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TPB/R/S/I-TH/1-1

寄件者: 守護大嶼SaveLantau [REDACTED]  
寄件日期: 24日05月2017年星期三 23:08  
收件者: tpbpd@pland.gov.hk  
主旨: 守護大嶼聯盟就大嶼分區計劃大綱草圖編號S/I-TH/1意見  
附件: 守護大嶼聯盟就大嶼分區計劃大綱草圖編號S\_I\_TH\_1意見.pdf

致：城規會秘書處，

附件為守護大嶼聯盟就《大嶼分區計劃大綱草圖編號 S/I-TH/1》所提交的意見。

感謝。

守護大嶼聯盟謹啟





# 守護大嶼聯盟

## Save Lantau Alliance

致：城市規劃委員會主席及各委員：

### 就《大嶼分區計劃大綱草圖編號 S/I-TH/1》意見

守護大嶼聯盟就《大嶼分區計劃大綱草圖編號 S/I-TH/1》提交以下意見：

#### 1. 歡迎整體規劃意向保育大嶼生態環境

大嶼具有極高的景觀價值及豐富的生物多樣性。大嶼河早在 1999 年被列為具特殊科學價值地點(SSSI)，漁農自然護理署確認大嶼河是本港唯一已知有瀕危野生香魚的天然繁殖地點，其他較少見魚類有花鰻鱺、日本鰻鱺、黑首阿胡鰻虎魚和雜食豆齒鰻。而規劃署 2002 年出版的《規劃原則及概念》亦指「有 49 種稀有魚類品種的大嶼河具特殊科學價值地點」。無論大嶼河與紅樹林都需要被保護。

此外，根據新自然保育政策，大嶼河被列為「須優先加強保育地點清單」的第三位。另外，大嶼河是香港少有的天然河溪，孕育多種淡水魚及鹹淡水魚類。大嶼河乃「具重要生態價值的河溪」及「具特殊科學價值地點」。因此，聯盟歡迎上述草圖的整體規劃意向，

「是保育該區具獨物科學及生態價值的優美自然景致，以保護更廣大地區的天然生境及自然系統，同時保存歷史文物和鄉村的本土文化及傳統。倘擬在區內和附近一帶進行發展，必須充份考慮生態及環境易受影響地方（例如大嶼河「具特殊科學價值地點」）。」

#### 2. 不應接受「先破壞後發展」

大嶼村民在 2014 年 8 月 24 日在傳媒面前高調鏟紅樹林，聲稱抗議政府不准村民耕種及建村屋。聯盟質疑村民無地復耕及建屋的說法。據聯盟的資料，村民早在 80 年代放棄耕作。大嶼一帶七成以上的土地自 90 年代初陸續賣給地產商，發展商一直計劃在區內興建第三/四類的中低密度房屋。村民以此要脅政府和城規會，城規會不應接納「先破壞後發展」的情況。

### 3. 對「鄉村式發展」用地關注

- 現時「鄉村式發展」用地(V zone)佔 6.43 公頃,對比發展審批地區圖(DPA)所批出 1.27 公頃 V zone 多 5.16 公頃,包括 134 間丁屋。
- 大蠔非常接近東涌新市鎮,134 間丁屋估計會為大蠔帶來 780 (規劃人口)或以上人口,將會為大蠔生境帶來極大影響。鄉郊地區經常發現化糞池滲漏及排污渠胡亂駁至河流,現時規劃的 V zone 有不少貼近大蠔河及其支流,對大蠔河的生態價值必定造成影響。
- 規劃署多次強調丁屋需求只是考慮 V zone 規劃的其中一項因素,不過這是必然因素。因為沒有相關需求,城規會和規劃署不用考慮規劃新的 V zone。因為城規會、規劃署、地政署及相關政府部門有責任考慮有關需求是否真確的需求,以免違反 V zone「主要預算供原居民興建小型屋宇」的規劃意向,以及避免 V zone 因為不恰當的過度擴張,而影響該區生態環境。
- 四村中只有白芒、牛牯塢和大蠔村有表示丁屋需求。對比 2014 年設立 DPA 時,其十年預算丁屋需求減少了 27.8%,無法解釋為何分區計劃大綱草圖(OZP) V zone 土地大幅上升。
- 大蠔各村新增可滿足的丁屋土地需求比例為:白芒(50%,38 間),牛牯塢(70%,50 間),大蠔(55%,46 間),整體比例為 58%,134 間。

其他近年改劃並同樣極具生態價值的郊野公園不包括土地,

大灘、屋頭、高塘、高塘下洋:15%,79 間

白沙澳:38%,34 間

谷埔、鳳坑、榕樹凹:14.68%,102 間

二澳:28%,13 間

大蠔新增可滿足的丁屋土地需求比例對比其他同樣極具生態價值的不包括土地高出不少。大蠔額外需要滿足較高比例的丁屋需求的理據是甚麼?滿足較高比例的需求會否違反城規會就小型屋宇政策一向採取循序漸進的方向?規劃署應解釋造成這種差異的原因。

- 根據城規會文件中離島地政處所提交的小型屋宇需求預算(圖 I,II),牛牯塢村及白芒村的丁屋需求分別有接近 50%及 20%來自僑居海外的村民,其原居民代表表示這批村民將會全數在未來十年申請丁屋。地政署及原居民代表有責任提供理據說明海外居民根據甚麼因素將會全數在未來十年申請興建丁屋。
- 根據城規會文件,現時 V zone 主要覆蓋在私人土地。大蠔有數個主要發展商早年購入不少土地,根據他們透過 Masterplan Limited 提交的信件,他們佔有大蠔該區超過七成的土地。根據他們信件,與政府或原居民換地的條件是

在大嶼提供他們發展的地區或交換東涌東填海土地。兩者都不是規劃署的考慮方案。規劃署及地政署應列明現時 V zone 是否屬於私人土地，還是上述數個私人發展商的土地，以供城規會委員考慮現時 V zone 是否恰當。

上述疑慮証明現有「鄉村式發展」範圍並不合理，為符合循序漸進的發展原則，守護大嶼聯盟建議將「鄉村式發展」用地只覆蓋現有的丁屋範圍，如村民在現有範圍外有額外丁屋需求，應再向城規會申請。

守護大嶼聯盟謹啟

2017 年 5 月 24 日

圖 I

Prob: Service Industry General Info 28340593

27/01/2016 15:50 #127 P.001/001

28 JAN 2016

Appendix V of  
TFB Paper No. 10186

題：綠島地政處  
檔案：(361)五區00592(273)/99 21.3

**未來十年內的小型屋宇需求預算**

本人／我們是代表區內有關屋宇的區居民代表，現根據本村的情況向貴處提供  
在未來十年內有意在綠島村內申請興建小型屋宇的村民需求預算，以便政府有關  
部門對村內有較具體的了解，有關資料如下：

甲部：現時(即截至2015年12月31日)年滿十八歲或以上的男性原居村民

	現居香港	現居海外
(A) 總人數：75人	64人	11人
(B) 總人數當中已獲行使其小型屋宇資格 <sup>1</sup> 的人數：6人	6人	0人
(C) 總人數當中未行使其小型屋宇資格的人數：69人	58人	11人
(D) 未行使其小型屋宇資格的人數當中預計未來十年內會申請興建小型屋宇的人數：55人 (i)	55人 (i)	11人 (ii)

乙部：未來十年內將會滿十八歲(即截至2015年12月31日時為八至十七歲)的男性原居村民

	現居香港	現居海外
(E) 總人數：72人	61人	11人
(F) 總人數當中預計十年內會申請興建小型屋宇的人數：61人 (iii)	61人 (iii)	11人 (iv)

未來十年內小型屋宇需求預算[(i) + (ii) + (iii) + (iv)]：72人

大嶼山梅窩白石村  
姓名 區樹代 張志雄  
姓名 區樹代 張志雄  
日期 27-1-2016

<sup>1</sup> 男性原居村民必須自1975年時為香港居民或可歸化居民。

<sup>2</sup> 區樹代、張志雄兩人均可向貴處索取其資格證明資料。

<sup>3</sup> 行使其小型屋宇資格的人數應包括在小型屋宇申請表中填明未來會申請興建小型屋宇的人數。

發：蘇島地政處

檔案：(303)in D:\CS93\CPY\09 P.1

7-1 Jan 1999

### 未來十年內的小型屋宇需求預算

本人/我們是大嶼山鄉委會主席/村務委員會代表，現根據本村的村情向貴處提供在未來十年內合資格的男性原居民申請興建小型屋宇的需求預算，以便政府有關部門對此有較具體的了解<sup>1</sup>。有關的資料如下：

甲區 聖瑪(即截至 2015 年 12 月 31 日)年滿十八歲或以上男性原居民

	祖居本地	移居海外
(A) 總人數：	40	35
(B) 總人數中已進行獲准小型屋宇資格 <sup>2</sup> 的人數：	10	9
(C) 總人數當中未行獲其小型屋宇資格的人數：	30	26
(D) 未行獲其小型屋宇資格人數當中預計未來十年內會申請興建小型屋宇的人數：	30 (i)	26 (ii)

乙區 未來十年內將會滿十八歲(即截至 2015 年 12 月 31 日時為八至十七歲)的男性原居民

	祖居本地	移居海外
(E) 總人數：	1	6
(F) 總人數當中預計十年內會申請興建小型屋宇的人數：	1 (iii)	6 (iv)

未來十年內小型屋宇需求預算 (i) + (ii) + (iii) + (iv) : 68

大嶼山鄉務委員會

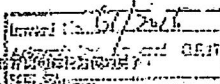
姓名 區區區代表林世明先生

簽名

姓名 林世明

簽名

日期 4/1/2016



<sup>1</sup> 此表格係根據《土地法》第 103 條及《土地法》第 104 條的規定而填。

<sup>2</sup> 根據香港《土地法》第 103 條及《土地法》第 104 條的規定。

<sup>3</sup> 小型屋宇是指符合《土地法》第 103 條及《土地法》第 104 條的規定。

tpbpd

TPB/R/S/I-TH/1-2

寄件者: Andrew Chan (WWF-HK) [REDACTED]  
寄件日期: 24日05月2017年星期三 17:55  
收件者: tpbpd@pland.gov.hk  
主旨: S\_I-TH\_1\_Tai Ho\_WWF\_May 2017  
附件: S\_I-TH\_1\_Tai Ho\_WWF\_May 2017.pdf


Dear Sir/Madam,

Please find attached our submission on the captioned.

Thank you for your attention.

Yours faithfully,

Andrew Chan  
Conservation Officer, Local Biodiversity  
WWF-Hong Kong 世界自然基金會香港分會  
Tel: [REDACTED]  
E-mail: [REDACTED]

**together possible** 

Find out more and get involved at [wwf.org.hk](http://wwf.org.hk)

Registered Name 註冊名稱: World Wide Fund For Nature Hong Kong 世界自然(香港)基金會  
(Incorporated in Hong Kong with limited liability by guarantee 於香港註冊成立的擔保有限公司)



世界自然基金會  
香港分會

WWF-Hong Kong

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24 May 2017

Chairman and members  
Town Planning Board  
15/F North Point Government Offices,  
333 Java Road, North Point, Hong Kong  
(E-mail: [tpbpd@pland.gov.hk](mailto:tpbpd@pland.gov.hk))

By E-mail ONLY

Dear Sir/Madam,

**Re: Draft Tai Ho Outline Zoning Plan No. S/I-TH/1**

WWF submits herewith our comments on the captioned draft Tai Ho Outline Zoning Plan (OZP) No. S/I-TH/1.

**Ecological importance of Tai Ho**

Tai Ho is one of the 12 Priority Sites for Enhanced Conservation listed under the New Nature Conservation Policy formulated by the former Environment, Transport and Works Bureau and the Agriculture, Fisheries and Conservation Department (AFCD) in 2004<sup>1</sup>. Based on the scoring system adopted for evaluating the Priority Sites, Tai Ho is ranked the 3<sup>rd</sup> among the 12 Priority Sites in terms of its ecological value, following on the Ramsar Site (1<sup>st</sup> rank) and Sha Lo Tung (2<sup>nd</sup> rank)<sup>2</sup>.

The area covered by the captioned OZP (Plan Area) comprises of various natural habitats of high conservation value, e.g. Tai Ho Stream, Tai Ho Wan, mangrove and mudflat. Tai Ho Stream which runs across the Plan Area from south to north down to the estuary is listed as

<sup>1</sup> [http://www.afcd.gov.hk/english/conservation/con\\_nncp/con\\_nncp\\_list/con\\_nncp\\_list.html](http://www.afcd.gov.hk/english/conservation/con_nncp/con_nncp_list/con_nncp_list.html)

<sup>2</sup> [http://www.afcd.gov.hk/english/conservation/con\\_nncp/con\\_nncp\\_leaf/files/leaflet2.pdf](http://www.afcd.gov.hk/english/conservation/con_nncp/con_nncp_leaf/files/leaflet2.pdf)

**together possible**

贊助人：香港特別行政區行政長官  
梁振英先生, GBS, GBS, JP  
主席：何國達先生  
行政總裁：江偉智先生

法律顧問：香港立信德豪會計師事務所有限公司  
核數公司秘書：嘉信德豐證券有限公司  
核數律師：牙士打律師行  
核數司庫：匯豐銀行  
註冊慈善機構

Patron: The Honourable CY Leung, GBS, GBS, JP  
Chief Executive of the HKSAR  
Chairman: Mr Edward M. Ho  
CEO: Mr Peter Cornthwaite

Honorary Auditors: BDO Limited  
Honorary Company Secretary:  
McCabe Secretarial Services Limited  
Honorary Solicitors: Mayer Brown JSM  
Honorary Treasurer: HSSC  
Registered Charity  
(Incorporated With Limited Liability)

**Ecological Important Stream (EIS)<sup>3</sup>** and has been designated as a **Site of Special Scientific Interest (SSSI)**. Tai Ho Stream has very high freshwater fish diversity, i.e. total 53 freshwater fish species are recorded<sup>4</sup> including some species of conservation concern like Largesnout Goby (*Awaous melanocephalus*) and the locally rare migratory fish Ayu (*Plecoglossus altivelis*) ("Vulnerable" under China Red Data Book)<sup>5</sup>. Besides, Tai Ho Wan mangroves and mudflats are the habitats for Seagrass *Halophila beccarii* and Horseshoe crabs *Carcinoscorpius rotundicauda*<sup>6</sup>, which are also of conservation importance. Thus, **we consider that all the important habitats in the Plan Area should be properly protected against incompatible development, potential pollution and environmental destruction.**

#### **Support the general planning intention of the OZP**

According to Section 8 of the Explanatory Statement of the captioned OZP, the general planning intention is to *"conserve the Area's outstanding natural landscape with unique scientific and ecological values in safeguarding the natural habitat and natural system of the wider area and to preserve historical artifacts, local culture and traditions of the villages."* Since Tai Ho enclave is of high ecological value, we **support the general planning intention to protect the important habitats and species of conservation interest of the Tai Ho enclave**. Besides, we also welcome the designation of "SSSI" zone for the Tai Ho Stream and its estuary area to provide statutory protection to the EIS and the mudflat and mangrove at the estuary. In addition, we also support the provision of 30-metre wide "Conservation Area" ("CA") zone to act as buffer zone protecting the riparian area of the Tai Ho Stream SSSI. The designation of "Coastal Protection Area" ("CPA") zone along the coast of Tai Ho Wan is also considered appropriate.

<sup>3</sup> [https://www.afcd.gov.hk/english/conservation/con\\_wet/streams\\_rivers\\_hk/Con\\_NSR/files/23\\_Tai\\_Ho.pdf](https://www.afcd.gov.hk/english/conservation/con_wet/streams_rivers_hk/Con_NSR/files/23_Tai_Ho.pdf)

<sup>4</sup> [http://www.afcd.gov.hk/english/conservation/hkbiodiversity/speciesgroup/speciesgroup\\_freshwaterfish.html](http://www.afcd.gov.hk/english/conservation/hkbiodiversity/speciesgroup/speciesgroup_freshwaterfish.html)

<sup>5</sup> Refer to Section 7.4.2 (c) of Explanatory Statement of Draft Tai Ho DPA Plan No. DPA/I-TH/1

<sup>6</sup> *Ibid*



**Concern on the close proximity of "Village Type Development" zones to the streams**

Although we welcome the conservation zones on the captioned OZP to protect the sensitive habitats in the Tai Ho enclave, we are of grave concern that certain parts of the proposed "Village Type Development" ("V") zones locate immediately adjacent to tributaries and streams that link to Tai Ho Stream and Tai Ho Wan. For example, the northern boundary of the "V" zone of Ngau Kwu Long is immediately next to a tributary that flows to Tai Ho Stream SSSI and then Tai Ho Wan (Fig. 1a). Since this tributary is ecologically and hydrologically connected to Tai Ho Stream, we worry that any untreated runoff from the construction and operation of Small Houses (e.g. illegal discharge of domestic sewage, untreated surface runoff, sewage from malfunction septic tank and soakaway system) will enter the sensitive Tai Ho Stream and Tai Ho Wan through this tributary and result in serious impacts on the water quality and ecology. Another example is the western boundary of the Pak Mong "V" zone which is also located closely to a stream leading to Tai Ho Wan (Fig. 1b). As such, we strongly recommend that **all the tributaries and streams in the Tai Ho enclave and their 30-metre wide riparian zones should be protected by "Green Belt (1)" ("GB"(1)) or even "CA" zone to prevent any water quality and ecological impacts from future developments to the important Tai Ho Stream and Tai Ho Wan.**

We would be grateful if our comments can be considered by the Board.

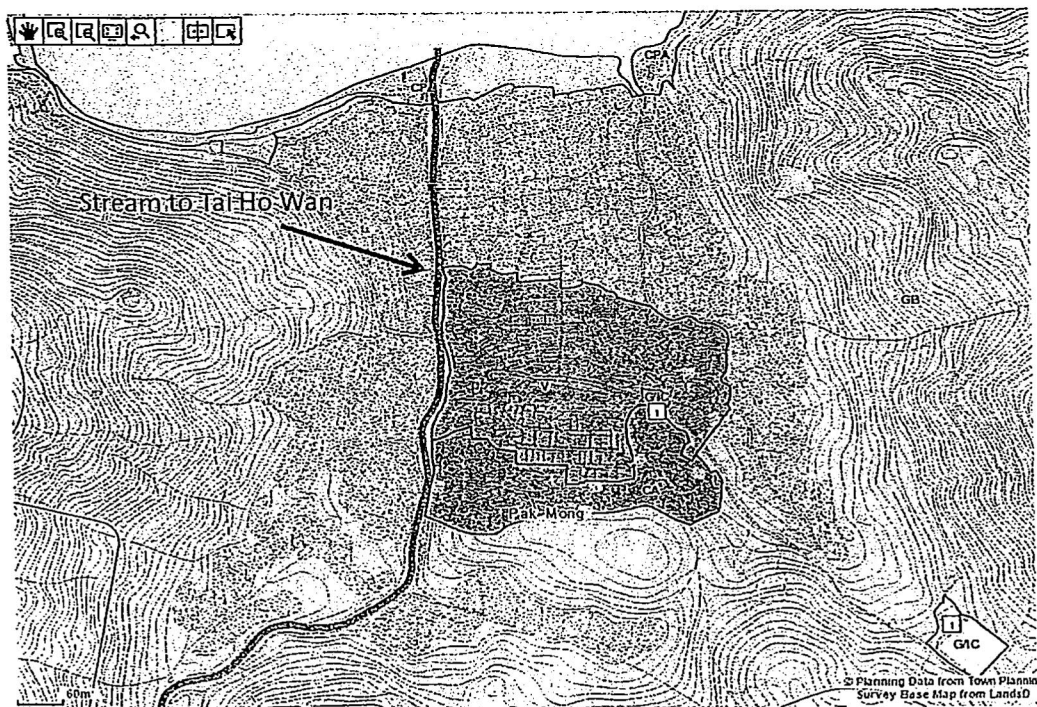
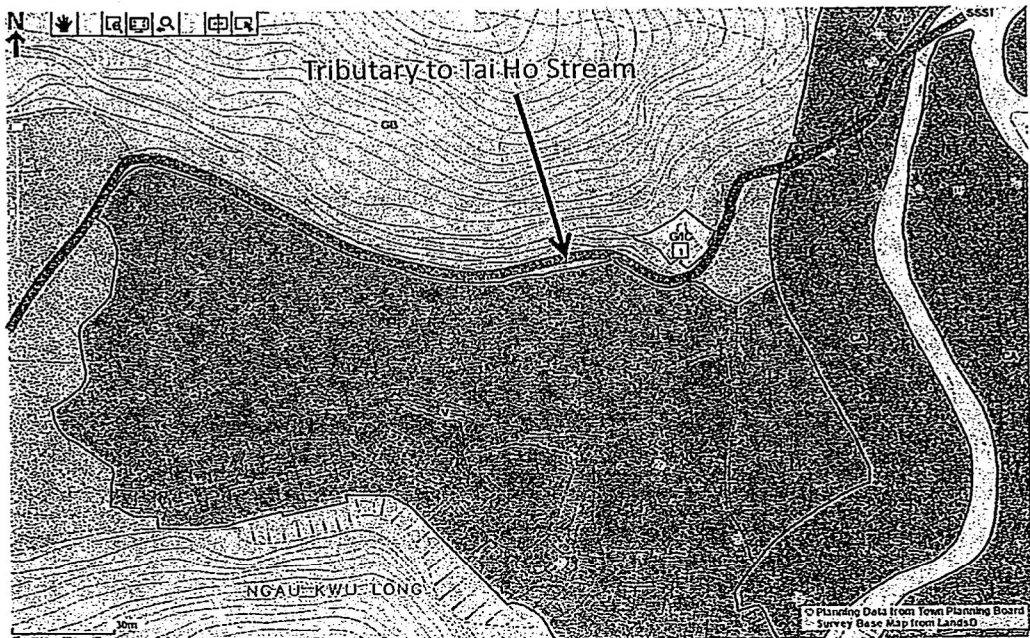
Yours faithfully,



Andrew Chan

Conservation Officer, Local Biodiversity

Figure 1a & 1b. "V" zones of Ngau Kwu Long and Pak Mong locate immediately next to tributary and stream that flow to the ecologically important Tai Ho Stream SSSI and Tai Ho Wan



tpbpd

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寄件者: WOO Ming Chuan [REDACTED]  
寄件日期: 22日05月2017年星期一 17:07  
收件者: Town Planning Board  
副本: HKBWS  
主旨: HKBWS's comments on the draft Tai Ho Outline Zoning Plan No. S/I-TH/1  
附件: 20170522\_TaiHoOZP\_HKBWS.pdf

Dear Sir/Madam,

The Hong Kong Bird Watching Society's comments on the draft Tai Ho Outline Zoning Plan No. S/I-TH/1 is attached.

Best Regards,  
WOO Ming Chuan (Ms)  
Conservation Officer  
The Hong Kong Bird Watching Society  
7C, V Ga Building, 532 Castle Peak Road, Lai Chi Kok, Kowloon, Hong Kong

Secretary, Town Planning Board  
15/F, North Point Government Offices  
333 Java Road, North Point, Hong Kong  
(E-mail: tpbpd@pland.gov.hk)



By email only

22 May 2017

香港觀鳥會  
THE  
HONG  
KONG  
BIRD  
WATCHING  
SOCIETY  
Since 1957 成立

Dear Sir/Madam,

Comments on the draft Tai Ho Outline Zoning Plan No. S/I-TH/1

The Hong Kong Bird Watching Society (HKBWS) would like to provide our comments on the draft Tai Ho Outline Zoning Plan No. S/I-TH/1.

1. Support the planning intention and conservation zonings in the draft Plan

We agree with the general planning intention of the draft Tai Ho OZP which is "to conserve the Area's outstanding natural landscape with unique scientific and ecological values in safeguarding the natural habitat and natural system of the wider area"<sup>1</sup>. We support the provision of a Site of Special Scientific Interest (SSSI) with statutory support under the Town Planning Ordinance (Cap. 131) to protect Tai Ho Stream with boundaries which follow that of the Register of SSSIs<sup>2</sup>, and the provision of a 30-metre "Conservation Area" (CA) zoning as buffer on the two sides of the Tai Ho Stream SSSI. We also support the coastal areas of Tai Ho Wan to be protected by "Coastal Protection Area" (CPA).



2. Ecological value of Tai Ho

2.1. The HKBWS would like reiterate that Tai Ho is listed as third out of the twelve priority sites under the New Nature Conservation Policy<sup>3</sup>. It supports the endemic Romer's Tree Frog (*Philautus romeri*)<sup>4</sup> which is globally endangered<sup>5</sup> and of potential global concern<sup>6</sup>. In addition, bird species of conservation importance were recorded in Tai

<sup>1</sup> Section 8 of the Explanatory Statement of the draft Tai Ho OZP S/I-TH/B

<sup>2</sup> Planning Department, 1995. *Register of Sites of Special Scientific Interest. Site no. 63 – Tai Ho Stream, Lantau Island.*

<sup>3</sup> AFCD – List of priority sites for enhanced conservation. Available at:

[http://www.afcd.gov.hk/english/conservation/con\\_nncp/con\\_nncp\\_list/con\\_nncp\\_list.html](http://www.afcd.gov.hk/english/conservation/con_nncp/con_nncp_list/con_nncp_list.html)

<sup>4</sup> AFCD – List of priority sites for enhanced conservation: Tai Ho. Available at:

[http://www.afcd.gov.hk/english/conservation/con\\_nncp/con\\_nncp\\_list/files/tai\\_ho\\_public.pdf](http://www.afcd.gov.hk/english/conservation/con_nncp/con_nncp_list/files/tai_ho_public.pdf)

<sup>5</sup> IUCN Red List version 2013.2. Available at: <http://www.iucnredlist.org/details/587940>

<sup>6</sup> Fellowes, J.R., Lau, M.W.N., Dudgeon, D., Reels, G.T., Ades, G.W.J., Carey, G.J., Chan, B.P.L., Kendrick, R.C., Lee, K.S., Leven, M.R., Wilson, K.D.P. and Yu, Y.T. (2002). Wild animals to watch: Terrestrial and freshwater fauna of conservation concern in Hong Kong. *Memoirs of the Hong Kong Natural History Society* No. 25, 123-160.

Ho, including Brown Fish Owl (*Ketupa zeylonensis*)<sup>7</sup>, Eurasian Eagle Owl (*Bubo bubo*)<sup>8</sup>, and Swinhoe's Egret (*Egretta eulophotes*)<sup>9</sup>. All three species are scarce in Hong Kong<sup>10,11</sup> and are listed under Class II protection in the People's Republic of China List of Wild Animals<sup>12</sup>.

- 2.2. Brown Fish Owl is considered to be of regional concern<sup>6</sup>. This species has specific habitat requirements and only feeds in undisturbed, unpolluted lowland streams and tidal creeks<sup>10</sup>. The woodlands in Tai Ho provide suitable roosting habitats for Brown Fish Owl, while the wetlands and unpolluted natural streams and their riparian vegetation are suitable foraging grounds and perches for this species.
- 2.3. Eurasian Eagle Owl is of regional concern and considered to be rare in the China Red Data Book<sup>13</sup>. It is recorded in remote areas of hill slope grassland<sup>11</sup>.
- 2.4. Swinhoe's Egret is considered of global concern<sup>6</sup>, nationally endangered<sup>13</sup>, and globally vulnerable<sup>5</sup>. The greatest threat to this species is habitat loss and degradation through reclamation of tidal mudflats, estuarine habitats and uninhabited offshore breeding islands, and through pollution<sup>14</sup>.
- 2.5. Therefore, we consider that the woodland, shrubland, grassland, natural streams, mudflats, estuary and intertidal wetlands are important habitats in Tai Ho and should be adequately protected from any development threats and potential pollution.

### 3. Our concerns

- 3.1. We appreciate the efforts made by the Planning Department and the Town Planning Board to protect the ecologically sensitive habitats in Tai Ho. However, we noticed that some of the proposed "Village Type Development" (V) zones are immediately next to streams which flows into the SSSI or the Tai Ho Wan (Figure 1). It is well-known that the construction and operation of small houses near streams would cause water pollution (e.g. from contaminated surface runoff, illegal discharge of household greywater, sewerage seepage from septic tanks and saturated soakaway systems)<sup>15,16,17</sup>. We are concerned the provision of V zones immediately next to

<sup>7</sup> HKBWS Hong Kong Bird Report 2012.

<sup>8</sup> HKBWS Hong Kong Bird Report 2004.

<sup>9</sup> HKBWS internal records, data obtained in 2001.

<sup>10</sup> Carey, G.J., Chalmers, M.L., Diskin, D.A., Kennerley, P.R., Leader, P.J., Leven, M.R., Lewthwaite, R.W., Melville, D.S., Turnbull, M. and Young, L. (2001). *The Avifauna of Hong Kong*. Hong Kong Bird Watching Society.

<sup>11</sup> HKBWS Hong Kong Bird Report 2013.

<sup>12</sup> List of Wild Animals under State Protection (promulgated by State Forestry Administration and Ministry of Agriculture on 14 January, 1989).

<sup>13</sup> Zheng, G. M. and Wang, Q. S. (1998).

<sup>14</sup> <http://www.birdlife.org/datazone/species/factsheet/22696977>

<sup>15</sup> [http://www.dsd.gov.hk/SC/Files/publications\\_publicity/publicity\\_materials/leaflets\\_booklets\\_factsheets/Village%20Sewerage.pdf](http://www.dsd.gov.hk/SC/Files/publications_publicity/publicity_materials/leaflets_booklets_factsheets/Village%20Sewerage.pdf)

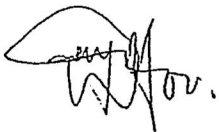
<sup>16</sup> [http://www.dsd.gov.hk/EN/Files/OpenDay2012/PDF/Sewage\\_Treatment\\_07.pdf](http://www.dsd.gov.hk/EN/Files/OpenDay2012/PDF/Sewage_Treatment_07.pdf)

natural streams/ watercourses would deteriorate the water quality which eventually flows into the SSSI and Tai Ho Wan, and is against the intention of providing conservation zonings (i.e. SSSI and CA) for the protection of the SSSI and Tai Ho Wan at the downstream area.

- 3.2. Given that the Town Planning Board has been taking an incremental approach in the provision of V zone for the small houses developments in various villages within Country Park enclaves and the currently proposed V zones in Tai Ho can meet 50 - 70% of the total small house demand<sup>18</sup>, we consider that there should be rooms for adjustments on the location (i.e. away from streams) and size (i.e. smaller) of the proposed V zones, particularly for Pak Mong and Ngau Kwu Long, such that the development right of villagers are respected without compromising the sensitive habitats in Tai Ho.
- 3.3. The HKBWS considers that an "Ecosystem Approach", which is the primary framework for action under the Convention on Biological Diversity<sup>19</sup>, should be adopted to protect the various sensitive habitats in Tai Ho. We consider that all natural streams and watercourses (including all tributaries flowing into the Tai Ho Stream SSSI) should be protected by conservation zonings (i.e. "Green Belt (1)" (GB(1)) or CA) of 30 metres along both sides of the banks. This buffer zone would protect the riparian vegetation and would also prevent pollutants created by nearby developments from contaminating the stream, the intertidal mudflats and the sheltered Tai Ho Wan. Moreover, GB zone in the Plan Area should be rezoned to GB(1) or CA zoning to enhance the protection of the natural habitats by alleviating the development pressure while the redevelopment rights of the villagers are respected.

Thank you for your kind attention and we hope that the Town Planning Board would take our comments into consideration.

Yours faithfully,



Woo Ming Chuan  
Conservation Officer  
The Hong Kong Bird Watching Society

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<sup>17</sup> <http://www.legco.gov.hk/yr13-14/english/fc/pwsc/papers/p14-20e.pdf>

<sup>18</sup> Table 2 of the TPB Paper No. 10186

<sup>19</sup> <https://www.cbd.int/ecosystem/>



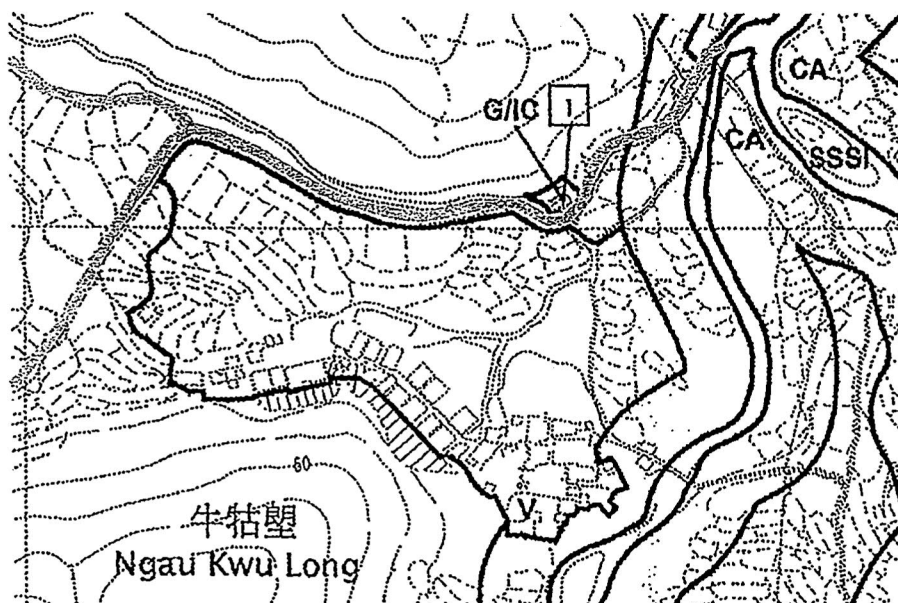
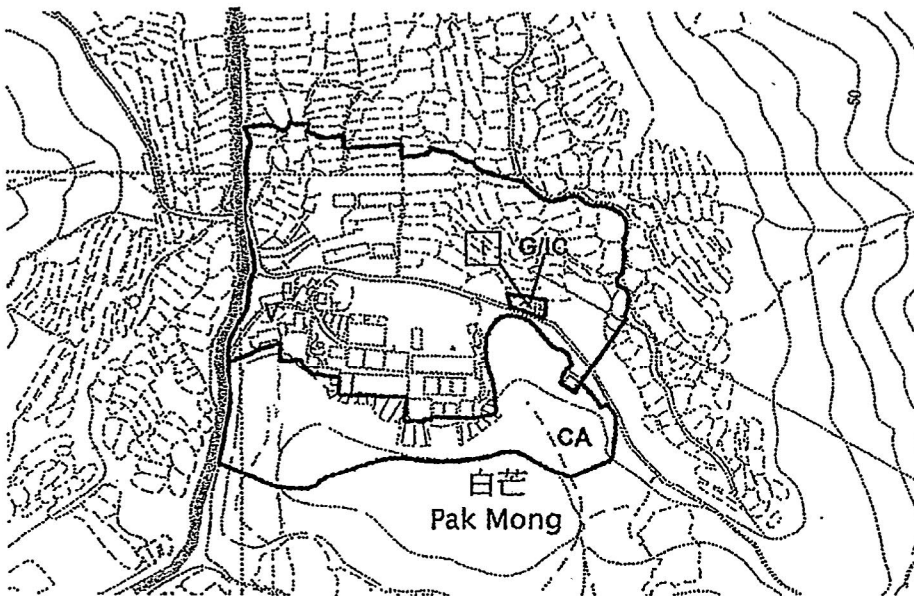
cc.

Designing Hong Kong

Kadoorie Farm and Botanic Garden

WWF – Hong Kong

Figure 1. The V zone at Pak Mong is immediately next to the Pak Mong Stream (top), while the V zone at Ngau Kwu Long is immediately next to a tributary of the Tai Ho Stream SSSI (bottom). Sections of streams next to the V zones are indicated by the light blue lines.



tpbpd

TPB/R/S/I-TH/1-4

寄件者: Kitty Tang [REDACTED]  
寄件日期: 24日05月2017年星期三 18:36  
收件者: tpbpd@pland.gov.hk  
主旨: DHK's comment submission on draft OZP  
附件: 20170524 Representation on Draft Tai Ho OZP No.S\_NE-PC\_1.pdf; 20170524  
Representataion on Draft Ping Chau OZP No.S\_NE-PC\_1.pdf

Dear Sir/Madam,

Our comments on the following draft OZP are attached in this email :

1. S/NE-PC/1
2. S/I-TH/1

Thank you for your attention.

Yours faithfully,  
For and on behalf of Designing Hong Kong Limited  
Kitty Tang



# Designing Hong Kong

創建香港 .com

Hong Kong, 24<sup>th</sup> May, 2017  
Chairman and Members  
Town Planning Board  
15/F, North Point Government Offices  
333 Java Road, North Point, Hong Kong  
Fax: 2877 0245;  
Email: [tpbpd@pland.gov.hk](mailto:tpbpd@pland.gov.hk)

## Representation on the Draft Tai Ho Outline Zoning Plan No. S/I-TH/1

Dear Chairman and Members,

Designing Hong Kong supports the general planning intention of the Draft Tai Ho Outline Zoning Plan, which aims to conserve the Area's outstanding natural landscape with unique scientific and ecological values. To safeguard the natural habitat and natural system of the wider area and to preserve historical artifacts, local culture and traditions of the villages. We also welcome the designation of "Site of Special Scientific Interest" (SSSI) on the Tai Ho Stream to protect the high diversity of freshwater and brackish-water fishes in Hong Kong.

Tai Ho is one of the priority site for enhanced conservation. We hereby would like to give a few recommendations on the proposed land uses in hope of providing better protection for the valuable wildlife species and important habitats:

### 1. No V-zone should be allocated next to the watercourse

Due to the high diversity of freshwater and brackish-water fishes, Tai Ho stream is zoned as "Site of Special Scientific Interest(SSSI)". Construction and operation of small houses generate waste, sewage and effluence. As there is no existing or planned public sewer for the area, houses are only typically served by septic tanks and open drain. Experience tells us that the discharge of sewage and greywater within the V-zone next to the stream, especially in the Northern part of Tai Ho San Tsuen, would definitely pose threats to the water quality of the Tai Ho Stream and Tai Ho Wan.

This goes against the intention of designating SSSI on Tai Ho stream which aims at conserving and protecting special features. Adjustment on the location of V-zone is needed.

### 2. No justification for the extension of "V" zone

Compared with the Tai Ho Development Permission Area (DPA) Plan, there is an increase of 5.27 ha in V-zone. However, the existing transportation and infrastructure cannot support the proposed V-zone extension.

Concerning the accessibility, no proper vehicular access is available except for the footpath connecting Pak Mong and Ngau Kwu Long. The proposed "V" zone is accessible by hiking trails linking Tai Ho Area with Mui Wo and Tung Chung. It poses danger to the future residents to walk up and down to hill every day, especially at night time without any street light. This will lead to calls for road which will damage the natural environment.

As mentioned above, existing infrastructure provisions are limited as well. No existing or planned public sewer is located in the area. The use of septic tank and soakaway system for sewage treatment and disposal, which are necessary to be installed in Small House, is considered unacceptable means for village development in this area as sewage and foul waters would be discharged into the ground and nearby water gathering ground (WGG).

# 創建 Designing Hong Kong 香港.com

Therefore, the V-zone should be confined to the existing village clusters.

Here we submit our concerns for your consideration.

Yours,

**Designing Hong Kong Limited**

tpbpd

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寄件者: [REDACTED]  
寄件日期: 24日05月2017年星期三 23:44  
收件者: tpbpd@pland.gov.hk  
副本: [REDACTED]  
主旨: Green Power's Submission for Tai Ho OZP 24May2017  
附件: GP-Tai Ho OZP (S\_I-TH\_1) 24May2017.doc

Dear Sir/Madam,  
Please find the attached self-explanatory letter.  
Thanks for your kind attention.  
Yours faithfully,  
CHENG Luk-ki  
[REDACTED]



BY E-MAIL ONLY

Chairperson and Members,  
Town Planning Board,  
15th Floor, North Point Government Offices,  
333 Java Road,  
North Point, Hong Kong  
(Email: [tpbpd@pland.gov.hk](mailto:tpbpd@pland.gov.hk))

24 May, 2017

Dear Sirs/Madams,

**Green Power's Comments on Draft Tai Ho Outline Zoning Plan (No. S/I-TH/1)**

1. Green Power is a local charitable green group with major concerns for river conservation and developments on Lantau Island. We submitted our views and comments on the Draft Tai Ho Development Permission Area Plan (DPA/I-TH/1) on 28 May, 2014, and Draft Tai Ho Outline Zoning Plan (OZP) on 17 June, 2016 and 14 October, 2016 regarding the preservation of water quality, ecology, hydrology and landscape of Tai Ho River system.
2. Following our previous submissions, we would like to reiterate and emphasize our concerns about preservation of Tai Ho River Basin and Tai Ho Bay regarding above-captioned draft OZP.

**Holistic Landuse Planning for Tai Ho River Basin**

3. Land use planning in Tai Ho that wisely takes into account of the natural Tai Ho River can
  - (a) lower the flood risk to secure the public's safety and properties.
  - (b) protect the river, marine and bathing beach water quality to avoid water pollution, odour nuisance, communal hygiene degradation and urban blight.
  - (c) conserve river and estuarine ecology to protect biodiversity and fishery resources.
  - (d) act as breeze corridors to disperse air pollutants, relieve heat island effect and moderate microclimate.
  - (e) preserve few remaining natural river landscapes in the territory for public's appreciation, leisure and recreation pursuits, and as natural heritage.
4. **Green Power** supports that "*the general planning intention for the Planning Schedule Area (the Area) is to conserve the Area's outstanding natural landscape with unique scientific and ecological values in safeguarding the natural habitat and natural system of the wider area... ..*"(Sec 8, EXPLANATORY STATEMENT). Moreover, the OZP should aim at conservation of the Area through strict landuse planning and effective enforcement to avoid degradation of high and rich scientific and ecological resources.

5. We concur that "*there is a general presumption against development*" in Site of Special Scientific Interest ("SSSI"), Conservation Area ("CA"), Coastal Protection Area ("CPA"), and Green Belt ("GB") zones which is consistent with the general planning intention for the Area.
6. We agree to the Remarks to Village Type Development ("V"), "GB", "CPA", "CA" and "SSSI" zone to strictly control "*any diversion of streams, filling of land/pond or excavation of land*" in order to protect the Tai Ho Stream SSSI.
7. We also agree to the planning intention of "SSSI" which "*.....intends to deter human activities or developments within the SSSI*" (Schedules of Uses).
8. We welcome the shore of Tai Ho Wan is rezoned as "CPA" as Tai Ho River estuary is an integral part of a river system. However, we still opine to extend the boundary of "SSSI" to cover larger area of the intertidal mudflat.
9. We also welcome that Fung Shui Woodland behind Pak Mong Village is zoned as "CA" in order to preserve the terrestrial ecology and high landscape value of the Area.
10. The fact that "*new residential development is not permitted under*" "CPA" and "CA" zones is of ultimate important to uphold the planning intentions of (Sec. 9.4.3, and 9.5.4 respectively, EXPLANATORY STATEMENT).

#### **Comments on Village Type Development**

11. Although the captioned OZP intends "*to concentrate village type development within "V" zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services* (Planning intention, VILLAGE TYPE DEVELOPMENT, Schedules of Uses)", "V" should not be zoned in vicinity to the existing stream courses and estuary in order to avoid water pollution to the streams and SSSI.
12. Tai Ho Wan is almost completely sheltered from the open sea by North Lantau Highway (NLH) with an outlet (of about 20 metre wide) underneath NLH. Its turnover rate of seawater is hugely plummeted. Therefore, the water quality of the Bay is prone to deterioration by wastewater discharge to rivers/stream courses or stormwater discharged from Tai Ho area.
13. The Board should aware that unpolluted river and marine water quality is vital for protection and maintenance of important and fragile ecosystem of Tai Ho River and Bay.
14. However, the "V" zones in the captioned OZP is too close to the existing stream courses which will be polluted by surface runoff and stormwater drained from built-up and/or paved areas.

15. Moreover, such risk is substantially increased as the area of "V" zones are increased from 1.27 ha in Development Permission Plan to 6.54 ha in the captioned OZP as *"no drainage system is provided at the inland area of Tai Ho and there is no existing and planned public sewer for the Area"*.
16. We are highly concerned that, without sewerage infrastructure in the Tai Ho area, any additional residential developments, village Small Houses, commercial use (especially restaurants) that generate large amount of wastewater will pollute the river/stream courses and the Bay.
17. We urge the Board to cautiously consider the extent and locations of "V" zones in the context of water pollution, because large area of "V" will create extensive paved areas that generate polluted stormwater (during rainstorm or from daily washing practices of residents) draining to river/stream courses and the Bay. Therefore, "V" should not be zoned in vicinity to the existing stream courses and estuary.

#### **Comments on "CPA", "CA" and "SSSI"**

18. Only the stream channels of the mainstream and two major tributaries of Tai Ho Stream are designed as "SSSI" and both sides of Tai Ho Stream SSSI as "CA" against incompatible development. The remaining courses in the upper reach of "SSSI" and all the stream banks of natural streams in the Area receive no adequate land use zonings which may be vulnerable to human disturbance. Therefore, we advise to extend the "SSSI" and/or "CA" to cover the whole stream courses and river banks of all tributaries in the Area to provide a hydrologically complete preservation of Tai Ho River against disturbance and/or destruction by future works and developments.
19. Also, the extension of "SSSI" and/or "CA" to connect existing country parks will secure a terrestrial and aquatic wildlife corridors and ecological linkage between country parks, natural rivers, estuary and intertidal mudflat.
20. No building structures or ground paving, whatever of concrete, metals or other materials, should be permitted under "Agricultural Use" in "CPA" and "CA" (Column 1, COASTAL PROTECTION AREA, Schedules of Uses).
21. Similarly, no building structures or ground paving, whatever of concrete, metals or other materials, should be permitted under "plant nursery", "amenity planting" in "CPA", "CA" and "SSSI" (Sec (9)(i) and (b), NOTES).
22. In such sense, "Agricultural Use" that involves excavation of top soil, paving with concrete/asphalt or non-arable materials/debris should be prohibited in "CPA", "CA" and "SSSI".
23. "Road works", "Sewerage works", "drainage works" and other public works that will impose

adverse environmental impacts to the “CPA”, “CA” and “SSSI” should seek approval from relevant authorities, i.e. Planning Department, Environmental Protection Department, Agriculture, Fisheries and Conservation Department, inspite being co-ordinated or implemented by Government (Sec. (9)(a)(ii), NOTES).

24. The temporary use or development specified in Sec. (11)(a) of NOTES that will generate wastes and sewage and impose adverse environmental impacts to the “CPA”, “CA” and “SSSI” should seek approval from relevant authorities, i.e. Planning Department, Environmental Protection Department, Agriculture, Fisheries and Conservation Department.
25. In Sec (11)(b) of NOTES, applications of temporary uses or developments should not be accepted and processed if relevant uses or developments commence before Town Planning Board grants permission.
26. Also, reclamation of coastal areas, whatever above or below high tide mark, must be clearly prohibited in “CPA”, “CA”, “SSSI” and waters in Tai Ho Wan.


#### **Comments on GREEN BELT**

27. In order to manifest the planning intention of “GB” for *“defining the limits of development areas by natural features and to preserve the existing natural landscape* (Planning Intention, GREEN BELT, Schedules of Uses), Use of “House” in Column 2 of “GB” should be deleted.
28. Maintaining sufficient vegetation cover and permeability is crucial to the hydrology and water quality of Tai Ho Stream and its ecology as permeable (not concrete-paved) and vegetated land can moderate the flow volume and purify the surface runoff. Therefore, significant portion of the land use in the stream basin of Tai Ho Stream, which is largely zoned as “GB”, should be non-polluting and unpaved to prevent pollution to the stream and maintain natural hydrology.
29. No building structures or ground paving, whatever of concrete, metals or other materials, should be permitted under “Agricultural Use” in “GB” (Column 1, GREEN BELT, Schedules of Uses).
30. In such sense, “Agricultural Use” that involves excavation of top soil, paving with concrete/asphalt or non-arable materials/debris should be prohibited in “GB”.
31. In conclusion, we urge the Administration takes into account of and makes wise use of the functions and intrinsic values of river systems in the landuse planning that will not only promote sustainable development and biodiversity of Tai Ho area, but also avoid costly and irreversible environmental, economic and social burdens in the future.

For any questions, please contact the undersigned at Green Power ([REDACTED])  
[REDACTED]

Thank you very much for your kind attention and we look forward to a wise landuse plan for Tai Ho area.

Yours faithfully,

A handwritten signature in cursive script, reading "Cheng Luk-ki", followed by a vertical line.

CHENG Luk-ki

Division Head, Scientific Research and Conservation, GREEN POWER



寄件者: KFBG EAP <eap@kfbg.org>  
寄件日期: 23日05月2017年星期二 16:01  
收件者: tpbpd  
主旨: KFBG's comments on two draft OZPs (S/NE-PC/1 & S/I-TH/1)

Dear Sir/ Madam,

Re. the captioned.

There should be no doubt that the two sites of concern are of high ecological and conservation importance. But we consider that, under the two draft plans, some areas are not covered with appropriate zonings. Our recommendations are provided below:

S/NE-PC/1:

The whole island is designated as a SSSI by the Government; the area covered under the draft OZP is also surrounded by Country Park and Marine Park, and is also part of the Hong Kong UNESCO Global Geopark. The rich coral communities there are highly sensitive to pollution. In view of the above, we suggest the followings:

1. We object to any expansion of the V zone - it should be confined to existing village clusters.
2. The eastern coast should be zoned SSSI, not CPA.
3. GB should be upgraded to CA.

S/I-TH/1:

Tai Ho is one of the priority sites for enhanced conservation, under the New Nature Conservation Policy by the Government. The Tai Ho stream system has been designated as a SSSI. This enclave is highly rural in nature and is also largely bounded by the Country Park system. The Tai Ho stream system drains into Tai Ho Bay, which contains mangrove, and has also been reported to provide habitats for seagrass and horseshoe crab. We are highly concerned about the potential environmental impacts caused by the construction and operation of additional Small Houses. We therefore suggest the followings:

1. V zones should not be located next to any watercourses.
2. V zones should be confined to existing village clusters.
3. There should be buffer zones between watercourses and development zones.
4. GB should be upgraded to CA.

Best Regards,

Ecological Advisory Programme  
Kadoorie Farm and Botanic Garden

寄件者: Tony Nip [REDACTED]  
寄件日期: 23日05月2017年星期二 16:04  
收件者: tpbpd  
主旨: Comments on two draft OZPs (S/NE-PC/1 & S/I-TH/1)

Dear Sir/ Madam,

Re. the captioned.

There should be no doubt that the two sites of concern are of high ecological and conservation importance. But we consider that, under the two draft plans, some areas are not covered with appropriate zonings. Our recommendations are provided below:

S/NE-PC/1:

The whole island is designated as a SSSI by the Government; the area covered under the draft OZP is also surrounded by Country Park and Marine Park, and is also part of the Hong Kong UNESCO Global Geopark. The rich coral communities there are highly sensitive to pollution. In view of the above, we suggest the followings:

1. We object to any expansion of the V zone - it should be confined to existing village clusters.
2. The eastern coast should be zoned SSSI, not CPA.
3. GB should be upgraded to CA.

S/I-TH/1:

Tai Ho is one of the priority sites for enhanced conservation, under the New Nature Conservation Policy by the Government. The Tai Ho stream system has been designated as a SSSI. This enclave is highly rural in nature and is also largely bounded by the Country Park system. The Tai Ho stream system drains into Tai Ho Bay, which contains mangrove, and has also been reported to provide habitats for seagrass and horseshoe crab. We are highly concerned about the potential environmental impacts caused by the construction and operation of additional Small Houses. We therefore suggest the followings:

1. V zones should not be located next to any watercourses.
2. V zones should be confined to existing village clusters.
3. There should be buffer zones between watercourses and development zones.
4. GB should be upgraded to CA.

Best Regards,

Tony NIP

寄件者: Chiu Sein Tuck [REDACTED]  
寄件日期: 24日05月2017年星期三 14:07  
收件者: tpbpd@pland.gov.hk  
主旨: Comments on two draft OZPs (S/NE-PC/1 & S/I-TH/1)

Dear Sir/ Madam,

Re. the captioned.

There is no doubt that the two sites are of high ecological and conservation importance. However, I consider that, under the two draft OZPs, some areas are not covered with appropriate zonings. My recommendations are set out as below:

For S/NE-PC/1:

The whole island is designated as a SSSI by the Government and the area covered under the draft OZP is also surrounded by Country Park and Marine Park, and, is also part of the Hong Kong UNESCO Global Geopark. The rich coral communities there are highly sensitive to pollution. In view of the above, I suggest the following:

1. Object to any expansion of the V zones - these should be confined to existing village clusters.
2. The eastern coast should be zoned as SSSI, not CPA.
3. GB zone should be upgraded to CA.

For S/I-TH/1:

Tai Ho is one of the priority sites for enhanced conservation, under the New Nature Conservation Policy of the Hong Kong Government. The Tai Ho stream system has been designated as a SSSI. This enclave is highly rural in nature and is also largely bounded by the Country Park system. The Tai Ho stream system drains into Tai Ho Bay which contains mangroves and has also been reported to provide habitats for seagrasses, and, horseshoe crabs. I am highly concerned about the potential environmental impacts caused by the construction and operation of additional Small Houses. Therefore, the following are suggested:

1. V zones should not be located next to or abutting any watercourses.
2. V zones should be confined to existing village clusters.
3. There should be buffer zones between watercourses and development zones.
4. GB zone should be upgraded to CA.

Thank you for your attention.

Sincerely yours,

Chiu Sein Tuck

tpbpd

寄件者: Horseshoe Crab [REDACTED]  
 寄件日期: 23日05月2017年星期二 6:59  
 收件者: tpbpd@pland.gov.hk  
 主旨: Draft Tai Ho Outline Zoning Plan No. S/I-TH/1  
 附件: Submission Draft Tai Ho OZP SI\_TH\_1.docx

Chairman and Members of the Town Planning Board,

This is a representation made under Section 6(1) of the Town Planning Ordinance in respect of the draft Tai Ho Outline Zoning Plan No. S/I-TH/1. The attached file refers.

This submission is made in respect of the importance of Tai Ho Wan to the conservation of the Mangrove Horseshoe Crab (*Carcinoscorpius rotundicauda*) in Hong Kong.

Kevin Laurie,  
 Independent Horseshoe Crab Researcher,  
 Hong Kong

[REDACTED]

In making this submission, I give my consent to the TPB and the Government of the HKSAR to partially or wholly publish my comments (including my personal details).

Secretary,  
Town Planning Board,  
15th Floor,  
North Point Government Offices,  
333 Java Road,  
North Point,  
Hong Kong.

23 May 2017

Chairman and Members of the Town Planning Board,

Draft Tai Ho Outline Zoning Plan No. S/I-TH/1

This is a representation made under Section 6(1) of the Town Planning Ordinance in respect of the draft Tai Ho Outline Zoning Plan No. S/I-TH/1.

This submission is made in respect of the importance of Tai Ho Wan to the conservation of the Mangrove Horseshoe Crab (*Carcinoscorpius rotundicauda*) in Hong Kong.

Reason for submission

This submission is made on the following grounds:

- Tai Ho Wan is an active horseshoe crab spawning ground/nursery area for Mangrove horseshoe crabs;
- It is the best place in Hong Kong to see spawning Mangrove horseshoe crabs;
- Because of its remoteness, Tai Ho Wan is still relatively undisturbed;
- Protecting this location is vital to ensure the long term survival of this species in Hong Kong;
- Tai Ho Wan has been identified in the Lantau Development Plan as one of the areas on Lantau to promote Ecology and Biodiversity and constructing boardwalks at Tai Ho Wan to witness Mangrove horseshoe crab spawning events could be undertaken if the area receives appropriate protections.

Existing conservation measures at Tai Ho Wan

- Tai Ho Stream is designated SSSI No. 63, because it is one of the few remaining medium-sized natural streams stretching from uplands to the lowland estuary, supporting the greatest diversity of fresh water and brackish-water fish in Hong Kong. The SSSI includes the mangrove and seagrass beds which provide shelter and food for a variety of intertidal and marine invertebrates.
- Tai Ho Wan is listed as an Ecologically Important Stream (EIS No. 23) by AFCD.

Records of Horseshoe crabs at Tai Ho Wan

Formal horseshoe crab surveys have been conducted at Tai Ho Wan with the following results:

- 1998 - Juvenile Horseshoe crabs seen in the summer of 1998. One newly-born horseshoe crab with a carapace diameter of ~5mm was found here in the summer of 1998 (Huang, Chiu and Morton.1998).
- 1999 - Juvenile *T. tridentatus*(???) and *C. rotundicauda* were found here and juvenile horseshoe crabs were commonly found in the *H. beccari* seagrass beds. A mating pair of *C. rotundicauda* were seen in one of the freshwater streams during a survey in 1999 (Fong.1999).
- 2000 - AFCD recorded 12 specimens of *C. rotundicauda* in walk through surveys in June and Aug 2000 (AFCD. 2010).
- 2012 - In 2012 City University of Hong Kong conducted a horseshoe crab distribution survey of 17 sites in Hong Kong. Juveniles of *C. rotundicauda* were found at Tai Ho Wan (Billy K.Y. Kwan et al. 2012).

#### Threats to horseshoe crabs at Tai Ho Wan

- Mangrove cutting by villagers poses a threat to the horseshoe crab spawning sites that exist there. See photographs below.

#### Horseshoe crab overview

There are four species of horseshoe crab living today:

- *Limulus polyphemus*;
- *Tachypleus tridentatus*;
- *Tachypleus gigas*;
- *Carcinoscorpius rotundicauda*.

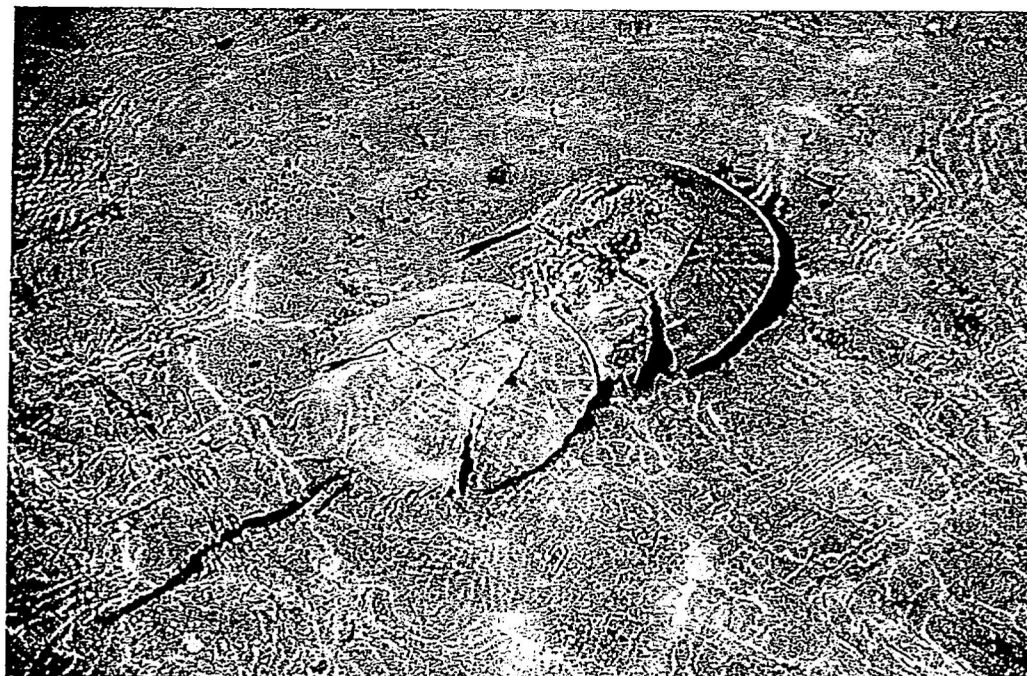
*Limulus* occurs along the east coast of the USA and Mexico. The other three species occur in South-East Asia. *Tachypleus tridentatus* (Chinese horseshoe crab) and *Carcinoscorpius rotundicauda* (Mangrove horseshoe crab) are found in Hong Kong.

## Horseshoe crabs in Hong Kong

The two species of horseshoe crab found in in Hong Kong are:



Chinese horseshoe crab (*Tachypleus tridentatus*)



Mangrove horseshoe crab (*Carcinoscorpius rotundicauda*)



### Horseshoe crab life cycle stages

All horseshoe crab species have specific and specialized habitat requirements during different stages of their life cycles, related to:

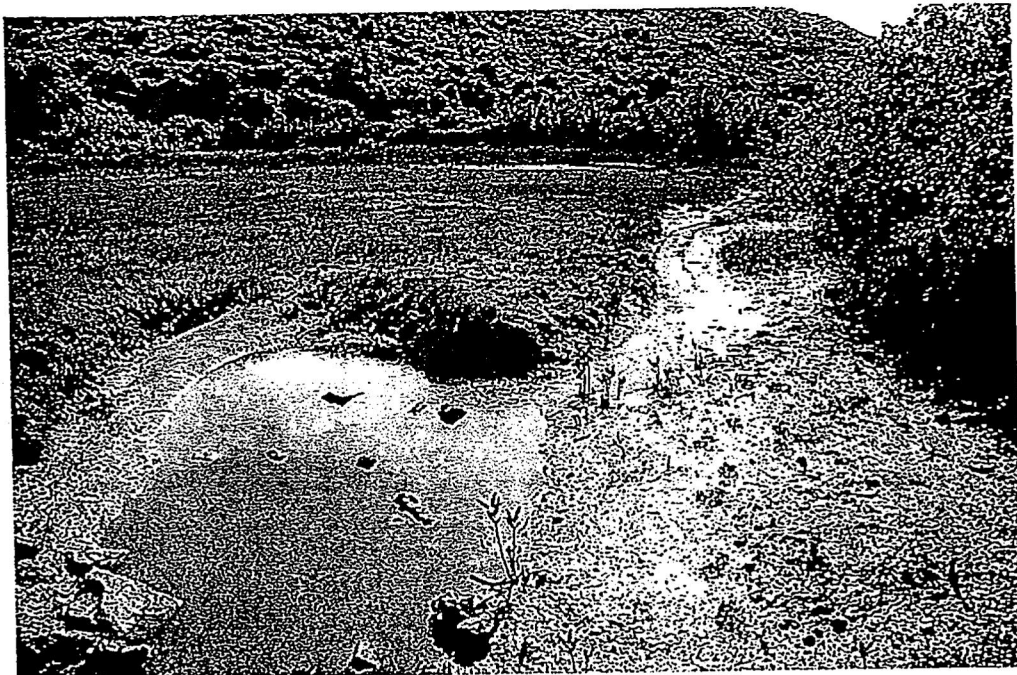
- spawning and larval development;
- juvenile development;
- adulthood.

It is the close proximity of these three differing habitats to meet the demands of the different stages of development that is critical to their survival needs, and if either the spawning grounds or juvenile development areas are lost, then the entire habitat suite is lost. See details of these life stages at Annex A.

Tai Ho Wan is important because the mangrove area is a spawning site and area of larval development for Mangrove horseshoe crabs and the inter-tidal mudflat in the bay is a juvenile Mangrove horseshoe crab nursery ground.

