

**Civil Engineering and Development Department
Geotechnical Engineering Office
The Government of the Hong Kong Special Administrative Region**

**AGREEMENT NO. CE 76/2001 (GE)
10-YEAR EXTENDED LPM PROJECT, PHASE 3, PACKAGE D
OUTLYING ISLANDS, LANDSLIP PREVENTIVE WORKS ON
GOVERNMENT SLOPES AND RELATED STUDIES –
INVESTIGATION, DESIGN AND CONSTRUCTION**

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1 BASIC INFORMATION

Project Title

- 1.1 Agreement No. CE 76/2001 (GE)
10-Year Extended Landslip Preventive Measures (LPM) Project Phase 3, Package D - Outlying Islands Landslip Preventive Works on Government Slopes and Related Studies – Investigation, Design and Construction.

Purpose and Nature of the Project

- 1.2 The acceleration of the LPM Programme was originally arranged as a 5-year Project to end in March 2000. As part of Government's long-term strategy for upgrading slopes and retaining walls (i.e. features) in the New Catalogue of Slopes, the Geotechnical Engineering Office (GEO) has extended the Project for another 10 years beyond the year 2000. This 10-year Extended LPM Project aims to complete the upgrading works for another 2,500 substandard government features and safety-screening studies for another 3,000 private features by the year 2010.
- 1.3 The objective of this Agreement is to upgrade up to 30 government features in Lantau, Cheung Chau and Lamma Island. The scope of works comprises minor earthworks to facilitate landscaping, soil nailing, rock slope stabilization measures, drainage improvements and landscaping works.

Name of Project Proponent

- 1.4 The Project Proponent is Landslip Preventive Measures Division 3 of the Geotechnical Engineering Office, Civil Engineering and Development Department, Government of the Hong Kong Special Administrative Region (HKSAR).

Location and Scale of Project

- 1.5 The Agreement involves investigation, design and upgrading works for the 30 substandard features, which are distributed over the areas of Lantau, Cheung Chau and Lamma Island. Among them, one feature falls partly within the Lantau North Country Park while four features fall wholly within the Lantau South Country Park and one feature falls partly within the Lantau South Country Park.
- 1.6 Upon completion of ecological studies for the above six potential Designated Projects, a set of ecological reports was submitted to the Environmental Protection Department (EPD) for determination of Designated Projects. Subsequently, only one feature (Feature No. 13NW-B/C319) in Lantau is considered as a Designated Project after detailed review by EPD. The general location of this feature is presented in Figure 1. This report addresses the environmental issues associated with the proposed LPM works for the Designated Project.

Number and Type of Designated Project Covered by the Project Profile

- 1.7 In accordance with Category Q.1 (a) of Part 1, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO), the Feature No. 13NW-B/C319 in Lantau is regarded as a

Designated Project and this feature falls wholly within the Lantau South Country Park, near to Keung Shan. Therefore, an Environmental Permit must be obtained prior to the commencement of the LPM works for Feature No. 13NW-B/C319 (named as “Designated Project” hereafter) under the EIAO.

Name and Telephone Number of Contact Person(s)

- 1.8 All queries regarding the project can be addressed to the project proponent (Mr. Mark J. Shaw/GEO) or their consultants (Mr. Patrick Chao/MGSL):

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2 OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

Implementation and Planning of the Proposed Project

- 2.1 The Agreement was awarded by the Civil Engineering Department to Maunsell Geotechnical Services Ltd. (MGSL) as the engineering Consultant in March 2002. MGSL is responsible for the design and supervision of the LPM works for the Designated Project. The proposed upgrading works will be undertaken in the Works Contract No. GE/2004/12.
- 2.2 The sequence of the proposed slope works, generally comprising 6 activities, is described below:

Activities	Details
1. Minor earthworks including slope trimming and removal of slope debris materials	<ul style="list-style-type: none"> - minor trimming of slope surface to remove loose materials and overhanging blocks and disposal of the excavated materials - removal of slope debris materials
2. Installation of soil nails	<ul style="list-style-type: none"> - drilling holes into slope for installation of steel bars and grouting up the holes as soil nails
3. Construction of concrete skin wall	<ul style="list-style-type: none"> - minor slope trimming - construction of concrete skin wall with sub-soil drain
4. Drainage improvement works	<ul style="list-style-type: none"> - construction of concrete surface drainage channels to control surface runoff
5. Sprayed concrete surface cover	<ul style="list-style-type: none"> - provision of sprayed concrete surface cover on the slope surface
6. Landscaping works	<ul style="list-style-type: none"> - painting of sprayed concrete surface cover - hydroseeding, shrubs and tree planting at the slope toe

- 2.3 Details of the Designated Project and a summary of the above activities are presented in Tables 2.1 and 2.2 respectively.

