

# **RURAL AND NEW TOWN PLANNING COMMITTEE OF THE TOWN PLANNING BOARD**

**RNTPC Paper No. 3/15**

**For Consideration by**

**The Rural and New Town Planning Committee on 13.3.2015**

**PROPOSED AMENDMENTS TO THE  
APPROVED MA ON SHAN OUTLINE ZONING PLAN NO. S/MOS/20**

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THE APPROVED MA ON SHAN OUTLINE ZONING PLAN NO. S/MOS/20**

**1. Introduction**

This paper is to seek Members' agreement that:

- (a) the proposed amendments to the approved Ma On Shan Outline Zoning Plan (OZP) No. S/MOS/20 as shown on the draft Ma On Shan OZP No. S/MOS/20A (**Annex B**) and its Notes (**Annex C**) are suitable for exhibition for public inspection under section 5 of the Town Planning Ordinance (the Ordinance); and
- (b) the revised Explanatory Statement (ES) of the OZP (**Annex D**) is an expression of the Town Planning Board (the Board)'s planning intentions and objectives for various land use zones of the OZP, and is suitable for exhibition together with the OZP and its Notes.

**2. Status of the Current OZP**

- 2.1 On 2.12.2014, the Chief Executive in Council (CE in C) approved the draft Ma On Shan OZP No. S/MOS/19 under section 9(1)(a) of the Ordinance which was subsequently renumbered as S/MOS/20. On 12.12.2014, the approved Ma On Shan OZP No. S/MOS/20 was exhibited for public inspection under section 9(5) of the Ordinance.
- 2.2 On 3.2.2015, the CE in C referred the approved Ma On Shan OZP No. S/MOS/20 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The reference back of the OZP was notified in the Gazette on 13.2.2015 under section 12(2) of the Ordinance.

**3. The Proposed Amendments**

- 3.1 It was stated in the 2013 Policy Address that the Government would adopt a multi-pronged approach to increase land supply to meet the housing and other development needs of Hong Kong. To optimize the use of land, the Government has continued reviewing various land uses and rezoning sites as appropriate and, where the original intended use is no longer required, converting the land for housing development. To meet the pressing need for housing land supply, two sites, namely, a "Government, Institution or Community" ("G/IC") site near Yiu Sha Road in Whitehead and an "Open Space" ("O") site (with a minor portion of



land shown as ‘Road’) at Hang Kin Street in Ma On Shan have been identified for housing developments (**Plans 1a and 1b**).

- 3.2 The 2014 Policy Address also announced that the Government considers it is feasible to generally increase the maximum domestic plot ratio (PR) currently permitted for the development zones in part of Hong Kong Island and the New Territories by around 20% as appropriate and the development intensity of unleased or unallocated residential sites could be increased as far as allowable in planning terms. Hence, the technical feasibility of increasing the development intensity of the “G/IC and “O” sites by 20% was undertaken under the current proposed amendments.

**Item A - Proposed Private Residential Development near Yiu Sha Road in Whitehead (Plans 1a, 2a, 3a and 4a)**

- 3.3 The proposed Item A site, covering a site area of about 0.46 ha, is a piece of government land located to the east of Yiu Sha Road and in the southeastern part of Whitehead headland and near Starfish Bay (**Plans 1a and 2a**). The site is currently accessible via a local road leading to Lok Wo Sha Lane to its further south. The site was previously used as a temporary works area and is currently vacant and has some trees in its periphery (**Plans 3a and 4a**). It has been reserved for provision of GIC facilities in the long term. Since sufficient land has been reserved for the provision of GIC facilities in the locality, the relevant Government departments have confirmed that there was no need to reserve the site for GIC uses. It is proposed to rezone the site from “G/IC” to “Residential (Group C)3” (“R(C)3”) for low-rise, low-density residential development.
- 3.4 Whitehead headland is predominated by residential developments with patches of conservation areas and an area planned for recreational facilities (**Plan 2a**). To the south and southwest of Item A site is the “Comprehensive Development Area (1)” (“CDA(1)”) zone for medium-density residential and commercial development subject to a maximum domestic PR of 3, a maximum non-domestic Gross Floor Area (GFA) of 10,000 m<sup>2</sup> and maximum building heights (BHs) of 105/120/130 mPD. To the north and northwest are the “CDA(2)” and “CDA(3)” zones for low to medium-density residential developments subject to maximum GFAs of 40,000 m<sup>2</sup> and 30,000 m<sup>2</sup> respectively (equivalent to PRs of 1.06 and 1.26 respectively), and a maximum BH of 50 mPD. To the further north is the “Recreation” (“REC”) zone for low-rise and low-density recreational and sports facilities subject to a maximum BH of 30 mPD. The Wu Kai Sha Station and the topside high-rise property development (Lake Silver) zoned “Other Specified Uses” (“OU”) annotated “Railway Station and Public Transport Interchange with Commercial/Residential Development” located to the further south about 500 m away is subject to a maximum domestic GFA of 168,650 m<sup>2</sup> (equivalent to a PR of 5), a maximum non-domestic GFA of 4,000 m<sup>2</sup>, and a maximum BH of 185 mPD. The “CDA(1)”, “CDA(2)”, “CDA(3)” and “OU(Railway Station and Public Transport Interchange with Commercial/Residential Development)” zones are also subject to development schemes approved by the Rural and New Town Planning Committee (the Committee) (**Plan 2a**). The coastal areas of Starfish Bay to the east where patches of dense, undisturbed and mature vegetation are found to support a number of bird species and To Tau to the west where a mature coastal woodland is found are zoned “Conservation Area” (“CA”).

- 3.5 Having regard to its waterfront location near Starfish Bay, the low-to-medium density residential character of the neighbourhood, the general gradation in development intensity and building height from MTR Wu Kai Sha Station inland towards the waterfront and the policy initiative of increasing development density as appropriate, a PR of 2.4 and maximum BH of 40 mPD are proposed for private residential development at the site. It is estimated that the site could provide about 180 flats.
- 3.6 The proposed development parameters of the private residential site are summarized as follows:

Proposed Zoning	“R(C)3”
Gross Site Area	about 0.46 ha
Maximum PR	2.4
Maximum GFA	about 11,040 m <sup>2</sup>
Maximum BH	40 mPD (about 9 storeys)
No. of Flats	about 180 <sup>Note 1</sup>
Estimated Population	about 540 <sup>Note 2</sup>

Note 1: Based on an assumed average flat size of 60 m<sup>2</sup>

Note 2: Based on an assumed person per occupancy factor (PPOF) of about 3.

**Item B - Proposed Public Housing Development at Hang Kin Street in Ma On Shan (Plans 1b, 2b, 3b and 4b)**

- 3.7 The proposed Item B site, covering a site area of about 0.59 ha, is part of an “O” zone located at the junction of Hang Kin Street and Hang Ming Street (**Plans 1b and 2b**). The site is in close proximity to the MTR Hang On Station and well served by public transport and other facilities. The whole “O” zone is a piece of Government land originally reserved for open space/recreational uses and is currently formed and occupied by a temporary fee-paying public car park (**Plans 3b and 4b**). Together with other “O” zones to its east and west, they form a east-west green corridor/air path between the waterfront and hillside of Ma On Shan (**Plan 2b**) having an overall width of over 120 m. It is considered that there is scope to excise a portion of the “O” zone for housing development to meet the acute demand for public housing in the short to medium term without compromising the overall urban design and air ventilation function of the existing green corridor/air path.
- 3.8 Various technical assessments including air ventilation assessment (AVA) as elaborated in paragraph 4 have been carried out to demonstrate the feasibility of the proposal. Director of Leisure and Cultural Services (DLCS) has no objection to releasing part of the “O” zone for housing development as the overall provision of open space (about 74 ha) within the Ma On Shan Planning Scheme Area is sufficient to meet the planned population and there is a surplus of about 26 ha of open space in the Planning Scheme Area. Moreover, there is still enough space in the southern part of the “O” zone and another “O” zone to the west on the other side of Hang Ming Street (**Plan 2b**) for the provision of various open space/recreational facilities (such as 7-a-side soccer pitch). It is proposed to rezone the site from “O” and an area (about 27 m<sup>2</sup>) shown as ‘Road’ to “Residential (Group A)10” (“R(A)10”) for public housing (i.e. HOS) development.

- 3.9 The site is located in proximity to the waterfront (about 110 m) and Ma On Shan Promenade and within a neighbourhood of mixed residential, GIC and open space uses (**Plans 1b and 2b**). To the northeast and southeast to the inland area are the public housing developments of Heng On Estate, Yan On Estate and Kam On Court subject to maximum BHs of 120/140 mPD, and maximum domestic PRs of 5/6. To the north is a GIC cluster comprising two existing schools, an electricity substation and a site reserved for clinic use. Along the waterfront, there are public (e.g. Chung On Estate and Kam Tai Court) and private (e.g. Baycrest, Vista Paradiso, Oceanaire, Ocean View and La Costa) residential developments subject to maximum BHs ranging from 80mPD to 120mPD (**Plan 1b**) and maximum PR of 5.
- 3.10 Having regard to the building height profile in the vicinity with building heights ranging from 80 mPD to 140 mPD, the medium-to-high density residential character of the neighbourhood and the policy initiative of increasing development density as appropriate, a maximum PR of 6 and a maximum BH of 120 mPD are proposed for the site. It is estimated that the site could provide about 800 flats. Major development parameters of the proposed public housing development are summarized as follows:

Proposed Zoning	“R(A)10”
Gross Site Area	about 0.59 ha <sup>Note 1</sup>
Site Area for the Public Housing	about 0.53 ha
Maximum GFA	31,800 m <sup>2</sup>
Maximum PR	6
Maximum BH	120 mPD (about 39 storeys)
No. of Flats	about 800
No. of Block	1
Local Open Space	Not less than 2,400 m <sup>2</sup>
Car Parking and Loading/Unloading (L/UL) Facilities	A semi-sunken basement carpark at the southern part of the site: <ul style="list-style-type: none"> <li>- Private car (domestic): 35</li> <li>- Private car (visitor): 3</li> <li>- Motorcycle: 7</li> <li>- L/UL (domestic): 1</li> <li>- Bicycle: 53</li> </ul>
Estimated Population	2,400 <sup>Note 2</sup>

Note 1: About 0.06 ha of land along the eastern boundary of the proposed “R(A)10” zone will be reserved for the proposed road access to the open space to the south.

Note 2: Based on an assumed PPOF of about 3.

#### 4. **Technical Assessments**

- 4.1 Broad technical assessments on traffic, environment and infrastructure, as well as visual and air ventilation aspects have been conducted to ascertain the feasibility of the proposed developments. The adequacy of provision of open space and GIC facilities in the area has also been assessed.

## Proposed Private Residential Development near Lok Wo Sha Lane in Whitehead

### *Traffic, Environmental and Infrastructure Aspects*

- 4.2 Civil Engineering and Development Department (CEDD) has carried out technical assessments on the traffic, sewerage, drainage, water supply and environment including ecological aspects for the proposed development. A summary of the technical assessment results is at **Appendix I**.
- 4.3 The Traffic Impact Assessment (TIA) shows that the site is located to the east of Yiu Sha Road and is currently accessible via a local road leading to Lok Wo Sha Lane to its south. It is proposed to construct a roundabout junction by the Government to connect the local road with Yiu Sha Road to its west and Lok Wo Sha Lane to its south (**Drawing 3**). With the implementation of the proposed roundabout junction and associated road works (including provision of footpath, cycle track and pedestrian crossing), Yiu Sha Road will become the primary access to the site. The TIA indicated that the traffic generated by the proposed housing development is minimal and will not cause any significant traffic impact on the surrounding road networks. The Assistant Commissioner for Transport/New Territories (AC for T/NT) considers the TIA acceptable in principle.
- 4.4 The Preliminary Environmental Review (PER) indicates that the proposed development would not have adverse impact on the noise and ecological aspects. On the noise aspect, the noise impact assessment indicates that the traffic noise impact from the nearby roads to the proposed residential development is insignificant, and the rail noise impact from Ma On Shan Line is also insignificant as the site is beyond a setback distance of 300 m. Regarding the ecological aspect, the site has been hard paved and partly covered with vegetation. The proposed development would result in loss of low value plantation habitat and developed area and the ecological impact is minor. Although the site adjoins the “CA” zone of the Starfish Bay, the proposed development will not cause any adverse impact on the “CA” zone as most part of the site has been formed and necessary drainage and sewerage facilities would be provided. Besides, periphery tree planting at the site will be adopted to facilitate better integration with the adjacent “CA” zone. Both the Director of Environmental Protection (DEP) and Director of Agriculture, Fisheries and Conservation (DAFC) consider the PER acceptable in principle.
- 4.5 The Sewerage Impact Assessment (SIA), Drainage Impact Assessment (DIA) and Water Supply Impact Assessment (WSIA) indicate that the existing/planned sewerage, drainage and waterworks facilities have sufficient capacities to cater for the proposed housing development and there are no insurmountable problems on the sewerage, drainage and water supply aspects. DEP, Chief Engineer/Mainland South, Drainage Services Department (CE/MS of DSD) and Chief Engineer/Development, Water Supplies Department (CE/Dev of WSD) consider the SIA, DIA and WSIA acceptable in principle.

### *Visual Aspect*

- 4.6 With respect to the visual impact, the Visual Appraisal (VA) conducted by

Planning Department (PlanD) (**Appendix IV** and **Plans 5, 5a to 5c**) concludes that the proposed development will be largely screened off by the rows of existing trees along the roads and the visual impact would be insignificant. Being located at the transition area from high-rise developments at Lok Wo Sha (“OU” zone at 185 mPD and “CDA(1)” zone at 105/120/130 mPD) to medium to low-rise developments at Whitehead (“CDA(2)” and “CDA(3)” zones at 50 mPD and “REC” zone at 30 mPD), the proposed maximum BH of 40 mPD can blend in with the overall setting, preserve the stepped height profile descending towards the waterfront and respect to the waterfront location at Starfish Bay.

#### *Air Ventilation Aspect*

- 4.7 The Air Ventilation Assessment (Expert Evaluation) (AVE(EE)) (**Appendix IIIa**) conducted by PlanD shows that the annual prevailing wind directions are from east and northeast whereas the summer prevailing wind directions vary from east and southwest. Lok Wo Sha Lane, Yiu Sha Road and the building separations in the nearby CDA developments are the major wind corridors in the locality. In view of the low-rise profile of the proposed development at 40 mPD, it is anticipated that the proposed development would not result in significant adverse air ventilation impact to the surrounding areas. CTP/UD&L of PlanD considered the AVA (EE) acceptable.

#### Proposed Public Housing Site at Hang Kin Street in Ma On Shan

- 4.8 As illustrated in the indicative conceptual layout prepared by HD, western part of the site falls within geological fault zone/ an area with underground cavities and northern boundary of the site is designated for Drainage Reserve (**Drawing 1**). In view of the site constraints, HD proposes to place the building block at the middle/eastern portion of the site.

#### *Traffic and Visual Aspects*

- 4.9 HD has undertaken relevant technical assessments (i.e. Traffic Review (TR) and visual appraisal (VA)) to ascertain that the proposed developments would not have adverse impacts on the traffic and visual aspects.
- 4.10 The site is well-served by public transport facilities and well-connected to adjacent developments by existing walkway and pedestrian crossing facilities. The TR shows that the traffic generated by the proposed housing development will not cause any significant traffic impact on the surrounding road networks. The TR confirms that the four junctions (i.e. Hang Fai Street/Sai Sha Road, Ning Tai Road/Hang Ming Street/Hang Fai Street, Hang Kin Street/Hang Ming Street and Hang Ming Street/Sai Sha Road) and the three road links (i.e. Sai Sha Road Northbound (from Ma On Shan Road), Sai Sha Road Northbound (from Hang Tak Street) and Sai Sha Road Southbound in the vicinity would operate satisfactorily with spare capacity in design year 2020 and 2025 (**Drawing 4**). The traffic queue problem in the vicinity due to school-related traffic would also not be deteriorated after the population intake given the road link of Sai Sha Road Northbound would operate satisfactorily. AC for T/NT considers the TR acceptable in principle. A summary of the TR is at **Appendix II**.

- 4.11 The proposed public housing is to be developed for one block with BH of 39 storeys (i.e. 120 mPD). The maximum BH has taken into account the variations of BH of the existing and planned residential developments in the waterfront area (80 mPD to 120 mPD) and the inland area (120 mPD to 140 mPD). The VA (**Appendix V** and **Drawings 2, 2a to 2c**) conducted by HD indicates that the proposed development with BH of 120 mPD is below the Ma On Shan ridgeline and would blend in with the overall height profile in the vicinity where the heights of the waterfront buildings and inland buildings are 80mPD-120mPD and 120mPD-140mPD respectively. Suitable building design elements such as harmonized colour scheme and appropriate façade design and treatment (e.g. provision of green features, planter boxes, etc.) should be adopted to further improve the visual quality. The CTP/UD&L has no adverse comment on the VA.

#### *Air Ventilation Aspect*

- 4.12 According to the recommendations of the AVA (EE) conducted for the whole MOS OZP in 2009, the site is located within an air path running in an east-west direction from the mountain backdrop to the shoreline of Tide Cove/Tolo Harbour (**Plans 1b and 2b**). To assess the air ventilation impacts of the proposed housing development at the site on the surrounding areas, an AVA comprising expert evaluation and quantitative assessment has been conducted by PlanD for the site.
- 4.13 The AVA by expert evaluation indicates that, given that the scale and blocking of the proposed housing development at the site is not significant and the continuous open space network running in an east-west direction serving the function of an air path (at least 70 m) could largely be maintained, it is unlikely that the proposed housing development will have significant adverse air ventilation impacts on the surrounding areas. To assess the possible impact on air ventilation performance of the proposed housing development in more details under different wind directions and at different locations in the vicinity, a site-specific quantitative assessment by Computational Fluid Dynamics (CFD) was carried out for the proposed housing development.
- 4.14 In the CFD study (**Appendix IIIb**), two schemes of different designs have been examined against the baseline scenario of having no development at the site. Special design elements for the proposed development, i.e. linear building block disposition aligned with the prevailing wind direction, podium-free structure, semi-sunken basement car park in the southern portion of the site and building setbacks from nearby roads have also been examined. It is found that the overall air ventilation performances are comparable between the baseline scenario and the two design schemes thus the current overall wind environment would not be adversely affected by the proposed public housing development. While there would be some impacts on the wind environment of a few locations, the impacts are not significant, and are localized and confined to limited wind directions only. The CFD study recommended that mitigation measures such as refining the disposition/orientation and bulk of the building block, provision of voids/empty bays at the ground floor and lower building height should be further explored in quantitative air ventilation study at the detailed design stage by HD. Such requirement has been mentioned in paragraph 9.3.11 of the ES (**Annex D**) of the OZP.

### *Environmental and Infrastructure Aspect*

- 4.15 Concerned departments (i.e. DEP, CE/MS of DSD and CE/Dev of WSD) have been consulted and confirmed that the proposed development would not cause any insurmountable problems on the environmental, drainage, sewerage and water supplies aspects and relevant technical assessments could be conducted at the detailed design stage.
- 4.16 The proposed public housing development will be guided by administrative planning brief as specified in the ES of the OZP. The planning brief sets out the planning parameters, the design requirements as well as the technical assessments to be conducted for the proposed development (paragraph 9.3.12 in **Annex D**). The proposed public housing development is targeted to be completed in 2019/20.