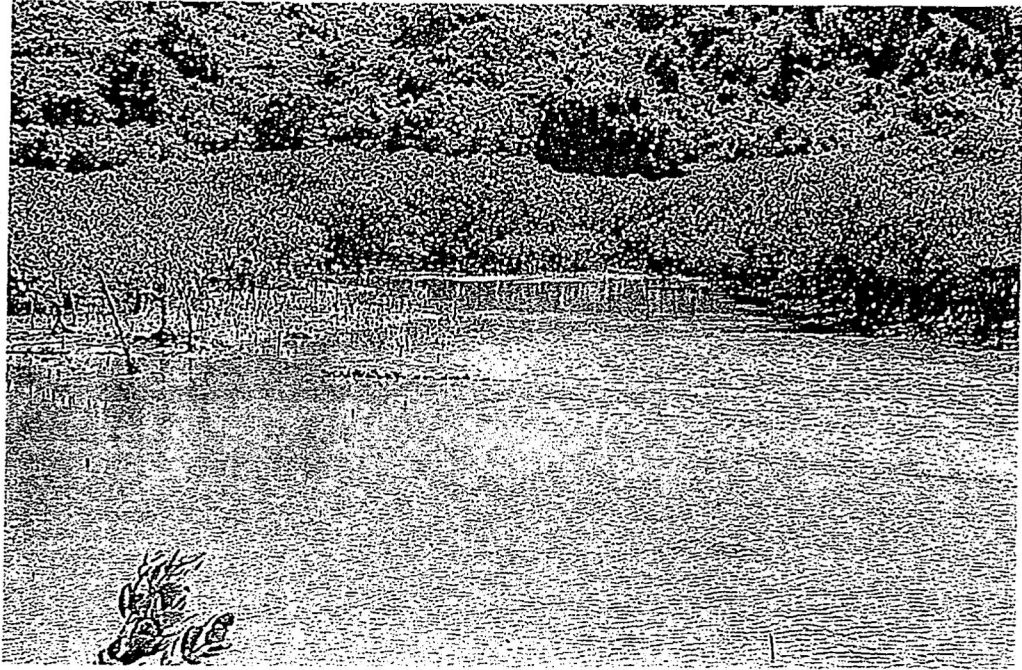
### Horseshoe crab spawning site at Tai Ho Wan

Tai Ho Wan comprises an extensive inter-tidal area with mangroves and mudflats:



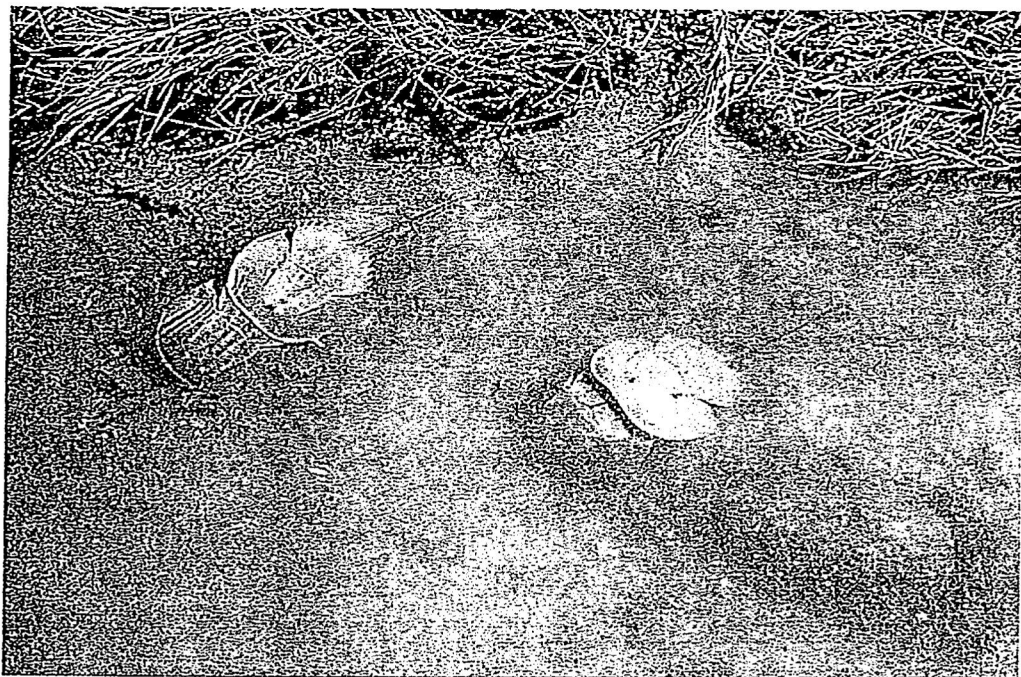
Inter-tidal horseshoe crab spawning area at Tai Ho Wan (7 June 2012)



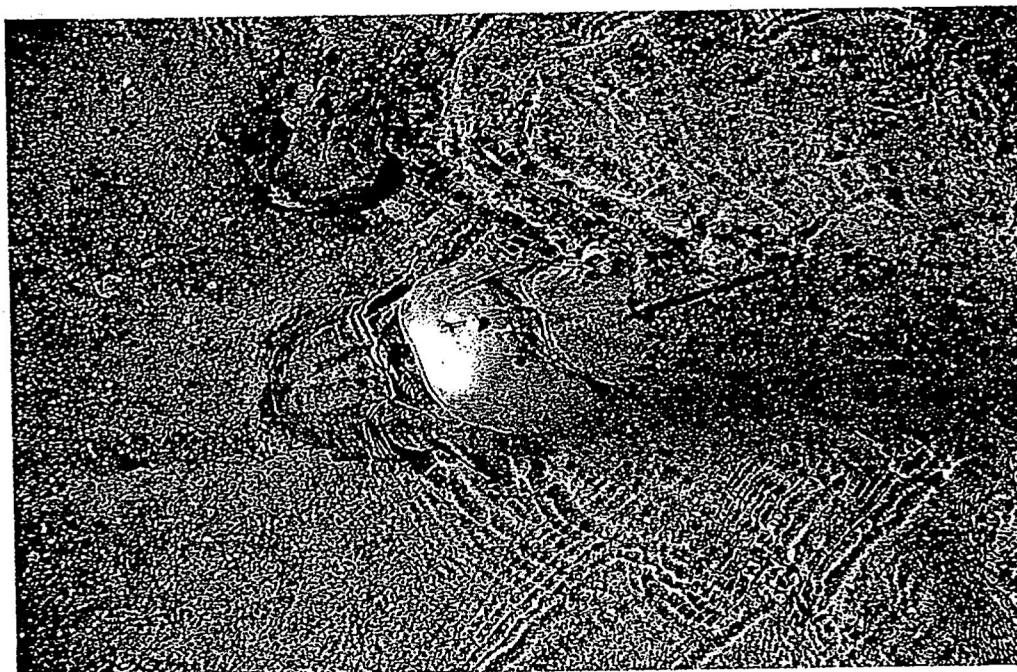


Spawning area in well developed Mangrove stand at Tai Ho Wan (7 April 2012).

Mating pairs of Mangrove horseshoe crabs at Tai Ho Wan



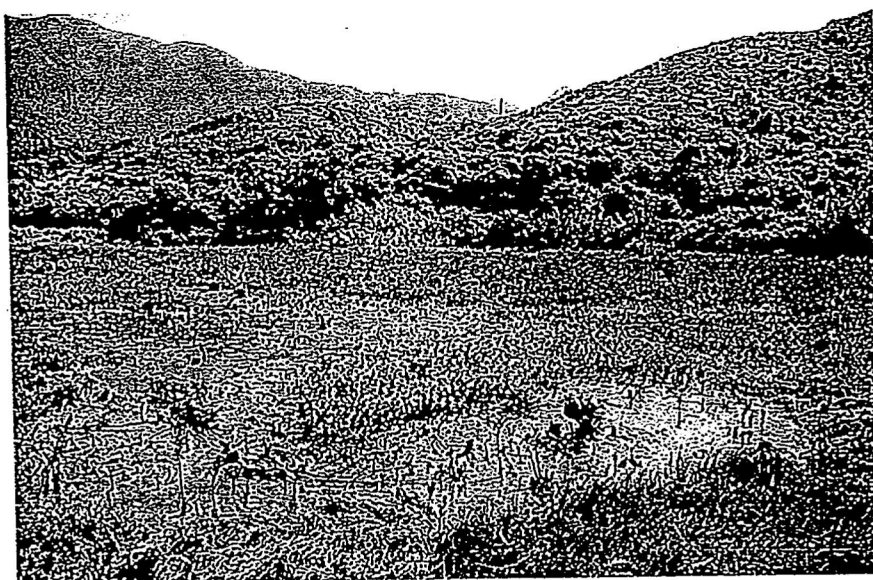
These mating pairs of Mangrove horseshoe crabs were seen swimming in an inter-tidal stream at Tai Ho Wan on 7 June 2012.



This mating pair of Mangrove horseshoe crabs was seen burying themselves in the same stream bed at Tai Ho Wan on 7 June 2012.

#### Threats to horseshoe crab habitats at Tai Ho Wan

Destruction of mangroves at Tai Ho Wan in 2012

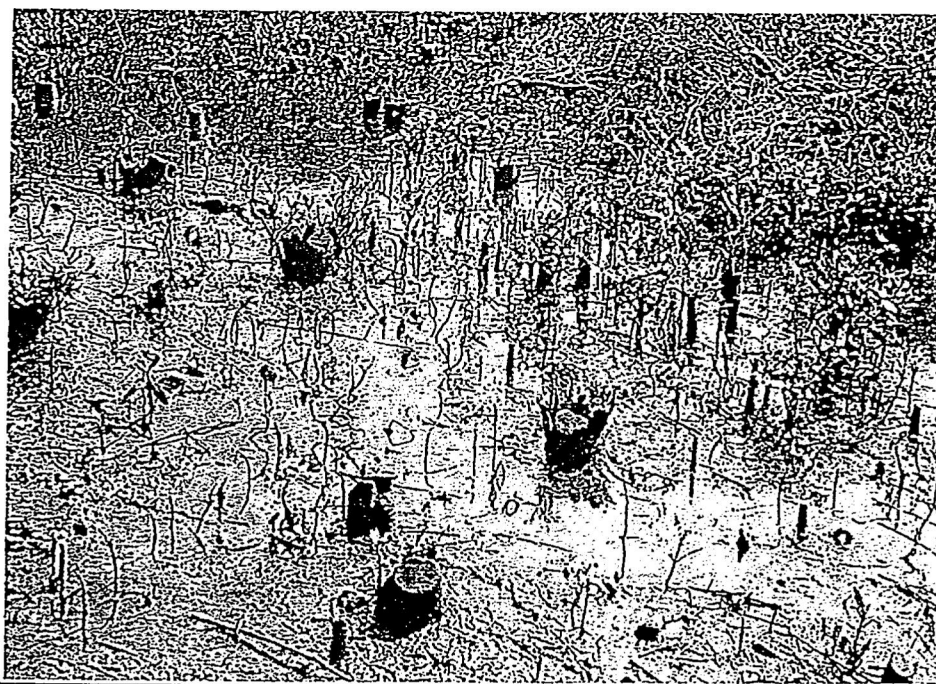


This entire inter-tidal Mangrove stand was cut down at Tai Ho Wan.  
Photograph taken on 7 June 2012.



Close-up photographs of the cut mangroves at Tai Ho Wan (7 June 2012).

Destruction of mangroves in 2012 (cont'd)



Stumps are all that are left of the cut mangroves at Tai Ho Wan (7 June 2012).

Tai Ho Wan is an active and important Mangrove horseshoe crab (*Carcinoscorpius rotundicauda*) spawning ground and nursery area and is the only undisturbed location left on Lantau where this species breeds.

It is also the best place to see spawning Mangrove horseshoe crabs in Hong Kong, making it a location of considerable public and scientific interest.

Tai Ho Wan has been identified in the Lantau Development Plan as one of the areas on Lantau to promote Ecology and Biodiversity and constructing boardwalks at Tai Ho Wan to witness Mangrove horseshoe crab spawning events could be undertaken if the area receives appropriate protections.

Protecting this location is vital to ensure the long term survival of this species in Hong Kong.

The Town Planning Board is urged to take all steps to afford all inter-tidal areas in Tai Ho Wan, including the lower reaches of the Tai Ho Stream, the Mangrove stands and the mudflats suitable protections to ensure the future viability of this area as a Mangrove horseshoe crab spawning ground and nursery area.

Submitted by

Kevin Laurie,  
Independent Horseshoe Crab Researcher,  
Hong Kong



In making this submission, I give my consent to the TPB and the Government of the HKSAR to partially or wholly publish my comments (including my personal details).



## References

AFCD (2010). *AFCD Walk Through Survey Results 1999 – 2003*. Personal Communication. K. Laurie/AFCD. May 2010.

Billy K.Y. Kwan, S.G. Cheung and Paul K.S. Shin. (2012). *Distribution and Abundance of Juvenile Horseshoe Crabs at 17 sites in Hong Kong*. [unpublished – on-going doctoral research]. City University of Hong Kong.

Chiu HMC, Morton B. (1999). *The distribution of horseshoe crabs (*Tachypleus tridentatus* and *Carcinoscorpius rotundicauda*) in Hong Kong*. Asian Marine Biology 16. 185-194.

FONG Chung-wai, Terence. (1999). *Tai Ho Wan: breeding and nursery ground of Horseshoe crabs*. Porcupine 20.

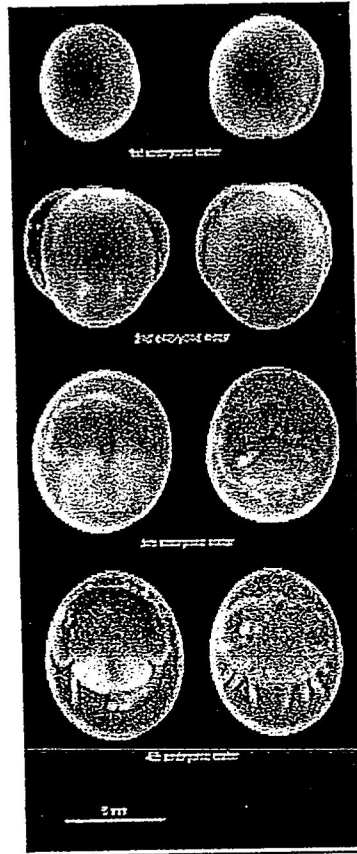
## Site visits and photographs

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## Annex A- Early life style stages of horseshoe crabs

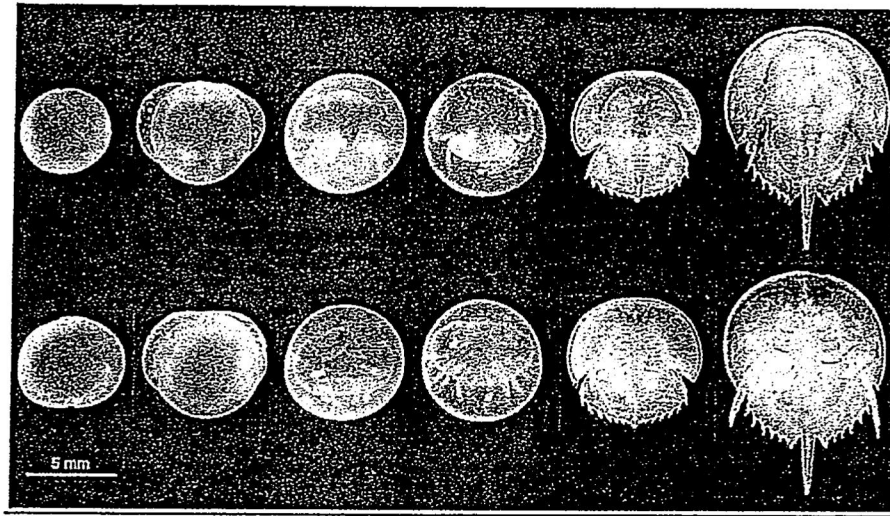
Note: Each of the life cycle stages below will take place in Tai Ho Wan:

### Stage 1: Development in the egg



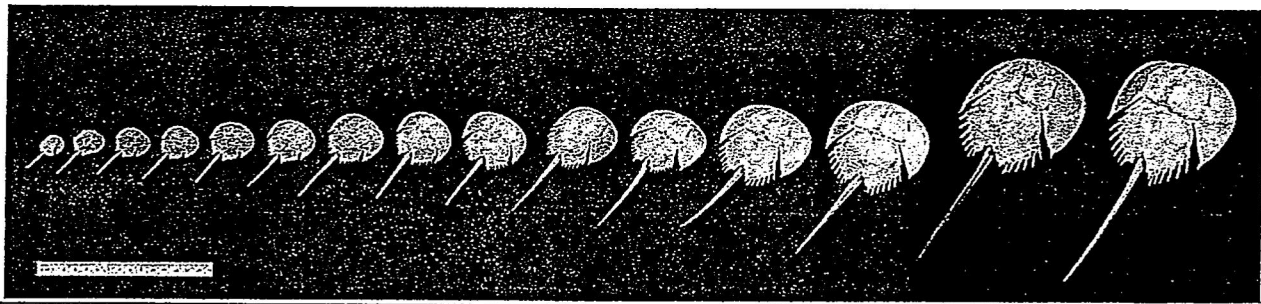
Juvenile horseshoe crabs start life by developing in their eggs (Photo: William Lau).

### Stage 2: Development in the spawning area



Juvenile horseshoe crabs develop in their eggs first, then after hatching they continue to develop in the spawning area (Photo: William Lau).

### Stage 3: Juvenile development on inter-tidal mudflats



After developing in the spawning area for about 6 weeks, the juveniles move to inter-tidal mudflats for the juvenile stages of their development.

This is a growth range of juvenile horseshoe crab molts collected from the beaches of Ha Pak Nai in Deep Bay (Growth stages are similar for both species of horseshoe crab in Hong Kong).

Each molt represents one stage of growth or instar and Mangrove horseshoe crabs may take 10 to 15 years before reaching maturity.

The scale is a 1 foot (30 centimetre) ruler.

Chairman and Members of the Town Planning Board,


Draft Tai Ho Outline Zoning Plan No. S/I-TH/1

This is a copy of my Email representation made under Section 6(1) of the Town Planning Ordinance in respect of the draft Tai Ho Outline Zoning Plan No. S/I-TH/1, which was sent to you on 23 May 2017. The attached report refers.

This submission is made in respect of the importance of Tai Ho Wan to the conservation of the Mangrove Horseshoe Crab (*Carcinoscorpius rotundicauda*) in Hong Kong.

Regards,

Kevin Laurie,  
Independent Horseshoe Crab Researcher,  
Hong Kong

  
Date: 23 May 2017

In making this submission, I give my consent to the TPB and the Government of the HKSAR to partially or wholly publish my comments (including my personal details).



Secretary,  
Town Planning Board,  
15th Floor,  
North Point Government Offices,  
333 Java Road,  
North Point,  
Hong Kong.

23 May 2017

Chairman and Members of the Town Planning Board,

**Draft Tai Ho Outline Zoning Plan No. S/I-TH/1**

This is a representation made under Section 6(1) of the Town Planning Ordinance in respect of the draft Tai Ho Outline Zoning Plan No. S/I-TH/1.

This submission is made in respect of the importance of Tai Ho Wan to the conservation of the Mangrove Horseshoe Crab (*Carcinoscorpius rotundicauda*) in Hong Kong.

**Reason for submission**

This submission is made on the following grounds:

- Tai Ho Wan is an active horseshoe crab spawning ground/nursery area for Mangrove horseshoe crabs;
- It is the best place in Hong Kong to see spawning Mangrove horseshoe crabs;
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- Protecting this location is vital to ensure the long term survival of this species in Hong Kong;
- Tai Ho Wan has been identified in the Lantau Development Plan as one of the areas on Lantau to promote Ecology and Biodiversity and constructing boardwalks at Tai Ho Wan to witness Mangrove horseshoe crab spawning events could be undertaken if the area receives appropriate protections.

**Existing conservation measures at Tai Ho Wan**

- Tai Ho Stream is designated SSSI No. 63, because it is one of the few remaining medium-sized natural streams stretching from uplands to the lowland estuary, supporting the greatest diversity of fresh water and brackish-water fish in Hong Kong. The SSSI includes the mangrove and seagrass beds which provide shelter and food for a variety of intertidal and marine invertebrates.
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Formal horseshoe crab surveys have been conducted at Tai Ho Wan with the following results:

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- Mangrove cutting by villagers poses a threat to the horseshoe crab spawning sites that exist there. See photographs below.

#### Horseshoe crab overview

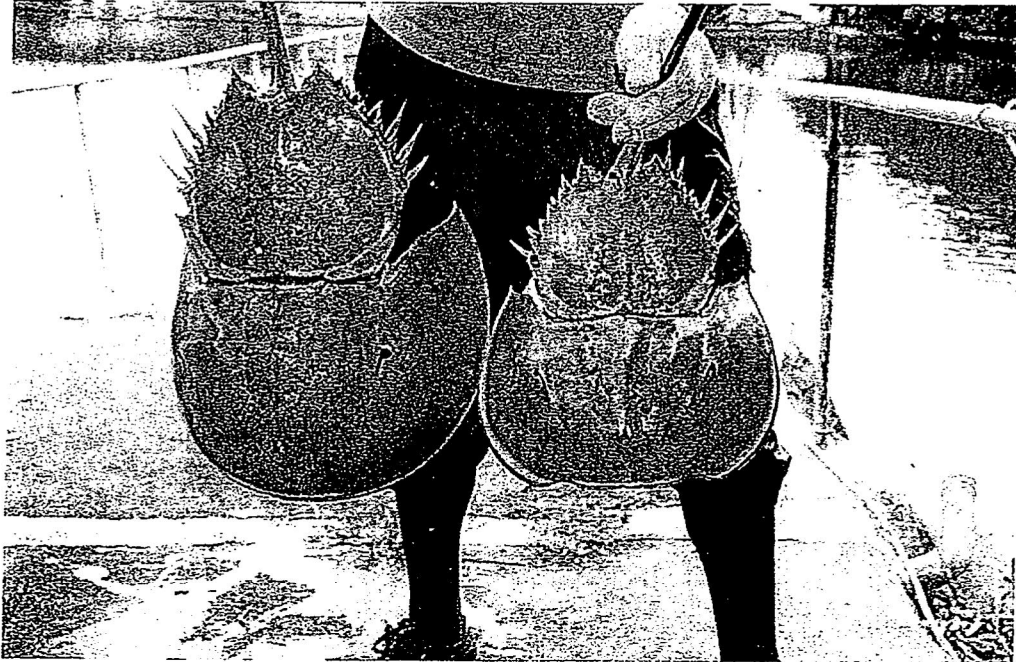
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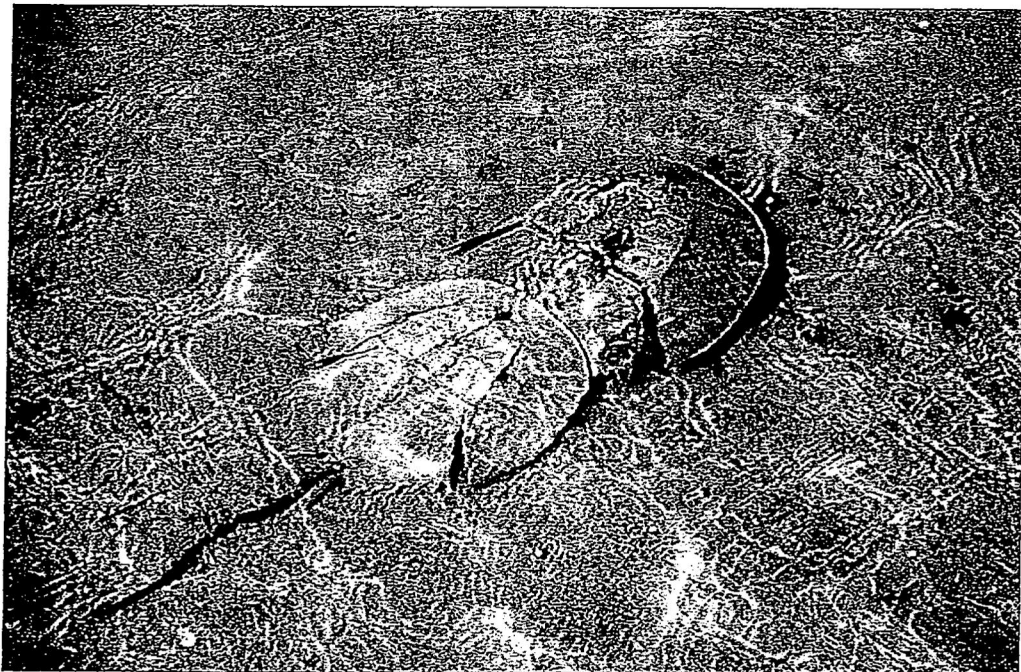
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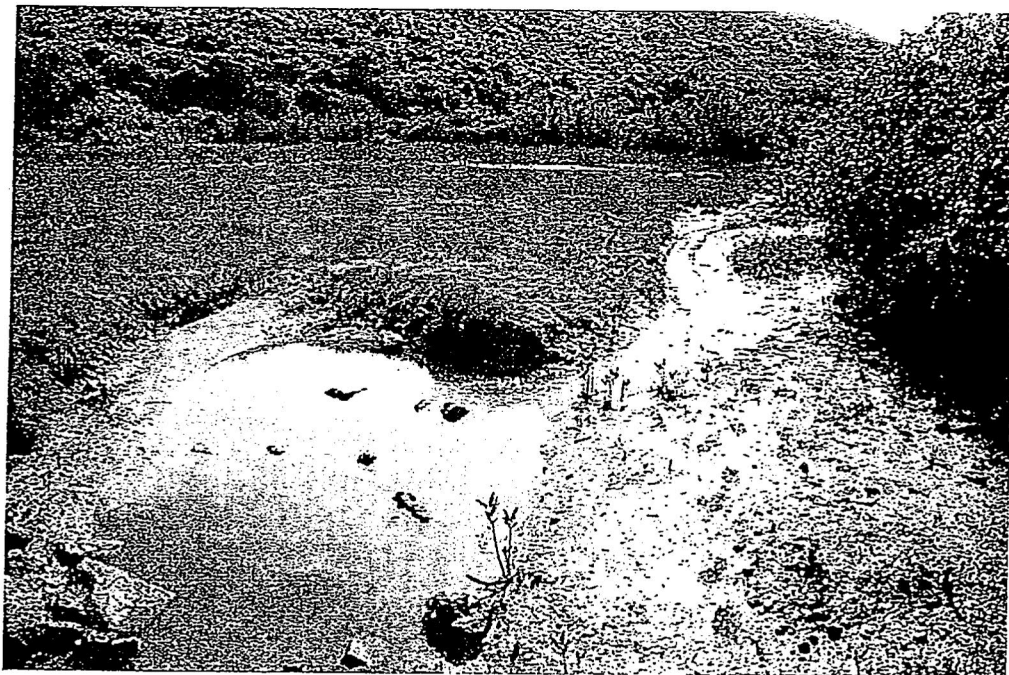
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Inter-tidal horseshoe crab spawning area at Tai Ho Wan (7 June 2012)



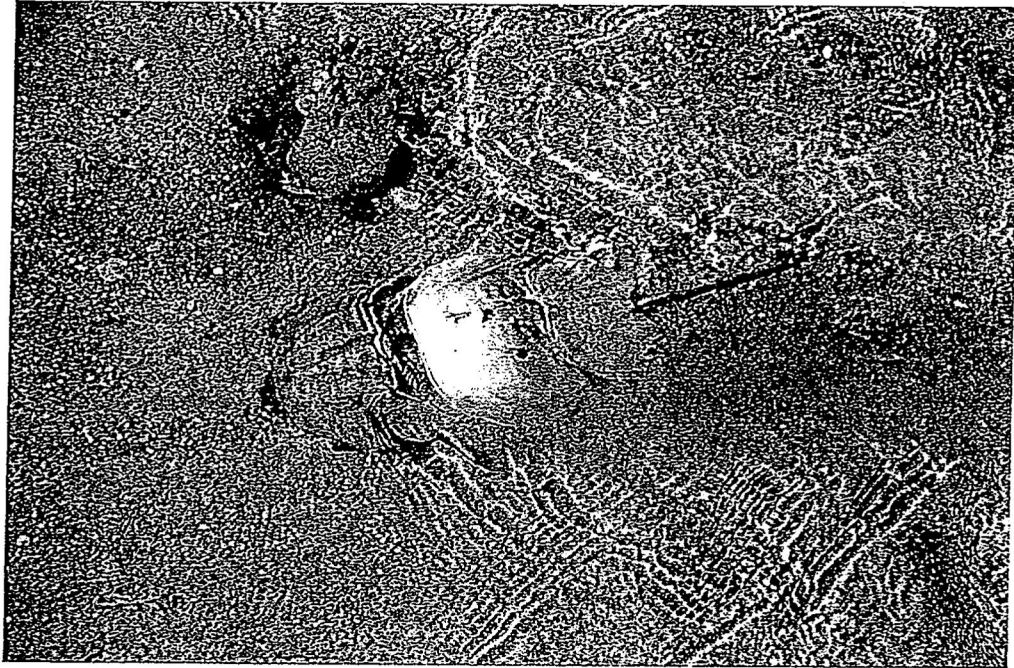
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Mating pairs of Mangrove horseshoe crabs at Tai Ho Wan



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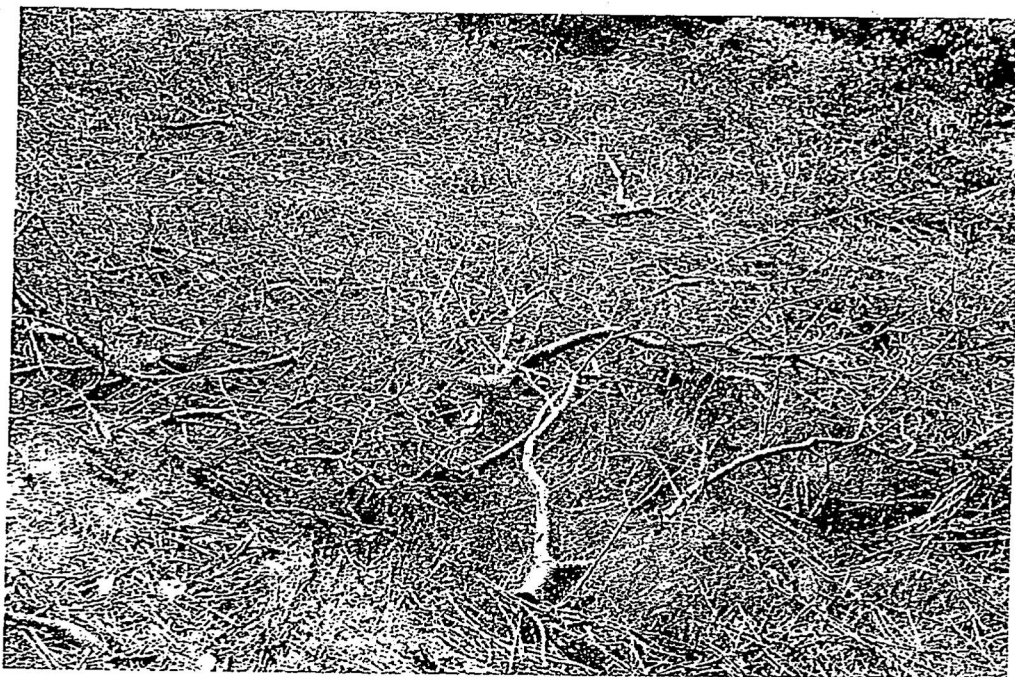
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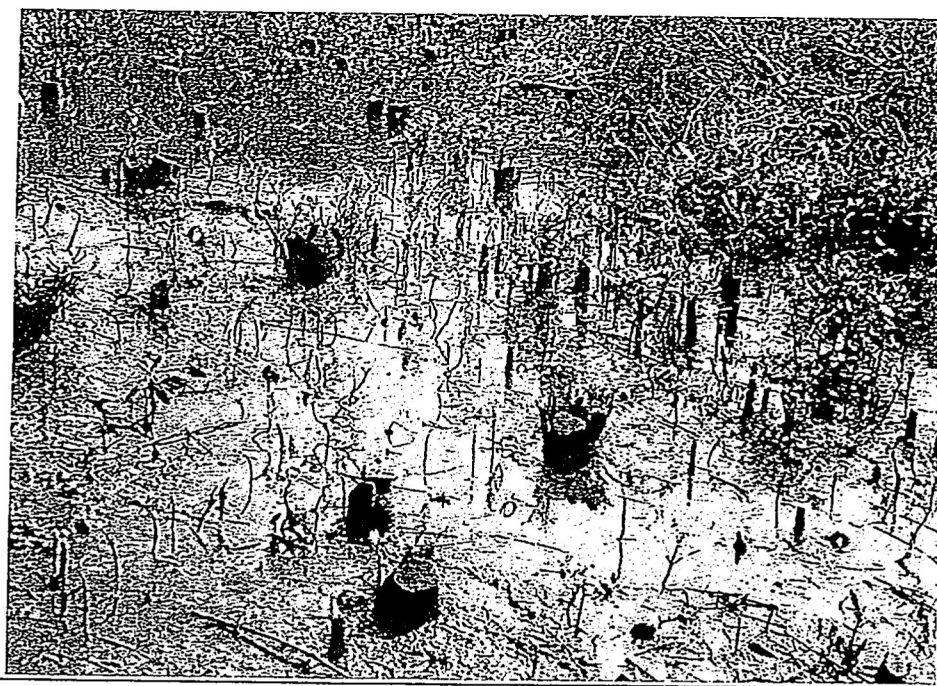


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Submitted by

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Hong Kong

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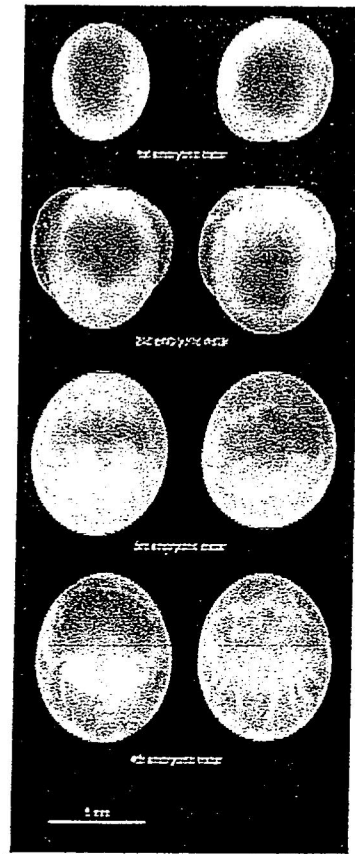
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## Annex A- Early life style stages of horseshoe crabs

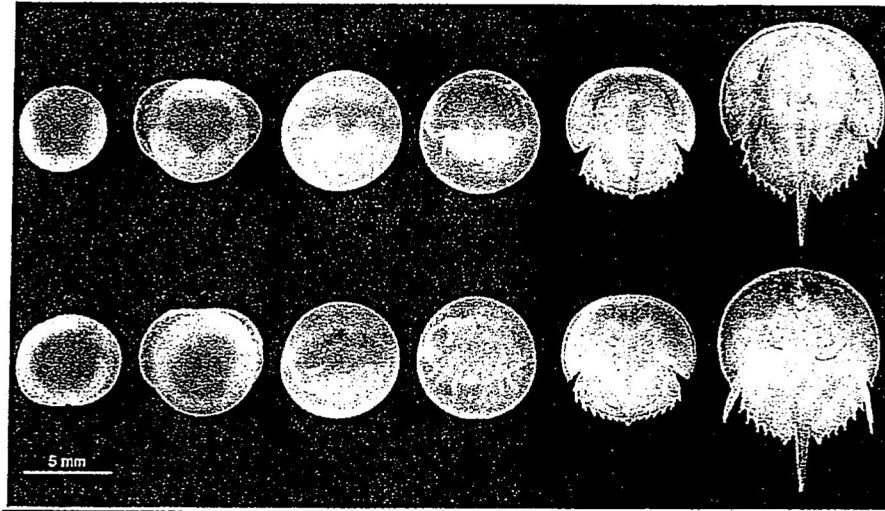
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### Stage 1: Development in the egg



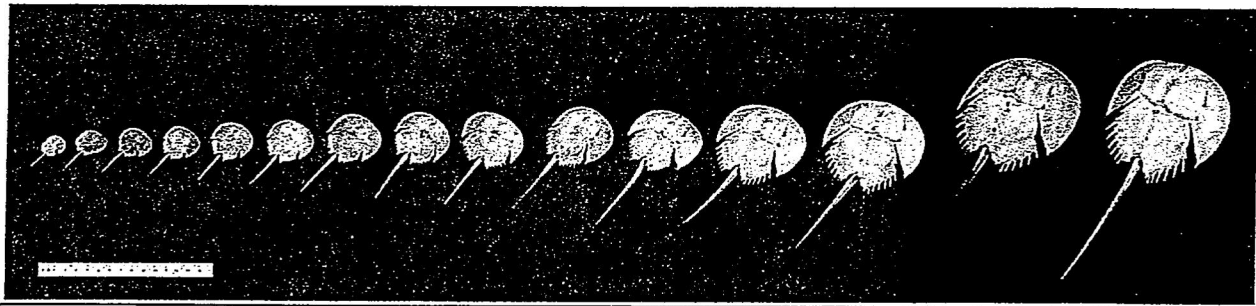
Juvenile horseshoe crabs start life by developing in their eggs (Photo: William Lau).

### Stage 2: Development in the spawning area



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### Stage 3: Juvenile development on inter-tidal mudflats



After developing in the spawning area for about 6 weeks, the juveniles move to inter-tidal mudflats for the juvenile stages of their development.

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The scale is a 1 foot (30 centimetre) ruler.



# 新界鄉議局 HEUNG YEE KUK NEW TERRITORIES

TPB/R/S/I-TH/1-10

新界沙田石門安睦街 30 號

30 On Muk Street, Shek Mun, Shatin, N.T., Hong Kong.

Tel: 2336 1151-2, 2338 8818, 2336 8659 Fax: 2338 3125

Website: www.hyknt.org

Email: nthyk@netvigator.com

檔案編號：三十四／六／三十九／一二九二號

郵遞及傳真

日期：二〇一七年五月二十三日

城市規劃委員會主席

黃偉綸太平紳士 台鑒：

## 有關《大蠔分區計劃大綱草圖(編號：S/ I-TH/1)》的申述意見

本局收到梅窩鄉事委員會來函，反映村民對標題所述規劃圖則的反對意見。本局認為梅窩鄉事委員會及村民的訴求合理，對大綱草圖表示反對，主要意見如下：

### (一)反對草圖將私人土地劃作保育用途而不作任何補償

現時圖則將大部份土地劃作 SSSI、自然保育區、海岸保育區和綠化地帶等保育用途，當中包括私人土地，村民的土地被凍結不能進行發展或進行農耕活動，當局卻沒有任何賠償予業權人，令村民蒙受損失，做法並不公平。村民建議政府積極和主動地投入資源保育該區，而非只透過限制當地村民活動進行保育。

### (二)反對草圖的「鄉村式發展」用途地帶未能真正反映村民需要

現時圖則的「鄉村式發展」用途地帶只涵蓋現有的白芒、牛牯塢及大蠔新村村界面積，部份舊屋地亦沒包括在內。村民認為現時的規劃未能滿足未來小型屋宇發展需求，並要求政府根據村民提交的小型屋宇未來十年需求數字，規劃足夠的「鄉村式發展」用途地帶，以供小型屋宇發展和填補被劃作保育用途而失去的土地。

本局希望規劃署和城規會能夠本著以人為本的精神，聆聽村民的意見。隨函附上梅窩鄉事委員會來函副本，以供參閱。專此奉達，敬祈 亮察。如有查詢請致電 2336-1151 與本局秘書處聯絡。

新界鄉議局

土地發展、規劃及保育委員會

主任委員：林偉強

副主任委員：林國昌

梁福元

(秘書處代)



附 件：梅窩鄉事委員會就《大蠔分區計劃大綱草圖》的意見信函  
副本致：梅窩鄉事委員會

# HEUNG YEE KUK NEW TERRITORIES

寄件者: 梅窩鄉事委員會 < [REDACTED] >  
寄件日期: 2017年5月18日星期四 11:03  
收件者: [REDACTED]  
主旨: 有關大蠔分區計畫大綱的意見及建議  
附件: 有關大蠔分區計劃大綱意見及建議-鄉議局.pdf

新界鄉議局  
秘書處:

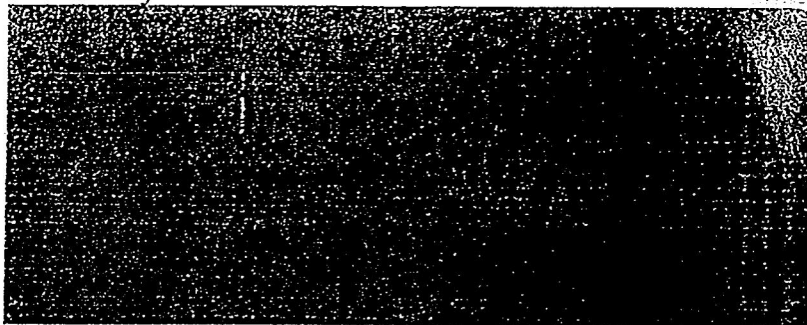
現附上有關大蠔分區計畫大綱的意見及建議  
文件，煩請轉交給  
新界傳統權益委員會主席(梁福元先生)。  
稍後寄上正本文件。  
謝謝!



Please feel free to contact us during office hour if you have any inquiries, Thank you.

Best Regards,

Ann Wan  
Secretary



# 梅窩鄉事委員會

## MUI WO RURAL COMMITTEE

香港 大嶼山 梅窩 鄉事會路 45 號 電話TEL: 2984 8473 傳真FAX: 2984 9089  
45 Mui Wo Rural Committee Rd., Mui Wo, Lantau Island, H.K. 電郵E-mail: muiworc@gmail.com

(本會檔號: MWRC/21 TO/2017/0003)

敬啟者:

本會茲收到牛牯塢、大蠔村、白芒村村代表之反映信。

內容如下:

### 有關大蠔分區計畫大綱的意見及建議

村民對大蠔分區計劃大綱草圖編號 S/I-JH/1 以下的意見及建議，懇請新界鄉議局劉業強主席及鄉議局轄下的不包括土地小組跟進。

反對說明書中整體規劃意向，理由：

1. 現時的整體規劃意向只是向環保霸權傾斜，多達 96%的土地被劃作保育，同時被強行保育的私人土地又不作任何補償或賠償，相關規劃對土地業權人絕對是不公平、不公義。我們有理由相信這是違反基本法中關於保護私人財產權益的條文。私人土地被劃作保育用途，而又不作任何賠償，村民絕不接受！農地劃作農地是村民的底線。因此三鄉村民不排除繼 2014 年大規模清除「具特殊科學價值地點」內紅樹林的維權運動後，再作進一步的行動，以示村民保護自己土地的決心！
2. 政府現時正大力發展北大嶼山，北大嶼山橋頭經濟位置旨日可待，整個北大嶼山都受惠於城市經濟發展，而我們三鄉卻只有望橋輕嘆！基建項目近在咫尺，廢氣、污染物我們"分享"了，城市發展帶來的便利，我們丁點都得不到！村民盼望相關規劃能平衡保育與發展，並不是一刀切將土地劃作保育。此外現時政府缺乏承擔的保育政策；浪費土地資源的同時，亦未能有效地管理天然環境及生態。
3. 現時特區政府覓地困難，費盡九牛二虎之力改劃綠化地帶，但卻又豪爽地劃 191 公頃的大蠔土地作為保育用途，綠化帶面積竟然多達 167 公頃！試問特

# 梅窩鄉事委員會

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區政府要花多少工夫才能覓得 167 公頃在市區邊緣的土地來建屋呢？在大蠔區就有大片土地可以用作興建公營房屋，為何不加以善用呢？

反對土地用途表的土地用途規劃，理由：

1. 此規劃的土地用途分布極不公平，梅窩邊緣分區大綱圖規劃了 12.7 公頃的住宅用地，同時亦有 18.4 公頃的康樂用地。東涌西，有 15 公頃鄉村式發展區、有住宅發展區、有資助房屋、有政府設施。地理上差不多的地方，為何如此厚此薄彼！我們要求一個與梅窩及東涌模式一樣的大綱圖，不要只是傾向保育的單一化規劃！
2. 在整份規劃文件中，大篇幅說明大蠔及大蠔溪的生態重要性，除了限制、打壓當地村民的活動，從來沒有提出主動、積極的方式去保育大蠔及大蠔溪。我們強烈要求特區政府在大蠔區域興建排污及排水系統，積極、主動地投入資源保育該區。另外村民幾百年來沿着大蠔溪生活，80 年代時更大規模在大蠔灣及大蠔溪旁養殖家禽，香魚正是在此時發現，生物物種比現時更多源。由此證明村民的活動根本不會破壞生態或使物種減少，環保霸權的指控根本不成立！
3. 現時白芒、牛牯塢及大蠔都有活躍的農耕活動，因此我們認為農地不應劃作 SSSI、自然保育區、海岸保育區或綠化地帶，雖然除 SSSI 外，農業用途在這些地區均為經常准許，但現時在其他被強行劃入保育區的土地已有環保團體質疑耕種活動會破壞環境，為了社會和諧或引起不必要的爭論，農地劃為農業用途是妥善的處理方法。
4. 特區政府在大嶼山發展的宣傳上表明會把大嶼山打做為宜居、宜樂、宜學的好地方，但近在基建兩公里範圍內的大蠔，卻連一條合規格的道路也欠奉，村民即使在東涌上班、上學也寧願住在市區前往東涌，這怪現象全因交通問題，試問又何來宜居、宜學！同時，年長的村民由於體力上未能應付又上山、又落斜、又要步行 45 分鐘的路程，最終只好放棄返鄉的念頭。他們回家的願望可能只有死後，才能達成！特區政府在規劃大蠔區時，可否人性化一點，不要遺棄當地的人類，起碼規劃一此利民的政府設施！



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反對現時「鄉村式發展」面積過少，理由：

1. 規劃署於 1992 年（附件 1）回覆梅窩鄉事委員會就有關白芒、牛牯塢及大蠔新村「鄉村式發展用地」的提問時表示” .....顧問已對多項因素作出適當的考慮，包括認可鄉村範圍、天然地形、環境狀況、基礎建設、道路及其他發展需要等，其中原居民對小型屋宇的需求亦已全面顧及。.....現有鄉村兩側兩大片共約 27 公頃的土地，已劃為「鄉村式發展用地」，並特別指定為鄉村式發展用途。” 這 27 公頃正是白芒、牛牯塢及大蠔新村村界面積的總和。現時規劃署評估「鄉村式發展用地」面積的準則相約，而現時各村落在各方的情況跟以往相約，除了海灣出口被政府填了、景觀被政府建的高架橋遮擋了、噪音多了、廢氣多了。現在可發展的土地竟然被縮小至 3.37 公頃，只能供應未來 10 住屋需求的 58%，那麼餘下的 42% 的住屋需求又如何處理？現在也滿足不了，未來的供應又如何呢？為滿足未來 10 年的住屋需求，我們要求現在先提供 6 公頃的「鄉村式發展用地」（附件 2）。長遠而言，將現有的村界加 300 尺劃為「鄉村式發展區」，這已是村民無可退讓的底線！
2. 田寮村在村界上從屬牛牯塢村，但行政上卻是屬於大蠔新村，這此歷史遺留下來的問題，在大綱圖起草時被忽略了，村民在大綱圖制定其間曾多次表達田寮村的獨特性及由來，例如統一姓郭及曾因不同的理由而多次搬村的苦況，但現時的大綱草圖除了現有的屋地被劃入鄉村式發展外，根本沒有配合將來需求的鄉村式發展用地，田寮村沒有小型屋宇需求的數據，原因只是該數據收錄在大蠔新村的申報內。現時村民建議將田寮村附近的一幅遠離大蠔溪、地勢平坦及屬於牛牯塢村界內的一幅土地劃為鄉村式發展範圍，以為持該村的宗族傳統及免受再搬遷之苦（附件 2）。
3. 大蠔新村的鄉村式發展範圍，未能配合村民的需求，現時村民在村界範圍較為平坦的土地內已作出 23 個丁屋申請，但該地段卻沒有完全包括在現時的鄉村式發展範圍內，對個別申請者做成不公平的情況。村民世代居於大蠔溪邊，將沿河 30 米劃為保育區對村民的小型屋宇申請做成極大的影響，政府理應將



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村民要求的土地劃入鄉村式發展範圍以填補保育區失去的土地。同時有部分村民的舊屋地也沒有包括在鄉村式發展內，這是村民過往生活的範圍及擁有業權的地方，絕對不能因為生長了樹木而視為遭到放棄的土地。所以大蠔村的鄉村式發展範圍必須擴大，以反映村民生活範圍及配合村民的小型屋宇需求（附件2）。

4. 牛牯塢村村界範圍有 12 公頃土地，絕大部分的土地都適合發展，現時的鄉村式發展面積少於 2 公頃，可發展面積被縮小了 6 倍。我們要求將村界範圍內西南面、東南面及北面大量適合發展的土地，劃入鄉村式發展內，以滿足村民對小型屋宇的需求。牛牯塢村鄉村式發展範圍應擴大，以反映適發展的用地、村民現時的生活範圍及對小型屋宇的需求。

5. 白芒村界範圍同樣地有大量土地適合發展，但現時被嚴重地侵蝕了。祖先種植的風水林竟然被劃為保育區，限制鄉村的發展，西面的土地，一點鄉村式發展區也沒有，北面有活躍的農業活動竟然被劃入綠化帶，村民強烈反對相關規劃！西面的土地應劃入鄉村式發展，農地不應劃為綠化帶。小型屋宇的需求得不到適切的回應，村民必定群起反對！

反對設立海岸保護區及自然保育區：

現時在海岸保護區及自然保育區准許用途的條文非常不清晰，村民很容易誤墮法網，根據過往經驗相關部門對不清晰的條文也會各自表述，結果受苦的就是我們弱小村民，舉例說：

1. 在這些地區可以使用挖泥機或其他機器協助耕種嗎？
2. 村民世代以來船隻都是停泊在海岸區域，建立了海岸保護區，船隻可以停泊嗎？雖然在註釋上說明“如在緊接有關發展審批地區草圖的公告在憲報首次刊登前已經存在，而該項用途由展開以來一直持續進行，則即使不符合圖則的規定，也無須更正。村民如何證明“持續進行”呢？如果不是持續進行是又否抵觸了規劃用途因而會受到檢控呢？

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3. 在以上區域捕魚、挖蜆，又是否抵觸了保育的規劃意向因而受到檢控呢？
4. 在海岸保護區及自然保育區上的屋宇重建須先向城市規劃委員會申請，而重建不得超過在有關發展審批地區草圖的公告在憲報首次刊登前已經存在的屋宇的地積比率、上蓋面積和高度。如該屋宇已完全倒塌，村民如何證明它的高度而作出申請呢？

反對私人土地規劃為「具特殊科學價值地點」SSSI，理由：

1. 要求將私人農地從"SSSI"中剔除或向業權人賠償或換地。位於大蠔灣 SSSI 範圍內的私人農地竟然被消失，被特區政府標籤為水體，是企圖掩飾將私人土地劃入 SSSI 的惡行嗎？！在大綱圖起草期間，村民曾多次提出將土地範圍反映在大綱圖上，以識別該處是一私人農地而非現時標註的"水體"。
2. 根據土地用途表，在 SSSI 內耕種，必須先向城規會申請，並得到准許才能進行。村民在自己農地上耕種也須申請，有違合法的地契用途，這豈不是強搶民產豈，抵觸了基本法的相關條文！繼 2014 年大規劃清理紅樹林，村民只好再開動挖泥機，繼續未完成的耕種工作！還有自以為正義之士的環保霸權，對政府的惡行不但不加以指責，反而助紂為虐，實在是無恥之極！
3. 大蠔溪被劃入 SSSI 及沿著大蠔溪兩邊 30 米範圍內的土地被劃入保育區，由溪口申延至源頭，受影響的私人土地多達 10 多公頃。1999 年特區政府在大蠔溪成立 SSSI 時曾書面回覆，表示大蠔溪 SSSI 的成立只影響河岸兩邊 20 米範圍的發展，並會作出補償！但現時規劃圖中普遍覆蓋 30 米範圍，對補償方案更是隻字不提！現時的保育區，理應退到 20 米，並落實補償方案，作出舒緩措施（附件 3）。
4. 同時村民農地的堤圍由於在 SSSI 內導致未能維修保養，村民曾去信規劃署要求澄清維修的問題，規劃署明確回應須向城規會申請並得到准許才能進行，相關損失只有業權人自己承擔，這是極不久責任及不公平的政策，政府部門應

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統籌及進行相關維修。

有見現時大綱草圖只偏向保育霸權一方，有違以民為本的原則，村民絕不希望被政府迫上絕路，村民也不希望玉石俱焚、一拍兩散的局面出現。但在沒有選擇的情況下，這是必然的選擇！

以上是村民就大蠔分區計劃大綱草圖編號 S/I-TH/1 的意見及建議。

大蠔村村代表、牛牯壆村村代表、白芒村村代表

鄒長福、林慶貴、林世明、張志雄、郭樹榕

三鄉權益關注組召集人 林家柱

現本會希望 貴會對三鄉的未來的規劃作出跟進，祈求覆示，以待本會回覆三鄉各村村代表。

此致

新界鄉議局

新界傳統權益委員會主席

梁福元先生



梅窩鄉事委員會

主席黃文漢

副主席鄒長福

李國強

(秘書處 溫少麗 代行)

2017年5月18日

tpbpd

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寄件者: Hon Kwan Yu <[REDACTED]>  
寄件日期: 23日05月2017年星期二 15:53  
收件者: tpbpd@pland.gov.hk  
主旨: 《大蠓分區計劃大綱草圖編號SI-TH 1》申述意見  
附件: 《大蠓分區計劃大綱草圖編號SI-TH 1》的申述意見.pdf

敬啟者:

請查看附件內容,謝謝。

此致 城規會秘書處

申述人余漢坤

致 城市規劃委員會秘書署  
由 離島區議會余漢坤  
共十六頁

REPRESENTATION RELATING TO  
DRAFT PLAN UNDER SECTION 6(1) OF  
THE TOWN PLANNING ORDINANCE (CAP.131)

根據《城市規劃條例》（第131章）  
第6(1)條就草圖作出申述

For Official Use Only 請勿填寫此欄	Reference No. 檔案編號	
	Date Received 收到日期	

- The representation should be made to the Town Planning Board (the Board) before the expiry of the specified plan exhibition period. The completed form and supporting documents (if any) should be sent to the Secretary, Town Planning Board, 15/F., North Point Government Offices, 333 Java Road, North Point, Hong Kong.  
申述必須於指定的圖則展示期限屆滿前向城市規劃委員會（下稱「委員會」）提出，填妥的表格及支持有關申述的文件（倘有），必須送交香港北角渣華道 333 號北角政府合署 15 樓城市規劃委員會秘書收。
- Please read the "Town Planning Board Guidelines on Submission and Publication of Representations, Comments on Representations and Further Representations" before you fill in this form. The Guidelines can be obtained from the Secretariat of the Board (15/F., North Point Government Offices, 333 Java Road, North Point, Hong Kong - Tel.: 2231 4810 or 2231 4835) and the Planning Enquiry Counters of the Planning Department (Hotline: 2231 5000) (17/F., North Point Government Offices, 333 Java Road, North Point, Hong Kong and 14/F., Sha Tin Government Offices, 1 Sheung Wo Che Road, Sha Tin, New Territories), or downloaded from the Board's website at <http://www.info.gov.hk/tph/>.  
填寫此表格之前，請先細閱有關「根據城市規劃條例提交及公布申述、對申述的意見及進一步申述」的城市規劃委員會規劃指引。這份指引可向委員會秘書處（香港北角渣華道 333 號北角政府合署 15 樓 - 電話：2231 4810 或 2231 4835）及規劃署的規劃資料查詢處（熱線：2231 5000）（香港北角渣華道 333 號北角政府合署 17 樓及新界沙田上禾輦路 1 號沙田政府合署 14 樓）索取，亦可從委員會的網頁下載（網址：<http://www.info.gov.hk/tph/>）。
- This form can be downloaded from the Board's website, and obtained from the Secretariat of the Board and the Planning Enquiry Counters of the Planning Department. The form should be typed or completed in block letters, preferably in both English and Chinese. The representation may be treated as not having been made if the required information is not provided.  
此表格可從委員會的網頁下載，亦可向委員會秘書處及規劃署的規劃資料查詢處索取。提出申述的人士須以打印方式或以正楷填寫表格，填寫的資料宜中英文兼備。倘若未能提供所需資料，則委員會可把有關申述視為不曾提出論。

1. Person Making This Representation (known as "Representer" hereafter) 提出此宗申述的人士（下稱「申述人」）	
Name 姓名/名稱 (Mr./Mrs./Miss/Ms./Company/Organization* 先生/夫人/小姐/女士/公司/機構*)  余漢坤 離島區議會副主席	
2. Authorized Agent (if applicable) 獲授權代理人 (如適用)	
Name 姓名/名稱 (Mr./Mrs./Miss/Ms./Company/Organization* 先生/夫人/小姐/女士/公司/機構*)  	
3. Details of the Representation 申述詳情	
Draft plan to which the representation relates 與申述相關的草圖	大嶼分區計劃大綱草圖編號 S/I - TH/1

\* Delete as appropriate      \* 請刪去不適用者  
Please fill "NA" for inapplicable item    請在不適用的項目填寫「不適用」

**3. Details of the Representation (Continued) (use separate sheet if necessary)**  
**申述詳情 (續) (如有需要, 請另頁說明)**

**Nature of and reasons for the representation 申述的性質及理由**

Subject matters <sup>②</sup> 有關事項 <sup>②</sup>	Are you supporting or opposing the subject matter? 你支持還是反對有關事項?	Reasons 理由
	<input type="checkbox"/> support 支持 <input checked="" type="checkbox"/> oppose 反對	詳見「有關《大嶺分區計劃大綱草圖編號 S/L-TH/1》的居民申訴意見及建議」
	<input type="checkbox"/> support 支持 <input type="checkbox"/> oppose 反對	
	<input type="checkbox"/> support 支持 <input type="checkbox"/> oppose 反對	

Any proposed amendments to the draft plan? If yes, please specify the details.  
 對草圖是否有任何擬議修訂? 如有的話, 請註明詳情。

② Please describe the particular matter in the plan to which the representation relates. Where the representation relates to an amendment to a plan, please specify the amendment item number provided in the Schedule of Amendments.  
 請形容圖則內與申述相關的指定事項。如申述與圖則的修訂有關, 請註明在修訂項目附表內的修訂項目編號。

Please fill "NA" for inapplicable item 請在不適用的項目填寫「不適用」  
 「✓」 at the appropriate box 請在適當的方格內加上「✓」號

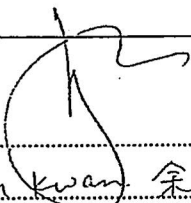
**4. Plans, Drawings and Documents 圖則、繪圖及文件**

Please list location plans, sites plans, other relevant plans, drawings and other documents submitted with the representation. For coloured drawings/plans or plans/drawings larger than A3 size, 90 copies each should be provided. For other supplementary documents, e.g. reports on impact assessment, 90 copies each should be submitted.

請列明連同申述一併遞交的位置圖、地盤平面圖、其他相關圖則、繪圖及其他文件。倘有圖則/繪圖為彩圖或超過A3大小，須一式90份。至於其他補充文件（例如：影響評估報告），則須一式90份。

**5. Signature 簽署**

Signature  
簽署



"Representer" / Authorized Agent\*

「申述人」/ 獲授權代理人\*

Yu Hon Kwan 余漢坤

Name in Block Letters 姓名（以正楷填寫）

Position (if applicable) 職位（如適用）

Professional  
Qualification(s) 專業資格

Member 會員 / Fellow 資深會員 \* of

☐ HKIP ☐ HKIA ☐ HKIS ☐ HKIE ☐ HKILA

Others 其他 RICS

on behalf of  
代表

Company/Organization Name and Chop (if applicable)

公司/機構名稱及蓋章（如適用）

Date

日期 24/5/2017

**Statement on Personal Data 個人資料的聲明**

1. The personal data submitted to the Board in this representation will be used by the Secretary of the Board and Government departments for the following purposes:

- (a) the processing of this representation which includes making available the name of the "representer" for public inspection when making available this representation for public inspection; and
- (b) facilitating communication between the "representer" and the Secretary of the Board/Government departments in accordance with the provisions of the Town Planning Ordinance and the relevant Town Planning Board Guidelines.

委員會就這宗申述所收到的個人資料會交給委員會秘書及政府部門，以根據《城市規劃條例》及相關的城市規劃委員會規劃指引的規定作以下用途：

- (a) 處理這宗申述，包括公布這宗申述供公眾查閱，同時公布「申述人」的姓名供公眾查閱；以及
- (b) 方便「申述人」與委員會秘書及政府部門之間進行聯絡。

2. The personal data provided by the "representer" in this representation may also be disclosed to other persons for the purposes mentioned in paragraph 1 above.

「申述人」就這宗申述提供的個人資料，或亦會向其他人士披露，以作上述第1段提及的用途。

3. A "representer" has a right of access and correction with respect to his/her personal data as provided under the Personal Data (Privacy) Ordinance (Cap. 486). Request for personal data access and correction should be addressed to the Secretary of the Board at 15/F., North Point Government Offices, 333 Java Road, North Point, Hong Kong.

