

LANTAU LOGISTICS PARK DEVELOPMENT

PROJECT PROFILE

October 2004

Civil Engineering and Development Department

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1 BASIC INFORMATION

1.1 Project Title

1.1.1 Lantau Logistics Park (LLP) Development

1.2 Purpose and Nature of Project

1.2.1 The Project is to develop a logistics park on a proposed reclamation site at Siu Ho Wan to:

- ✍ Provide a secure operating environment for modern logistics facilities well-connected to the Hong Kong International Airport (HKIA), the container port and other logistics platforms; and thereby
- ✍ Establish a cluster of modern logistics facilities incorporating value added activities related to time-critical and time-definite transportation of goods.

1.2.2 In order to foster service integration, the LLP must embrace the full range of logistics services from conventional transportation and freight forwarding activities, to value-added services, and further to logistics consultancy, project logistics and quality control.

1.2.3 The logistics activities to be undertaken in the LLP will include a variety of value added logistics activities which could not normally be carried out efficiently in the typical existing logistic facilities in Hong Kong. These would include: cross docking; customisation; kitting; labelling; management reporting; merge-in-transit; manufacturing support; order taking; pick-and-pack; repair or refurbishment; reverse logistics; special packaging; and sub-assembly.

1.2.4 Other logistics services to be provided within these facilities should include a combination of: call centre management; consultancy services including systems integration and process reengineering; customs brokerage; freight consolidation; project logistics; purchase order management; and quality control.

1.2.5 The scope of the project includes the following major works:

- ✍ Dredging, construction of seawalls, and reclamation to a level of around +5.5mPD to provide an approximately 112 ha land platform with 72 ha for the development of the LLP (the remaining 40 ha at the western portion will be for possible logistics park extension or other compatible uses, e.g. recreational uses);
- ✍ Placement and subsequent removal of surcharge mounds;
- ✍ Installation of vertical drains within the reclamation;
- ✍ Construction of an elevated interchange at the eastern end of Siu Ho Wan Depot to provide connection between the North Lantau Highway (NLH) and the LLP, and the associated road and utilities services diversion works and associated reprovisioning works for the affected North Lantau Highway and Cheung Tung Road;
- ✍ Construction of roads, footpaths, roadside planters, signage and road markings, road lighting, etc. and all other associated roadworks;
- ✍ Construction of temporary roads for construction of the reclamation works;
- ✍ Construction of stormwater drainage system including extension of existing box culverts and drainage channels;
- ✍ Construction of sewerage system including twin rising mains, gravity sewers and a sewage pumping station with an estimated installed capacity of not more than 2,000

m³ per day;

- ✘ Construction of water supply system including fresh and salt water supply mains, and fire hydrants;
- ✘ Provision of public utility services including IT/telecommunication connections and automation requirement;
- ✘ Construction of vertical seawall and land reserve for future provision of shared marine cargo loading/unloading facility;
- ✘ Provision of associated environmental mitigation measures;
- ✘ Landscape works; and
- ✘ Environmental monitoring.

1.3 Name of Project Proponent

- 1.3.1 Hong Kong Island & Islands Development Office, Civil Engineering and Development Department (CEDD)

1.4 Location and Scale of Project and History of Site

- 1.4.1 The LLP will be developed on the 72 ha out of a total reclamation area of 112 ha off the north shore of Lantau Island immediately to the north of, and encompassing, the existing Siu Ho Wan railway depot. The new reclamation will be an extension of the existing reclamation carried out for the North Lantau Highway and the Siu Ho Wan depot. The exact layout of the proposed LLP reclamation is subject to further study and will be confirmed after detailed investigation. The proposed location of the LLP at Siu Ho Wan and the related major road network are shown on Figure No. PP1 at Appendix 1.
- 1.4.2 The site was previously recommended for mainly residential development and G/IC facilities under Agreement No. CE 1/97 "Remaining Development in Tung Chung and Tai Ho Comprehensive Feasibility Study". The previous feasibility study looked at options aiming at providing an area of around 148 ha for high-rise residential development. With the current use requiring less land, a modified reclamation layout has been adopted that basically follows the previous proposal with the exception that the extent of the western portion off the shoreline is reduced and will be directly under the proposed long-term connection of the Hong Kong Zhuhai-Macao Bridge with North Lantau Highway.