### Provision of Open Space and G/IC Facilities (Appendix VI)

- 4.17 The overall provision of open space within the Planning Scheme Area (about 74 ha) is sufficient to meet the planned population in Ma On Shan. There is still a surplus of about 26 ha of open space in the Planning Scheme Area as a whole after excluding 0.59 ha of the subject “O” site. In the vicinity, there are about 2.38 ha of land reserved for “O” at Po Tai Street, Hang Kin Street and Sai Sha Road (near Chun On Estate) that have yet to be implemented (**Plan 1b**).
- 4.18 Ma On Shan is a well planned and established new town. The planned provision for various GIC facilities and land reservation are generally adequate to meet the need of the planned population of Ma On Shan according to HKPSG. There is no deficit of planned GIC facilities such as sports centre, sports ground/sports complex, swimming pool complex, integrated family services centre, library, clinic/health centre, divisional/district police station, magistracy, etc. in the Planning Scheme Area. Sites have been reserved at Hang Kin Street, On Chun Street, Ma On Shan Road (adjacent to Ma On Shan Police Station) and Lok Wo Sha Lane for provision of a clinic, a complex for a sports centre and a community hall and a sport centre respectively (**Plan 6**). Regarding the provision of hospital beds, although there is a shortfall of hospital beds in the whole Sha Tin (including Ma On Shan) district, it is determined within a regional context and the Hospital Authority and Food and Health Bureau should comprehensively review the overall demand and provision of hospital facilities in the territory and determine whether there is a need for site reservation for hospitals to meet the demand. As for the provision of primary school, whilst there is a deficit of about 98 classrooms, EDB advised that, among the 304 existing primary school classrooms in Ma On Shan, only 230 primary school classrooms are in use and there is still an existing surplus of 74 primary school classrooms. The provision of school facilities would be kept monitored.

## **5. Consultation with District Council**

- 5.1 The Development and Housing Committee (DHC) of Sha Tin District Council (STDC) has been consulted on 5.3.2015. A summary of the discussion at the meeting is at **Appendix VII**.

- 5.2 DHC generally supported the initiative of increasing housing land supply to meet the acute housing demand but considered that site selection should be careful to minimize impacts on the neighbourhood and adequate transport and supporting facilities should be provided for the new housing developments.
- 5.3 The site at Hang Kin Street was considered a difficult site for housing development given its current green corridor/air path function and various site constraints. The government should consider if it was worth to pursue. Strong objections from local residents were heard. There were concerns on air ventilation, building height, traffic congestion, inadequate car parking spaces and insufficient public transport services. It was also considered that additional GIC facilities and public open space should be provided to cater for the new population.
- 5.4 Regarding the private residential development near Yiu Sha Road, there were concerns on the adverse environmental, ecological and visual impacts arising from the development, and views that the site should be reserved for GIC use as there were insufficient community facilities.
- 5.5 PlanD has also received public comments objecting to the two proposed housing sites on similar grounds as mentioned above. In response, the technical assessments highlighted in paragraph 4 above are relevant.

## **6. Proposed Amendments to the Approved Ma On Shan OZP**

The proposed amendments to the approved OZP are shown on the draft Amendment Plan No. S/MOS/20A at **Annex B**. Details of the amendment items are as follows:

- (a) **Item A (about 0.46 ha) (Plans 1a and 2a)**  
Rezoning of a site near Yiu Sha Road from “G/IC” to “R(C)3” to facilitate private housing development with stipulation of maximum BH restriction of 40 mPD.
- (b) **Item B (about 0.59 ha) (Plans 1b and 2b)**  
Rezoning of a site at Hang Kin Street from “O” and an area shown as ‘Road’ to “R(A)10” to facilitate public housing development with stipulation of maximum BH restriction of 120 mPD.

## **7. Proposed Amendments to the Notes of the Approved Ma On Shan OZP**

The proposed amendments to the Notes for these zones to incorporate the building height and/or PR restrictions are shown on the revised Notes of the OZP at **Annex C** (with addition in bold and italics and deletions ~~crossed out~~). The major amendments include:

- (a) Incorporation of a new sub-zone of “R(C)3” with the stipulation of a maximum PR of 2.4 and a maximum BH of 40 mPD.
- (b) Incorporation of a new sub-zone of “R(A)10” with the stipulation of a maximum PR of 6.



## 8. **Explanatory Statement of the OZP**

The ES of the OZP has been revised to take into account the proposed amendments as mentioned in paragraphs 6 and 7 above and to reflect the latest status and planning circumstances of the OZP. A copy of the revised ES is at **Annex D** (with addition in bold and italics and deletions ~~crossed-out~~).

## 9. **Plan Number**

Upon gazetting, the draft OZP will be renumbered as S/MOS/21.

## 10. **Consultation**

### Departmental Consultation

10.1 Relevant bureaux and departments were consulted on the proposed amendments. Comments of Director of Housing (D of H), AC for T/NT, CE/MS of DSD, CE/Dev of WSD, S for E, DEP, DLCS and CTP/UD&L of PlanD have been incorporated into the above paragraphs, where appropriate.

10.2 Apart from the above, the following departments have no objection to/no comment on the proposed amendments:

- (a) District Lands Officer, Sha Tin;
- (b) District Officer (Sha Tin);
- (c) Project Manager/New Territories East, Civil Engineering and Development;
- (d) Head of Geotechnical Engineering Office, Civil Engineering and Development Department;
- (e) Antiquities and Monuments Office, Leisure and Cultural Services Department;
- (f) Chief Building Surveyor/New Territories 2 & Railway, Buildings Department;
- (g) Chief Architect/Central Management Division, Architectural Services Department;
- (h) Chief Highway Engineer/ New Territories East, Highways Department;
- (i) Director of Agriculture, Fisheries and Conservation;
- (j) Director of Fire Services; and
- (k) Commissioner for Police.

### Public Consultation

10.3 If the proposed amendments are agreed by the Committee, the draft OZP and its Notes will be suitable for exhibition under section 5 of the Ordinance. Members of the public can submit representations on the OZP to the Board during the two-month statutory public inspection period.

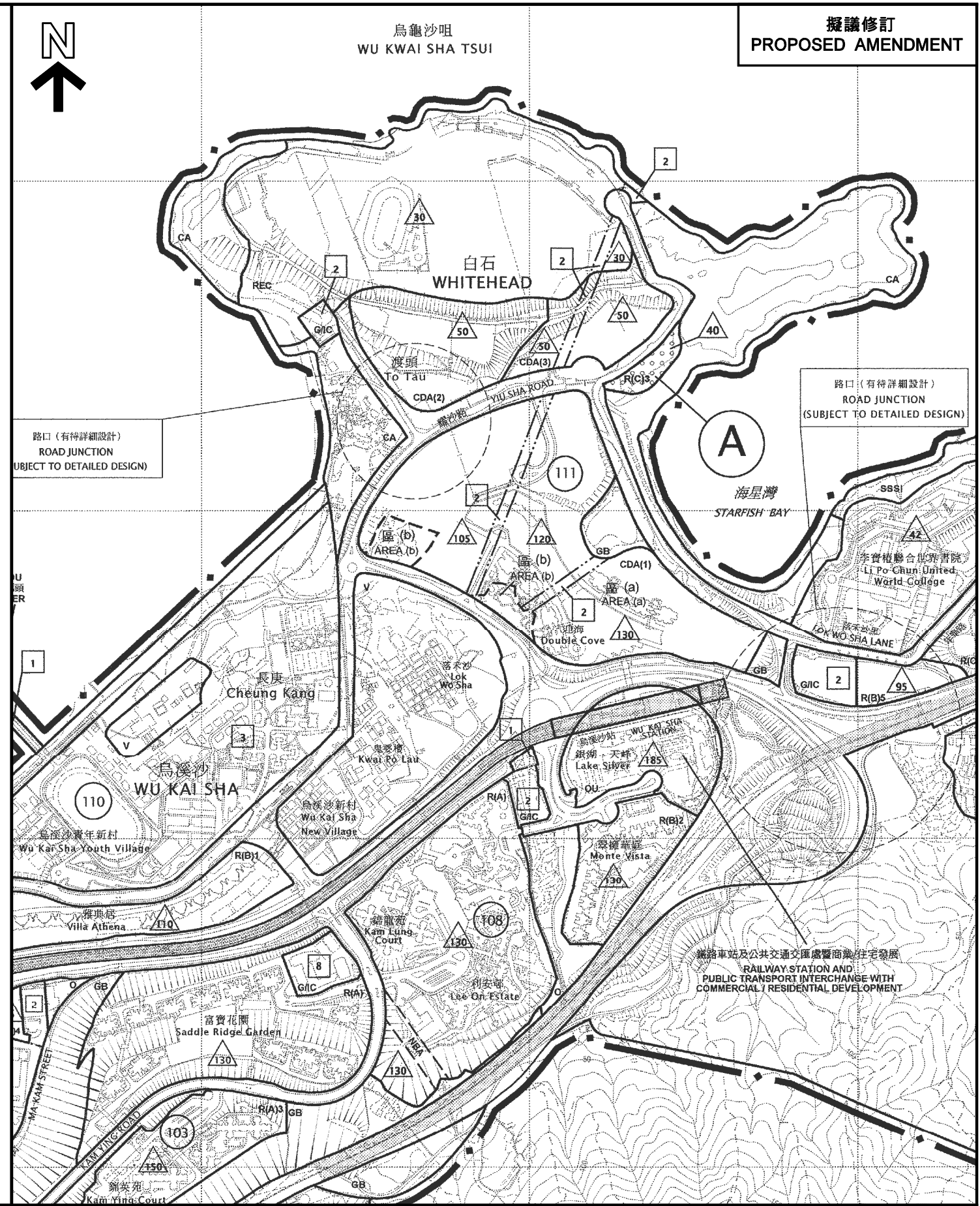
## 11. **Decision Sought**

Members are invited to:

- (a) agree to the proposed amendments to the approved Ma On Shan OZP No. S/MOS/20 as mentioned in paragraphs 6 and 7 above;
- (b) agree that the amendment Plan No. S/MOS/20A at Annex B (to be renumbered to S/MOS/21 upon gazetting) and its Notes at Annex C are suitable for exhibition for public inspection under section 5 of the Ordinance;
- (c) adopt the revised ES at Annex D as an expression of the planning intentions and objectives of the Board for various land use zones on the draft Ma On Shan OZP; and
- (d) agree that the revised ES at Annex D is suitable for exhibition for public inspection together with the draft OZP No. S/MOS/20A (to be renumbered to S/MOS/21 upon gazetting).

## 12. **Attachments**

<b>Plans 1a and 1b</b>	OZP Comparison
<b>Plans 2a and 2b</b>	Site Plan
<b>Plans 3a and 3b</b>	Aerial Photos
<b>Plans 4a and 4b</b>	Site Photos
<b>Plans 5, 5a to 5c</b>	Photomontages for the Proposed Private Residential Site
<b>Plan 6</b>	Sites Reserved for GIC Facilities
<b>Drawing 1</b>	Conceptual Layout for the Proposed Public Housing Site
<b>Drawings 2, 2a to 2c</b>	Photomontages for the Proposed Public Housing Site
<b>Drawing 3</b>	Indicative Plan of the Proposed Roundabout Junction at Yiu Sha Road and Lok Wo Sha Lane
<b>Drawing 4</b>	Road Junctions and Road Links in the Vicinity of Proposed Public Housing Site
<b>Annex A</b>	Approved Ma On Shan OZP No. S/MOS/20 (A-3 size)
<b>Annex B</b>	Draft Ma On Shan OZP No. S/MOS/20A
<b>Annex C</b>	Notes of the draft Ma On Shan OZP No. S/MOS/20A
<b>Annex D</b>	Explanatory Statement of the draft Ma On Shan OZP No. S/MOS/20A
<b>Appendix I</b>	Summary of Technical Assessment Results provided by CEDD
<b>Appendix II</b>	Summary of Traffic Review Results provided by HD
<b>Appendices IIIa and IIIb</b>	Summary of Air Ventilation Assessment by Expert Evaluation and Computational Fluid Dynamics
<b>Appendix IV</b>	Visual Appraisal Report provided by PlanD
<b>Appendix V</b>	Visual Appraisal Report provided by HD
<b>Appendix VI</b>	Provision of Open Space and Major GIC Facilities in the MOS OZP
<b>Appendix VII</b>	Summary of Consultation with DHC of STDC on 5.3.2015



本摘要圖於2015年2月18日擬備，  
所根據的資料為分區計劃大綱圖編號  
S/MOS/20及S/MOS/20A  
EXTRACT PLAN PREPARED ON 18.2.2015  
BASED ON OUTLINE ZONING PLANS No.  
S/MOS/20 & S/MOS/20A

位置圖 - 項目A  
LOCATION PLAN - ITEM A  
在馬鞍山分區計劃大綱核准圖編號S/MOS/20作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20  
SCALE 1 : 7 500 比例尺

米  
METRES 100 0 100 200 300 400 500 600 700 METRES

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PLANNING DEPARTMENT

參考編號  
REFERENCE No.  
M/ST/15/7

圖 PLAN  
1a





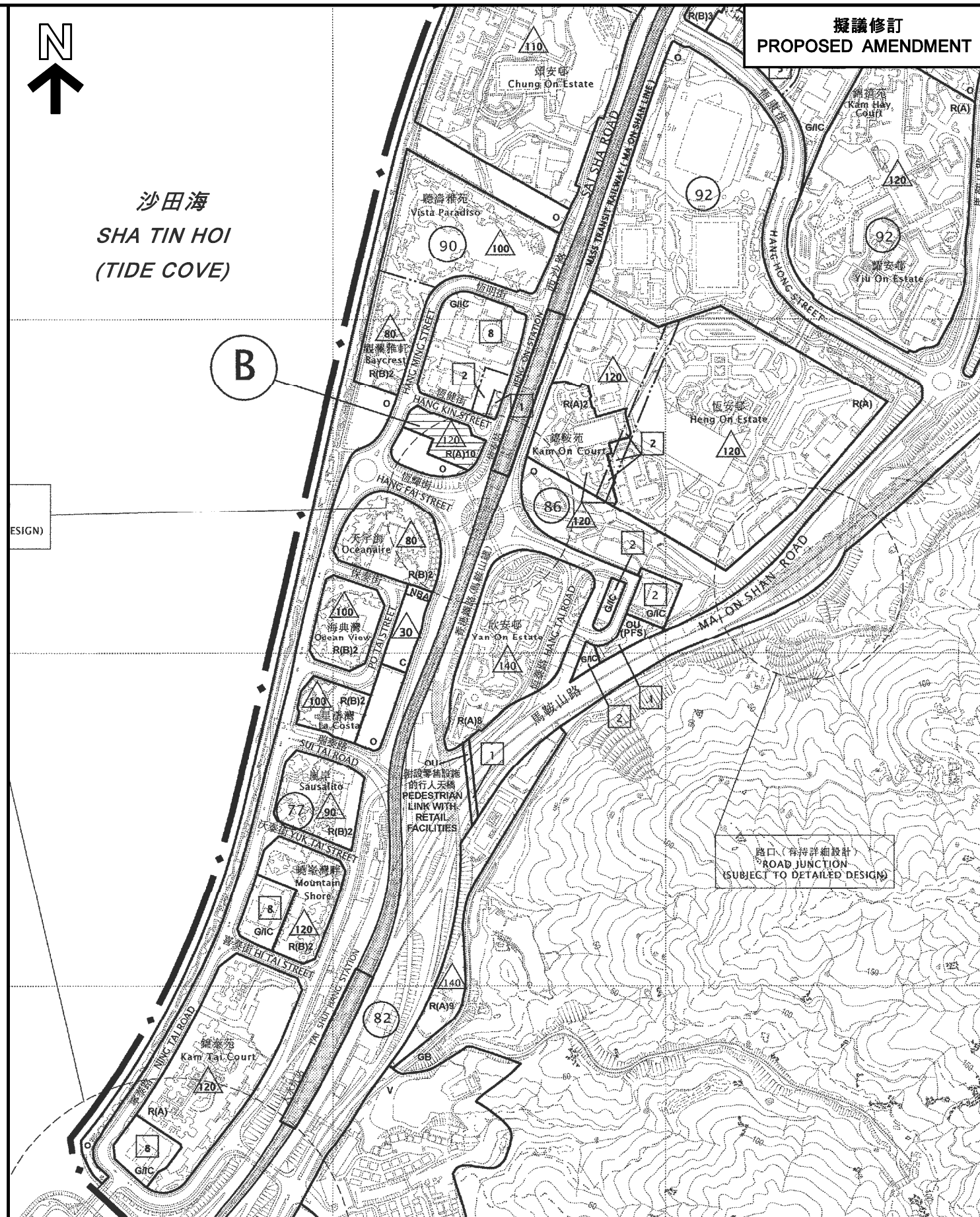
沙田海  
SHA TIN HOI  
(TIDE COVE)

分區計劃大綱圖編號S/MOS/20  
的現有用途地帶  
EXISTING ZONINGS ON  
PLAN No. S/MOS/20



沙田海  
SHA TIN HOI  
(TIDE COVE)

擬議修訂  
PROPOSED AMENDMENT



本摘要圖於2015年3月9日擬備，  
所根據的資料為分區計劃大綱圖編號  
S/MOS/20及S/MOS/20A  
EXTRACT PLAN PREPARED ON 9.3.2015  
BASED ON OUTLINE ZONING PLANS No.  
S/MOS/20 & S/MOS/20A

位置圖 - 項目B  
LOCATION PLAN - ITEM B  
在馬鞍山分區計劃大綱核准圖編號S/MOS/20作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20  
SCALE 1 : 7 500 比例尺