根據《個人資料（私隱）條例》（第486章）的規定，「申述人」有權查閱及更正其個人資料。如欲查閱及更正個人資料，應向委員會秘書提出有關要求，其地址為香港北角遼寧道333號北角政府合署15樓。

\* Delete as appropriate

\* 請刪去不適用者

Please fill "NA" for inapplicable item 請在不適用的項目填寫「不適用」

「✓」 at the appropriate box

請在適當的方格內加上「✓」號



敬啟者：

有關《大蠔分區計劃大綱草圖編號 S/I-TH/1》

的居民申訴意見及建議

關於《大蠔分區計劃大綱草圖編號 S/I-TH/1》，本人在 5 月 17 日收到大蠔村村代表、牛牯塱村村代表、白芒村村代表及三鄉權益關注組的意見及建議，村民最主要是不滿大綱草圖只偏向環境保育一方，關注人文歷史保育不足，並有違以民為本的原則。此外，申訴還包括五大項（詳見附件一），內容如下。

- 一．反對說明書中整體規劃意向
- 二．反對土地用途表的土地用途規劃，
- 三．反對現時「鄉村式發展」面積過少
- 四．反對設立海岸保護區及自然保育區
- 五．反對私人土地規劃為「具特殊科學價值地點」SSSI

誠如本人在離島區議會 2016 年 12 月 19 日的會議中所言，規劃署代表雖然表示，已曾徵詢梅窩鄉事委員會及三鄉村民的意見，但有關說法並不準確，也並非事實全部，因為署方未能反映鄉事會及三鄉村民對大綱草圖所提出的反對意見，所以村民一而再向本人反映不滿。本人理解三鄉村民憂慮大綱草圖的規劃限制鄉村的發展，同時一再懇請規劃署及政府考慮村民的意見。

對《大蠔分區計劃大綱草圖編號 S/I-TH/1》，本人的意見如下：

- (a) 雖然規劃署由擬備發展審批地區草圖至大綱草圖曾作出不少修訂，例如將預留作「鄉村式發展」土地由 1.2 公頃增至 6.43 公頃，但不少新增土地位於陡峭斜坡，難以興建房屋。
- (b) 本港任何鄉郊地方都具有一定生態價值，若有關地點已有居民居住，便需以人為本。政府在 1999 年將大蠔溪（稱謂謬誤為大蠔河）兩旁 20 米劃為“SSSI”，但現時範圍增至 30 米。政府曾承諾考慮賠償村民，但至今未有提出補償方案。村民現時引用《基本法》條文，希望政府保障村民的私人財產。若規劃署一意孤行，或會造成矛盾。
- (c) 保育必須，但代價為何由三鄉村民付出？北大嶼山公路與港珠澳大橋香港口岸的連接點鄰近大蠔灣，對大蠔灣生態有一定影響，若從保育角度考慮，便不應在大蠔附近興建道路。三鄉村民承受車輛廢氣、污染物及空氣污染，卻未能享受便捷的交通。政府封閉大蠔灣河口，導致三鄉兩處排水位失效，居民無力負擔農地堤圍的維修費用，但現時政府又不准居民於保育地耕種。雖然規劃署已盡力提出補救措施，但對政府整體政策感到失望。
- (d) 本人曾多次要求政府成立自然保育基金，若村民的私有產權因規劃而受到侵害，便可作出適切賠償。若政府認為保護環境重要，

便應考慮為三鄉村民換地或作出補償。三鄉村民要求保留農地便應規劃作為農業用途，政府應正視他們對實際及潛在鄉村式發展土地的需求。成立自然保育基金後，若需進行保育，便有機會顧及村民的私有產權。

- (e) 現時區內欠缺污水和排水設施，難以進行保育，希望政府為居民提供基本設施。
- (f) 近年有村民為進行復耕，在大蠔河的私人土地/祖堂地清除樹木及雜草，由於有關土地位於“SSSI”，造成城鄉矛盾。現時地貌已經改變，可否考慮將祖堂農地剔出“SSSI”範圍，規劃為農地。

本人促請規劃署及圻規會尊重村民意見，盡量提供協助，不要墨守成規，並重新規劃大綱草圖。

此致 城市規劃委員會

離島區議會余漢坤



謹上

二零一七年五月十九日

## 附件一

致離島區議會余漢坤副主席：

余議員，首先感謝閣下及離島區議會一直以來對三鄉的關注及幫助，村民對大蠔分區計劃大綱草圖編號 S/I-TH/1 有以下的意見及建議，懇請余議員協助向相關的政府部門反映村民的申訴。

反對說明書中整體規劃意向，理由：

1. 現時的整體規劃意向只是向環保霸權傾斜，多達 96% 的土地被劃作保育，同時被強行保育的私人土地又不作任何補償或賠償，相關規劃對土地業權人絕對是不公平、不公義。我們有理由相信這是違反基本法中關於保護私人財產權益的條文。私人土地被劃作保育用途，而又不作任何賠償，村民絕不接受！農地劃作農地是村民的底線。因此三鄉村民不排除繼 2014 年大規模清除「具特殊科學價值地點」內紅樹林的維權運動後，再作進一步的行動，以示村民保護自己土地的決心！
2. 政府現時正大力發展北大嶼山，北大嶼山橋頭經濟位置旨日可待，整個北大嶼山都受惠於城市經濟發展，而我們三鄉卻只有望橋輕嘆！基建項目近在咫尺，廢氣、污染物我們“分享”了，城市發展帶來的便利，我們丁點都得不到！村民盼望相關規劃能平衡保育與發展，並不是一刀切將土地劃作保育。此外現時政府缺乏承擔的保育政策，浪費土地資源的同時，亦未能有效地管理天然環境及生態。
3. 現時特區政府覓地困難，費盡九牛二虎之力改劃綠化地帶，但卻又豪爽地劃 191 公頃的大蠔土地作為保育用途，綠化帶面積竟然多達 167 公頃！試問特區政府要花多少工夫才能覓得 167 公頃在市區邊緣的土地來建屋呢？在大蠔區就有大片土地可以用作興建公營房屋，為何不加以善用呢？

反對土地用途表的土地用途規劃，理由：

1. 此規劃的土地用途分布極不公平，梅窩邊緣分區大綱圖規劃了 12.7 公頃的住宅用地，同時亦有 18.4 公頃的康樂用地。東涌西，有 15 公頃鄉村式發展區、有住宅發展區、有資助房屋、有政府設施。地理上差不多的地方，為何如此厚此薄彼！我們要求一個與梅窩及東涌模式一樣的大綱圖，不要只是傾向保育的單一化規劃！
2. 在整份規劃文件中，大篇幅說明大蠔及大蠔溪的生態重要性，除了限制、打壓當地村民的活動，從來沒有提出主動、積極的方式去保育大蠔及大蠔溪。我們強烈要求特區政府在大蠔區域興建排污及排水系統，積極、主動地投入資源

保育該區。另外村民幾百年來沿着大蠔溪生活，80年代時更大規模在大蠔灣及大蠔溪旁養殖家禽，香魚正是在此時發現，生物物種比現時更多源。由此證明村民的活動根本不會破壞生態或使物種減少，環保霸權的指控根本不成立！

3. 現時白芒、牛牯塢及大蠔都有活躍的農耕活動，因此我們認為農地不應劃作 SSSI、自然保育區、海岸保育區或綠化地帶，雖然除 SSSI 外，農業用途在這些地區均為經常准許，但現時在其他被強行劃入保育區的土地已有環保團體質疑耕種活動會破壞環境，為了社會和諧或引起不必要的爭論，農地劃為農業用途是妥善的處理方法。

4. 特區政府在大嶼山發展的宣傳上表明會把大嶼山打做為宜居、宜樂、宜學的好地方，但近在基建兩公里範圍內的大蠔，卻連一條合規格的道路也欠奉，村民即使在東涌上班、上學也寧願住在市區前往東涌，這怪現象全因交通問題，試問又何來宜居、宜學！同時，年長的村民由於體力上未能應付又上山、又落斜、又要步行 45 分鐘的路程，最終只好放棄返鄉的念頭。他們回家的願望可能只有死後，才能達成！特區政府在規劃大蠔區時，可否人性化一點，不要遺棄當地的人類，起碼規劃一此利民的政府設施！

反對現時「鄉村式發展」面積過少，理由：

1. 規劃署於 1992 年（附件 A）回覆梅窩鄉事委員會就有關白芒、牛牯塢及大蠔新村「鄉村式發展用地」的提問時表示”……顧問已對多項因素作出適當的考慮，包括認可鄉村範圍、天然地形、環境狀況、基礎建設、道路及其他發展需要等，其中原居民對小型屋宇的需求亦已全面顧及。……現有鄉村兩側兩大片共約 27 公頃的土地，已劃為「鄉村式發展用地」，並特別指定為鄉村式發展用途。”這 27 公頃正是白芒、牛牯塢及大蠔新村村界面積的總和。現時規劃署評估「鄉村式發展用地」面積的準則相約，而現時各村落在各方的情況跟已往相約，除了海灣出口被政府填了、景觀被政府建的高架橋遮擋了、噪音多了、廢氣多了。現在可發展的土地竟然被縮小至 3.37 公頃，只能供應未來 10 住屋需求的 58%，那麼餘下的 42% 的住屋需求又如何處理？現在也滿足不了，未來的供應又如何呢？為滿足未來 10 年的住屋需求，我們要求現在先提供 6 公頃的「鄉村式發展用地」（附件 B）。長遠而言，將現有的村界加 300 尺劃為「鄉村式發展區」，這已是村民無可退讓的底線！

2. 田寮村在村界上從屬牛牯塢村，但行政上卻是屬於大蠔新村，這此歷史遺留下來的問題，在大綱圖起草時被忽略了，村民在大綱圖制定期間曾多次表達田寮村的獨特性及由來，例如統一姓郭及曾因不同的理由而多次搬村的苦況，但現時的大綱草圖除了現有的屋地被劃入鄉村式發展外，根本沒有配合將來需求的鄉村式發展用地，田寮村沒有小型屋宇需求的數據，原因只是該數據收錄

在大蠔新村的申報內。現時村民建議將田寮村附近的一幅遠離大蠔溪、地勢平坦及屬於牛牯塱村界內的一幅土地劃為鄉村式發展範圍，以為持該村的宗族傳統及免受再搬遷之苦（附件 B）。

3. 大蠔新村的鄉村式發展範圍，未能配合村民的需求，現時村民在村界範圍較為平坦的土地內已作出 23 個丁屋申請，但該地段卻沒有完全包括在現時的鄉村式發展範圍內，對個別申請者做成不公平的情況。村民世代居於大蠔溪邊，將沿河 30 米劃為保育區對村民的小型屋宇申請做成極大的影響，政府理應將村民要求的土地劃入鄉村式發展範圍以填補保育區失去的土地。同時有部分村民的舊屋地也沒有包括在鄉村式發展內，這是村民過往生活的範圍及擁有業權的地方，絕對不能因為生長了樹木而視為遭到放棄的土地。所以大蠔村的鄉村式發展範圍必須擴大，以反映村民生活範圍及配合村民的小型屋宇需求（附件 B）。

4. 牛牯塱村村界範圍有 12 公頃土地，絕大部分的土地都適合發展，現時的鄉村式發展面積少於 2 公頃，可發展面積被縮小了 6 倍。我們要求將村界範圍內西南面、東南面及北面大量適合發展的土地，劃入鄉村式發展內，以滿足村民對小型屋宇的需求。牛牯塱村鄉村式發展範圍應擴大，以反映適發展的用地、村民現時的生活範圍及對小型屋宇的需求（附件 B）。

5. 白芒村界範圍同樣地有大量土地適合發展，但現時被嚴重地侵蝕了。祖先種植的風水林竟然被劃為保育區，限制鄉村的發展，西面的土地，一點鄉村式發展區也沒有，北面有活躍的農業活動竟然被劃入綠化帶，村民強烈反對相關規劃！西面的土地應劃入鄉村式發展，農地不應劃為綠化帶。小型屋宇的需求得不到適切的回應，村民必定群起反對！（附件 B）

反對設立海岸保護區及自然保育區：

現時在海岸保護區及自然保育區准許用途的條文非常不清晰，村民很容易誤墮法網，根據過往經驗相關部門對不清晰的條文也會各自表述，結果受苦的就是我們弱小村民，舉例說：

1. 在這些地區可以使用挖泥機或其他機器協助耕種嗎？
2. 村民世代以來船隻都是停泊在海岸區域，建立了海岸保護區，船隻可以停泊嗎？雖然在註釋上說明“如在緊接有關發展審批地區草圖的公告在憲報首次刊登前已經存在，而該項用途由展開以來一直持續進行，則即使不符合圖則的規定，也無須更正。村民如何證明“持續進行”呢？如果不是持續進行是又否抵觸了規劃用途因而會受到檢控呢？
3. 在以上區域捕魚、挖蜆，又是否抵觸了保育的規劃意向因而受到檢控呢？

4. 在海岸保護區及自然保育區上的屋宇重建須先向城市規劃委員會申請，而重建不得超過在有關發展審批地區草圖的公告在憲報首次刊登前已經存在的屋宇的地積比率、上蓋面積和高度。如該屋宇已完全倒塌，村民如何證明它的高度而作出申請呢？

反對私人土地規劃為「具特殊科學價值地點」SSSI，理由：

1. 要求將私人農地從"SSSI"中剔除或向業權人賠償或換地。位於大蠔灣 SSSI 範圍內的私人農地竟然被消失，被特區政府標籤為水體，是企圖掩飾將私人土地劃入 SSSI 的惡行嗎？！在大綱圖起草期間，村民曾多次提出將土地範圍反映在大綱圖上，以識別該處是一私人農地而非現時標註的"水體"。

2. 根據土地用途表，在 SSSI 內耕種，必須先向城規會申請，並得到准許才能進行。村民在自己農地上耕種也須申請，有違合法的地契用途，這豈不是強搶民產豈，抵觸了基本法的相關條文！繼 2014 年大規劃清理紅樹林，村民只好再開動挖泥機，繼續未完成的耕種工作！還有自以為正義之士的環保霸權，對政府的惡行不但不加以指責，反而助紂為虐，實在是無恥之極！

3. 大蠔溪被劃入 SSSI 及沿著大蠔溪兩邊 30 米範圍內的土地被劃入保育區，由溪口申延至源頭，受影響的私人土地多達 10 多公頃。1999 年特區政府在大蠔溪成立 SSSI 時曾書面回覆，表示大蠔溪 SSSI 的成立只影響河岸兩邊 20 米範圍的發展，並會作出補償！但現時規劃圖中普遍覆蓋 30 米範圍，對補償方案更是隻字不提！現時的保育區，理應退到 20 米，並落實補償方案，作出舒緩措施（附件 C）。

4. 同時村民農地的堤圍由於在 SSSI 內導致未能維修保養，村民曾去信規劃署要求澄清維修的問題，規劃署明確回應須向城規會申請並得到准許才能進行，相關損失只有業權人自己承擔，這是極不久責任及不公平的政策，政府部門應統籌及進行相關維修。

有見現時大綱草圖只偏向保育霸權一方，有違以民為本的原則，村民絕不希望被政府迫上絕路，村民也不希望玉石俱焚、一拍兩散的局面出現。但在沒有選擇的情況下，這是必然的選擇！



以上是村民就大蠔分區計劃大綱草圖編號 S/I-TH/ 1 的意見及建議。再次感謝閣下及貴會的幫助！

大蠔村村代表、牛牯塱村村代表、白芒村村代表  
鄒長福、林慶貴、林世明、張志雄、郭樹榕  
三鄉權益關注組召集人林家柱

# 附件 A

Annex III

Please quote our reference  
in future correspondence



來函編號 Your Reference

本署編號 Our Reference

傳真號碼 Fax No.:

電 話 Tel.:

(22) in PD/LI 6/3/16

577 3075

881 7128



規 劃 署  
Planning Department  
Hong Kong

大嶼山及離島規劃處  
Lantau and Islands  
District Planning Office

大嶼山梅窩  
梅窩鄉事委員會  
曾連主席

曾主席：

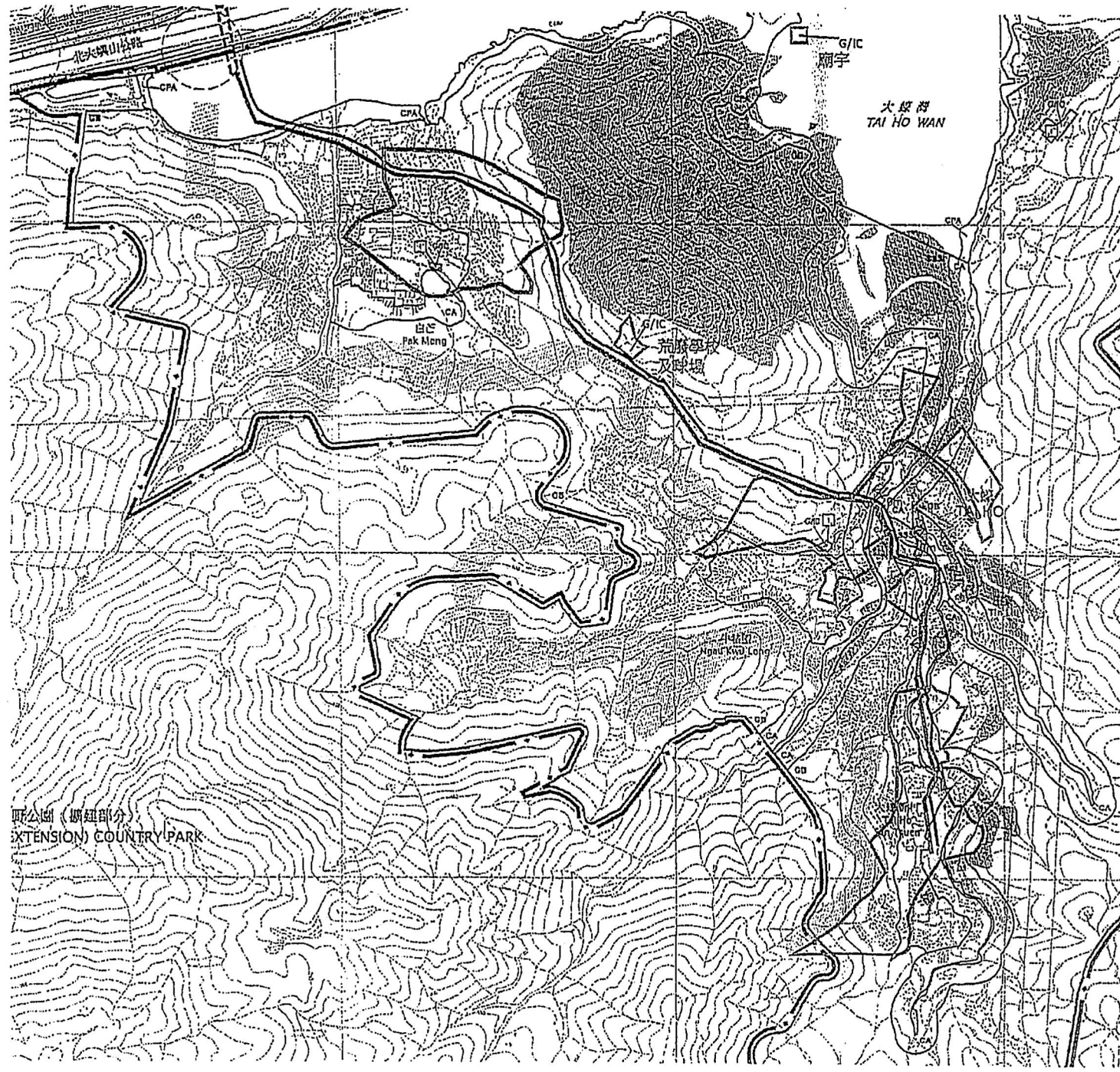
## 北大嶼山發展研究 白芒、牛牯壆及大鑊新村的土地用途建議

本年六月十七日來信已收到。

本年五月十一日在離島區議會的特別會議上，本人已約略解釋過，在制訂土地用途建議時，特別是在界定標題所述鄉村的「鄉村式發展用地」範圍時，負責「北大嶼山發展研究」的顧問已對多項因素作出適當的考慮，包括認可鄉村範圍、天然地形、環境狀況、基礎設施、道路及其他發展需要等，其中原居民對小型屋宇的需求亦已全面顧及。正如「大鑊建議發展大綱圖」上所顯示，現有鄉村兩側兩大片共約27公頃的土地，已劃為「鄉村式發展用地」，並特別指定作鄉村式發展用途。該兩片土地的面積，已足以應付預測中此區的小型屋宇用地長遠需求。

當局對上述地區的土地用途建議，目前未有計劃在可見的將來實施。由於規劃工作需要一段頗長的時間；在這段時間本處定會留意有關地區的情況，如有需要，在制訂詳細藍圖時並會對各土地用途分區的界線作出必要的調整。本處亦會密切注意原居民對小型屋宇的真正需要；另外在實施有關地區的發展建議時，定會特別留意來信第(1)至(3)分段提出的各點。

# 附件B



- 鄉村式發展
- 排污及排水渠
- 通道
- 政府、機構或社區
- 改善現有隧道通往未來東涌東發展區
- 農地
- 公營房屋
- 綠化帶

999 09:16 FROM ISDO

附件C TO

P. 21/03  
Annex II

離島民政事務處  
香港中區統一碼頭38號  
香港政府大樓二十字樓



ISLANDS DISTRICT OFFICE  
HARBOUR BUILDING, 20th FLOOR,  
38 PIER ROAD, CENTRAL,  
HONG KONG.

本處指號 Our Ref.:

(100) in IS 150/1/12 (TC2/99)

來函指號 Your Ref.:

電話 Tel.:

2852 4321 Fax 28152291

大蠔村村代表  
張松帶先生

張先生:

建議位於北大嶼山大濠河的具特殊科學價值地點

在本月五日的會議上，西貢及離島規劃處，漁農處及本處代表曾向你及牛牯壆村村代表林吉勝先生解釋政府建議將位於北大嶼山大濠河的一帶列為「具特殊科學價值地點」的原因，以及相應的規劃。

漁農處的代表在會上解釋了該地點的特殊生態價值。此外，規劃處的代表表示，為了配合保護大濠河一帶的自然生態，該處會把沿河岸兩旁約 20 米闊的土地規劃為「保育區」以作緩衝之用。在保育區內仍然准許小型屋宇的重建，不過新建的丁屋將受到限制。該處已考慮在附近覓地以彌補在原村界內所失去的可供發展的土地。

大濠河「具特殊科學價值地點」及其緩衝區將會納入「大蠔分區計劃大綱圖」內並刊登憲報，徵詢公眾的意見。屆時，如果你或其他人士欲提出意見，可於指定的時間內根據《城市規劃條例》向城市規劃委員會提出。

若果你有任何疑問及其他建議，本處定當將你的意見向有關部門反映及作出跟進。

離島民政事務專員  
(陸嘉健 蔣嘉俊 代行)

副本送：漁農處處長  
西貢及離島規劃專員  
環境保護署署長

一九九九年五月十四日

梅窩鄉事委員會 [REDACTED]  
18日05月2017年星期四 13:10  
tpbpd@pland.gov.hk  
有關大蠔分區計畫大綱的意見及建議  
有關大蠔分區計畫大綱意見及建議-城市規劃.pdf

TPB/R/S/I-TH/1-12

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者:  
訂:  
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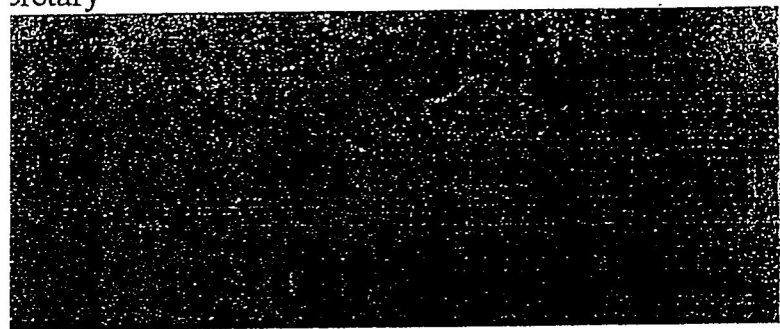
市規劃委員會  
書處:

附上有關大蠔分區計畫大綱的意見及建議  
件，煩請轉交給  
市規劃委員會負責人。  
後寄上正本文件。  
謝!

ase feel free to contact us during office hour if you have any inquiries, Thank you.

st Regards,

n Wan  
cretary



# 梅窩鄉事委員會

MUI WO RURAL COMMITTEE

香港 大嶼山 梅窩 鄉事會路 45 號 電話TEL: 2984 8473 傳真FAX: 2984 9089  
45 Mui Wo Rural Committee Rd., Mui Wo, Lantau Island, H.K. 電郵E-mail: muiworc@gmail.com

(本會檔號: MWRC/21 TO/2017/0003)

敬啟者:

本會茲收到牛牯塢、大蠔村、白芒村村代表之反映信。

內容如下:

## 有關大蠔分區計畫大綱的意見及建議

村民對大蠔分區計劃大綱草圖編號 S/I-TH/1 以下的意見及建議，希望城市規劃委員會能作出跟進。

反對說明書中整體規劃意向，理由：

1. 現時的整體規劃意向只是向環保霸權傾斜，多達 96%的土地被劃作保育，同時被強行保育的私人土地又不作任何補償或賠償，相關規劃對土地業權人絕對是不公平、不公義。我們有理由相信這是違反基本法中關於保護私人財產權益的條文。私人土地被劃作保育用途，而又不作任何賠償，村民絕不接受！農地劃作農地是村民的底線。因此三鄉村民不排除繼 2014 年大規模清除「具特殊科學價值地點」內紅樹林的維權運動後，再作進一步的行動，以示村民保護自己土地的決心！
2. 政府現時正大力發展北大嶼山，北大嶼山橋頭經濟位置旨日可待，整個北大嶼山都受惠於城市經濟發展，而我們三鄉卻只有望橋輕嘆！基建項目近在咫尺，廢氣、污染物我們"分享"了，城市發展帶來的便利，我們丁點都得不到！村民盼望相關規劃能平衡保育與發展，並不是一刀切將土地劃作保育。此外現時政府缺乏承擔的保育政策，浪費土地資源的同時，亦未能有效地管理天然環境及生態。
3. 現時特區政府覓地困難，費盡九牛二虎之力改劃綠化地帶，但卻又豪爽地劃 191 公頃的大蠔土地作為保育用途，綠化帶面積竟然多達 167 公頃！試問特

# 梅窩鄉事委員會

MUI WO RURAL COMMITTEE

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45 Mui Wo Rural Committee Rd., Mui Wo, Lantau Island, H.K. 電郵E-mail: muiworc@gmail.com

區政府要花多少工夫才能覓得 167 公頃在市區邊緣的土地來建屋呢？在大蠔區就有大片土地可以用作興建公營房屋，為何不加以善用呢？

反對土地用途表的土地用途規劃，理由：

1. 此規劃的土地用途分布極不公平，梅窩邊緣分區大綱圖規劃了 12.7 公頃的住宅用地，同時亦有 18.4 公頃的康樂用地。東涌西，有 15 公頃鄉村式發展區、有住宅發展區、有資助房屋、有政府設施。地理上差不多的地方，為何如此厚此薄彼！我們要求一個與梅窩及東涌模式一樣的大綱圖，不要只是傾向保育的單一化規劃！

2. 在整份規劃文件中，太編幅說明大蠔及太蠔溪的生態重要性，除了限制、打壓當地村民的活動，從來沒有提出主動、積極的方式去保育大蠔及大蠔溪。我們強烈要求特區政府在大蠔區域興建排污及排水系統，積極、主動地投入資源保育該區。另外村民幾百年來沿着大蠔溪生活，80 年代時更大規模在大蠔灣及大蠔溪旁養殖家禽，香魚正是在此時發現，生物物種比現時更多源。由此證明村民的活動根本不會破壞生態或使物種減少，環保霸權的指控根本不成立！

3. 現時白芒、牛牯塢及大蠔都有活躍的農耕活動，因此我們認為農地不應劃作 SSSI、自然保育區、海岸保育區或綠化地帶，雖然除 SSSI 外，農業用途在這些地區均為經常准許，但現時在其他被強行劃入保育區的土地已有環保團體質疑耕種活動會破壞環境，為了社會和諧或引起不必要的爭論，農地劃為農業用途是妥善的處理方法。

4. 特區政府在大嶼山發展的宣傳上表明會把大嶼山打做為宜居、宜樂、宜學的好地方，但近在基建兩公里範圍內的大蠔，卻連一條合規格的道路也欠奉，村民即使在東涌上班、上學也寧願住在市區前往東涌，這怪現象全因交通問題，試問又何來宜居、宜學！同時，年長的村民由於體力上未能應付又上山、又落斜、又要步行 45 分鐘的路程，最終只好放棄返鄉的念頭。他們回家的願望可能只有死後，才能達成！特區政府在規劃大蠔區時，可否人性化一點，不要遺棄當地的人類，起碼規劃一此利民的政府設施！



# 梅窩鄉事委員會

## MUI WO RURAL COMMITTEE

香港 大嶼山 梅窩 鄉事會路 45 號 電話TEL: 2984 8473 傳真FAX: 2984 9089  
45 Mui Wo Rural Committee Rd., Mui Wo, Lantau Island, H.K. 電郵E-mail: muiworc@gmail.com

反對現時「鄉村式發展」面積過少，理由：

1. 規劃署於 1992 年（附件 1）回覆梅窩鄉事委員會就有關白芒、牛牯塢及大蠔新村「鄉村式發展用地」的提問時表示” .....顧問已對多項因素作出適當的考慮，包括認可鄉村範圍、天然地形、環境狀況、基礎建設、道路及其他發展需要等，其中原居民對小型屋宇的需求亦已全面顧及。.....現有鄉村兩側兩大片共約 27 公頃的土地，已劃為「鄉村式發展用地」，並特別指定為鄉村式發展用途。” 這 27 公頃正是白芒、牛牯塢及大蠔新村村界面積的總和。現時規劃署評估「鄉村式發展用地」面積的準則相約，而現時各村落在各方的情況跟已往相約，除了海灣出口被政府填了、景觀被政府建的高架橋遮擋了、噪音多了、廢氣多了。現在可發展的土地竟然被縮小至 3.37 公頃，只能供應未來 10 住屋需求的 58%，那麼餘下的 42%的住屋需求又如何處理？現在也滿足不了，未來的供應又如何呢？為滿足未來 10 年的住屋需求，我們要求現在先提供 6 公頃的「鄉村式發展用地」（附件 2）。長遠而言，將現有的村界加 300 尺劃為「鄉村式發展區」，這已是村民無可退讓的底線！

2. 田寮村在村界上從屬牛牯塢村，但行政上卻是屬於大蠔新村，這此歷史遺留下來的問題，在大綱圖起草時被忽略了，村民在大綱圖制定其間曾多次表達田寮村的獨特性及由來，例如統一姓郭及曾因不同的理由而多次搬村的苦況，但現時的大綱草圖除了現有的屋地被劃入鄉村式發展外，根本沒有配合將來需求的鄉村式發展用地，田寮村沒有小型屋宇需求的數據，原因只是該數據收錄在大蠔新村的申報內。現時村民建議將田寮村附近的一幅遠離大蠔溪、地勢平坦及屬於牛牯塢村界內的一幅土地劃為鄉村式發展範圍，以為持該村的宗族傳統及免受再搬遷之苦（附件 2）。

3. 大蠔新村的鄉村式發展範圍，未能配合村民的需求，現時村民在村界範圍較為平坦的土地內已作出 23 個丁屋申請，但該地段卻沒有完全包括在現時的鄉村式發展範圍內，對個別申請者做成不公平的情況。村民世代居於大蠔溪邊，將沿河 30 米劃為保育區對村民的小型屋宇申請做成極大的影響，政府理應將

# 梅窩鄉事委員會

MUI WO RURAL COMMITTEE

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村民要求的土地劃入鄉村式發展範圍以填補保育區失去的土地。同時有部分村民的舊屋地也沒有包括在鄉村式發展內，這是村民過往生活的範圍及擁有業權的地方，絕對不能因為生長了樹木而視為遭到放棄的土地。所以大蠔村的鄉村式發展範圍必須擴大，以反映村民生活範圍及配合村民的小型屋宇需求（附件2）。

4. 牛牯塱村村界範圍有 12 公頃土地，絕大部分的土地都適合發展，現時的鄉村式發展面積少於 2 公頃，可發展面積被縮小了 6 倍。我們要求將村界範圍內西南面、東南面及北面大量適合發展的土地，劃入鄉村式發展內，以滿足村民對小型屋宇的需求。牛牯塱村鄉村式發展範圍應擴大，以反映適發展的用地、村民現時的生活範圍及對小型屋宇的需求。

5. 白芒村界範圍同樣地有大量土地適合發展，但現時被嚴重地侵蝕了。祖先種植的風水林竟然被劃為保育區，限制鄉村的發展，西面的土地，一點鄉村式發展區也沒有，北面有活躍的農業活動竟然被劃入綠化帶，村民強烈反對相關規劃！西面的土地應劃入鄉村式發展，農地不應劃為綠化帶。小型屋宇的需求得不到適切的回應，村民必定群起反對！

反對設立海岸保護區及自然保育區：

現時在海岸保護區及自然保育區准許用途的條文非常不清晰，村民很容易誤墮法網，根據過往經驗相關部門對不清晰的條文也會各自表述，結果受苦的就是我們弱小村民，舉例說：

1. 在這些地區可以使用挖泥機或其他機器協助耕種嗎？

2. 村民世代以來船隻都是停泊在海岸區域，建立了海岸保護區，船隻可以停泊嗎？雖然在註釋上說明“如在緊接有關發展審批地區草圖的公告在憲報首次刊登前已經存在，而該項用途由展開以來一直持續進行，則即使不符合圖則的規定，也無須更正。村民如何證明“持續進行”呢？如果不是持續進行是又否抵觸了規劃用途因而會受到檢控呢？

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3. 在以上區域捕魚、挖蜆，又是否抵觸了保育的規劃意向因而受到檢控呢？
4. 在海岸保護區及自然保育區上的屋宇重建須先向城市規劃委員會申請，而重建不得超過在有關發展審批地區草圖的公告在憲報首次刊登前已經存在的屋宇的地積比率、上蓋面積和高度。如該屋宇已完全倒塌，村民如何證明它的高度而作出申請呢？

反對私人土地規劃為「具特殊科學價值地點」SSSI，理由：

1. 要求將私人農地從"SSSI"中剔除或向業權人賠償或換地。位於大蠔灣 SSSI 範圍內的私人農地竟然被消失，被特區政府標籤為水體，是企圖掩飾將私人土地劃入 SSSI 的惡行嗎？！在大綱圖起草期間，村民曾多次提出將土地範圍反映在大綱圖上，以識別該處是一私人農地而非現時標註的"水體"。
2. 根據土地用途表，在 SSSI 內耕種，必須先向城規會申請，並得到准許才能進行。村民在自己農地上耕種也須申請，有違合法的地契用途，這豈不是強搶民產豈，抵觸了基本法的相關條文！繼 2014 年大規劃清理紅樹林，村民只好再開動挖泥機，繼續未完成的耕種工作！還有自以為正義之士的環保霸權，對政府的惡行不但不加以指責，反而助紂為虐，實在是無恥之極！
3. 大蠔溪被劃入 SSSI 及沿著大蠔溪兩邊 30 米範圍內的土地被劃入保育區，由溪口申延至源頭，受影響的私人土地多達 10 多公頃。1999 年特區政府在大蠔溪成立 SSSI 時曾書面回覆，表示大蠔溪 SSSI 的成立只影響河岸兩邊 20 米範圍的發展，並會作出補償！但現時規劃圖中普遍覆蓋 30 米範圍，對補償方案更是隻字不提！現時的保育區，理應退到 20 米，並落實補償方案，作出舒緩措施（附件 3）。
4. 同時村民農地的堤圍由於在 SSSI 內導致未能維修保養，村民曾去信規劃署要求澄清維修的問題，規劃署明確回應須向城規會申請並得到准許才能進行，相關損失只有業權人自己承擔，這是極不公平責任及不公平的政策，政府部門應

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統籌及進行相關維修。

有見現時大綱草圖只偏向保育霸權一方，有違以民為本的原則，村民絕不希望被政府迫上絕路，村民也不希望玉石俱焚、一拍兩散的局面出現。但在沒有選擇的情況下，這是必然的選擇！

以上是村民就大蠔分區計劃大綱草圖編號 S/I-TH/1 的意見及建議。

大蠔村村代表、牛牯墾村村代表、白芒村村代表

鄒長福、林慶貴、林世明、張志雄、郭樹榕

三鄉權益關注組召集人 林家柱

現本會希望 貴署對三鄉的未來作出合理的規劃，祈求覆示，以待本會回覆三鄉各村村代表。

此致

城市規劃委員會



梅窩鄉事委員會

主席黃文漢

副主席鄒長福

李國強

(秘書處 溫少麗 代行)

2017年5月18日

tobpd

收件者: kc lim  
 寄件日期: 19日05月2017年星期五 0:54  
 收件者: tobpd@pland.gov.hk  
 主旨: Fwd: 對大嶼分區計劃大綱草圖編號S/I-TH/1有以下意見  
 附件: Attachment OZP.pdf

致城市規劃委員會秘書處:

本人對大嶼分區計劃大綱草圖編號 S/I-TH/1 有以下意見及建議:

反對說明書中整體規劃意向, 理由:

1. 現時的整體規劃意向只是向環保霸權傾斜, 多達 96% 的土地被劃作保育, 同時被強行保育的私人土地又不作任何補償或賠償, 相關規劃對土地業權人絕對是不公平、不公義。我們有理由相信這是違反基本法中關於保護私人財產權益的條文。私人土地被劃作保育用途, 而又不作任何賠償, 村民絕不接受! 農地劃作農地是村民的底線。因此三鄉村民不排除繼 2014 年大規模清除「具特殊科學價值地點」內紅樹林的維權運動後, 再作進一步的行動, 以示村民保護自己土地的決心!

1. 政府現時正大力發展北大嶼山, 北大嶼山橋頭經濟位置旨日可待, 整個北大嶼山都受惠於城市經濟發展, 而我們三鄉卻只有望橋輕嘆! 基建項目近在咫尺, 廢氣、污染物我們"分享"了, 城市發展帶來的便利, 我們一點都得不到! 村民盼望相關規劃能平衡保育與發展, 並不是一刀切將土地劃作保育。此外現時政府缺乏承擔的保育政策, 浪費土地資源的同時, 亦未能有效地管理天然環境及生態。

1. 現時特區政府覓地困難, 費盡九牛二虎之力改劃綠化地帶, 但卻又酸爽地劃 191 公頃的大嶼土地作為保育用途, 綠化帶面積竟然多達 167 公頃! 試問特區政府要花多少工夫才能覓得 167 公頃在市區邊緣的土地來建屋呢? 在大嶼區就有大片土地可以用作興建公營房屋, 為何不加以善用呢?

反對土地用途表的土地用途規劃, 理由:

1. 此規劃的土地用途分布極不公平, 梅窩邊緣分區大綱圖規劃了 12.7 公頃的住宅用地, 同時亦有 18.4 公頃的康樂用地。東涌西, 有 15 公頃鄉村式發展區、有住宅發展區、有資助房屋有政府設施。地理上差不多的地方, 為何如此厚此薄彼! 我們要求一個與梅窩及東涌模式一樣的大綱圖, 不要只是傾向保育的單一化規劃!

1. 在整份規劃文件中, 大篇幅說明大嶼及大嶼溪的生態重要性, 除了限制、打壓當地村民的活動, 從來沒有提出主動、積極的方式去保育大嶼及大嶼溪。我們強烈要求特區政府在大嶼區域興建排污及排水系統, 積極、主動地投入資源保育該區。另外村民幾百年來沿著大嶼溪生活, 80 年代時更大規模在大嶼灣及大嶼溪旁養殖家禽, 香魚正是在此時發現, 生物物種比現時更多源。由此證明村民的活動根本不會破壞生態或使物種減少, 環保霸權的指控根本不成立!

1. 現時白芒、牛牯塢及大嶼都有活躍的農耕活動, 因此我們認為農地不應劃作 SSSI、自然保育區、海岸保育區或綠化地帶, 雖然除 SSSI 外, 農業用途在這些地區均為經常准許, 但現時

在其他被強行劃入保育區的土地已有環保團體質疑耕種活動會破壞環境, 為了社會和諧或引起不必要的爭論, 農地劃為農業用途是妥善的處理方法。

1. 特區政府在大嶼山發展的宣傳上表明會把大嶼山打做為宜居、宜樂、宜學的好地方, 但近在基建兩公里範圍內的大嶼, 卻連一條合規格的道路也未奉, 村民即使在東涌上班、上學也寧願住在市區前往東涌, 這樣現象全因交通問題, 試問又何來宜居、宜學! 同時, 年長的村民由於體力上未能應付又上山、又落斜、又要步行 45 分鐘的路程, 最終只好放棄返鄉的念頭。他們回家的願望可能只有死後, 才能達成! 特區政府在規劃大嶼區時, 可否人性化一點, 不要遺棄當地的人類, 起碼規劃此一利民的政府設施!

反對現時「鄉村式發展」面積過少, 理由:

1. 規劃署於 1992 年(附件 1)回覆梅窩鄉事委員會就有關白芒、牛牯塢及大嶼新村「鄉村式發展用地」的提問時表示".....顧問已對多項因素作出適當的考慮, 包括認可鄉村範圍、天然地形、環境狀況、基礎建設、道路及其他發展需要等, 其中原居民對小型屋宇的需求亦已全面顧及。.....現有鄉村兩側兩大片共約 27 公頃的土地, 已劃為「鄉村式發展用地」, 並特別指定為鄉村式發展用途。" 這 27 公頃正是白芒、牛牯塢及大嶼新村村界面積的總和。現時規劃署評估「鄉村式發展用地」面積的準則相約, 而現時各村落在各方的情況跟以往相約除了海灣出口被政府填了、景觀被政府建的高架橋遮擋了、噪音多了、廢氣多了。現在可發展的土地竟然被縮小至 3.37 公頃, 只能供應未來 10 住屋需求的 58%, 那麼餘下的 42% 的住屋需求又如何處理? 現在也滿足不了, 未來的供應又如何呢? 為滿足未來 10 年的住屋需求我們要求現在先提供 6 公頃的「鄉村式發展用地」(附件 2)。長遠而言, 將現有的村界加 300 尺劃為「鄉村式發展區」, 這已是村民無可退讓的底線!

1. 田寮村在村界上從屬牛牯塢村, 但行政上卻是屬於大嶼新村, 這此歷史遺留下來的問題, 在大綱圖起草時被忽略了, 村民在大綱圖制定其間曾多次表達田寮村的獨特性及由來, 例如統一姓郭及曾因不同的理由而多次搬村的苦況, 但現時的大綱草圖除了現有的屋地被劃入鄉村式發展外, 根本沒有配合將來需求的鄉村式發展用地, 田寮村沒有小型屋宇需求的數據, 原因只是該數據收錄在大嶼新村的申報內。現時村民建議將田寮村附近的一幅遠離大嶼溪、地勢平坦及屬於牛牯塢村界內的一幅土地劃為鄉村式發展範圍, 以為持該村的宗族傳統及免受再搬遷之苦(附件 2)。

2. 大嶼新村的鄉村式發展範圍, 未能配合村民的需求, 現時村民在村界範圍較為平坦的土地內已作出 23 個丁屋申請, 但該地段卻沒有完全包括在現時的鄉村式發展範圍內, 對個別申請者做成不公平的情況。村民世代居於大嶼溪邊, 將沿河 30 米劃為保育區對村民的小型屋宇申請做成極大的影響, 政府理應將村民要求的土地劃入鄉村式發展範圍以填補保育區失去的土地。同時有部分村民的舊屋地也沒有包括在鄉村式發展內, 這是村民過往生活的範圍及擁有業權的地方, 絕對不能因為生長了樹木而視為遭到放棄的土地。所以大嶼村的鄉村式發展範圍必須擴大, 以反映村民生活範圍及配合村民的小型屋宇需求(附件 2)。

1. 牛牯塢村村界範圍有 12 公頃土地, 絕大部分的土地都適合發展, 現時的鄉村式發展面積少於 2 公頃, 可發展面積被縮小了 6 倍。我們要求將村界範圍內西南面、東南面及北面大量適合發展的土地, 劃入鄉村式發展內, 以滿足村民對小型屋宇的需求。牛牯塢村鄉村式發展範圍應擴大, 以反映適合發展的用地、村民現時的生活範圍及對小型屋宇的需求(附件 2)。

1. 白芒村界範圍同樣地有大量土地適合發展, 但現時被嚴重地侵蝕了。祖先種植的風水林竟然被劃為保育區, 限制鄉村的發展, 西面的土地, 一點鄉村式發展區也沒有, 北面有活躍的



農業活動竟然被劃入綠化帶，村民強烈反對相關規劃！西面的土地應劃入鄉村式發展，農地不應劃為綠化帶。小型屋宇的需求得不到適切的回應，村民必定群起反對！（附件 2）

#### 反對設立海岸保護區及自然保育區：

現時在海岸保護區及自然保育區准許用途的條文非常不清晰，村民很容易誤墮法網，根據過往經驗相關部門對不清晰的條文也會各自表述，結果受苦的就是我們弱小村民，舉例說：

1. 在這些地區可以使用挖泥機或其他機器協助耕種嗎？
2. 村民世代以來船隻都是停泊在海岸區域，建立了海岸保護區，船隻可以停泊嗎？雖然在註釋上說明“如在緊接有關發展審批地區草圖的公告在憲報首次刊登前已經存在，而該項用途由展開以來一直持續進行，則即使不符合圖則的規定，也無須更正。村民如何證明”持續進行”呢？如果不是持續進行是又否抵觸了規劃用途因而會受到檢控呢？
3. 在以上區域捕魚、挖蜆，又是否抵觸了保育的規劃意向因而受到檢控呢？
4. 在海岸保護區及自然保育區上的屋宇重建須先向城市規劃委員會申請，而重建不得超過在有關發展審批地區草圖的公告在憲報首次刊登前已經存在的屋宇的地積比率、上蓋面積和高度。如該屋宇已完全倒塌，村民如何證明它的高度而作出申請呢？

#### 反對私人土地規劃為「具特殊科學價值地點」SSSI，理由：

1. 要求將私人農地從“SSSI”中剔除或向業權人賠償或換地。位於大蠔灣 SSSI 範圍內的私人農地竟然被消失，被特區政府標籤為水體，是企圖掩飾將私人土地劃入 SSSI 的惡行嗎？！在大綱圖起草期間，村民曾多次提出將土地範圍反映在大綱圖上，以識別該處是一私人農地而非現時標註的“水體”。

1. 根據土地用途表，在 SSSI 內耕種，必須先向城規會申請，並得到准許才能進行。村民在自己農地上耕種也須申請，有違合法的地契用途，這豈不是強搶民產豈，抵觸了基本法的相關條文！繼 2014 年大規劃清理紅樹林，村民只好再開動挖泥機，繼續未完成的耕種工作！還有自以為正義之士的環保霸權，對政府的惡行不但不加以指責，反而助紂為虐，實在是無恥之極！

1. 大蠔溪被劃入 SSSI 及沿著大蠔溪兩邊 30 米範圍內的土地被劃入保育區，由溪口申延至源頭，受影響的私人土地多達 10 多公頃。1999 年特區政府在大蠔溪成立 SSSI 時曾書面回覆，表示大蠔溪 SSSI 的成立只影響河岸兩邊 20 米範圍的發展，並會作出補償！但現時規劃圖中普遍覆蓋 30 米範圍，對補償方案更是隻字不提！現時的保育區，理應退到 20 米，並落實補償方案，作出舒緩措施（附件 3）。

1. 同時村民農地的堤圍由於在 SSSI 內導致未能維修保養，村民曾去信規劃署要求澄清維修的問題，規劃署明確回應須向城規會申請並得到准許才能進行，相關損失只有業權人自己承擔這是極不久責任及不公平的政策，政府部門應統籌及進行相關維修。

有見現時大綱草圖只偏向保育霸權一方，有違以民為本的原則，村民絕不希望被政府迫上絕路，村民也不希望玉石俱焚、一拍兩散的局面出現。但在沒有選擇的情況下，這是必然的選擇！

以上是本人就大蠔分區計劃大綱草圖編號 S/I-TH/1 的意見及建議。

姓名：何詠芝

[REDACTED]

[REDACTED]



Virus-free. [www.avq.com](http://www.avq.com)

Please quote our reference  
in future correspondence

附件1

Annex III



規劃署  
Planning Department  
Hong Kong  
大嶼山及離島規劃處  
Lantau and Islands  
District Planning Office

來函編號 Your Reference

本署編號 Our Reference

傳真號碼 Fax No.: 577 3075

電話號碼 Tel.: 881 7128

(22) in PD/LI 6/3/10

大嶼山梅窩  
梅窩鄉事委員會  
曾主席

曾主席：

北大嶼山發展研究  
白沙、牛牯洲及大嶼新村的土地用途建議

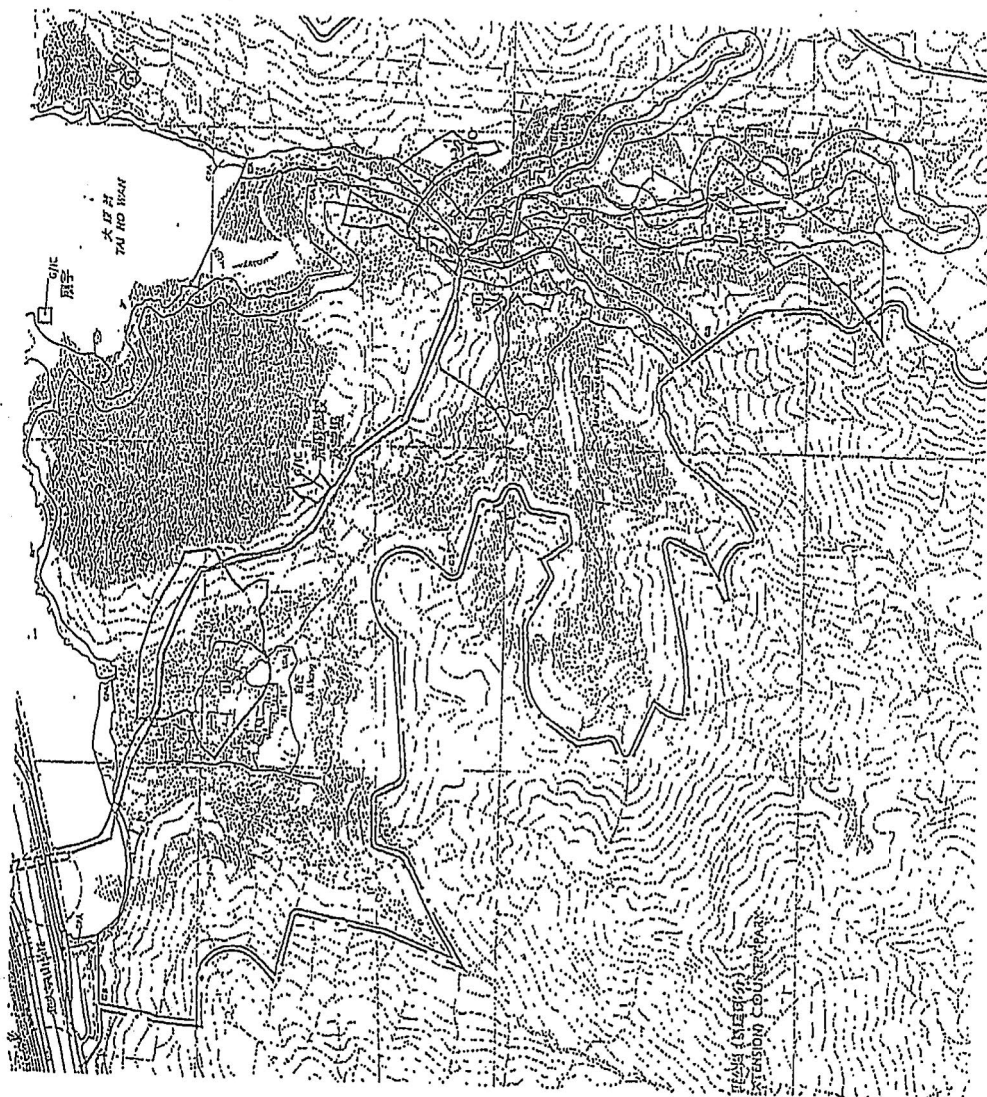
本年六月十七日來信已收到。

本年五月十一日在離島區議會特別會議上，本人已略略解釋過，在制訂土地用途建議時，特別是在界定擬建所述鄉村的「鄉村式發展用地」範圍時，負責「北大嶼山發展研究」的顧問已對多項因素作出適當的考慮，包括擬建鄉村範圍、天然地形、環境狀況、基礎設施、道路及其他發展需要等，其中原居民對小型屋宇的需求亦已全面顧及。正如「大嶼山發展大綱圖」上所顯示，現有鄉村用側兩大片共約27公頃的土地，已劃為「鄉村式發展用地」，並特別指定作鄉村式發展用途。該兩片土地的面積，已足以應付預測中此區的小型屋宇用地長遠需求。

當局對上述地區的土地用途建議，目前未有計劃在可見的將來實施。由於規劃工作需一段頗長的時間；在這段時間本處定會留意有關地區的情況，如有需要，在制訂詳細藍圖時並會對各土地用途分區的界線作出必要的調整。本處亦會密切注意原居民對小型屋宇的真正需要；另外在實施有關地區的長遠建議時，定會特別留意來信第(1)至(3)分段提出的各點。

附件2

鄉村式發展  
排污水渠  
道路  
政府、機構或社區  
改善現有隧道通  
往未來東涌東發  
展區  
農地  
公營房屋  
綠化帶





999 09:16 FROM ISDO

附件 3

P.21/97  
Annex II

離島民政事務處  
香港中環干諾道中118號  
離島政府大樓二十樓



ISLANDS DISTRICT OFFICE  
HARBOUR BUILDING, 20th FLOOR,  
38 PIER ROAD, CENTRAL,  
HONG KONG.

本區轄區 Our Ref: (100) in IS 150/1/12 (TC2/99)  
查詢查詢 Your Ref:  
電 話 Tel: 2852 4321 Fax 28152291.

大嶼村村代表  
張松帶先生

張先生:

建議位於北大嶼山大溪河的具特殊科學價值地點

在本月五日的會議上，西貢及離島規劃處、漁農處及本處代表會向你及牛牯壆村村代表林吉勝先生解釋政府建議將位於北大嶼山大溪河的一帶列為「具特殊科學價值地點」的原因，以及相應的規劃。

漁農處的代表在會上解釋了該地點的特殊生態價值。此外，規劃處的代表表示，為了配合保護大溪河一帶的自然生態，該處會把沿河岸兩旁約 20 米闊的土地規劃為「保育區」以作緩衝之用。在保育區內仍然准許小型屋宇的興建，不過新建的丁屋將受到限制。該處已考慮在附近覓地以彌補在原村界內所失去的可供發展的土地。

大溪河「具特殊科學價值地點」及其緩衝區將會納入「大嶼分區計劃大綱圖」內並刊登憲報，徵詢公眾的意見。屆時，如果你或其他人士欲提出意見，可於指定的時間內根據《城市規劃條例》向城市規劃委員會提出。

如果你有任何疑問及其他建議，本處定當將你的意見向有關部門反映及作出跟進。

離島民政事務專員  
(陸嘉健 陸永健代行)

副本送：漁農處處長  
西貢及離島規劃專員  
環境保護署署長

一九九九年五月十四日

tpbpd

---

寄件者: Derek <[REDACTED]>  
寄件日期: 24日05月2017年星期三 23:59  
收件者: tpbpd@pland.gov.hk  
主旨: 題: 反對《大嶧分區計劃大綱草圖編號S/I-TH/1》

<http://www.info.gov.hk/gia/general/201703/24/P2017032400609.htm>

城市規劃委員會秘書處  
香港北角渣華道 333 號, 北角政府合署 15 樓  
電郵地址: [tpbpd@pland.gov.hk](mailto:tpbpd@pland.gov.hk)

( 傳真號碼: 2877 0245 或 2522 8426 )

標題: 反對整個《大嶧分區計劃大綱草圖編號S/I-TH/1》的規劃圖

# MASTERPLAN LIMITED

Planning and Development Advisors

領賢規劃顧問有限公司

TPB/R/S/I-TH/1-1063

The Secretary,  
Town Planning Board,  
15/F, North Point Government Offices,  
333 Java Road, North Point,  
Hong Kong.

Date: 24 May, 2017

By Hand

Dear Sirs,

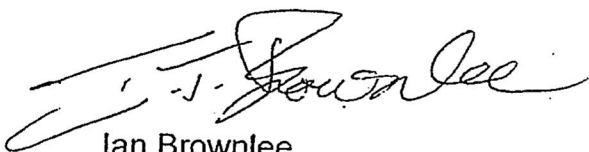
**Re: Representation to the Draft Tai Ho OZP No. S/I-TH/1**  
**Proposal for a Balanced Conservation**  
**and Development Approach for Tai Ho**

We are authorized by the Representers, a consortium of major private land owners of Tai Ho, including Sun Hung Kai Properties, Swire Properties Limited, and Hong Kong Land; to act on their behalf in submitting this Representation statement under Section 6(1) of the Town Planning Ordinance to the Town Planning Board, with respect to the Draft Tai Ho OZP No. S/I-TH/1 (the "OZP").

This Representation is to object to the OZP, on the grounds that it does not meet its conservation objectives and precludes any opportunities for compatible forms of development. An alternative zoning framework is proposed that would form the basis for the future implementation of a balanced conservation and development approach for Tai Ho.

Enclosed, please find 90 hardcopies of the Representation Statement for submission.

Yours faithfully,



Ian Brownlee  
For and On Behalf of Masterplan Limited

Encl.

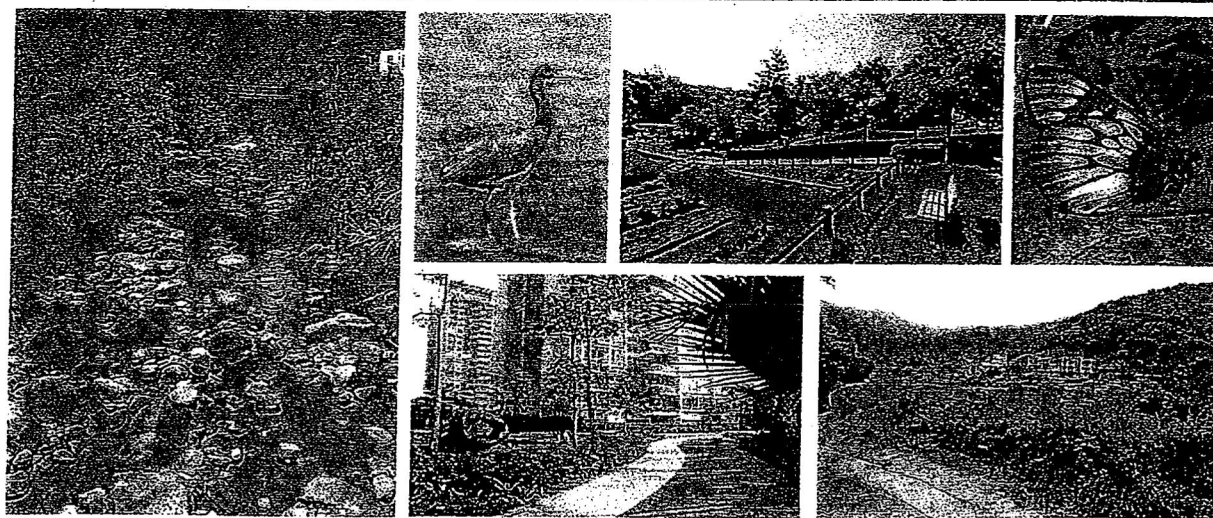
c.c. Client (By Email)  
DPO SI&I (Mr. Richard Siu) (By Email)

RECEIVED  
2017 MAY 24 3 05 PM  
TOWN PLANNING BOARD

0719

**Representation to the Draft Tai Ho OZP No. S/I-TH/1**

**Proposal for a Balanced Conservation  
and Development Approach for Tai Ho**



**By Major Private Land Owners of Tai Ho:**  
Sun Hung Kai Properties  
Swire Properties Limited  
Hongkong Land

## **Representation Statement**

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## ***Executive Summary***

- S1. This Representation is made on behalf of the major private land owners within the Draft Tai Ho OZP, namely Sun Hung Kai Properties Limited, Swire Properties Limited, and Hongkong Land Limited (the "Representers").
- S2. The conservation zonings on the OZP prohibits any form of new development (including public or private housing) within the entire Tai Ho area, even those less ecologically sensitive areas. They are restrictive to the point that it constitutes a deprivation of private development rights, as its intention is based on a general presumption against any development. The OZP does not facilitate the conservation objectives of Tai Ho as the third highest priority site under the New Nature Conservation Policy. The private land ownership within the Tai Ho valley, at the Tai Ho stream, makes it important that some form of balance between development and conservation be reached.
- S3. The current "Village Type Development" (V) zones have not optimized the land potential to provide village housing to meet the long-term demand. The Planning Department has adopted a questionable "incremental approach" to justify a provision of 58% of the 10-year forecast demand, which was based on a wide array of uncertain factors. The OZP has not considered the need for a public road access and infrastructure facilities for the additional village house developments.
- S4. In light of the deficiencies of the OZP, this Representation consolidates the proposals by the land owners to better utilize the land potential for (public and private) residential and village house development; and at the same time, includes measures to conserve the ecological setting and cultural heritage. It presents a balanced solution to address the development and conservation needs of the villagers, private land owners, conservationists and the general public.
- S5. The Representer proposes amendments to the Zoning Plan to designate the least environmentally-sensitive areas for an appropriate scale of residential and infrastructure development at the western side of Tai Ho Bay, and to put in place a more extensive Conservation Area zone in the eastern side. This will enable putting into place a conservation management plan at the most ecologically important areas of the Tai Ho Stream catchment. These components are mutually inclusive and can only be implemented in conjunction with each other.
- S6. The proposed amendments to the Zoning Plan would facilitate a Proposed Scheme which consists of *four Development Sites (DS)*, *three Village Expansion Areas (VEA)*, *two Conservation Areas*, and *a new Public Road*.
- S7. The four DS could accommodate a total of about 10,462 flats with 66% (6,864 flats) of public housing and 34% (3,598 flats ) of private housing, which is close to the current New Development Areas in New Territories. The three Village Expansion Areas (VEA) are intended to designate land for village house development to cater to the village housing demand. With adjusted site boundaries and house alignments, the VEAs would be able to meet a significant 92% of the 10-year forecast demand, or a total of 212 village houses.

