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ACE-EIA Paper 5/2008
For advice

Environmental Assessment Report
Pilot Project for Public-private Partnership Conservation Scheme
at Sha Lo Tung Valley, Tai Po

PURPOSE

This paper presents the key findings and recommendations of the Environmental Assessment (EA) report for the proposed project at Sha Lo Tung Valley, Tai Po. The project proponent, Sha Lo Tung Development Company (SLTDC) and their consultants will be represented at the EIA Subcommittee meeting on 8 September 2008.

ADVICE SOUGHT

2. Members' views are sought on the findings and recommendations of the EA report.

BACKGROUND AND NEED FOR PROJECT

3. Following a comprehensive review of the nature conservation policy and measures, the Government promulgated the New Nature Conservation Policy (NNCP) in end 2004. The NNCP aims at regulating, protecting and managing natural resources that are important for the conservation of biological diversity of Hong Kong in a sustainable manner, taking into account social and economic considerations, for the benefit and enjoyment of the present and future generations of the community. Under the NNCP, 12 priority sites have been identified for enhanced conservation under a scoring system drawn up by an Expert Group with membership comprising key

academics and major green/interest groups with expertise in ecology.

4. Under the NNCP, the Government proposed to implement the Pilot Scheme for Public-private Partnership (PPP), with a view to striking a balance between sustainable development and nature conservation. Under this scheme, development of an agreed scale will be allowed at the ecologically less sensitive portion of any of the 12 priority sites, provided that the project proponent undertakes to conserve and manage the rest of the site that is ecologically more sensitive on a long-term basis. We received a total of six applications including the Sha Lo Tung project.

5. The Sha Lo Tung project was first discussed by the Nature Conservation Subcommittee of the Advisory Council on the Environment (NCSC) on 9 April 2008 and then by the Advisory Council on the Environment (ACE) on 14 April 2008. The ACE noted the ecological merits of the proposal as the ecologically important Sha Lo Tung Valley would be managed as an Ecological Reserve whereas the proposed development of a Multi-cultural Educational Retreat cum Columbarium Complex would only be carried out in the adjacent Green Belt site which was of less ecological significance. The ACE agreed that the Government should support the Sha Lo Tung project from the nature conservation angle. The NCSC further discussed the proposed conservation management plan for the Ecological Reserve on 14 August 2008 and agreed that the proposed measures could enhance the ecological value of Sha Lo Tung Valley.

6. Though the project is not a designated project under the Environmental Impact Assessment Ordinance (EIAO), SLTDC has completed an EA Report for the project and agreed to go through the same public inspection and consultation process using the same standards and criteria under the EIAO including seeking advice from the ACE.

7. In response to ACE Members' concerns that a robust mechanism and legally enforceable measures have to be put in place to ensure the full implementation of recommendations and mitigating measures identified in the EA Report, the Government is considering appropriate legally-binding instruments such as contractual agreements between the Government and SLTDC.

DESCRIPTION OF THE PROJECT

8. The project includes three components, i.e. (a) Ecological Reserve, (b) Development Site and (c) Sha Lo Tung Road improvement. A brief description is

set out below and their locations are shown in **Figure 1**:

- (a) *Ecological Reserve*: SLTDC proposes to surrender all of the land it owns in Sha Lo Tung Valley (about 27 ha, representing 96% of the private land in the valley) to the Government for setting up an Ecological Reserve of approximately 52 ha. In order to enhance the ecological value of the site, SLTDC intends to implement a comprehensive management plan for the Ecological Reserve. Under the plan, there are measures to conserve the dragonfly biodiversity through protecting the important habitats. Moreover, SLTDC has agreed to implement measures to prevent hill fire, remove exotic vegetation, enhance the quality of secondary woodland, conserve target species and habitats, restore abandoned farmland, manage the proposed Nature Interpretation Centre at the Development Site, and to promote conservation education. SLTDC has undertaken to spend \$50 million to set up the Ecological Reserve and inject another \$120 million into a trust to finance the long-term operation of the Ecological Reserve of which the majority of trustees would be appointed by the Government.
- (b) *Development Site*: SLTDC requests a piece of government land of some 5 ha in the adjacent “Green Belt” for the development of a Nature Interpretation Centre, and a Multi-cultural Education Retreat cum Columbarium Complex (with a footprint of approximately 1.5 ha). It will pay for the full market premium to effect the land exchange.
- (c) *Sha Lo Tung Road improvement*: The existing Sha Lo Tung Road (approximately 2.3 km) which is the only access road to the Sha Lo Tung Valley will be upgraded by SLTDC at its own cost to the minimum requirement of a safe Single Track Access Road that would enable emergency access for fire engines. In addition, SLTDC will further inject \$20 million into a trust to finance the management and maintenance of the road.