米 METRES 100 0 100 200 300 400 500 600 700 METRES

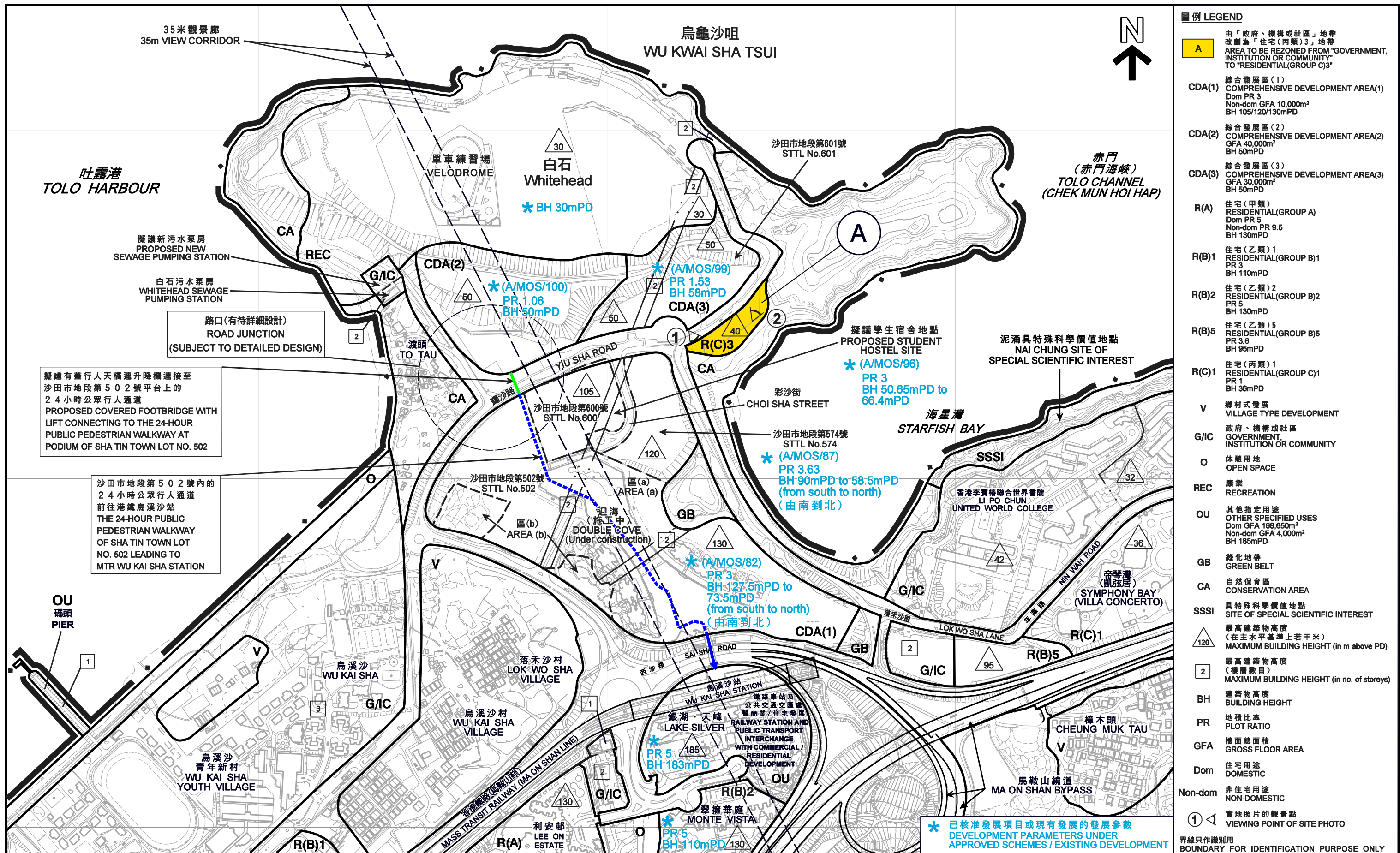
規 劃 署  
PLANNING DEPARTMENT



參考編號  
REFERENCE No.  
M/ST/15/7

圖 PLAN  
1b





圖例 LEGEND	
<b>A</b>	由「政府、機構或社區」地帶 改劃為「住宅(丙類)3」地帶 AREA TO BE REZONED FROM "GOVERNMENT, INSTITUTION OR COMMUNITY" TO "RESIDENTIAL(GROUP C)3"
<b>CDA(1)</b>	綜合發展區(1) COMPREHENSIVE DEVELOPMENT AREA(1) Dom PR 3 Non-dom GFA 10,000m <sup>2</sup> BH 105/120/130mPD
<b>CDA(2)</b>	綜合發展區(2) COMPREHENSIVE DEVELOPMENT AREA(2) GFA 40,000m <sup>2</sup> BH 50mPD
<b>CDA(3)</b>	綜合發展區(3) COMPREHENSIVE DEVELOPMENT AREA(3) GFA 30,000m <sup>2</sup> BH 50mPD
<b>R(A)</b>	住宅(甲類) RESIDENTIAL(GROUP A) Dom PR 5 Non-dom PR 9.5 BH 130mPD
<b>R(B)1</b>	住宅(乙類)1 RESIDENTIAL(GROUP B)1 PR 3 BH 110mPD
<b>R(B)2</b>	住宅(乙類)2 RESIDENTIAL(GROUP B)2 PR 5 BH 130mPD
<b>R(B)5</b>	住宅(乙類)5 RESIDENTIAL(GROUP B)5 PR 3.6 BH 95mPD
<b>R(C)1</b>	住宅(丙類)1 RESIDENTIAL(GROUP C)1 PR 1 BH 36mPD
<b>V</b>	鄉村式發展 VILLAGE TYPE DEVELOPMENT
<b>G/IC</b>	政府、機構或社區 GOVERNMENT, INSTITUTION OR COMMUNITY
<b>O</b>	休憩用地 OPEN SPACE
<b>REC</b>	康樂 RECREATION
<b>OU</b>	其他指定用途 OTHER SPECIFIED USES Dom GFA 168,650m <sup>2</sup> Non-dom GFA 4,000m <sup>2</sup> BH 185mPD
<b>GB</b>	綠化地帶 GREEN BELT
<b>CA</b>	自然保育區 CONSERVATION AREA
<b>SSSI</b>	具特殊科學價值地點 SITE OF SPECIAL SCIENTIFIC INTEREST
<b>△120</b>	最高建築物高度 (在主水平基準上若干米) MAXIMUM BUILDING HEIGHT (in m above PD)
<b>2</b>	最高建築物高度 (樓層數目) MAXIMUM BUILDING HEIGHT (in no. of storeys)
<b>BH</b>	建築物高度 BUILDING HEIGHT
<b>PR</b>	地積比率 PLOT RATIO
<b>GFA</b>	樓面總面積 GROSS FLOOR AREA
<b>Dom</b>	住宅用途 DOMESTIC
<b>Non-dom</b>	非住宅用途 NON-DOMESTIC
<b>①</b>	實地照片的觀景點 VIEWING POINT OF SITE PHOTO
界線只作識別用 BOUNDARY FOR IDENTIFICATION PURPOSE ONLY	

本摘要圖於2015年2月18日擬備，  
所根據的資料為測量圖編號  
7-NE-14A、B、C、D、15C、19A、B 及 20A  
EXTRACT PLAN PREPARED ON 18.2.2015  
BASED ON SURVEY SHEETS No.  
7-NE-14A, B, C, D, 15C, 19A, B & 20A

平面圖-項目A  
SITE PLAN - ITEM A  
在馬鞍山分區計劃大綱核准圖編號S/MOS/20  
作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

SCALE 1 : 5 000 比例尺  
0 100 200 300 400 METRES 米

規劃署  
PLANNING DEPARTMENT  
參考編號  
REFERENCE No.  
M/ST/15/7  
圖 PLAN  
2a









A

白石  
WHITEHEAD

YIU SHA ROAD

耀沙路

彩沙街  
CHOI SHA STREET

海星灣  
STARFISH BAY

迎海  
Double Cove

**圖例 LEGEND**



主題地點  
(界線只作識別用)  
SUBJECT SITE  
(BOUNDARY FOR IDENTIFICATION  
PURPOSE ONLY)

**航攝照片 - 項目A  
AERIAL PHOTO - ITEM A**

在馬鞍山分區計劃大綱核准圖編號S/MOS/20  
作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

**規劃署  
PLANNING  
DEPARTMENT**



參考編號  
REFERENCE No.  
M/ST/15/7

**圖 PLAN  
3a**

本摘要圖於2015年1月26日擬備，  
所根據的資料為地政總署  
於2014年8月15日拍得的航攝照片  
編號CW109268

EXTRACT PLAN PREPARED ON 26.1.2015  
BASED ON AERIAL PHOTO No. CW109268  
TAKEN ON 15.8.2014 BY  
LANDS DEPARTMENT





**圖例 LEGEND**



主題地點  
(界線只作識別用)  
SUBJECT SITE  
(BOUNDARY FOR IDENTIFICATION  
PURPOSE ONLY)

本摘要圖於2015年2月25日擬備，  
所根據的資料為地政總署  
於2014年8月15日拍得的航攝照片  
編號CW109260

EXTRACT PLAN PREPARED ON 25.2.2015  
BASED ON AERIAL PHOTO No. CW109260  
TAKEN ON 15.8.2014 BY  
LANDS DEPARTMENT

**航攝照片 - 項目B  
AERIAL PHOTO - ITEM B**

在馬鞍山分區計劃大綱核准圖編號S/MOS/20  
作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

**規劃署  
PLANNING  
DEPARTMENT**



參考編號  
REFERENCE No.  
M/ST/15/7

**圖 PLAN  
3b**





界線只作識別用  
BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本圖於2015年1月26日擬備，所根據的資料為攝於2014年6月18日的實地照片  
PLAN PREPARED ON 26.1.2015  
BASED ON SITE PHOTOS TAKEN ON 18.6.2014

**實地照片 - 項目A**  
**SITE PHOTO - ITEM A**

在馬鞍山分區計劃大綱核准圖編號S/MOS/20作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

**規 劃 署**  
**PLANNING**  
**DEPARTMENT**



參考編號  
REFERENCE No.  
**M/ST/15/7**

**圖 PLAN**  
**4a**





界線只作識別用  
BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本圖於2015年2月25日擬備，所根據的資料為攝於2014年11月26日的實地照片

PLAN PREPARED ON 25.2.2015  
BASED ON SITE PHOTO TAKEN ON 26.11.2014

### 實地照片 - 項目B SITE PHOTO - ITEM B

在馬鞍山分區計劃大綱核准圖編號S/MOS/20作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

規 劃 署  
PLANNING  
DEPARTMENT

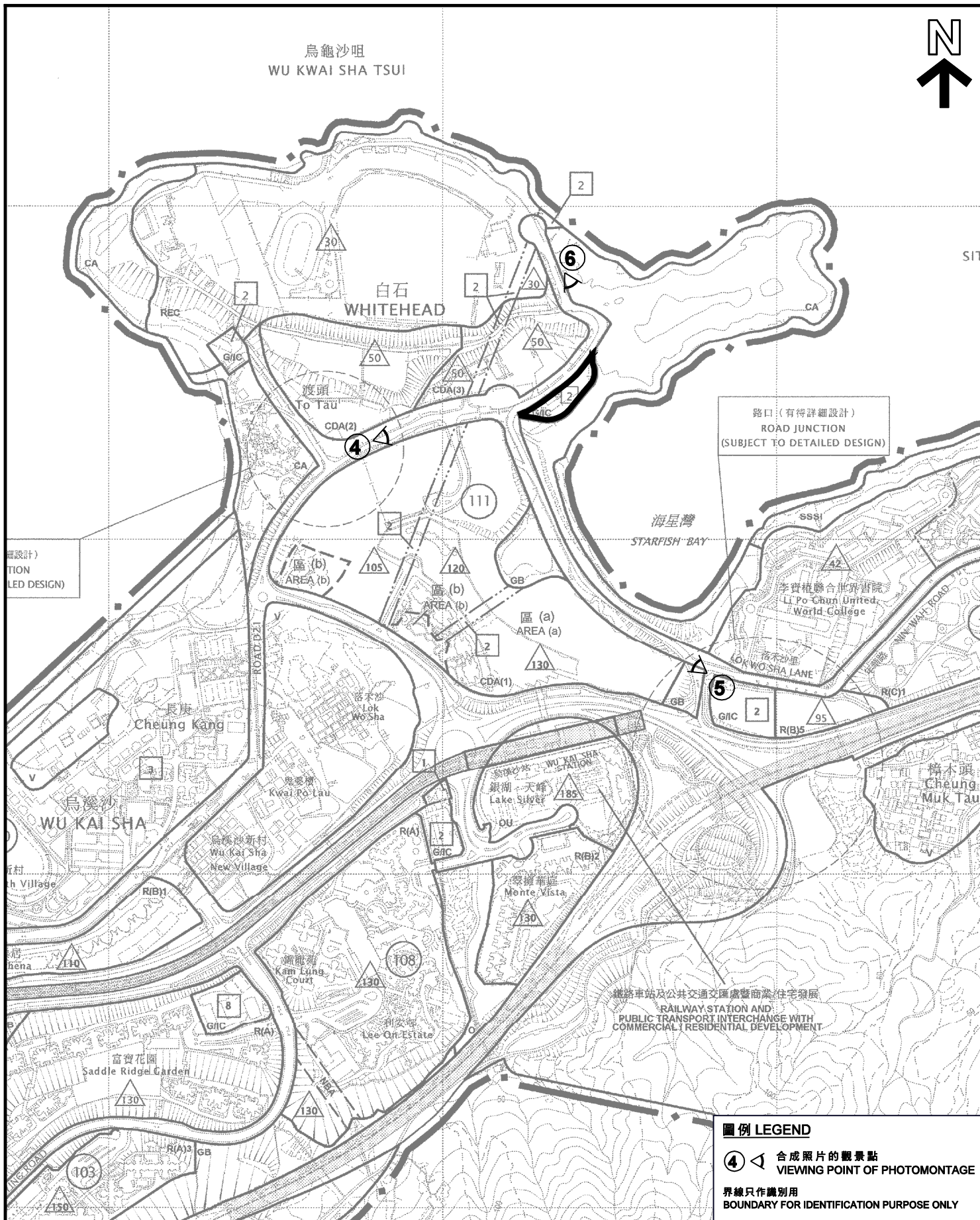


參考編號  
REFERENCE No.  
M/ST/15/7

圖 PLAN  
4b



烏龜沙咀  
WU KWAI SHA TSUI



本摘要圖於2015年2月24日擬備，  
所根據的資料為於2014年12月2日  
核准的分區計劃大綱圖編號S/MOS/20  
EXTRACT PLAN PREPARED ON 24.2.2015  
BASED ON OUTLINE ZONING PLAN No.  
S/MOS/20 APPROVED ON 2.12.2014

### 合成照片的觀景點 VIEWPOINTS OF PHOTOMONTAGE

在馬鞍山分區計劃大綱核准圖編號S/MOS/20作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

SCALE 1:7 500 比例尺  
米 100 0 100 200 300 米  
METRES

規劃署  
PLANNING  
DEPARTMENT



參考編號  
REFERENCE No.  
M/ST/15/7

圖 PLAN  
5



實地照片  
SITE PHOTO



合成照片  
PHOTOMONTAGE



圖例 LEGEND

-  主題地點  
SUBJECT SITE
-  CDA(1)地帶沙田市地段第600號的擬議學生宿舍  
PROPOSED STUDENT HOSTEL AT STTL No. 600 IN "CDA(1)" ZONE
-  CDA(1)地帶沙田市地段第574號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 574 IN "CDA(1)" ZONE
-  CDA(3)地帶沙田市地段第601號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 601 IN "CDA(3)" ZONE
-  CDA  
綜合發展區  
COMPREHENSIVE DEVELOPMENT AREA

本圖於2015年2月24日擬備，所根據  
的資料為攝於2015年1月27日  
的實地照片  
PLAN PREPARED ON 24.2.2015  
BASED ON SITE PHOTO TAKEN ON  
27.1.2015

合成照片 - 項目A  
PHOTOMONTAGE - ITEM A  
在馬鞍山分區計劃大綱核准圖編號S/MOS/20  
作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

規 劃 署  
PLANNING DEPARTMENT   
參考編號  
REFERENCE No.  
M/ST/15/7  
圖 PLAN  
5a



實地照片  
SITE PHOTO



合成照片  
PHOTOMONTAGE



圖 例 LEGEND

- 主 題 地 點  
SUBJECT SITE
- CDA(1)地帶沙田市地段第600號的擬議學生宿舍  
PROPOSED STUDENT HOSTEL AT STTL No. 600 IN "CDA(1)" ZONE
- CDA(1)地帶沙田市地段第574號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 574 IN "CDA(1)" ZONE
- CDA(3)地帶沙田市地段第601號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 601 IN "CDA(3)" ZONE
- CDA 綜 合 發 展 區  
COMPREHENSIVE DEVELOPMENT AREA

本圖於2015年2月24日擬備，所根據的資料為攝於2015年1月27日的實地照片  
PLAN PREPARED ON 24.2.2015  
BASED ON SITE PHOTO TAKEN ON 27.1.2015

合成照片 - 項目A  
PHOTOMONTAGE - ITEM A  
在馬鞍山分區計劃大綱核准圖編號S/MOS/20  
作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

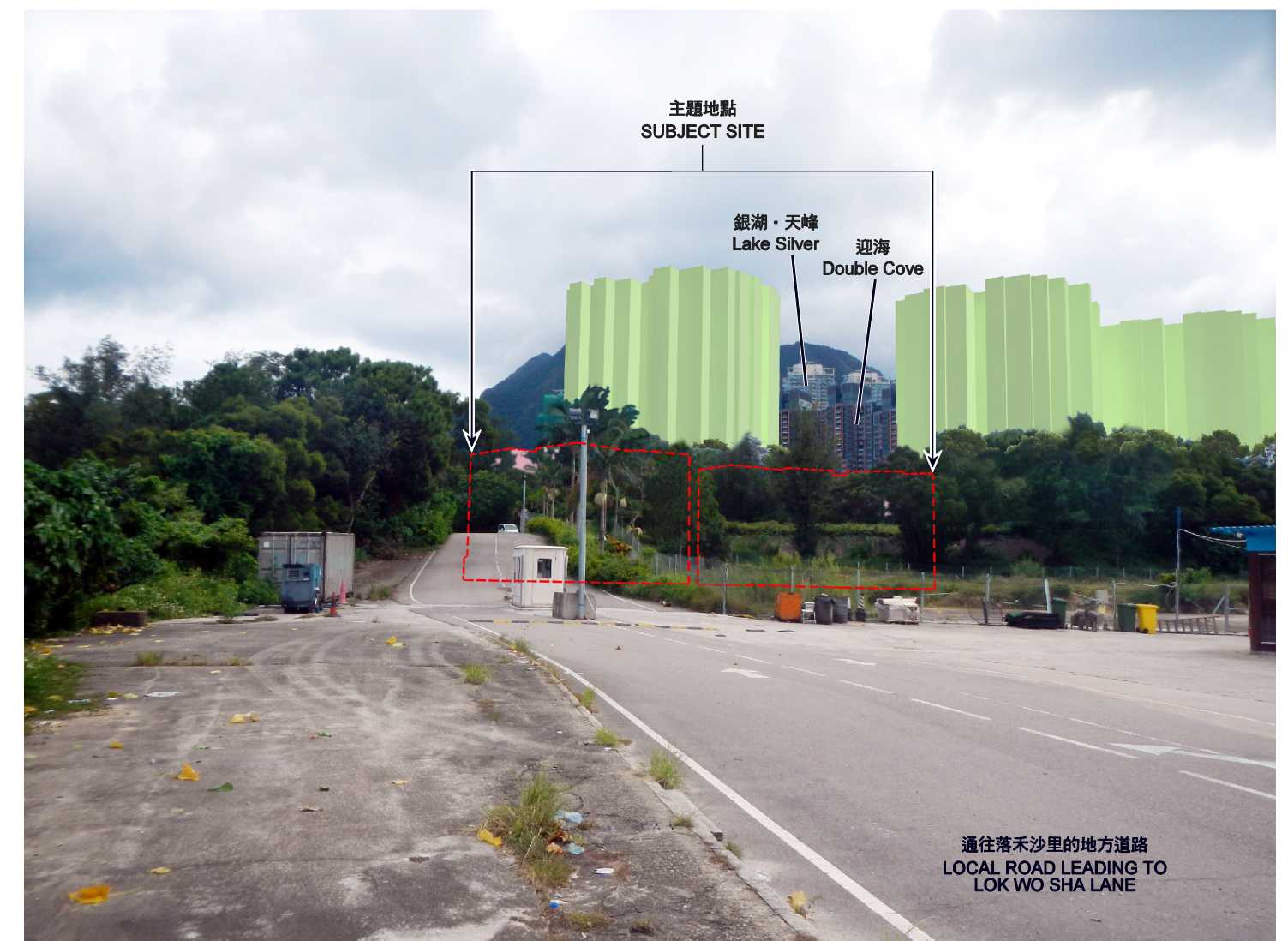
規 劃 署  
PLANNING DEPARTMENT   
參考編號  
REFERENCE No.  
M/ST/15/7  
圖 PLAN  
5b



實地照片  
SITE PHOTO



合成照片  
PHOTOMONTAGE



圖例 LEGEND



主題地點  
SUBJECT SITE



CDA(3)地帶沙田市地段第601號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 601 IN "CDA(3)" ZONE

CDA

綜合發展區  
COMPREHENSIVE DEVELOPMENT AREA

本圖於2015年3月6日擬備，所根據  
的資料為攝於2015年1月27日  
的實地照片  
PLAN PREPARED ON 6.3.2015  
BASED ON SITE PHOTO TAKEN ON  
27.1.2015