- S8. The "Conservation Area A" (ConA) covers an area of about 31,790m<sup>2</sup> at the north of Pak Mong Village, and is intended to conserve the natural environment there and protect the archaeological heritage site. With further detailed design at a later planning stage, it would provide a space for leisure and nature appreciation, and managed as a public open space.
- S9. The "Conservation Area B" (ConB)" covers a large area of 305,469m<sup>2</sup> at the Tai Ho Stream catchment. It is intended for the conservation of this important ecologically sensitive habitat. It encompasses the SSSI and CA zones in the OZP, and entail rezoning the GB zones under private ownership at the catchment of Tai Ho Stream to CA zones.
- S10. The scheme proposes a new public road that would be linked to Cheung Tung Road, providing access and connection between the Development Sites and VEA1 and VEA2, and would not extend beyond Ngau Kwu Long Village to avoid disturbing the ecologically sensitive Tai Ho stream. The public road would be able to accommodate Emergency Vehicular Access, footpath, cycling track and underground public sewage and drainage facilities for the DSs and VEAs.
- S11. Preliminary technical assessments from an ecological review, traffic and transport analysis, and environmental review (noise, air and sewage) demonstrated that the proposed developments are situated at the least ecologically-sensitive areas within Tai ho area, and the scale and intensity of development is feasible and compatible with the surroundings.
- S12. The Representatives believe the possibility of implementing an effective long-term conservation strategy for Tai Ho can be achieved through a Management Agreement approach in conjunction with development that would enable a win-win solution for all the stakeholders, including the villagers, major private land owners, conservationists, Government and general public. **The proposed amendments to the OZP would ensure that this takes place under appropriate zoning controls.**

## 行政摘要

- S1. 本申述書由大蠔分區計劃大綱草圖內的主要私人發展商提出，分別為新鴻基地產發展有限公司、太古地產有限公司及香港置地有限公司(下稱「申述人」)。
- S2. 根據大蠔分區計劃大綱草圖內的保育及綠化規劃，在整個大蠔區內，一切新發展(包括公共或私人房屋)均被禁止，當中包括一些低生態價值及具有發展潛力的土地，嚴重剝削了私人發展權及地區發展。大蠔雖然屬於新自然保育政策下的第三大須優先加強保育地點，但是分區計劃大綱草圖的限制卻未能推動相關的保育宗旨。在加強私人土地的保育工作的同時，也需要尊重土地擁有人的業權，因此，大蠔灣的發展規劃必須要有一個可達致平衡發展及保育的方案。
- S3. 目前，「鄉村式發展」地帶並未充份發揮土地發展潛力以應付長遠土地需要。規劃署採取了循序漸進模式，根據一系列不穩定的因素計算出未來 10 年的「鄉村式發展」的需求，但大綱草圖上劃設的三個「鄉村式發展」地帶卻只能滿足當中 58%的需求。再者，分區計劃大綱草圖並未考慮額外鄉村式發展對公共道路及基礎設施的需要。



- S4. 基於以上分區計劃大綱草圖的不足，本申述書總結了各土地業權人的擬議計劃，希望能善用土地資源以供長遠住宅（公共及私人）及鄉村式發展之用，同時，為生態區及文化遺產提供有效的保育措施，在地區發展、保育及維護私有產權各方面取得平衡。
- S5. 大蠔灣西面屬生態價值較低的地區，申述人擬議於該地區範圍內容許適當的住宅及基建發展，同時擴大大蠔灣東部的生態保育區，有便於管理政策能在東面屬高生態價值的大蠔海灣植林區內有效地執行，達致共融發展。
- S6. 擬議的修訂計劃包括了四個發展區、三個鄉村擴展區、兩個保育區及一條公共行車道路。
- S7. 四個發展區可以提供約 10,462 個住宅單位，其中 66%（6,864 個）為公共房屋，34%（3,598 個）為私人住宅，公私營房屋比率跟其他新界新發展區相近。另外，本計劃建議調整位於牛牯塢的鄉村擴展區邊界，並加以優化各個鄉村擴展區內的土地運用，鄉村擴展土地供應可以增加至未來十年 92% 的預計需求，或共 212 間屋。
- S8. 本計劃建議將白芒村以北的一帶劃設為「保育區 A」，面積達 31,790 平方米，以保護區內的天然環境及歷史文物，透過進一步的設計及管理規劃，保育區 A 可成為一個集休憩、消閑及享受大自然的公眾地方。
- S9. 本建議中的「保育區 B」覆蓋大蠔西面的大蠔河一帶，面積達 305,469 平方米，是大綱草圖中的「具特殊科學價值」的區域的延伸，建議部份原被劃為「綠化地帶」的土地進一步改劃為「保育區」，當中不免牽涉私人土地，以提高對區內的重要生態的保護作用。
- S10. 本計劃擬議興建一條接駁翔東路的公共行車道路，以連接發展區及鄉村擴展區一及二，更可以配合緊急車輛通道、行人徑、單車徑、地下污水處理及排水等設施的建造。為免對大蠔河一帶的生態環境造成騷擾，擬建的公共道路只會延伸至位於牛牯塢鄉村擴展區東面的邊界。
- S11. 在各初步技術評估中，擬議的發展區域均在生態保護、交通、噪音及排污處理等方面具正面的可行性。而且有關項目的發展規模及密度均可跟週邊環境融合。
- S12. 申述人建議透過「管理協議」，配合適切的發展及保育規劃，為大蠔制訂一個長遠有效的保育方案，為所有持份者，包括村民、私人業權人、保育人士、政府及公眾提供一個共贏方案。

1.1 This Representation is made on behalf of the major private land owners within the Tai Ho Area, namely Sun Hung Kai Properties Limited, Swire Properties Limited, and Hongkong Land Limited (the "Representers").

2.1 This Representation relates to the Draft Tai Ho OZP No. S/I-TH/1 (the OZP), gazetted on 24 March, 2017. It consolidates the proposals by the major private land owners for the Tai Ho stream ecology to be conserved in perpetuity, and implemented in conjunction with compatible development, while also factoring the needs and expectations of villagers.

2.2 The Representation Site is illustrated in Figure 1. The Representers object largely to the Green Belt (GB) and inadequacies of the Village Type Development (V) zonings of the OZP in the Representation Site:

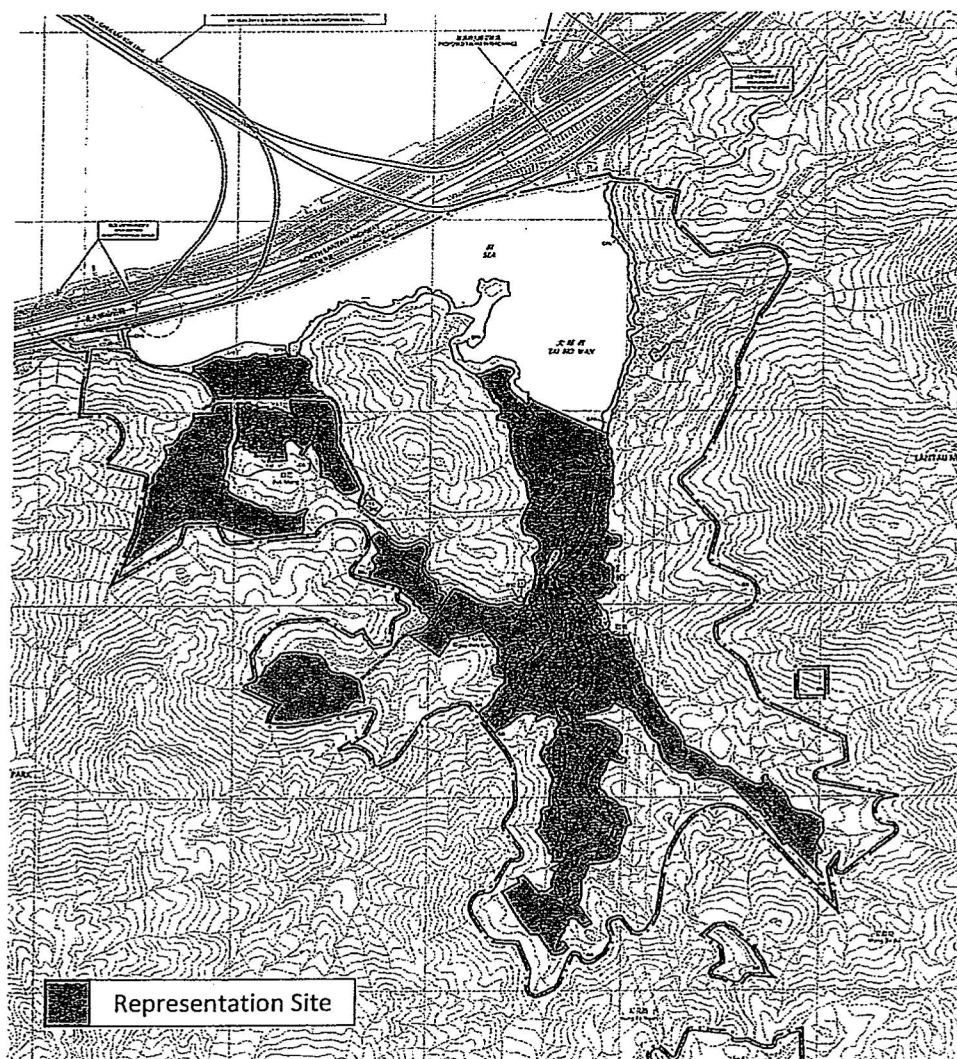


Figure 1: Representation Site on the Draft Tai Ho OZP No. S/I-TH/1

### **3. Background**

- 3.1 Tai Ho has a long history of intent for residential development. Based on the Port and Airport Strategy (PADS) in 1989, and The North Lantau Development Study (1992), Tai Ho was a key development area that would accommodate a sizeable residential development. In 1999, under the sub-regional plan for south-west New Territories, a Recommended Outline Development Plan was published and assigned Tai Ho with public and residential housing. Under this premise, the Representer began to acquire additional land holding and submitted proposals to the Government. Three submissions were made in 2000, 2002 and 2006 to propose a conservation plan and residential development at Tai Ho. However, these were not taken up or supported by Government.
- 3.2 The Tai Ho Stream was designated as SSSI in 1999, which led to the New Nature Conservation Policy (NNCP) in 2004 identifying Tai Ho as the third priority site and the only site on Lantau Island. The importance of the Tai Ho stream was well-recognized and documented and worthy of a long-term conservation plan. Under the Public-Private Partnership scheme of the NNCP, proposals were also made by the Representer for residential development at the least ecologically sensitive areas together with a long-term conservation plan. However, these have dragged on due to implementation issues.
- 3.3 In 2012 and 2013, proposals were submitted to the Tung Chung New Town Extension Study Public Engagement (the "Tung Chung Study") Stage 1 and Stage 2, respectively. The Representatives raised some general points to Government to respect the property rights of the major private land owners, and to consider land exchange options to facilitate residential development and conservation at Tai Ho. The proposals emphasized that successful implementation of any conservation plan hinged on a land exchange process to consolidate the private land in the valley. Despite the submission of all these proposals, no responses came from the Government. The only response has been a letter of acknowledgement from the Planning Department that the submission was received on 24 September, 2013, regarding the Tung Chung Study Stage 2 process.
- 3.5 In 2014, the Town Planning Board (TPB) gazetted the "Draft Tai Ho Development Permission Area plan No. DPA/I-TH/1" (the DPA Plan). The Representer submitted a preliminary land use proposal to designate the least environmentally sensitive areas for low to medium density residential developments and tourism-related facilities, village expansion areas at the existing villages, and a conservation management plan at the ecologically sensitive areas. At the representation hearing in December 2014, the TPB decided not to uphold any representations to the DPA Plan (including R197, the one made by the Representer). However, the Board agreed that the Representer's proposal could be further studied during the OZP preparation stage.
- 3.6 In Jan 2016, the Lantau Development Advisory Committee, under the Development Bureau, had proposed in their public engagement digest to earmark Tai Ho as a hotspot for eco-tourism. A submission was made to the DevB to acknowledge the potential of Tai Ho for eco-tourism as a component of an appropriate scale of residential development and conservation management plan. The large private land holdings at the Tai Ho valley required the participation of private land owners and an incentive for them to create partnerships.

- 3.7 In Oct 2016, the Planning Department presented a draft Tai Ho OZP No. S/I-TH/B to the TPB for instructions to consult with the Islands District Council (IsDC) and Mui Wo Rural Committee (MWRC).
- 3.8 In Feb 2017, the Planning Department presented a revised draft Tai Ho OZP No. S/I-TH/C to the TPB on the results of the consultation with IsDC and MWRC, as well as Green Groups. However, the Representer, the major private land owners within Tai Ho, are quite disappointed that the PlanD has not consulted them on the OZP. Instead, they have consulted and considered the comments of the Green/Concern Groups, who hold no commitment nor land rights in the area. This is considered an unfair and inequitable arrangement. When the TPB Paper No. 10253 was published, the Representer submitted a letter to table at the Board meeting to compensate for lack of consultation. The major refinements to the proposal were not considered fully by PlanD and other departments, as new elements of public housing, traffic facilities and an Ecological Review were included. In the meeting, PlanD responded with stating their previous position that the proposal was conceptual in nature and did not have any supporting technical assessments. PlanD also mentioned that proposals or representations with more solid technical substantiation could be submitted during the gazette period of the draft Tai Ho OZP.
- 3.9 The history and studies associated with Tai Ho reveal the intention and potential for a balanced approach to conservation and development. The co-existence and stewardship of the local villagers to the natural environment is proof of this.

#### **4. The Reasons for this Representation**

- 4.1 The zoning on the OZP does not provide sufficient conservation mechanism at ecologically sensitive areas at the Tai Ho Stream catchment. The GB zone excessively covers the majority (about 80% of the land area) of the OZP, and prohibits any form of new development (including public or private housing) at the whole of Tai Ho area, even at less ecologically sensitive areas. The GB zoning is restrictive to the point that it constitutes a deprivation of private development rights, as its intention is based on a general presumption against any development.
- 4.2 The OZP does not facilitate the conservation objectives of Tai Ho as the third highest priority site under the NNCP. The zonings on designating private land for conservation purpose are restrictive and the development potential is grossly limited as there is no indication on the OZP of any attempts to reasonably balance private ownership rights and public benefit. The private land ownership within the Tai Ho valley, at the Tai Ho stream, makes it important that some form of balance between development and conservation be reached.
- 4.3 The current "Village Type Development" (V) zones have not optimized the land potential to provide village housing to meet the long-term demand. The Planning Department has adopted a questionable "incremental approach" to justify a provision of 58% of the 10-year forecast demand, which was based on a wide array of uncertain factors. The OZP has not considered the need for a public road access and infrastructure facilities for the additional village house developments.
- 4.4 In light of the deficiencies of the OZP, this Representation consolidates the proposals by the land owners to better utilize the land potential for residential and village house development, and at the same time, includes measures to conserve the natural setting and cultural heritage. It presents a balanced solution to address the

development and conservation needs of the villagers, private land owners, conservationists and the general public.

- 4.5 In addition, the Government has been looking at suitable sites for providing additional housing and tourism facilities. This is an opportunity to propose additional housing in the Tai Ho Valley in a form compatible with other plans for development in the area, such as the expansion of the nearby Tung Chung New Town and potential development above the MTR Siu Ho Wan Depot. This Representation proposes appropriate zoning which would ensure control, but facilitate early implementation. This enables the development process to proceed, while not conflicting with conservation objectives.

## **5. The Proposed Scheme**

- 5.1 The Representer proposes an alternative land use framework to designate the least environmentally-sensitive areas for an appropriate scale of residential development at the western side of Tai Ho Valley, and to put in place a conservation plan at the most ecologically important areas of the Tai Ho Stream catchment at the eastern side of the Tai Ho Valley. A new public road would serve the developments and limit the impact to the ecologically important locations to the east. These components are mutually inclusive and can only be implemented in conjunction with each other.
- 5.2 The Proposed Scheme consists of *four Development Sites (DS), three Village Expansion Areas (VEA), two Conservation Areas, and a new Public Road*. Please refer to Appendix 1 for an indicative Master Layout Plan (MLP).

### **(a) Four Development Sites**

- 5.3 The Development Sites are situated at the western side of Tai Ho Area, around the already built-up area of Pak Mong village and Ngau Kwu Long village. The DS1 is proposed for medium-density public housing development, which is located closest to the North Lantau Highway and within a 1km walking distance to the planned Tung Chung East MTR station; while DS2 to 4 are relatively remote sites and proposed for medium-density private housing.
- 5.4 Within DS1 and DS2, an ecological buffer of minimum 5m-wide is proposed to protect the settings of the two Pak Mong streams. The streams are to be undisturbed and retained in its natural or existing state as a measure of ecological mitigation and conservation.
- 5.5 The four DS could accommodate a total of about 10,462 flats with 66% (6,864 flats) of public housing and 34% (3,598 flats ) of private housing, which is close to the current New Development Areas in New Territories. The proposed indicative parameters are shown in Table 1 below:



Table 1: Indicative parameters for the Development Sites

	Site Area (m <sup>2</sup> )	Plot Ratio	Total GFA (m <sup>2</sup> )	No. of Flat (% of Total)		No. of Block	No. of Storey	Max. Building height (mPD)
DS 1	53,462	4.0	216,353	6,864 (66%)		11	39	139
DS 2	15,355	3.5	532,000	1,064	3,598  (34%)	3	18-20	61
DS 3	17,266	3.5	602,000	1,204		3	18-20	87
DS 4	31,547	2.1	66,500	1,330		7	10	86
Total	117,630		396,253	10,462				

**(b) Three Village Expansion Areas**

- 5.6 The Village Expansion Areas relate to the three existing villages of Pak Mong, Ngau Kwu Long and Tai Ho San Tsuen. They are intended to designate land for village house development to cater to the village housing demand. According to the OZP and the 10-year forecast of small house demand, the Planning Department has indicated that the available land suitable for village house development in the V zone would be able to provide land to meet 58% of the 10-year forecast demand, or 138 village houses at the V zones. In comparison, the three proposed VEAs, with adjusted site boundaries and house alignments, would be able to meet a significant 92% of the forecast demand, or a total of 212 village houses.

Table 2: Percentage of Village House Demand Met

	Draft Tai Ho OZP			The Proposed Scheme		
	V Zone Area (m <sup>2</sup> )	No. of village houses to be provided	% of new demand <sup>1</sup> met for village houses	VEA Site Area (m <sup>2</sup> )	No. village houses to be provided	% of new demand <sup>1</sup> met for village houses
Pak Mong	21,100	38	50%	21,100	49	64%
Ngau Kwu Long	24,800	50	70%	30,908	113	160%
Tai Ho San Tsuen	19,500	50	55%	19,500	50	60%
<b>Total</b>	<b>65,400</b>	<b>138</b>	<b>60%</b>	<b>71,508</b>	<b>212</b>	<b>92%</b>

<sup>1</sup> new demand includes the total of outstanding application and 10-year forecast as indicated in the TPB Paper No. 10186.

- 5.7 The VEAs are designed to be careful of the surrounding ecologically sensitive features, and would not encroach into any conservation or riparian buffer zones of the OZP. In fact, in VEA1 and VEA2, there would be a provision of a 5m-wide riparian buffer zone to protect the streams.

**(c) Two Conservation Areas (A and B)**

- 5.8 The "Conservation Area A" (ConA) covers an area of about 31,790m<sup>2</sup> at the north of Pak Mong Village, and is intended to conserve the natural environment there and protect the archaeological heritage site. Detailed design could be explored at a later

planning stage. It would provide a space for leisure and nature appreciation, and managed as a public open space.

- 5.9 The "Conservation Area B" (ConB) covers a large area of 305,469m<sup>2</sup> at the Tai Ho Stream catchment. It is intended for eco-tourism and conservation of this important ecologically sensitive habitat. It encompasses the SSSI and CA zones in the OZP, and entail rezoning the GB zones under private ownership at the catchment of Tai Ho Stream to CA zones.

**(d) New Public Road**

- 5.10 There is an existing track road into Tai Ho that runs from Cheung Tung Road to Ngau Kwu Long village. This track is in substandard condition. The Olympic Trail from Mui Wo forms part of this track.
- 5.11 The scheme proposes a new public road that would be linked to Cheung Tung Road, providing access and connection between the Development Sites and VEA1 and VEA2, and would not extend into the valley beyond Ngau Kwu Long Village (VEA2) to avoid disturbing the ecologically sensitive Tai Ho stream. The public road would be able to accommodate EVA, footpath, cycling track and underground public sewage and drainage facilities for the DSs and VEAs. This is a standard practice for public road developments in Hong Kong.
- 5.12 The Representatives are open to construct the public access road up to Government standards, and then transfer ownership to relevant Government departments for their long-term maintenance and management

**6. Land Ownership Consolidation**

- 6.1 The Representer owns about 70% of all private land in Tai Ho. They are also in communication with local villagers who are open to a land exchange approach to consolidate the ownership in the proposed VEAs. They currently own about 74% and 38% of the private land in the ConA and ConB, respectively.
- 6.2 Should there be policy support and an appropriate zoning; the Representatives would explore increasing the land holding within the ConA and ConB to facilitate future management arrangement. They would liaise with villagers for land exchange between the Representer's land in the VEAs and villagers' land in the Conservation Areas.
- 6.3 A critical factor to ensure the implementation of a sustainable conservation plan in conjunction with residential development is through the land ownership consolidation in the area. The proposed zoning plan can facilitate this process to enable the land exchange process to proceed.

**7. Ecological Review**

- 7.1 Previous studies that covered the Tai Ho area were reviewed and site inspections were carried out to determine the ecological value of various sites within the OZP. (Appendix 2) The ecological review indicated that most records of concerned species were located inside and along Tai Ho Stream (SSSI) as well as Tai Ho Bay, i.e. its eastern terrestrial part and the marine waters.



- 7.2 The conservation zones has been aligned to protect the Tai Ho Stream and its estuary and included about half of the concerned species sightings, including highly concerned species of Brown Fish Owl, Ayu, seagrass (*Halophila beccarii*) and horseshoe crabs (*Tachypleus tridentatus* and *Carcinoscorpius rotundicauda*). Other known key ecological resources such as records of bat cave, seagrass bed and horseshoe crab juveniles were located at the eastern part of Tai Ho area, sheltered by the "Conservation Area B" (ConB). Most flora and fauna species of conservation importance reported from previous studies were recorded within ConB.
- 7.3 Development Sites 1, 2 and 3, and Village Expansion Areas (VEA) 1 and 2 are considered to be least ecologically-sensitive areas within Tai Ho area as these lands were mainly made up of habitats of low ecological value. Only a few species were recorded within the boundary of development zones (including one ardeid, and two butterflies). The habitats within the development zones are not considered critical to these species. These species, of moderate conservation value, either have a wide distribution in Hong Kong, or do not have much dependence on the sighting locations. Development Site 4 and VEA 3 were not covered by the reviewed previous studies, and the ecological value of these two zones would be further studied.
- 7.4 The proposed Development Sites are located near the entrance of the Tai Ho area, existing villages and existing access roads, and are thus already subject to relatively higher disturbance level. Based on the above, the proposed Conservation Areas have covered the most sensitive terrestrial part of Tai Ho area while the proposed Development Sites are located on the least sensitive locations within Tai Ho.
- 7.5 It is anticipated that a more in-depth ecological impact assessment will be conducted in a later stage prior to any development, to demonstrate the evaluation in the present review.
- 7.6 The Tai Ho Stream and its estuarine bay are the key ecological resources in the Tai Ho area and also the key elements of the recognized conservation importance of the entire Tai Ho area. This is in line with the findings from the present Ecological Review, which revealed that most species of conservation importance were recorded in the eastern part of Tai Ho area inside or near the stream and its estuarine bay.
- 7.7 Conservation and prevention of damages to the stream courses and the riparian zone are essential for maintaining the habitats of those species of conservation importance having high association with stream and estuarine habitats. Without proper management, however, some activities such as clearance of vegetation might still jeopardize the ecological functions of the stream and its riparian zone. It is essential to introduce management of conservation, and there have been successful examples of providing management and enhancement measures in areas with high ecological values such as the management agreement in the New Nature Conservation Policy.

## **8. Management of Conservation**

### ***(a) Inadequate Provision for Conservation Management in the OZP***

- 8.1 The General Planning Intention for the Area included in paragraph 8 of the Explanatory Statement of the OZP states amongst other things that:

*"The general planning intention .... is to conserve ..... outstanding natural landscape with unique scientific and ecological values in safeguarding the natural habitats and natural system. .... Due consideration should be given to the conservation of the ecologically and environmentally sensitive areas, such as Tai Ho Stream SSSI, when development in or near the area is proposed."*

- 8.2 The zoning on the OZP does not provide for any active and positive means for ensuring the protection of the Tai Ho Stream catchment. The only proposals are for an SSSI zoning along the stream and some small areas of CA. The majority of the catchment is zoned GB. These zoning proposals are inadequate to achieve the planning intention and also do not take account of, or provide for the positive conservation management provisions in the New Nature Conservation Policy (NNCP).
- 8.3 The technical reasons and benefits of implementing conservation management for the Tai Ho Stream catchment have been outlined in the Ecological Review (Appendix 2) in paragraph 7.

***(b) New Nature Conservation Policy***

- 8.4 The Tai Ho site is identified in the NNCP as one of the highest priority sites for conservation management - priority Site 3. This is based on the importance of the Tai Ho stream which is described as a "medium-sized stream running from upland to estuary without fragmentation". The approach taken in the NNCP is to focus on how to better achieve the nature conservation objectives and to enhance conservation of ecologically important sites in private ownership.
- 8.5 Under the Policy Statement there are a number of policy objectives. The following are considered relevant to Tai Ho:-
- To promote the protection of ecosystems and important habitats and the maintenance of viable populations of species in natural surroundings;
  - To promote the protection and sustainable use of natural resources that are important for the conservation of biological diversity;
  - To collaborate with the private sector including the business community, non-governmental organisations and the academia to promote nature conservation, and to conduct research and surveys as well as to manage ecologically important sites for such purposes.
- 8.6 To improve the management of conservation areas in private ownership, the NNCP proposed that partnerships should be encouraged between key stake holders, including land owners and NGO's, in pursuit of the nature conservation objectives. Two approaches which provide incentives for private sector and NGO's to manage these ecologically important areas. One is the Private-public partnership approach (PPP) while the other is the management agreement with landowners (MA).

***(c) Private-public Partnership Approach***

- 8.7 In the previous proposals prepared for the area by the owners the PPP approach was followed. However, that was not accepted by the ACE in July 2005, primarily for issues relating to the assembly of adequate private land to enable the proposal to

proceed. The further assembly of private land has not taken place since that time, meaning that the PPP approach is still unlikely to be accepted.

- 8.8 The zoning on the Tai Ho OZP does not encourage further assembly of private land, nor provide for the proper long term conservation of the Tai Ho River catchment. In this respect the PPP approach is not applicable.

***(d) Management Agreement Approach***

- 8.9 The MA approach provides a more flexible approach and the statements in the NNCP document "Nature Outlook" are very useful in providing guidance:-

*"3.4 under this option, NGO's will be encouraged to enter into management agreements with the landowners concerned either with government subsidies or their own funding. Through the management agreement the landowner is required to undertake specified activities or allow the conduct of these activities by the NGO in negotiation with the landowner, and the NGO shall monitor and ensure the proper implementation of the agreement to meet the conservation objectives of the site concerned. ...."*

*"3.5 The management agreements will constitute a form of partnership among the Government, NGOs and the land owners in conserving individual habitats. Since the management agreements are negotiated on a case-by-case basis, this option will provide the flexibility for programs that best suit the needs of individual sites to be drawn up. ...."*

*"3.6 The effectiveness of this option will depend on the willingness of the landowners and NGOs to participate in this type of management agreements, their commitment to fulfil the obligations under the agreements and the implementation of an effective monitoring and audit system for checking that the recurrent resources are well spent on the intended objectives. We consider this option most suitable for the habitats the sustainability of which depends on the type of human activities that take place in them."*

- 8.10 The MA approach is ideally suited to the character, mix of uses and land ownership pattern of the Tai Ho Valley and therefore can be considered as an option for future management. It provides a basis for coming to a partnership between the stakeholders and providing a firm arrangement for the long term sustainability of conservation management.

***(e) Implementing a Management Agreement***

- 8.11 The Representors are the major owners of private land at Tai Ho and would be willing to enter into a suitable management agreement in relation to the relevant portions of their land, in conjunction with the provision of appropriate residential development in the less ecologically sensitive areas of Tai Ho. They would be the proactive members of a partnership with the government and a suitable NGO.
- 8.12 In addition they would facilitate discussions with other private landowners who may be interested in becoming part of the MA scheme. Community involvement would also be facilitated if possible.
- 8.13 The purpose of the MA would be to ensure compatible management of the majority of the catchment of the main Tai Ho Stream in the eastern part of the Planning Area.

This would involve both private land and relevant parts of the government land. The extent of the MA area would be determined with reference to the extent and location of the SSSI zone relating to the Tai Ho Stream.

8.14 The application for the MA would be made in accordance with the "Guideline to Application" issued by the Environment and Conservation Fund. The Guideline states that the MA applies to priority sites and Tai Ho is a priority site listed in the Guideline. The application would be lodged in the name of the selected NGO and the application process facilitated by the landowners who are part of this representation. In particular they could assist with meeting the following criteria;

- Sustainability of resources; Participation of the landowners/tenants; nature conservation and enforceability of the MA;
- Planning of the implementation of the project
- Budgeting and cost effectiveness of the project;
- Provision of initial funding to ensure that at least the objective of 5% of the budget is met, possibly including a nominal rent for their private land involved.
- Possible assistance with constructing the minor works required to implement the proposals within the MA.
- Possibly becoming a long term sponsor of the MA project.

8.15 The approach taken in the NNCP is a practical one which realizes that there is limited funding available for nature conservation. The implementation of nature conservation requires partnerships with stake holders and linked to this is the concept of conservation being undertaken in conjunction with suitable forms of development. In Tai Ho, this MA development should be specifically provided for in the zoning on the OZP, and associated with this the areas requiring managed conservation should also be clearly identified, as an option for future conservation management implementation.

***(f) Proposed Area to be Covered by the Management Agreement***

8.16 It is proposed that the minimum area to be covered by the MA would be the private land located within the SSSI along the Tai Ho Stream, and the area shown on Figure 2 which is proposed to be an extended area zoned "Conservation Area". Additionally the MA area could be extended to include parts of the government land which would remain zoned as Green Belt, but are an integral part of the catchment and the "run from the upland all the way to the lowland estuary where mangrove and mudflat are found".

8.17 The implementation of the MA over the whole area of the relevant CA and SSSI zones would provide a substantial area of managed conservation area and would better achieve the general planning intention than the large areas of Green Belt shown on the Draft OZP.



## 9. Preliminary Technical Assessments

- Page 11

parameters. This approach has been followed by Government. It is through this approach that preliminary technical assessments for traffic impact, sewerage, noise, and ecology are provided. Detailed technical assessments could be carried out at the next stage of the land development process.

- 9.3 The OZP is proposed by PlanD without technical support, and more importantly, private land ownership rights have not been addressed. On the other hand, detailed technical assessments are requested from the Representers to justify their preliminary land use proposals.

**(a) Preliminary Visual Impact Review**

- 9.4 A preliminary visual impact review was carried out to investigate the spatial relationship of the residential developments in the Proposed Scheme to the overall surrounding townscape and landscape. The proposed extended CA zone in the eastern part of the Tai Ho Valley will ensure that the natural environment of streams, valleys and rising hills will remain unchanged.
- 9.5 The major visual elements to consider are the Pok To Yan hill, Tai Ho Bay, North Lantau Highway, Tuen Mun-Chek Lap Kok Link, and the Tung Chung East Reclamation developments which form a major cosmopolitan area. (Figure 3)
- 9.6 It can be seen in Figure 3 below, the residential developments in DS1 to 4 are nestled at the foothill of the western Tai Ho Area, in the Pak Mong valley. The ridgelines of the Pok To Yan hill are far from being affected by the DS buildings. Their massing is much smaller compared with the expanse of landscaping in the backdrop of Pok To Yan hill. In fact, the hills at the shoreline at Tai Ho Bay water body would shield a large portion of the buildings from public view on the North Lantau Highway.
- 9.7 Within the DS, the buildings are oriented such that there would be sufficient building gaps in between. The buildings are also in close proximity to the built-up infrastructure of North Lantau Highway, and the access road connected to Cheung Tung Road.
- 9.8 A cluster of commercial buildings and public housing of TCE line along the North Lantau Highway. An abrupt stop to developments can be seen at the south side of North Lantau Highway. The DS form a natural extension of the built-up and cosmopolitan area of Tung Chung East, opposite the North Lantau Highway, as be seen in Figure 3.
- 9.9 In TCE, there is a gradual stepping-down of building height profile from North Lantau Highway of about 185mPD to 70mPD towards the shoreline at Tung Chung channel. A similar stepping-down of building height profile would be adopted at the south side of North Lantau Highway, with the closest DS1 having a building height of 139mPD and then gradually decreases towards the inland of 60 to 80mPD at DS2 to 4. (Figure 4)
- 9.10 The overall visual impact is compatible with the existing natural topography, as the visual effects to the surrounding views are moderate. The scale and bulk of the DS buildings are also visually compatible with the proposed buildings and extensive urbanization to take place in Tung Chung East.

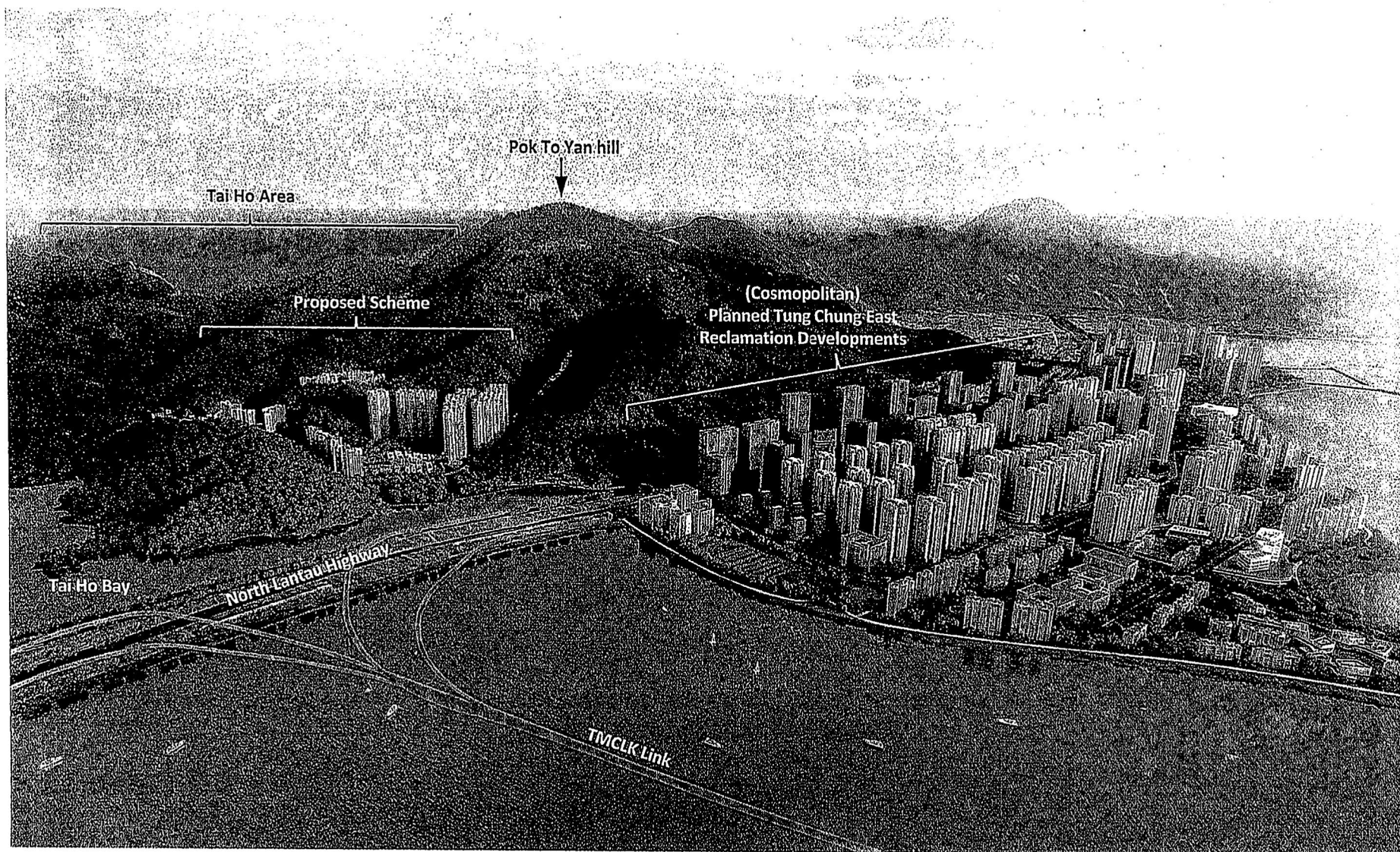
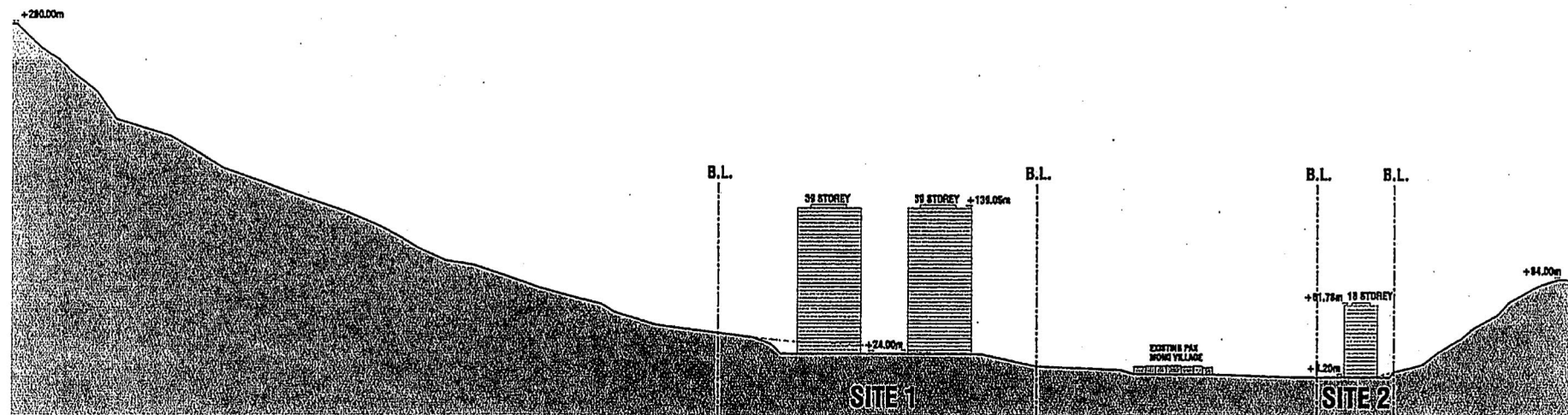
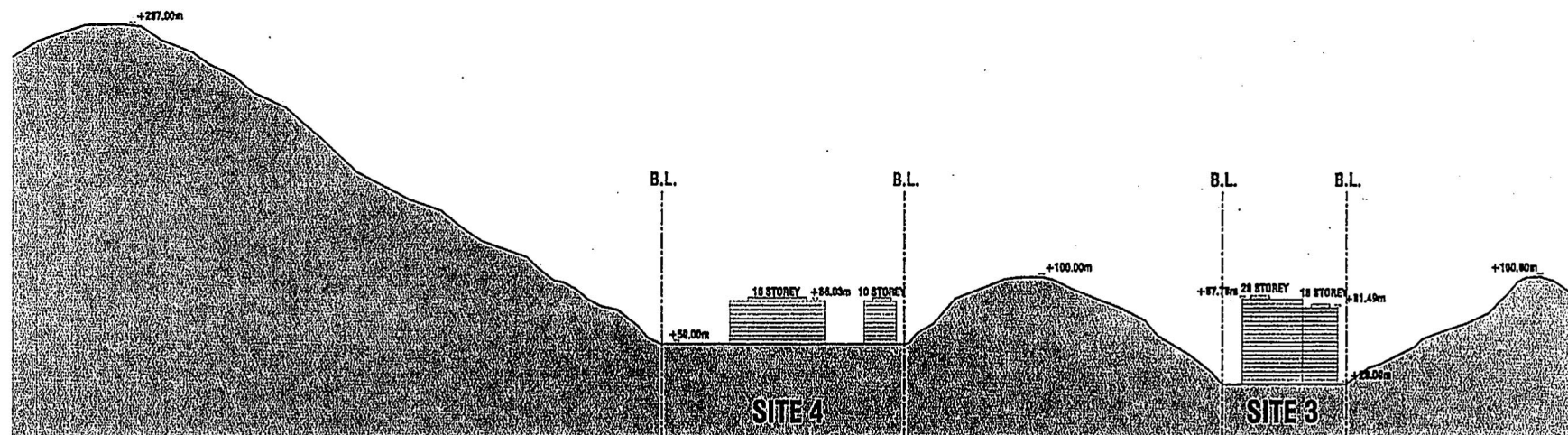


Figure 3: The visual context of the Proposed scheme and surrounding landscape





SECTION A



SECTION B

Figure 4: Section of the proposed residential developments at the Development Sites in relation to the surrounding topography (please refer to MLP in Appendix 1 for cross-reference of section)

***(b) Traffic and Transport Analysis***

- 9.11 A Traffic and Transport Analysis (TTA) was carried out (Appendix 3).
- 9.12 For the vehicular access of the four DS, a new public road is proposed in form of a standard 7.3m wide single 2-lane carriageway in connection with Cheung Tung Road, whilst footpath and cycling track are also proposed alongside the new access road to integrate with the planned pedestrian and cycling network in TCE.
- 9.13 In addition to the existing North Lantau Highway and Cheung Tung Road, new transport infrastructure has been proposed in close proximity to Tai Ho, including the planned Road P1 and Tai Ho Interchange, as well as the additional railway stations and public transport interchange at TCE and Siu Ho Wan along the existing Tung Chung Line (TCL).
- 9.14 With the provision of supporting feeder services such as buses and minibuses, the catchment areas of the two new railway stations at TCE and Siu Ho Wan can be further enlarged to cover the potential developments at Tai Ho, including the future village expansions in Pak Mong and Ngau Kwu Long. Therefore, the traffic and transport context in Tai Ho is regarded to be well integrated with the planned developments and infrastructure in TCE and Siu Ho Wan.
- 9.15 On the other hand, the external transport connectivity in North Lantau is also expected to significantly enhanced with the completion of planned transport infrastructure, including the TM-CLKL (under construction) and Route 11 (under planning), which strengthens the linkage between North Lantau and NWNT, in addition to the existing Lantau Link.
- 9.16 With the completion of HZMB and HKBCF, North Lantau will also become an important gateway for cross-boundary transport to serve the western bank of the Pearl River Delta, as well as the international flight destinations through the HK International Airport.
- 9.17 Based on the traffic analysis under the TCNTE Study, it is anticipated that most of the internal and external road links will be operating at satisfactory level, except the Lantau Link, which will be operated marginally over the manageable degree of congestion when all the planned new developments in HKIA and North Lantau, including the previous assumption of Lantau Logistic Park at Siu Ho Wan Reclamation, are in place.
- 9.18 Meanwhile, it was announced in the 2017 Policy Address that the feasibility of Route 11 would commence, which may provide an additional highway connection between North Lantau and NWNT, as long as an effective solution to the capacity issue of Lantau Link.
- 9.19 Nevertheless, the additional traffic impact by the potential residential developments in Tai Ho is expected to be minor, given that overall traffic generation are relatively marginal with maximum of 468 pcu/hour, whilst the additional traffic to Lantau Link is only 257 pcu/hour with a net increase of 0.04 in the V/C ratio. Therefore, the development potential at Tai Ho should not be constrained by the capacity of Lantau Link, given that the additional traffic impact is expected to be very minimal.

- 9.20 On the other hand, it is estimated that the public transport demand on the Lantau Link will be 2,413 passengers per hour in one direction (pphpd), whilst about 60% of them will be travel by the MTR Tung Chung Line.
- 9.21 According to the TCNTE Study, the maximum carrying capacity of TCL will be enhanced to 31,300 pphpd under 4 ppsm at the Lantau Link Section in order to meet the anticipated increase in railway transport demand by the proposed new stations in TCNTW and Siu Ho Wan.
- 9.22 With the completion of modification works, the TCL should have adequate spare capacity to accommodate the additional patronage of 1,448 pphpd by the potential developments in Tai Ho, which is equivalent to approximately 5% of the maximum carrying capacity.
- 9.23 The associated traffic and transport demand induced by the potential developments of the four sites and the future village expansions in Pak Mong and Ngau Kwu Long within the Tai Ho OZP should be well-supported by private and public transport connections with comprehensive linkage to the pedestrian and cycling network in Tung Chung East and Siu Ho Wan.

***(c) Sewerage Impact Review***

- 9.24 A Sewerage Impact Assessment (SIA) was carried out (Appendix 4). According to the SIA, the Siu Ho Wan Sewage Treatment Works with its design maximum handling capacity of 180,000 m<sup>3</sup>/ day has sufficient capacity to cater for the committed development and proposed scheme. The sewage flow generated from the Subject Sites will be discharged to SHWSTW with future sewer system. Therefore, there is no insurmountable sewerage impact envisaged.

***(d) Noise and Air Quality Impact Review***

- 9.25 An Environmental Review was conducted for noise and air quality impact (Appendix 4). The minimum buffer separation distance between the Subject Sites and the main carriageways and local road are respectively over 200 m and not less than 5m, which comply with the relevant HKPSG requirements. No adverse vehicular emission impact on the proposed residential developments is envisaged. According to site investigations, there was no chimney and other air pollution source nearby the Subject Sites. Air quality impact due to industrial activities is not anticipated.
- 9.26 The subject sites are not near to existing and planned helipad facility, and also outside NEF25 contour of Hong Kong International Airport so that HKPSG standard is complied with. Site investigation revealed that there was no identified industrial activities or noise sources in the vicinity of the Subject Sites. Moreover, there is no railway noise source identified in the vicinity (i.e. 300 m) of the Subject sites. As a result, no adverse industrial noise impact and railway noise impact are anticipated on the proposed residential developments.
- 9.27 According to the road traffic noise impact assessment result based on traffic forecast representative of the worst case within 15 years from tentative completion year of the proposed residential developments (i.e. year 2026), full compliance of the road traffic noise standard is achieved. The future residents would not be subject to adverse road traffic noise impact with proposed noise mitigation measures in place

## **10. Proposed Amendments to the Tai Ho Outline Zoning Plan to Meet the Representation**

The proposed amendments to the OZP to meet the representation are shown in Figure 5 below, while Figure 6 indicates the zoning pattern for the whole of the OZP that would result from the acceptance of the proposed amendments.

### **(a) Ecological Conservation Zone**

- 10.1 The proposed zoning for the ConB consists of maintaining the SSSI zone that encompasses the Tai Ho Stream, and the CA riparian buffer zone is to be expanded to cover a larger stream catchment area. (Figure 5) The expanded CA zone would require rezoning portions of the GB zone in the OZP. This would enable Management Agreements to take place on land that is largely privately-owned. The 30-m wide buffer of the Tai Ho Stream would be retained in the CA zones. (Figure 6)

### **(b) Development Site Zones**

- 10.2 The proposed zoning at the Development Sites is a "Residential" zone that would allow a suitable scale of residential development. A "Residential (Group A)" [R(A)] is proposed for medium-density public housing at DS1, and "Residential (Group B)" [R(B)] is proposed for medium-density private housing at DS2, DS3 and DS4. (Figure 5) The residential zoning recognizes the less ecological sensitive location that is suitable for residential development. Maximum GFA and building heights would be imposed on each development site in accordance with Table 1.
- 10.3 The preliminary technical assessments accompanying this Representation Statement have demonstrated that residential development are compatible land uses, and detailed technical assessments could be conducted at a later stage under the lease conditions.

### **(c) Village Expansion Area Zones**

- 10.4 The proposed zoning for the VEAs are designated as "Village Type Development" (V) zones. The proposed V zone boundaries of Pak Mong Village (VEA1) and Tai Ho San Tsuen (VEA3) would be the same as that on the OZP; however, at Ngau Kwu Long Village (VEA2), the proposed V zone boundary has been expanded compared to that in the OZP. (Figure 5) A preliminary review of the topography shows that more land could be made available for village house expansion.

### **(d) Open space Zone**

- 10.5 The proposed zoning for the ConA is a new "Open space" (i.e. O) zone which is adjacent to the existing small beach and would be appropriate for public recreation while protecting the underground archaeological site. (Figure 5)

### **(e) Road Zone**

- 10.6 The proposed zoning for the new public road is a "Road" zone. This would help facilitate the provision of infrastructure and upgraded utilities for the residents of the public and private housing, as well as the village houses. (Figure 5)





**(f) Proposed Zoning Plan**

- 10.7 The proposed amendments to the OZP above would create a revised Zoning Plan that would form the basis for achieving a holistic and balanced conservation and development scheme for Tai Ho. (Figure 6)

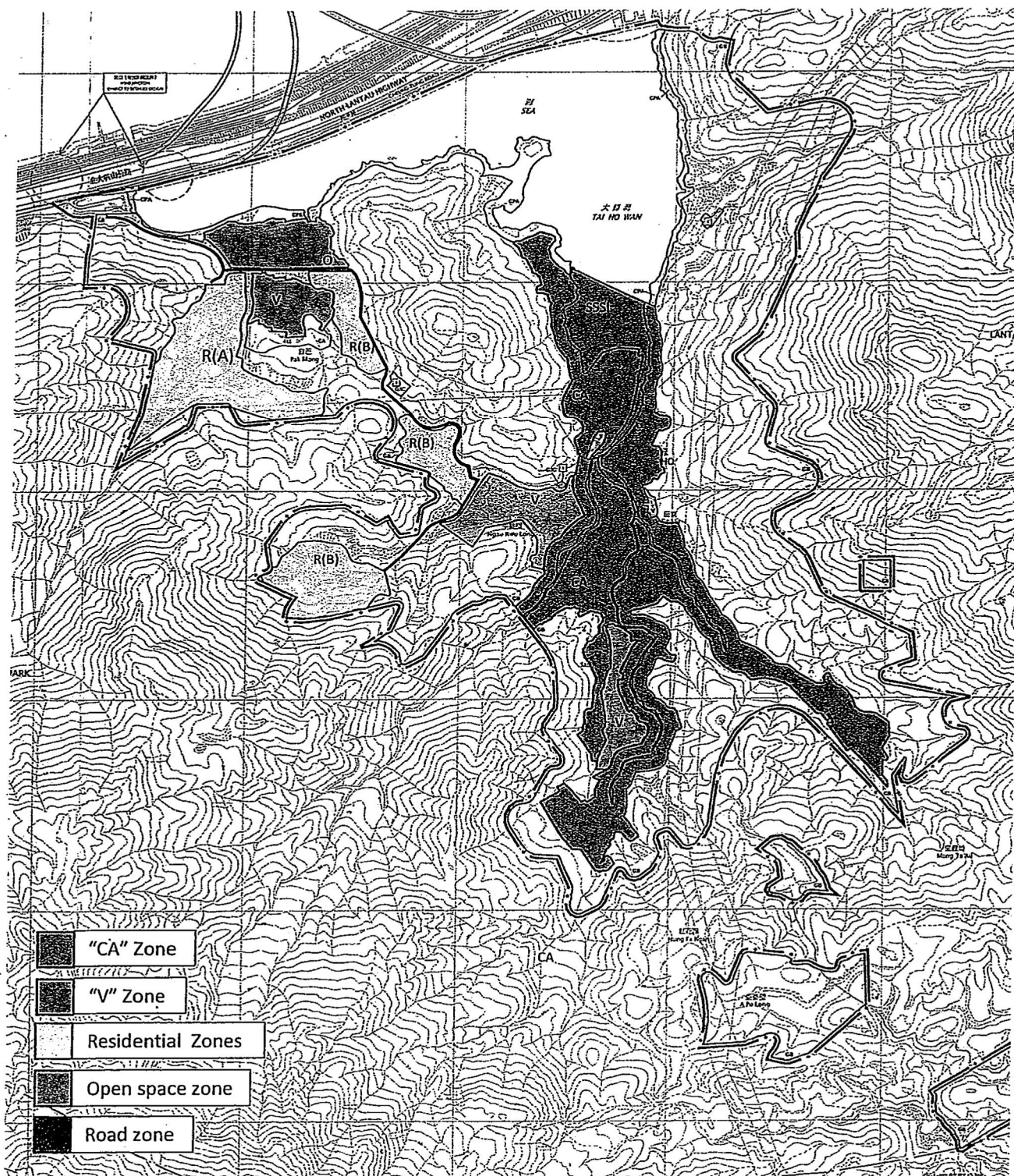


Figure 6: Proposed Zoning Plan

## **11. Planning Justifications**

### ***Acute Shortage of Housing Supply***

- 11.1 In the Policy Addresses of recent years, the Chief Executive has placed top priority to address housing shortage as the most critical of all livelihood issues. In the Policy Address 2014, the Government accepted the recommendation of the Long Term Housing Strategy Steering Committee to increase the housing supply target of 470,000 units in the coming ten years, with a public to private housing ratio of 60:40.
- 11.2 In the Policy Address 2015, the Government emphasized the need to explore ways to leverage the private sector's capacity to increase the supply of public flats. In 2015, the Government had raised the 10-year housing supply target to 480,000 starting from 2015, in response to the heated market demand for housing.
- 11.3 The Proposed Scheme, therefore supports a stable and healthy public housing supply by producing about 6,864 flats, and would be flexible in supplementing the private sector with about 3,598 flats.

### ***Conservation, Education and Development***

- 11.4 The Tai Ho Valley has been included as the third highest priority sites under the New Nature Conservation Policy since 2004, and under the Lantau Study it is ear-marked for creative eco-tourism and nature conservation.
- 11.5 Tai Ho is important for heritage and ecology, and managed in an appropriate way would stimulate tourism development, particularly for local visitation. It would become a site for the sensitive protection of the ecologically significant components related to the Tai Ho stream, for public education and for enjoyment of the natural environment. It would also ensure that the heritage and ecology would be protected.

### ***Long-standing Development Intent at Tai Ho***

- 11.6 The Revised Proposal draws from the history of the site as having a long-standing intent for residential development. Based on the Port and Airport Strategy (PADS) in 1989, and The North Lantau Development Study (1992), Tai Ho was proposed to accommodate a sizeable form of residential development. Even when the Tai Ho Stream was designated as SSSI in 1999, and the New Nature Conservation Policy (NNCP) came into effect in 2004, under which Tai Ho was identified as a priority site; the Public-Private Partnership (PPP) provided a channel to explore the intention for development at the least ecologically sensitive areas in conjunction with managed conservation.
- 11.7 Under this premise, the Representers believes that residential development are justified at the least ecologically sensitive areas of the Development Sites.

### ***Favourable Infrastructure Context for Developments at Tai Ho***

- 11.8 The site is at a strategic location of the frontier of infrastructure development in North Lantau. It is accessible to the North Lantau highway that is linked to the connecting point of Tuen Mun Chek Lap Kok Link, the most direct route between the Northwest New Territories and Hong Kong-Zhuhai-Macao Bridge (HKZMB), the International



Airport and North Lantau. The northern connection of TM-CLKL will connect Tuen Mun Area 40 with the HZMB Hong Kong Boundary Crossing Facilities (HKBCF). The HKZMB would establish a new land transport link between the east and west banks of the Pearl River, and enhance the economic and sustainable development of the three places.

- 11.9 The major planned infrastructure that would be completed in the next few years include the Road P1, Tai Ho Interchange, Tuen Mun Chek Lap Kok Link, Tung Chung East MTR Station, and Tung Chung East Reclamation. This provides a favorable infrastructure context for developments at Tai Ho. The proposed additional road connection between Tai Ho Interchange and Cheung Tung Road would be a minimal upgrade needed to enable access to developments at Tai Ho and other areas on North Lantau.
- 11.10 The Revised Proposal would be within a walking distance of 1km to the planned Tung Chung East MTR station. There is an existing pedestrian subway to safely and conveniently cross under the North Lantau Highway to get to the waterfront side and walk to/from the future MTR station.

***Technically Feasible***

- 11.11 The preliminary technical assessments and ecological review has demonstrated that an appropriate scale of residential developments is feasible at the less ecologically sensitive locations at the western side of Tai Ho. The proposed zoning would ensure flexibility for residential development with ecological mitigation measures put in place at the least ecologically sensitive locations. Detailed technical assessments could be carried out under the lease conditions.
- 11.12 The developments would also be visually compatible in scale and intensity with the surrounding landscape and future cosmopolitan of Tung Chung East.

***Management Agreement Approach in Conjunction with Development***

- 11.13 The MA arrangements proposed would meet the conservation objectives under the NNCP and also provide opportunities for eco-tourism sought for by the Government in Tai Ho. Under the MA approach, a management proposal would be initiated by the Representatives in accordance with the procedures outlined by the Government and a suitable NGO would be identified to undertake the conservation management.

### ***Meeting the Long-term Village Housing Demand***

- 11.14 The OZP has provided inadequate land for village house expansion to address the long-term demand. The village representatives have also expressed concern over this inadequate provision. Therefore, additional areas for village expansion would seem necessary.
- 11.15 The proposed VEAs have been assessed to provide available land to accommodate a total of 212 village houses, which could meet 92% of the long-term village housing demand. In comparison, the provision by the V zones in the OZP can only provide 138 village houses and meet 60% of the demand. The difference comes from expanding the boundary of developable land at Ngau Kwu Long and assessing the site conditions of the VEAs to optimize the available land for housing.
- 11.16 TPB Paper No. 10253, para 2.2, (b): *"Given the natural environment with high ecological and landscape value, an incremental approach for designation of "V" zone for small house development has been adopted... at suitable locations so as to avoid undesirable disturbances to the natural environment and overtaking the limited infrastructure in the Area."* However, this rationale does not justify undermining the need to meet the village housing demand, and could well be addressed with providing needed infrastructure facilities for the villagers. The proposed new public road is such measure that would enable an orderly development pattern and efficient use of land for village house development.

### ***Increased Incentive for Land Exchange and Protection of Private Property Rights***

- 11.17 The proposed Zoning Plan is needed to provide incentive for private land owners (including villagers) to take forward the land exchange process to consolidate land at the DSs and VEAs, and to surrender land at conservation zones (i.e. GB, SSSI, CPA and CA zones). Without a Zoning Plan that defines and balances a land use framework for *both* conservation and development together, there is no certainty or guarantee for development to take place and land exchange to proceed. In turn, an opportunity would be lost to establish the Management Agreement approach at the most ecologically important areas of Tai Ho, and to build public and private housing development in an acute housing shortage context.
- 11.18 The current state of affairs, as reflected by the OZP, is that the Tai Ho stream would continue to degenerate from the uncontrolled village house development in the absence of public infrastructure, and no positive management of conservation.
- 11.19 The conservation zones on the OZP also prohibits any form of new development (including public or private housing) and are restrictive to the point that it constitutes a deprivation of private development rights. As it stands, the OZP excessively and unreasonably emphasizes conservation over the entire Tai Ho area; however, the most ecologically sensitive feature is the Tai Ho stream locality. The proposed Zoning Plan would bring about an effective and long-term conservation strategy that takes into consideration compatible development at suitable locations and provides an opportunity to protect private property rights, so that these private land owners would be encouraged to participate in the conservation strategy.

### Similar Conservation and Development Model at Tung Chung Valley

- 11.20 The Tung Chung Town Centre OZP (No. S/I-TCTC/21) and the Tung Chung Valley OZP (No. S/I-TCV/1) has gone through a statutory process that has consolidated the input from stakeholder groups and have resulted in putting into place a balanced conservation and development model. The model anchors on conserving Tung Chung Stream as an Ecologically Important Stream (EIS) with a Conservation Area (CA) buffer zone and a special River Park zone. On both sides of the stream are sites designated for different intensities of housing that are sensitive to the ecological character. (Figure 7)

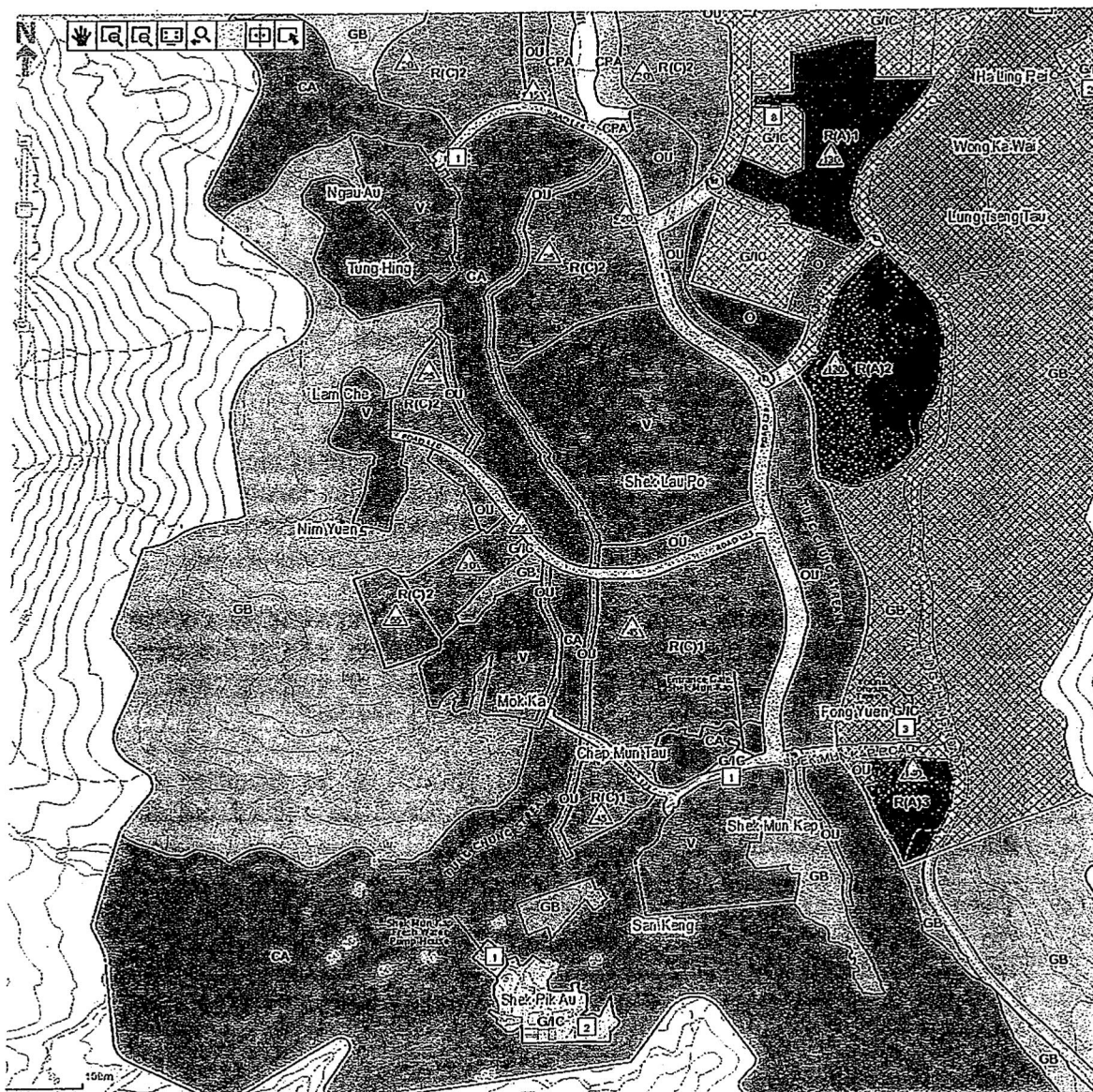


Figure 7: Tung Chung Valley zoning context, conservation of stream with adjacent residential development (source: Statutory Planning Portal 2, 2016)

- 11.21 For example, to the east side of the stream are already built-up infrastructure, including the Tung Chung Road, that can provide infrastructure capacity for more intensive residential developments. There are two sites located there that are zoned Residential (Group A) with a maximum plot ratio of up to 5. To the west of the stream are less built up and are more ecologically sensitive environments, so lower-density residential zones with a plot ratio of 1 to 1.5 are designated there. (Figure 7)

- 11.22 The Revised Proposal falls in line with this model, as it considers designating more intensive residential developments at the least ecological sensitive areas with infrastructure facilities, and the lower-density residential development sites are closer to the ecologically sensitive Tai Ho Stream with sufficient buffer areas. The Tai Ho stream (SSSI) is also well protected and provided with buffer CA zones. The ecological impact of the proposed Development Sites are insignificant.
- 11.23 This model has been considered to be workable at Tung Chung Valley where "R(A)" zones are located by the Tung Chung Stream, with appropriate buffer zone and Green Belt separation. A similar situation should also be considered at Tai Ho.

### ***New Public Road***

- 11.24 The new public road would be a planning gain to provide access for the villagers and future residents. It would enable public infrastructure, such as sewer provision, that would lessen the environmental impact of the village house development onto the ecologically sensitive areas, including the Tai Ho stream.
- 11.25 Moreover, during the consultation stage for preparation of the OZP, the village representatives have expressed the need to enhance the provision of infrastructure facilities to improve the living environment of the Area.