Table 2.1 Details of the Designated Project

Feature No.	Height	Length along slope toe (m)		Slope angle		Existing cover	
	(m)	In Soil	In Rock	In Soil	In Rock	In Soil	In Rock
13NW-B/C319	24	190	-	65°	-	40% of vegetation and 60% of bare surface	-

Table 2.2 Proposed Works for Designated Project

Feature No.	Proposed Works
13NW-B/C319	<ul style="list-style-type: none"> • Removal of the slope debris materials at the toe • Minor trimming of the rugged slope surface • Installation of soil nails and construction of concrete skin wall • Drainage improvement works • Provision of painted sprayed concrete surface cover • Landscape works of hydroseeding with shrub mix and tree planting at the slope toe

Tentative Project Timetable

- 2.4 The proposed LPM works for the Designated Project shall be carried out under the LPM SoR Contract. The whole Contract is scheduled for commencement in September 2004 with duration of 24 months while the construction works for Designated Project are scheduled for commencement in December 2004 with duration of 7 months.
- 2.5 The approximate periods for the various construction activities of the Designated Project are shown in Table 2.3. It should be noted that some of the construction activities (for example, installation of soil nails, construction of concrete skin wall and drainage improvement works) would be carried out concurrently.

Table 2.3 Duration of Construction Activities

Activities	Anticipated Duration
1. Minor earthworks including slope trimming and removal of slope debris materials	1-2 months
2. Installation of soil nails	2-3 months
3. Construction of concrete skin wall	1 month
4. Drainage improvement works	1.5-2 months
5. Sprayed concrete surface cover	1-1.5 months
6. Landscaping works	1 month

Interactions with Broader Programme Requirements or Other Projects

- 2.6 The interactions of the LPM works for the Designated Project under this Agreement with other on-going projects have been studied, according to the information from the Project Coordination Group (PCG) for Utilities & Slope Works along South Lantau chaired by Transport Department. Some on-going active projects include laying works of pipeline undertaken by Drainage Services Department under the project of Outlying Islands Sewerage Stage 1 Phase 1 Ngong Ping Sewage Treatment Works and Sewerage (Agreement No. CE 29/2001 and Contract No. DC/2003/01), LPM slope upgrading works projects from Mui Wo to Pui O and Shek Pik to Tai O (Contract No. GE/2001/06 and GE/2002/17 respectively) and CLP 132kV cable laying works along South Lantau Road from Pui O to Shek Pik.

- 2.7 The LPM works for the Designated Project would not require any road closure and hence temporary traffic arrangement is not necessary. No interference of the LPM works for the Designated Project with other on-going active projects is, therefore, expected.

3 MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

Air Quality

- 3.1 Vehicle emissions at Keung Shan Road on Lantau Island would be the only major source of existing air pollution in the vicinity of the Designated Project located along Keung Shan Road. No other source of air pollution has been identified. The level of pollution is expected to be low due to the low to moderate traffic flows.
- 3.2 In the absence of in-situ monitoring data for the proposed works area at the Designated Project on Lantau Island, the annual average concentrations of pollutants measured at EPD's nearest monitoring station (Tung Chung) would be used as a reference to provide information on the background air pollutant levels. Table 3.1 summarizes the annual average concentrations of the pollutants as reported in the "Air Quality in Hong Kong, 2001" published by EPD.

Table 3.1 Air Pollutant Levels Recorded at EPD's Air Quality Monitoring Stations (Tung Chung)

Pollutants	Annual Average Concentrations ($\mu\text{g}/\text{m}^3$)
TSP	71
NO ₂	46
RSP	49

- 3.3 In accordance with Annex 12 of the *Technical Memorandum on Environmental Impact Assessment Process* (EIAO-TM), no representative air sensitive receivers (ASRs) were identified close to the site.