合成照片 - 項目A  
PHOTOMONTAGE - ITEM A

在馬鞍山分區計劃大綱核准圖編號S/MOS/20  
作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

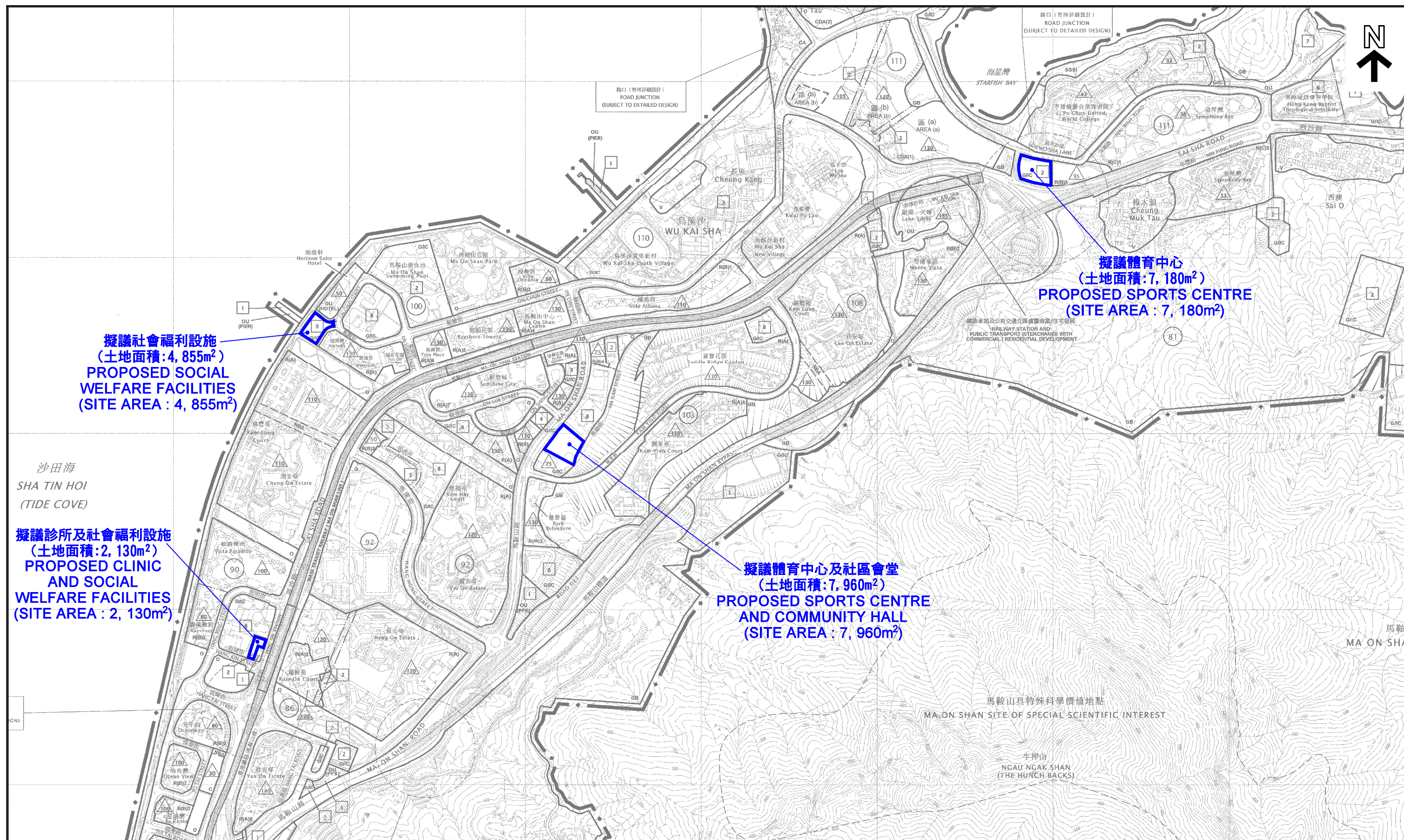
規 劃 署  
PLANNING DEPARTMENT



參考編號  
REFERENCE No.  
M/ST/15/7

圖 PLAN  
5c





本摘要圖於2015年3月9日擬備，  
所根據的資料為於2014年12月2日  
核准的分區計劃大綱圖編號S/MOS/20  
EXTRACT PLAN PREPARED ON 9.3.2015  
BASED ON OUTLINE ZONING PLAN No.  
S/MOS/20 APPROVED ON 2.12.2014

擬議社區設施的位置  
SITES RESERVED FOR GIC FACILITIES

在馬鞍山分區計劃大綱核准圖編號S/MOS/20作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

SCALE 1:10 000 比例尺  
METRES 100 0 100 200 300 METRES

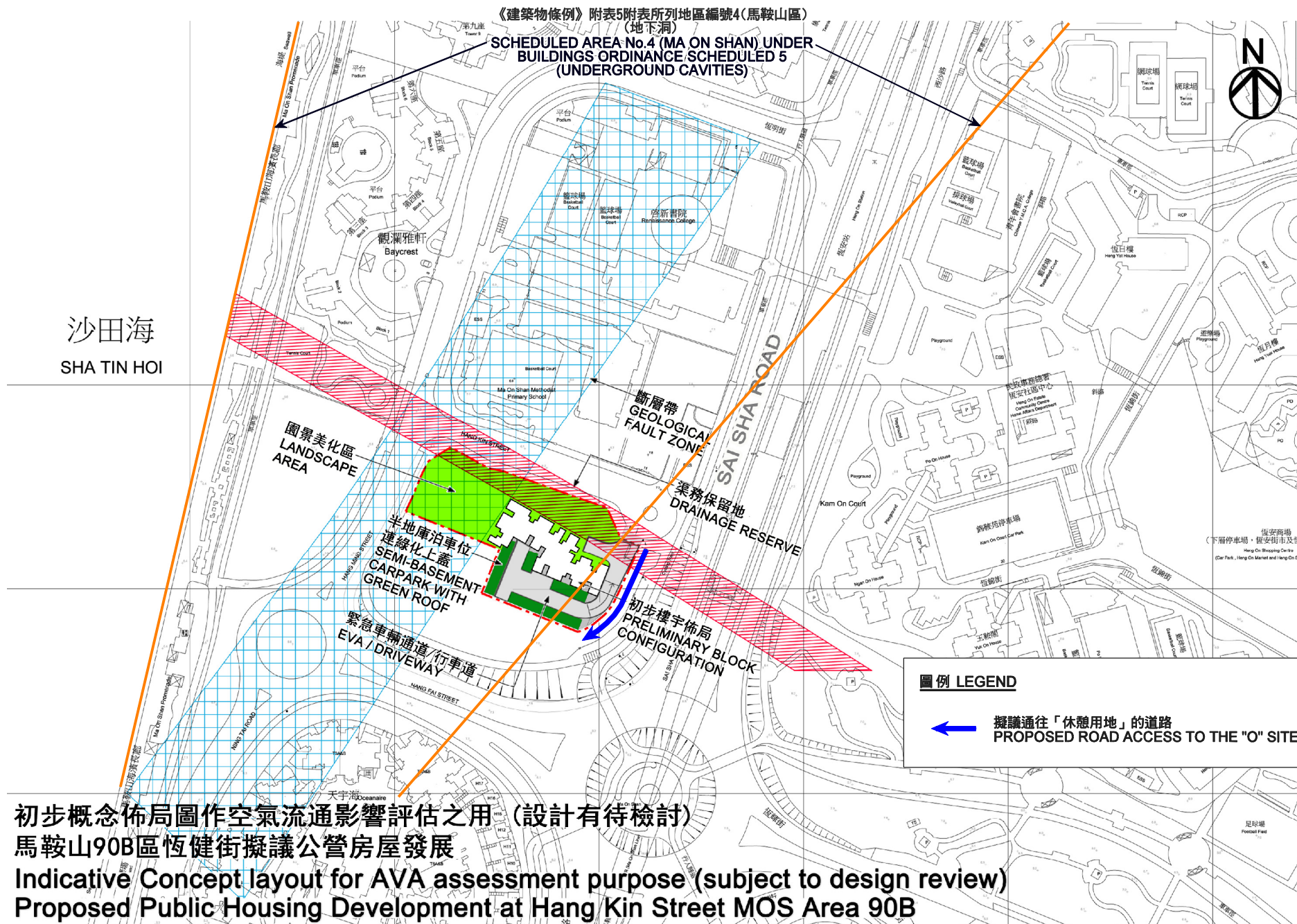
規劃署  
PLANNING DEPARTMENT



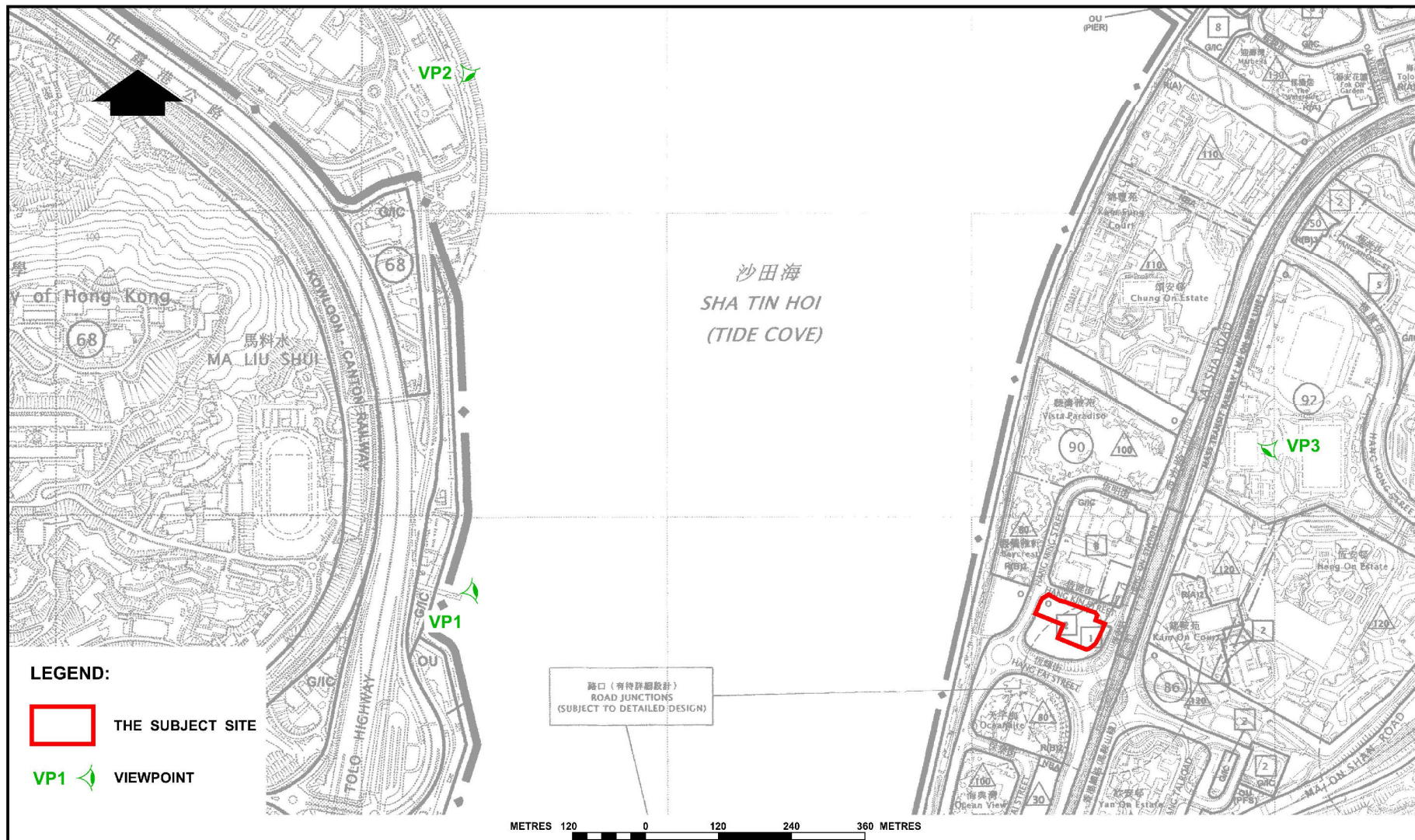
參考編號  
REFERENCE No.  
M/ST/15/7

圖 PLAN  
6









## LOCATION OF THE THREE SELECTED VIEWPOINTS



HOUSING DEPARTMENT  
PLANNING SECTION

Figure 1

DATE:  
29. 1. 2015

BASE EXTRACTED FROM OZP Nos. S/MOS/20 & S/ST/30

15 01365T

參考編號

REFERENCE No.

M/ST/15/7

繪圖 DRAWING 2

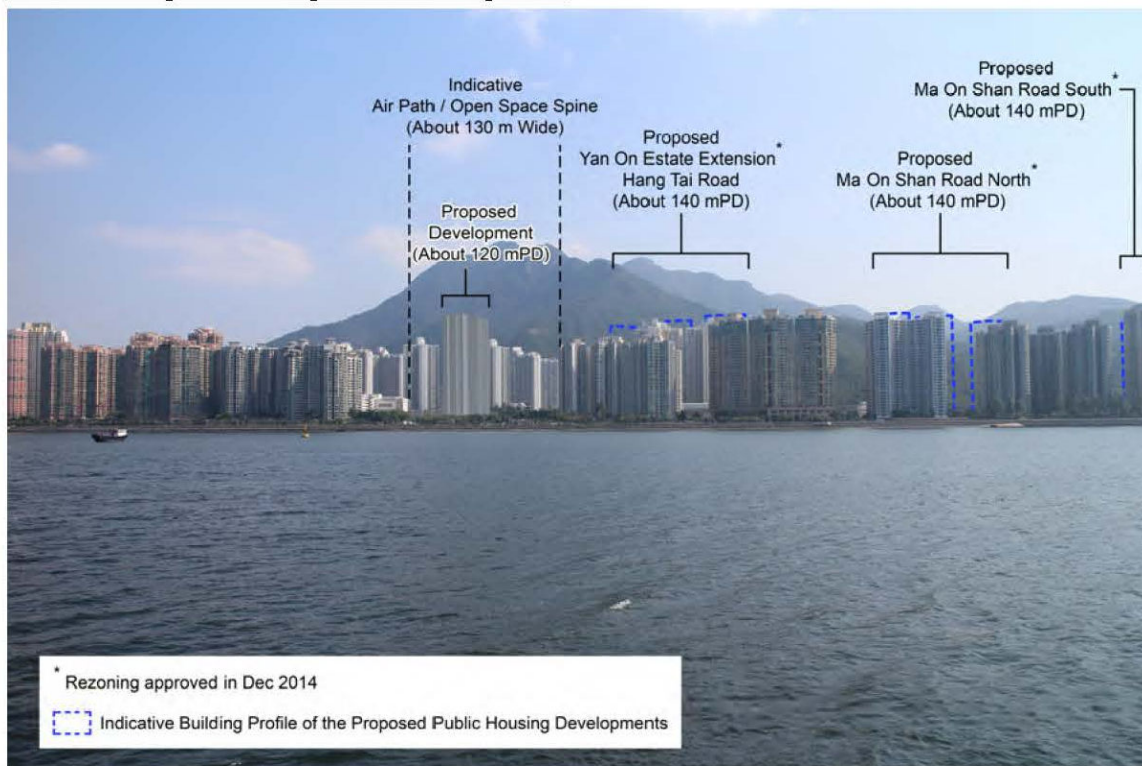
**Figure 2**

**Viewpoint 1 - Photomontage viewing from Ma Liu Shui Ferry Pier (from the west)**

Existing Condition without Proposed Development



Photomontage with Proposed Development





**Figure 3**

**Viewpoint 2 - Photomontage viewing from Pak Shek Kok Promenade (from the northwest)**

Existing Condition without Proposed Development



Photomontage with Proposed Development



**Figure 4**

**Viewpoint 3 - Photomontage viewing from Ma On Shan Recreation Ground (from the northeast)**

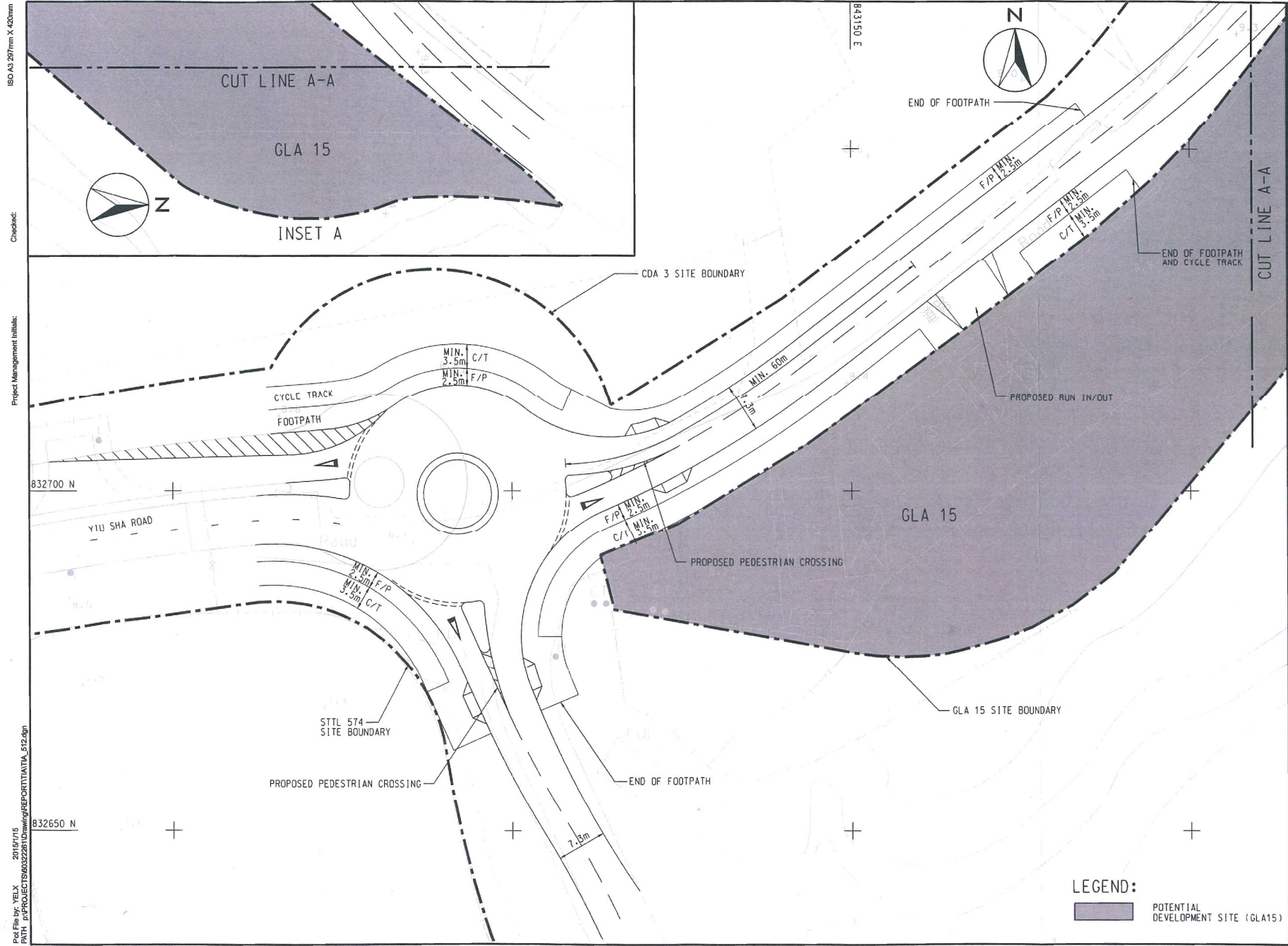
Existing Condition without Proposed Development