1.5 Number and Types of Designated Projects to be Covered by the Project Profile

- 1.5.1 This Project Profile has been prepared in accordance with Annex 1 of the Technical Memorandum on the Environmental Impact Assessment Process (EIAO-TM). The purpose of the Project Profile is to enable the Director of Environmental Protection (DEP) to determine the scope of the environmental issues associated with the proposed LLP development that shall be addressed in the subsequent Environmental Impact Assessment (EIA) Study, together with the technical and procedural requirements that the EIA Study shall meet.
- 1.5.2 The Project comprises a Schedule 3 Designated Project (DP) as an engineering feasibility study of this development project with a study area covering more than 20 ha. The Project also includes Schedule 2 DPs that, under the EIAO, require Environmental Permits (EPs) to be granted by the DEP before they may be either constructed or operated. It is expected that the following elements under this Project would be classified as Schedule 2 DPs and are covered in this Project Profile:

- ✍ Reclamation works (including associated dredging works) of more than 5 ha in size (considered as a DP under Schedule 2, Part I, C.1 of the EIAO).
- ✍ An elevated roundabout and distributor roads (considered as a DP under Schedule 2, Part I, A.1 of the EIAO).

1.6 Name and Telephone Numbers of Contact Person

Name: Mr. Anka Leung (Hong Kong Island & Islands Development Office,
Civil Engineering and Development Department)

Telephone No: 2231 4423

2 OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

2.1 Project Implementation and Timetable

2.1.1 The LLP development at Siu Ho Wan will be implemented to a super fast track programme. It is anticipated that the Feasibility Study would commence in early 2005 for completion in 2006. The Feasibility Study will be carried out by consultants to be appointed.

2.1.2 Interactions with broader programme requirements or other proposed/committed projects (all of which are subject to confirmation by the relevant project proponents) that shall be considered in the EIA Study include:

- ✍ Infrastructure connecting the Hong Kong-Zhuhai-Macao Bridge with the NLH, the alignment of which may affect the western extent of the LLP project and the access arrangement for the LLP.
- ✍ Transport hub within Siu Ho Wan MTR Depot.
- ✍ Contaminated mud disposal pits at South Brothers, off Tai Ho and Siu Ho Wan coast to the northwest of the LLP project area.¹
- ✍ Road P1 (section between Sham Shui Kok and Airport Island), a route parallel to NLH and be constructed on the reclamation for the LLP.
- ✍ Extension of the Siu Ho Wan Water Treatment Works (SHW WTW).
- ✍ Upgrading works for Siu Ho Wan Sewage Treatment Works (SHW STW).
- ✍ Salt water pumping station intake at Ta Pang Po.
- ✍ Fresh and salt water service reservoirs at SHW
- ✍ Possible logistics park extension/other compatible uses at Siu Ho Wan (western portion of the proposed reclamation)

¹ Construction of the planned contaminated mud disposal facility at South Brothers is tentatively scheduled to commence in mid-2007 and operate in late 2008.

3 POSSIBLE IMPACTS ON THE ENVIRONMENT

3.1 General

3.1.1 The following are possible impacts on the environment arising from the LLP development:

- ✍ Construction work will involve reclamation, construction of surcharge, handling and stockpiling of excavated materials for roadworks, drainage and waterworks, etc., concreting works and construction traffic movements on unpaved roads. These activities will increase the levels of dust. Moreover, during the operation phase, vehicular emissions from increased numbers of vehicles on new roads could cause air quality impact.
- ✍ Plant and machinery used as well as non-mechanical construction activities will generate increased noise levels. Major noise sources would include civil works and general construction activities. During the operational phase, traffic noise would be generated from the increased number of vehicles, especially heavy goods vehicles such as container lorries, using the new roads. Operational noise associated with various trading/logistic/business activities within the LLP would be a concern.
- ✍ Waste generated during the construction phase would comprise excavated materials, construction waste, chemical waste and general refuse, with associated dust and odour emissions, noise, potential hazards and water pollution.
- ✍ Reclamation works and potentially polluted runoff may result in water quality and marine ecological impacts.
- ✍ Reclamation works may affect areas of potential marine archaeological deposit which have not been investigated and/or adequately studied previously.
- ✍ Landscape and visual impacts may arise from the LLP development.
- ✍ High mast lighting resulting from the potential 24-hour 7-day per week operation of the LLP may cause glare impact.
- ✍ There is a possibility of cumulative environmental impacts as a result of concurrent projects undertaken near the LLP development.