## **12. Conclusion**

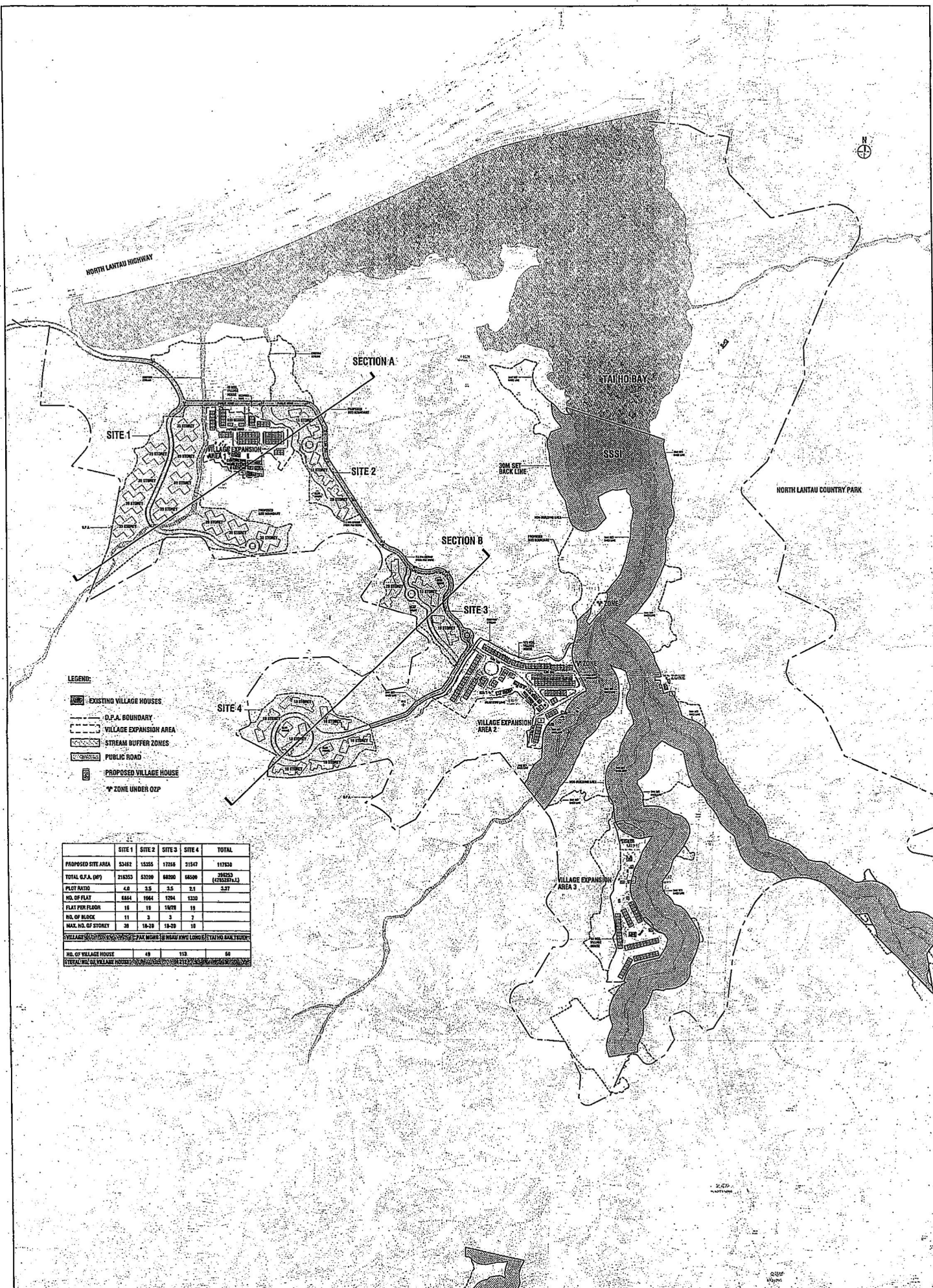
- 12.1 This Representation has demonstrated proposed suitable land uses for the Tai Ho valley, that would help balance the merits of economic development and ecological protection in the Tai Ho valley. The implementation of the General Planning Intention requires a change to the zoning as proposed in this Representation.
- 12.2 This submission is made in the broad interests of Hong Kong as a whole, to conserve the natural resources and cultural heritage at Tai Ho, and at the same time, find a balance in optimizing the development potential of suitable land, to help boost ecotourism and provide land to the acute housing demand.
- 12.3 The proposed development scheme is shown to be feasible with preliminary technical reviews and more in-depth studies shall be carried out at a later stage under the lease conditions.
- 12.4 The possibility of implementing an effective long term conservation strategy for Tai Ho can be achieved through a Management Agreement approach in conjunction with development that enable a win-win solution for all the stakeholders, including the villagers, major private land owners, conservationists, Government and general public.
- 12.5 Accordingly, the Town Planning Board's favourable consideration of the proposed amendments to the OZP would enable the sustainable development use and management of this valuable area of land.

***Masterplan Limited***  
***May 2017***

## **Appendix 1**

### **Master Layout Plan and Sections**





+280.00m

B.L.

39 STOREY

39 STOREY

+139.05m

B.L.

B.L.

B.L.

+61.78m 18 STOREY

+5.20m

EXISTING PAK  
MONG VILLAGE

SITE 1

SITE 2

+84.00m

## SECTION A

+267.00m

B.L.

B.L.

B.L.

B.L.

10 STOREY

+86.03m

10 STOREY

+100.00m

+87.79m 20 STOREY

18 STOREY

+81.49m

+50.00m

+20.00m

SITE 4

SITE 3

+100.00m

## SECTION B

1:3000 in A3



## **Appendix 2**

### **Ecological Review**

# **Draft Tai Ho Outline Zoning Plan No. S/I-TH/B - Further Consideration of a New Plan**

## ***Ecological Review Report***

May 2017



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## Executive Summary

Previous studies covered the Tai Ho area were reviewed to determine the ecological value of various sites/areas within the "Tai Ho Outline Zoning Plan No. S/I-TH/C". Within the Tai Ho area, most records of concerned species were located inside and along Tai Ho Stream as well as Tai Ho Wan, i.e. its eastern terrestrial part and the marine waters.

The coverage of the proposed Conservation Areas has, not only harboured Tai Ho Stream and its estuary, but also included about 40% of the concerned species sightings including highly concerned species such as Brown Fish Owl, Ayu, seagrass (*Halophila beccarii*) and horseshoe crabs (*Tachypleus tridentatus*). Other known key ecological resources such as records of bat cave, seagrass bed and horseshoe crab juveniles were also located at the eastern part of Tai Ho area, sheltered from the proposed Development Sites by the natural landscape and the proposed Conservation Areas.

Development Sites 1, 2 and 3, and Village Expansion Areas (VEA) 1 and 2 are considered less ecologically sensitive areas within Tai Ho area as these areas were mainly made up of habitats of low ecological value, and with only a few records of flora and fauna species of conservation importance (including one ardeid, two butterflies and one bat species). These species, of moderate conservation value, either have a wide distribution in Hong Kong, or do not have much dependence on the sighting locations. Development Site 4 and VEA 3 were not covered by the reviewed previous studies, and the ecological value of these two zones would be further studied.

The proposed Development Sites are located near the entrance of Tai Ho area, existing villages and existing access roads, and are thus subject to relatively higher disturbance level. Based on the above, it could conclude that the proposed Conservation Areas have covered the most sensitive terrestrial part of Tai Ho area while the proposed Development Sites are located on the least sensitive locations within Tai Ho.

Without proper management, however, some activities such as clearance of vegetation might still jeopardize the ecological functions of the stream and its riparian zone. It is essential to introduce management into the Conservation Areas, and there have been successful examples of providing management and enhancement measures in areas with high ecological values such as the management agreement in the New Nature Conservation Policy.

## **1. STUDY BACKGROUND**

- 1.1.1 Draft Tai Ho Outline Zoning Plan No. S/I-TH/B exhibited to for public inspection on 24 March 2014 under Section 5 of the Town Planning Ordinance.
- 1.1.2 In relation to the public inspection, the Representaters propose revisions for the draft OZP in accordance with the rationales presented in the main text of this representation submission. A desktop ecological review study was also conducted to support the proposed revised plan.
- 1.1.3 The report summarized the results of the ecological review study, which comprised desktop study and site visits, and aimed to provide indications on the ecological value of various zones/areas covered by the "Tai Ho Outline Zoning Plan No. S/I-TH/B", in particular those proposed as Conservation Areas, Development Sites and Village Expansion Areas (VEA) by the present proposed revised plan.

## **2. METHODOLOGY**

### **2.1 Literature Review**

2.1.1 Ecological conditions of different parts of the Tai Ho area were covered by different previous EIA studies. The latest EIA studies in the area included the "Expansion of Hong Kong International Airport into a Three Runway System (3RS EIA)" and "Tung Chung New Town Extension Study (TCNTE)". Ecological surveys of 3RS EIA study were conducted between 2012 and 2013, while those of TCNTE were conducted between 2012 and 2015. Other EIA studies included the Hong Kong - Zhuhai - Macao Bridge Hong Kong Link Road (HKLR) and Tuen Mun-Chek Lap Kok Link (TM-CLKL). Surveys of the HKLR were conducted between 2003 and 2004, while those of TM-CLKL were conducted in 2008.

2.1.2 The findings of ecological surveys of these EIA studies were reviewed, in particular the distribution of flora and fauna species of conservation importance recorded in the Tai Ho area. The review also focused on the previous evaluation of habitat types identified in Tai Ho area, in particular those habitats falling within the proposed Development Sites and proposed Conservation Areas.

### **2.2 Site Visits**

2.2.1 Apart from desktop review, site visits were also conducted in February and March 2017. The main objectives of the site visits were to verify the findings from reviewed literatures and to observe if there are any major changes from the descriptions in reviewed literature. During the site visits, fauna species observed within the proposed Development Sites and proposed Conservation Areas were also recorded as supplementary information.

### **2.3 Compatibility of the Proposed Revisions**

2.3.1 Based upon the findings from literature review and site visits, the compatibility of the proposed revisions (i.e. the proposed Development Sites, the proposed Village Expansion Areas and the proposed Conservation Areas) was evaluated, in accordance with the proposed land use and the reported richness of ecological resources.



### 3. RESULTS OF LITERATURE REVIEW & SITE VISITS

#### 3.1 Recognised Sites of Conservation Importance

- 3.1.1 The draft Tai Ho OZP covers land and marine areas in Tai Ho. Recognised sites of conservation importance identified in the Tai Ho area include Tai Ho Priority Site, Lantau North (Extension) Country Park, Tai Ho Stream SSSI and Tai Ho EIS (**Figure 1, Appendix 1**).
- 3.1.2 **Tai Ho Stream SSSI and Tai Ho EIS** - **Tai Ho Stream SSSI** is about 5ha in area and comprises the Tai Ho Stream and the inner part of Tai Ho Wan. Tai Ho Stream is one of the most ecologically valuable fresh water streams in Hong Kong. Tai Ho Stream and its estuary has the most diverse stream fish community in Hong Kong and is the first and only location of the globally threatened salmonid fish Ayu ("sweetfish") *Plecoglossus altivelis* this species in Hong Kong. Its estuarine zone, Tai Ho Wan, also harbours a lot of ecologically important intertidal habitats. Tai Ho Stream and part of its estuarine zone were designated as a "Site of Special Scientific Interest" (SSSI) in 1999 in recognition of the ecological importance of the stream and its fish fauna, and for conservation and prevention of damages to the stream channel and riparian zone. The Tai Ho Stream is also identified as an "**Ecologically Important Stream**" (EIS) in a technical circular for works in rivers/streams issued by government in 2005.
- 3.1.3 **Tai Ho Priority Site** is one of 12 priority sites identified for enhanced conservation under New Nature Conservation Policy. It covers an area of 255.5 ha and is more or less includes the entire draft Tai Ho OZP. The site comprises four major habitat types, namely natural stream, mangrove stand / mudflat, agricultural land and woodland. The natural stream (i.e. Tai Ho Stream) is a medium-sized natural stream running from upland to the lowland estuary where mangrove and mudflat are found, without any fragmentation or major modification, while the natural stream habitat is considered impossible to be recreated. Moderate diversity of freshwater fish (53 species as of 2004) and amphibians (10 species as of 2004) including the endemic Romer's Tree Frog were recorded.
- 3.1.4 **Lantau North (Extension) Country Park** covers the hill slopes to the south of North Lantau Highway between Sunny Bay and Tung Chung, as well as between the hill slopes to the south of the coastline between San Tau and Sham Wat. It is located immediately outside the draft Tai Ho OZP. In addition to the existing 7,800ha of designated Lantau North and South Country Parks, the Lantau North (Extension) Country Park was proposed in the 1999 Policy Address as a positive means to conserve the natural environment of Lantau, and was designated in 2008.
- 3.1.5 As the boundary of the Tai Ho Priority Site covers the entire Tai Ho area, similar with the Draft Tai Ho Outline Zoning Plan No. S/I-TH/B, all the proposed Development Sites, Village Expansion Areas and Conservation Areas also fall within the boundary of the Tai Ho Priority Site. All other sites of conservation importance fall outside the footprints of the four Development Sites and the three Village Expansion Areas. Both the

existing Tai Ho Stream SSSI and the whole length of the Tai Ho Ecologically Important Stream fall within the boundary of the proposed Conservation Area B.

### 3.2 Flora and Fauna Species of Conservation Importance Recorded In Tai Ho from Reviewed Literature

- 3.2.1 A number of flora and fauna species of conservation importance considered of ecological importance were recorded within the Tai Ho area in previous EIA studies (**Figures 2a & 2b**). Details of these records are described in **Appendices 3 & 4**.
- 3.2.2 Eight species of plant species of conservation importance were previously reported in Tai Ho area, but all of them were recorded outside the proposed Development Sites (**Table 1**). Most of these plant species are commonly distributed in Hong Kong, but seagrass *Halophila beccari* is considered locally rare while Pitcher Plant has a restricted distribution in Hong Kong.
- 3.2.3 A total of 59 fauna species of conservation importance were reported in Tai Ho area by the previous EIA studies, with only two fauna species were recorded in the proposed Development Site boundaries (**Table 1**, also see **Section 3.3** below). Besides, one butterfly species and one bat species was recorded in the boundary of Village Expansion Area 1 (see **Figure 2b**).
- 3.2.4 None of the reported flora or fauna species of conservation importance was recorded within the proposed boundaries of Development Site 2, Development Site 3 or Development Site 4, nor Village Expansion Area 2 and 3.

**Table 1. Number of flora and fauna species of conservation importance in Tai Ho area (DS = development site; CA = conservation area)**

Groups	Within DS	Outside DS	Inside CA (A & B)	Total
Plant	0	8	2	8
Mammal	0	3	0	3
Bird	1	21	10	21
Reptile	0	2	1	2
Amphibian	0	3	1	3
Fish	0	11	6	11
Dragonfly	0	2	0	2
Butterfly	1	4	3	5
Other Aquatic Fauna (excluding fish)	0	4	1	4
<b>Total</b>	<b>2</b>	<b>58</b>	<b>24</b>	<b>59</b>

- 3.2.5 Among all the flora and fauna species of conservation importance reported in Tai Ho area, about 40% of them could be found within the boundaries of the proposed Conservation Areas. These included the species of high conservation value such those only found in Hong Kong in Tai Ho area (e.g. Sweet fish Ayu), or with limited distribution in Hong Kong (e.g., Brown Fish Owl, seagrass *Halophila beccarii*, horseshoe crab *Tachypleus*

- tridentatus*) (see **Appendix 2**). These high conservation value species are mostly aquatic fauna of highly associated with aquatic habitats. Habitats of these species within Tai Ho area are all avoided by the proposed Development Sites and VEAs, and covered by the proposed Conservation Areas. Records and ecology of these species are described in the following sections.
- 3.2.6 Brown Fish Owl *Ketupa zeylonensis* is a scarce resident. This species is only reported from a few localities in Hong Kong, mostly in Sai Kung Peninsula (e.g., Yung Shue O, Tai Tan) (Carey *et al.* 2001). Brown Fish Owl feeds in undisturbed, unpolluted lowland streams and tidal creeks and this type of habitats is uncommon in Hong Kong. Hence, Tai Ho area is considered of special importance to this species. All observations of Brown Fish Owls during previous studies (i.e. HKLR EIA Study) were made at the mouth of Tai Ho Stream near Tai Ho Village, and were covered by the boundary of Conservation Area B.
- 3.2.7 The first record of Ayu *Plecoglossus altivelis* for Hong Kong or Guangdong came from Tai Ho Stream (Chong and Dudgeon 1992). Tai Ho Stream is the only known breeding site for the globally threatened Ayu in Hong Kong. Ayu is considered "vulnerable" by China Red Data Book. This species requires unobstructed passage between salt and fresh water to breed. The high water quality and natural state of Tai Ho Stream are likely very important to this species. The Tai Ho Ecologically Important Stream is covered by the boundary of Conservation Area B.
- 3.2.8 More than 20 colonies of *Halophila beccarii*, each approximately 30cm x 30cm in area, were found during low tide at Tai Ho Wan during the survey of HKLA EIA in April 2004. Tai Ho Wan is considered of importance due to the presence of this locally restricted seagrass species, which provides nursery site for horseshoe crabs which are threatened by habitat loss in Hong Kong. Although no seagrass beds were found on the mudflat in Tai Ho Wan during the field survey for TM - CLKL (Maunsell 2009), the coverage of its habitats into the Conservation Area B could protect the habitat of seagrass and allow future colonization / reintroduction.
- 3.2.9 Horseshoe Crab (*Tachypleus tridentatus*) appear to be undergoing rapid population declines and are thought to be under severe pressure in the South China Sea, including Hong Kong waters, due to habitat loss, pollution and over exploitation. Tai Ho Wan is among the few sites where both these two species could be found in Hong Kong. Tai Ho Wan is hydrologically influenced by Tai Ho Stream. Preservation of Tai Ho Stream will enhance the conservation of horseshoe crabs.
- 3.3 **Flora and Fauna Species of Conservation Importance within the Proposed Development Sites**
- 3.3.1 While no flora species of conservation importance was reported within any proposed development sites, only two fauna species of conservation importance, yet considered common in Hong Kong, were recorded within the boundaries of the proposed Development Sites by previous studies,

which included one ardeids (Pacific Reef Heron), and one butterfly (Small Grass Yellow) (**Figure 2b**). Besides, one butterfly (Grass Demon) and one bat species was recorded within the boundary of VEA 1.

- 3.3.2 An unidentified bat species was reported by previous studies within the boundary of VEA 1. It is considered that this unidentified bat was likely a *Rhinolophus* sp., as two *Rhinolophus* species were recorded roosting in the bat cave on the eastern coastline of Tai Ho Wan (which is located far outside any development zones). Three bat species belong to the genus *Rhinolophus* in Hong Kong, and all are widely distributed in Hong Kong (Shek 2004, 2006). Bats are known to mainly forage in riparian vegetation on the edge of streams and open standing water bodies; woodland boundary with grassland, shrubland and abandoned agricultural lands; and active and abandoned agricultural lands (Ades and Reels 1998). Most bat foraging habitats will be preserved within the Conservation Zones.
- 3.3.3 One butterfly species Grass Demon was reported within the boundary of VEA 1. Grass Demon is widely distributed in agricultural field throughout Hong Kong.
- 3.3.4 Pacific Reef Heron was reported in a watercourse within Development Site 1, which is not considered typical habitat of this species. Pacific Reef Heron is widely distributed in coastal area (e.g., rocky shores) throughout Hong Kong (Carey *et al.* 2001). This species was also observed along the artificial walls on the north of Tai Ho Wan.
- 3.3.5 In Tai Ho area, only one butterfly species, i.e. Small Grass Yellow, was recorded within boundaries of the proposed Development Sites (i.e. Development Site 1). Small Grass Yellow are also reported in other areas in Hong Kong, and can be found in woodland edges, where their larval food plant (*Cassia mimosoides*) is found (Bascombe *et al.* 1999). Development Site 1 however is not considered critical habitats for this species.
- 3.3.6 Six fauna species of conservation importance were recorded in locations surrounding Development Site 1 and VEA 1. These were Greater Coucal *Centropus sinensis*, Romer's Tree Frog *Liuixalus romeri*, Short-legged Toad *Xenophrys brachykolos*, Predaceous Chub *Parazacco spilurus*, Freshwater Crab *Cryptopotamon anacoluthon* and Elegant Clubtail *Leptogomphus hongkongensis*.
- 3.3.7 Greater Coucal is a habitat generalist and is highly mobile, and alternative habitats are available in the Tai Ho area. Adverse impact from the proposed development is not anticipated.
- 3.3.8 Potential impact to stream inhabitants, including Predaceous Chub, Freshwater Crab and Elegant Clubtail, can be avoided/minimized by preservation of stream habitats. Establishment of buffer zones for watercourses near development sites would reduce the potential disturbance to aquatic fauna species during both construction and operation phases. In the proposed revision, stream courses were found

inside Development Site 1 and Development Site 2, but all these stream courses will be avoided and preserved, and buffer distance of 5 to 10m will be provided to both stream courses.

- 3.3.9 Boundary of Development Site 1 has avoided the locations with records of Romer's Tree Frog and Short-legged Toad. Though impacts to these amphibian species are not anticipated due to the avoidance, further precautionary protection measures could be proposed in the later detailed assessment study, such as searching survey prior to construction works to ensure no occurrence of these two amphibian species and to perform capture and translocate if any.



### 3.4 Habitats Types

- 3.4.1 The occurrence, distribution and quality of habitat types present in an area are important indicators for the ecological values of the area. Given the time constraint, the present ecological review study did not include a habitat survey or habitat mapping, which are expected to be conducted in the later stage. But previous studies could provide some indications on the types of habitats occurring in Tai Ho area.
- 3.4.2 A number of habitats, with different ecological values, were identified within the Tai Ho area during previous studies, including secondary woodland, *fung shui* woods, plantation woodland, cultivated land/orchard, urbanised/disturbed & wasteland, shrubland, grassland, mangroves & mudflat and stream (**Appendix 2**). Among them, secondary woodland, *fung shui* wood, natural streams, mangroves & mudflat, and seagrass beds were considered important habitats. There was also a bat cave, which is also considered as important habitat, on the eastern coastal area of Tai Ho Wan.
- 3.4.3 The reviewed studies altogether covered Conservation Area A, Development Sites 1 and 2, and VEA 1, and about half of Conservation Area B and most part of Development Site 3 and VEA 2. Development Site 4 and VEA 3 were however not covered by those previous studies.
- 3.4.4 The types of habitats within Development Sites 1, 2 and 3, and Conservation Areas A and B were shown in **Table 2**. Ranking of ecological value of habitats (except Fung Shui Wood) within the development sites and village expansion areas was made reference to the 3RS EIA, which was completed recently and covered the largest portion of the Tai Ho area when compared with other reviewed studies. Ranking of ecological value of Fung Shui Wood was made reference to the TCNTE as this habitat type was not mapped in the 3RS EIA.
- 3.4.5 Development Sites 1, 2 and 3 mainly consisted of "cultivated land" (**Figure 3a**), which was considered of "low" ecological value in the 3RS EIA due to man-made nature, easily re-creatable and common in rural areas of Hong Kong.
- 3.4.6 Some habitats of ecological importance (e.g., woodland, streams) were also found in the Development Sites 1 to 3. However, these habitats only made up minor proportion of these Development Sites. Habitats of high ecological value (e.g., mangroves, mudflat) are already included within the footprint of Conservation Area B. The whole length of the Tai Ho Ecologically Important Stream falls within the boundary of Conservation Area B. Tai Ho Stream is among the few sizable streams retained most natural riparian habitats throughout its length in Hong Kong. The Pak Mong Fung Shui Wood, which is ranked as "High" ecological value, will not be encroached by the development sites or village expansion areas. Besides, stream courses inside Development Site 1 and 2, which are much smaller than Tai Ho Stream (in particular the stream course in



Development Site 2 is a minor watercourse and not mapped as stream habitat in previous EIAs and are not reported of special conservation value, will be avoided and preserved, and buffer distance of 5 to 10m will be provided to both stream courses.

- 3.4.7 The major types of habitats in VEA 1 and 2 were developed site and seasonal wet grassland respectively, and both were considered of low ecological value in the 3RS EIA.

**Table 2. Habitat types within each proposed development site (DS), village expansion area (VEA) and conservation area (CA) (major habitat types: ++; minor habitat types: +)**

Habitat (ecological value)*	DS1	DS2	DS3	VEA1	VEA2	CA-A	CA-B
Cultivated Land (Low)	++	++	++	+	+	++	
Fung Shui Wood (High)**							
Developed Area (Low)	+			++	+		+
Secondary Woodland (Moderate to High)	+	+	+		+	+	++
Seasonal Wet Grassland (Low)					++		
Stream and riparian (Moderate)	+						+ (Tai Ho Stream: High)
Tall Shrubland (Moderate)							+
Shrubby Grassland (Low to Moderate)							+
Salt Marsh (Low)							+
Mangroves & Mudflat (Moderate to High)							+

\* ranking of ecological value followed Appendix 12.4 of Mott MacDonald (2014)

\*\* ranking of ecological value followed Table 9.11 of ARUP (2016)

- 3.4.8 In accordance with the habitat map from the approved 3RS EIA Study and their ecological value ranking, the DS1, DS2, DS3, VEA1 and VEA2 are mainly covered by habitat types considered as of low ecological value.

### 3.5 Findings from Site Visits

- 3.5.1 During the site visits conducted in February and March 2017, it was found that the habitat types present within the proposed Development Sites, VEAs and Conservation Areas, and the conditions of those habitats were similar to the descriptions from previous studies such as the 3RS EIA study (Figures 3b & 3c).

- 3.5.2 Development Site 1 was in L shape and located to the west, southwest and south of the existing Pak Mong Village. It was mostly covered by cultivated lands with active farming in particular the northern portion.

Besides cultivated land, there were also some developed areas, a patch of secondary woodland and a section of stream course in its middle part. A section of Pak Mong Stream also ran adjacent and through the site.

- 3.5.3 Development Site 2 was located to the northeast of Pak Mong Village, in between the village and a wooded slope further northeast. The site was mainly covered by abandoned cultivated land, with some plantation woodlands near the footpath along its southwest side. A minor unnamed stream course was inside its boundary.
- 3.5.4 Development Site 3 was solely cultivated lands, with both active and abandoned status. It was relatively open, and was located to the west of Ngau Kwu Long Village.
- 3.5.5 According to the observations during site visits, Development Site 4 is mainly covered by secondary woodland. As Development Site 4 was not covered by previous EIA studies, the ecological value could not be determined at this stage.
- 3.5.6 A total of 41 bird species were recorded (**Appendix 5a**). These species are mostly common and widely distributed in Hong Kong (Carey *et al.* 2001). Five recorded species are considered of conservation importance. These were Chinese Pond Heron *Ardeola bacchus*, Great Egret *Ardea alba*, Little Egret *Egretta garzetta*, Crested Goshawk *Accipiter trivirgatus* and Greater Coucal *Centropus sinensis*. All these species were recorded in areas fall within the proposed coverage of Conservation Areas (**Figure 4**), which harbor high diversity of habitats and habitats of high ecological importance. In fact, the important habitats of these species are included within the boundary of the proposed Conservation Areas, i.e., mudflat for Little Egret, Great Egret and Chinese Pond Heron, woodland for Crested Goshawk. Greater Coucal is a habitat generalist and hence can easily inhabit the habitats within the Conservation Areas. The important habitat of Little Egret, Great Egret and Chinese Pond Heron (e.g., mudflat, mangroves) will not be encroached by the proposed Development Sites or VEA. Some of these habitats will be included within the boundary of Conservation Area B. Crested Goshawk is widely distributed in woodlands and shrublands throughout Hong Kong. These two types of habitats are largely outside the proposed development sites and village expansion areas.
- 3.5.7 No mammal or herpetofauna was recorded during the site visits. Dragonfly and butterfly species recorded during the site visits were common and widely distributed in Hong Kong, and are considered of low ecological importance (**Appendix 5b**).
- 3.5.8 Aquatic insects include Water Skater *Ptilomera tigrina* and Backswimmer *Enithares* sp., and aquatic fish Predaceous Chub *Parazacco spilurus* were observed in the stream sections within Conservation Area A.
- 3.5.9 Predaceous Chub, though common and widespread in Hong Kong and, occurring in most unpolluted hill streams in both upper and lower courses,

its number is declining in Mainland China because of habitat loss and destructive fishing activities. This species is considered as "vulnerable" by China Red Data Book. Preservation of stream habitats will be recommended.

- 3.5.10 Pacific Reef Egret which had been reported by previous studies was not recorded inside any areas proposed as Development Sites or VEAs. Indeed this species is typically found on coastlines such as seawalls or rocky shores, rather than at inland terrestrial habitats. There was also no sighting of the other two butterfly species and one bat species reported by literature during the site visits. In summary, the conditions of these areas were basically similar with the descriptions in the literature, including the general conditions and the habitat types occurred.

#### **4. STATUS OF STREAM HABITATS IN TAI HO AND NEED OF MANAGEMENT**

##### **4.1 Status of Stream Habitats in Tai Ho Area**

- 4.1.1 Tai Ho Stream and its estuarine bay are the key ecological resources in Tai Ho area and also the key elements of the recognized conservation importance of the entire Tai Ho area. This is in line with the findings from the present Ecological Review, which revealed that most species of conservation importance were recorded in the western part of Tai Ho area inside or near the stream and its estuarine bay.
- 4.1.2 Conservation and prevention of damages to the stream courses and the riparian zone as well as the estuary are essential for maintaining the habitats of those species of conservation importance which have high association with stream and estuarine habitats.
- 4.1.3 In the draft Tai Ho OZP for public inspection, a SSSI zone is provided following the existing SSSI boundary, with CA zone covering the riparian zone of the SSSI. Their intentions are to protect the stream habitat and to provide buffer zone for the stream. Though new application of development will be controlled, management works will not be provided under the land zoning or the OZP, and thus might not be able to maintain the deterioration of the habitats due to various factors such as vandalisms, illegal developments, or natural successions of habitats.
- 4.1.4 In the proposed revision, control of new developments at Tai Ho Stream will still be provided in a better way by the proposed Conservation Areas which cover a much larger extent than the SSSI and CA zones under the draft OZP, including the main course as well as the major tributaries of Tai Ho Stream together with the riparian zone. The larger extent is considered to provide a better protection for Tai Ho Stream system. However, if without proper management, some activities such as ad-hoc clearance of vegetation might still jeopardize the ecological functions of the stream and its riparian zone, especially on private lots which constitute a high proportion of land areas along the streams, just like the case in the SSSI

and CA zones under the draft OZP.

4.1.5 To maintain the ecological values of the stream and riparian habitats in Tai Ho area, it is essential to introduce management into the proposed Conservation Areas. Potential measures to be considered include but not limited to the followings:

- Preservation of existing vegetation on the riparian zone of the stream courses.
- Enhancement planting at selected locations along the stream courses where riparian vegetation has been lost or insufficient for erosion control.
- Screen planting at selection locations near footpaths to reduce the accessibility to the stream courses by visitors (except designated locations).
- Review and design the alignment of footpaths to control the activities of visitors and thus the potential disturbance to the stream habitats.
- Prevention of transformation of mudflats into mangroves by control the mangrove expansion via removal of new seedling on mudflats.
- Avoidance of maintenance earthworks during raining season.

4.1.6 However as mentioned above, private lots which constitute a high proportion of land areas along the streams. There are difficulties to provide management works even proved to be feasible and beneficial.

4.1.7 An existing mechanism could facilitate the implementation of management works inside proposed Conservation Areas without the need to resolve the land ownership issue. Under the Management Agreement (MA) scheme of the New Nature Conservation Policy (NNCP), funding support can be granted through the Environment and Conservation Fund (ECF) to enable non-governmental organisations (NGOs) to enter into agreements with landowners for enhancing the conservation of the sites concerned. There have been successful examples of providing management and enhancement measures in areas with high ecological values such as the management agreement in Long Valley and the fishponds in Deep Bay area. These examples demonstrated that involvement of local villagers/farmers is important, not only on the provision of man power sources, but also on the successful implementation of management measures. Besides, previous MA schemes also demonstrated that the MA could also provide opportunities for conservation education such as guide tours

## 5. WAY FORWARDS

### 5.1 Ecological Impact Assessment

5.1.1 It is expected that an ecological impact assessment supported by a comprehensive ecological baseline with quantitative field surveys will be conducted at a later stage prior to any development, to demonstrate the evaluation in the present review, to verify and assess the ecological impacts might be caused by the proposed Development Sites, and to

propose suitable control and mitigation measures.

## **5.2 Ecological Enhancement Proposal**

- 5.2.1 As mentioned in above sections, management works for the habitats inside the proposed Conservation Areas in particular Tai Ho Stream and its riparian zone would be beneficial for the conservation of Tai Ho area. Management Agreement Scheme under New Conservation Policy has several successful precedent examples and should be explored the feasibility to adopt this approach in Tai Ho area.

## 6. CONCLUSIONS

- 6.1.1 Development Sites 1, 2 and 3, and VEA 1 and 2 are mainly made up of habitats of low ecological value. Most flora and fauna species of conservation importance reported from previous studies were recorded within Conservation Area B. Only a few species were recorded within the boundary of development zones. The habitats within the development zones are not considered critical to these species, indeed.
- 6.1.2 Development Sites 1, 2 and 3, and VEA 1 and 2 are relatively less ecological sensitive areas.
- 6.1.3 The proposed coverage of Conservation Areas has harboured Tai Ho Stream and its estuary, and also included about half of the concerned species sightings including highly concerned species such as Brown Fish Owl, seagrass (*Halophila beccarii*) and horseshoe crabs (*Tachypleus tridentatus*).
- 6.1.4 Development Site 4 and VEA 3 were not covered by any previous studies. While no previous record of any species of conservation importance so far, the ecological value of these two zones will be evaluated during detailed ecological study in later stage.
- 6.1.5 Site visits found that the general conditions and habitat types present in these areas were similar with the descriptions in literature. Preservation of stream courses has also been taken into account when formulating the proposed revisions and buffer distance of 5 to 10m will be provided to stream courses near the proposed development. It is anticipated that ecological impact assessment will be conducted in a later stage prior to any development, to demonstrate the evaluation in the present review.
- 6.1.6 Conservation and prevention of damages to the stream courses and the riparian zone are essential for maintaining the habitats of those species of conservation importance having high association with stream and estuarine habitats. Without proper management, however, some activities such as clearance of vegetation might still jeopardize the ecological functions of the stream and its riparian zone. It is essential to introduce management into the Conservation Areas, and there have been successful examples of providing management and enhancement measures in areas with high ecological values such as the management agreement in the New Nature Conservation Policy.



## 7. REFERENCES

- Ades, G.W.J. and Reels, G. 1998. Special Feature: Focus on Farmland – Mammal. *Porcupine!* 18: 23-24.
- Arup. 2009a. Hong Kong - Zhuhai - Macao Bridge Hong Kong Boundary Crossing Facilities (EIA Register No: AEIAR-145/2009).
- Arup. 2009b. Hong Kong - Zhuhai - Macao Bridge Hong Kong Link Road (EIA Register No: AEIAR-144/2009).
- Arup. 2016. Tung Chung New Town Extension (EIA Register No: AEIAR-196/2016).
- Bascombe, M.J., Johnston, G. and Bascombe, F.S. 1999. *The Butterflies of Hong Kong*. Academic Press, San Diego, California.
- Carey, G.J., Chalmers, M.L., Diskin, D.A., Kennerley, P.R., Leader, P.J., Leven, M.R., Lewthwaite, R. W., Melville, D.S., Turnbull, M. and Young, L. 2001. *The Avifauna of Hong Kong*. Hong Kong Bird Watching Society, Hong Kong.
- Fellowes, J.R., Lau, M.W.N., Dudgeon, D., Reels, G.T., Ades, G.W.J., Carey, G.J., Chan, B.P.L., Kendrick, R.C., Lee, K.S., Leven, M.R., Wilson, K.D.P. and Yu, Y.T. 2002. Wild animals to watch: Terrestrial and freshwater fauna of conservation concern in Hong Kong. *Memoirs of the Hong Kong Natural History Society* 25: 123-159.
- Maunsell. 2009. *Tuen Mun - Chek Lap Kok Link* (EIA Register No: AEIAR-146/2009).
- Mott Connell. 1998. *Remaining Development in Tung Chung and Tai Ho Comprehensive Feasibility Study*. Prepared for Territory Development Department.
- Mott MacDonald 2014. *Expansion of Hong Kong International Airport into a Three-Runway System - Environmental Impact Assessment Report (Final)* (EIA Register No: AEIAR-185/2014).
- Shek, C.T. 2004. Bats of Hong Kong: An Introduction of Hong Kong Bats, with an Illustrative Identification Key. *Hong Kong Biodiversity* 7: 1-9.
- Shek, C.T. 2006. *A Field Guide to the Terrestrial Mammals of Hong Kong*. AFCD

## FIGURES

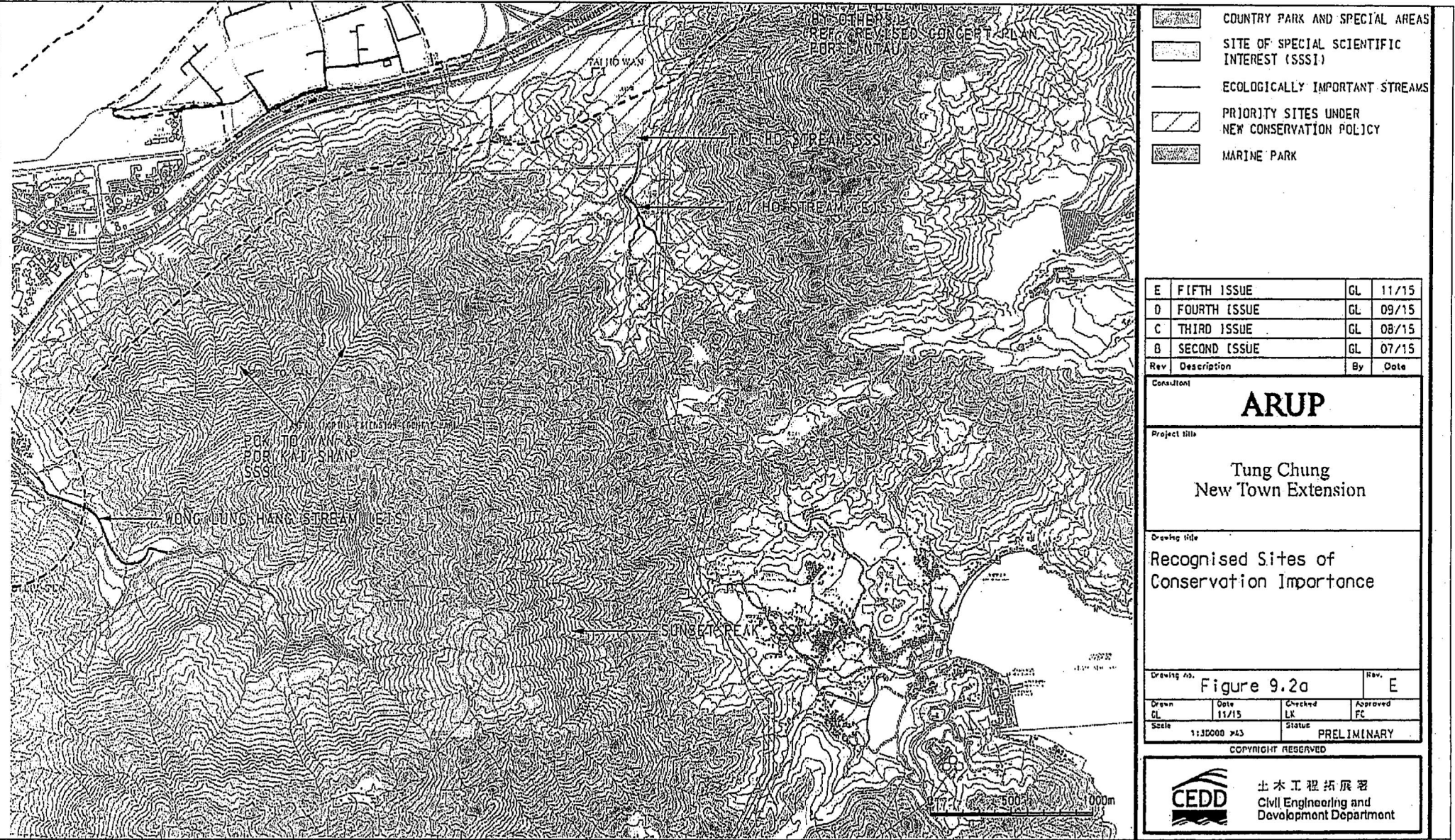


Figure 1 Recognized Sites of Conservation Importance in Tai Ho Area (source: ARUP 2016)

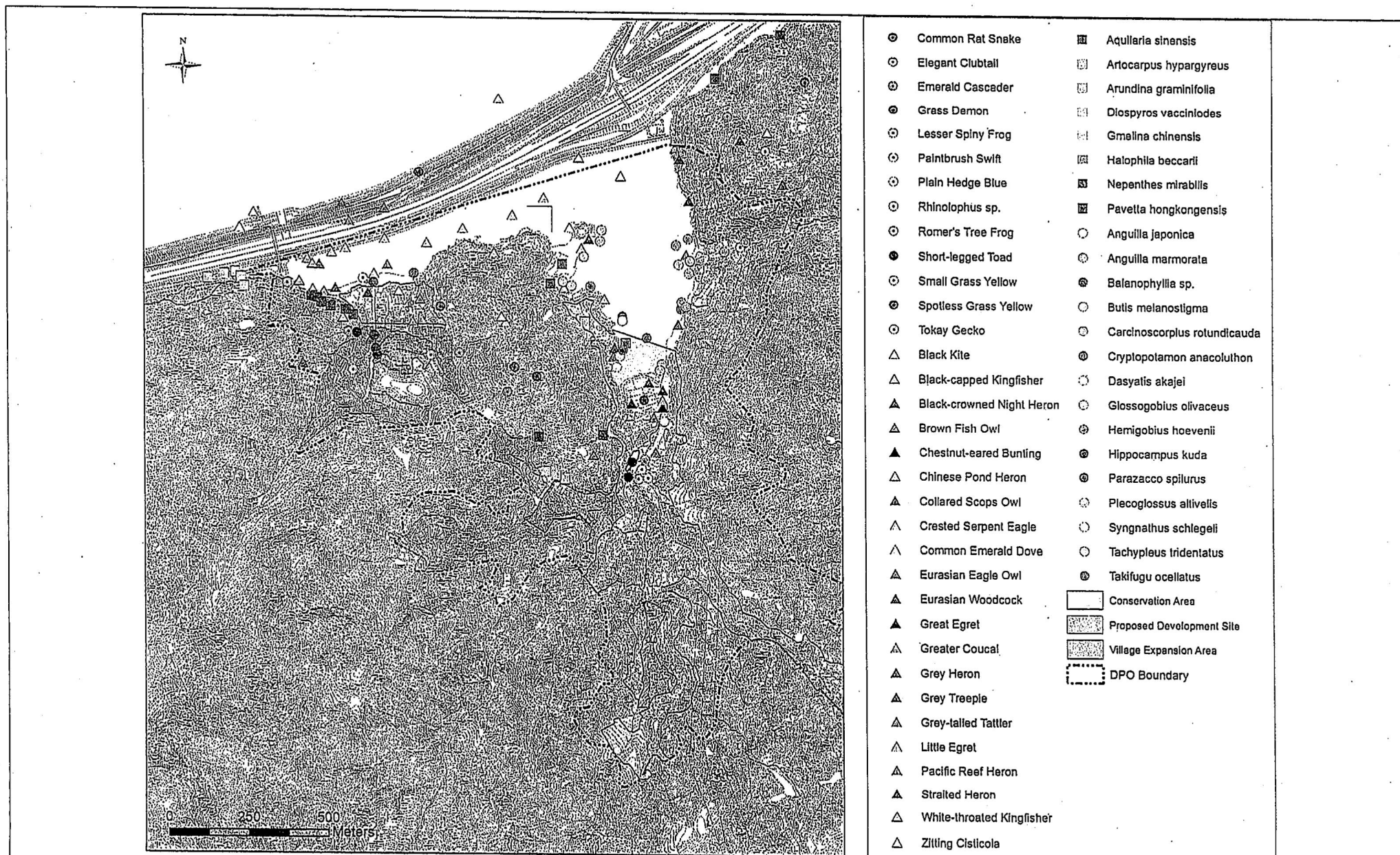


Figure 2a. Locations of Flora and Fauna Species of Conservation Importance in Tai Ho Area (source: Arup 2009a, 2009b, 2016; Mott MacDonald 2014)



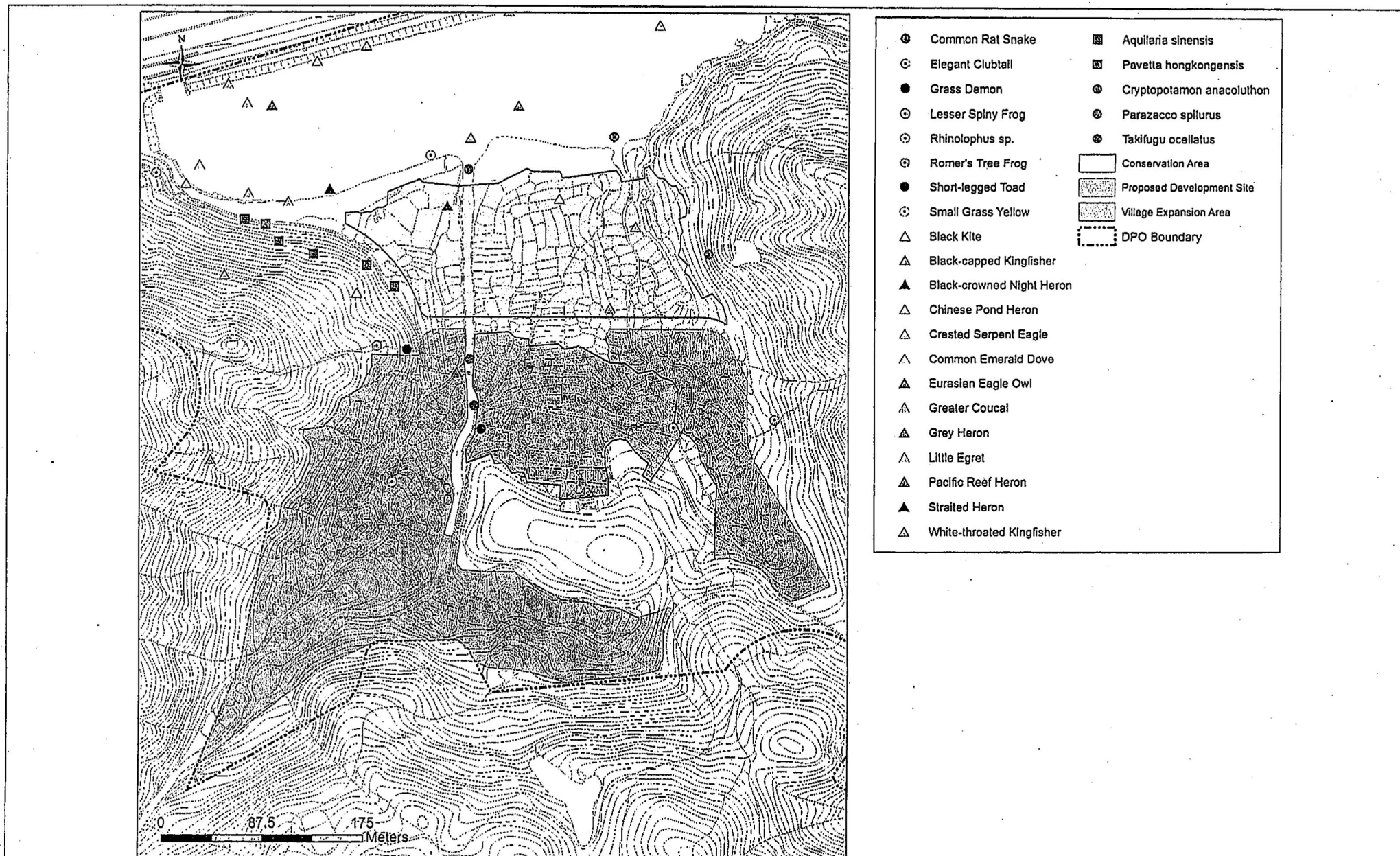
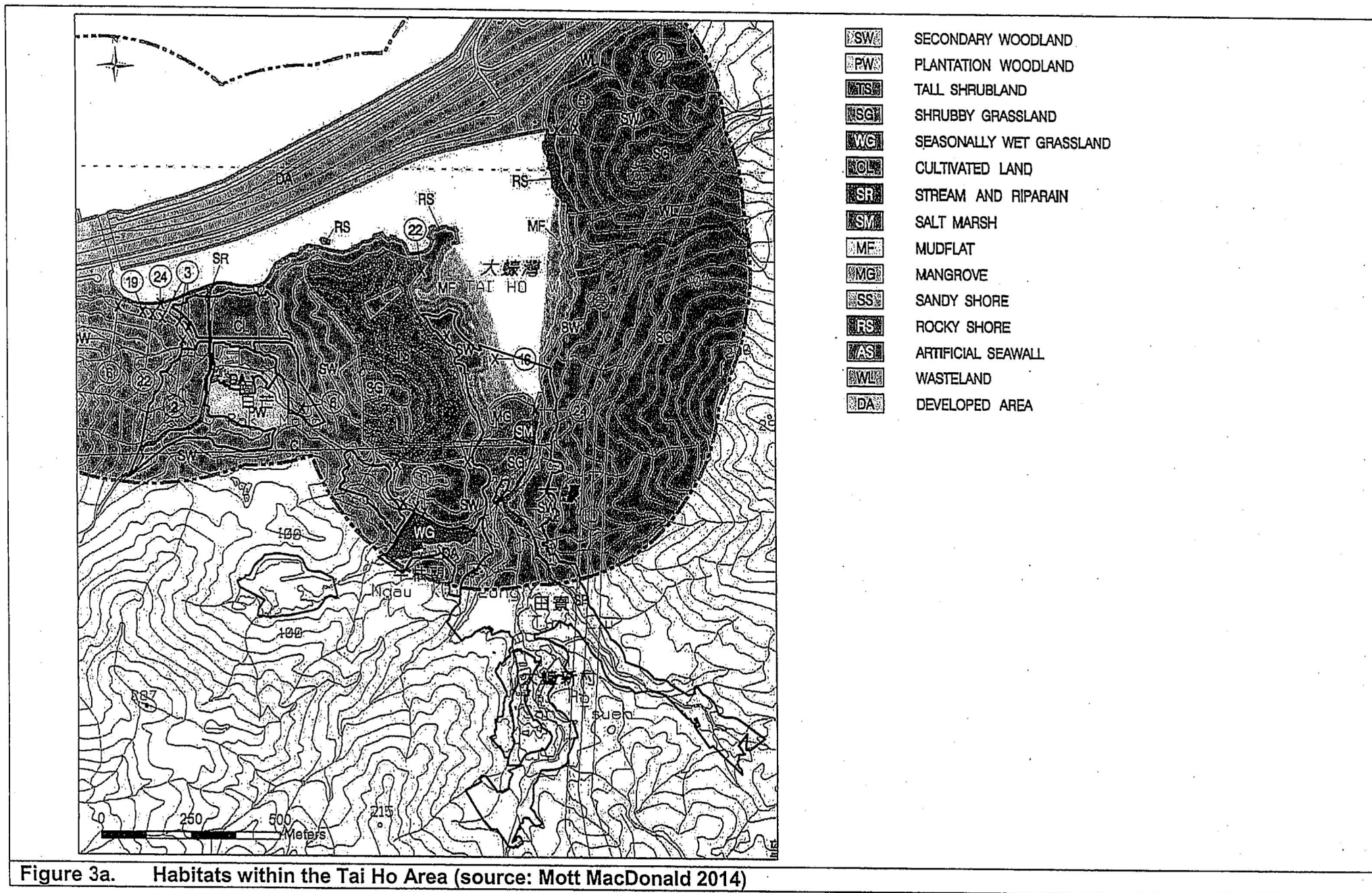


Figure 2b. Locations of Flora and Fauna Species of Conservation Importance in Tai Ho Area (Close-up) (source: Arup 2009a, 2009b, 2016; Mott MacDonald 2014)





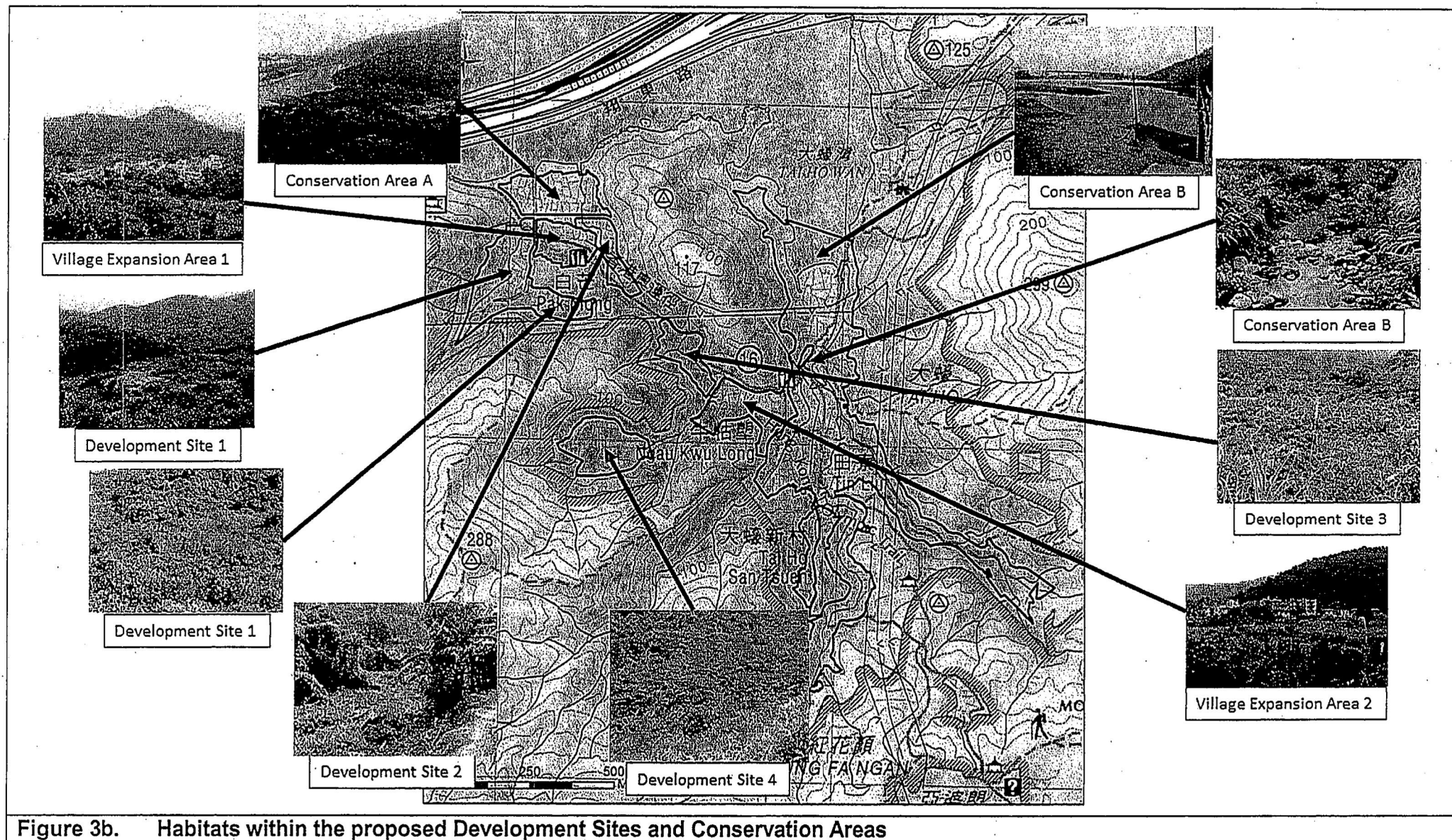
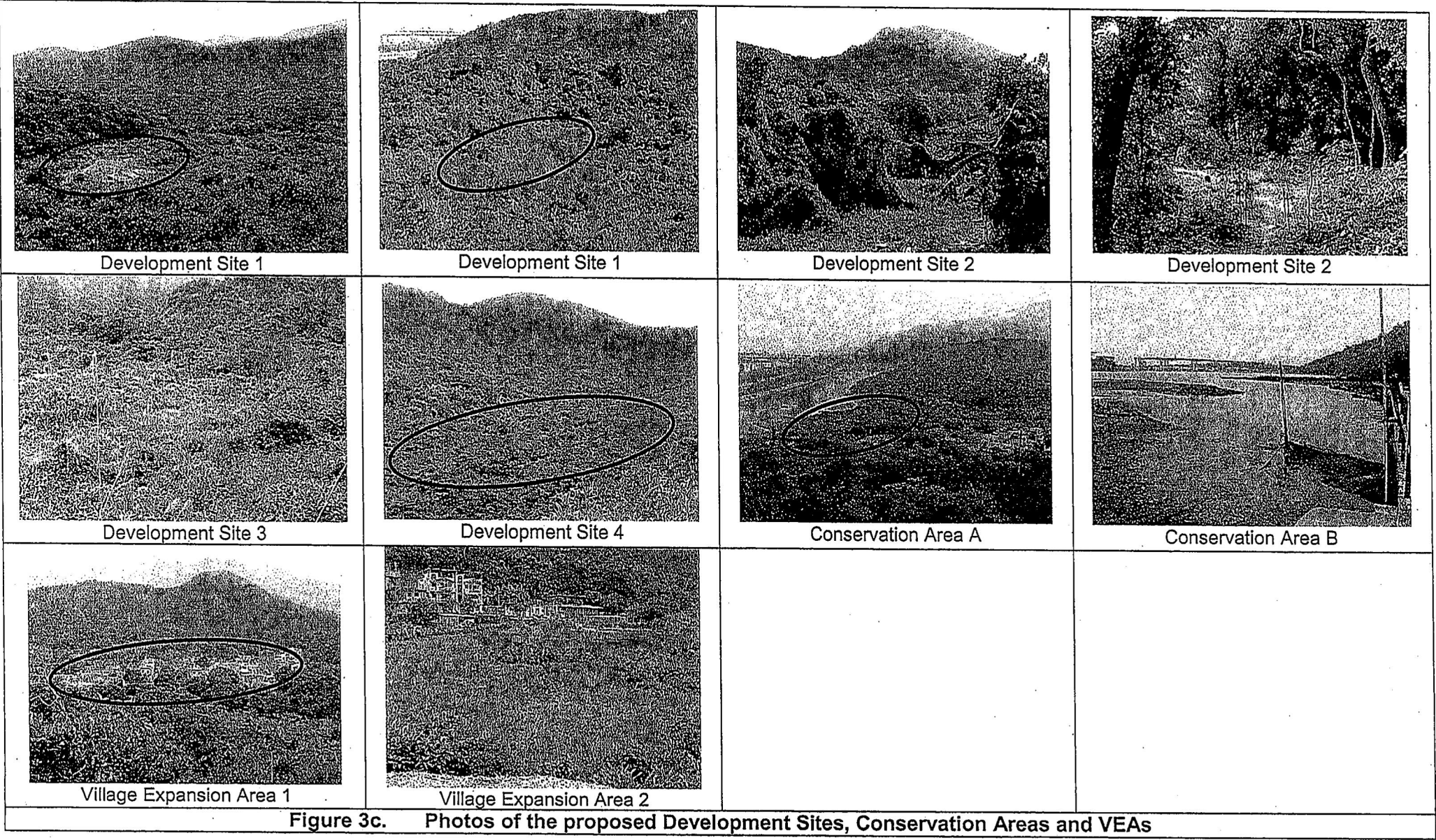
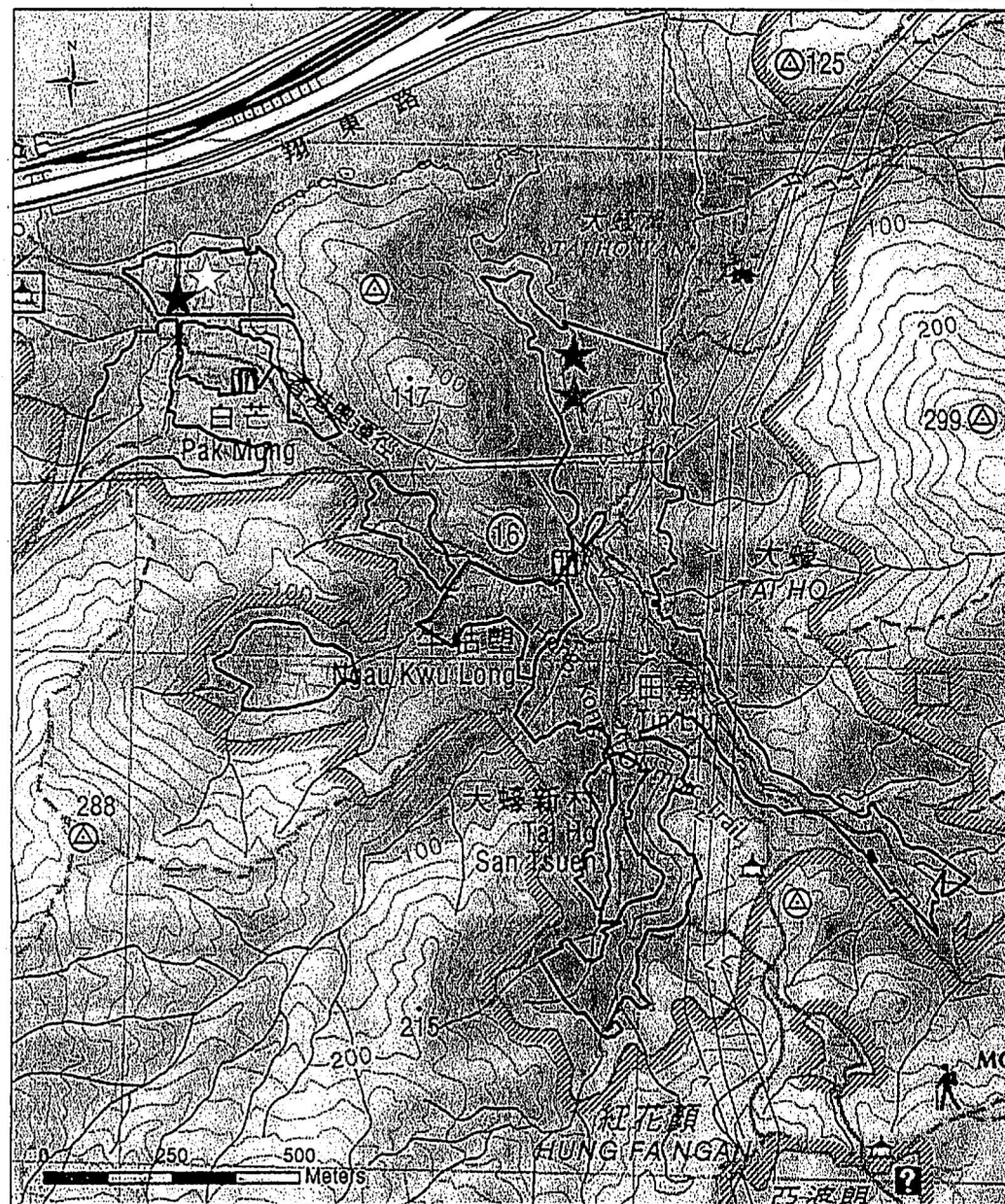


Figure 3b. Habitats within the proposed Development Sites and Conservation Areas







### Legend

- ☆ Chinese Pond Heron
- ★ Little Egret
- ★ Great Egret
- ☆ Greater Coucal
- ★ Crested Goshawk
- ★ Predaceous Chub

Figure 4. Locations of sightings of Fauna Species of Conservation Importance during Site Visits

## **Appendices**

## Appendix 1 Descriptions of Recognised Sites of Conservation Importance

**Tai Ho Stream SSSI and Tai Ho EIS - Tai Ho Stream SSSI** is about 5ha in area and comprises the Tai Ho Stream and the inner part of Tai Ho Wan. "Tai Ho Stream" includes several tributaries that lie to the south and east of Tai Ho Wan, passing Tin Liu, Tai Ho San Tsuen, and merging just below Ngau Kwu Long, and entering Tai Ho Wan at its southern end.