Photomontage with Proposed Development







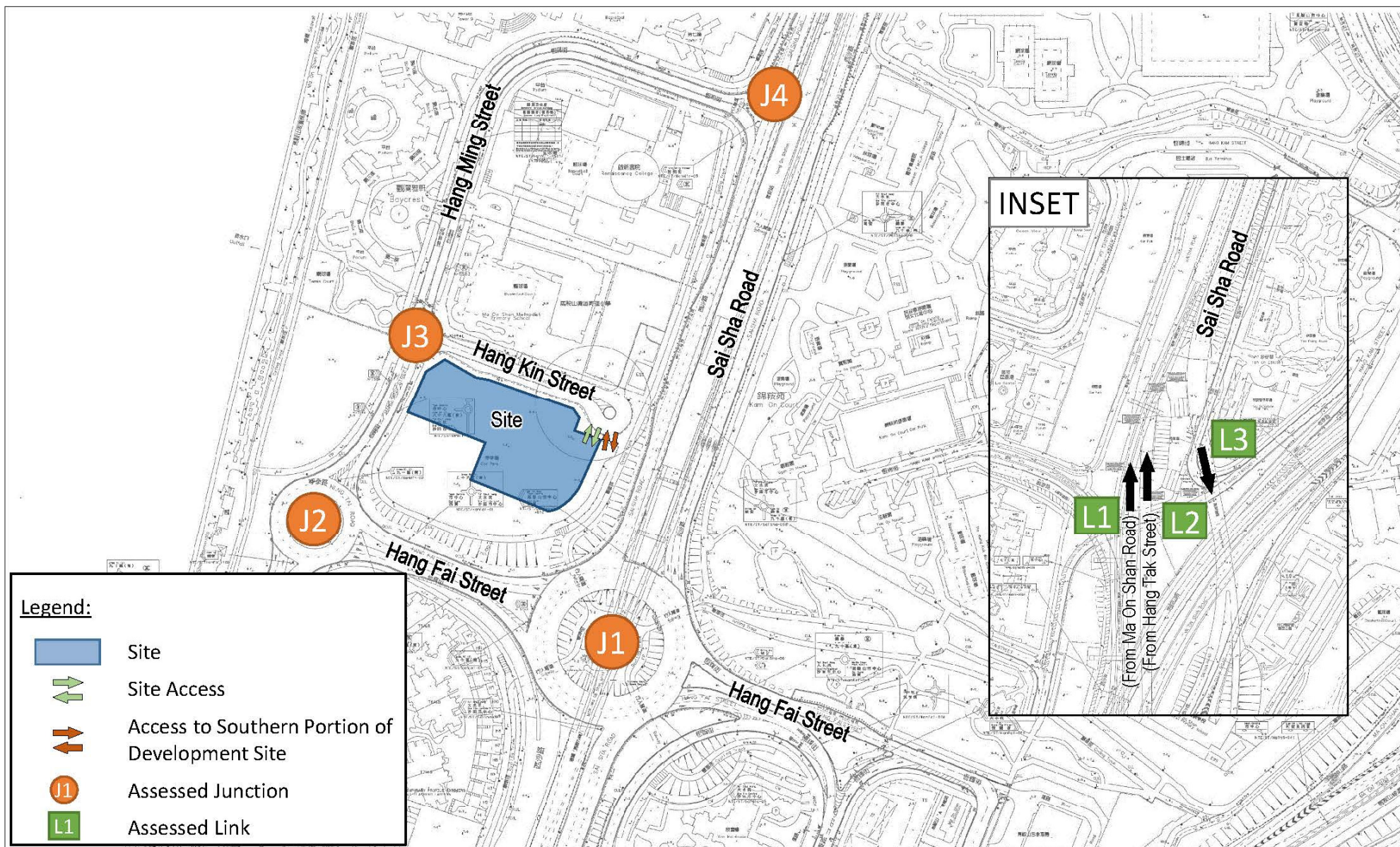
**AECOM**

60322261/TIA/FIGURE 3.2B

THE PROPOSED ROAD CONNECTION TO  
YIU SHA ROAD DUAL - 2 LANE CARRIAGEWAY

AGREEMENT NO. NTE 01/2014  
TECHNICAL ASSESSMENTS ON INFRASTRUCTURE TO  
SUPPORT A HOUSING SITE (GLA15) AT WHITEHEAD,  
MA ON SHAN - FEASIBILITY STUDY  
Project No.: 60322261 Date: Jan. 2015





Job Title Hang Kin Street, Area 90B, Ma On Shan – Traffic Review Study			FIGURE 2.1
Date 02/15	Scale N.T.S	Drawing Title SITE AND ASSESSED JUNCTIONS AND LINKS LOCATIONS	ARUP
Drawn FKFT	Job No. 236072-07		





圖例 NOTATION				土地用途及面積一覽表 SCHEDULE OF USES AND AREAS			
ZONES		地帶 COMMUNICATIONS		交通		土地用途及面積一覽表 SCHEDULE OF USES AND AREAS	
COMMERCIAL	C	商業	RAILWAY AND STATION ELEVATED	鐵路及車站 (高架)		USE/S	大約面積及百分比 APPROXIMATE AREA & %
COMPREHENSIVE DEVELOPMENT AREA	CDA	綜合發展區	MAJOR ROAD AND JUNCTION	主要道路及路口		名稱	名稱
RESIDENTIAL (GROUP A)	RA(A)	住宅 (甲類)	ELEVATED ROAD	高架道路		HECTARES	%
RESIDENTIAL (GROUP B)	RB(B)	住宅 (乙類)					
RESIDENTIAL (GROUP C)	RC(C)	住宅 (丙類)	MISCELLANEOUS	其他			
VILLAGE TYPE DEVELOPMENT	V	鄉村式發展	BOUNDARY OF PLANNING SCHEME	規劃範圍界線			
GOVERNMENT, INSTITUTION OR COMMUNITY	GIC	政府、機構或社區	PLANNING AREA NUMBER	規劃區編號			
OPEN SPACE	O	休憩用地	BUILDING HEIGHT CONTROL ZONE BOUNDARY	建築物高度管制區界線			
RECREATION	REC	康樂	MAXIMUM BUILDING HEIGHT (IN METRES ABOVE PRINCIPAL DATUM)	最高建築物高度 (在主水平基準上若干米)			
OTHER SPECIFIED USES	OU	其他指定用途	MAXIMUM BUILDING HEIGHT (IN NUMBER OF STOREYS)	最高建築物高度 (樓層數目)			
GREEN BELT	GB	綠化地帶	PETROL FILLING STATION	加油站			
CONSERVATION AREA	CA	自然保育區	NON-BUILDING AREA	非建築用地			
SITE OF SPECIAL SCIENTIFIC INTEREST	SSSI	具特殊科學價值地點					
COUNTRY PARK	CP	郊野公園					
				用途			
				COMMERCIAL	商業		
				COMPREHENSIVE DEVELOPMENT AREA	綜合發展區		
				RESIDENTIAL (GROUP A)	住宅 (甲類)		
				RESIDENTIAL (GROUP B)	住宅 (乙類)		
				RESIDENTIAL (GROUP C)	住宅 (丙類)		
				VILLAGE TYPE DEVELOPMENT	鄉村式發展		
				GOVERNMENT, INSTITUTION OR COMMUNITY	政府、機構或社區		
				OPEN SPACE	休憩用地		
				RECREATION	康樂		
				OTHER SPECIFIED USES	其他指定用途		
				GREEN BELT	綠化地帶		
				CONSERVATION AREA	自然保育區		
				SITE OF SPECIAL SCIENTIFIC INTEREST	具特殊科學價值地點		
				COUNTRY PARK	郊野公園		
				RIVER CHANNEL	河道		
				MAJOR ROAD ETC.	主要道路等		
				TOTAL PLANNING SCHEME AREA	規劃範圍總面積		



<



**APPROVED DRAFT MA ON SHAN OUTLINE ZONING PLAN NO. S/MOS/20A**

(Being ~~an~~ *Approved a Draft* Plan for the Purposes of the Town Planning Ordinance)

**NOTES**

(N.B. These form part of the Plan)

- (1) These Notes show the uses or developments on land falling within the boundaries of the Plan which are always permitted and which may be permitted by the Town Planning Board, with or without conditions, on application. Where permission from the Town Planning Board for a use or development is required, the application for such permission should be made in a prescribed form. The application shall be addressed to the Secretary of the Town Planning Board, from whom the prescribed application form may be obtained.
- (2) Any use or development which is always permitted or may be permitted in accordance with these Notes must also conform to any other relevant legislation, the conditions of the Government lease concerned, and any other Government requirements, as may be applicable.
- (3)
  - (a) No action is required to make the existing use of any land or building conform to this Plan until there is a material change of use or the building is redeveloped.
  - (b) Any material change of use or any other development (except minor alteration and/or modification to the development of the land or building in respect of the existing use which is always permitted) or redevelopment must be always permitted in terms of the Plan or, if permission is required, in accordance with the permission granted by the Town Planning Board.
  - (c) For the purposes of subparagraph (a) above, "existing use of any land or building" means-
    - (i) before the publication in the Gazette of the notice of the first statutory plan covering the land or building (hereafter referred as 'the first plan'),
      - a use in existence before the publication of the first plan which has continued since it came into existence; or
      - a use or a change of use approved under the Buildings Ordinance which relates to an existing building; and
    - (ii) after the publication of the first plan,
      - a use permitted under a plan which was effected during the effective period of that plan and has continued since it was effected; or

- a use or a change of use approved under the Buildings Ordinance which relates to an existing building and permitted under a plan prevailing at the time when the use or change of use was approved.
- (4) Except as otherwise specified by the Town Planning Board, when a use or material change of use is effected or a development or redevelopment is undertaken, as always permitted in terms of the Plan or in accordance with a permission granted by the Town Planning Board, all permissions granted by the Town Planning Board in respect of the site of the use or material change of use or development or redevelopment shall lapse.
- (5) Road junctions, alignments of roads and railway tracks, and boundaries between zones may be subject to minor adjustments as detailed planning proceeds.
- (6) Temporary uses (expected to be 5 years or less) of any land or building are always permitted as long as they comply with any other relevant legislation, the conditions of the Government lease concerned, and any other Government requirements, and there is no need for these to conform to the zoned use or these Notes. For temporary uses expected to be over 5 years, the uses must conform to the zoned use or these Notes.
- (7) The following uses or developments are always permitted on land falling within the boundaries of the Plan except (a) where the uses or developments are specified in Column 2 of the Notes of individual zones or (b) as provided in paragraph (8) in relation to areas zoned "Site of Special Scientific Interest" or "Conservation Area":
- (a) provision, maintenance or repair of plant nursery, amenity planting, open space, rain shelter, refreshment kiosk, road, bus/public light bus stop or lay-by, cycle track, Mass Transit Railway entrance, Mass Transit Railway structure below ground level, taxi rank, nullah, public utility pipeline, electricity mast, lamp pole, telephone booth, telecommunications radio base station, automatic teller machine and shrine;
  - (b) geotechnical works, local public works, road works, sewerage works, drainage works, environmental improvement works, marine related facilities, waterworks (excluding works on service reservoir) and such other public works co-ordinated or implemented by Government; and
  - (c) maintenance or repair of watercourse and grave.
- (8) In areas zoned "Site of Special Scientific Interest" or "Conservation Area",
- (a) the following uses or developments are always permitted:
    - (i) maintenance or repair of plant nursery, amenity planting, sitting out area, rain shelter, refreshment kiosk, road, watercourse, nullah, public utility pipeline, electricity mast, lamp pole, telephone booth, shrine and grave; and
    - (ii) geotechnical works, local public works, road works, sewerage works, drainage works, environmental improvement works, marine related facilities, waterworks (excluding works on service reservoir) and such other public works co-ordinated or implemented by Government; and

- (b) the following uses or developments require permission from the Town Planning Board:

provision of plant nursery, amenity planting, sitting out area, rain shelter, refreshment kiosk, footpath, public utility pipeline, electricity mast, lamp pole, telephone booth and shrine.

- (9) In any area shown as 'Road', all uses or developments except those specified in paragraph (7) above and those specified below require permission from the Town Planning Board:

toll plaza, on-street vehicle park and railway track.

- (10) Unless otherwise specified, all building, engineering and other operations incidental to and all uses directly related and ancillary to the permitted uses and developments within the same zone are always permitted and no separate permission is required.

- (11) In these Notes,

"existing building" means a building, including a structure, which is physically existing and is in compliance with any relevant legislation, and the conditions of the Government lease concerned.

"New Territories Exempted House" means a domestic building other than a guesthouse or a hotel; or a building primarily used for habitation, other than a guesthouse or a hotel, the ground floor of which may be used as 'Shop and Services' or 'Eating Place', the building works in respect of which are exempted by a certificate of exemption under Part III of the Buildings Ordinance (Application to the New Territories) Ordinance (Cap. 121).

Schedule of Uses

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COMMERCIAL

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot	Broadcasting, Television and/or Film Studio
Commercial Bathhouse/ Massage Establishment	Flat
Eating Place	Government Refuse Collection Point
Educational Institution	Hospital
Exhibition or Convention Hall	House
Government Use (not elsewhere specified)	Petrol Filling Station
Hotel	Residential Institution
Information Technology and Telecommunications Industries	
Institutional Use (not elsewhere specified)	
Library	
Market	
Off-course Betting Centre	
Office	
Place of Entertainment	
Place of Recreation, Sports or Culture	
Private Club	
Public Clinic	
Public Convenience	
Public Transport Terminus or Station	
Public Utility Installation	
Public Vehicle Park (excluding container vehicle)	
Recyclable Collection Centre	
Religious Institution	
School	
Shop and Services	
Social Welfare Facility	
Training Centre	
Utility Installation for Private Project	

Planning Intention

This zone is intended primarily for commercial developments, which may include shop, services, place of entertainment and eating place, functioning mainly as local shopping centre serving the immediate neighbourhood.

(Please see next page)

COMMERCIAL (Cont'd)

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height in terms of metres above Principal Datum as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (b) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 3.0 or the plot ratio of the existing building, whichever is the greater.
- (c) In determining the maximum plot ratio for the purposes of paragraph (b) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (d) Where the permitted plot ratio as defined in Building (Planning) Regulations is permitted to be exceeded in circumstances as set out in Regulation 22(1) or (2) of the said Regulations, the plot ratio for the building on land to which paragraph (b) applies may be increased by the additional plot ratio by which the permitted plot ratio is permitted to be exceeded under and in accordance with the said Regulation 22(1) or (2), notwithstanding that the relevant maximum plot ratio specified in paragraph (b) above may thereby be exceeded.
- (e) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height and/or plot ratio restrictions stated in paragraphs (a) and (b) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (f) Under exceptional circumstances, for developments and/or redevelopments, minor relaxation of the non-building area restrictions as shown on the Plan may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

COMPREHENSIVE DEVELOPMENT AREA

Column 1  
Uses always permitted

Column 2  
Uses that may be permitted with or  
without conditions on application  
to the Town Planning Board

Ambulance Depot  
Broadcasting, Television and/or  
Film Studio  
Commercial Bathhouse/  
Massage Establishment  
Eating Place  
Educational Institution  
Exhibition or Convention Hall  
Field Study/Education/Visitor Centre  
Flat  
Government Refuse Collection Point  
Government Use (not elsewhere specified)  
Hotel  
House  
Institutional Use (not elsewhere specified)  
Library  
Market  
Off-course Betting Centre  
Office  
Petrol Filling Station  
Pier  
Place of Entertainment  
Place of Recreation, Sports or Culture  
Private Club  
Public Clinic  
Public Convenience  
Public Transport Terminus or Station  
Public Utility Installation  
Public Vehicle Park (excluding  
container vehicle)  
Recyclable Collection Centre  
Religious Institution  
Residential Institution  
School  
Shop and Services  
Social Welfare Facility  
Training Centre  
Utility Installation for Private Project

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (Cont'd)

Planning Intention

This zone is intended for comprehensive development/redevelopment of the area for recreational, residential and/or commercial uses with the provision of open space and other supporting facilities. The zoning is to facilitate appropriate planning control over the development mix, scale, design and layout of development, taking account of various environmental, traffic, infrastructure and other constraints.

Remarks

- (a) Pursuant to Section 4A(2) of the Town Planning Ordinance, and except as otherwise expressly provided that it is not required by the Town Planning Board, an applicant for permission for development on land designated "Comprehensive Development Area" shall prepare a Master Layout Plan for the approval of the Town Planning Board and include therein the following information:
- (i) the area of the proposed land uses, the nature, position, dimensions, and heights of all buildings to be erected in the area;
  - (ii) the proposed total site area and gross floor area (GFA) for various uses, total number of flats and flat size, where applicable;
  - (iii) the details and extent of Government, institution or community (GIC) and recreational facilities, public transport and parking facilities, and open space to be provided within the area;
  - (iv) the alignment, widths and levels of any roads proposed to be constructed within the area;
  - (v) the urban design, landscaping and tree preservation proposals within the area;
  - (vi) programmes of development in detail;
  - (vii) an environmental assessment report including an ecological assessment to examine any possible environmental problems that may be caused to or by the proposed development during and after construction and the proposed mitigation measures to tackle them;
  - (viii) a drainage and sewerage impact assessment report to examine any possible drainage and sewerage problems that may be caused by the proposed development and the proposed mitigation measures to tackle them;
  - (ix) a traffic impact assessment report to examine any possible traffic problems that may be caused by the proposed development and the proposed mitigation measures to tackle them;

(Please see next page)



COMPREHENSIVE DEVELOPMENT AREA (Cont'd)

Remarks (Cont'd)

- (x) a visual impact assessment report to examine any possible visual impacts that may be caused by the proposed development and the proposed mitigation measures to tackle them;
  - (xi) an air ventilation assessment report to examine any possible air ventilation problems that may be caused by the proposed development and the proposed mitigation measures to tackle them; and
  - (xii) such other information as may be required by the Town Planning Board.
- (b) The Master Layout Plan should be supported by an explanatory statement which contains an adequate explanation of the development proposal, including such information as land tenure, relevant lease conditions, existing conditions of the site, the character of the site in relation to the surrounding areas, principles of layout design, major development parameters, design population, types of GIC facilities, and recreational and open space facilities.
- (c) On land designated "Comprehensive Development Area (1)", no new development, or addition, alteration and/or modification to or redevelopment of an existing building in Area (a) shall result in a total development and/or redevelopment in excess of a maximum domestic plot ratio of 3, a maximum non-domestic GFA of 10,000m<sup>2</sup>, and a maximum building height in terms of number of storeys or metres above Principal Datum as stipulated on the Plan, or the plot ratio and height of the existing building, whichever is the greater. No building development is permitted in Area (b). A "stepped height" building profile descending from the southern part to the northern part of the site is required.
- (d) On land designated "Comprehensive Development Area (2)", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum GFA of 40,000m<sup>2</sup> and a maximum building height in terms of metres above Principal Datum as stipulated on the Plan, or the GFA and height of the existing building, whichever is the greater.
- (e) On land designated "Comprehensive Development Area (3)", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum GFA of 30,000m<sup>2</sup> and a maximum building height in terms of number of storeys or metres above Principal Datum as stipulated on the Plan, or the GFA and height of the existing building, whichever is the greater.
- (f) In determining the maximum plot ratio/GFA for the purposes of paragraphs (c) to (e) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded. Any floor space that is constructed or intended for use solely as school or Government, institution or community facilities, as required by the Government, may also be disregarded.

(Please see next page)

COMPREHENSIVE DEVELOPMENT AREA (Cont'd)

Remarks (Cont'd)

- (g) In determining the maximum domestic plot ratio for the purpose of paragraph (c) above, area of any part of Area (a) that is occupied or intended to be occupied by free-standing purpose-designed schools as may be required by the Government, and Area (b) shall be deducted in calculating the relevant site area.
- (h) In determining the maximum number of storeys for the purposes of paragraphs (c) and (e) above, any basement floor(s) may be disregarded.
- (i) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/GFA/building height restrictions stated in paragraphs (c) to (e) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP A)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
<p>Ambulance Depot</p> <p>Flat</p> <p>Government Use (not elsewhere specified)</p> <p>House</p> <p>Library</p> <p>Market</p> <p>Place of Recreation, Sports or Culture</p> <p>Public Clinic</p> <p>Public Transport Terminus or Station (excluding open-air terminus or station)</p> <p>Residential Institution</p> <p>School (in free-standing purpose-designed building only)</p> <p>Social Welfare Facility</p> <p>Utility Installation for Private Project</p>	<p>Commercial Bathhouse/ Massage Establishment</p> <p>Eating Place</p> <p>Educational Institution</p> <p>Exhibition or Convention Hall</p> <p>Government Refuse Collection Point</p> <p>Hospital</p> <p>Hotel</p> <p>Institutional Use (not elsewhere specified)</p> <p>Office</p> <p>Petrol Filling Station</p> <p>Place of Entertainment</p> <p>Private Club</p> <p>Public Convenience</p> <p>Public Transport Terminus or Station (not elsewhere specified)</p> <p>Public Utility Installation</p> <p>Public Vehicle Park (excluding container vehicle)</p> <p>Religious Institution</p> <p>School (not elsewhere specified)</p> <p>Shop and Services</p> <p>Training Centre</p>

(Please see next page)

RESIDENTIAL (GROUP A) (Cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
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In addition, the following uses are always permitted (a) on the lowest three floors of a building, taken to include basements; or (b) in the purpose-designed non-residential portion of an existing building, both excluding floors containing wholly or mainly car parking, loading/unloading bays and/or plant room:

Eating Place  
Educational Institution  
Institutional Use (not elsewhere specified)  
Off-course Betting Centre  
Office  
Place of Entertainment  
Private Club  
Public Convenience  
Recyclable Collection Centre  
School  
Shop and Services  
Training Centre

Planning Intention

This zone is intended primarily for high-density residential developments. Commercial uses are always permitted on the lowest three floors of a building or in the purpose-designed non-residential portion of an existing building.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height in terms of number of storeys or metres above Principal Datum as stipulated on the Plan, or the height of the existing building, whichever is the greater.