CONSIDERATION OF ALTERNATIVE OPTIONS

9. The EA Report has considered alternative layout options for the development site with a view to avoiding and minimizing disturbance and impact on nearby ecological

sensitive areas. The recommended layout as shown in **Figure 2** has the following features in this respect:

- (a) no encroachment onto the nearby country park, conservation area and Site of Special Scientific Interest (SSSI);
- (b) provision of a 20 m non-building buffer between the development site and the Sha Lo Tung SSSI;
- (c) majority of the building works is located at the southern part of the development site and away from the secondary woodland and Sha Lo Tung SSSI; and
- (d) no restaurant in the development to reduce human disturbance.

SPECIFIC ENVIRONMENTAL ASPECTS TO HIGHLIGHT

Water Quality and Ecological Impacts

10. The ecologically important habitats of the Sha Lo Tung Valley are stream and marsh, which are important breeding and development grounds for dragonflies, fresh water fishes and woodland. As the development site is immediately adjacent to the Sha Lo Tung Valley, the construction activities and silty runoff especially during rainy seasons will have the potential to bring about water quality and ecological impacts. The EA Report has recommended the following mitigation measures for the development site:

- (a) new stormwater drainage and sewerage systems will be installed along the Sha Lo Tung Road prior to construction works so that silty runoff and sewage generated from construction activities will be collected and diverted away from the Sha Lo Tung Valley;
- (b) temporary drains with silt traps will be constructed at the development site boundary for collection of silty runoff;
- (c) no excavation works will be carried out in wet season from April to October to minimize generation of silty runoff;

- (d) construction works will be carried out in stages starting from the southern part of the site to minimize cumulative impact arising from concurrent works within the site; and
- (e) 2 m high gap-free hoardings will be installed along the northern part of the site to prevent possible spillage of silty runoff to the Sha Lo Tung Valley.

11. With the above mitigation measures in place, the residual water quality and ecological impacts arising from the construction of the development site is not expected to cause any exceedance to the requirements of the Technical Memorandum on Environmental Impact Assessment Process (EIA-TM).

12. While the development site and road improvement works will not result in loss of ecologically important habitats (including country parks, SSSIs, conservation areas and streams), about 0.36 ha of secondary woodland including 0.16 ha at the development site and 0.20 ha due to the road improvement works will be lost and about 2 ha of on-site compensatory planting will be provided.

13. The Nature Interpretation Centre, Multi-cultural Education Retreat and Columbarium Complex are equipped with toilet facilities and the sewage collected will be discharged via the new sewer to public sewerage system. An on-site retention tank is installed to cater for maintenance of the new sewer without the need to discharge sewage into nearby watercourse. During Ching Ming Festival and Chung Yeung Festival, SLTDC will provide shuttle bus service to visitors and trained personnel for crowd control to minimize the human disturbance and potential impact on the nearby ecologically important areas.

Pollution Risks and Impact on Water Gathering Ground

14. The project (including the Development Site and the northern part of the road improvement works along the existing Sha Lo Tung Road) is located within the Water Gathering Ground (WGG). The EA Report recommends a package of measures to prevent pollution and siltation at the WGG:

- (a) no earth, building materials, fuel, oil or toxic materials and any other materials which may cause contamination to the WGG are allowed to be

stockpiled or stored on site;