Tai Ho Stream is one of the most ecologically valuable fresh water streams in Hong Kong. During the extensive surveys from 1980-1991, this stream had the highest freshwater fish species diversity among the 31 field sites studied in Hong Kong (Chong and Dudgeon 1992). A total of 46 fish species were recorded in Tai Ho Stream in that study (at least 53 fish species have been recorded so far). Based on this published study of stream fish fauna in the HKSAR, the Tai Ho Stream is ranked as the richest in freshwater fish species in the HKSAR.

The importance of Tai Ho Stream to Hong Kong's freshwater fish fauna (Tai Ho Stream and its estuary has the most diverse stream fish community in Hong Kong and is the first and only location of the globally threatened salmonid fish Ayu ("sweetfish") *Plecoglossus altivelis* in Hong Kong), and the linkages to other ecologically important intertidal habitats in Tai Ho Wan, qualify Tai Ho Stream as a habitat of high ecological value. Conservation and prevention of damages to the stream channel and riparian zone are essential. The Tai Ho Stream and part of its estuarine zone were designated as an SSSI in 1999 in recognition of the ecological importance of the stream and its fish fauna. The Tai Ho Stream is also identified as an "**Ecologically Important Stream**" (EIS) in 2005 as stipulated in the Government's Technical Circular "ETWB (W) No. 5/2005 Protection of Natural Streams/Rivers from Adverse Impacts arising from Construction Works".

**Tai Ho Priority Site** is one of 12 priority sites identified for enhanced conservation under New Nature Conservation Policy. It covers an area of 255.5 ha and is more or less includes the entire draft Tai Ho OZP. The site comprises four major habitat types, namely natural stream, mangrove stand / mudflat, agricultural land and woodland. The natural stream (i.e. Tai Ho Stream) is a medium-sized natural stream running from upland to the lowland estuary where mangrove and mudflat are found, without any fragmentation or major modification, while natural stream habitat is considered impossible to be recreated. Moderate diversity of freshwater fish (53 species as of 2004) and amphibians (10 species as of 2004) including the endemic Romer's Tree Frog were recorded.

**Lantau North (Extension) Country Park** covers the hill slopes to the south of North Lantau Highway between Sunny Bay and Tung Chung, as well as between the hill slopes to the south of the coastline between San Tau and Sham Wat. It is located immediately outside the draft Tai Ho OZP. In addition to the existing 7,800ha of designated Lantau North and South Country Parks, the Lantau North (Extension) Country Park was proposed in the 1999 Policy Address as a positive means to conserve the natural environment of Lantau, and was designated in 2008.

## Appendix 2 Descriptions of Habitat Types in Tai Ho Area

**Woodlands:** Woodlands are found in the hillside near Pak Mong and Ngau Kwu Long in Tai Ho and lower slopes of Por Kai Shan, and supported rare and protected flora species (Mott Connell, 1998). *Fung shui* woods are found in Pak Mong. These woodlands were preserved during village development and are characterised by high flora diversity, the rare and protected flora species (e.g., *Aquilaria sinensis*).

**Natural Streams:** Within the area covered by the draft Tai Ho OZP, there are two major natural streams, namely Tai Ho Stream (including its tributaries) and Pak Mong Stream.

Tai Ho Stream (the main course together with the major tributaries) is an Ecologically Important Stream (EIS), and was also, together with the inner part of its estuarine bay, designated as SSSI to protect Tai Ho Stream.

Tai Ho Stream is one of the most ecologically valuable fresh water streams in Hong Kong. During the extensive surveys from 1980-1991, this stream had the highest freshwater fish species diversity among the 31 field sites studied in Hong Kong (Chong and Dudgeon 1992). Chong and Dudgeon (1992) also recorded the salmonid fish Ayu ("sweetfish") *Plecoglossus altivelis* at Tai Ho Stream, the first record of this species for Hong Kong or Guangdong (Dudgeon 1993). This stream is also the only known occurrence site for the globally threatened Ayu in Hong Kong so far. This species was also recorded in Tai Ho again during the Tung Chung New Town Extension EIA (Arup 2016). This species requires unobstructed passage between salt and fresh water to breed. The high water quality and natural state of Tai Ho Stream are likely very important to this species. Other freshwater fish species recorded include Giant Mottled Eel *Anguilla marmorata* (a Class II protected species in China), Japanese Eel *A. japonica*, Largesnout Goby *Awaous melanocephalus* and Rice-paddy Eel *Pisodonophis boro*.

The surveys on estuarine macroinvertebrates for the approved EIA for 3RS (AEIAR-185/2014) reported that estuarine fish of conservation importance including Red Stingray *Dasyatis akajei*, Banded mulletgoby *Hemigobius hoevenii*, Spotted Seahorse *Hippocampus kuda* and Seaweed pipefish *Syngnathus schlegeli* were recorded in Tai Ho.

According to the approved EIA for Tung Chung New Town Extension (AEIAR-196/2016), a total of 53 species of fish and 3 species of crustacean were recorded from both the stream courses and the estuarine area of Tai Ho. Eight species of fish were considered of conservation importance. They are Japanese Eel *Anguilla japonica*, Giant Marbled Eel *Anguilla marmorata*, Predaceous Chub *Parazacco spilurus*, Crimson-tipped Flathead Gudgeon *Butis melanostigmas*, Mangrove Goby *Hemigobius hoevenii*, Spotty Band Goby *Glossogobius olivaceus*, and Archpatch Puffer *Takifugu ocellatus*. Ayu *Plecoglossus altivelis* was also recorded. Among the crustaceans, a Freshwater Crab *Cryptopotamon anacoluthon* was the species of conservation importance.

Pak Mong Stream is not an identified EIS, but it is basically natural in its upper



reach. Its lower reach has been channelized with the original stream banks modified and replaced by gabions. Freshwater fish Predaceous Chub *Parazacco spilurus*, which is considered "Vulnerable" in China Red List, also occurs in Pak Mong Stream.

**Mudflat:** Mudflats in the inner embayment of Tai Ho Wan are important not only because they provide habitats to infauna, but also provide suitable substrate for the colonization of mangroves and seagrasses. Ecological functions provided by these communities include energy cycling, coastal stabilisation, and habitat for wildlife such as coastal birds and horseshoe crabs.

**Mangroves:** Mangroves in Tai Ho Wan are 1.86 ha in area and are the third largest mangrove on Lantau, after Tung Chung and San Tau. The Tai Ho Wan mangroves harboured all of Hong Kong's mangrove species except *Lumnitzera racemosa* and the extremely restricted *Heritiera littoralis* (Mott Connell 2003).

**Seagrasses:** Patches of the seagrass *Halophila beccarii* were recorded in Tai Ho Wan and at the stream mouth within Tai Ho Stream SSSI. During the April 2004 survey, the seagrass *Halophila beccarii* habitat was found during low tide at Tai Ho Wan and supported more than 20 colonies each approximately 30cm x 30cm in area (Arup 2009). The Tai Ho seagrass beds are of importance due to the presence of a locally restricted seagrass species and also it is a horseshoe crab nursery site while horseshoe crabs are threatened by habitat loss in Hong Kong. During the field survey for TM - CLKL, however, no seagrass beds were found on the mudflat in Tai Ho Wan (Maunsell 2009). All established seagrass beds are considered to be an important habitat under the Environmental Impact Assessment Ordinances and any potential developmental disturbances and/or impacts should be avoided or minimized.

**Bat Cave:** This is a cave just above the intertidal zone along the eastern shore of Tai Ho Wan. This cave was probably excavated for mineral exploration and subsequently abandoned has been colonised by bats (Mott Connell 1999). The cave was used as a day-time roost by at least three species of insectivorous bats. These were Pomona Leaf-nosed Bat *Hipposideros pomona*, Least Horseshoe Bat *Rhinolophus pusillus* and Chinese Horseshoe Bat *Rhinolophus sinicus*. The cave was probably also used as a winter hibernaculum.

## Appendix 3 Flora Species of Conservation Importance Reported in Tai Ho Area

Scientific Name	Common Name	Protection / conservation status	Rarity
<i>Aquilaria sinensis</i>	Incense Tree	Cap. 586 Category II Nationally Protected Species in the PRC China Plant Red Data Book: Vulnerable Near Threatened (NT) in China (AFCD 2015) Listed in Rare and Precious Plants in Hong Kong (AFCD 2015) Vulnerable in IUCN (2015).	Common (Xing <i>et al.</i> 2000)
<i>Artocarpus hypargyreus</i> *	Silver-backed Artocarpus	Near Threatened (NT) in China (AFCD 2015) Listed in Rare and Precious Plants of Hong Kong (AFCD 2015)	Common (Xing <i>et al.</i> 2000)
<i>Arundina graminifolia</i>	Bamboo Orchid	Cap. 96A Cap. 586	Common (Xing <i>et al.</i> 2000)
<i>Diospyros vaccinioides</i>	Small Persimmon	Critically Endangered in IUCN (2015)	Common (Xing <i>et al.</i> 2000)
<i>Gmelina chinensis</i>	Little-leaved Rourea	Vulnerable (V) in China Listed in Rare and Precious Plants of Hong Kong	Locally common in Lantau (AFCD 2015)
<i>Halophila beccarii</i> *	Beccari's Halophila	Vulnerable in IUCN (2015)	Locally Rare (Xing <i>et al.</i> 2000)

Scientific Name	Common Name	Protection / conservation status	Rarity
<i>Nepenthes mirabilis</i>	Pitcher Plant	Cap. 96A Cap. 586 Vulnerable in the China Plant Red Data Book (AFCD 2015) Listed in Rare and Precious Plants in Hong Kong (AFCD 2015)	Restricted (Xing <i>et al.</i> 2000)
<i>Pavetta hongkongensis</i>	Hong Kong Pavetta	Cap. 96A	Common (Xing <i>et al.</i> 2000)

\* within conservation zones

#### Appendix 4 Fauna Species of Conservation Importance Reported in Tai Ho Area (DS: Development Site; CA = Conservation Area)

Common names & Scientific names	Outside DS	Inside DS	Inside CA	Protection/ Conservation status <sup>1,2,3,4</sup>	Distribution <sup>1</sup>	Rarity <sup>1</sup>
<b>Mammals</b>						
Pomona Leaf-nosed Bat <i>Hipposideros pomona</i>	+			Cap. 170 Fellowes <i>et al.</i> 2002: LC	A cave on the eastern coastline of Tai Ho Wan	Very common
Least Horseshoe Bat <i>Rhinolophus pusillus</i>	+			Cap. 170 Fellowes <i>et al.</i> 2002: PRC	A cave on the eastern coastline of Tai Ho Wan	Uncommon
Chinese Horseshoe Bat <i>Rhinolophus sinicus</i>	+			Cap. 170	A cave on the eastern coastline of Tai Ho Wan	Very common
<i>Rhinolophus sp.</i>	+			Cap. 170	-	-
<b>Birds</b>						
Little Egret <i>Egretta garzetta</i>	+			Fellowes <i>et al.</i> (2002): PRC, (RC)	Widely distributed in lowlying wet or coastal areas in Hong Kong	Common resident
Pacific Reef Heron <i>Egretta sacra</i>	+	+		Fellowes <i>et al.</i> (2002): (LC)	Mainly found in rocky shores	Uncommon resident
Grey Heron <i>Ardea cinerea</i>	+		+	Fellowes <i>et al.</i> (2002): PRC	Mainly found in inter-tidal habitats, fishpond and gei wais in the Deep Bay Area	Common winter visitor
Great Egret <i>Ardea alba</i>	+		+	Fellowes <i>et al.</i> (2002): PRC, (RC)	Mainly found in wetlands in the Deep Bay areas	Common resident and winter visitor
Chinese Pond Heron <i>Ardeola bacchus</i>	+			Fellowes <i>et al.</i> (2002): PRC, (RC)	Widely distributed in Hong Kong, but particularly common in the Deep Bay area. Found in almost any lowlying damp areas	Common resident

Common names & Scientific names	Outside DS	Inside DS	Inside CA	Protection/ Conservation status <sup>1,2,3,4</sup>	Distribution	Rarity
Black-crowned Night Heron <i>Nycticorax nycticorax</i>	+		+	Fellowes <i>et al.</i> (2002): (LC)	Mainly found in low lying wetlands and coastal areas with mangroves	Common resident and winter visitor
Striated Heron <i>Butorides striatus</i>	+		+	Fellowes <i>et al.</i> (2002): (LC)	Found in streams in wooded areas	Present all year, locally uncommon in summer and scarce in winter
Grey-tailed Tattler <i>Tringa brevipes</i>	+					
Black Kite <i>Milvus migrans</i>	+		+	Cap. 586; Class 2 Protected Animal of China; CITES: Appendix II; Fellowes <i>et al.</i> (2002): (RC)	Widely distributed in Hong Kong and occurs in many types of habitats	Common resident and winter visitor
Crested Serpent Eagle <i>Spilornis cheela</i>	+			Cap. 586; Class 2 Protected Animal of China; CITES: Appendix II; China Red Data Book: Vulnerable Fellowes <i>et al.</i> (2002): (LC)	Mostly recorded from well-wooded areas	Uncommon resident
Eurasian Woodcock <i>Scolopax rusticola</i>	+			Nil	Found in Cloudy Hill, Tai Po Kau, Shek Kong.	Scarce winter visitor.
Greater Coucal <i>Centropus sinensis</i>	+		+	Class 2 Protected Animal of China; China Red Data Book: Vulnerable	Widely distributed in Hong Kong and occurs in many types of habitats	Common resident
Collared Scops Owl <i>Otus lettia</i>	+					
Eurasian Eagle Owl <i>Bubo bubo</i>	+			Cap. 586; CITES: Appendix II; Class 2 Protected Animal of China; Fellowes <i>et al.</i> (2002): RC	Found in poorly-vegetated boulder-stream hillsides with grass, low shrubland or lightly-wooded areas	Scarce resident

Common names & Scientific names	Outside DS	Inside DS	Inside CA	Protection/ Conservation status <sup>1,2,3,4</sup>	Distribution <sup>1</sup>	Rarity <sup>1</sup>
Brown Fish Owl <i>Ketupa zeylonensis</i>	+		+	Class II Protected Animal of PRC; Appendix 2 of CITES	Found in Discovery Bay, Pak Tam Chung, Tai Tan, Yung Shue O, Sham Chung.	Scarce resident.
Common Emerald Dove <i>Chalcophaps indica</i>	+			China Red Data Book: Vulnerable	Found in a variety of wooded habitats including woodland, <i>fung shui</i> woods and shrubland	Scarce but widespread resident
White-throated Kingfisher <i>Halcyon smyrnensis</i>	+		+	Fellowes <i>et al.</i> (2002): (LC)	Mainly found in coastal mudflat and mangroves, also seen in inland fishponds, wet agricultural areas	Common resident.
Black-Capped Kingfisher <i>Halcyon pileata</i>	+		+	Fellowes <i>et al.</i> (2002): (LC)	Mainly found in coastal areas, particularly those with mudflats, creeks, mangroves and gei wais	Common passage migrant and winter visitor.
Zitting Cisticola <i>Cisticola juncidis</i>	+			Fellowes <i>et al.</i> (2002): LC	Widely distributed in open areas of long grass	Common passage migrant and winter visitor
Chestnut-eared Bunting <i>Emberiza fucata</i>	+		+	Fellowes <i>et al.</i> (2002): LC	Found in Long Valley, Tai Mong Tsai, Luk Keng, Ho Chung, Kam Tin, Lantau, Sha Lo Tung.	Scarce passage migrant.
Grey Treepie <i>Dendrocitta formosae</i>	+			Fellowes <i>et al.</i> (2002): LC	Found in Sai Kung, Luk Keng, Tai Po Kau, Tai Tam Reservoir, Ho Chung, Hong Kong University, Lam Tsuen, Hok Tau.	Scarce winter visitor and resident.
<b>Reptiles</b>						
Common Rat Snake <i>Ptyas mucosus</i>	+			CITES: Appendix II; China Red Data Book Status: Endangered; Fellowes <i>et al.</i> (2002): PRC	Widely distributed in Hong Kong	Common



Common names & Scientific names	Outside DS	Inside DS	Inside CA	Protection/Conservation status <sup>1,2,3,4</sup>	Distribution	Rarity <sup>1</sup>
Tokay Gecko <i>Gekko reevesii</i>	+		+	China Red Data Book Status: Endangered; Fellowes <i>et al.</i> (2002): RC	Distributed in rocky areas in Tung Chung and Sham Wat on Lantau Island, Lion Rock Country Park. Population on Hong Kong Island are considered as escaped from snake shops.	NA
<b>Amphibian</b>						
Lesser Spiny Frog <i>Paa exilispinosa</i>	+			IUCN (2015): vulnerable; Fellowes <i>et al.</i> (2002): PGC	Found in and near hill streams in a wide range of altitudes	Common
Romer's Tree Frog <i>Liuixalus romeri</i>	+			Cap. 170, IUCN (2015): endangered; Fellowes <i>et al.</i> (2002): PGC	Endemic to Hong Kong; formerly found in Lamma, Lantau, Po Toi and Chek Lap Kok. Relocated to various sites in the New Territories; Breeds in shaded, still or slow-flowing waters that are fish free and are low in nutrient content. The breeding sites are usually associated with forest or shrubland, while non-breeding individuals are found in forest, plantation and clearings within them	Locally common in scattered locations
Short-legged Toad <i>Xenophrys brachykolos</i>	+		+	IUCN (2015): Endangered Fellowes <i>et al.</i> (2002): PGC	Possibly endemic to Hong Kong, found in mountain streams with well-wooded banks	Common in Hong Kong Island and a few islands
<b>Fishes</b>						
Japanese Eel <i>Anguilla japonica</i>	+		+	China Red Data Book: Endangered China Key List: II IUCN (2015): Endangered	Records from Lantau Island, Hong Kong Island, Sai Kung and Tsuen Wan in low abundance	Uncommon

Common names & Scientific names	Outside DS	Inside DS	Inside CA	Protection/ Conservation status <sup>1,2,3,4</sup>	Distribution <sup>1</sup>	Rarity <sup>1</sup>
Giant Mottled Eel <i>Anguilla marmorata</i>	+			AFCD Assessment: Species of Conservation Importance Class II Protected Animal in China; China Red Data Book: Endangered Fellowes <i>et al.</i> (2002): GC	Records from Lantau Island, Sai Kung and Tsuen Wan	Uncommon
Predaceous Chub <i>Parazacco spilurus</i>	+			China Red Data Book: Vulnerable	A widespread species occurring in most unpolluted hill streams in both upper and lower courses	Common
Seaweed Pipefish <i>Syngnathus schlegelii</i>	+			Nil	Distribution unknown	Locally abundant
Common Seahorse <i>Hippocampus kuda</i>	+			Cap. 586 CITES: Appendix II IUCN (2015): Vulnerable	Occasionally found in shallow, sheltered areas of corals and boulders, primarily in eastern waters but also around man-made structures such as abandoned nets, pipes and shark nets	Moderately abundant
Black-spotted Gudgeon <i>Butis melanostigma</i> (= Crimson-tipped Flathead Gudgeon <i>Butis melanostigma</i> )	+		+	Nil	Records from a few streams in Sai Kung and Lantau Island	Uncommon
Mangrove Goby <i>Hemigobius hoevenii</i>	+		+	Nil	Lantau	Rare
Spotty Band Goby <i>Glossogobius olivaceus</i>	+		+	AFCD Assessment: Species of Conservation Importance	Restricted distribution in Hong Kong, only recorded in a few reservoirs and estuaries	Uncommon
Archpatch Puffer <i>Takifugu ocellatus</i>	+			Fellowes <i>et al.</i> (2002): Local Concern for habitat	Tai Ho	Rare
Ayu <i>Plecoglossus altivelis</i>	+		+	AFCD Assessment: Species of Conservation Importance China Red Data Book: Vulnerable Fellowes <i>et al.</i> (2002): RC	In Hong Kong, only found in Tai Ho	Rare

Common names & Scientific names	Outside DS	Inside DS	Inside CA	Protection/ Conservation status <sup>1,2,3,4</sup>	Distribution <sup>1</sup>	Rarity <sup>1</sup>
Red Stingray <i>Dasyatis akajei</i>	+		+	China Species Red List: Endangered; IUCN (2015): Near Threatened	Distribution unknown	Unknown
<b>Butterflies</b>						
Small Grass Yellow <i>Eurema brigitta</i>		+		Fellowes <i>et al.</i> (2002): LC	Found in scattered locations including Ping Shan Tsai, Yung Shue O, Pat Sin Leng	Rare
Spotless Grass Yellow <i>Eurema laeta</i>	+		+	Nil	Found in scattered locations including Ping Shan Tsai, Ma On Shan	Very rare
Plain Hedge Blue <i>Celastrina lavendularis</i>	+		+	Fellowes <i>et al.</i> (2002): LC	Found in scattered locations including Tai Po Kau, Tai Lam Country Park, Kadoorie Farm and Botanic Garden, Ngau Ngak Shan	Very rare
Grass Demon <i>Udaspes folus</i>	+			Nil	Widely distributed in agricultural land throughout Hong Kong	Rare
Paintbrush Swift <i>Baoris farri</i>	+		+	Nil	Found in scattered locations including Deep Water Bay, Shing Mun, Lam Tsuen, Fung Yuen, Wu Kau Tang, Lai Chi Wo	Rare
<b>Dragonfly</b>						
Emerald Cascader <i>Zygonyx iris</i>	+					
Elegant Clubtail <i>Leptogomphus hongkongensis</i>	+			Fellowes <i>et al.</i> (2002): LC	Endemic to Hong Kong; Widely distribute in small wooded streams throughout Hong Kong	Common
<b>Horseshoe Crab</b>						
<i>Carcinoscorpius rotundicauda</i>	+			China Species Red List: Vulnerable	Declining in range due to water pollution/ loss of nursery grounds (Morton & Lee 2003); locally found in Tsim Bei Tsui, Pak Nai, Sham Wat, Yi O, Shui Hau Wan	Uncommon

Common names & Scientific names	Outside DS	Inside DS	Inside CA	Protection/ Conservation status <sup>1,2,3,4</sup>	Distribution <sup>1</sup>	Rarity <sup>1</sup>
<i>Tachypleus tridentatus</i>	+		+	China Species Red List: Endangered	Declining in range due to water pollution/ loss of nursery grounds (Morton & Lee 2003); locally found in Tsim Bei Tsui, Pak Nai, Sham Wat, Yi O, Shui Hau Wan	Uncommon
<b>Crustacea</b>						
Freshwater Crab <i>Cryptopotamon anacoluthon</i>	+			IUCN (2015): Vulnerable; Fellowes <i>et al.</i> (2002): potential global concern	Widespread in local unpolluted streams	Fairly common
<b>Coral</b>						
<i>Balanophyllia</i> sp.	+			Cap 586	Common in western waters	Common

Level of concern: LC = local concern, PRC = potential regional concern, RC = regional concern, GC = global concern; Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes *et al.*, 2002).

1: AFCD (2016), 2: Wang (1998), 3: Zhao (1998), 4: IUCN (2016)

## Appendix 5a Bird species Recorded during Site Visits (DS = Development Site; CA = Conservation Area)

Common names	Scientific names	CAA	CAB	DS 1	DS 2	DS 3	DS 4	Commonness	Distribution in Hong Kong	Conservation Status
Chinese Pond Heron	<i>Ardeola bacchus</i>		1					Common resident.	Common resident. Widely distributed in Hong Kong.	Fellowes <i>et al.</i> (2002): PRC, (RC)
Great Egret	<i>Ardea alba</i>		1					Common resident and winter visitor.	Widely distributed in Hong Kong.	Fellowes <i>et al.</i> (2002): PRC, (RC)
Little Egret	<i>Egretta garzetta</i>	1						Common resident.	Widely distributed in coastal area throughout Hong Kong.	Fellowes <i>et al.</i> (2002): RC
Crested Goshawk	<i>Accipiter trivirgatus</i>		1					Uncommon resident.	Widely distributed in woodlands and shrublands throughout Hong Kong.	Class 2 Protected Animal of China; China Red Data Book Status: (Rare); Appendix 2 of CITES
White-breasted Waterhen	<i>Amauornis phoenicurus</i>		1					Common resident.	Widely distributed in wetland throughout Hong Kong.	
Common Sandpiper	<i>Actitis hypoleucos</i>		1					Common passage migrant and winter visitor.	Widely distributed in wetland area throughout Hong Kong.	
Spotted Dove	<i>Spilopelia chinensis</i>	1		1				Abundant resident.	Widely distributed in Hong Kong.	
Greater Coucal	<i>Centropus sinensis</i>		1					Common resident.	Widely distributed in Hong Kong.	Class 2 Protected Animal of China; China Red Data Book Status: (Vulnerable)
Common Kingfisher	<i>Alcedo atthis</i>		1					Common passage migrant and winter visitor.	Widely distributed in wetland habitat throughout Hong Kong.	
Long-tailed Shrike	<i>Lanius schach</i>					1		Common resident.	Widely distributed in open areas throughout Hong Kong.	
Eurasian Magpie	<i>Pica pica</i>			1				Common resident.	Widely distributed in Hong Kong	

Common names	Scientific names	CA/A	CA/B	DS 1	DS 2	DS 3	DS 4	Commonness	Distribution in Hong Kong	Conservation Status
Large-billed Crow	<i>Corvus macrorhynchos</i>	1	1					Common resident.	Widely distributed in Hong Kong	1/2/3
Cinereous Tit	<i>Parus cinereus</i>	1	1					Common resident.	Widely distributed in Hong Kong.	
Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	1	1	2		1		Abundant resident.	Widely distributed in Hong Kong.	
Chinese Bulbul	<i>Pycnonotus sinensis</i>	2	4			2	1	Abundant resident.	Widely distributed in Hong Kong.	
Sooty-headed Bulbul	<i>Pycnonotus aurigaster</i>		1					Uncommon resident.	Widely distributed in open areas throughout Hong Kong.	
Chestnut Bulbul	<i>Hemixos castanonotus</i>		1					Common resident and winter visitor.	Widely distributed in woodland throughout Hong Kong.	
Barn Swallow	<i>Hirundo rustica</i>				1			Abundant passage migrant and summer visitor.	Widely distributed in Hong Kong.	
Dusky Warbler	<i>Phylloscopus fuscatus</i>					1		Common passage migrant and winter visitor.	Widely distributed in shrubland and waterside vegetation throughout Hong Kong.	
Pallas's Leaf Warbler	<i>Phylloscopus proregulus</i>		1					Common winter visitor.	Found in woodland throughout Hong Kong.	
Yellow-browed Warbler	<i>Phylloscopus inornatus</i>	1			1			Common winter visitor.	Found in woodland throughout Hong Kong.	
Yellow-bellied Prinia	<i>Prinia flaviventris</i>		1			1		Common resident.	Widely distributed in Hong Kong.	
Common Tailorbird	<i>Orthotomus sutorius</i>	1	1	1		1	1	Common resident.	Widely distributed in Hong Kong.	
Masked Laughingthrush	<i>Garrulax perspicillatus</i>		1					Abundant resident.	Widely distributed in shrubland throughout Hong Kong.	



Common names	Scientific names	CA/A	CA/B	DS 1	DS 2	DS 3	DS 4	Commonness	Distribution in Hong Kong	Conservation Status 1/2/3
Black-throated Laughingthrush	<i>Garrulax chinensis</i>						1	Common resident.	Widely distributed in woodland and shrubland throughout Hong Kong	
Japanese White-eye	<i>Zosterops japonicus</i>	1	2	1	1	1	1	Abundant resident.	Widely distributed in Hong Kong.	
Crested Myna	<i>Acridotheres cristatellus</i>	3		1		2		Common resident.	Widely distributed in Hong Kong.	
Black-collared Starling	<i>Gracupica nigricollis</i>	3		1				Common resident.	Widely distributed in Hong Kong.	
Grey-backed Thrush	<i>Turdus hortulorum</i>	1	1				1	Common winter visitor.	Widely distributed in woodland throughout Hong Kong.	
Japanese Thrush	<i>Turdus cardis</i>				1			Uncommon winter visitor.	Widely distributed in woodland throughout Hong Kong.	
Oriental Magpie Robin	<i>Copsychus saularis</i>	1	2				1	Abundant resident.	Widely distributed in Hong Kong.	
Blue Whistling Thrush	<i>Myophonus caeruleus</i>	1						Common resident.	Widely distributed in shrubland and woodland throughout Hong Kong.	
Daurian Redstart	<i>Phoenicurus aureus</i>				1			Common winter visitor.	Widely distributed in Hong Kong.	
Stejneger's Stonechat	<i>Saxicola stejnegeri</i>		1					Common passage migrant and winter visitor.	Widely distributed in open cultivated fields throughout Hong Kong.	
Fork-tailed Sunbird	<i>Aethopyga christinae</i>					1	1	Common resident.	Widely distributed in Hong Kong.	
Eurasian Tree Sparrow	<i>Passer montanus</i>	1						Abundant resident.	Widely distributed in Hong Kong.	
Scaly-breasted Munia	<i>Lonchura punctulata</i>				1			Common resident.	Widely distributed in Hong Kong	

Common names	Scientific names	CA A	CA B	DS 1	DS 2	DS 3	DS 4	Commonness	Distribution in Hong Kong	Conservation Status 1/2/3
Grey Wagtail	<i>Motacilla cinerea</i>		1					Common passage migrant and winter visitor.	Widely distributed in hill streams throughout Hong Kong.	
White Wagtail	<i>Motacilla alba</i>					1		Common passage migrant and winter visitor.	Widely distributed in Hong Kong.	
Olive-backed Pipit	<i>Anthus hodgsoni</i>	1						Common passage migrant and winter visitor.	Widely distributed in Hong Kong.	
Black-faced Bunting	<i>Emberiza spodocephala</i>	1						Common winter visitor and passage migrant.	Widely distributed in Hong Kong.	

Level of concern: LC = local concern, PRC = potential regional concern, RC = regional concern, GC = global concern; Letters in parentheses indicate that the assessment is on the basis of restrictedness in breeding and/or roosting sites rather than in general occurrence (Fellowes *et al.*, 2002).

1: AFCD (2016), 2: Wang (1998), 3: IUCN (2016)

## Appendix 5b Butterfly and Dragonfly Species Recorded During Site Visits (DS = Development Site; CA = Conservation Area)

Common names	Scientific names	CA A	CA B	DS 1	DS 2	DS 3	DS 4	Commonness	Distribution in Hong Kong	Conservation Status
<b>Butterfly</b>										
Red Helen	<i>Papilio helenus</i>	1						Very common	Widely distributed throughout Hong Kong	
Red-base Jezebel	<i>Delias pasithoe</i>			1				Very common	Widely distributed throughout Hong Kong	
<b>Dragonfly</b>										
Green Skimmer	<i>Orthetrum sabina</i>	2						Common	Widely distribute in all wetland habitats throughout Hong Kong	
Common Blue Skimmer	<i>Orthetrum glaucum</i>	2	1		1			Abundant	Widely distributed in streams, conduits, drainage channels, seepages and road gutters throughout Hong Kong	
Crimson Dropwing	<i>Trithemis aurora</i>	1						Abundant	Widely distribute in marshes, ponds, streams and ornamental ponds throughout Hong Kong	

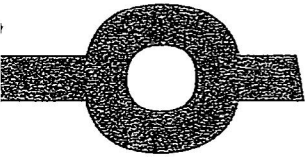
1: AFCD (2016)

## **Appendix 3**

### **Traffic and Transport Analysis**

Reference number CHK50282710

## TRAFFIC AND TRANSPORT ANALYSIS



**SYSTRA**  
MVA 

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## 1. BACKGROUND

### 1.1 The Draft Tai Ho Outline Zoning Plan (OZP No. S/I-TH/1)

- 1.1.1 The Draft Tai Ho Outline Zoning Plan (OZP No. S/I-TH/1) has been gazetted on 24 March 2017, which covers a total area of about 230 ha in Tai Ho between the Tung Chung New Town Extension (TCNTE) Area and the existing Siu Ho Wan Depot of Tung Chung Line (TCL).
- 1.1.2 More than 70% of OZP area (166.7 ha) is proposed to be zoned as “Green Belt” (“GB”), whilst there is a general presumption against developments within this zone.
- 1.1.3 On the other hand, the future developments in Tung Chung East (TCE) of the TCNTE aim for an intake of over 110,000 population and 40,000 employment, whilst new transport infrastructure, including the planned Road P1 and Tai Ho Interchange to the current highway network, as well as an additional railway station to the existing TCL, have been proposed in TCE.
- 1.1.4 Further eastward along the shoreline of North Lantau, a comprehensive topside development is also proposed at the Siu Ho Wan Depot to provide about 14,000 residential units with commercial/retail facilities and a new railway station along the TCL.
- 1.1.5 In view of the estimated shortfall of long-term land supply as stipulated in the strategic planning study of Hong Kong 2030+, optimising the use of land is considered to be necessarily important to create development capacity for sustainable growth.
- 1.1.6 Therefore, taking account of the proposed developments and associated infrastructure in TCE and Siu Ho Wan, the potential of residential developments have been identified for 4 number of sites within Tai Ho OZP near the rural village settlements at Pak Mong and Ngau Kwu Long respectively, as per indicated in **Figure 1.1**

### 1.2 Identification of Development Potential within Tai Ho OZP

- 1.2.1 To demonstrate the development potential of the identified 4 sites within the Tai Ho OZP, a preliminary master layout plan (MLP) has been drafted with a provision of 10,462 residential units for a total site area of 117,630 m<sup>2</sup> (about 11.8 ha).
- 1.2.2 A new public road is proposed in form of a standard 7.3m wide single 2-lane carriageway in connection with Cheung Tung Road for the vehicular access of the 4 residential sites, whilst footpath and cycling track will be provided for the movements of pedestrians and cyclists alongside the new access road.
- 1.2.3 With the proposed public access road and residential developments, the existing rural villages of Pak Mong and Ngau Kwu Long are also expected to be expanded with an anticipated number of 49 and 113 village houses respectively.

### **1.3 Study Objectives**

- 1.3.1** With an assumption of 10,462 residential units in the preliminary MLP, the purpose of this report aims to justify the development potential of the 4 sites within the Tai Ho OZP and the future village expansion in Pak Mong and Ngau Kwu Long from the traffic and transport perspective, in support to the representation to the Town Planning Board (TPB) against the proposed zoning of "GB".

## 2. THE PRELIMINARY MASTER LAYOUT PLAN

### 2.1 The Indicative Development Schedule

2.1.1 The identified 4 sites of potential residential developments within the Tai Ho OZP are indicated on Figure 1.1.

2.1.2 Based on the preliminary MLP, the indicative development schedule are summarised in Table 2.1, with an anticipated provision of 6,864 and 3,598 units of public and private housing respectively in an approximate ratio of 7:3.

**Table 2.1 Indicative Development Schedule of the Preliminary MLP**

Site	Type	Site Area (m <sup>2</sup> )	Plot Ratio	GFA (m <sup>2</sup> )	Unit Size (m <sup>2</sup> )	No. of Units
Site 1	Public	53,462	4.0	216,353	31.52	6,864
Subtotal for Public		53,462	-	216,353	-	6,864 Flat Units
Site 2	Private	15,355	3.5	53,200	50	1,064
Site 3	Private	17,266	3.5	60,200	50	1,204
Site 4	Private	31,547	2.1	66,500	50	1,330
Subtotal for Private		64,168	-	155,479	-	3,598 Flat Units
Total		117,630	-	369,327	-	10,462 Flat Units

2.1.3 Besides, the potential village expansions areas in Pak Mong and Ngau Kwu Long to be served by the new access road are expected to include an addition of 162 village houses in total.

### 2.2 Estimated Population Intake

2.2.1 Based on the statistics from Housing Authority in 2016, the average household size for public and private permanent housing are both 2.9 number of persons per unit.

2.2.2 Therefore, the total population intake for the potential residential development sites in Tai Ho would be anticipated to be 10,462 units x 2.9 = 30,340 people.

### 3. BACKGROUND TRAFFIC AND TRANSPORT CONTEXT

#### 3.1 Existing Traffic and Transport Context

- 3.1.1 At present, the access for the existing village settlement at Pak Mong and Ngau Kwu Long is only viable through a concrete path, as known as the Olympic Trail, leading to Cheung Tung Road at Tai Ho Wan in the north.
- 3.1.2 Cheung Tung Road is a local distributor in form of single 2-lane carriageway, running in the east-west direction between Tung Chung and Sunny Bay in parallel to the North Lantau Highway.
- 3.1.3 North Lantau Highway (NLH) is a dual 3-lane expressway forming the strategic highway network along the northern coast of Lantau Island between the Airport (HKIA) and the Lantau Link, which currently serves as the only external connection for the Airport and North Lantau via Tsing Ma Bridge and Kap Shui Mun Bridge.
- 3.1.4 There is no direct interchange between Cheung Tung Road and the NLH. The access route between Tai Ho and the NLH is relatively indirect through Cheung Tung Road and the local road network via the interchange at either Tung Chung or Sunny bay.
- 3.1.5 In terms of railway connections, the existing Tung Chung Station is more than 4km away from Tai Ho, which is out of the typical catchment area of 500m.
- 3.1.6 Road-based public transport services for Tai Ho are neither available along Cheung Tung Road.

#### 3.2 Planned Traffic and Transport Context

- 3.2.1 With reference to the planned road network in TCE, it is proposed a new road named "Road P1 – Tai Ho Section" (Road P1) in form of a dual 2-lane carriageway, which will serve as the primary distributor in the east-west direction for the new reclamation area of TCE with the existing Tung Chung Waterfront Road and Ying Hei Road.
- 3.2.2 A new elevated Tai Ho Interchange of NLH is also proposed with slip road connections with Road P1 in the north and Cheung Tung Road in the south.
- 3.2.3 Besides, in view of the planned topside development at Siu Ho Wan Depot, a vehicular access at Road P1 near the Tai Ho Interchange is proposed to enable the road connectivity of the topside development with NLH and TCE via the Tai Ho Interchange.
- 3.2.4 As shown in Figure 1.1, the Tai Ho Interchange will provide a direct linkage between Cheung Tung Road and the NLH, such that the external connectivity of Tai Ho (i.e. to/from Metro Area, NENT, NWNT, Airport, etc.) can be significantly improved.
- 3.2.5 The inter-district connections of Tai Ho with Tung Chung Town, TCE and Siu Ho Wan will also be enabled by the planned Road P1 and Tai Ho Interchange.

- 3.2.6 On the other hand, the Hong Kong Boundary Control Facilities (HKBCF) and Hong Kong Link Road (HKLR) under the project of the Hong Kong-Zhuhai-Macao Bridge (HZMB) are currently under construction, which will enable the direct cross-boundary connection to the western bank of the Pearl River Delta (PRD).
- 3.2.7 The Tuen Mun – Chek Lap Kok Link (TM-CLKL) is also under construction, of which the Southern Connection will provide the strategic north-south linkage between the North Lantau and HKBCF, whilst the Northern Connection will strengthen the linkage between North Lantau and Tuen Mun in the Northwest New Territories (NWNT).
- 3.2.8 In a wider context between North Lantau and NWNT, a new strategic road named Route 11 is currently under planning to alleviate the potential future traffic bottleneck at Lantau Link, and hence could increase the development potential at North Lantau.
- 3.2.9 New railway stations and public transport interchanges (PTIs) have been proposed at TCE and Siu Ho Wan along the existing Tung Chung Line (TCL) to improve the public transport services to cope with the future traffic demand for the developments at TCE and Siu Ho Wan Depot respectively.
- 3.2.10 The concept of Transport Oriented Developments (TOD) has been adopted to optimise the planned developments in both TCE and Siu Ho Wan Depot within the 500m catchment area of the new railway stations.
- 3.2.11 With the provision of supporting feeder services such as buses and minibuses, the catchment areas of the two new railway stations at TCE and Siu Ho Wan can be further enlarged to cover the potential developments at Tai Ho.
- 3.2.12 Therefore, the traffic and transport context in Tai Ho is regarded to be well integrated with the planned developments in TCE and Siu Ho Wan Depot.
- 3.2.13 The external transport connectivity in North Lantau is also expected to significantly enhanced with the completion of planned highway and railway infrastructure.



## 4. PEDESTRIAN AND PUBLIC TRANSPORT CONNECTIVITY

### 4.1 Potential Pedestrian and Cycling Network

- 4.1.1 For the potential developments for 4 residential sites in Tai Ho, a new access road is proposed in form of a standard 7.3m wide single 2-lane carriageway in connection with Cheung Tung Road, whilst footpath and cycling track are also proposed for the movements of pedestrians and cyclists alongside the new access road.
- 4.1.2 The proposed footpath and cycling track of the new access road in Tai Ho are possible to connect with the planned pedestrian and cycling network in TCE via the existing subway across NLH. The integrated network of footpath and cycling track in Tai Ho and TCE would encourage walking and cycling for the inter-district trips or the first-leg trip to MTR stations.
- 4.1.3 The planned footpaths and cycling tracks might also be extended along Road P1 to cover the topside developments at the Siu Ho Wan Depot, forming an extensive pedestrian and cycling network for inter-district trips.
- 4.1.4 The walking distance to the planned MTR Station and Public Transport Interchange (PTI) in TCE varies from the nearest of about 1.5km for Site 1 to the farthest of about 2.5km for Site 4, which is equivalent to 20 to 35 minute walk along the new access road as shown in **Figure 4.1**.
- 4.1.5 Therefore, the potential developments in Tai Ho will be accessible by pedestrians and cyclists through the proposed network of footpath and cycling track.
- 4.1.6 In addition, the public transport connectivity for the potential developments in Tai Ho, as well as the existing villages of Pak Mong and Ngau Kwu Long, can be facilitated by the provision of supporting feeder services, as indicated in **Figure 4.1**.

### 4.2 Conceptual Public Transport Connections

- 4.2.1 In view of the planned road network in North Lantau, the conceptual public transport provisions for the potential developments in Tai Ho have been considered in form of supporting feeder services to TCE or Siu Ho Wan via Road P1 and Tai Ho Interchange for external public transport connections at a distance of about 4 to 5 km.
- 4.2.2 Tung Chung Town Centre would be also another destination for the possible feeder service, which has been well-developed with commercial/retail facilities and job opportunities. The routing from Tai Ho is relatively direct following the existing Cheung Tung Road at a similar distance.
- 4.2.3 The estimated mileage of the conceptual feeder services in Tai Ho are considered to be comparable with the existing feeder routes in Tung Chung serving Yat Tung Estate, Tung Chung North and Discovery Bay respectively, as shown in **Figure 4.2**.

- 4.2.4 Direct public transport services would also be possible for connections to HKIA and HKBCF, or external destinations beyond North Lantau e.g. NWNT via TM-CLKL, subject to the future passenger demand.
- 4.2.5 For the potential public housing of 6,864 units, it is possible to provide a bus terminus at Site 1 to serve the majority of future population intake in Tai Ho.
- 4.2.6 GMB or residential coaches might also be considered to serve the private housing at Sites 2, 3 and 4 further along the new access road, with possible provision of intermediate stops at the existing villages of Pak Mong and Ngau Kwu Long respectively to cope the future expansions.

## 5. ESTIMATED TRAFFIC AND TRANSPORT DEMAND

### 5.1 Estimated Demand by Private Transport Modes

5.1.1 In view of the potential residential developments in Tai Ho and future village expansions in Pak Mong and Ngau Kwu Long within the Tai Ho OZP, the corresponding vehicular trip generation and attraction are estimated by the trip rates adopted from Volume 1 of the Transport Planning and Design Manual (TPDM), which are summarised in Table 5.1 below for public and private housing respectively.

**Table 5.1 Traffic Generation and Attraction Rates from TPDM**

Site	Type	Average Unit Size (m <sup>2</sup> )	Mean Trip Rates in PCU per hour per unit <sup>(1)</sup>			
			AM Peak		PM Peak	
			Generation	Attraction	Generation	Attraction
Site 1	Public <sup>(2)</sup>	32	0.0242	0.0226	0.0177	0.0201
Site 2	Private <sup>(3)</sup>	50	0.0718	0.0425	0.0268	0.0370
Site 3						
Site 4						
VE1	Village <sup>(4)</sup>	195	0.2772	0.1769	0.1635	0.2394
VE2						

Notes:

- (1) Refers to TPDM Volume 1 Chapter 3 Annex D;
- (2) The public housing at Site 1 is assumed to be rental units;
- (3) The private housing at Sites 2, 3 and 4 are assumed to be high-density R(A) units.
- (4) The village houses at VE1 (Pak Mong) and VE2 (Ngau Kwu Long) are assumed to be low-density R(C)

5.1.2 Taking account of the indicative development schedule for preliminary MLP, the vehicular traffic demand by private transport modes are estimated in Table 5.2 below.

**Table 5.2 Estimated Traffic Demand by Private Transport Modes**

Site	Type	No. of Units	Estimated Private Transport Demand <sup>(1)(2)</sup> (in PCU/hour)			
			AM Peak		PM Peak	
			Generation	Attraction	Generation	Attraction
Site 1	Public	6,864	166	155	121	138
Subtotal for Public		6,864 Flat Units	166	155	121	138
Site 2	Private	1,064	76	45	29	39
Site 3	Private	1,204	86	51	32	45
Site 4	Private	1,330	95	57	36	49
Subtotal for Private		3,598 Flat Units	257	153	97	133
VE1	Village	49	14	9	8	12
VE2	Village	113	31	20	18	27
Subtotal for Village		162 Village Houses	45	29	26	39
Overall		10,462 Flat Units & 162 Village Houses	468	337	244	310

Notes:

- (1) The vehicular traffic generation and attraction are rounded to the nearest PCU per hour
- (2) Private transport modes mainly include private cars and taxis.

- 5.1.3 Therefore, the potential residential developments in Tai Ho and future village expansions in Pak Mong and Ngau Kwu Long within the Tai Ho OZP would generate and attract 244 to 468 PCU per hour in one direction during the commuting peak hours, which is equivalent to 4.1 to 7.8 PCU per minute.

## 5.2 Estimated Demand by Public Transport Modes

- 5.2.1 The public transport demand for the potential residential developments in Tai Ho and future village expansions in Pak Mong and Ngau Kwu Long are derived from first principle, assuming the average household size for public and private permanent housing to be 2.9 number of persons per unit, based on the statistics from Housing Authority in 2016.
- 5.2.2 With reference to the Travel Characteristics Survey 2011 (TCS 2011) by the Transport Department (TD), the average daily mechanised trips per person (excluding non-home-based and employers' business trips) is 1.61.
- 5.2.3 The overall peak hours for mechanised trips were identified with a large proportion of "Home-based Work" commuting trips, whilst the AM and PM peak hours accounted for about 12% of the daily trip in total.
- 5.2.4 Furthermore, the distribution modal split for public transport is assumed to be 82%, excluding the mode share for private vehicles and taxis of 12% and 6% respectively.
- 5.2.5 Therefore, the public transport demand for the potential residential developments is estimated to be 0.459 trips per hour per unit during the AM and PM peak respectively, whilst the derivation is summarised in Table 5.3 below.

**Table 5.3 Derivation of Public Transport Demand for the Potential Development**

Parameters	Formula	Value
Average household size for both public and private housing	(a)	2.9
Average daily mechanised trips per person	(b)	1.61
Estimated mechanised trips per day per residential unit	(c) = (a) x (b)	4.67 trips/day/unit
Peak hour factors (AM / PM) to daily total	(d)	12%
Estimated mechanised trips per hour (AM / PM peak) per unit	(e) = (c) x (d)	0.560 trips/hour/unit
Mode share of public transport (excluding private cars and taxis)	(f)	82%
Estimated public transport demand per hour (AM / PM peak) per unit	(g) = (e) x (f)	0.459 trips/hour/unit

- 5.2.6 Assuming that 90% of the trips are generated (outbound) and attracted (inbound) during AM and PM peak hour respectively, the public transport demand by the potential residential developments in Tai Ho is estimated as shown in Table 5.4.

**Table 5.4 Estimated Traffic Demand by Public Transport Modes**

Site	Type	No. of Units	Estimated Public Transport Demand (in pphpd) <sup>(1)(2)</sup>
Estimated Trip rate of public transport demand (per unit)			0.413
Site 1	Public	6,864	2,835
Subtotal for Public		6,864 Flat Units	2,835
Site 2	Private	1,064	439
Site 3	Private	1,204	497
Site 4	Private	1,330	549
Subtotal for Private		3,598 Flat Units	1,485
VE1	Village	49	20
VE2	Village	113	47
Subtotal for Village		162 Village Houses	67
Overall		10,462 Flat Units & 162 Village Houses	4,387

Notes:

- (1) The trip generation and attraction for public transport are rounded to the nearest passengers (PAX) per hour.  
(2) Public transport modes excluding private cars and taxis.

### 5.3 Directional Split of the Estimated Trips

- 5.3.1 Based on the findings from the TCS 2011, most of the mechanised trips during the AM and PM peak hours are identified to be "Home-based Work" commuting trips.
- 5.3.2 The existing directional split in North Lantau are derived from the place of work with reference to the demographic statistics in the 2011 population census, as summarised in Table 5.5 below.

**Table 5.5 Estimated Directional Split from Places of Work in 2011 Population Census**

Places of Work <sup>(1)</sup>		Existing in North Lantau <sup>(2)</sup>	Estimated in North Lantau	Routing
Metro Areas	HK & KLN	45%	40% (-5%)	Lantau Link
New Towns / Other NT Areas <sup>(3)</sup>	NENT	40%	15%	Lantau Link
	NWNT		25%	TM-CLKL
In the same district	North	10%	15% (+5%)	Local Road
Outside HK <sup>(4)</sup>	Lantau	5%	5%	Network

Notes:

- (1) The working population for "No Fixed Place" and "Work at Home" have been neglected.  
(2) Demographic data in North Lantau referred to Yat Tung North (T02), Yat Tung South (T03), Tung Chung North (T04) and Tung Chung South (T05) in the 2011 population census.  
(3) Assuming an inclined distribution to NWNT for working places in New Towns / other NT areas, given the enhanced transport connectivity between North Lantau and NWNT with the commissioning of TM-CLKL  
(4) Assuming the working population for "Outside HK" travels through the Airport.

- 5.3.3 In terms of self-containment, which refers to the proportion of trip movements within the same district as per defined in TCS 2011, the existing rate in North Lantau is the lowest at 10% across the territory.
- 5.3.4 Taking account of the planned developments in North Lantau, such as the future expansion of HKIA including the 3-runway system (3RS) and the North Commercial District (NCD), as well as the commercial elements in TCNTE and HKBCF, there will be substantial job opportunities in North Lantau.

5.3.5 Therefore, the demand for cross-district travel is expected to be reduced with an increased rate of self-containment in North Lantau up to 15%.

5.3.6 Besides, the transport connectivity between North Lantau and NWNT will be significantly enhanced with the commissioning of TM-CLKL. With the provision of job opportunities by the planned developments in Tuen Mun and Hung Shui Kiu, it is anticipated for an inclined distribution of 25% to NWNT for working places in New Town and other NT Areas.

## 5.4 Anticipated Distribution of Private Transport Demand

5.4.1 Based on the estimation of vehicular trip generation for the potential residential developments in Tai Ho, the anticipated distribution of private transport modes are consolidated in Table 5.6.

**Table 5.6 Anticipated Distribution of Private Transport Demand (in PCU/Hour)**

Route	Directional Split (%)	Estimated Private Transport Demand <sup>(1)(2)</sup> (in PCU/hour)			
		AM Peak		PM Peak	
		Generation	Attraction	Generation	Attraction
Overall	100%	468	337	244	310
Lantau Link	55%	257	185	134	170
TM-CLKL	25%	117	84	61	78
Inter-District	20%	94	68	49	62

Notes:

(1) The vehicular traffic generation and attraction are rounded to the nearest PCU per hour

(2) Private transport modes mainly include private cars and taxis.

5.4.2 Therefore, the additional vehicular traffic volume to the Lantau Link would be between 134 and 257 PCU per hour in one direction during the commuting peak hours, which is equivalent to 2.2 to 4.3 PCU per minute.

## 5.5 Anticipated Distribution of Public Transport Demand

5.5.1 Based on the findings in Tables 5.4 and 5.5, the anticipated distribution of public transport demand are derived in Table 5.7 for the potential residential developments in Tai Ho.

**Table 5.7 Anticipated Distribution of Public Transport Demand (in pphpd)**

Route	Directional Split (%)	Estimated Public Transport Demand <sup>(1)(2)</sup> (in pphpd)
Overall	100%	4,387
Lantau Link	55%	2,413
TM-CLKL	25%	1,097
Local Network	20%	877

Notes:

(1) The trip generation and attraction for public transport are rounded to the nearest passengers (PAX) per hour.

(2) Public transport modes excluding private cars and taxis.

5.5.2 As shown in Table 5.7, the peak hour demand of public transport demand using the Lantau Link is estimated to be 2,413 passengers per hour in one direction (pphpd).



## 6. TRAFFIC IMPACT ASSESSMENT

### 6.1 Highway Network

- 6.1.1 Based on the traffic analysis under the TCNTE Study, it is anticipated that most of the internal and external road links will be operating at satisfactory level, including the existing Cheung Tung Road and the planned Road P1.
- 6.1.2 The additional traffic impact by the potential residential developments in Tai Ho and the future village expansion in Pak Mong and Ngau Kwu Long are also expected to be minor, given that estimated traffic generation and attraction are relatively marginal at 244 to 468 PCU per hour.
- 6.1.3 Meanwhile, it is anticipated under the TCNTE study that only the Lantau Link will operate slightly over the manageable degree of congestion with a V/C ratio of 1.25 when all the planned new developments in HKIA and North Lantau, including the previous assumption of Lantau Logistic Park at Siu Ho Wan Reclamation, are in place.
- 6.1.4 However, it is advised under the TCNTE study that the comprehensive traffic demand for Lantau Link in the long run are subject to further review separately by the other planning studies in North Lantau, including the previous assumption of Lantau Logistic Park at Siu Ho Wan Reclamation and the planned topside development at Siu Ho Wan Depot.
- 6.1.5 Besides, the traffic forecast for HKBCF and HZMB are also subject to further review to cope with the latest changes in cross-boundary transport policy, tourist numbers, as well as the logistics and freight transport demand.
- 6.1.6 In addition, it was announced in the 2017 Policy Address that the feasibility of Route 11 would commence, which may provide an additional highway connection between North Lantau and NWNT, as long as an effective solution to the capacity issue of Lantau Link.
- 6.1.7 Based on the estimated directional split for the potential residential development in Tai Ho, the additional traffic volume to the Lantau Link will be between 134 and 257 PCU in one direction during the commuting peak hour. The overall performance of Lantau Link would not be significantly affected by the net increase of 0.02 to 0.04 in V/C ratio.
- 6.1.8 Therefore, with consideration of the updated planning assumptions and parameters for the developments in North Lantau and the possible highway infrastructure of Route 11, the development potential at Tai Ho should not be constrained by the capacity of Lantau Link, given that the additional traffic impact is expected to be very minimal.

### 6.2 Railway Network

- 6.2.1 According to the TCNTE Study, two new railway stations at TCE and TCW are proposed to serve the developments in TCE and TCW respectively. An additional railway station is also proposed at Siu Ho Wan along TCL for the topside development.

- 6.2.2 In order to meet the anticipated increase in railway transport demand by the proposed new stations, the maximum carrying capacity of TCL will be enhanced by the construction of new overrun tunnel and upgrading of signalling system.
- 6.2.3 Upon the completion of the above modification works, the maximum carrying capacity between Sunny Bay and Tsing Yi (i.e. the Lantau Link Section) will be increased to 31,300 pphpd under 4 ppsm for a conservative approach.
- 6.2.4 As shown in Table 5.7, the peak hour demand of public transport demand using the Lantau Link is estimated to be 2,413 passengers per hour in one direction (pphpd), whilst the market share between rail (MTR) and buses (excluding GMB) is approximately at a ratio of 6:4.
- 6.2.5 Thus, the additional patronage on TCL by the potential developments in Tai Ho will be approximately 1,448 pphpd during the peak hour, which is equivalent to approximately 5% of the maximum carrying capacity with the completion of modification works.
- 6.2.6 Therefore, the TCL should have adequate spare capacity to accommodate the additional patronage from the potential residential developments in Tai Ho.

## 7. SUMMARY

### 7.1 Background

- 7.1.1 The Draft Tai Ho Outline Zoning Plan (OZP No. S/I-TH/1) has been gazetted on 24 March 2017, which covers a total area of about 230 ha in Tai Ho to the east of Tung Chung New Town Extension (TCNTE) Area, whilst more than 70% of OZP area is proposed to be zoned as "Green Belt" ("GB") with a general presumption against developments.
- 7.1.2 On the other hand, the future developments in Tung Chung East (TCE) of the TCNTE aim for an intake of over 110,000 population and 40,000 employment, whilst a comprehensive topside development is proposed at the Siu Ho Wan Depot to provide about 14,000 residential units with commercial/retail facilities and a new railway station along the TCL.
- 7.1.3 In view of the estimated shortfall of long-term land supply as stipulated in the strategic planning study of Hong Kong 2030+, optimising the use of land is considered to be necessarily important to create development capacity for sustainable growth.
- 7.1.4 Therefore, taking account of the proposed developments and associated infrastructure in TCE, the potential of residential developments have been identified for 4 number of sites within Tai Ho OZP near the rural village settlements at Pak Mong and Ngau Kwu Long respectively.
- 7.1.5 To demonstrate the development potential of the identified 4 sites within the Tai Ho OZP, a preliminary master layout plan (MLP) has been drafted with a provision of 10,462 residential units for a population intake of approximately 30,000 people.

### 7.2 Traffic and Transport Context in Tai Ho

- 7.2.1 For the vehicular access of the 4 residential sites, a new public road is proposed in form of a standard 7.3m wide single 2-lane carriageway in connection with Cheung Tung Road, whilst footpath and cycling track are also proposed alongside the new access road to integrate with the planned pedestrian and cycling network in TCE.
- 7.2.2 In addition to the existing North Lantau Highway and Cheung Tung Road, new transport infrastructure has been proposed in close proximity to Tai Ho, including the planned Road P1 and Tai Ho Interchange, as well as the additional railway stations and public transport interchange at TCE and Siu Ho Wan along the existing Tung Chung Line (TCL).
- 7.2.3 With the provision of supporting feeder services such as buses and minibuses, the catchment areas of the two new railway stations at TCE and Siu Ho Wan can be further enlarged to cover the potential developments at Tai Ho, including the future village expansions in Pak Mong and Ngau Kwu Long.
- 7.2.4 Therefore, the traffic and transport context in Tai Ho is regarded to be well integrated with the planned developments and infrastructure in TCE and Siu Ho Wan.

7.2.5 On the other hand, the external transport connectivity in North Lantau is also expected to significantly enhanced with the completion of planned transport infrastructure, including the TM-CLKL (under construction) and Route 11 (under planning), which strengthens the linkage between North Lantau and NWNT, in addition to the existing Lantau Link.

7.2.6 With the completion of HZMB and HKBCF, North Lantau will also become an important gateway for cross-boundary transport to serve the western bank of the Pearl River Delta, as well as the international flight destinations through the HKIA.

### 7.3 Traffic Impact by the Potential Developments in Tai Ho

7.3.1 Based on the traffic analysis under the TCNTE Study, it is anticipated that most of the internal and external road links will be operating at satisfactory level, except the Lantau Link, which will be operated marginally over the manageable degree of congestion when all the planned new developments in HKIA and North Lantau, including the previous assumption of Lantau Logistic Park at Siu Ho Wan Reclamation, are in place.

7.3.2 Meanwhile, it was announced in the 2017 Policy Address that the feasibility of Route 11 would commence, which may provide an additional highway connection between North Lantau and NWNT, as long as an effective solution to the capacity issue of Lantau Link.

7.3.3 Nevertheless, the additional traffic impact by the potential residential developments in Tai Ho is expected to be minor, given that overall traffic generation are relatively marginal with maximum of 468 pcu/hour, whilst the additional traffic to Lantau Link is only 257 pcu/hour with a net increase of 0.04 in the V/C ratio.

7.3.4 Therefore, the development potential at Tai Ho should not be constrained by the capacity of Lantau Link, given that the additional traffic impact is expected to be very minimal.

7.3.5 On the other hand, it is estimated that the public transport demand on the Lantau Link will be 2,413 passengers per hour in one direction (pphpd), whilst about 60% of them will be travel by the MTR TCL.

7.3.6 According to the TCNTE Study, the maximum carrying capacity of TCL will be enhanced to 31,300 pphpd under 4 ppsm at the Lantau Link Section in order to meet the anticipated increase in railway transport demand by the proposed new stations in TCNTW and Siu Ho Wan.

7.3.7 With the completion of modification works, the TCL should have adequate spare capacity to accommodate the additional patronage of 1,448 pphpd by the potential developments in Tai Ho, which is equivalent to approximately 5% of the maximum carrying capacity.