Noise

- 3.4 The Designated Project is located along Keung Shan Road in Lantau Island. Keung Shan Road is a major road in the southwest of Lantau, running north to south above the western edge of Shek Pik Reservoir. The major source of existing noise would be road traffic. Traffic flow is relatively low on Keung Shan Road, however the noise level is expected to be higher during the weekends and on public holidays due to the influx of visitors. According to Annex 13 of EIAO-TM, country parks would be regarded as noise sensitive receivers (NSRs). Visitors to the Lantau South Country Park would potentially be impacted by the proposed construction works at the Designated Project. Nonetheless, the EIAO-TM does not specify a limit for construction noise levels received at a country park, construction noise impact assessment at the Lantau South Country Park is thus addressed qualitatively in the sections below.
- 3.5 No representative noise sensitive receivers (NSRs) were identified close to the site. NSRs were identified in accordance with the definitions as set out in Annex 13 of the EIAO-TM for the purpose of quantitative noise assessment.

Water Quality

- 3.6 A drainage culvert lies to the west of the works area of the Designated Project (Figure 2).

- 3.7 The Designated Project is located inside the area of Water Gathering Grounds demarcated by Water Supplies Department (WSD).

Ecology

- 3.8 Ecological surveys of the proposed works area and adjacent areas were conducted in September 2003. The surveys consisted of the following aspects:

Habitat/Vegetation Surveys

- 3.9 Dominant and notable plant species (Appendix A refers), relative abundance and growth forms were recorded. Identification of species and status in Hong Kong were made with reference to Corlett et al. (2000) and Agriculture, Fisheries and Conservation Department (AFCD) (2002).

Wildlife Surveys

- 3.10 Wildlife including avifauna, herpetofauna and terrestrial insects (Odonates and Lepidoptera) was surveyed by direct sighting and listening for calling animals. Active searching of potential herpetofauna/mammal habitats was undertaken. Signs of terrestrial mammals (i.e., droppings, footprints and burrows) were searched for (Appendix B refers).

Areas of Conservation Interest

- 3.11 The Designated Project (Appendix C refers) is adjacent to Keung Shan in Western Lantau that falls within the boundary of Lantau South Country Park.
- 3.12 Natural areas of woodland exist within both of Lantau's Country Parks, principally on the lower slopes of Lantau and Sunset Peaks (both areas were designated as "Special Areas" in January 1980). Extensive afforestation work has been carried out in many places and plantations have been established mainly in Chi Ma Wan and around the water catchment areas of Shek Pik Reservoir. Scrub and coarse grassland covers much of Lantau Island, the latter being predominant on the higher areas exposed to strong winds. On the more sheltered lower slopes, and in stream valleys, the surface lends itself more to scrub growth.
- 3.13 Ecological surveys were therefore undertaken at the Designated Project by Maunsell Environmental Management Consultants Limited (MEMCL) to establish the ecological profile of potentially impacted areas. This report presents the results of the surveys conducted in September 2003 covering habitat/vegetation and wildlife as described in the following paragraphs:

Habitat/Vegetation

- 3.14 This site is dominated by a steep soil cut slope approximately 180m in length. Much of the slope face consisted of exposed soil, although small patches of herb and shrub species (e.g., *Rhodymyrus tomentosa*, *Blechnum orientale*, *Dicranopteris linearis*, *Lygodium japonicum*) were recorded on some parts of the slope face. Areas to the north, west and east of the Designated Project were dominated by *Acacia confusa* and *Pinus massoniana* plantation. Areas south of the Designated Project were dominated by grassland/shrubland mosaic. Typical species in this habitat included *Rhodymyrus tomentosa* and *Dicranopteris linearis*. Small patches of wasteland supporting species associated with disturbed habitats (e.g., *Ageratum conyzoides*, *Lantana camara*) were also recorded near the Designated Project.

- 3.15 Two plant species of conservation interest, the trees *Aquilaria sinensis* and *Gmelina chinensis* (Appendix D refers), were recorded within the proposed works area. *A. sinensis* is a wild plant under State protection (Category II) and recorded in *China Plant Red Data Book* and *Illustration of Rare and Endangered Plants in Guangdong Province*, and *G. chinensis* is recorded in *Illustration of Rare and Endangered Plants in Guangdong Province*.
- 3.16 The orchid *Arundina graminifolia* (Appendix D refers), which is protected under Hong Kong Legislation, was recorded approximately 20m from the southeastern side of the proposed works area boundary.