- (b) no storage and discharge of flammable or toxic solvents, petroleum oil or tar and other toxic substances will be allowed within the WGG;
- (c) all surplus spoil shall be removed from WGG as soon as possible and in the event that the spoil have to be stockpiled on site, the stockpiling will take place at a designated area located at the southern part of the development site which is over 300 m away from the Sha Lo Tung SSSI and streams and the area will also be provided with concrete paving, concrete bunds and interceptor drains along its perimeter to prevent the loss of materials to the surrounding area;
- (d) all excavated or filled surfaces which have the risk of erosion shall be protected from erosion at all time;
- (e) facilities for washing the wheels of vehicles before leaving the site shall be provided;
- (f) any construction plant which causes pollution to the WGG due to leakage of oil or fuel shall be removed off site immediately;
- (g) any soil contamination with fuel leaked from plant shall be removed off site and the voids arising from removal of contaminated soil shall be replaced by suitable material;
- (h) use of pesticides, herbicides or fertilizers will not be allowed within the WGG without prior approval from the Director of Water Supplies; and
- (i) watertight and leak-proof sewers will be used in WGG.

15. Moreover, as a precautionary measure to ensure that pollution risks and impact on the WGG are minimized to the most practicable extent, surface runoff during operation from the paved areas of the development site will be collected and stored in an underground water storage tank with sufficient capacity (1 in 200 years drainage capacity for the first 45 minutes). The surface runoff collected will be discharged via the new stormwater drainage system to the public drainage system.

Other Environmental Impacts

16. The EA Report has also assessed the potential impacts of construction dust and noise, sewerage, waste management, and visual and landscape impact. The assessments concluded that, with appropriate mitigation measures in place, the anticipated environmental impacts are considered acceptable in meeting relevant requirements under the EIA-TM.

ENVIRONMENTAL MONITORING AND AUDIT

17. The EA report has recommended an Environmental Monitoring and Audit programme during both the construction and operation phases of the project.

PUBLIC CONSULTATION

18. SLTDC has made the EA report and Executive Summary available for public inspection from 5 August to 3 September 2008. Members will be briefed on comments received from the public at the meeting.