4 POSSIBLE ENVIRONMENTAL IMPACTS DURING CONSTRUCTION

4.1 Air Quality

4.1.1 Possible construction phase air quality impacts would include:

- ✍ Fugitive dust arising from the newly reclaimed areas and surcharged areas, construction activities, movement of construction traffic over the site area, and wind erosion of open sites and stockpiling areas.
- ✍ Cumulative impact of fugitive dust resulting from any adjacent construction works that may be implemented at the same time as the LLP development works.
- ✍ Odour generation from dredging and reclamation activities and sediment management.

4.2 Noise

4.2.1 Possible construction noise impacts may result from:

- ✍ Neighbouring concurrent construction works.
- ✍ The use of powered mechanical equipment on construction site.
- ✍ Traffic, especially heavy vehicles, along site access roads.
- ✍ General construction activities associated with site clearance, geotechnical works, dredging/ reclamation works and works for the provision of infrastructure including roads and drains.

4.3 Water Quality

4.3.1 Possible water quality impacts during the construction phase would include:

- ✍ Change in coastline configuration that may influence the hydrodynamic and water quality conditions within the North Western Waters.
- ✍ Temporary elevation in concentration of suspended solids (SS) and generation of sediment plumes, release of organic and inorganic contaminants and nutrients during dredging and filling.
- ✍ Increase in SS levels and turbidity arising from construction site runoff and wastewater generated from construction activities.
- ✍ Change in sediment deposition rate that could affect the ecological sensitive receivers in the vicinity to the construction area.

4.4 Waste Management

4.4.1 Wastes generated by the construction works are likely to include:

- ✍ Site wastes including refuse.
- ✍ Sewage from site toilets & canteens.
- ✍ Chemical wastes such as waste lubricating oils.
- ✍ Construction and demolition materials.
- ✍ Dredged sediment.

Such wastes may result in environmental impacts if not properly controlled/ managed.

4.5 Ecology and Fisheries

4.5.1 Possible impacts to ecology and fisheries during the construction phase would include:

- ✍ Indirect impacts on mangroves and small areas of woodland located near Tai Ho Bay due to LLP development and associated infrastructure works.
- ✍ Indirect impacts on horseshoe crab nursery, seagrass beds and Site of Special Scientific Interest (SSSI) of Tai Ho Bay due to the reclamation works.
- ✍ Direct/indirect impact on the Brown Fish Owls, which have recently been found at Tai Ho Bay.
- ✍ Impacts on Chinese White Dolphins mainly in the form of loss of habitat are expected due to reclamation.
- ✍ Possible impacts to near shore waters and fisheries due to reclamation.

4.6 Cultural Heritage

4.6.1 Impact upon areas/ items of significant cultural heritage on land is considered minimal, as there would be no physical encroachment or interference with known cultural heritage areas.

4.6.2 Potential marine archaeological deposit if present within the reclamation/dredging area would be affected by the proposed reclamation and dredging works off the northeast shore of Lantau Island. It is therefore considered necessary to conduct a marine archaeological investigation (MAI) to ascertain if there are any marine archaeological resources to be impacted by the marine works.

4.7 Landscape and Visual

4.7.1 The primary sources of impact may arise from the impingement of views from both sea and land due to the reclamation works. Such impact should be addressed in the landscape and visual impact assessment to be carried out under the Feasibility Study.