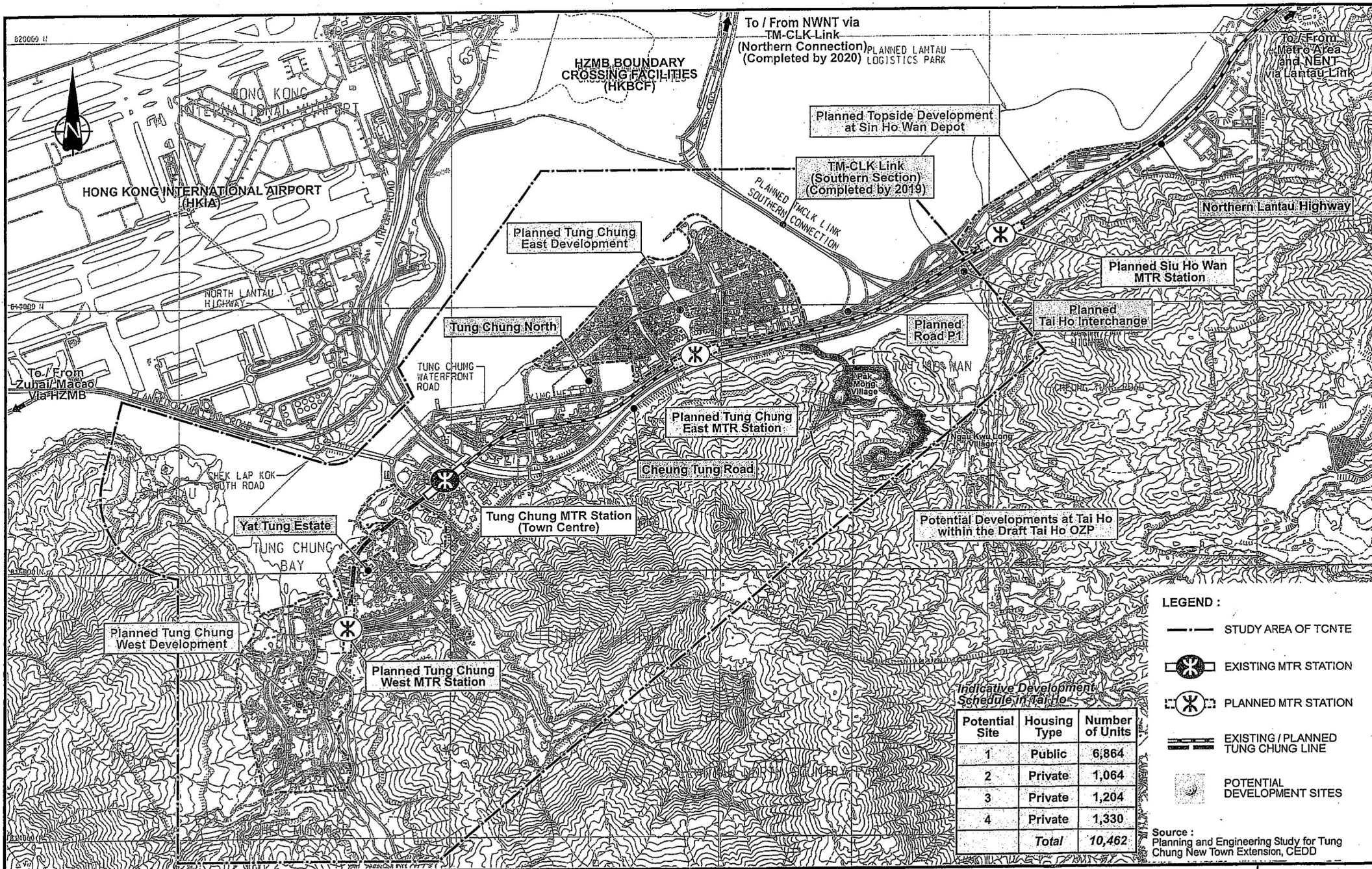
### 7.4 Conclusion

7.4.1 In view of the estimated shortfall of long-term land supply as stipulated in the strategic planning study of Hong Kong 2030+, optimising the use of land is considered to be necessarily important to create development capacity for sustainable growth.

- 7.4.2 Taking account of the planned developments in TCE and Siu Ho Wan, the traffic and transport context in Tai Ho is regarded to be well integrated with the future highway and railway infrastructure in North Lantau.
- 7.4.3 With an assumption of 10,462 residential units in the preliminary MLP, the associated traffic and transport demand induced by the potential developments of the 4 sites and the future village expansions in Pak Mong and Ngau Kwu Long within the Tai Ho OZP should be well-supported by private and public transport connections with comprehensive linkage to the pedestrian and cycling network in TCE and Siu Ho Wan.
- 7.4.4 The development potential in Tai Ho should not be constrained by the existing infrastructure of Lantau Link, with consideration of other planned developments in North Lantau and the possible new transport infrastructure currently under construction and planning.
- 7.4.5 Therefore, the development potential at the 4 identified sites within the Tai Ho OZP are deemed to be justified in traffic and transport perspective against the proposed zoning of "GB".

## FIGURES



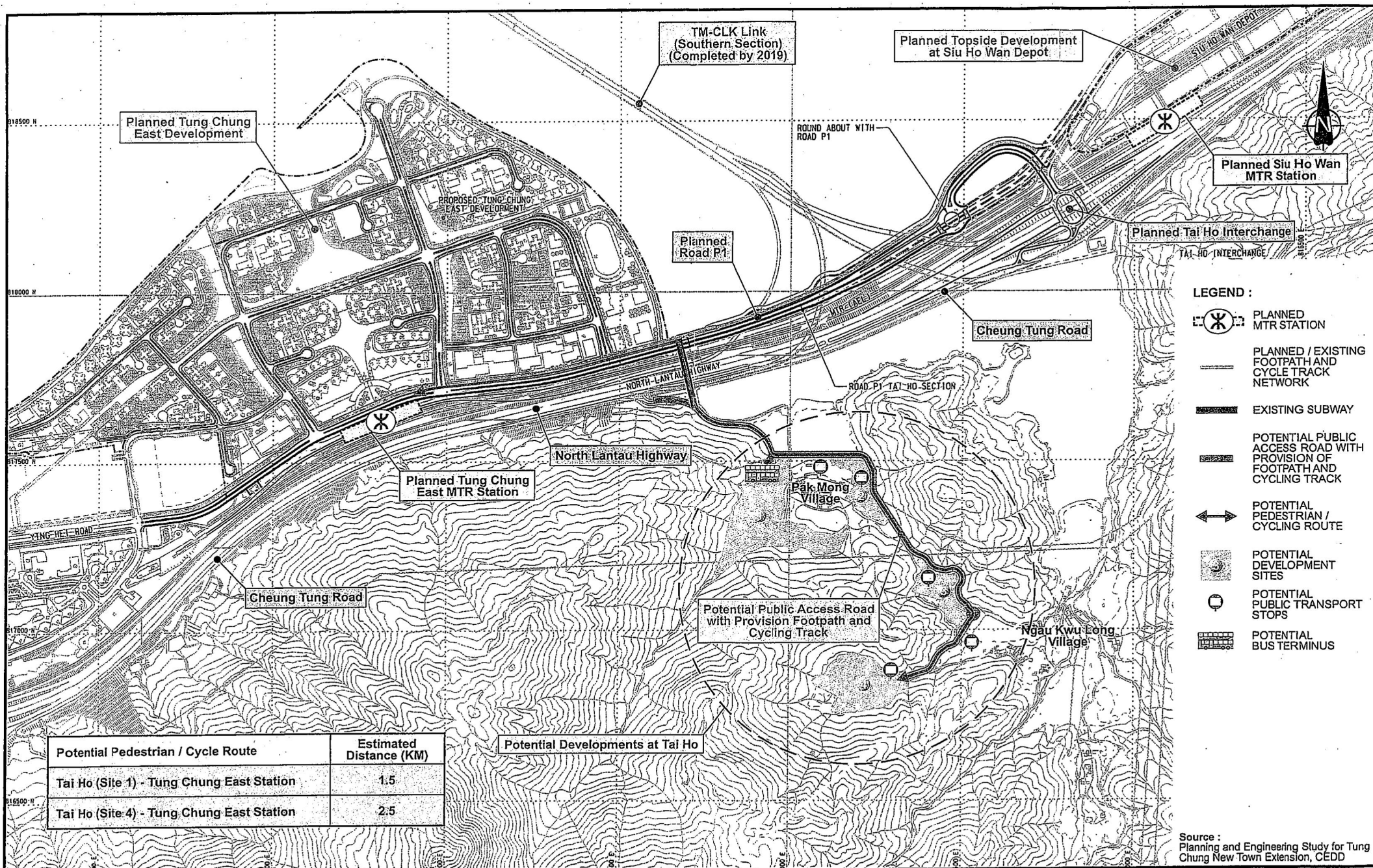


Rev.	Description	Checked	Date
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Project Title  
TRAFFIC CONSULTANCY SERVICES FOR REPRESENTATION  
TO DRAFT TAI HO OUTLINE ZONING PLAN

Drawing Title <b>POTENTIAL DEVELOPMENTS IN TAI HO AND OTHER PLANNED DEVELOPMENTS AND INFRASTRUCTURE IN NORTH LANTAU</b>						
Designed	LHW	Checked	EDK	Scale	NTS	Date
						MAY 2017
						Drawing No.
						<b>1.1</b>
						Rev.
						-





Rev.	Description	Checked	Date

Project Title
TRAFFIC CONSULTANCY SERVICES FOR REPRESENTATION TO DRAFT TAI HO OUTLINE ZONING PLAN

Drawing Title										
<b>POTENTIAL FOOTPATH AND CYCLING TRACK IN CONNECTION WITH THE PLANNED / EXISTING NETWORK</b>										
Designed	LHW	Checked	EDK	Scale	NTS	Date	MAY 2017	Drawing No.	4.1	Rev.



Source :  
Planning and Engineering Study for Tung  
Chung New Town Extension, CEDD

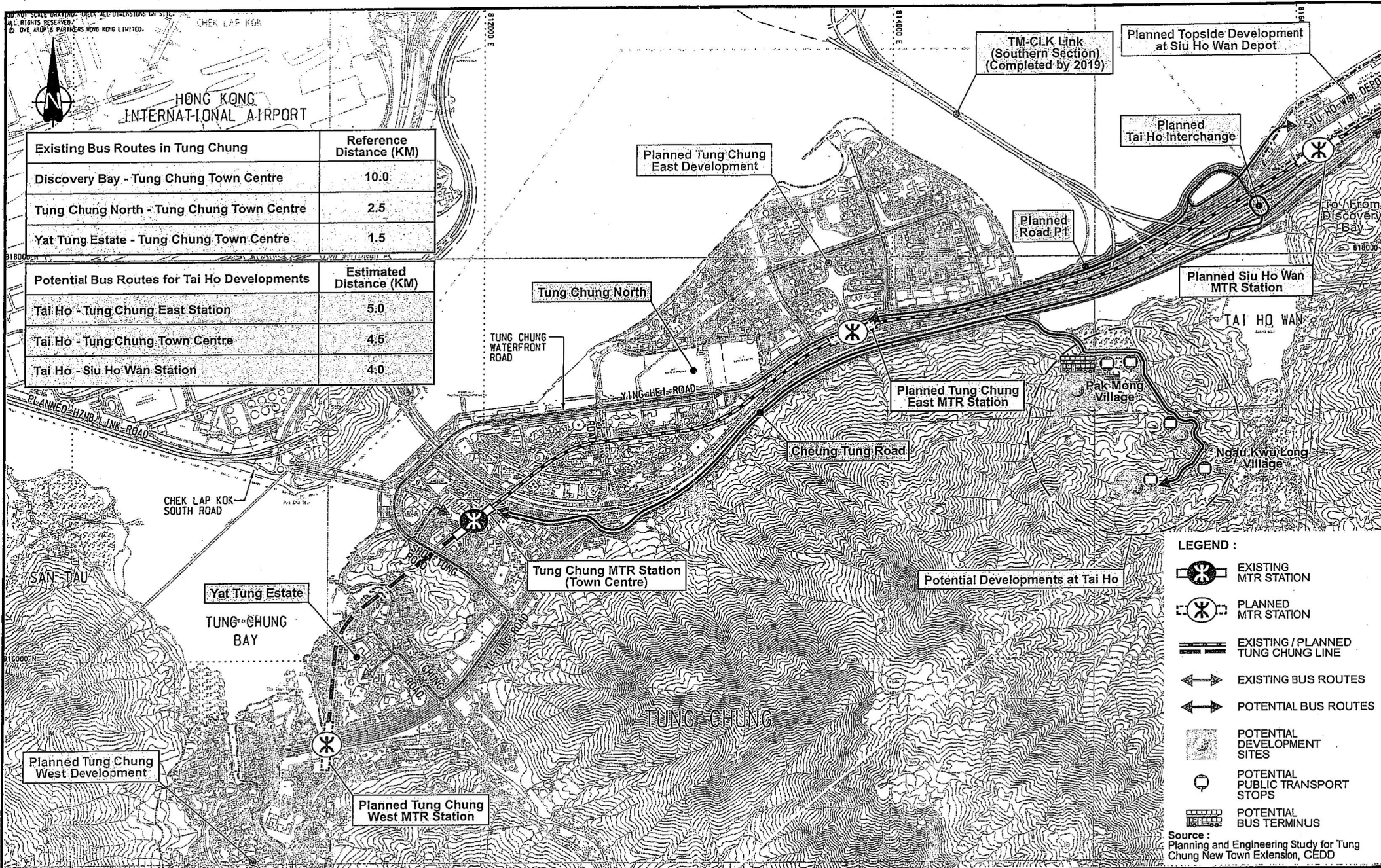




HONG KONG  
INTERNATIONAL AIRPORT

Existing Bus Routes in Tung Chung	Reference Distance (KM)
Discovery Bay - Tung Chung Town Centre	10.0
Tung Chung North - Tung Chung Town Centre	2.5
Yat Tung Estate - Tung Chung Town Centre	1.5

Potential Bus Routes for Tai Ho Developments	Estimated Distance (KM)
Tai Ho - Tung Chung East Station	5.0
Tai Ho - Tung Chung Town Centre	4.5
Tai Ho - Siu Ho Wan Station	4.0



LEGEND :

- EXISTING MTR STATION
- PLANNED MTR STATION
- EXISTING / PLANNED TUNG CHUNG LINE
- EXISTING BUS ROUTES
- POTENTIAL BUS ROUTES
- POTENTIAL DEVELOPMENT SITES
- POTENTIAL PUBLIC TRANSPORT STOPS
- POTENTIAL BUS TERMINUS

Source :  
Planning and Engineering Study for Tung  
Chung New Town Extension, CEDD

Rev.	Description	Checked	Date
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Project Title  
TRAFFIC CONSULTANCY SERVICES FOR REPRESENTATION  
TO DRAFT TAI HO OUTLINE ZONING PLAN

Drawing Title CONCEPTUAL PUBLIC TRANSPORT CONNECTIONS BETWEEN TUNG CHUNG AND THE POTENTIAL DEVELOPMENTS AT TAI HO							
Designed	LHW	Checked	EDK	Scale	NTS	Date	MAY 2017
Drawing No.	4.2	Rev.	-				

SYSTRA  
MVA

## **Appendix 4**

### **Environmental Review – Sewage, Noise and Air Quality**

Prepared for

**Sun Hung Kai Properties Limited**

Prepared by

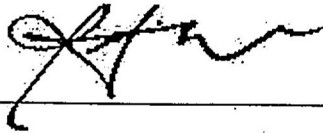
**Ramboll Environ Hong Kong Limited**

**PROPOSED DEVELOPMENT AT TAI HO, TUNG CHUNG,  
LANTAU ISLAND**

**ENVIRONMENTAL REVIEW**

Date **17 May 2017**  
Prepared by **Kole LEE**  
**Environmental Consultant**

Signed



Approved by **Calvin CHIU**  
**Senior Manager**

Signed



Project Reference **SHKTAIHOEI00**

Document No. **R5711\_V1.0**

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- Appendix 2.1 Traffic Forecast of Year 2041
- Appendix 2.2 Road Traffic Noise Assessment Result
- Appendix 3.1 Sewage Flow Estimation for SHWSTW Extracted from EIA Report

## 1. INTRODUCTION

### 1.1 Background

- 1.1.1 Pursuant to section 5 of the Town Planning Ordinance, the draft Tai Ho Outline Zoning Plan No. S/1-TH/1 (hereinafter referred to as "the draft plan") prepared by the Town Planning Board is exhibited for public inspection for a period of two months from 24 March 2017 to 24 May 2017. During the exhibition period, any person may make representation (whether in support or opposition to the plan) to the Board in respect of the draft plan or amendment to draft plan. Such representations will be made available for public inspection as soon as reasonably practicable after the expiry of the above 2-month period until the Chief Executive in Council (CE in C) has decided on the draft plan.
- 1.1.2 Ramboll Environ Hong Kong Limited is appointed by the representor to provide environmental consultancy services in support of the representation in opposition to the draft plan.
- 1.1.3 The representation in opposition to the draft plan (the adverse representation) objects to the "Green Belt" ("GB") zone which covers an area of about 166.7 ha and propose to rezone it to allow for residential development.

### 1.2 Objectives of the Study

- 1.2.1 The objectives of this review is to demonstrate there would not be insurmountable environmental impacts on the proposed residential developments should the proposed amendment to the draft plan are accepted by the CE in C.
- 1.2.2 The locations of the concerned sites (herein referred to as "the Subject Sites") are shown in **Figure 1.1**.

### 1.3 Environmental Appraisal of the Vicinity of the Subject Sites

#### 1.3.1 The Environs of the Subject Sites

- 1.3.1.1 The Subject Sites consists of 4 parcels (Subject Site 1 to 4) and currently mainly cover agricultural land, hillslopes, natural vegetations and small streams in Tai Ho valley.
- 1.3.1.2 As can be seen in **Figure 1.1**, Pak Mong village is located to the north of Subject Site 1 and 2 whereas Ngau Kwu Long village is situated immediate to the south of Subject Site 3 and 4. Apart from the nearby villages, the Subject Sites are bounded by steep sided forest terrains.
- 1.3.1.3 The surrounding areas are dominated by country parks, agricultural land and village type developments.

#### 1.3.2 Air Quality

- 1.3.2.1 Potential air quality impacts associated with the surrounding road carriageways and chimneys emission from the industrial stack shall be evaluated in accordance with the guidelines set out in the Hong Kong Planning Standards and Guidelines (HKPSG). Table 1.1 below is the extract of Table 3.1 in Chapter 9 "Environment" of HKPSG stating the recommended minimum horizontal buffer distance against pollution sources generated from road & highways and industrial areas.

**Table 1.1 Guidelines on Usage of Open Space Site**

Pollution Source	Parameter	Buffer Distance	Permitted Uses
Road and Highways	<i>Type of Road</i>		
	Trunk Road and Primary Distributor	>20 m	Active and passive recreation uses
		3 – 20 m	Passive recreational uses
		<3 m	Amenity areas
	District Distributor	>10 m	Active and passive recreation uses
		<10 m	Passive recreational uses
	Local Distributor	>5 m	Active and passive recreation uses
		<5 m	Passive recreational uses
	Under Flyovers		Passive recreational uses
Industrial Areas	<i>Difference in Height between Industrial Chimney Exit and the Site</i>		
	<20 m	>200 m	Active and passive recreation uses
		5 – 200 m	Passive recreational uses
	20 – 30 m (*)	>100 m	Active and passive recreation uses
		5 – 100 m	Passive recreational uses
	30 – 40 m	>50 m	Active and passive recreation uses
		5 – 50 m	Passive recreational uses
	>40 m	>10 m	Active and passive recreation uses
Construction and earth moving Activities	-	<50 m	Passive recreational uses
		>50 m	Active and passive recreational uses

**Remarks:**

- According to the Appendix 3.2: Principal Framework for Planning against Air Pollution of Chapter 9 Environment of Hong Kong Planning Standard and Guideline, Air Sensitive uses include: residential areas, child care centres, residential care homes for the elderly, hospitals and clinics, schools and active recreational activities.
- In situations where the height of chimneys is not known, use the set of guidelines marked with an asterisk for preliminary planning purpose and refine as and when more information is available.
- The buffer distance is the horizontal, shortest distance from the boundary of the industrial lot, the position of existing chimneys or the edge of road kerb, to the boundary of open space sites.
- The guidelines are generally applicable to major industrial areas but NOT individual large industrial establishments which are likely to be significant air pollution.
- The guidelines are generally applicable to major industrial areas but NOT individual large industrial establishments which are likely to be significant air pollution sources. Consult EPD when planning open space sites close to such establishments.
- Amenity areas are permitted in any situation.

### 1.3.2.2 *Potential Vehicular Emission Impact*

With respect to the potential vehicular emission impact, the nearest road carriageway to the Subject Sites is the public access road connecting the Subject Sites which is a local distributor in terms of road type. As for the road carriageways situated to the further north of the Subject Sites with over 200m separation including North Lantau Highway, a future road P1, TMCLKL-S Slip Road and Cheung Tung Road, they are considered as expressway, primary distributor, trunk road and local distributor respectively.

The minimum buffer distance to the nearest local distributor as recommended by HKPSG shall be 5m and can be met by means of building setback.

The buffer distances between the Subject Site 1 & 2 and other nearest road carriageways (North Lantau Highway, a future road P1, TMCLKL-S Slip Road and Cheung Tung Road) are at least over 200 m, which is well above the respective required buffer distance (max 20m) recommended in the HKPSG as listed in **Table 1.1**. Subject Site 3 & 4 are even further away from road carriageways.

According to **Figure 1.2** illustrating the buffer distance of the aforementioned road carriageways within 300m study area, the proposed development complies with the minimum requirement of the buffer distance. Thus, the proposed developments would not be subject to adverse vehicular emission impact.

### 1.3.2.3 *Potential Chimney Emission Impact*

With regard to the potential chimney impact, site survey has been conducted in April 2017 in an attempt to identify any active chimney or other air pollution sources located in the proximity of the Subject Sites. Site investigation concluded that there is no presence of chimney in the vicinity of the Subject Sites. There is also no odour, fluff or other air pollutant emission observed in the surrounding. The potential air quality impact due to chimney emission is not anticipated.

## 1.3.3 **Noise**

### 1.3.3.1 *Potential Traffic Noise Impact*

The potential road traffic noise impact to the Subject Sites would be dominated by the road carriageways including North Lantau Highway and Cheung Tung Road that are situated to the further north of the Subject Sites. Although with a separation distance over 200 m, quantitative road traffic noise impact assessment is prepared (detailed in **Section 2**) to address the potential noise impact that would be generated from the traffic from these roads and public access road as well.

### 1.3.3.2 *Potential Industrial Noise Impact*

Based on the existing conditions of the environs where the surrounding areas of the Subject Sites mainly cover agricultural land, hillslopes, natural vegetations and village type developments, industrial noise impact is not envisaged. Moreover, according to our recent site investigation, no fixed noise source was identified in the vicinity of the Subject Sites. As a result, no adverse industrial noise impact on the proposed residential developments is anticipated.

### 1.3.3.3 *Potential Railway Noise Impact*

There is no railway noise source identified in the vicinity (i.e. 300 m) of the Subject sites and thus, no adverse railway noise impact is anticipated on the proposed residential developments.

#### 1.3.3.4 *Potential Helicopter Noise Impact*

There is no existing and planned helipad identified in the vicinity (i.e. 300 m) of the Subject Sites. A helicopter holding area is situated over 400m to the northeast of the Subject Sites. Therefore, no adverse helicopter noise impact is anticipated to the proposed developments.

#### 1.3.3.5 *Potential Aircraft Noise Impact*

The Subject Sites are outside NEF25 contour of Hong Kong International Airport at Chep Lap Kok. While aircraft noise is likely audible, the HKPSG requirement is complied with.

#### 1.3.4 **Sewerage Impact**

SHWSTW is situated further northeast to the Subject Sites. It is the nearest sewage treatment works with a design Average Dry Weather Flow (ADWF) capacity of 180,000 m<sup>3</sup>/day. Currently SHWSTW receives sewage from Hong Kong International Airport (HKIA), Tung Chung, Disneyland at Penny's Bay, Sunny Bay, Discovery Bay and Siu Ho Wan. The treated effluent is discharged into the marine waters of North Western Water Control Zone via a DN1840 submarine outfall.

According to the EIA Report for Tung Chung New Town Extension, the projected flow (ADWF) in year 2031 at SHWSTW will reach 144,585 m<sup>3</sup>/day. EPD has arranged with DSD to fit out the remainder of the treatment units at SHWSTW to its designed maximum handling capacity by 2024 in order to cope with the projected sewage flows within its catchment.

The sewerage impact is appraised (detailed in Section 3) to evaluate whether the capacity of the existing treatment facility is sufficient to cater the sewage flow from the proposed development and existing and planned developments in vicinity.

### 1.4 **Structure of the Environmental Review Report**

#### 1.4.1 According to the appraisal above, this environmental review report is set out as follow:

- |            |                                      |
|------------|--------------------------------------|
| Section 2: | Road Traffic Noise Impact Assessment |
| Section 3: | Sewerage Impact Assessment           |
| Section 4: | Overall Conclusion                   |



## 2. ROAD TRAFFIC NOISE IMPACT ASSESSMENT

### 2.1 Introduction

- 2.1.1 This road traffic noise impact assessment is prepared to address road traffic noise impact on the noise sensitive uses of the proposed residential developments and to recommend mitigation measures where practicable to attenuate the impact.

### 2.2 Assessment Criteria

- 2.2.1 Noise standards are recommended in the Hong Kong Planning Standards and Guidelines (HKPSG) for planning against noise impact from sources such as road traffic, railway and aircraft.
- 2.2.2 Under the HKPSG, the criterion for road traffic noise impact on domestic premises (habitable rooms) is  $L_{10(1\text{-hour})}$  70 dB(A). This criterion applies to uses which rely on opened windows for ventilation.

### 2.3 Assessment Methodology

- 2.3.1 In this assessment, the potential noise impact arising from nearby existing and future road carriageways (if any) on the development has been assessed. It involved the prediction of future noise impacts on Noise Sensitive Receivers (NSRs) arising from traffic flows along existing and future road carriageways situated within or in the vicinity of the Subject Sites. Calculations of predicted road traffic noise were based on the peak hour traffic flows projected within a 15-year period from the target completion date of the proposed residential developments, year 2026. For worst-case scenario evaluation, the assessment year was chosen to be year 2041, which has the maximum forecasted traffic data within 15-year period. The year 2041 traffic data is attached in **Appendix 2.1**.
- 2.3.2 The U.K. Department of Transport's procedure "Calculation of Road Traffic Noise" was used to predict the hourly  $L_{10(1\text{-hour})}$  noise levels generated from road traffic at selected representative NSRs. The predicted noise levels were compared with the relevant HKPSG noise standards (i.e.  $L_{10(1\text{-hour})}$  70 dB(A)).
- 2.3.3 **Appendix 2.1** presents the predicted 2041 peak hour traffic data on the main road carriageways in the vicinity of the Subject Sites. Other road carriageways are either with very little traffic volume or already shielded by other buildings in the vicinity so that the impact derived from these road carriageways is considered insignificant.
- 2.3.4 In this assessment, based on the traffic forecast, speed limits of 110 km/hr and 80 km/hr are assumed for North Lantau Highway and TMCLKL-S Slip Road, respectively. As for Cheung Tung Road and Road P1 (as indicated in **Appendix 2.1**) are assumed with speed limit of 50 km/hr.

### 2.4 Noise Sensitive Receivers

- 2.4.1 A number of Noise Sensitive Receivers (NSRs), which are likely to be subject to adverse traffic noise impacts, were selected for the assessment. All assessment points were taken 1.2 m above the floor and 1 m away from the façade of openable windows of habitable rooms. **Figure 2.1** shows the locations of the selected NSRs for the road traffic noise impact assessment.

### 2.5 Noise Mitigation Measures Recommended for the Proposed Residential Developments

With adequate separation distance from the heavy road carriageways situated in further north to the Subject Site, the proposed development is impacted by the road

traffic noise arising from the public access road instead which is closely laid along the site boundary.

#### 2.5.1 Noise Barrier

Considering the public access road in close proximity to the Subject Site, erection of barrier along site boundary based on street level could effectively shield noise from along the public access road. Therefore, three noise barriers with a maximum height of 5m are proposed in Site 2 and Site 3 respectively as illustrated in **Figure 2.3**.

### 2.6 Assessment Result

- 2.6.1 The road traffic noise impact on the selected NSRs was quantitatively assessed. Detailed results in **Appendix 2.2** show that with the practical noise mitigation measures of noise barrier considered and incorporated as described in **Figure 2.3**, the proposed residential development would comply with the relevant HKPSG standard regarding the aspect of Road Traffic Noise Impact Assessment.

### 2.7 Overall Conclusion

- 2.7.1 Road traffic noise impact assessment has been carried out for the proposed development.
- 2.7.2 With all practical noise mitigation measures proposed, no unacceptable road traffic noise impact is anticipated.

### 3. SEWERAGE IMPACT ASSESSMENT

#### 3.1 Scope of Work

- 3.1.1 The aim of study is to assess whether the capacity of the existing sewage infrastructure is sufficient to cater the sewage flow from the proposed development and existing developments in vicinity.

#### 3.2 Assessment Criteria and Methodology

- 3.2.1 Environmental Protection Department's (EPD's) Guidelines for Estimating Sewage Flows for Sewage Infrastructure Planning, Version 1 (GESF) is referred to estimate the quantity of the sewage generated from the proposed development and the existing development. Sewage flow parameters and global peaking factors in this document are adopted.
- 3.2.2 The proposed residential development is categorised as "Domestic, Private R2" for maximum domestic plot ratio of 4. The Unit Flow Factors (UFFs) for domestic flow and commercial flows have been summarised in **Table 3.1** in accordance with the Tables T-1 and T-2 of GESF.

**Table 3.1 Summary of Adopted Unit Flow Factors**

Development	Type	Category	UFF (m <sup>3</sup> /day per capita)
Residential	Residential	Domestic – Private R2	0.27
Clubhouse	Staff and Guest	Commercial Employee	0.08
		Commercial Activities – Community, Social & Personal Services	0.2

#### 3.3 Wastewater Generated by the Proposed Development

- 3.3.1 Wastewater arising from the proposed development will be primarily contributed by the residents and commercial employees of the clubhouse. The proposed development with 4 parcels provides a total of 10,462 residential units, with non-domestic gross floor area (including clubhouse) of 7,318m<sup>2</sup>. Information of 4 parcels of site is summarised in **Table 3.2**.

**Table 3.2 Details of the Proposed Development**

	Site 1	Site 2	Site 3	Site 4
<b>Description</b>	Public Housing	Private Housing		
<b>Plot Ratio</b>	4.0	3.5	3.5	2.1
<b>No. of Block</b>	11	3	3	7
<b>No. of Flat</b>	6,864	1,064	1,204	1,330
<b>Non-domestic Area (including clubhouse)</b>	-	2,250 m <sup>2</sup>	2,408 m <sup>2</sup>	2,660 m <sup>2</sup>

- 3.3.2 The average household density of 2.9 according to 2011 Hong Kong Population Census (Lantau) is assumed as a worse case scenario, which would amount to about 30,590 residents.
- 3.3.3 A total of 242 employees are assumed to work in non-domestic area (including clubhouse).

3.3.4 **Table 3.3** below shows the detailed calculation for the sewage generation rate from the proposed development and the villages in vicinity.

**Table 3.3 Calculation for Sewage Generation Rate of the Proposed Development and Villages in Vicinity**

<b>1. Proposed Development (Site 1 – Site 4)</b>		
1a. Total number of residential units	=	10462 units
1b. Total number of residents	=	30340 people (average household size of 2.9 is adopted)
1c. Design flow	=	270 litre/person/day (Private R2 in Table T-1 of GESF)
1d. Sewage generation rate	=	8191.7 m <sup>3</sup> /day
<b>2. Total Non-domestic Area (Including Clubhouse)</b>		
2a. Total non-domestic area	=	7318 m <sup>2</sup>
2b. Assumed floor area per employee	=	30.3 m <sup>2</sup> per employee (worker densities refer to Table 8 of CIFSUS)
2c. Total number of employees	=	242 employees
2d. Design flow for commercial employee	=	80 litre/employee/day (refer to Table T-2 of GESF)
2e. Design flow for commercial activities	=	200 litre/employee/day (refer to Table T-2 of GESF - General)
2f. Sewage generation rate	=	67.6 m <sup>3</sup> /day
<b>Sewage Generation Rate of the Proposed Development</b>		
Flow Rate	=	8259.4 m <sup>3</sup> /day
Contributing Population	=	30590 people
Peaking Factor	=	4 (Refer to Table T-5 of GESF for population 10,000-50,000 including stormwater allowance)
Peak Flow	=	382.4 litre/sec
<b>3. Village – Pak Mong</b>		
3a. Total number of village house	=	49 Units
3b. Total number of residents	=	142 people (average household size of 2.9 is adopted)
3c. Design flow	=	270 litre/person/day (Modern Village in Table T-1 of GESF)
3d. Sewage generation rate	=	38.4 m <sup>3</sup> /day
<b>4. Village – Ngau Kwu Long</b>		
4a. Total number of village house	=	113 Units
4b. Total number of residents	=	328 people (average household size of 2.9 is adopted)
4c. Design flow	=	270 litre/person/day (Modern Village in Table T-1 of GESF)
4d. Sewage generation rate	=	88.5 m <sup>3</sup> /day
<b>Sewage Generation Rate of the Villages in Vicinity</b>		
Flow Rate	=	126.8 m <sup>3</sup> /day
Contributing Population	=	470 people
Peaking Factor	=	8 (Refer to Table T-5 of GESF for population <1,000 including stormwater allowance)
Peak Flow	=	11.7 litre/sec
<b>Total Sewage Generation Rate of the Proposed Development and Villages in Vicinity</b>		
Flow Rate	=	38599.2 m <sup>3</sup> /day
Contributing Population	=	142960 people
Peaking Factor	=	4 (Refer to Table T-5 of GESF for population 10,000-50,000 including stormwater allowance)
Peak Flow	=	1787.0 litre/sec

### 3.4 Proposed Sewerage Arrangement

- 3.4.1 The sewage flow generated from the proposed development will be proposed to discharge to SHWSTW which is the nearest sewage treatment works situated in the northeast to the Subject Site.
- 3.4.2 The designed capacity of SHWSTW is 180,000 m<sup>3</sup>/day and it is estimated to reach a projected flow of 144,585 m<sup>3</sup>/day in Year 2031, including the ultimate stage of Tung Chung West and Tung Chung East Development, according to the EIA Report for Tung Chung New Town Extension. The relevant page for estimation of sewage flow at SHWSTW is extracted as **Appendix 3.1** for reference.
- 3.4.3 The estimation on the sewage flow at SHWSTW contributed by the proposed development, villages in vicinity and also the existing and committed developments are shown in **Table 3.4** below. The proposed development with a sewage flow rate of approximately 8,259 m<sup>3</sup>/day is estimated to about 4.6% of the design capacity at SHWSTW.
- 3.4.4 For the target completion year of the proposed development in Year 2026, the sewage flow contributed by the proposed development and the surrounding developments including villages in vicinity is estimated to about 62% of the designed capacity at SHWSTW. Therefore, the SHWSTW with its designed maximum handling capacity of 180,000 m<sup>3</sup>/day is sufficient to cater for committed development and the proposed residential development.

**Table 3.4 Estimation of Sewage Flow Contribution at SHWSTW**

Year	Designed Capacity of SHWSTW (m <sup>3</sup> /day)	Estimated Flow of the Proposed Development (m <sup>3</sup> /day)	Estimated Flow of the Villages in Vicinity (m <sup>3</sup> /day)	Projected Flow at SHWSTW Contributed by Existing and Committed Development (m <sup>3</sup> /day)	Estimated Flow including the Proposed Development and the Surrounding Developments (m <sup>3</sup> /day)	Contributed by the Proposed Development only (m <sup>3</sup> /day)	Contributed by the Proposed Development and the Surrounding Developments (m <sup>3</sup> /day)
2026	180,000	8,259	127	103,231	111,617	4.6%	62.0%
2031	180,000	8,259	127	144,585	152,971	4.6%	85.0%

- 3.4.5 With adequate capacity at SHWSTW to cater the sewage generated from the proposed residential development, future sewer system connecting the proposed development and the SHWSTW shall be constructed in due course.
- 3.4.6 Public sewer collecting the wastewater discharge from village areas shall be constructed, whereas septic tank facilities are avoided so as to prevent any adverse water quality impact on surrounding water body, e.g. nearby rivers with natural value.

### 3.5 Overall Conclusion

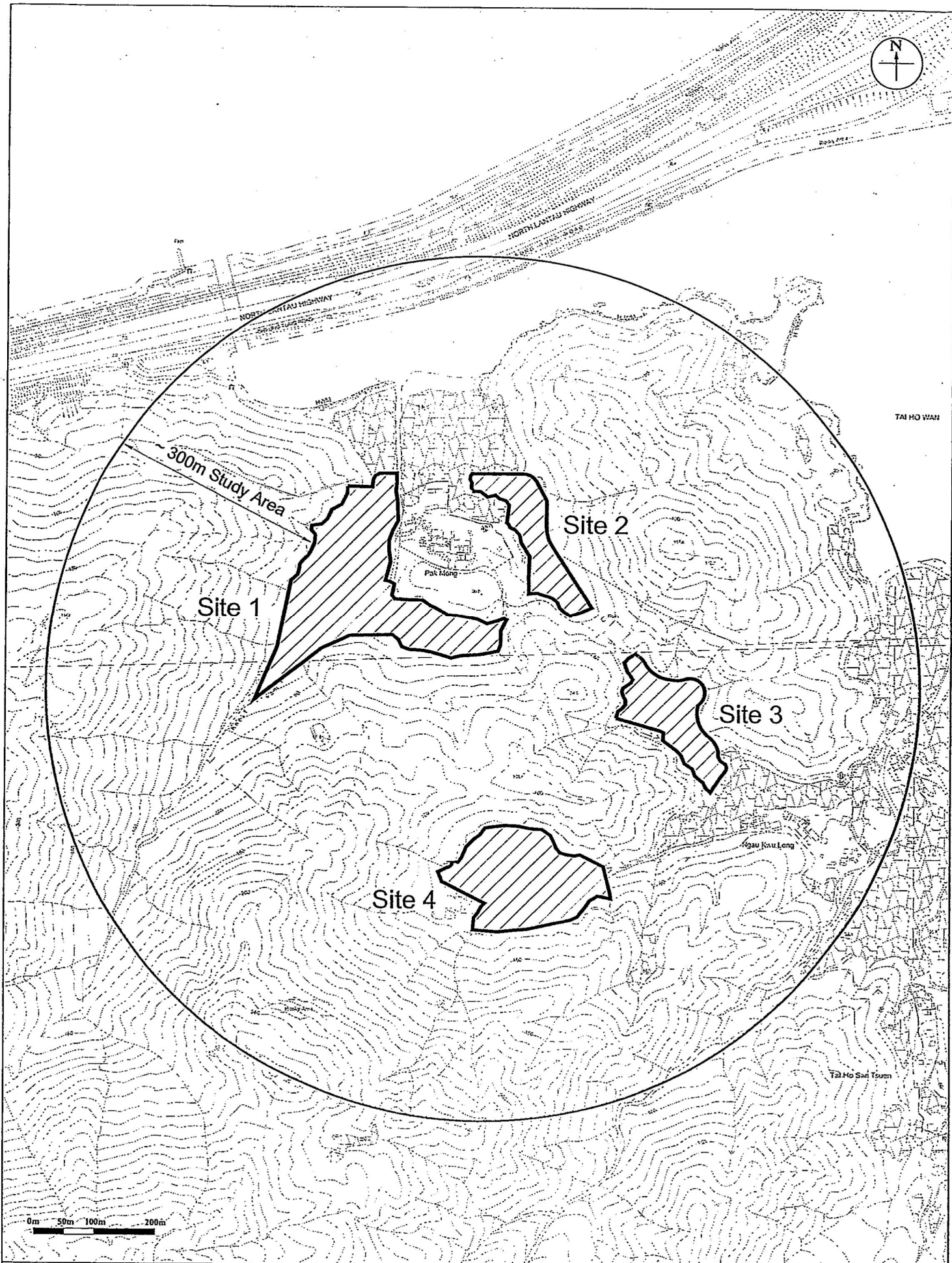
- 3.5.1 Based on the sewerage impact assessment results, the SHWSTW with its designed maximum handling capacity of 180,000 m<sup>3</sup>/day has sufficient capacity to cater for committed development and proposed development. Future sewer system connecting the proposed development and the SHWSTW as well as the public sewer collecting the wastewater from village areas shall be constructed in due course.
- 3.5.2 No adverse sewerage impact is anticipated on the proposed residential developments.

## OVERALL CONCLUSION

- 3.5.4 The potential environmental air quality and noise impact have been evaluated.
- 3.5.5 The minimum buffer separation distance between the Subject Sites and the main carriageways and local road are respectively over 200 m and not less than 5m, which comply with the relevant HKPSG requirements. No adverse vehicular emission impact on the proposed residential developments is envisaged. According to site investigations, there was no chimney and other air pollution source nearby the Subject Sites. Air quality impact due to industrial activities is not anticipated.
- 3.5.6 The subject sites are not near to existing and planned helipad facility, and also outside NEF25 contour of Hong Kong International Airport so that HKPSG standard is complied with. Site investigation revealed that there was no identified industrial activities or noise sources in the vicinity of the Subject Sites. Moreover, there is no railway noise source identified in the vicinity (i.e. 300 m) of the Subject sites. As a result, no adverse industrial noise impact and railway noise impact are anticipated on the proposed residential developments.
- 3.5.7 According to the road traffic noise impact assessment result based on traffic forecast representative of the worst case within 15 years from tentative completion year of the proposed residential developments (i.e. year 2026), full compliance of the road traffic noise standard is achieved. The future residents would not be subject to adverse road traffic noise impact with proposed noise mitigation measures in place.
- 3.5.8 According to the sewerage impact assessment, the SHWSTW with its designed maximum handling capacity of 180,000 m<sup>3</sup>/day has sufficient capacity to cater for committed development and proposed development. The sewage flow generated from the Subject Sites will be discharged to SHWSTW with future sewer system. Therefore, there is no insurmountable sewerage impact envisaged.
- 3.5.9 Based on the evaluation of this environmental review, it is concluded that the proposed residential developments in the Subject Sites is environmentally acceptable.



## FIGURES



**Figure: 1.1**

**Title:** Location of the Subject Site and its Environ

**Project:** Proposed Development at Tai Ho, Tung Chung, Lantau Island  
Environmental Review

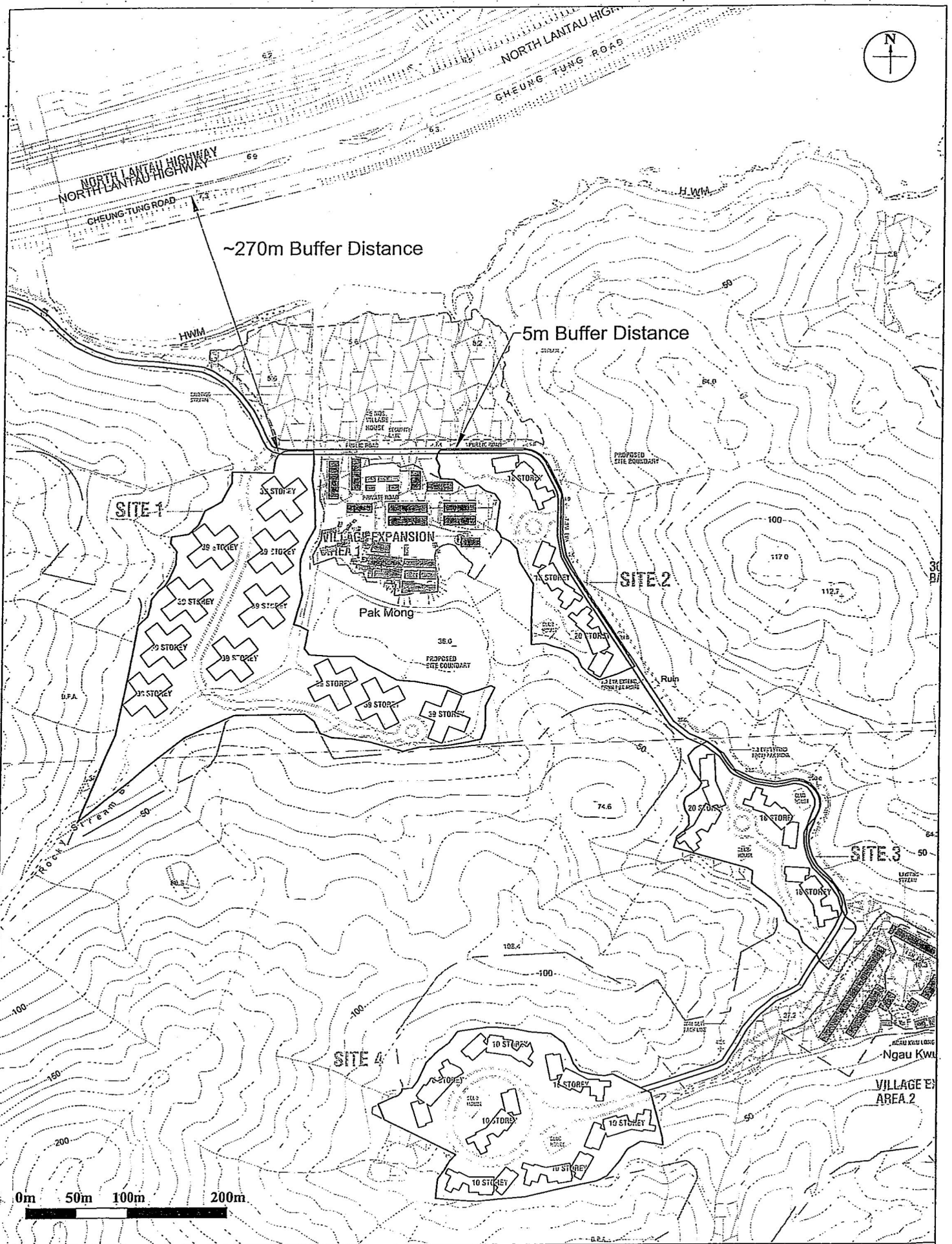
**RAVE** ENVIRON

Drawn by: JC

Checked by: KL

Rev.: 1.0

Date: May 2017



**Figure: 1.2**

**Title:** Buffer Distances between the Subject Sites and Road Carriageways

**Project:** Proposed Development at Tai Ho, Tung Chung, Lantau Island  
Environmental Review

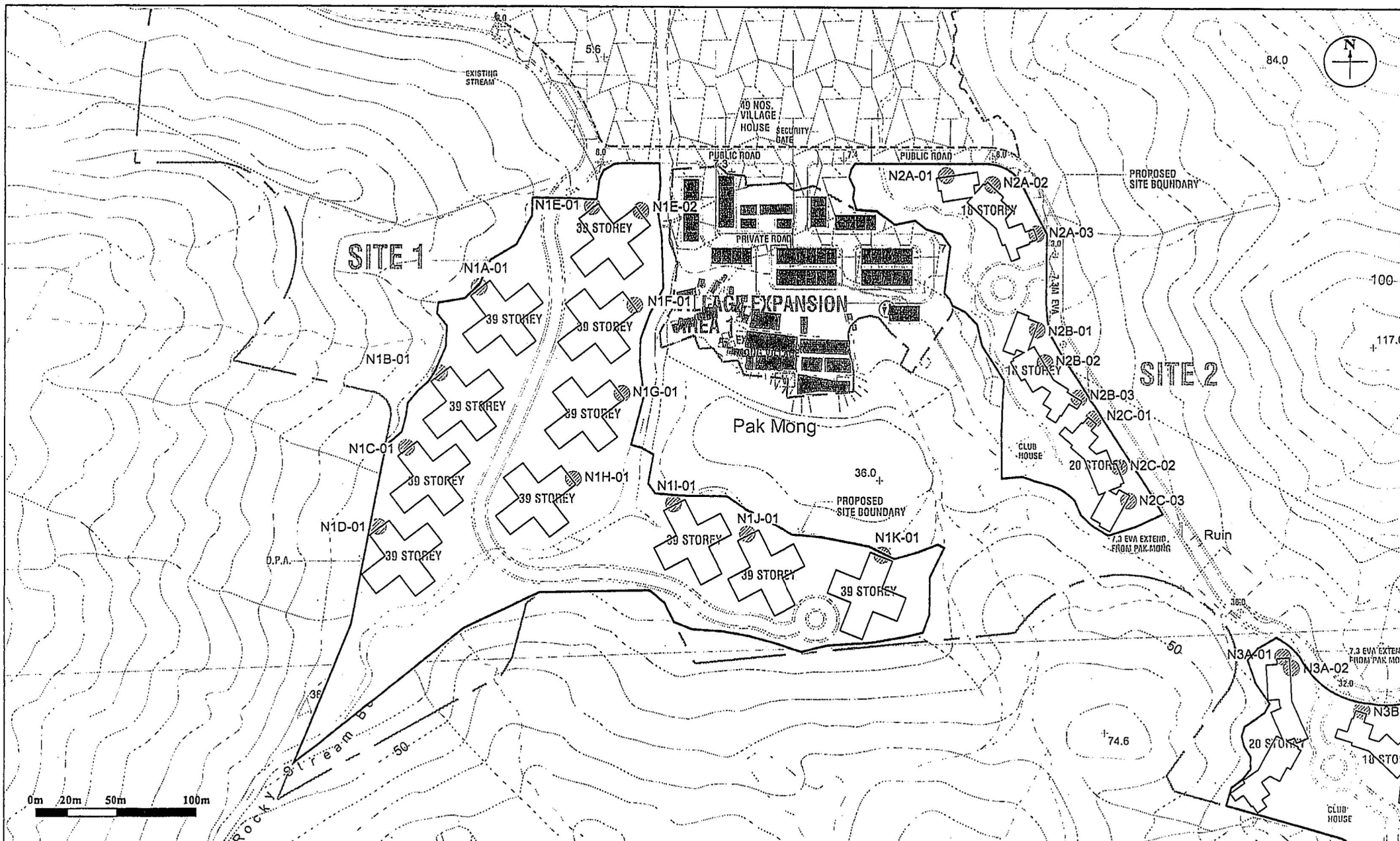
**RAMBOLL** ENVIRON

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Rev.: 1.0

Date: May 2017



**Figure:** 2.1a

**Title:** Locations of Representative Noise Sensitive Receivers for Road Traffic Noise Impact Assessment (Site 1 and Site 2)

**Project:** Proposed Development at Tai Ho, Tung Chung, Lantau Island - Environmental Review

**RAMBOLL** ENVIRON

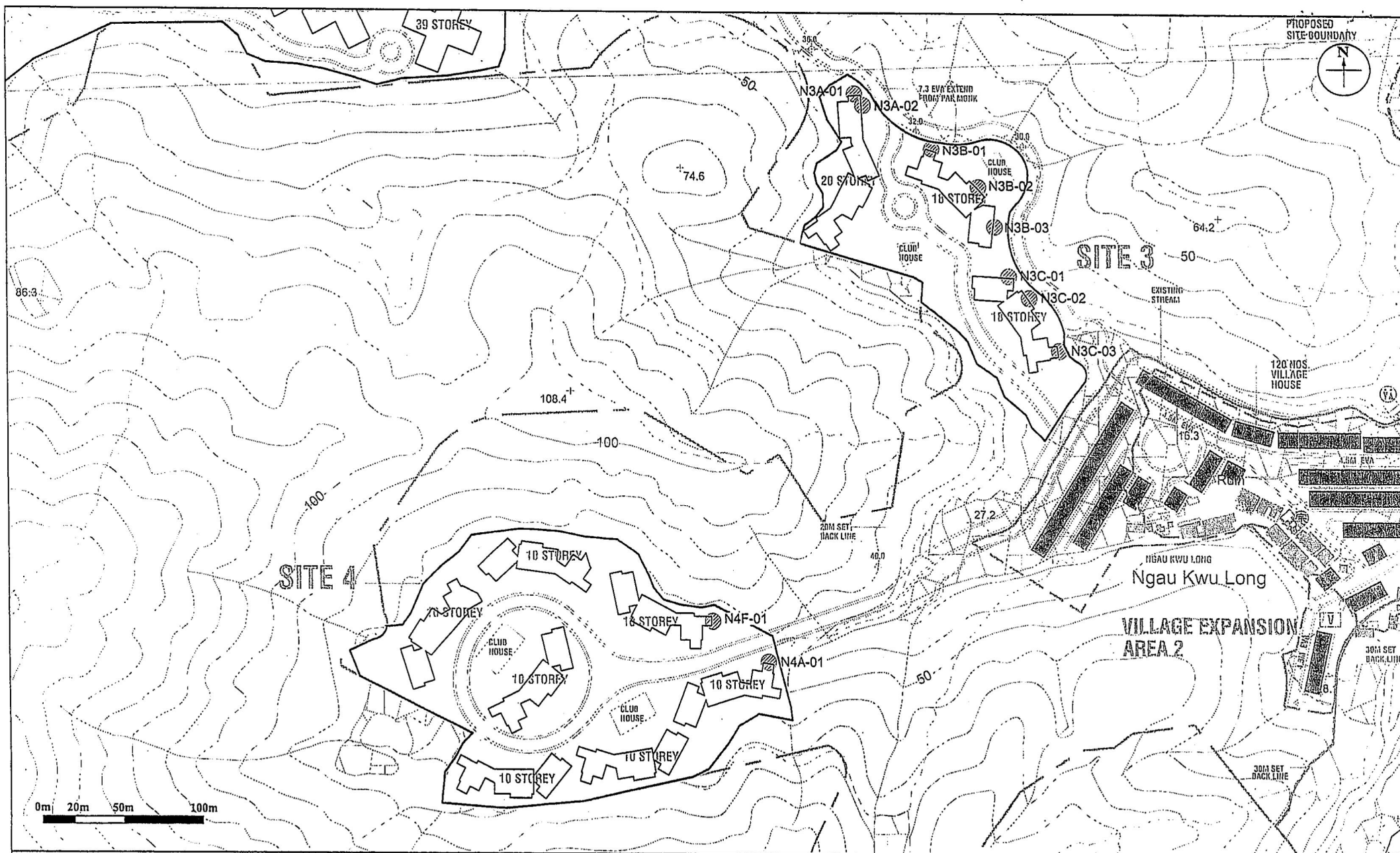
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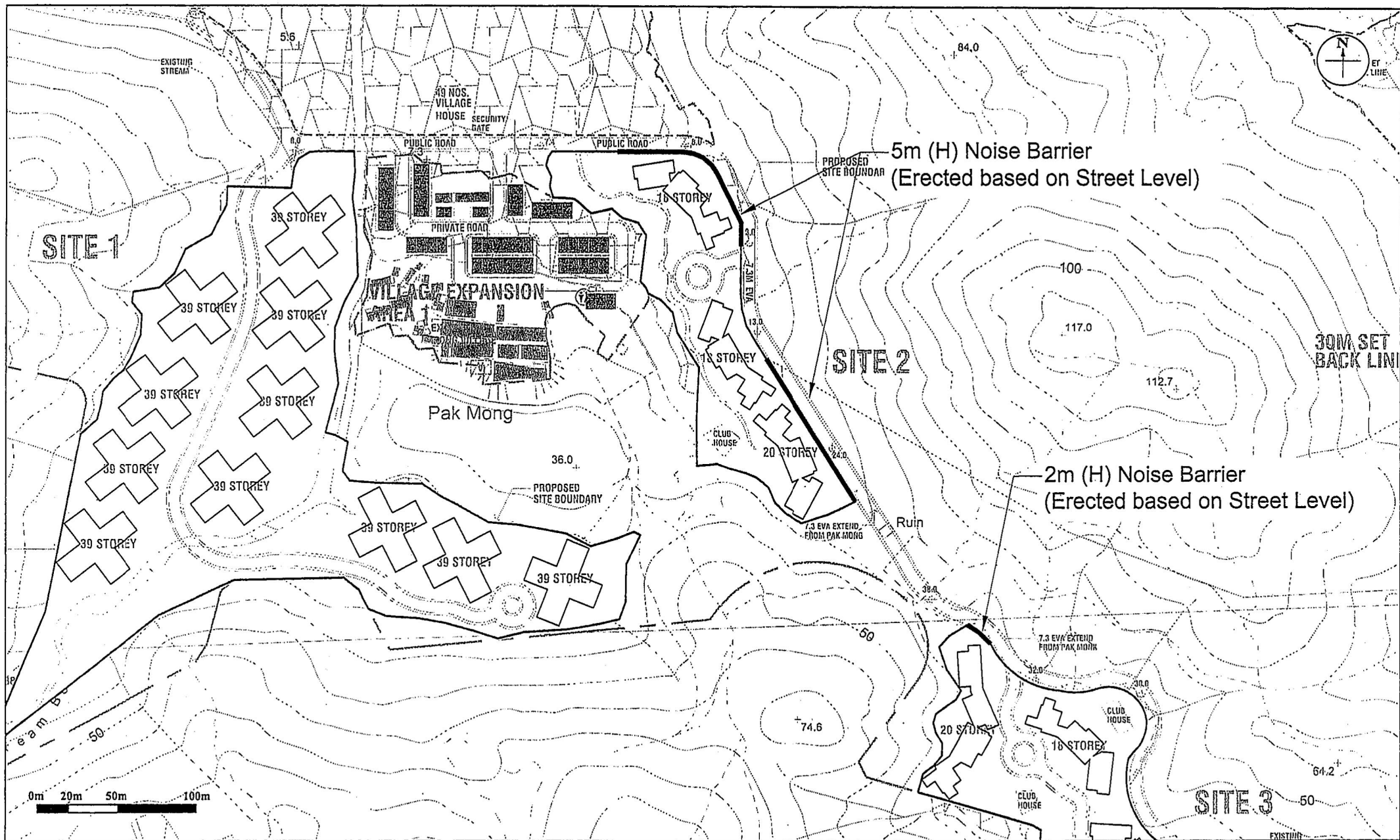


**Figure:** 2.1b

**Title:** Locations of Representative Noise Sensitive Receivers for Road Traffic Noise Impact Assessment (Site 3 and Site 4)

**Project:** Proposed Development at Tai Ho, Tung Chung, Lantau Island - Environmental Review

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Checked by:	KL
Rev.:	1.0
Date:	May 2017



**Figure: 2.2**

**Title:** Recommended Road Traffic Noise Mitigation Measures

**Project:** Proposed Development at Tai Ho, Tung Chung, Lantau Island - Environmental Review

**RAMBOLL** ENVIRON

Drawn by: JC

Checked by: KL

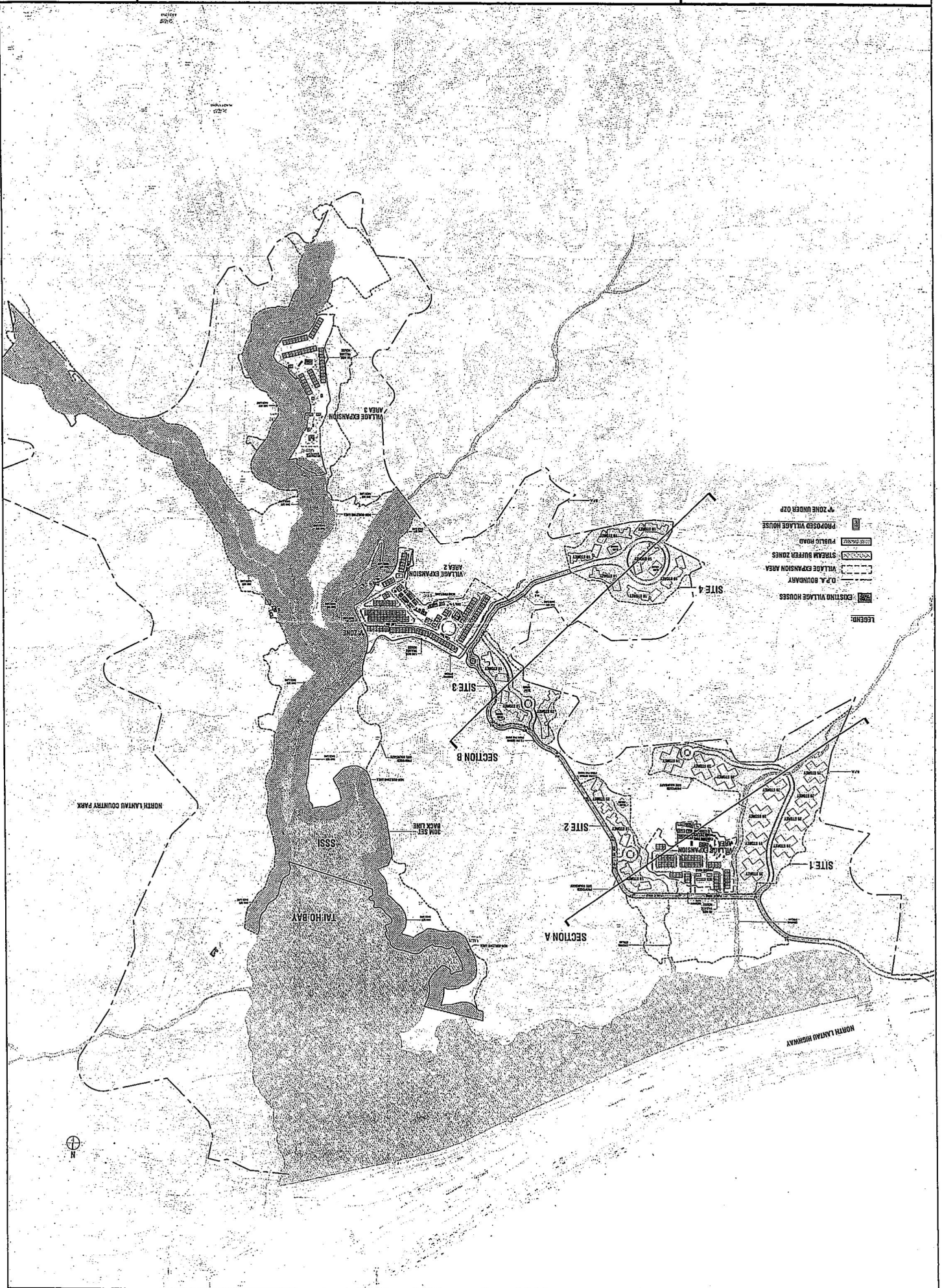
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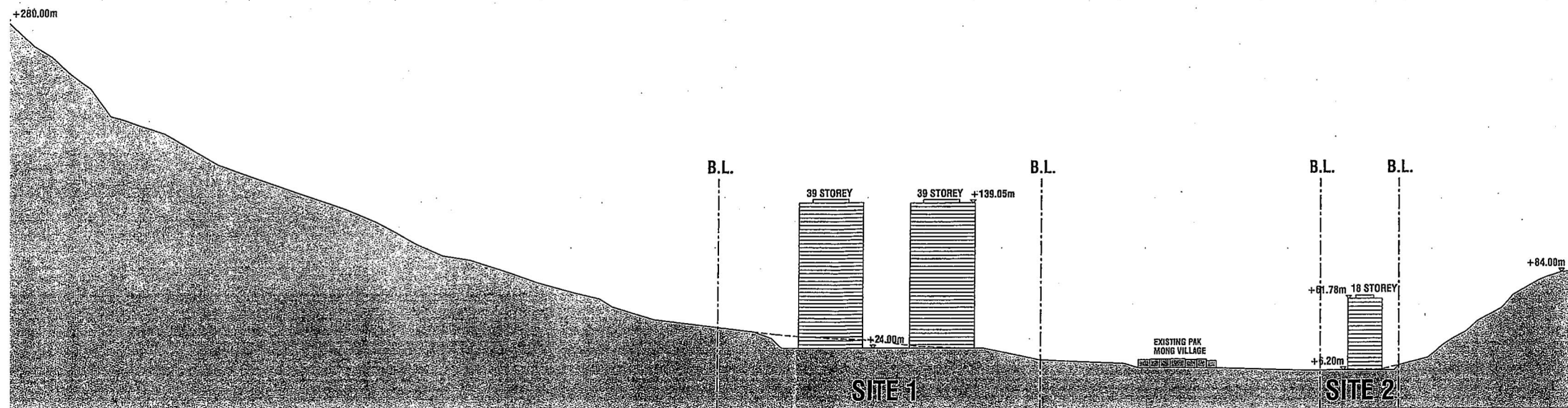
Date: May 2017



