area, are recommended to be conducted during construction to monitor the effectiveness of proposed mitigation measures and detect any unpredicted indirect ecological impacts arising from the proposed Project, and during operational phase to monitor any change in foraging habitats by the proposed Project. Details are provided in Section 5.13 of this EIA Report.</p>
7	Ecology	<p>Tai Po Sewage Treatment Works is an important pre-roosting site of the vulnerable Collared Crow and a potential night roost of ardeids. Disturbing and noisy construction procedures of the proposed project and human disturbance should be restricted to minimize potential impacts on Collared Crow and ardeids during construction phase. Therefore, the construction site should be well masked if necessary. Avoidance of human disturbance, including noise and glare, is also important in operation phase.</p>	<p>Surveys from this updated EIA study reveal that no pre-root gathering nor regular ardeid roosting takes place within the Tai Po Sewage Treatment Works (TPSTW) and no ardeid roost was recorded within the 500m assessment area. Surveys from this updated study only recorded three times ardeids roosting within the TPSTW at the southwestern tree group adjacent to the proposed expansion area.</p> <p>Noisy construction works within 100m of the concerned tree group (with occasional ardeid night roost) should cease at least 1 hour before sunset before the removal/transplantation of the tree group. All noisy construction works within 100m of the relevant transplantation/compensation planting area should also cease at least 1 hour before sunset after transplantation/compensatory planting. No night-time construction works are proposed under this Project. Unnecessary lighting outside working hours (07:00 – 19:00) of the construction sites should be turned off.</p> <p>Phasing of the construction works is required for the Project. Please see Sections 2.2.13 and 2.2.14 of this EIA Report for details. This will minimize the total disturbance level at a time. Mitigation measures to further minimize the construction disturbances are proposed in this EIA. For example, good site practices, non-percussive or quieter piling method and quiet construction plant are recommended. The construction works boundary will be clearly defined and fenced with screening materials, and any works beyond the boundary should be strictly prohibited. Construction workers will be briefed regularly regarding the sensitivity of the areas to increase their environmental awareness. Further details are provided in Section</p>

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			<p>5.11 of this EIA Report.</p> <p>Monthly ecological monitoring focusing on pre-roost and night roost of Collared Crows as well as avifauna species of conservation importance (e.g. Collared Crows and ardeids) are suggested to be conducted during construction phase as presented in Section 5.13 of this EIA Report.</p> <p>The existing TPSTW is an active sewerage works and birds using this site are already habituated to the existing levels of human disturbance present. During operational phase of upgraded TPSTW, the disturbance impacts are anticipated to be similar level of current TPSTW. No adverse ecological impact is expected during operational phase. Monthly ecological monitoring, focusing on avifauna species of conservation importance (e.g. Collared Crows and ardeids) is proposed to be conducted during operational phase to monitor any changes in foraging habitats by the proposed Project (as presented in Section 5.13 of this EIA Report).</p>
8	Ecology	The proposed construction works including demolition and construction of superstructures would cause direct impacts and loss in pre-roosting site of Collared Crow, a globally vulnerable bird species.	<p>No pre-roost was recorded within the Project site. Although Collared Crows were recorded in the Tai Po Sewage Treatment Works (TPSTW), they were of birds following their usual daytime activities. Pre-roost sites were located in the adjacent SWRL. Please see response in Item 2 above.</p> <p>No pre-roosting sites would be lost. The eastern existing facilities of TPSTW do not involve any new buildings under this Project. Therefore, the eastern existing facilities of TPSTW and the new buildings of the future upgraded TPSTW would still be available for any birds to perch/loaf on as part of their normal daytime activities. Please also see responses in Items 4 and 7 above.</p>
9	Ecology	The project proponent should confirm the presence of ardeids' night roost at/around the project site. If ardeids' roosting site is identified within the project site, there would be direct impacts on the ardeids due to the construction works and proper protection measures should be considered accordingly. If ardeids' roosting site is outside the construction site, the construction hours within a day should be set carefully to avoid overlapping with the time that ardeids use for night roost every day (e.g. construction works should be stopped one hour before sunset), and good site practices	<p>No regular ardeid roosting takes place within the Tai Po Sewage treatment Works (TPSTW) and no ardeid roost was recorded within the 500m assessment area. Surveys from this updated study only recorded three times ardeids roosting within the existing TPSTW at the southwestern tree group adjacent to the proposed expansion area.</p> <p>Noisy construction works within 100m from the concerned tree group (with occasional ardeid night roost) should cease at least 1 hour before sunset. No night-time construction works are proposed under this Project. Unnecessary lighting outside working hours (07:00 – 19:00) of the construction sites should be turned off.</p>

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		should be adopted to avoid the adverse ecological impacts on the ardeids' night roost.	