5 POSSIBLE ENVIRONMENTAL IMPACTS DURING OPERATION

5.1 Air Quality

5.1.1 Potential operation phase air quality impact would include:

- ✘ Emissions of nitrogen dioxide (NO₂) and respirable suspended particulates (RSP) from vehicles (especially heavy vehicles).
- ✘ Odour from the Siu Ho Wan Sewage Treatment Works should be taken into account.
- ✘ Emissions of nitrogen oxides (NO_x), particulates (TSP & RSP), sulphur dioxide (SO₂), carbon monoxide (CO) and volatile organic compounds (VOCs) from aircraft. Other air pollutant species in aircraft emissions would include polycyclic aromatic hydrocarbons (PAHs) found in the particulate emissions and certain volatile organic compounds (VOCs).

5.2 Noise

5.2.1 Potential operation noise impact would include:

- ✘ Traffic noise arising from the new roads in the LLP, which may affect existing and future noise sensitive receivers (NSRs).
- ✘ Fixed plant noise sources (such as ventilation exhaust fans, sewage pumping stations, utilities, etc.) and noise associated with various logistics activities and movement of containers and marine cargoes.
- ✘ Aircraft noise arising from the runway and during take-off and landing at the Hong Kong International Airport and helicopter noise from the flight paths along the north coast of Lantau and a helicopter holding point at Pak Mong may have noise impacts on offices in the LLP.

5.3 Water Quality

5.3.1 Potential operational phase water quality impact would include:

- ✘ Runoff arising from the LLP development and new roads.
- ✘ Change in coastline, due to reclamation, that may influence the hydrodynamic and water quality conditions. However, due to the open coastal location and shape of the proposed reclamation, major impacts are not expected.
- ✘ Impact on ecological sensitive receivers due to diversion of storm water outfalls.
- ✘ Sewage generated from the LLP will be diverted to the Siu Ho Wan Sewage Treatment Works and associated impacts are not expected.²

5.3.2 According to the *Remaining Development in Tung Chung and Tai Ho Comprehensive Feasibility Study Environmental Studies Final Assessment Report*, the results of bacterial dispersion modelling indicated that, with Chemical Enhanced Primary Treatment provided

² Expansion programme for SHW STW implemented under *Contract DC/99/10 Outlying Islands Sewerage - Stage 1 Phase 1C, Upgrading of Siu Ho Wan Sewage Treatment Plant, Civil Works* with anticipated completion date in mid August 2005; *Contract DE/99/12 Outlying Islands Sewerage - Stage 1 Phase 1C, Upgrading of Siu Ho Wan Sewage Treatment Plant, E&M Works* with anticipated completion date in late November 2004; and *Contract DE/2002/12 Outlying Islands Sewerage - Stage 1 Phase 1C, Upgrading of Siu Ho Wan Sewage Treatment Plant, UV Disinfection Works* with contract commencement due late February 2005 and with a contract period of 43 months.

at the SHW STW, the water quality objective for Escherichia Coli can be achieved. The findings of the water quality assessment carried out in the above Final Assessment Report should be reviewed to confirm that the LLP development would not adversely affect the performance of the SHW STW outfall.

5.4 Waste Management

5.4.1 Wastes generated during the operation phase would mainly comprise:

- ✍ Industrial and chemical wastes.
- ✍ Commercial wastes (from offices and restaurants).

5.4.2 The closest Refuse Transfer Station is located at Sham Shui Kok. Therefore, with suitable waste management arrangements provided, resulting on-site/ off-site impacts are not expected.³

5.5 Ecology and Fisheries

5.5.1 Reclamation would cause permanent loss of sea area, which provides a small portion of the habitat used by Chinese White Dolphins. Impacts on dolphins are expected and may be cumulative with other concurrent marine projects in North Lantau waters. Given the scale and location of the land use, direct ecological and fisheries impact is not expected. However, there might be indirect impact arising from the loss of foraging ground due to reclamation.

5.5.2 Potential pollution sources during the operation phase would be storm water run-off from the LLP area, possibly contaminated with oils and other substances draining from road surfaces. Given the scale and location of the land use for the LLP, pollution impacts on ecological sensitive receivers and fisheries are not expected.