(Please see next page)

RESIDENTIAL (GROUP A) (Cont'd)

Remarks (Cont'd)

- (b) On land designated "R(A)", no new development of or redevelopment to a domestic or non-domestic building shall result in a total development and/or redevelopment in excess of a maximum domestic plot ratio of 5, or a maximum non-domestic plot ratio of 9.5, as the case may be. For new development of or redevelopment to a building that is partly domestic and partly non-domestic, the plot ratio for the domestic part of the building shall not exceed the product of the difference between the maximum non-domestic plot ratio of 9.5 and the actual non-domestic plot ratio proposed for the building and the maximum domestic plot ratio of 5 divided by the maximum non-domestic plot ratio of 9.5.
- (c) On land designated "R(A)", no addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the relevant maximum domestic and/or non-domestic plot ratio(s) stated in paragraph (b) above, or the domestic and/or non-domestic plot ratio(s) of the existing building, whichever is the greater, subject to, as applicable –
  - (i) the plot ratio(s) of the existing building shall apply only if any addition, alteration and/or modification to or redevelopment of an existing building is for the same type of building as the existing building, i.e. domestic, non-domestic, or partly domestic and partly non-domestic building; or
  - (ii) the maximum domestic and/or non-domestic plot ratio(s) stated in paragraph (b) above shall apply if any addition, alteration and/or modification to or redevelopment of an existing building is not for the same type of building as the existing building, i.e. domestic, non-domestic, or partly domestic and partly non-domestic building.
- (d) On land designated "R(A)1", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 3, or the plot ratio of the existing building, whichever is the greater.
- (e) On land designated "R(A)2", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 3.8, or the plot ratio of the existing building, whichever is the greater.
- (f) On land designated "R(A)3", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 4.6, or the plot ratio of the existing building, whichever is the greater.

(Please see next page)

RESIDENTIAL (GROUP A) (Cont'd)

Remarks (Cont'd)

- (g) On land designated "R(A)4", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic gross floor area (GFA) of 54,544m<sup>2</sup> and a maximum non-domestic GFA of 7,620m<sup>2</sup>, or the GFA of the existing building, whichever is the greater.
- (h) On land designated "R(A)5", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic GFA of 57,300m<sup>2</sup> and a maximum non-domestic GFA of 30,000m<sup>2</sup>, or the GFA of the existing building, whichever is the greater.
- (i) On land designated "R(A)6", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic GFA of 40,400m<sup>2</sup> and a maximum non-domestic GFA of 5,650m<sup>2</sup>, or the GFA of the existing building, whichever is the greater.
- (j) On land designated "R(A)7", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic GFA of 114,618m<sup>2</sup> and a maximum non-domestic GFA of 50,240m<sup>2</sup>, or the GFA of the existing building, whichever is the greater.
- (k) On land designated "R(A)8", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic plot ratio of 6 and a maximum non-domestic plot ratio of 0.5, or the plot ratio of the existing building, whichever is the greater.
- (l) On land designated "R(A)9", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic plot ratio of 5.5 and a maximum non-domestic plot ratio of 0.3, or the plot ratio of the existing building, whichever is the greater.
- (m) *On land designated "R(A)10", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 6, or the plot ratio of the existing building, whichever is the greater.*
- (n) In determining the maximum plot ratio for the purposes of paragraphs (b) to (f), *and (k) and (l) to (m)* above, the area of any part of the site that is occupied or intended to be occupied by free-standing purpose-designed buildings (including both developed on ground and on podium level) solely for accommodating Government, institution or community facilities including school(s) as may be required by Government shall be deducted from calculation of the site area.

(Please see next page)

RESIDENTIAL (GROUP A) (Cont'd)

Remarks (Cont'd)

- (o) In determining the maximum plot ratio/GFA for the purposes of paragraphs (b) to ~~(h)~~(m) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (p) Where the permitted plot ratio/GFA as defined in Building (Planning) Regulations is permitted to be exceeded in circumstances as set out in Regulation 22(1) or (2) of the said Regulations, the plot ratio/GFA for the building on land to which paragraphs (b) to ~~(h)~~(m) above applies may be increased by the additional plot ratio by which the permitted plot ratio is permitted to be exceeded under and in accordance with the said Regulation 22(1) or (2), notwithstanding that the relevant maximum plot ratio/GFA specified in paragraphs (b) to ~~(h)~~(m) above may thereby be exceeded.
- (q) In determining the maximum number of storeys for the purposes of paragraph (a) above, any basement floor(s) may be disregarded.
- (r) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height and/or plot ratio/GFA restrictions stated in paragraphs (a) to ~~(h)~~(m) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (s) Under exceptional circumstances, for developments and/or redevelopments, minor relaxation of the non-building area restrictions as shown on the Plan may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP B)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Flat Government Use (Police Reporting Centre, Post Office only) House Library Residential Institution School (in free-standing purpose-designed building only) Utility Installation for Private Project	Ambulance Depot Eating Place Educational Institution Government Refuse Collection Point Government Use (not elsewhere specified) Hospital Hotel Institutional Use (not elsewhere specified) Market Off-course Betting Centre Office Petrol Filling Station Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Recyclable Collection Centre Religious Institution School (not elsewhere specified) Shop and Services Social Welfare Facility Training Centre

Planning Intention

This zone is intended primarily for medium-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Town Planning Board.

(Please see next page)



RESIDENTIAL (GROUP B) (Cont'd)

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height in terms of metres above Principal Datum as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (b) On land designated "R(B)1", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 3, or the plot ratio of the existing building, whichever is the greater.
- (c) On land designated "R(B)2", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 5, or the plot ratio of the existing building, whichever is the greater.
- (d) On land designated "R(B)3", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum gross floor area (GFA) of 8,910m<sup>2</sup>, or the GFA of the existing building, whichever is the greater.
- (e) On land designated "R(B)4", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum GFA of 15,500m<sup>2</sup>, or the GFA of the existing building, whichever is the greater.
- (f) On land designated "R(B)5", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 3.6, or the plot ratio of the existing building, whichever is the greater.
- (g) In determining the maximum plot ratio/GFA for the purposes of paragraphs (b) to (f) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (h) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height and/or plot ratio/GFA restrictions stated in paragraphs (a) to (f) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RESIDENTIAL (GROUP C)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Flat Government Use (Police Reporting Centre, Post Office only) House Utility Installation for Private Project	Ambulance Depot Eating Place Educational Institution Government Refuse Collection Point Government Use (not elsewhere specified) Hospital Hotel Institutional Use (not elsewhere specified) Library Petrol Filling Station Place of Recreation, Sports or Culture Private Club Public Clinic Public Convenience Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Recyclable Collection Centre Religious Institution Residential Institution School Shop and Services Social Welfare Facility Training Centre

Planning Intention

This zone is intended primarily for low-rise, low-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Town Planning Board.

(Please see next page)

RESIDENTIAL (GROUP C) (Cont'd)

Remarks

- (a) On land designated "Residential (Group C)1", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 1.0 and a maximum building height of 36mPD, or the plot ratio and height of the existing building, whichever is the greater.
- (b) On land designated "Residential (Group C)2", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 1.5 and a maximum building height of 55mPD, or the plot ratio and height of the existing building, whichever is the greater.
- (c) *On land designated "Residential (Group C)3", no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 2.4 and a maximum building height of 40mPD, or the plot ratio and height of the existing building, whichever is the greater.*
- (d) In determining the maximum plot ratio for the purposes of paragraphs (a) ~~and (b)~~ to (c) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded.
- (e) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio/building height restrictions stated in paragraphs (a) ~~and (b)~~ to (c) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

# VILLAGE TYPE DEVELOPMENT

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
<p>Agricultural Use</p> <p>Government Use (Police Reporting Centre, Post Office only)</p> <p>House (New Territories Exempted House only)</p> <p>On-Farm Domestic Structure</p> <p>Religious Institution (Ancestral Hall only)</p> <p>Rural Committee/Village Office</p>	<p>Eating Place</p> <p>Flat</p> <p>Government Refuse Collection Point</p> <p>Government Use (not elsewhere specified)#</p> <p>House (not elsewhere specified)</p> <p>Institutional Use (not elsewhere specified)#</p> <p>Market</p> <p>Petrol Filling Station</p> <p>Place of Recreation, Sports or Culture</p> <p>Private Club</p> <p>Public Clinic</p> <p>Public Convenience</p> <p>Public Transport Terminus or Station</p> <p>Public Utility Installation#</p> <p>Public Vehicle Park (excluding container vehicle)</p> <p>Religious Institution (not elsewhere specified)#</p> <p>Residential Institution#</p> <p>School#</p> <p>Shop and Services</p> <p>Social Welfare Facility#</p> <p>Utility Installation for Private Project</p>

In addition, the following uses are always  
permitted on the ground floor of a New  
Territories Exempted House:

Eating Place  
Library  
School  
Shop and Services

(Please see next page)



VILLAGE TYPE DEVELOPMENT (Cont'd)

Planning Intention

The planning intention of this zone is to designate both existing recognized villages and areas of land considered suitable for village expansion. Land within this zone is primarily intended for development of Small Houses by indigenous villagers. It is also intended to concentrate village type development within this zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services. Selected commercial and community uses serving the needs of the villagers and in support of the village development are always permitted on the ground floor of a New Territories Exempted House. Other commercial, community and recreational uses may be permitted on application to the Town Planning Board.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building (except development or redevelopment to those annotated with #) shall result in a total development and/or redevelopment in excess of a maximum building height of 3 storeys (8.23m) or the height of the existing building, whichever is the greater.
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

GOVERNMENT, INSTITUTION OR COMMUNITY

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Ambulance Depot	Animal Boarding Establishment
Animal Quarantine Centre (in Government building only)	Animal Quarantine Centre (not elsewhere specified)
Broadcasting, Television and/or Film Studio	Columbarium
Cable Car Route and Terminal Building	Correctional Institution
Eating Place (Canteen, Cooked Food Centre only)	Crematorium
Educational Institution	Driving School
Exhibition or Convention Hall	Eating Place (not elsewhere specified)
Field Study/Education/Visitor Centre	Flat
Government Refuse Collection Point	Funeral Facility
Government Use (not elsewhere specified)	Helicopter Landing Pad
Hospital	Holiday Camp
Institutional Use (not elsewhere specified)	Hotel
Library	House
Market	Marine Fuelling Station
Pier	Off-course Betting Centre
Place of Recreation, Sports or Culture	Office
Public Clinic	Petrol Filling Station
Public Convenience	Place of Entertainment
Public Transport Terminus or Station	Private Club
Public Utility Installation	Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation
Public Vehicle Park (excluding container vehicle)	Refuse Disposal Installation (Refuse Transfer Station only)
Recyclable Collection Centre	Residential Institution
Religious Institution	Sewage Treatment/Screening Plant
Research, Design and Development Centre	Shop and Services
Rural Committee/Village Office	Utility Installation for Private Project
School	Zoo
Service Reservoir	
Social Welfare Facility	
Training Centre	
Wholesale Trade	

Planning Intention

This zone is intended primarily for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.

(Please see next page)

GOVERNMENT, INSTITUTION OR COMMUNITY (Cont'd)

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height in terms of number of storeys or metres above Principal Datum as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (b) In determining the maximum number of storeys for the purposes of paragraph (a) above, any basement floor(s) may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

RECREATION

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use	Animal Boarding Establishment
Barbecue Spot	Broadcasting, Television and/or Film Studio
Field Study/Education/Visitor Centre	Cable Car Route and Terminal Building
Government Use (Police Reporting Centre only)	Eating Place
Holiday Camp	Golf Course
On-Farm Domestic Structure	Government Refuse Collection Point
Picnic Area	Government Use (not elsewhere specified)
Public Convenience	Helicopter Landing Pad
Tent Camping Ground	Hotel
	Marina
	Pier
	Place of Recreation, Sports or Culture
	Place of Entertainment
	Private Club
	Public Utility Installation
	Public Vehicle Park (excluding container vehicle)
	Religious Institution
	Residential Institution
	Shop and Services
	Theme Park
	Utility Installation for Private Project
	Zoo

Planning Intention

This zone is intended primarily for comprehensive recreational developments for the use of the general public. It encourages the development of sports, active and/or passive recreation and tourism/eco-tourism. Major recreational/sports facilities and uses in support of the recreational developments may be permitted subject to planning permission.

Remarks

- (a) No development shall result in a total development in excess of a maximum building height in terms of number of storeys or metres above Principal Datum as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.



OPEN SPACE

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Aviary Barbecue Spot Bathing Beach Field Study/Education/Visitor Centre Park and Garden Pavilion Pedestrian Area Picnic Area Playground/Playing Field Promenade Public Convenience Sitting Out Area Zoo	Cable Car Route and Terminal Building Eating Place Government Refuse Collection Point Government Use (not elsewhere specified) Holiday Camp Pier Place of Entertainment Place of Recreation, Sports or Culture Private Club Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution Service Reservoir Shop and Services Tenting Camping Ground Utility Installation for Private Project

Planning Intention

This zone is intended primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public.

OTHER SPECIFIED USES

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
<u>For "Pier" only</u>	
Government Use Pier	Eating Place Marine Fuelling Station Office Shop and Services (not elsewhere specified)

Planning Intention

This zone is primarily to provide land for pier use.

Remarks

- (a) Kiosks not greater than 10m<sup>2</sup> each in area and not more than 10 in number for use as shop and services are considered as ancillary to "Pier" use.
- (b) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height in terms of number of storeys as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions mentioned in paragraph (b) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
<u>For "Hotel" only</u>	
Hotel	Eating Place Exhibition or Convention Hall Government Use Place of Entertainment Private Club Shop and Services

Planning Intention

This zone is primarily to provide land for hotel use.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 7.0 and a maximum building height of 50mPD, or the plot ratio and height of the existing building, whichever is the greater.
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height and/or plot ratio restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)



OTHER SPECIFIED USES (Cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
<u>For "Railway Station and Public Transport Interchange with Commercial/Residential Development" only</u>	
Ambulance Depot	Broadcasting, Television and/or Film Studio
Eating Place	Commercial Bathhouse/ Massage Establishment
Educational Institution (in a commercial building or in the purpose-designed non-residential portion <sup>@</sup> of an existing building only)	Educational Institution (not elsewhere specified)
Exhibition or Convention Hall	Government Refuse Collection Point
Flat	Institutional Use (not elsewhere specified)
Government Use (not elsewhere specified)	Petrol Filling Station
Information Technology and Telecommunications Industries (in a commercial building or in the purpose-designed non-residential portion <sup>@</sup> of an existing building only)	Recyclable Collection Centre
Library	School (not elsewhere specified)
Market	
Off-course Betting Centre	
Office	
Place of Entertainment	
Place of Recreation, Sports or Culture	
Private Club	
Public Clinic	
Public Convenience	
Public Transport Terminus or Station	
Public Utility Installation	
Public Vehicle Park (excluding container vehicle)	
Railway Station	
Religious Institution	
Residential Institution	
School (in free-standing purpose-designed school building, in a commercial building or in the purpose-designed non-residential portion <sup>@</sup> of an existing building only)	
Shop and Services	
Social Welfare Facility	
Training Centre	
Utility Installation for Private Project	
Wholesale Trade	

<sup>@</sup> Excluding floors containing wholly or mainly car parking, loading/unloading bay  
and/or plant room

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

For "Railway Station and Public Transport Interchange with  
Commercial/Residential Development" only (Cont'd)

Planning Intention

This zone is primarily to provide land for railway station and a public transport interchange with commercial/residential development.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height in terms of metres above Principal Datum as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (b) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum domestic gross floor area (GFA) of 168,650m<sup>2</sup>, a maximum non-domestic GFA of 4,000m<sup>2</sup> and a maximum GFA of 15,066m<sup>2</sup> for the public transport interchange, or the GFA of the existing building, whichever is the greater.
- (c) In determining the maximum GFA for the purposes of paragraph (b) above, any floor space that is constructed or intended for use solely as car park, loading/unloading bay, plant room and caretaker's office, or caretaker's quarters and recreational facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building, provided such uses and facilities are ancillary and directly related to the development or redevelopment, may be disregarded. Any floorspace that is constructed or intended for use solely as railway station development, as required by the Government, may also be disregarded.
- (d) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height and/or GFA restrictions stated in paragraphs (a) and (b) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
<u>For "Educational and Recreational Development" only</u>	
Field Study/Education/Visitor Centre Government Use (Police Reporting Centre only) Park and Garden Picnic Area Playground/Playing Field Public Convenience	Government Use (not elsewhere specified) Pier Place of Recreation, Sports or Culture Public Utility Installation Public Vehicle Park (excluding container vehicle) Religious Institution School Utility Installation for Private Project

Planning Intention

This zone is primarily to provide land for educational and recreational development.

Remarks

- (a) An applicant for permission for development on land designated "Other Specified Uses" annotated "Educational and Recreational Development" shall prepare a layout plan for the approval of the Town Planning Board and include therein the following information:
- (i) the area of the proposed land uses, the nature, positions, dimensions and heights of all buildings to be erected in the area;
  - (ii) the proposed total site area and gross floor area for various uses;
  - (iii) the details and extent of Government, institution or community and recreational facilities, public transport and parking facilities, and open space to be provided within the area;
  - (iv) the alignments, widths and levels of any roads and pedestrian linkages proposed to be constructed within the area;
  - (v) the landscaping and urban design proposals within the area;
  - (vi) programmes of development in detail; and
  - (vii) any other information as required by the Town Planning Board.

(Please see next page)



OTHER SPECIFIED USES (Cont'd)

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Column 1  
Uses always permitted

Column 2  
Uses that may be permitted with or  
without conditions on application  
to the Town Planning Board

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For "Educational and Recreational Development" only (Cont'd)

Remarks (Cont'd)

- (b) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum gross floor area of 17,800m<sup>2</sup> and a maximum building height of seven storeys.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the gross floor area/building height restrictions stated in paragraph (b) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

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Column 1  
Uses always permitted

Column 2  
Uses that may be permitted with or  
without conditions on application  
to the Town Planning Board

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For "Pedestrian Link with Retail Facilities" only

As specified on the Plan  
Shop and Services

Planning Intention

This zone is primarily intended for the provision of a pedestrian link connecting the public housing developments on both sides of Ma On Shan Road. Retail facilities can be provided in the pedestrian link to help create a better walking experience.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height of 1 storey as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (b) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction mentioned in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

(Please see next page)

OTHER SPECIFIED USES (Cont'd)

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Column 1  
Uses always permitted

Column 2  
Uses that may be permitted with or  
without conditions on application  
to the Town Planning Board

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For All Other Sites (Not Listed Above)

As Specified on the Plan

Government Use  
Public Utility Installation  
Utility Installation for Private Project

Planning Intention

This zone is primarily to provide/reserve land for specific purposes and uses.

Remarks

- (a) No new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of the maximum building height in terms of number of storey(s) as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (b) In determining the relevant maximum number of storey(s) for the purposes of paragraph (a) above, any basement floor(s) may be disregarded.
- (c) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions stated in paragraph (a) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.