10	Ecology	Cumulative ecological impacts associated with the surrounding development such as Shuen Wan Golf Course should be assessed. Careful phasing/timing of the construction program of the TPSTW are recommended to avoid/minimize disturbance and the potential cumulative impacts on the globally vulnerable Collared Crow and the ardeids.	<p>No pre-roost or roosting site of Collared Crows is identified in Tai Po Sewage Treatment Works (TPSTW) under this updated EIA study. Please see response in Item 2 above.</p> <p>Based on the updated survey conducted under this study, the existing buildings in TPSTW are currently used by Collared Crows through the course of the day following their usual daytime activities. The eastern existing facilities of TPSTW will not be demolished. Therefore, the eastern existing facilities of TPSTW and the new buildings of the future upgraded TPSTW would still be available for any birds to perch/loaf on as part of their normal daytime activities.</p> <p>According to the approved EIA for Shuen Wan Golf Course (SWGK), with the implementation of mitigation measures, there would be no adverse residual impacts to terrestrial ecology. About 25ha of plantation trees within the SWRL will be impacted due to the golf course project. 10ha of new trees including native trees will be planted and the plantation lost will be replaced by other vegetation forms (such as turfgrass and landscape vegetation). Though a temporary reduction in plantation area, the major tree groups frequently used as roosting sites will be preserved.</p> <p>This Project would involve modification of developed area in the western portion of TPSTW only and the construction works will implemented in phases to minimize the extent of disturbance impacts at a time (see Sections 2.2.13 and 2.2.14 of this EIA Report). It will not impact pre-roost or roost sites on the existing Shuen Wan Restored Landfill or proposed Shuen Wan Golf Course.</p> <p>No unacceptable cumulative impact would be resulted from this Project.</p>
11	Ecology	Based on an estimated total global population of 1,847 Collared Crows in 2014 (Leader et al 2016) and the past relevant bird count data for the study area, Shuen Wan Restored Landfill (SWRL) regularly holds over 6% of the world population of the species. Given the scope of works outlined for Tai Po Sewage Treatment Works (TPSTW) and in view of its close proximity to the Collared Crow roost-site at SWRL, and the fact that it also regularly attracts a pre-roost gathering of Collared Crows on	<p>There will be no indirect or direct impacts to pre-roost or roost sites on the Shuen Wan Restored Landfill (SWRL) as a result of the TPSTW project.</p> <p>It should also be noted that further to Leader <i>et al.</i> (2016), that global population estimates have been updated by Birdlife (2022) as follows:</p> <p><i>“with careful consideration of the estimates presented for the multiple locations holding the species in Leader et al. (2016), the population is placed here in the band of 2,500 – 9,999 mature individuals, which equates to 3,750-14,999 individuals in total, rounded here to 3,500-15,000 individuals”</i></p> <p>With regard to cumulative impacts, the Shuen Wan Golf Proposal (EIA-260/2019) has determined</p>

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		<p>their way to their overnight roost at SWRL, special care must be taken with the proposed upgrading at all stages.</p> <p>A safe communal roost-site is a very important factor in the survival of highly social birds, such as crows, especially so for young, inexperienced birds. The SWRL roost is one of only two large Collared Crow roosts in Hong Kong, the other being at Mai Po Nature reserve. As at Mai Po, a striking seasonal pattern can be seen at SWRL, with the counts highest between May and September and lowest in December-January. The reason for this is that birds of all ages join the roost between May and September, but breeding-age adults roost near their nest-sites during the breeding season (November/December to March/April) and thus stay away from the communal roost. Although numbers at the roost are considerably lower in December-January, the roost is still very important at this time as it holds all of the immature birds in the local population.