Wildlife

- 3.17 A total of eight species of bird were recorded at the Designated Project and adjacent habitats during recent surveys (Appendix B refers). Most of the species recorded are common and widespread in Hong Kong.
- 3.18 No amphibian and reptile species were recorded at the Designated Project and adjacent habitats during recent surveys. No direct or indirect observations of mammals were made during the surveys.
- 3.19 Eight species of butterfly, and four species of odonate were recorded at the Designated Project and adjacent habitats (Appendix B refers). All the recorded terrestrial insects are common and widespread in Hong Kong.

Cultural Heritage

- 3.20 No declared monument is located wholly or partly within the works area for the Designated Project.

Landscape and Visual Impact

- 3.21 The Designated Project on Lantau Island is visually sensitive as it is located along Keung Shan Road. The slope surface of Designated Project is partly bare and partly vegetated.

4 POSSIBLE IMPACT ON THE ENVIRONMENT

General

- 4.1 The potential environmental impacts of the LPM works in Lantau Island are reviewed in this section.

Construction Phase

Air Quality

- 4.2 Potential construction phase air quality impacts pertinent to the Project would include dust nuisance and gaseous emissions from the construction plants and vehicles. Fugitive dust emissions arising from minor earthworks for the removal of existing slope surface material, drilling operations and wind erosion would be the main sources of air pollution.
- 4.3 Given that the number of plants to be used on site would be limited and the works area would be small, adverse dust impacts during construction would not be anticipated with the incorporation of mitigation measures stipulated in the Air Pollution Control (Construction Dust) Regulation. Vehicle and plant exhaust emissions from the site would not be considered to constitute a significant source of air pollution.

Noise

- 4.4 According to the construction programme of this Designated Project, the site works are scheduled for commencement in December 2004 with duration of 7 months.
- 4.5 No NSR was identified within the assessment area (i.e. 300m from the boundary of the proposed works area) apart from the Lantau South Country Park. Visitors to the Country Park would potentially be impacted by the proposed construction works at the Designated Project. However, the EIAO-TM does not specify a limit for construction noise levels received at a Country Park. Taking into account the transient nature of visitors to the Country Park, insurmountable construction noise impact on these NSRs would not be anticipated.

Water Quality

- 4.6 Water-bodies potentially affected by the proposed slope works include a drainage culvert to the immediate west of the southern end of the works area of the Designated Project (Figure 2 refers). Site runoff and drainage from the works area of the Designated Project, if uncontrolled, could enter the drainage culvert.
- 4.7 The Designated Project is located inside the area of Water Gathering Grounds demarcated by WSD and therefore the "Conditions for Working within Water Gathering Grounds", issued by WSD, should be strictly followed for the slope works (see Section 5 of this report).
- 4.8 During the construction phase, runoff and drainage from construction site would be the main sources of potential water quality impacts to the nearby water bodies. Site runoff and drainage may contain increased loads of suspended solids and contaminants. Potential sources of pollution from site drainage include: runoff and erosion from exposed soil surfaces and stockpiles; release of grouting and cement materials with rain wash; wash water from

dust suppression sprays; and fuel and lubricants from maintenance of construction vehicles and mechanical equipment. Sewage arising from the on-site construction workforce would also have the potential to cause water pollution if it is discharged directly into adjacent waters without any appropriate treatment.

Waste Management

- 4.9 Construction waste would be generated during vegetation clearance, removal of slope debris materials and minor trimming of slope surface for the Designated Project. The waste generated from vegetation clearance would be taken to the Mui Wo Transfer Facility managed by EPD while the soil waste materials would be taken to the Mui Wo Public Fill Stockpiling Area managed by the Civil Engineering and Development Department (CEDD). Permissions have been granted from EPD and CEDD for waste disposal to these designated facilities.
- 4.10 Estimated volumes of the waste materials are summarized in Table 4.1 below. Provided that these waste materials are handled, transported and disposed of using the recommended methods in Section 5 and that good site practices are adhered to, no adverse environmental impacts and nuisance would be expected.