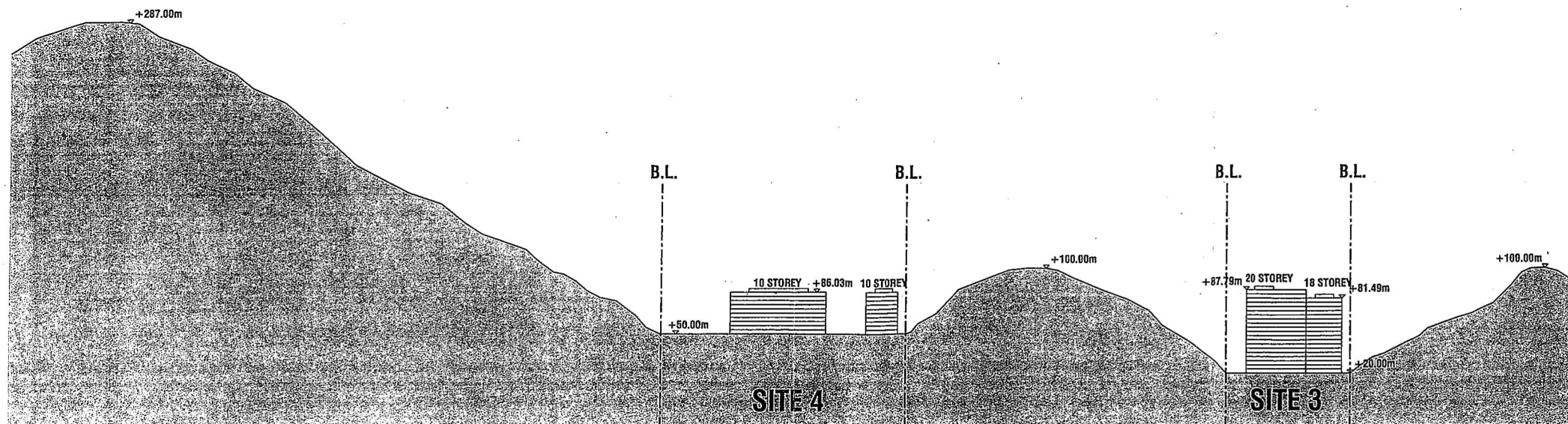
## **APPENDIX 1.1**

### **MASTER LAYOUT PLAN OF THE PROPOSED DEVELOPMENT**





SECTION A



SECTION B

1:3000 in A3

## **APPENDIX 2.1**

### **TRAFFIC FORECAST OF YEAR 2041**

CHK50282710

Tai Ho OZP Representation

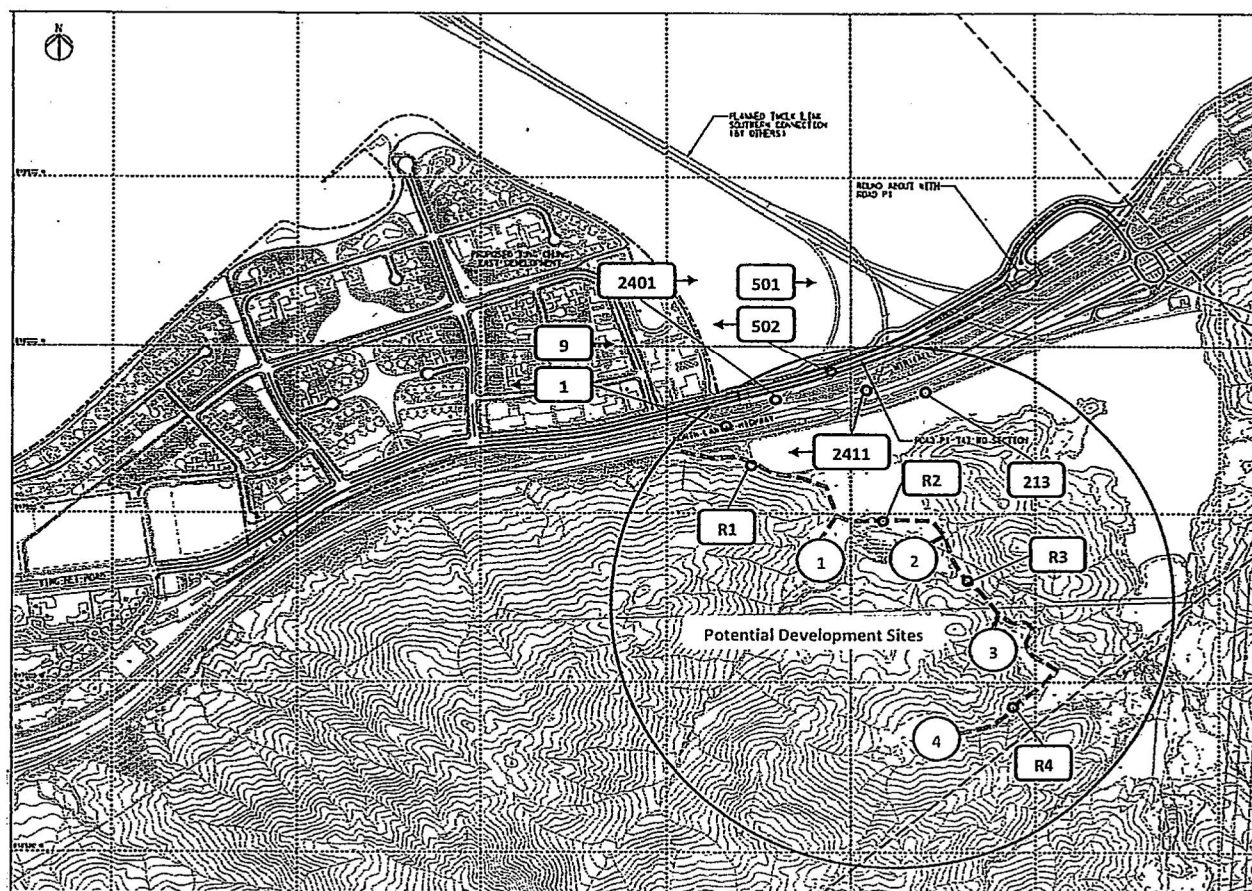
EIA Traffic Forecast

Source: EIA Report for Tung Chung New Town Extension (Dec 2015)

Appendix 4.12 Key Map of Traffic Flow and Traffic Data at 2023, 2025, 2027 and 2045

[http://www.epd.gov.hk/eia/register/report/eiareport/eia\\_2332015/html/EIA/Appendices/4.%20Noise/Appendix%204.12.pdf](http://www.epd.gov.hk/eia/register/report/eiareport/eia_2332015/html/EIA/Appendices/4.%20Noise/Appendix%204.12.pdf)

ID	Location	Road Type	Design Speed	Year 2041	
				Total Flow	Heavy Vehs (%)
1	North Lantau Highway (westbound to Airport)	Expressway	110	3968	24.1
9	North Lantau Highway (eastbound to Kowloon)	Expressway	110	3407	25.4
213	Cheung Tung Road (2-way)	Local Distributor	50	724	24.5
501	Road P1 (eastbound)	Primary Distributor	50	1080	24.1
502	Road P1 (westbound)	Primary Distributor	50	883	27.3
2401	TMCLKL-S Slip Road (northbound from Tung Chung)	Trunk Road	80	667	36.8
2411	TMCLKL-S Slip Road (southbound to Tung Chung)	Trunk Road	80	1004	36.7
R1	Public Access Road (Cheung Tung Road - Site 1) (2-way)	Local Distributor	50	488	25.0
R2	Public Access Road (Site 1 - Site 2) (2-way)	Local Distributor	50	258	25.0
R3	Public Access Road (Site 2 - Site 3) (2-way)	Local Distributor	50	182	25.0
R4	Public Access Road (Site 3 - Site 4) (2-way)	Local Distributor	50	110	25.0



## **APPENDIX 2.2**

### **ROAD TRAFFIC NOISE ASSESSMENT RESULT**



Predicted Road Traffic Noise at Selected Sensitive Receivers - Year 2041  
 Tal Ho - Base Case

Site 1													
Floor	mPD	N1A-01	N1B-01	N1C-01	N1D-01	N1E-01	N1F-01	N1G-01	N1H-01	N1I-01	N1J-01	N1K-01	
G/F	24.0	63	54	49	26	69	68	56	53	36	50	50	55
1/F	27.0	63	54	49	26	69	68	56	53	37	51	51	55
2/F	29.5	63	54	49	26	69	68	56	53	38	51	51	55
3/F	32.5	63	54	49	26	69	67	56	53	40	51	51	55
4/F	35.8	63	55	49	27	68	67	56	54	41	52	52	55
5/F	38.8	63	55	49	27	68	67	57	54	42	52	52	55
6/F	41.7	63	55	50	28	68	67	57	54	42	53	53	56
7/F	44.7	64	55	50	28	68	67	57	54	43	53	53	56
8/F	47.6	64	55	50	30	68	67	57	54	43	53	53	56
9/F	50.6	64	55	50	31	68	67	57	54	43	53	53	56
10/F	53.5	64	55	50	33	68	67	57	54	43	53	53	56
11/F	56.5	64	55	50	35	68	67	57	54	43	53	53	56
12/F	59.4	64	55	50	39	68	67	57	54	43	53	53	56
13/F	62.4	64	56	51	42	68	67	57	54	43	53	53	56
14/F	65.3	64	56	51	43	68	66	57	55	43	53	53	56
15/F	68.3	64	56	51	43	68	66	57	55	43	53	53	56
16/F	71.2	64	56	51	43	68	66	57	55	43	53	53	56
17/F	74.2	64	56	51	43	68	66	57	55	43	53	53	56
18/F	77.1	64	56	51	43	68	66	56	55	43	53	53	56
19/F	80.1	64	56	51	43	68	66	56	55	43	54	53	56
20/F	83.0	64	56	51	43	68	66	56	55	43	53	53	56
21/F	86.0	64	56	51	43	67	66	56	55	43	54	53	56
22/F	88.9	64	56	51	43	67	66	56	55	43	54	54	56
23/F	91.9	64	56	51	43	67	66	56	55	43	54	54	56
24/F	94.8	64	56	51	43	67	66	56	54	43	54	54	56
25/F	97.8	64	56	51	43	67	66	56	54	43	54	54	56
26/F	100.7	64	56	51	43	67	66	56	54	43	54	54	56
27/F	103.7	64	56	51	43	67	66	56	54	43	54	54	56
28/F	106.6	64	57	51	43	67	66	56	54	43	54	54	56
29/F	109.6	64	57	52	43	67	66	56	54	42	54	54	56
30/F	112.5	64	57	52	43	67	66	56	54	42	54	54	56
31/F	115.5	64	57	52	43	67	65	56	54	42	54	54	56
32/F	118.4	64	57	52	43	67	65	56	54	42	54	54	56
33/F	121.4	64	57	52	43	67	65	56	54	42	54	54	56
34/F	124.3	64	57	52	43	67	65	55	54	42	54	54	55
35/F	127.3	64	57	53	43	67	65	55	54	42	54	54	55
36/F	130.2	64	57	53	43	67	65	55	54	42	54	54	55
37/F	133.2	64	57	53	43	67	65	55	54	42	54	54	55
38/F	136.1	64	57	53	44	67	65	55	54	42	53	54	55

71.2 Denotes Pr Denotes Predicted Noise Level that will exceed limit of L10(1-hour) 70.4dB(A)

Note: The predicted noise as shown in the table is not the actual noise level at the external façade after the application of acoustic windows.  
 These predicted noise levels are the equivalent noise levels at 1m from the external façade after accounting the reduction in noise levels inside the flat offered by the proposed acoustic window.

Site 2													
Floor	mPD	N2A-01	N2A-02	N2A-03	N2B-01	N2B-02	N2B-03	N2C-01	N2C-02	N2C-03			
G/F	6.2	71.2	71.2	72.2	69	69	71.2	71.2	70	68			
1/F	9.3	71.2	71.2	73.2	69	69	72.2	72.2	71.2	68			
2/F	12.4	71.2	71.2	73.2	70	70	72.2	72.2	71.2	68			
3/F	15.4	70	70	73.2	69	69	73.2	73.2	71.2	69			
4/F	18.5	70	70	72.2	69	69	73.2	73.2	72.2	69			
5/F	21.6	69	70	72.2	68	69	72.2	73.2	72.2	69			
6/F	24.7	69	69	71.2	68	69	72.2	72.2	72.2	69			
7/F	27.8	68	69	71.2	67	68	71.2	72.2	72.2	69			
8/F	30.8	68	69	70	67	68	70	71.2	71.2	69			
9/F	33.9	68	68	70	66	67	70	70	71.2	69			
10/F	37.0	67	68	69	66	67	69	70	70	68			
11/F	40.1	67	68	69	66	67	69	69	70	68			
12/F	43.2	67	68	68	65	66	68	69	69	68			
13/F	46.2	67	67	68	65	66	68	68	69	67			
14/F	49.3	66	67	68	65	66	68	68	69	67			
15/F	52.4	66	67	67	64	65	67	68	68	67			
16/F	55.5	66	67	67	64	65	67	67	68	66			
17/F	58.6	66	66	67	64	65	67	67	67	66			
18/F	61.6	-	-	-	-	-	67	67	67	66			
19/F	64.7	-	-	-	-	-	67	67	67	66			

Site 3													
Floor	mPD	N3A-01	N3A-02	N3B-01	N3B-02	N3B-03	N3C-01	N3C-02	N3C-03				
G/F	20.0	68	67	67	65	65	65	65	66	67			
1/F	23.4	69	68	67	65	65	65	65	66	67			
2/F	26.8	70	68	68	65	66	65	65	67	68			
3/F	30.2	70	69	68	65	66	66	66	67	68			
4/F	33.6	70	69	68	65	66	66	66	67	68			
5/F	37.0	70	69	68	65	66	66	66	67	68			
6/F	40.4	70	69	67	65	65	65	65	66	68			
7/F	43.8	70	68	67	65	65	65	65	66	67			
8/F	47.2	69	68	66	65	64	64	64	65	67			
9/F	50.6	69	67	66	64	64	64	64	65	66			
10/F	54.0	68	67	65	64	64	64	63	65	66			
11/F	57.4	68	66	65	64	63	63	63	64	65			
12/F	60.8	67	66	65	64	63	63	63	64	65			
13/F	64.2	67	65	65	64	63	63	63	63	65			
14/F	67.6	66	65	64	63	62	62	63	63	64			
15/F	71.0	66	65	64	63	62	61	63	63	64			
16/F	74.4	65	64	64	63	62	62	63	63	64			
17/F	77.8	65	64	63	63	62	62	62	62	64			
18/F	81.2	65	64	-	-	-	-	-	-	-			
19/F	84.6	65	63	-	-	-	-	-	-	-			

Site 4			
Floor	mPD	N4A-01	N4F-01
G/F	50.0	65	60
1/F	53.6	65	60
2/F	57.2	65	60
3/F	60.8	65	60
4/F	64.4	64	60
5/F	68.0	64	59
6/F	71.6	63	59
7/F	75.1	63	59
8/F	78.8	62	59
9/F	82.4	62	58

Predicted Road Traffic Noise at Selected Sensitive Receivers - Year 2041  
 Tal Ho - Mitigated Scenario (with max. 5m Noise Barrier Proposed)

Floor	mPD	N1A-01	N1B-01	N1C-01	N1D-01	N1E-01	N1F-01	N1G-01	N1H-01	N1I-01	N1J-01	N1K-01
G/F	24.0	63	54	49	26	69	68	56	52	35	50	54
1/F	27.0	63	54	49	26	69	68	56	53	36	50	54
2/F	25.9	63	54	49	26	69	68	56	53	38	51	54
3/F	23.9	63	54	49	26	69	67	56	53	39	51	54
4/F	35.9	63	55	49	27	68	67	56	53	39	51	55
5/F	38.8	63	55	49	27	68	67	56	53	39	52	55
6/F	41.7	63	55	50	28	68	67	56	54	39	52	55
7/F	44.7	64	55	50	29	68	67	57	54	40	53	55
8/F	47.6	64	55	50	30	68	67	57	54	40	53	55
9/F	50.6	64	55	50	31	68	67	57	54	40	53	55
10/F	53.5	64	55	50	33	68	67	57	54	40	53	55
11/F	56.5	64	55	50	35	68	67	57	54	40	53	55
12/F	59.4	64	55	50	39	68	67	57	54	40	53	55
13/F	62.4	64	56	51	42	68	67	57	54	40	53	55
14/F	65.3	64	56	51	43	68	66	56	54	40	53	55
15/F	68.3	64	56	51	43	68	66	56	54	40	53	55
16/F	71.2	64	56	51	43	68	66	56	54	40	53	55
17/F	74.2	64	56	51	43	68	66	56	54	40	53	55
18/F	77.1	64	56	51	43	68	66	56	54	40	53	55
19/F	80.1	64	56	51	43	68	66	56	54	39	53	55
20/F	83.0	64	56	51	43	68	66	56	54	39	53	55
21/F	86.0	64	56	51	43	67	66	56	54	39	53	55
22/F	88.9	64	56	51	43	67	66	56	54	39	53	55
23/F	91.9	64	56	51	43	67	66	56	54	39	53	55
24/F	94.8	64	56	51	43	67	66	56	54	39	53	55
25/F	97.8	64	56	51	43	67	66	56	54	39	53	55
26/F	100.7	64	56	51	43	67	66	56	54	39	53	55
27/F	103.7	64	56	51	43	67	66	56	54	39	53	55
28/F	106.6	64	57	52	43	67	66	56	54	39	53	55
29/F	109.6	64	57	52	43	67	66	56	54	39	53	55
30/F	112.5	64	57	52	43	67	65	56	54	39	53	55
31/F	115.5	64	57	52	43	67	65	56	54	39	53	55
32/F	118.4	64	57	52	43	67	65	56	54	39	53	55
33/F	121.4	64	57	52	43	67	65	55	54	39	53	55
34/F	124.3	64	57	52	43	67	65	55	54	39	53	55
35/F	127.3	64	57	53	43	67	65	55	54	39	53	55
36/F	130.2	64	57	53	43	67	65	55	54	39	53	55
37/F	133.2	64	57	53	43	67	65	55	54	39	53	55
38/F	136.1	64	57	53	44	67	65	55	54	40	53	55

71.2 Denotes Pr Denotes Predicted Noise Level that will exceed limit of L10(1-hour) 70.4dB(A)

Note: The predicted noise as shown in the table is not the actual noise level at the external façade after the application of acoustic windows.  
 These predicted noise levels are the equivalent noise levels at 1m from the external façade after accounting the reduction in noise levels inside the flat offered by the proposed acoustic window.

Floor	mPD	N2A-01	N2A-02	N2A-03	N2B-01	N2B-02	N2B-03	N2C-01	N2C-02	N2C-03
G/F	6.2	63	50	61	69	68	55	45	56	61
1/F	9.3	63	52	61	69	68	56	47	56	62
2/F	12.4	64	56	62	69	68	57	48	57	62
3/F	15.4	65	58	63	69	68	57	50	57	62
4/F	18.5	66	60	65	69	68	58	53	56	62
5/F	21.6	68	62	68	68	68	61	57	58	63
6/F	24.7	68	64	70	68	68	66	62	59	63
7/F	27.8	68	66	70	67	68	70	68	61	63
8/F	30.8	68	67	70	67	68	70	70	63	63
9/F	33.9	68	68	69	66	67	70	70	66	63
10/F	37.0	67	68	69	66	67	69	70	69	63
11/F	40.1	67	67	69	65	67	69	69	69	64
12/F	43.2	67	67	68	65	66	68	69	69	65
13/F	46.2	68	67	68	65	66	68	68	69	65
14/F	49.3	66	67	68	65	66	68	68	69	66
15/F	52.4	66	67	67	64	65	67	68	68	66
16/F	55.5	66	66	67	64	65	67	67	68	66
17/F	58.6	66	66	67	64	65	67	67	67	66
18/F	61.6	-	-	-	-	-	67	67	67	66
19/F	64.7	-	-	-	-	-	67	67	67	65

Floor	mPD	N3A-01	N3A-02	N3B-01	N3B-02	N3B-03	N3C-01	N3C-02	N3C-03
G/F	20.0	63	65	67	65	65	65	66	67
1/F	23.4	64	66	67	65	65	65	66	67
2/F	26.8	65	66	68	65	66	65	67	68
3/F	30.2	65	67	68	65	66	66	67	68
4/F	33.6	66	67	68	65	66	66	67	68
5/F	37.0	67	67	68	65	66	66	67	68
6/F	40.4	69	68	67	65	65	65	66	68
7/F	43.8	70	68	67	65	65	65	66	67
8/F	47.2	69	68	66	65	64	64	65	67
9/F	50.6	69	67	66	64	64	64	65	66
10/F	54.0	68	67	65	64	64	63	65	66
11/F	57.4	68	66	65	64	63	63	64	65
12/F	60.8	67	66	65	64	63	62	64	65
13/F	64.2	67	65	65	64	63	62	63	65
14/F	67.6	66	65	64	63	62	61	63	64
15/F	71.0	66	65	64	63	62	62	63	64
16/F	74.4	65	64	64	63	62	62	63	64
17/F	77.8	65	64	63	63	62	62	62	64
18/F	81.2	65	64	-	-	-	-	-	-
19/F	84.6	65	63	-	-	-	-	-	-

Floor	mPD	N4A-01	N4F-01
G/F	50.0	66	60
1/F	53.6	65	60
2/F	57.2	65	60
3/F	60.8	65	60
4/F	64.4	64	60
5/F	68.0	64	59
6/F	71.6	63	59
7/F	75.2	63	59
8/F	78.8	62	58
9/F	82.4	62	58

## **APPENDIX 3.1**

### **SEWAGE FLOW ESTIMATION FOR SHWSTW EXTRACTED FROM EIA REPORT**



寄件者: 梅窩鄉事委員會 <muiworc@gmail.com>  
寄件日期: 27日06月2017年星期二 14:19  
收件者: tpbpd@pland.gov.hk  
主旨: (更正版)大蠔分區計畫大綱圖  
附件: 更正-大蠔大綱圖.pdf

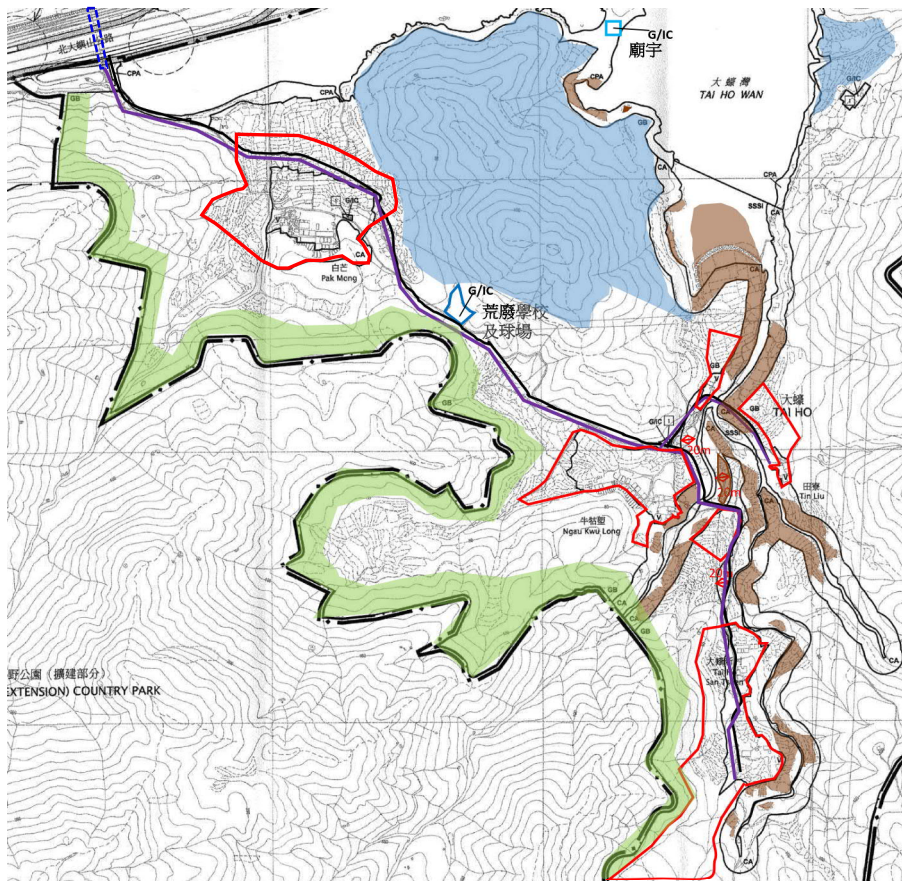
城市規劃委員會  
秘書處:

梅窩鄉事委員會之編號 R12 -R1061  
現附上(更正版)大蠔分區計畫大綱的圖片。  
煩請跟進。  
謝謝!

Please feel free to contact us during office hour if you have any inquiries, Thank you.

Best Regards,

Ann Wan  
Secretary  
Mui Wo Rural Committee  
Tel : 2984 8473  
Fax : 2984 9089  
Email : [muiworc@gmail.com](mailto:muiworc@gmail.com)  
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- 鄉村式發展
- 排污及排水渠
- 通道
- 政府、機構或社區
- 改善現有隧道通往未來東涌東發展區
- 農地
- 公營房屋
- 綠化帶



# MASTERPLAN LIMITED

Planning and Development Advisors

領賢規劃顧問有限公司

The Secretary,  
Town Planning Board,  
15/F, North Point Government Offices,  
333 Java Road, North Point,  
Hong Kong.

Date: 13 July, 2017

By Hand

Dear Sirs,

**Re: Comment on Representations relating  
to the Draft Tai Ho OZP No. S/I-TH/1**

***Proposal for a Balanced Conservation  
and Development Approach for Tai Ho***

**1. Introduction**

- 1.1 We are authorized by the Commenter, a consortium of major private land owners of Tai Ho, including Sun Hung Kai Properties, Swire Properties Limited, and Hong Kong Land; to act on their behalf in submitting this Comment under Section 6A(1) of the Town Planning Ordinance to the Town Planning Board, with respect to the Draft Tai Ho OZP No. S/I-TH/1 (the "OZP").
- 1.2 This Comment is in response to the Representations of the Green Groups (i.e. R1 to R9), and the Villagers and their representatives (i.e. R10 to R1061).

**2. Responses to Green Groups**

- 2.1 The Commenter agrees with the Green Group's position on increasing conservation measures to protect the Tai Ho Stream (SSSI zone) at the most ecologically sensitive location in Tai Ho. In this respect, the current Conservation Area (CA) zoning at the Tai Ho Stream could be expanded to cover the surrounding riparian land. (Figure 1) As a result, the CA zone coverage could double in size, compared to the OZP.
- 2.2 However, the Tai Ho Stream and its riparian area are largely privately-owned, and its long-term conservation can only be effectively implemented by addressing the development needs of these private land owners. As such, the Commenter proposes an expanded CA zone with management under Management Agreement (MA) at the most ecologically sensitive locations at Tai Ho stream; *in conjunction* with suitable residential and other developments at less ecologically sensitive locations to the west. (Figure 2) Under the MA approach, a suitable Non-Government Organization (NGO) could be identified to initiate a management proposal to the Government and to undertake the conservation management. This is in line with the New Nature Conservation Policy (NNCP) that has designated Tai Ho as the third priority site.



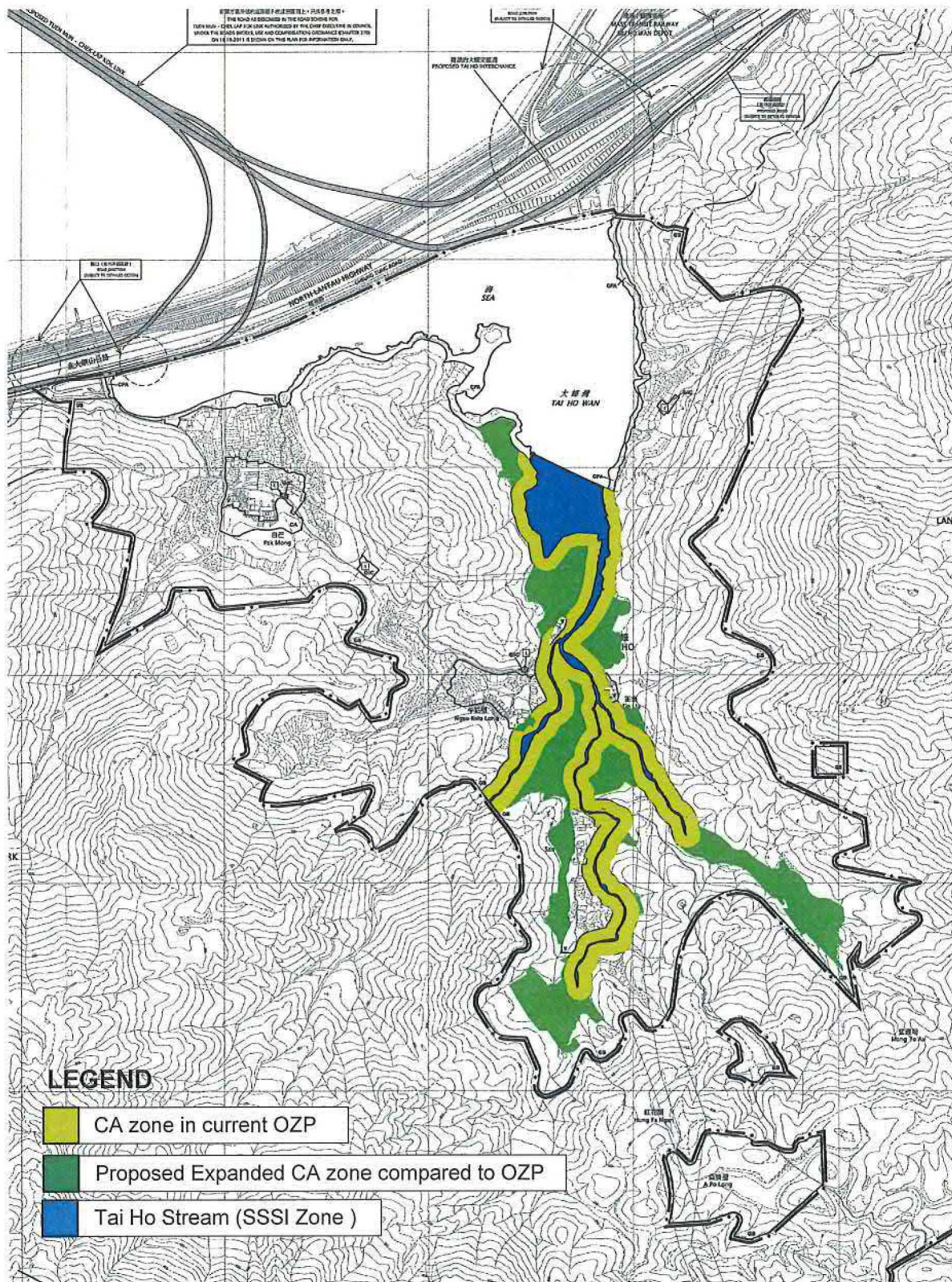


Figure 1: (*Indicative*) Proposed expanded CA zone and NBA at Pak Mong Stream, compared with OZP



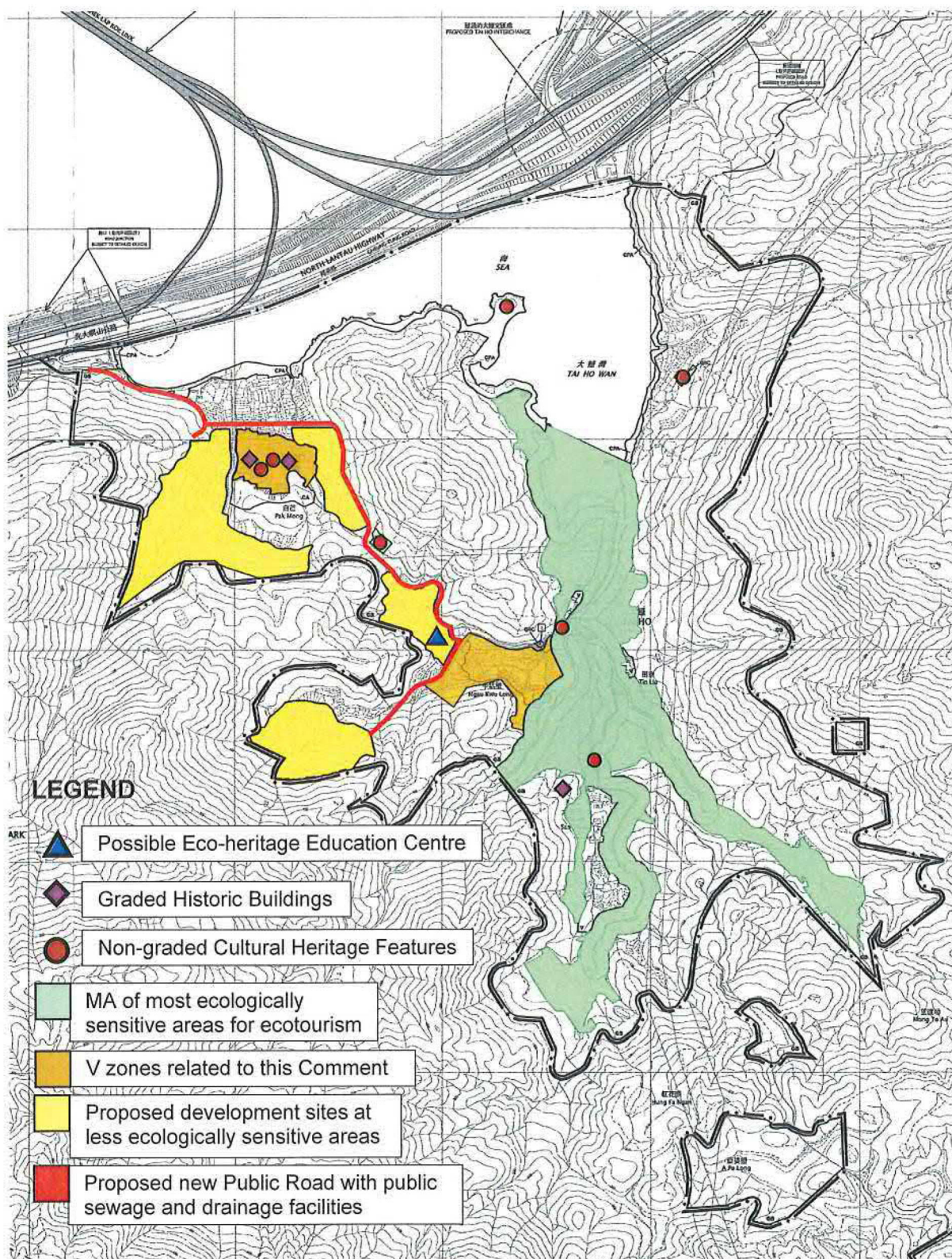


Figure 2: (*Indicative*) Proposed MA approach and opportunities for eco-heritage tourism



### **3. Responses to Villagers**

- 3.1 The Commenter agrees that the overall planning intention of the OZP is biased towards ecological conservation, and the “incremental approach” for the V zones in the OZP does not justify undermining the need to meet the village housing demand. The OZP is restrictive to the point that it constitutes a deprivation of private development rights. The conservation measures should be concentrated at the most ecologically sensitive area at the Tai Ho stream locality, while providing flexibility for development at the less ecologically sensitive areas.
- 3.2 In addition, the Government concerns on adverse ecological impact of the additional developments could well be addressed by providing needed infrastructure facilities. The proposed new public road is such a measure that would enable the provision of sewage and drainage facilities, as well as an orderly development pattern and efficient use of land for village house development. (Figure 2)
- 3.3 The Commenter agrees to expand the V zone at Ngau Kwu Long Village to provide land to reallocate village housing away from the more ecologically sensitive locations or CA zones. The V zone at Pak Mong Village could also be able to accommodate more village housing than that proposed in the OZP. (Figure 2) This would provide incentive for the Commenter and other private land owners (including villagers) to take forward the land exchange process to consolidate developable land and to surrender land at the conservation zones. Without a zoning plan that defines and balances a land use framework for *both* conservation and development together, there is no certainty or guarantee for development to take place and land exchange to proceed.

### **4. The Sustainable Lantau Blueprint**

- 4.1 The Sustainable Lantau Blueprint (SLB) was published in June 2017, after the closing date of representations, and earmarked Tai Ho for eco-tourism development. The SLB suggests an “education centre” to be located within Tai Ho to facilitate the public education and conservation of the natural area. The Commenter believes this is only possible by balancing the needs of the major stakeholder groups, which require a zoning framework to facilitate development and village housing at suitable locations, and a MA approach to boost ecotourism and conservation of the Tai Ho stream.
- 4.2 Tai Ho is important for both heritage and ecology, and managed in an appropriate way, would stimulate tourism development. To support the MA approach, the Commenter is open to include an “Eco-heritage Education Centre” at the development sites in their private land, providing essential conservation education facilities and displays, as well as a gathering place for eco-heritage tours and other public education activities. (Figure 2) The tour routes will make use of existing trails and will be designed with avoidance of certain areas of high conservation value, to achieve a balance of preserving the biodiversity while still serving the education purposes. There is also potential to link together heritage features for the eco-heritage tours. There are three graded historic buildings (i.e. Pak Mong watch tower, Pak Mong entrance gate, and Tai Ho watch tower) by the Antiquities Advisor Board, and a number of cultural heritage features that reflect the important history of the area, including the Leung Ma Temple, Luk Hap Yuen Temple, Man Hing Bridge, Kwok Ancestral Hall, and Pak Mong Fung Shui Wall, etc... A proposed concept for potential eco-heritage tourism, in line with the MA approach is provided in Figure 2. It could become a site for the sensitive protection of the ecologically significant components related to the Tai Ho stream, for public education and for enjoyment of the rich cultural heritage and natural environment.

- 4.3 The MA approach in conjunction with development, would meet the conservation objectives under the NNCP, and provide opportunities for eco-tourism sought for by the Government in Tai Ho. Again, private sector and villagers involvement is critical for the effective implementation of this approach.

**5. Conclusion**

- 5.1 The current state of affairs, as reflected by the OZP, is that the Tai Ho stream would continue to degenerate from the uncontrolled village house development in the absence of public infrastructure, and no positive management of conservation.
- 5.2 The Commenter (major private land owners), villagers, and the Green Groups have clearly laid out their positions and proposals. There is a need for zoning adjustments to the OZP to ensure a balanced conservation and development approach for these major stakeholders.
- 5.3 The Commenter believes that the proposed MA approach in conjunction with development, would facilitate suitable development at the less ecologically sensitive locations, and strengthen conservation at the more ecologically sensitive Tai Ho stream. In turn, this would lead to opportunities for an eco-heritage tourism node, and to create incentive for the private land owners to consolidate land ownership and facilitate the conservation process.

Yours faithfully,



Ian Brownlee  
For and On Behalf of Masterplan Limited

Encl.

c.c. Client (By Email)  
DPO SI&I (Mr. Richard Siu) (By Email)



**Summary of the grounds of representations/representers' proposals and comments on representations and PlanD's responses  
With regards to the Draft Tai Ho Outline Zoning Plan No. S/I-TH/1 (the draft OZP)**

<b>Rep. No. (TPB/R/S/I-TH/1-)<sup>1</sup></b>	<b>Gist of Representation</b>	<b>Responses</b>
<b>R1</b>	<p><u>Grounds of Representation</u></p> <p>(a) Welcomes the general planning intention of the draft OZP. It protects the ecological environment of Tai Ho, which is ranked the 3rd among the 12 Priority Sites for Enhanced Conservation listed under the New Nature Conservation Policy (NNCP).</p> <p>(b) Concerns about the location, demand, extent and land ownership of "Village Type Development" ("V") zone:</p> <p>(i) designation of "V" zone which is located immediately adjacent to Tai Ho Stream and its tributaries will adversely affect the ecological value of Tai Ho Stream as leakage of septic tank and soakaway (STS) system and improper connection of sewers to rivers are commonly seen in rural area;</p> <p>(ii) area of "V" zone increases significantly comparing to the area designated in Development Permission Area (DPA) Plan while the 10-year Small House (SH) demand forecast for the local villages in Tai Ho decreases. The demand of SHs in Tai Ho is 58% fulfilled while in other country park enclaves it is about 15% - 38% fulfilled. Planning Department (PlanD) should explain the differences and whether it is against the incremental approach adopted by the Town Planning Board (the Board) in regard to SH policy; and</p> <p>(iii) PlanD should indicate whether the land covered by "V" zone is private land or land owned by private developers for the Board members'</p>	<p><u>Grounds of Representation</u></p> <p>(a) Noted.</p> <p>(b) Please refer to paragraphs 6.29 to 6.33, 6.40 to 6.44 of the Paper.</p>

<sup>1</sup> For locations of representation sites, please see **Plan H-2**.



	<p>consideration. There is a latent development threat covering the private lots purchased from the villagers by the property developers for low to medium-density residential development within the Area.</p> <p>(c) Confines the “V” zone to the existing village clusters.</p> <p>(d) Concerns about ‘destroy first, build later’ activities which destroy the natural environment in the name of agricultural rehabilitation and SH development.</p> <p><u>Representer’s Proposal</u></p> <p>(1) Nil.</p>	<p>(c) Please refer to paragraphs 6.29 to 6.33, 6.40 to 6.44 of the Paper.</p> <p>(d) Please refer to paragraph 6.52 of the Paper.</p>
<b>R2</b>	<p><u>Grounds of Representation</u></p> <p>(a) Supports the general planning intention of the draft OZP to protect the important habitats and species of conservation interest of Tai Ho enclave.</p> <p>(b) Welcomes the designation of “Site of Special Scientific Interest” (“SSSI”) zone for Tai Ho Stream and its estuary area to provide statutory protection to the Ecologically Important Stream (EIS) and the mudflat and mangrove at the estuary.</p> <p>(c) Supports the provision of 30m wide “Conservation Area” (“CA”) zone along Tai Ho Stream to act as buffer zone protecting the riparian area of Tai Ho Stream SSSI, and the designation of “Coastal Protection Area” (“CPA”) zone along the coast of Tai Ho Wan.</p>	<p><u>Grounds of Representation</u></p> <p>(a) Noted.</p> <p>(b) Noted.</p> <p>(c) Noted.</p>

	<p>(d) Concerns about the close proximity of “V” zones to Tai Ho Stream and its tributaries, in particular illegal discharge of domestic sewage and untreated surface runoff.</p> <p><u>Representer’s Proposal</u></p> <p>(1) To designate all streams/tributaries and their 30m wide riparian zones along both sides of the river banks with restrictive conservation zonings such as Green Belt (1)” (“GB(1)”) or “CA” zone to prevent any water quality and ecological impacts from future developments to the important Tai Ho Stream and Tai Ho Wan. In particular, the northern part of the “V” zone of Ngau Kwu Long and the western part of the “V” zone of Pak Mong should be reviewed.</p>	<p>(d) Please refer to paragraphs 6.29 to 6.33 of the Paper.</p> <p><u>Representer’s Proposal</u></p> <p>(1) Please refer to paragraphs 6.29 to 6.34 of the Paper.</p>
<b>R3</b>	<p><u>Grounds of Representation</u></p> <p>(a) Supports the planning intention and conservation zonings of the draft OZP.</p> <p>(b) Supports the provision of “SSSI” zone to protect Tai Ho Stream.</p> <p>(c) Supports the provision of 30m wide “CA” zone as buffers on the two sides of Tai Ho Stream SSSI, and the designation of “Coastal Protection Area” (“CPA”) zone to protect the coastal areas of Tai Ho Wan.</p> <p>(d) Concerns about the close proximity of “V” zones to Tai Ho Stream and its tributaries which flow into the SSSI or Tai Ho Wan, in particular illegal discharge of domestic sewage and untreated surface runoff.</p> <p>(e) To adjust the location (i.e. away from streams) and size (i.e. smaller) of the proposed “V” zones such that the development right of villagers are respected without compromising the sensitive habitats in Tai Ho.</p>	<p><u>Grounds of Representation</u></p> <p>(a) Noted.</p> <p>(b) Noted.</p> <p>(c) Noted.</p> <p>(d) Please refer to paragraphs 6.29 to 6.33 of the Paper.</p> <p>(e) Please refer to paragraphs 6.29 to 6.33 and 6.41 of the Paper.</p>

	<p><u>Representer's Proposals</u></p> <p>(1) "GB" zone in the Area should be rezoned to "GB(1)" or "CA" to enhance the protection of natural habitats by alleviating the development pressure while the redevelopment rights of the villagers are respected.</p> <p>(2) To designate all streams/tributaries and their 30m wide riparian zones along both sides of the river banks with restrictive conservation zonings such as "GB(1)" or "CA" zone to prevent any water quality and ecological impacts from future developments to the important Tai Ho Stream and Tai Ho Wan. In particular, the northern part of the "V" zone of Ngau Kwu Long and the western part of the "V" zone of Pak Mong should be reviewed.</p>	<p><u>Representer's Proposals</u></p> <p>(1) Please refer to paragraphs 6.26 to 6.27 of the Paper.</p> <p>(2) Please refer to paragraphs 6.29 to 6.34 of the Paper .</p>
<b>R4</b>	<p><u>Grounds of Representation</u></p> <p>(a) Supports the general planning intention of the draft OZP.</p> <p>(b) Welcomes the designation of "SSSI" zone on Tai Ho Stream to protect the high diversity of freshwater and brackish-water fishes in Hong Kong.</p> <p>(c) No "V" zone should be allocated next to the watercourse as discharge of sewage and greywater within the "V" zone next to the stream would pose threats to the water quality of Tai Ho Stream and Tai Ho Wan.</p> <p>(d) To adjust the location of "V" zone.</p> <p>(e) To confine the "V" zone to the existing village clusters as the existing transportation and infrastructure cannot support the proposed "V" zone extension.</p>	<p><u>Grounds of Representation</u></p> <p>(a) Noted.</p> <p>(b) Noted.</p> <p>(c) Please refer to paragraphs 6.30 to 6.33 of the Paper.</p> <p>(d) Please refer to paragraphs 6.29 to 6.33 and 6.41 of the Paper.</p> <p>(e) Please refer to paragraph 6.41 of the Paper.</p>

	<u>Representer's Proposal</u> (1) Nil.	
<b>R5</b>	<u>Grounds of Representation</u> (a) Supports the general planning intention of the draft OZP and the planning intention of "SSSI" zone.  (b) Supports the general presumption against development in the "SSSI", "CA", "CPA" and "GB" zones and not permitting new residential development in "CPA" and "CA" zones.  (c) Agrees to the Remarks to "V", "SSSI", "CA", "CPA" and "GB" zones to control of <i>'any diversion of streams, filling of land/pond or excavation of land'</i> .  (d) Welcomes the designations of the shore of Tai Ho Wan as "CPA" zone and the mature woodland behind Pak Mong Village as "CA" zone.  (e) Concerns that remaining courses in the upper reach of "SSSI" and all stream banks of natural stream in the Area receive inadequate land use zoning protection.  (f) Concerns about preservation of Tai Ho Stream Basin and Tai Ho Wan. A significant portion of the land use in the stream basin of Tai Ho Stream, which is largely zoned "GB", should be non-polluting and unpaved to prevent pollution to the stream and maintain natural hydrology.	<u>Grounds of Representation</u> (a) Noted.  (b) Noted.  (c) Noted.  (d) Noted.  (e) Please refer to paragraphs 6.29 to 6.33 of the Paper.  (f) Please refer to paragraph 6.34 of the Paper.

	<p>(g) The Board should cautiously consider the extent of “V” zone as without sewage infrastructure in Tai Ho area, any additional residential developments, village houses, commercial use (especially restaurants) that generate large amount of wastewater will pollute the river/stream courses and the bay.</p> <p>(h) Not to accept and process applications of temporary uses or developments if relevant uses or developments have commenced before the Board grants permission. The Board should not accept destroy first, build later cases.</p> <p><u>Representer’s Proposals</u></p> <p>(1) To remove ‘House’ from Column 2 in the Notes for “GB” zone in order to manifest the planning intention of “GB” zone for <i>‘defining the limits of development areas by natural features and to preserve the existing natural landscape’</i>.</p> <p>(2) To extend the boundary of “SSSI” zone to cover larger area of the intertidal mudflat. To extend the “SSSI” zone and/or “CA” zone to cover the whole stream courses and river banks of all tributaries in the Area to provide a hydrologically complete preservation of Tai Ho Stream against disturbance and/or destruction by future works and developments, and to connect with the existing country parks to secure a terrestrial and aquatic wildlife corridor and ecological linkage between country parks and the existing natural landscape in the Area.</p> <p>(3) To clearly prohibit reclamation of coastal areas, whatever above or below high tide mark, in “CPA”, “CA”, and “SSSI” zones and waters in Tai Ho Wan.</p>	<p>(g) Please refer to paragraphs 6.29 to 6.33 and 6.41 of the Paper.</p> <p>(h) Please refer to paragraph 6.52 of the Paper.</p> <p><u>Representer’s Proposals</u></p> <p>(1) Please refer to paragraphs 6.26 and 6.50 of the Paper.</p> <p>(2) Please refer to paragraphs 6.22 to 6.23 and 6.27 to 6.28 of the Paper.</p> <p>(3) Please refer to paragraph 6.28 of the Paper.</p>
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	<p>(4) Not to designate “V” zone for area in the vicinity of the existing stream courses and estuary to avoid water pollution to the streams and “SSSI” zone.</p> <p>(5) Permission from relevant government departments should be required for ‘road works’, ‘sewerage works’, ‘drainage works’, other public works as well as temporary uses/developments specified in paragraph 11(a) of covering Notes that will impose adverse environmental impacts on the “CPA”, “CA” and “SSSI” zones.</p> <p>(6) To prohibit building structures for (i) ‘Agricultural Use’ in “CPA”, “CA” and “GB” zones; and (ii) ‘plant nursery’ and ‘amenity planting’ in “SSSI”, “CPA” and “CA” zones. To prohibit ‘Agricultural Use’ that involves excavation of top soil, paving with concrete/asphalt or non-arable materials/debris in “SSSI”, “CPA”, “CA” and “GB” zones or ground paving, whatever of concrete, metals or other materials.</p>	<p>(4) Please refer to paragraphs 6.29 to 6.33 and 6.41 of the Paper.</p> <p>(5) Please refer to paragraphs 6.48 to 6.49 of the Paper.</p> <p>(6) Please refer to paragraph 6.51 of the Paper.</p>
<b>R6, R7 &amp; R8</b>	<p><u>Grounds of Representations</u></p> <p>(a) Concern about the potential environmental impacts caused by SHs, in particular within certain part of “V” zones located immediately next to streams and tributaries.</p> <p>(b) “V” zones should be confined to existing village clusters.</p> <p>(c) To provide buffer zones between watercourses and development zones.</p>	<p><u>Grounds of Representations</u></p> <p>(a) Please refer to paragraphs 6.29 to 6.33 and 6.41 of the Paper.</p> <p>(b) Please refer to paragraphs 6.29 to 6.33 and 6.41 of the Paper.</p> <p>(c) Please refer to paragraphs 6.29 to 6.33 of the Paper.</p>



	<u>Representers' Proposal</u> (1) To rezone "GB" zone to "CA" zone.	<u>Representers' Proposal</u> (1) Please refer to paragraph 6.26 of the Paper.
<b>R9</b>	<u>Grounds of Representation</u> (a) Provides view and information on the importance of Tai Ho Wan for the conservation of the Mangrove Horseshoe Crab ( <i>Carcinoscorpius rotundicauda</i> ) in Hong Kong.  (b) Should provide suitable protection for all inter-tidal areas in Tai Ho Wan, including the lower reaches of Tai Ho Stream, the Mangrove stands and the mudflats, to ensure the future viability of this area as a Mangrove Horseshoe Crab spawning ground and nursery area.  <u>Representer's Proposal</u> (1) Nil.	<u>Grounds of Representation</u> (a) Noted.  (b) Noted.
<b>R10 – R1061</b>	<u>Grounds of Representations</u> (a) Oppose the overall planning intention stated in the Explanatory Statement and the Schedule of Uses in the Notes of the draft OZP which are biased towards environmental conservation. The conservation zonings are excessive. Government should balance conservation and development.  (b) There is opportunity to provide public housing in the Area.	<u>Grounds of Representations</u> (a) Please refer to paragraphs 6.20 to 6.21 of the Paper.  (b) Please refer to paragraphs 6.20 to 6.21 and 6.27 of the Paper.

	<p>(c) Consider “CA” of 30m in width for buffer of Tai Ho Stream SSSI is too excessive, and contravenes the commitment made by the Government in 1999.</p> <p>(d) Oppose the conservation zonings imposed on private land without compensation as they infringe the private land rights/interests and adversely affect their development potential. It is injustice, unacceptable and contravening the Basic Law in protecting the right of private property.</p> <p>(e) Oppose the designation of “SSSI” zone on the private agricultural lots. Agriculture use is permitted under lease, however the repair and maintenance of farmland embankment within the “SSSI” zone require planning permission. It deprives the rights of the concerned land owners.</p> <p>(f) Government should establish a Conservation Fund for compensation and land resumption (<b>R11</b> only).</p> <p>(g) Opposes the size of the “V” zone which is too small and some old house lots are not included in the “V” zone. The actual demand of the villagers could not be reflected/satisfied. There is insufficient land to meet the long-term SH demand of indigenous villagers.</p> <p>(h) Concerns that some areas within “V” zone are steep slope which do not suitable for SH development (<b>R11</b> only).</p> <p>(i) Development potential of a large area of land within the village environ of Pak Mong Village is restricted. Mature woodland is covered by conservation zoning. No “V” zone on the western part and the northern part, where active agricultural activities are taking place, and they are zoned “GB”.</p>	<p>(c) Please refer to paragraphs 6.22 to 6.24 of the Paper.</p> <p>(d) Please refer to paragraphs 6.35 to 6.36 of the Paper.</p> <p>(e) Please refer to paragraphs 6.35 to 6.36 of the Paper.</p> <p>(f) Please refer to paragraph 6.37 of the Paper.</p> <p>(g) Please refer to paragraphs 6.40 to 6.44 of the Paper.</p> <p>(h) Please refer to paragraph 6.41 of the Paper.</p> <p>(i) Please refer to paragraphs 6.40 to 6.44 of the Paper.</p>
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	<p>(j) Tin Liu should be considered as an independent recognised village due to its complicated historical background. Besides the area covering the existing village clusters in Tin Liu, sufficient land should be reserved for the village's own SH demand, separated from the forecast for Tai Ho and Ngau Kwu Long.</p> <p>(k) Oppose the designation of "CPA" and "CA" zones as the uses/activities permitted in the zones are not clear, e.g. whether backhoe or other machine is allowed for farming activities within these zones and whether fishing and shellfish harvesting are prohibited within these zones.</p> <p>(l) Concern about how the villagers could prove the uses of land (e.g. mooring boats along the shoreline of Tai Ho Wan) were in existence before the first publication of DPA Plan. They have also concerns on the redevelopment of house within conservation zonings. Although there are provisions for application to the Board for redevelopment of house in a scale not exceeding the plot ratio, site coverage and height of the existing house within "CPA" and "CA" zones, how the villagers would prove that the house and its building height were in existence before the first publication of DPA Plan for redevelopment application.</p> <p>(m) A piece of private land within "SSSI" zone is not reflected and indicated correctly on the draft OZP.</p> <p>(n) Government departments should coordinate and repair the farmland embankment within the "SSSI" zone.</p>	<p>(j) Please refer to paragraph 6.45 of the Paper.</p> <p>(k) Please refer to paragraph 6.46 of the Paper.</p> <p>(l) Please refer to paragraph 6.47 of the Paper.</p> <p>(m) The relevant information has been updated in the Statutory Planning Portal according to the latest land survey findings.</p> <p>(n) Please refer to paragraph 6.54 of the Paper.</p>
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	<p>(o) Government should provide sewerage and drainage systems in Tai Ho area and take a proactive approach to conserve the area by allocating resource instead of just limiting the activities of local villagers.</p> <p>(p) Government should resolve the traffic problem in the Area.</p> <p><u>Representer's Proposals</u></p> <p>(1) To reserve two pieces of land within "GB" zone for public housing development.</p> <p>(2) To reduce the width of "CA" zone along Tai Ho Stream Site of SSSI from 30m to 20m with compensation proposal.</p> <p>(3) To confine the extent of "GB" zone to areas adjoining the Lantau North (Extension) Country Park.</p> <p>(4) To exclude private farmland from "SSSI" zone or provide compensation/land exchange to the land owners.</p> <p>(5) To rezone 'tso tong' farmland from "SSSI" zone to "Agriculture" ("AGR") zone (<b>R11</b> only).</p>	<p>(o) Please refer to paragraphs 6.53 to 6.54 of the Paper.</p> <p>(p) Please refer to paragraphs 6.53 to 6.54 of the Paper.</p> <p><u>Representers' Proposals</u></p> <p>(1) Please refer to paragraphs 6.21 to 6.22, 6.25 and 6.27 of the Paper.</p> <p>(2) Please refer to paragraphs 6.22 to 6.23 and 6.27 of the Paper.</p> <p>(3) Please refer to paragraphs 6.22, 6.25 and 6.27 of the Paper.</p> <p>(4) Please refer to paragraphs 6.22 to 6.23, 6.27 and 6.35 to 6.36 of the Paper.</p> <p>(5) Please refer to paragraphs 6.22 to 6.23, 6.27, 6.35 to 6.36 and 6.38 of the Paper.</p>
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	<p>(6) To zone farmland “AGR” instead of “SSSI”, “CA”, “CPA” or “GB” in order to reflect the existing condition and avoid dispute; or to offer compensation/land exchange to the land owners.</p> <p>(7) To designate land covering a total area of 6 ha in different locations as “V” zone for addressing the 10 year forecast of SH demand of indigenous villagers. In the long term, to designate land covering further 300 feet from the boundaries of the ‘Village Environs’ (‘VE’) as “V” zone.</p> <p>(8) To provide/extend “V” zones for local villages to reflect the developable land, the living area of villagers and meet the SH demand:</p> <ul style="list-style-type: none"> <li>(i) to designate a piece of land near Tin Liu Village and away from Tai Ho Stream as “V” for its individual SH demand;</li> <li>(ii) to expand the “V” zone in Tai Ho San Tsuen to cover the private lots with building entitlement in Tai Ho;</li> <li>(iii) to designate the areas in the southernwest, southerneast and northern parts of ‘VE’ at Ngau Kwu Long Village considered suitable for SH development as “V” zone; and</li> <li>(iv) to designate the area within the ‘VE’ of Pak Mong covering the mature woodland, active farmland to the north and area to the west of Pak Mong as “V” zone.</li> </ul> <p>(9) To provide an access and to carry out improvement works of the existing subway located to the northeast edge of the Area to enhance the overall pedestrian connection from Tai Ho to Tung Chung New Town Extension (TCNTE).</p>	<p>(6) Please refer to paragraphs 6.22 to 6.23, 6.27 and 6.35 to 6.38 of the Paper.</p> <p>(7) Please refer to paragraphs 6.40 to 6.44 of the Paper.</p> <p>(8) Please refer to paragraph 6.45 of the Paper.</p> <p>(9) Please refer to paragraphs 6.53 to 6.54 of the Paper.</p>
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	(10) To zone the Leung Ma Temple at the coastal area of Tai Ho Wan “Government, Institution or Community” (“G/IC”) to reflect the existing structure and facilitate its future repair, maintenance and potential redevelopment.	(10) Please refer to paragraph 6.59 of the Paper.
<b>R1062</b>	<u>Ground of Representation</u> (a) Oppose the entire draft OZP.  <u>Representer’s Proposals</u> (1) Nil.	<u>Ground of Representation</u> (a) Please refer to paragraphs 6.20 to 6.21 of the Paper.
<b>R1063</b>	<u>Grounds of Representation</u> (a) Object to the draft OZP on the grounds that it does not meet its conservation objectives and precludes any opportunities for compatible forms of development.  (b) Object largely to the “GB” zone and inadequacies of the “V” zones in various areas.  (c) The conservation zonings on the draft OZP prohibit any form of new development within the entire Tai Ho, even those ecologically less sensitive areas, and deprive private development rights.  (d) The zoning on the draft OZP does not provide sufficient conservation mechanism at ecologically sensitive areas at Tai Ho Catchment.	<u>Grounds of Representation</u> (a) Please refer to paragraphs 6.20 to 6.21 of the Paper.  (b) Please refer to paragraphs 6.22, 6.25, 6.27 and 6.40 to 6.44 of the Paper.  (c) Please refer to paragraphs 6.20 to 6.27 of the Paper.  (d) Please refer to paragraphs 6.22 to 6.27 of the Paper.



	<p>(e) The current “V” zone has not optimised the land potential for SH development. The ‘incremental approach’ undermines the need to meet the long-term SH demand.</p> <p>(f) Concern on ownership of the land within the “V” zone.</p> <p>(g) The draft OZP has not considered the need for a public road access and infrastructure facilities for the additional village house developments.</p> <p><u>Representer’s Proposals</u></p> <p>(1) To adopt a Management Agreement approach in conjunction with development that would enable a win-win solution for all the stakeholders for implementing an effective long-term conservation strategy for Tai Ho.</p> <p>(2) An alternative land use framework (Proposed Scheme) is proposed which consists of:</p> <p>(i) four development sites (three sites around the already built-up area of Pak Mong and Ngau Kwu Long and a site at the uphill to the southwest of Ngau Kwu Long) are proposed for public and private housing development. The site to the west of Pak Mong is proposed to be rezoned from “GB” to “Residential (Group A)” (“R(A)”) for public housing with plot ratio of 4.0 and maximum building height of 139mPD (39 storeys). The remaining three sites are proposed to be rezoned from “GB” to “Residential (Group B)” (“R(B)”) for private housing with plot ratio ranging from 2.1 to 3.5 and maximum building height ranging from 61mPD to 87mPD (10 to 20 storeys). According to the representer’s indicative scheme, the proposed medium-density housing developments</p>	<p>(e) Please refer to paragraphs 6.40 to 6.44 of the Paper.</p> <p>(f) Please refer to paragraph 6.44 of the Paper.</p> <p>(g) Please refer to paragraphs 6.53 to 6.54 of the Paper.</p> <p><u>Representer’s Proposals</u></p> <p>(1) Please refer to paragraphs 6.55 to 6.56 of the Paper.</p> <p>(2) Please refer to paragraphs 6.57 and 6.58 of the Paper.</p>
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	<p>of 24 residential blocks providing over 10,000 flats. The representer proposes that an ‘Eco-heritage Education Centre’ could be provided at the development site to support the proposed eco-heritage tourism and education in Tai Ho as suggested by the Sustainable Lantau Blueprint;</p> <p>(ii) three village expansion areas for Pak Mong, Ngau Kwu Long and Tai Ho San Tsuen to cater for the SH demand;</p> <p>(iii) two conservation areas including a more extensive “CA” zone to cover the catchment of Tai Ho Stream for conservation. Another site to the north of Pak Mong is proposed to be rezoned from “GB” to “Open Space” (“O”) in order to conserve the natural environment and protect the archaeological site, with a view to managing it as a public open space for leisure and nature appreciation in the long run; and</p> <p>(iv) a new public road connecting the development sites and Village Expansion Areas to Cheung Tung Road, which would also enable the provision of sewerage and drainage facilities in addressing the concerns on adverse ecological impact of the additional developments.</p>	
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<b>Comment No. (TPB/R/S/I-TH/1-)<sup>2</sup></b>	<b>Gist of Comment</b>	<b>Responses</b>
<b>C1</b>	Provides a revised figure showing the proposal in relation to representations <b>R12</b> to <b>R1061</b> for clarification.	Noted.
<b>C2</b>	Support <b>R1063</b> 's proposal on the grounds that the alternative zoning proposal and implementation approach could address most of the conservation and development concerns raised by the representations.	Please refer to our responses to <b>R1063</b> .

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<sup>2</sup> For locations of comment sites, please see **Plan H-2**.