</p> <p>There will be a concern of the potential adverse impacts on Collared Crow resulting from the upgrading of TPSTW and also from the cumulative effects of the upgrading of TPSTW and the Shuen Wan Golf Proposal (EIA-260/2019).</p>	<p><i>"With implementation of the mitigation measures, no adverse residual impacts to terrestrial ecology are anticipated."</i> Surveys undertaken for this Project reveal that no pre-roost or nocturnal roost of Collared Crow are within the existing Tai Po Sewage Treatment Works (TPSTW) and the proposed expansion site of this Project. The proposed works for this Project will involve modification of developed area in the western portion of the existing TPSTW and the construction works will be implemented in phases to minimize the extent of disturbance impacts at a time. It will not impact pre-roost or roost sites on the SWRL (at least 200m away from the works boundary of this Project).</p> <p>Areas for birds continuing their daily behaviour will still be available, daytime surveys recorded Collared Crow throughout TPSTW, loafing on lampposts, planted trees, rooftop or sedimentation tanks. The existing facilities of the eastern section of TPSTW will not be demolished and do not involve any new buildings, and will be available to Collared Crows.</p> <p>Buildings will not exceed heights of surrounding industrial estate and crows flying to pre-roosts sites will not be inhibited by this development.</p> <p>No impacts to flightlines are anticipated. Buildings in the TPSTW are used by Collared Crows through the course of the day and any new buildings would be anticipated to be used as per those already present in the TPSTW and wider industrial estate.</p>
12	Water quality	<p>Surface runoff generated from the site during construction phase should be prevented from discharging into stormwater drainage and Tolo harbour directly because the turnover rate of seawater of engulfed Tolo Harbour is low and unfavourable for disposal and dilution of pollutants in stormwater. Additional pollution load should be avoided to protect the marine water quality and ecology of Tolo Harbour.</p>	<p><u>Construction Phase</u></p> <p>Mitigation measures are recommended in this EIA to control construction site run-off and wastewater generated from construction activities such as the provision of proper construction site drainage for diversion of site runoff and wastewater to treatment facilities.</p> <p>Good site practices are proposed to control accidental chemical spillage from storage, handling and disposal of chemical waste and vehicle / equipment maintenance.</p> <p>Sufficient chemical toilet with regular maintenance programme will be provided for the construction</p>

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			<p>workforce to avoid illegal discharge of sewage effluent. Training of construction site personnel and regular environmental audit would be provided as an effective means to avoid any malpractices.</p> <p>The decommissioned treatment facilities shall be cleaned prior to their demolition or removal. All wastewater residues, if any, in the decommissioned facilities shall be properly collected, contained and treated within the plant and shall not be discharged directly into the drainage system or the environment.</p> <p>Further elaborations on the construction phase water quality mitigation measures are provided in Section 4.11 of this EIA Report.</p> <p><u>Operational Phase</u></p> <p>During operational phase, no additional pollution loading into the Tolo Harbour would arise from this Project.</p>
13	Water Quality	Same as current practice, the effluent of Tai Po Sewage Treatment Works after upgrading will be conveyed to Kai Tak River for disposal through the pipelines of the Tolo Harbour Effluent Export Scheme (THEES). Therefore, the effluent should be of good quality, free of odour and harmless to organisms inhabited or foraging in Kai Tak River (e.g. freshwater fish and egrets).	Secondary treatment plus disinfection will be provided for the Project effluent. Only secondarily treated and disinfected effluent will be allowed for discharge into the Kai Tak River. The effluent quality of this Project will be same as that of the existing THEES effluent.