Table 4.1 Estimated Waste Material Arisings

Type of Waste Materials	Estimated Volume	Designated Waste Disposal Facility
Vegetation Clearance	300 m ³	Mui Wo Transfer Facility managed by EPD
Soil	1,500 m ³ (Including slope debris materials and minor trimming of slope surface)	Mui Wo Public Fill Stockpiling Area managed by CEDD
Total	1,800 m ³	

Ecology

- 4.11 Removal of slope debris and the trimming of slope surface at the Designated Project would require vegetation clearance of an estimated area of 1,800m². No tree felling is proposed and it would be strictly avoided during the construction stage. In addition, tree rings are proposed for existing trees on the slope surface. The impact of vegetation clearance is considered relatively minor, as the affected habitats (grassland/shrubland and plantation) are of low ecological value. Two plant species of conservation interest recorded on the works area (*Aquilaria sinensis* and *Gmelina chinensis*) would potentially be affected by the proposed works. No direct impacts are anticipated to the protected *Arundina graminifolia*, which was recorded adjacent to the proposed works area.
- 4.12 Other potential indirect impacts to the works area and adjacent habitats/wildlife would result from construction phase activities and increased human activity during the construction phase, such as trampling of habitats/vegetation, littering, human waste discharge and fires. Such impacts would be temporary in nature and only affect low value ecological habitats. Provided the mitigation measures presented in Section 5 are implemented, indirect ecological impacts are expected to be minimal.

Table 4.2 Area of Vegetation Removal

Approximate Total Slope Works Area at the Designated Project (m ²)	Approximate Area of Vegetation to be Removed (m ²)
4,500	1,800 (Tree rings are proposed for existing trees on the slope surface)

Cultural Heritage

4.13 No declared monument would be affected by the proposed LPM works.

Landscape and Visual Impact

4.14 During the construction works, temporary scaffolding and working platforms would be erected on the slope face to install soil nails and carry out landscaping works. No tree felling would be required.

Table 4.3 Predicted Tree Felling

Approximate Number of Trees within Slope Works Area of the Designated Project	Number of Trees to be Felled	Number of Trees to be Transplanted
60	0	0

Operation Phase

4.15 No adverse impact would be expected during the operation phase of the proposed LPM works with regard to the environmental issues of noise, air quality, water quality, waste management, ecology and cultural heritage.

4.16 It is expected that the proposed LPM works with proposed tree planting and the other landscaping works would result in positive impacts in terms of landscape character in the long term.

5 ENVIRONMENTAL PROTECTION MEASURES TO BE INCORPORATED IN THE DESIGN AND ANY FURTHER ENVIRONMENTAL IMPLICATIONS

Air Quality Impact

5.1 Dust mitigation measures stipulated in the Air Pollution Control (Construction Dust) Regulation should be implemented to minimize fugitive dust emissions from the works area during the construction phase. Relevant control measures are listed below:

- Use of regular watering to reduce dust emissions from exposed site surfaces and unpaved road, with complete coverage, particularly during dry weather;
- Use of frequent watering for particularly dusty static construction areas;
- Tarpaulin covering of all dusty vehicle loads transported to and from site; and
- Water construction vehicles' wheel and body before exiting construction site.

Noise Impact

5.2 The following good site practices are recommended and have been incorporated into the Contract Specification:

Good Site Practice

5.3 Good site practices and noise management would considerably reduce the impact of construction activities on nearby areas. The following package of measures should be followed during each phase of construction:

- Only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program;
- Silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction program;
- Machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; and
- Material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities.

Water Quality Impact

5.4 The Contractor shall comply with the Water Pollution Control Ordinance (WPCO) and its subsidiary regulations. In addition, the Contractor shall comply with the "Conditions for Working within Water Gathering Grounds" issued by WSD for the proposed LPM works at the Designated Project (refer to Appendix E).

5.5 The Contractor should ensure that all runoff arising from the work sites are properly treated, e.g. by the use of sedimentation tank or silt trap, and that the discharge standards as stipulated in WPCO are met. Any trade effluent or foul or contaminated or cooling or hot water should not be discharged into any public sewer, stormwater drain, channel, stream course or the sea. If toilet facilities are erected, foul water effluent should be directed to a foul sewer or to a sewage treatment and disposal facility.

- 5.6 The Contractor should be responsible for the design, construction, operation and maintenance of all the mitigation measures and practices specified in the Professional Persons Environmental Consultative Committee Practice Note (ProPECC PN) 1/94 "Construction Site Drainage" issued by the Director of Environmental Protection.