5.5.3 Impact on Tai Ho Stream SSSI (which includes the estuary of Tai Ho Stream) might arise from the increased sedimentation as a result of reduced current flow within Tai Ho Bay due to shifts in hydrographic conditions resulting from reclamation.

5.5.4 Operations at the LLP may lead to disturbance impacts on sensitive Brown Fish Owls, which use Tai Ho Bay as feeding habitat.

5.6 Cultural Heritage

5.6.1 Cultural heritage impacts during the operation phase are not expected.

5.7 Landscape and Visual

5.7.1 Landscape and visual impacts during operation would result from the new coastline and from LLP development on the newly reclaimed area. The LLP would consist mainly of low-rise industrial development. Impacts would occur primarily from visual obstruction to views from Tai Ho Bay and hillsides in the hinterland (forming the proposed Lantau North (Extension) Country Park). Landscape and visual impacts from any operational noise mitigation measures (e.g. noise barriers, if any) of new roads should also be addressed. Impacts on any loss of natural vegetation and landscape shall be addressed in the landscape and visual impact assessment to be carried out under the Feasibility Study.

³ No consolidated expansion programme for SHW Refuse Transfer Station up to year 2013

5.8 Glare

- 5.8.1 Operation of the LLP would likely be 24-hour, 7-days per week. Floodlights and high mast lighting installed in the LLP may generate glare and light pollution, and potentially affect the safety of aircraft operation since they will be located near the flight path and navigation of marine vessels.

5.9 Risk Assessment

- 5.9.1 Due to storage of chlorine, the SHW WTW is classified as a Potentially Hazardous Installation (PHI). The 1 km PHI consultation zone may impinge upon the eastern end of the LLP development. Therefore, a Quantitative Risk Assessment (QRA) should be undertaken to ensure that risk associated with the SHW WTW complies with Hong Kong Risk Guidelines in case working population of the LLP is brought into the consultation zone.

6 MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

6.1.1 The major existing and planned sensitive receivers and sensitive parts of the natural environment that might be affected by the project include:

- ✍ Coastal waters along North Lantau;
- ✍ Marine resources (including fisheries and fish culture zone at Ma Wan);
- ✍ Terrestrial ecological sensitive receivers at Tai Ho Bay and Tai Ho Valley (woodland, mangroves, Tai Ho Stream SSSI, Brown Fish Owl and avifauna);
- ✍ Marine ecological sensitive receivers near Tai Ho Bay (including Chinese White Dolphins, horseshoe crabs and seagrasses);
- ✍ High visual value of Tai Ho Bay and Tai Ho Valley;
- ✍ Visual sensitive receivers (including travellers along NLH, MTR Tung Chung Line and Airport Express Line, the proposed infrastructure connecting the Hong Kong – Zhuhai – Macao Bridge with NLH, villages further south in Tai Ho Valley such as Tai Ho San Tsuen, Ngau Kwu Long and Tin Liu, and the HKIA);
- ✍ Water quality sensitive receiver (seawater intake at Ta Pang Po);
- ✍ Possible logistics park extension/other compatible uses at Siu Ho Wan (western portion of the proposed reclamation); and
- ✍ Lantau North Country Park and the proposed Lantau North Country Park (Extension).

Figure No. PP2 at Appendix 1 indicates the above major existing and planned sensitive receivers and sensitive parts of the natural environment.

6.1.2 The major elements of the surrounding environment and existing and planned land uses that might affect the area of new development proposed under the Project include:

- ✍ North Lantau Highway;
- ✍ Airport railway;
- ✍ A proposed cross-boundary transport hub above MTRCL's Siu Ho Wan Railway Depot;
- ✍ Proposed Road P1 (section between Sham Shui Kok and Airport Island);
- ✍ SHW STW and its submarine outfall;
- ✍ Upgrading works for SHW STW;
- ✍ SHW WTW extension works including the proposed raw water booster pumping station and associated DN1800 raw water mains at Cheung Tung Road;
- ✍ Proposed infrastructure connecting the Hong Kong-Zhuhai-Macao Bridge with NLH;
- ✍ Proposed salt water pumping station intake at Ta Pang Po;
- ✍ Proposed fresh and salt water service reservoirs at SHW;
- ✍ The planned contaminated mud disposal facilities at South Brothers;
- ✍ Hong Kong International Airport; and
- ✍ Possible logistics park extension/other compatible uses at Siu Ho Wan (western portion of the proposed reclamation).