GREEN BELT

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use Barbecue Spot Country Park* Government Use (Police Reporting Centre only) Nature Reserve Nature Trail On-Farm Domestic Structure Picnic Area Public Convenience Tent Camping Ground Wild Animals Protection Area	Animal Boarding Establishment Broadcasting, Television and/or Film Studio Burial Ground Cable Car Route and Terminal Building Columbarium (within a Religious Institution or extension of existing Columbarium only) Crematorium (within a Religious Institution or extension of existing Crematorium only) Field Study/Education/Visitor Centre Flat Golf Course Government Refuse Collection Point Government Use (not elsewhere specified) Helicopter Landing Pad Holiday Camp House Marine Fuelling Station Petrol Filling Station Pier Place of Recreation, Sports or Culture Public Transport Terminus or Station Public Utility Installation Public Vehicle Park (excluding container vehicle) Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation Religious Institution Residential Institution School Service Reservoir Social Welfare Facility Utility Installation for Private Project Zoo

- \* Country Park means a country park or special area as designated under the Country Parks Ordinance (Cap. 208). All uses and developments require consent from the Country and Marine Parks Authority and approval from the Town Planning Board is not required.

Planning Intention

The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. There is a general presumption against development within this zone.

CONSERVATION AREA

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Agricultural Use Country Park* Nature Reserve Nature Trail On-Farm Domestic Structure Picnic Area Wild Animals Protection Area	Barbecue Spot Field Study/Education/Visitor Centre Government Refuse Collection Point Government Use (not elsewhere specified) Holiday Camp House (Redevelopment only) Pier Public Convenience Public Utility Installation Radar, Telecommunications Electronic Microwave Repeater, Television and/or Radio Transmitter Installation Tent Camping Ground Utility Installation for Private Project

- \* Country Park means a country park or special area as designated under the Country Parks Ordinance (Cap. 208). All uses and developments require consent from the Country and Marine Parks Authority and approval from the Town Planning Board is not required.

Planning Intention

This zoning is intended to protect and retain the existing natural landscape, ecological, topographical or archaeological features of the area for conservation, educational and research purposes and to separate sensitive natural environment such as Site of Special Scientific Interest from the adverse effects of development.

There is a general presumption against development in this zone. In general, only developments that are needed to support the conservation of the existing natural landscape or scenic quality of the area or are essential infrastructure projects with overriding public interest may be permitted.

Remarks

- (a) No redevelopment, including alteration and/or modification to an existing house, shall result in a total redevelopment in excess of the plot ratio, site coverage and building height of the house which was in existence on the date of the publication in the Gazette of the notice of the draft Ma On Shan Outline Zoning Plan No. S/MOS/11.
- (b) Any filling or excavation of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes, shall not be undertaken or continued on or after the date of the publication in the Gazette of the notice of the draft Ma On Shan Outline Zoning Plan No. S/MOS/12 without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.

SITE OF SPECIAL SCIENTIFIC INTEREST

Column 1 Uses always permitted	Column 2 Uses that may be permitted with or without conditions on application to the Town Planning Board
Country Park* Wild Animals Protection Area	Agricultural Use Field Study/Education/Visitor Centre Government Use Nature Reserve Nature Trail On-Farm Domestic Structure Picnic Area Public Convenience Public Utility Installation Utility Installation for Private Project

- \* Country Park means a country park or special area as designated under the Country Parks Ordinance (Cap. 208). All uses and developments require consent from the Country and Marine Parks Authority and approval from the Town Planning Board is not required.

Planning Intention

The planning intention of this zone is to conserve and protect the features of special geological interest which are designated as Site of Special Scientific Interest (SSSI). It intends to deter human activities or developments within the SSSI.

There is a general presumption against development in this zone. No developments are permitted unless they are needed to support the conservation of the features of special scientific interest in the SSSI, to maintain and protect the existing character of the SSSI, or for educational and research purposes.

Remarks

Any filling or excavation of land, including that to effect a change of use to any of those specified in Columns 1 and 2 above or the uses or developments always permitted under the covering Notes, shall not be undertaken or continued on or after the date of the publication in the Gazette of the notice of the draft Ma On Shan Outline Zoning Plan No. S/MOS/12 without the permission from the Town Planning Board under section 16 of the Town Planning Ordinance.



COUNTRY PARK

Country Park means a country park or special area as designated under the Country Parks Ordinance (Cap. 208). All uses and developments require consent from the Country and Marine Parks Authority and approval from the Town Planning Board is not required.

**APPROVED DRAFT MA ON SHAN OUTLINE ZONING PLAN NO. S/MOS/20A**

**EXPLANATORY STATEMENT**

**APPROVED DRAFT MA ON SHAN OUTLINE ZONING PLAN NO. S/MOS/20A**

**EXPLANATORY STATEMENT**

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# APPROVED DRAFT MA ON SHAN OUTLINE ZONING PLAN NO. S/MOS/20A

(Being ~~an~~ *Approved a Draft* Plan for the Purposes of the Town Planning Ordinance)

## EXPLANATORY STATEMENT

Note : For the purposes of the Town Planning Ordinance, this statement shall not be deemed to constitute a part of the Plan.

### 1. INTRODUCTION

This Explanatory Statement is intended to assist an understanding of the *approved draft* Ma On Shan Outline Zoning Plan (OZP) No. S/MOS/20A. It reflects the planning intention and objectives of the Town Planning Board (the Board) for various land-use zonings of the Plan.

### 2. AUTHORITY FOR THE PLAN

- 2.1 Under the power delegated by the then Governor, the then Secretary for Lands and Works, directed the Board on 10 July 1987, under section 3(1)(a) of the Town Planning Ordinance (the Ordinance), to prepare an outline zoning plan for the Ma On Shan area. Since the exhibition of the draft Ma On Shan OZP No. S/MOS/1 on 22 March 1991, the OZP has been amended three times and exhibited for public inspection under section 7 of the Ordinance to reflect the changing circumstances.
- 2.2 On 7 October 1997, the Chief Executive in Council (CE in C), under section 9(1)(a) of the Ordinance, approved the draft Ma On Shan OZP, which was subsequently renumbered as S/MOS/5. On 26 October 1999, the CE in C referred the approved Ma On Shan OZP No. S/MOS/5 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended twice and exhibited for public inspection under section 12(3) and 7 of the Ordinance respectively.
- 2.3 On 21 November 2000, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Ma On Shan OZP, which was subsequently renumbered as S/MOS/8. On 1 December 2000, the approved Ma On Shan OZP No. S/MOS/8 was exhibited for public inspection under section 9(5) of the Ordinance.
- 2.4 On 25 September 2001, the CE in C referred the approved Ma On Shan OZP No. S/MOS/8 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The OZP was subsequently amended four times to reflect changing circumstances.
- 2.5 On 5 October 2004, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Ma On Shan OZP, which was subsequently renumbered as S/MOS/13. On 15 October 2004, the approved Ma On Shan OZP No. S/MOS/13 was exhibited for public inspection under section 9(5) of the Ordinance. On 19 February 2008, the CE in C referred the approved Ma On Shan OZP No. S/MOS/13 to the Board for amendment under section 12(1)(b)(ii) of the

Ordinance. The OZP was subsequently amended two times to reflect changing circumstances.

- 2.6 On 1 June 2010, the CE in C under section 9(1)(a) of the Ordinance, approved the draft Ma On Shan OZP, which was subsequently re-numbered as S/MOS/16. On 11 June 2010, the approved Ma On Shan OZP was exhibited for public inspection under section 9(5) of the Ordinance. On 8 November 2011, the CE in C referred the approved Ma On Shan OZP No. S/MOS/16 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance.
- 2.7 On 24 February 2012, the draft Ma On Shan OZP No. S/MOS/17, incorporating amendments to rezone the sites at Whitehead for recreational and residential developments and a site at On Chun Street for residential development was exhibited for public inspection under section 5 of the Ordinance. During the ~~two-month exhibition-statutory publication~~ period, a total of 1,079 representations and 61 comments were received. ~~On 18 May 2012, the representations were published for public comments. During the first three weeks of the publication periods, 61 comments were received.~~ After giving consideration to the representations and comments on 31 August 2012, the Board decided not to uphold the representations related to Whitehead but defer a decision on the representations related to the On Chun Street site pending a review of "Government, Institution or Community" ("G/IC") sites in Ma On Shan which might also be suitable for residential development. On 1 February 2013, the Board further considered the representations and comments related to the On Chun Street site and decided to propose amendments to the OZP to meet the 1,074 representations related to the On Chun Street site. On 22 February 2013, the proposed amendments to the OZP to rezone the On Chun Street site for GIC use, rezone two sites at Hang Kwong Street and Ma Kam Street respectively for residential development, and amend the building height restriction of a site at On Luk Street, were exhibited for public inspection under section 6C(2) of the Ordinance. Upon expiry of the three-week exhibition period, a total of 83 further representations were received. Upon consideration of the 28 valid further representations on 26 April 2013, the Board noted the supportive further representations and decided not to uphold the adverse further representations. The Board also decided to amend the draft OZP by the proposed amendments.
- 2.8 On 30 July 2013, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Ma On Shan OZP, which was subsequently renumbered as S/MOS/18. On 9 August 2013, the approved Ma On Shan OZP No. S/MOS/18 was exhibited for public inspection under section 9(5) of the Ordinance. On 8 October 2013, the CE in C referred the approved Ma On Shan OZP No. S/MOS/18 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The reference back of the OZP was notified in the Gazette on 18 October 2013 under section 12(2) of the Ordinance.
- 2.9 On 7 March 2014, the draft Ma On Shan OZP No. S/MOS/19, incorporating amendments including (i) the rezoning of Yan On Estate and its adjoining land from "Residential (Group B)2" and "G/IC" and an area shown as 'Road' to "Residential (Group A)8"; (ii) the rezoning of the land to the east of Yan On Estate from "G/IC" to an area shown as 'Road'; (iii) the rezoning of the land to the east of Ma On Shan Road from "Green Belt" ("GB") to "Residential (Group A)9"; (iv) the rezoning of a strip of land over Ma On Shan Road shown as 'Road'

and a small portion of land abutting Ma On Shan Road zoned as “GB” to “Other Specified Uses” annotated “Pedestrian Link with Retail Facilities”; (v) the rezoning of a strip of land abutting Ma On Shan Road from “GB” to an area shown as ‘Road’; and (vi) the rezoning of a site at Lok Wo Sha Lane from “Open Space” (“O”) to “Residential (Group B)5”, was exhibited for public inspection under section 5 of the Ordinance. During the ~~two-month exhibition-statutory publication~~ period, a total of 264 representations ~~and 38 comments~~ were received. ~~On 6 June 2014, the representations were published for public comments. During the first three weeks of the publication period, a total of 38 comments were received.~~ After giving consideration to the representations and comments on 5 September 2014, the Board decided not to propose any amendment to the draft OZP to meet the representations.

- 2.10 On 2 December 2014, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Ma On Shan OZP, which was subsequently renumbered as S/MOS/20. On 12 December 2014, the approved Ma On Shan OZP No. S/MOS/20 ~~(the Plan)~~ was exhibited for public inspection under section 9(5) of the Ordinance. *On 3 February 2015, the CE in C referred the approved Ma On Shan OZP No. S/MOS/20 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. The reference back of the OZP was notified in the Gazette on 13 February 2015 under section 12(2) of the Ordinance.*
- 2.11 *On xx.xx.2015, the draft Ma On Shan OZP No. S/MOS/20A (the Plan), incorporating amendments including (i) the rezoning of a site near Yiu Sha Road from “G/IC” to “Residential (Group C)3”; and (ii) the rezoning of a site at Hang Kin Street from “O” and an area shown as ‘Road’ to “Residential (Group A)10”, was exhibited for public inspection under section 5 of the Ordinance.*

### 3. OBJECT OF THE PLAN

- 3.1 The object of the Plan is to indicate the broad land-use zones and major transport networks for Ma On Shan so that development and redevelopment within Ma On Shan can be put under statutory planning control. It also provides the planning framework for preparing more detailed non-statutory plans which form the basis for public works planning and site reservation for various uses.
- 3.2 The Plan is to illustrate the broad principles of development and planning control only. It is a small-scale plan and the transport alignments and boundaries between the land-use zones may be subject to minor adjustments as detailed planning proceeds.
- 3.3 Since the Plan is to show broad land use zonings, there would be situations in which small strips of land not intended for building development purposes and carry no development right under the lease, such as the areas restricted as non-building area or for garden, slope maintenance and access road purposes, are included in the residential zones. The general principle is that such areas should not be taken into account in plot ratio and site coverage calculation. Development within residential zones should be restricted to building lots carrying development right in order to maintain the character and amenity of the Ma On Shan area and not to overload the road network in this area.



#### 4. NOTES OF THE PLAN

- 4.1 Attached to the Plan is a set of Notes which shows the types of uses or developments which are always permitted within the Area and in particular zones and which may be permitted by the Board, with or without conditions, on application. The provision for application for planning permission under section 16 of the Ordinance allows greater flexibility in land use planning and control of development to meet changing needs.
- 4.2 For the guidance of the general public, a set of definitions that explains some of the terms used in the Notes may be obtained from the Technical Services Division of the Planning Department and can be downloaded from the Board's website at <http://www.info.gov.hk/tpb>.

#### 5. THE PLANNING SCHEME AREA

- 5.1 Ma On Shan area, being part of Sha Tin New Town, is located in the eastern New Territories along the southern shore of Tolo Harbour. The Planning Scheme Area (the Area), about 814 hectares in size, adjoins Sha Tin in the west, and extends as far as Kwun Hang in the east. To the south and east, it is bounded by the Ma On Shan Country Park, whilst to the north and west, by Tolo Harbour and Sha Tin Hoi (Tide Cove) respectively.
- 5.2 Most of the existing and proposed developments between Tai Shui Hang and Wu Kai Sha are of relatively high intensity. They include housing developments as well as sites used for commercial and community facilities. The development concept of the Area is to achieve a descending building height profile from the highest part in the town centre, petering out towards the peripheries. East of Whitehead, a few villages are found scattered in a green and serene setting overlooking Tolo Harbour. Along the coast of Nai Chung is a strip of land identified as a "Site of Special Scientific Interest" abutting some heavily vegetated knolls. Any development, which would significantly change the character of this part of the Area, should be avoided. Recreational as well as low-density residential or Government, institution or community uses are considered to be most suitable.
- 5.3 The boundary of the Area is shown by a heavy broken line on the Plan. For planning and reference purposes, the Area is sub-divided into a number of smaller planning areas as shown on the Plan.

#### 6. POPULATION

According to the 2011 Census, the population of the Area was about 202,450 persons, comprising 125,700 in public housing (including Home Ownership Schemes (HOS) and Private Sector Participation Scheme (PSPS)) and 76,750 in private housing including village type development. It is estimated that the total planned population would be about ~~236,980~~ 248,891.

7. BUILDING HEIGHT RESTRICTIONS IN THE AREA

- 7.1 In order to provide better planning control on the development intensity and building height upon development/redevelopment, to address public demand for greater certainty and transparency in the statutory planning system, and to meet the growing community aspiration for a better living environment, a review of the Ma On Shan OZP has been taken with a view to incorporating appropriate building height restrictions for various development zones to guide future development/redevelopment. In the absence of building height control, tall buildings may proliferate at random locations and the scale may be out-of-context in the locality, resulting in negative impacts on the visual quality of the Area and may sometimes obstruct air ventilation. In order to prevent excessively tall or out-of-context buildings, to preserve some key urban design attributes (e.g. stepped building height from the waterfront and preservation of public views to the ridgelines) and to provide better control on the building height of developments in the Area, building height restrictions are imposed for the development zones on the Plan.
- 7.2 The stepped building height concept recommended in the Urban Design Guidelines with lower buildings on the waterfront/near major open spaces has been adopted, taking into account the local area context, the local wind environment, and the need to maintain visually compatible building masses in the wider setting. In view of the topography of the Area, there are different height bands generally increasing progressively from the waterfront to inland area and decreasing progressively from the town centre and the western and eastern gateway nodes to respect the distinct urban form of the new town. The proposed building height bands help preserve public views to the ridgelines, achieve a stepped height profile, and maintain visual permeability and wind penetration and circulation as far as possible.
- 7.3 Specific building height restrictions for the “G/IC” and “Other Specified Uses” (“OU”) zones in terms of number of storeys or mPD, where appropriate, which mainly reflect the existing and planned building heights of developments, have been incorporated into the Plan to provide visual and spatial relief to the high density environment of the Area.
- 7.4 For any site which covers a relatively large area, the development should be designed with a view to providing a variation in the height profile within the site, whilst not exceeding the maximum building height specified on the Plan.
- 7.5 An Expert Evaluation on Air Ventilation Assessment (AVA) has been undertaken to assess the existing wind environment and the likely impact of the proposed building heights of the development sites within the Area on the pedestrian wind environment. The building height restrictions shown on the Plan have taken the findings of the AVA into consideration.
- 7.6 In general, a minor relaxation clause in respect of building height restrictions is incorporated into the Notes of the Plan in order to provide incentive for developments/redevelopments with planning and design merits. Each planning application under section 16 of the Ordinance will be considered on its own merits and the relevant criteria for consideration of such application are as follows:

- (a) amalgamating smaller sites for achieving better urban design and local area improvements;
- (b) accommodating the bonus plot ratio granted under the Buildings Ordinance in relation to surrender/dedication of land /area for use as a public passage/street widening;
- (c) providing better streetscape/good quality street level public urban space;
- (d) providing separation between buildings to enhance air and visual permeability; and
- (e) other factors such as site constraints, need for tree preservation, innovative building design and planning merits that would bring about improvements to townscape and amenity of the locality, provided that no adverse landscape and visual impacts would be resulted from the innovative building design.

7.7 However, for any existing building with building height already exceeding the building height restrictions in terms of mPD and/or number of storeys as shown on the Notes of the Plan and/or stipulated on the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

## 8. NON-BUILDING AREAS

8.1 According to the findings of the AVA, the major prevailing annual winds come from the east and north-east direction. In the summer, the south-west background prevailing wind flows from Shing Mun River Channel unobstructed into the south-western part of the Area. This summer wind is very important for urban thermal comfort and air ventilation. The waterbody of Tolo Harbour can create some "southeast-northwest" land and sea breeze with a slight east-west thermally driven air movement across the Area. In terms of air ventilation, the layout of the Area performs well in that the road and open space networks provide an extensive network of airpaths for necessary air ventilation. There is no major air ventilation issue for the Area. However, to further improve the airpath network, the AVA recommends a few strips of non-building/low building areas for better air ventilation of the Area.

8.2 Taking into account the findings of the AVA and other relevant factors, such as site constraints and impacts on development/redevelopment potential, three strips of non-building areas (NBA) are proposed on the Plan as follows:

- (a) a 25m-wide strip of land across the northern part of Kam Fung Court/Chung On Estate. The NBA passes through the existing landscaped area of the public housing site and will help to improve the effectiveness of the Hang Hong Street airpath and improve the air ventilation of the area. The NBA should be taken into account upon future redevelopment of the estate.
- (b) a 25m-wide strip of land across the south-western part of Lee On Estate. The NBA passes through the existing landscaped area and slope area and



will improve the effectiveness of the Kam Ying Road airpath. The NBA should be taken into account upon future redevelopment of the estate.

- (c) a 15m-wide strip of land along the northern boundary of the “Commercial” (“C”) site in Area 77. The NBA requirement will form part of the sale conditions of the “C” site. The NBA will improve the effectiveness of southeast and northwest airpaths in the area between the Ocean View and STTL 548.

The NBA requirements will not apply to underground development. Moreover, a minor relaxation clause has been incorporated in the Notes of the relevant zones to allow minor relaxation of the stated non-building area restrictions as shown on the Plan under exceptional circumstance.