Waste Management Implications

- 5.7 The Contractor should comply with the Waste Disposal (Chemical Waste) (General) Regulation, the Waste Disposal Ordinance and its subsidiary regulations.
- 5.8 The Contractor should not permit any sewage, waste water or effluent containing sand, cement, silt or any other suspended or dissolved material to flow from site onto any adjoining land or allow any waste matter which is not part of the final product from waste processing plants to be deposited anywhere within any site or onto any adjoining land.
- 5.9 The construction waste generated by the Contractor on-site would be transported to the designated disposal facilities managed by EPD or CEDD. Monitoring of the Contractor's compliance with the requirements of the trip ticket system would be carried out to ensure that the waste actually reaches the intended disposal facility and the correct procedures are being followed at all times.

Ecology

- 5.10 Overall, ecological impacts resulting from the proposed works are expected to be relatively minor. The works would be small in scale, and direct impacts would be limited to common habitat types of low ecological value. Landscape planting would provide compensation for disturbance to existing vegetation on the Designated Project.
- 5.11 The most notable potential impact would be to plant species of conservation interest recorded on the Designated Project. The location of these plants would be taken into consideration during the detailed design of slope works, and if practicable, they would be retained *in-situ*. If the proposed works would unavoidably affect the plants, as a last resort, it is recommended they be transplanted to suitable nearby locations prior to construction phase commencement.
- 5.12 Standard good site practice would be implemented to ensure disturbance to the surrounding habitats is avoided or minimized. Such measures would include:
- Placement of equipment or stockpile in the works area and access routes would be selected at existing disturbed land where possible to minimise disturbance to vegetation, or at the locations most convenient to gain access to the slope area. If existing vegetation is affected for the latter case, tree felling would be avoided and appropriate mitigation measures (for example, hydroseeding with shrub mix) would be proposed for the affected area. The choice of temporary stockpiling area and access routes would be far away from the identified plant species of conservation interest.
 - Construction activities would be restricted to works area that should be clearly demarcated.

- Temporary works area would be reinstated immediately after completion of the construction work.
- To protect nearby watercourses, water quality mitigation measures stipulated in Sections 5.4-5.6 would be implemented.
- Open fires would be strictly prohibited on the works site.
- Waste generated from the site would be disposed of in a timely and proper manner.
- The Resident Site Staff would monitor the proper implementation of the above mitigation measures.

Cultural Heritage

- 5.13 The impact assessment showed that no sites of cultural heritage would be affected by the proposed slope works and therefore no mitigation measures would be required.

Landscape and Visual

- 5.14 Temporary hoarding would be erected along the toe of the works site to screen the proposed LPM works. Current vegetation cover on the slope surface of the Designated Project would be removed and replaced by sprayed concrete with colour paints and planter holes to reduce visual impacts. In addition, hydroseeding with shrub mix and planting of tree at the area between the slope toe and the feature boundary are proposed. The visual impact of the maintenance staircase would be minimized by avoiding the use of steel ladders as far as possible. An outline of the landscape mitigation proposal is presented in Figure 3 and Table 5.1 below.

Table 5.1 Outline of Landscape Mitigation Proposals

Landscape Mitigation Proposal for the Designated Project
<ul style="list-style-type: none">• Planting of climbers in planter holes across the proposed sprayed concrete surface cover• Colour painting to the proposed sprayed concrete surface cover on the entire slope• Hydroseeding with shrub mix and planting of standard trees of species <i>Bombax malabaricum</i>, <i>Liquidambar formosana</i> and <i>Sapium sebiferum</i> at the area between the slope toe and the feature boundary

Severity, Distribution and Duration of Environmental Effects

- 5.15 No adverse residual environmental impacts are anticipated with the implementation of the recommended mitigation measures.

Further Implications

- 5.16 No further environmental implications are anticipated with the implementation of the recommended mitigation measures.

6 USE OF PREVIOUSLY APPROVED EIA REPORTS

6.1 A relevant Project Profile submitted for application for permission to apply directly for an Environmental Permit (EP) is list as below:

- Agreement No. CE 40/2000 10 Year Extended LPM Project Phase 2, Package G – Outlying Islands Features Near Shek Pik Reservoir, Lantau Island – Project Profile (Submitted in August 2002 and EP was granted in November 2002 with EP No. EP-148/2002)