14	Waste	The amount of solid wastes, such as Construction and Demolition (C&D) wastes, soil and rocks, contaminated soil generated from the proposed project should be considered in the EIA. Generation, transportation and disposal of such solid wastes should be under stricter control, especially for contaminated soil. The mitigated measures to prevent illegal and environmentally vandalistic dumping of wastes generated from the proposed project should be considered to be incorporated into the specification of the works contract.	<p>The estimated quantities of solid wastes including the generation, reuse and disposal of the C&D materials have been considered in this EIA. Mitigation measures are also recommended to minimise the environmental impacts associated with the waste storage, handling and transportation. Details are provided in Section 10 of this EIA Report.</p> <p>Based on the site appraisal conducted under this EIA, the potential contaminated lands of this Project are mostly confined within the existing waste recycling factories located at the proposed expansion site to the immediate south of the existing Tai Po Sewage Treatment Works (TPSTW). As the existing facilities in TPSTW and the proposed expansion site are in operation during the EIA stage, undertaking Site Investigation (SI) including soil and groundwater sampling and testing in the Project site is not possible. Hence, the extent of contaminated land and the amount of contaminated soil cannot be determined. Site re-appraisal and SI will be carried out after the EIA stage and before commencement of the Project construction to</p>

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			<p>confirm the land contamination extent. Details are provided in Section 11 of this EIA Report. Mitigation measures to control environmental impact such as wastewater, contaminated runoff, air / dust emissions from the soil remediation works are proposed in Section 11.10.5 of this EIA Report.</p> <p>Stringent control will be considered to be incorporated into the specifications of the future works contract of the Project to prevent illegal dumping such as the implementation of the trip ticket system, surveillance system, video recording system for dump trucks leaving the site, register of the CHIT / DDF issued, auditing system including the checking of disposal records against the survey / video records.</p>
15	Odour	As food waste and sewage sludge from other Sewage Treatment Works may be transported to Tai Po Sewage Treatment Works via tankers or pipelines for co-digestion and dewatered sludge will be exported. Measures to prevent generation of odour by the facilities in associated with co-digestion of organic wastes, and transport of sludge and food waste should be proposed.	<p>Food waste will only be imported from the adjoining Organic Waste Pre-treatment Centre (New Territories East) through a fully enclosed pipeline system with no odour emissions. Sludge tanks with totally enclosed design will be deployed for transporting sludge. Thorough tanker / truck cleaning practice and regular condition test of the sludge tanks are also recommended to prevent odour emission and leachate leakage.</p> <p>All odourous sources of the Project facilities and Project operations will be fully enclosed and the foul air will be diverted to the odour treatment units before discharge into the atmosphere. Details are provided in Section 3 of this EIA Report.</p>
16	Land contamination and landfill gas hazard	Safety design and measures should be in place to deal with any cumulation and evolving of hazard gas resulting from land contamination or landfill gas migration.	<p>To mitigate the landfill gas hazard impact, safety measures and landfill gas monitoring during the construction phase, building protection design and safety precautionary measures during the operational phase and formulation of Contingency Plan for construction and operational phases are recommended. Details are provided in Sections 9.7 to 9.10 of this EIA Report.</p> <p>The existing facilities in TPSTW and the proposed expansion site are in operation during the EIA stage, undertaking Site Investigation (SI) including soil and groundwater sampling and testing in the Project site is not possible. The extent and nature of contaminated land cannot be determined at the EIA stage. Site re-appraisal and SI will be carried out after the EIA stage and if necessary, land remediation works will be designed and implemented prior to commencement of the Project construction. General measures to avoid air emissions such as good site practices and covering the contaminated materials are recommended in Section 11.10.5 of this EIA Report. Specific mitigation measures for the remediation works to</p>

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			control air emissions will be developed after the nature / extent of contamination and the method of treatment are confirmed and these specific measures will be presented in the Remediation Action for the Project.
17	Green building design	Additional green design should be incorporated from the aims of alleviating heat island effect and enhancing conservation values.	Infill planting, planting along the site boundary, green roof and vertical planting will be implemented within the Project site layout where possible as presented in Figure 7.9 of the EIA Report.