August 2008
Environmental Protection Department

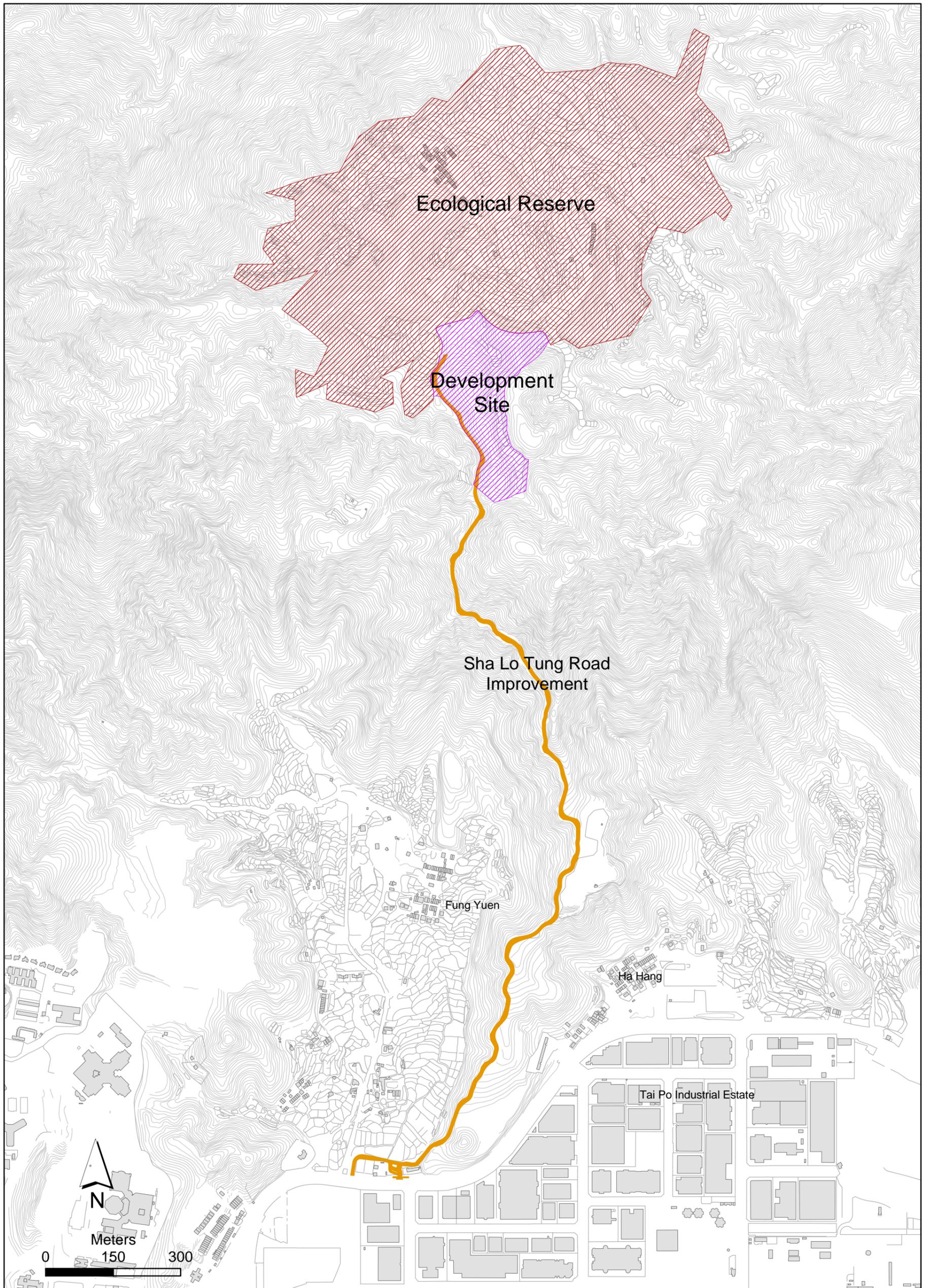


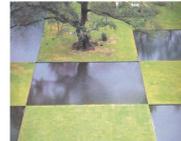
Figure 1

Three Components of the Project: Ecological Reserve, Development Site and Sha Lo Tung Road Improvement

Environmental
Resources
Management



Concept Images



Temple Courtyards

Entry Precincts

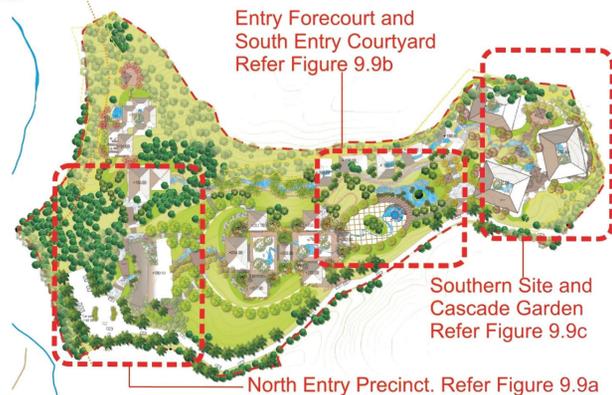
Cascade Garden

Conservation Garden

Feature Gardens



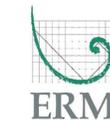
Key to Precinct Plan



Project Coordinator and Planning Consultant:



Environmental Consultant:



Land Advisor:

LARRY H.C. TAM AND ASSOCIATES LTD.

Engineering Consultant:



Town Planning and Development Consultants:



Traffic Engineers:



Client

Sha Lo Tung Development Co. Ltd in association with



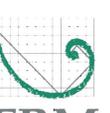
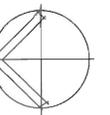
Revisions

A	Interpretation Centre Update	16/05/07
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Drawn By	Checked By	Drawing No	Revision No	Scale
LG	SL	Ls1	-	1:750@A1

Option 2 Proposed Option Master Plan
Interpretation Centre, Columbariums and Multi-Cultural Education Retreat
Sha Lo Tung, Hong Kong
Figure 2

Landscape Architecture & Urban Design
21 / F Lincoln House
379 Kings Road
Tsimshatsui
Island East, Hong Kong
Project No. 0042510
April 2008
ENVIRONMENTAL RESOURCES MANAGEMENT LTD



ERM
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