Figure No. PP3 attached at Appendix 1 indicates the above major elements of the surrounding environment and existing and planned land uses.

7 ENVIRONMENTAL PROTECTION MEASURES TO BE INCORPORATED

7.1 Air Quality Impact

7.1.1 Construction dust is not likely to be an issue, with the implementation of proper dust control and suppression measures as stipulated in the *Air Pollution Control (Construction Dust) Regulation*.

7.1.2 Operational air quality impacts arising from traffic on the new roads would be minimised through incorporation of set-backs, to provide sufficient separation between the major roads and the air sensitive receivers.

7.2 Noise Impact

7.2.1 With the application of mitigation in the form of quieter alternative mechanical plant, installation of movable noise barriers, reduction in number of plant and on-time percentage of powered mechanical equipment, construction noise criteria would be likely to comply with relevant criteria and thus no adverse residual impacts would be expected during the construction phase. Alternative mitigation measures such as quiet construction methods, scheduling/ phasing of noisy construction works, and other possible measures for reducing construction noise impact may also need to be explored. Prohibition of carrying out construction activities during night time period (23:00 – 07:00) is also recommended to alleviate construction noise impact to the surrounding area.

7.2.2 Operational phase traffic noise arising from the new roads and movement of containers and other goods/ packages in the LLP would be minimised with the implementation of noise mitigation measures such as provision of setbacks, alternative road alignments, appropriate adjustment of site layouts and building design, etc. Other direct mitigation measures as stipulated in the Technical Memorandum on Environmental Impact Assessment Process should also be investigated (noise barriers should be recommended if necessary) to reduce noise impacts to sensitive receivers. In accordance with the noise assessment for the Hong Kong International Airport conducted by the Airport Authority, the LLP would be located outside the noise exposure forecast 25 (NEF25) contour and hence the aircraft noise impact on the development would be acceptable. However, the LLP is located close to the helicopter flight paths along the north coast of Lantau and a helicopter holding point at Pak Mong. It is recommended to assess the helicopter noise impact and recommend mitigation measures, if necessary, to protect any noise sensitive uses within the LLP.

7.3 Water Quality Impact

7.3.1 Mitigation measures considered necessary during dredging and filling operations would include:

- ✍ Installation of silt curtains during dredging works.
- ✍ Construction of the seawall in the early stages of the reclamation to effectively confine sediment release during dredging and filling.
- ✍ Reduction of the dredging rate, use of tightly closed grabs, and control of grab descent speed to minimise disturbance to the seabed and sediment loss during dredging and raising of grabs.

7.3.2 For land-based construction activities, water quality impact would be readily mitigated with the adoption of good site arrangement and management practices.

7.4 Sediment Management

- 7.4.1 The requirements and procedures for dredged mud disposal under the Environment, Transport and Works Bureau Technical Circular No. 34/2002 should be followed.

7.5 Waste Management Implications

- 7.5.1 Waste management measures and good site practices in waste handling, disposal and transportation should be implemented.

7.6 Ecological and Fisheries Impact

- 7.6.1 To reduce impact on the marine environment, closed-grab dredger and silt curtains should be deployed to minimise impacts on benthos, other sessile and mobile organisms. Seawalls with riprap facing may be constructed to provide marine habitats. Reclamation should be carried out behind a seawall and only when the seawall is above sea level.

7.7 Cultural Heritage Impact

- 7.7.1 An MAI should be conducted by qualified marine archaeologists to assess the marine archaeological impact to the affected seabed. In accordance with the guidelines from the Antiquities and Monuments Office (AMO), the MAI consists of 4 tasks, i.e. (1) Baseline Review, (2) Geophysical Survey, (3) Establishing Archaeological Potential, and (4) Remote Operated Vehicle (ROV)/Diver Survey/Watching Brief. The archaeological potential of the study area should be firstly identified and established based on the results of Tasks 1 and 2 in order to facilitate formulation of a strategy for investigation. If there is an indication of archaeological potential within the study area, Task 4 will be required to be carried out.

7.8 Landscape and Visual Impact

- 7.8.1 Impacts could be effectively controlled by careful attention to the extent and form of the planned reclamation and the type and height of proposed structures to be placed on the newly reclaimed area. In addition, landscape design of the overall area would help to reduce impacts. The following mitigation measures would be considered for implementation where feasible and necessary:

Roadside Landscaping

- ⌘ Implementation of roadside planting.
- ⌘ Use of planted bunds or landscaped berms to screen developments from the surrounding areas.

Waterfront Promenade

- ⌘ Implementation of a waterfront promenade, forming an integral part of the waterfront promenade network extending from Tung Chung all the way to Siu Ho Wan.

Open Space Framework

- ⌘ Implementation of an open space framework, with green spines and nodes, creating an attractive landscape environment for the LLP and the adjoining waterfront.

Noise Barrier Design

- ✍ Use of transparent panels to reduce visual obstruction.
- ✍ Use of planting adjacent to noise barriers.
- ✍ Appropriate colour selection of panels and support structures to relate to other streetscape structures or surrounds.
- ✍ Design of support structures to incorporate a high level of quality and aesthetics.

Opening up views from Tai Ho Bay

- ✍ Provision of view corridors as an open spatial connection to the Tai Ho Bay area.
- ✍ Stepping down building heights along the waterfront to reduce visual obstruction.

7.9 Glare Impact

7.9.1 For reduction of glare and light pollution, floodlights in particular would need to be carefully positioned and angled so as to minimise light escape to surrounding non-target areas. High mast lighting should neither be pointing skywards nor generating glare impact, which would, in turn, affect safety of aircraft operation. A Glare Impact Assessment should be undertaken in this respect.

7.10 Risk Assessment

- 7.10.1 A QRA should be undertaken and risk mitigation measures may be specified to reduce the risk associated with SHW WTW. The following risk mitigation measures would be considered for the LLP operation where necessary and practicable:
- ✍ Locate the high density LLP working population area away from the two-abovementioned facilities.
 - ✍ Locate the outdoor working area away from the two-abovementioned facilities.
 - ✍ Maximize the use of indoor working environment.
 - ✍ Emergency plan for response to potential chlorine leakage events.

8 USE OF PREVIOUSLY APPROVED EIA REPORTS

8.1.1 There are no relevant EIA reports already approved under the EIA Ordinance. However, the following reports are relevant and will be referred to in the study:

- ✍ Remaining Development in Tung Chung and Tai Ho Comprehensive Feasibility Study, Environmental Studies, Final Assessment Report (June 2000)
- ✍ Hong Kong – Zhuhai – Macau Bridge: Hong Kong Section and North Lantau Highway Connection – Final 9 Month Ecological Baseline Survey Report (June 2004).
- ✍ Extension of Siu Ho Wan Water Treatment Works: Investigation – EIA Report (June 2004).
- ✍ Outlying Islands Sewerage Stage I Phase I Environmental Impact Assessment Report for Package B, C, D & E Final Assessment Report & Environmental Monitoring and Audit Manual (EIAO Register ref. EIA-124/BC)
- ✍ Agreement No. CE 12/2002 (EP), Detailed Site Selection Study for a Proposed Contaminated Mud Disposal Facility within the Airport East/East of Sha Chau Area – Environmental Impact Assessment (EIA) and Final Site Selection Report (Updated)

APPENDIX

Figure No. PP1 – LLP at Siu Ho Wan and Related Major Road Network

Figure No. PP2 – Major Existing and Planned Sensitive Receivers and Sensitive Parts of the Natural Environment that Might be Affected by Lantau Logistics Park Development

Figure No. PP3 – Major Elements of the Surrounding Environment and Existing and Planned Land Uses that Might Affect the Lantau Logistics Park Development