- 8.3 Furthermore, in accordance with the recommendation of AVA, 2-storey building height restrictions are imposed for three strips of land as follows:

- (a) a 16m-wide strip of land across Heng On Estate/Kam On Court with a width similar to that of Hang Tai Road. The strip of land passes through the existing open space, landscaped area and portion of a shopping centre of Heng On Estate and will improve the effectiveness of Ma On Shan Road breezeway towards Ma On Shan Sports Ground. The 2-storey building height restriction should be taken into account upon future redevelopment of the estate.
- (b) two strips of land (15 m-wide each) within the “Comprehensive Development Area (1)” zone at Lok Wo Sha. The two strips of land are in line with the view corridors incorporated in the approved Master Layout Plan (MLP) for Lok Wo Sha Development. The land strips are subject to a building height restriction of 2 storeys to cater for the height of podium structure of the Lok Wo Sha Development under the approved MLP.

As the 2-storey building height restriction is stipulated for better air ventilation of the area, basement floor may be disregarded when determining the maximum number of storeys.

- 8.4 As for the town centre, the AVA recommended that the area bounded by Ma On Shan Bypass and the waterfront should be free of building or as permeable as possible (for example, include large voids in podium) upon redevelopment, if any. It is important to continue to intensify the greenery as much as possible in this area. Although the sites around the town centre have already been fully developed, this recommendation should be taken into account for planning consideration of any redevelopment of the area in future.

## 9. LAND-USE ZONINGS

### 9.1 Commercial (“C”) : Total Area 0.50 ha

- 9.1.1 This zone is intended primarily for commercial developments, which may include shop, services, place of entertainment and eating place, functioning mainly as local shopping centre serving the immediate neighbourhood. A

“C” site located on the northern side of Sai Sha Road in Planning Area 77 is planned for a commercial/office development to serve the local population.

- 9.1.2 In order to control the building density and avoid over-development, the site zoned “C” is restricted to a maximum non-domestic plot ratio of 3. Development and redevelopment within this zone is subject to maximum building height restriction as stipulated on the Plan, or the height of the existing building, whichever is the greater. Minor relaxation of the building height and/or plot ratio restrictions may be considered by the Board on application under section 16 of the Town Planning Ordinance. The criteria given in paragraph 7.6 above would be relevant for assessment for minor relaxation of building height restrictions. Each application for minor relaxation of building height and/or plot ratio restrictions will be considered on its own merits.
- 9.1.3 However, for any existing building with plot ratio already exceeding the plot ratio restriction as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.2 Comprehensive Development Area (“CDA”) : Total Area 18.86 ha

- 9.2.1 This zone is intended for comprehensive development/redevelopment of the area for recreational, residential and/or commercial uses with the provision of open space and other supporting facilities. The zoning is to facilitate appropriate planning control over the development mix, scale, design and layout of development, taking account of various environmental, traffic, infrastructure and other constraints.
- 9.2.2 Pursuant to section 4A(1) of the Ordinance, any development in this zone would require approval of the Board by way of a planning application under section 16 of the Ordinance. A MLP should be submitted in accordance with the requirements as specified in the Notes of the Plan for the approval of the Board pursuant to section 4A(2) of the Ordinance. A copy of the approved MLP will be made available for public inspection pursuant to section 4A(3) of the Ordinance.
- 9.2.3 This zoning comprises the “CDA(1)” site near Lok Wo Sha, and “CDA(2)” and “CDA(3)” sites at the southern part of the Whitehead headland:

(i) “CDA(1)” site near Lok Wo Sha : Total Area 12.74 ha

This site covers an extensive area occupied mainly by ~~a~~ construction sites, ~~some land under cultivation~~ and two wooded areas in the western part of the site. A major part of a known archaeological site (i.e. the Wu Kai Sha Archaeological Site) also falls within the area.

The site is intended for medium-density residential and commercial development to be developed in a comprehensive manner. ~~A direct and convenient pedestrian link such as a central walkway will also be provided to connect with the adjacent "CDA(2)" site.~~ *A 24-hour pedestrian walkway will be provided within the "CDA(1)" zone to connect with Wu Kai Sha Station to its south and a proposed covered footbridge to be provided by the Government to its north leading to the "CDA(2)" zone.* This would serve the residents and visitors travelling between the railway station to its south and the recreational facilities at the Whitehead headland. As the southern side of the site is subject to road traffic noise from Sai Sha Road, adequate noise mitigation measures should be provided.

The site is divided into two sub-areas. Area (a), which comprises the central part of the site, is intended for medium-density residential development and is subject to a maximum domestic plot ratio of 3 and a maximum non-domestic GFA of 10,000m<sup>2</sup>, and a maximum building height in terms of number of storeys or metres above Principal Datum as stipulated on the Plan. A "stepped height" building profile descending from the southern part to the northern part of the site is required. One primary school and one secondary school or other compatible Government, institution or community (GIC) uses will be provided within this area. The site area that will be occupied by free-standing purpose-designed schools will be deducted in calculating the relevant site area. Existing trees within the area should be preserved as far as practicable. Area (b) includes two sites on the western side of the "CDA(1)" site which are designated as non-building area for tree preservation and replanting purposes and would not be accountable for site area calculation. Minor boundary adjustment of Areas (a) and (b) may be permitted at the MLP submission stage provided that the total non-building area not accountable for site area calculation remains unchanged.

- (ii) "CDA(2)" site at the southwestern part of Whitehead headland :  
Total Area 3.77 ha

The site occupies the southwestern part of Whitehead headland and comprises elevated platforms with vegetation on the slopes. It will be served by the local distributor road to the immediate south of the site. The site is intended for low to medium-density residential development to be developed in a comprehensive manner. It will be *accessible to a proposed covered footbridge to be provided by the Government which will be* connected to the 24-hr pedestrian walkway provided within the adjacent "CDA(1)" site. This would serve the residents and visitors travelling between the Ma On Shan Rail (MOS Rail) Wu Kai Sha Station to its further south and the recreational facilities at the Whitehead headland. The site is subject to a maximum GFA of 40,000m<sup>2</sup> and a maximum building height in terms of metres above Principal Datum as stipulated on



the Plan. Given its waterfront location, podium structure should be avoided.

- (iii) “CDA(3)” site at the southeastern part of Whitehead headland :  
Total Area 2.35 ha

The site occupies the southeastern part of Whitehead headland and comprises elevated platforms with vegetation on the slopes. It will be served by the local distributor road to the immediate south of the site. The site is intended for low to medium-density residential development to be developed in a comprehensive manner. The site is subject to a maximum GFA of 30,000m<sup>2</sup> and a maximum building height in terms of number of storeys or metres above Principal Datum as stipulated on the Plan. Given its waterfront location, podium structure should be avoided.

- 9.2.4 Minor relaxation of the building height and/or plot ratio/GFA restrictions may be considered by the Board on application under section 16 of the Town Planning Ordinance. The criteria given in paragraph 7.6 above would be relevant for assessment for minor relaxation of building height restrictions. Each application for minor relaxation of building height and/or plot ratio/GFA restrictions will be considered on its own merits.

- 9.2.5 However, for any existing building with plot ratio/GFA already exceeding the plot ratio/GFA restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.3 Residential (Group A) (“R(A)”) : Total Area ~~84.08~~ 84.67 ha

- 9.3.1 This zone is intended primarily for high-density residential developments. Commercial uses are always permitted on the lowest three floors of a building or in the purpose-designed non-residential portion of an existing building. The lowest three floors of a building include basements but exclude any floor used wholly or mainly for ancillary car parking, loading/unloading bay and/or plant room. Commercial uses on any floor above the lowest three floors will require planning permission from the Board.

- 9.3.2 Sites in Planning Areas 75, 77, 86, 90, **90B**, 92, 100, 103 and 108 zoned for this purpose are intended for public housing development including public rental estates, HOS as well as PSPS. Within these developments, local open spaces and neighbourhood shopping and community facilities are provided to serve the needs of the residents.

- 9.3.3 Existing public rental estates include Yan On Estate and Heng On Estate in Planning Area 86, Chung On Estate in Planning Area 90, Yiu On Estate in Planning Area 92 and Lee On Estate in Planning Area 108. Six HOS developments have been completed. They are Kam Tai Court in Planning Area 77, Kam On Court in Planning Area 86, Kam Fung Court in Planning Area 90, Kam Hay Court in Planning Area 92, Kam Ying

Court in Planning Area 103 and Kam Lung Court in Planning Area 108. Two major PSPS developments have also been completed, one in Planning Area 75 - Chevalier Garden and the other in Planning Area 103 - Saddle Ridge Garden. Fok On Garden and Fu Fai Garden in Planning Area 100 are two smaller scale PSPS developments.

9.3.4 All the private "R(A)" developments at the town centre in Planning Area 100 have been completed and occupied.

9.3.5 Developments or redevelopments in areas zoned "R(A)" are subject to a maximum domestic plot ratio of 5 or a maximum non-domestic plot ratio of 9.5, or the plot ratio of the existing building, whichever is the greater. They are also subject to the maximum building height restrictions as stipulated on the Plan, or the height of the existing building, whichever is the greater. The stipulated plot ratio restriction is the maximum only. All public housing estates are also governed by planning briefs. Any increase in GFA/plot ratio must be supported by relevant assessment on the infrastructural implications e.g. traffic impact assessment, drainage impact assessment and sewage impact assessment.

9.3.6 The three sites occupied by Chevalier Garden, Kam On Court and Kam Ying Court are zoned "R(A)1", "R(A)2" and "R(A)3" respectively. They are subject to maximum plot ratio restrictions or the plot ratio of the existing building, whichever is the greater. Their plot ratio restrictions are as follows:

Site	Zoning	Maximum Total Plot Ratio
Chevalier Garden	"R(A)1"	3
Kam On Court	"R(A)2"	3.8
Kam Ying Court	"R(A)3"	4.6

They are also subject to the maximum building height restriction as stipulated on the Plan, or the height of the existing building, whichever is the greater.

9.3.7 The four sites occupied by Ma On Shan Centre, Bayshore Towers, Sunshine City Phase V (Tolo Place) and Sunshine City Phase IV are zoned "R(A)4", "R(A)5", "R(A)6" and "R(A)7" respectively. They are subject to maximum GFA restrictions or the GFA of the existing building, whichever is the greater. In order to ensure that essential commercial floorspace would be provided to serve the function of the town centre, non-domestic GFA restriction is specified. Their GFA restrictions are as follows:

Site	Zoning	Maximum Domestic GFA (m <sup>2</sup> )	Maximum Non-domestic GFA (m <sup>2</sup> )
Ma On Shan Centre	"R(A)4"	54,544	7,620
Bayshore Towers	"R(A)5"	57,300	30,000
Sunshine City Phase V (Tolo Place)	"R(A)6"	40,400	5,650
Sunshine City Phase IV	"R(A)7"	114,618	50,240

The above sites are also subject to the maximum building height restrictions as stipulated on the Plan, or the height of the existing building, whichever is the greater.

- 9.3.8 Yan On Estate and its proposed extension in Planning Area 86 is zoned “R(A)8” for public rental housing development and another piece of land opposite to Yan On Estate across Ma On Shan Road is zoned “R(A)9” for HOS development. Both sites are subject to maximum plot ratio restrictions or the plot ratio of the existing building, whichever is the greater. Their plot ratio restrictions are as follows:

Site	Zoning	Maximum Domestic Plot Ratio	Maximum Non-domestic Plot Ratio
Yan On Estate	“R(A)8”	6	0.5
Ma On Shan Road Site	“R(A)9”	5.5	0.3

They are also subject to the maximum building height restriction as stipulated on the Plan, or the height of the existing building, whichever is the greater.

- 9.3.9 In the “R(A)8” zone, a number of GIC facilities including a kindergarten, a Day Care Centre for the Elderly, a Supported Hostel for Mentally Handicapped Persons, a Special Child Care Centre and an Early Education and Training Centre, as well as ancillary recreation, retail and commercial facilities will be provided.

- 9.3.10 *A piece of land at Hang Kin Street in Area 90B is zoned “R(A)10” for public housing development subject to a maximum plot ratio of 6 or the plot ratio of the existing building, whichever is the greater. It is also subject to a maximum building height restriction as stipulated on the Plan, or the height of the existing building, whichever is the greater. Western part of the land falls within geological fault zone/ an area with underground cavities and northern boundary of the land is designated for Drainage Reserve. Eastern boundary of the land would also need to set back for access purpose. Such constraints will be taken into account in design stage of the proposed development. Besides, environmental assessment and sewerage impact assessment should be conducted and appropriate mitigation measures should be provided to minimize the potential impacts.*

- 9.3.11 At detailed design stage, quantitative ~~AVA~~ *air ventilation* studies will need to be conducted for the ~~public rental housing and, HOS public housing~~ developments within the “R(A)8” ~~and~~, “R(A)9” and “R(A)10” sites to further refine the development layout and the relevant mitigation measures from the air ventilation perspectives.

- 9.3.12 *Planning brief(s) setting out the development parameters, design requirements and the relevant technical assessments to be conducted for individual public housing site(s) will be provided to guide the future development of the site(s).*



9.3.13 Minor relaxation of the building height and/or plot ratio/GFA restrictions may be considered by the Board on application under section 16 of the Town Planning Ordinance. The criteria given in paragraph 7.6 above would be relevant for assessment for minor relaxation of building height restrictions. Each application for minor relaxation of building height and/or plot ratio/GFA restrictions will be considered on its own merits.

9.3.14 However, for any existing building with plot ratio/GFA already exceeding the plot ratio/GFA restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.4 Residential (Group B) ("R(B)") : Total Area 20.77 ha

9.4.1 This zone is intended primarily for medium-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board. This zone includes areas in the northern part of Planning Area 77, the southern part of Planning Area 90, the eastern part of Planning Area 92 and Planning Area 108, a site at Hang Kwong Street in Planning Area 92, a site at Ma Kam Street in Planning Area 103 and a site to the south of the existing Wu Kai Sha Youth Village in Planning Area 110 and a site at Lok Wo Sha Lane in Planning Area 111.

9.4.2 Two of these "R(B)" sites which are designated for Sandwich Class Housing (SCH) development have been completed. Other "R(B)" sites in the Area are planned for private residential developments.

9.4.3 The "R(B)" zone is sub-divided into a number of sub-areas. These sub-areas have different restrictions on development intensity and these restrictions are specified in the Remarks in the Notes of the Plan. They are also subject to the maximum building height restrictions as stipulated on the Plan, or the height of the existing building, whichever is the greater. These restrictions are required to provide a variety of housing mix. Minor relaxation of the building height and/or plot ratio/GFA restrictions may be considered by the Board on application under section 16 of the Town Planning Ordinance. The criteria given in paragraph 7.6 above would be relevant for assessment for minor relaxation of building height restrictions. Each application for minor relaxation of building height and/or plot ratio/GFA restrictions will be considered on its own merits.

9.4.4 However, for any existing building with plot ratio already exceeding the plot ratio/GFA restriction as shown in the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.5 Residential (Group C) ("R(C)") : Total Area ~~10.59~~ 11.05 ha

- 9.5.1 This zone is intended primarily for low-rise, low-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board.
- 9.5.2 Two sites at Cheung Muk Tau *and a site in Whitehead* in Planning Area 111 are zoned for this use. Plot ratio and building height restrictions are imposed in the Notes of the Plan for residential developments within this zoning. The zoning is further sub-divided into ~~two~~ *three* sub-areas, each with its own specific plot ratio and building height restrictions. All these restrictions are necessary for preserving the general amenity and the rural character of Planning Area 111 as well as ensuring that the development intensities will not overload the road network. In addition, these restrictions can also ensure that the future development within this zone will be compatible with the nearby institution/community and recreational uses as well as the surrounding rural setting; and help to maintain the *silhouette ridgeline* of Ma On Shan as the backdrop of the Area as viewed from the other side of Tolo Harbour.
- 9.5.3 Minor relaxation of the building height and/or plot ratio restrictions may be considered by the Board on application under section 16 of the Town Planning Ordinance. The criteria given in paragraph 7.6 above would be relevant for assessment for minor relaxation of building height restrictions. Each application for minor relaxation of building height and/or plot ratio restrictions will be considered on its own merits.
- 9.5.4 However, for any existing building with plot ratio already exceeding the plot ratio restriction as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.

9.6 Village Type Development ("V") : Total Area 30.88 ha

- 9.6.1 The planning intention of this zone is to designate both existing recognised villages and areas of land considered suitable for village expansion. Land within this zone is primarily intended for development of Small Houses by indigenous villagers. It is also intended to concentrate village type development within this zone for a more orderly development pattern, efficient use of land and provision of infrastructures and services. Selected commercial and community uses serving the needs of the villagers and in support of the village development are always permitted on the ground floor of a New Territories Exempted House. Other commercial, community and recreational uses may be permitted on application to the Board. In order to ensure that any future development or redevelopment within these villages would retain the village character, a restriction of a maximum building height of 3 storeys (8.23m) or the height of the existing buildings, whichever is the greater, is imposed under this zoning.

- 9.6.2 Within the Area, there are altogether eight recognised villages covered by this zoning. They are Tai Shui Hang, Mui Tsz Lam, Ma On Shan Tsuen, Wu Kai Sha (comprising the areas of Cheung Kang, Wu Kwai Sha New Village, Kwai Po Lau and Lok Wo Sha), Cheung Muk Tau, Sai O, Nai Chung and Kwun Hang.
- 9.6.3 In the delineation of the boundaries of the proposed "V" zones, consideration has been given to the Small House demand forecast, the village 'environs' and geographical constraints.
- 9.6.4 As Mui Tsz Lam and Ma On Shan Tsuen are located at the hillslopes of Ma On Shan, building works for village housing and associated road access could result in excessive cutting of hillslopes and subsequent visual impact. Particular attention should therefore be paid to avoid adverse visual impact caused by any proposed developments at these areas. The two villages also lie within the upper indirect water gathering grounds and in the vicinity of streams. As such, it would be necessary to ensure control on effluents from proposed developments at these areas.
- 9.6.5 According to the Territorial Land Drainage and Flood Control Strategy Study Phase I, Cheung Muk Tau is located within a flood plain which is subject to overland flow and inundation during heavy rainfall. Any development at this village should therefore be strictly controlled. To avoid aggravating flood risk in the area, proper drainage mitigation measures should be identified for implementation in conjunction with proposed developments at this village.

9.7 Government, Institution or Community ("G/IC") : Total Area ~~64.23~~ 63.77 ha

- 9.7.1 This zone is intended primarily for the provision of GIC facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.
- 9.7.2 Existing GIC facilities serving a wider community include Wu Kai Sha Youth Village in Planning Area 110, Li Po Chun United World College and a holiday centre for the elderly in Planning Area 111 and a regional police headquarters in Planning Area 103.
- 9.7.3 Existing/planned GIC facilities serving mainly the local community include the following: a swimming pool complex, an indoor recreation centre cum library, a sub-divisional fire station, an ambulance depot and training school and a sports complex in Planning Area 92, a health and welfare building in Planning Area 90, a sewage pumping station and an electricity sub-station in Planning Area 86, a site for social welfare facilities and other GIC facilities in Area 100, the indoor recreation centre cum community hall as well as other facilities to be considered by Leisure and Cultural Services Department at Area 103 as well as the indoor recreation centre at Lok Wo Sha Lane.



- 9.7.4 The "G/IC" sites in the area near the eastern end of Planning Area 81 has been developed as a service reservoir. The other "G/IC" site in the area is planned for the development of another service reservoir. The "G/IC" site in Planning Area 81 near Kam Ying Court has been developed as the Ma On Shan Service Reservoir and Ma On Shan Salt Water Reservoir. The "G/IC" site near To Tau is planned for the development of a sewage pumping station. ~~A site near Starfish Bay is zoned "G/IC" to provide a long-term reserve to meet the needs of the district.~~
- 9.7.5 A number of primary and secondary schools have been provided and planned within the Area. Also included under this zoning are sites for churches, telephone exchanges, and a proposed Government office development.
- 9.7.6 When detailed planning and development for the Area proceeds, local community facilities such as kindergartens and neighbourhood centres will be provided within the public housing estates and the large private residential developments.
- 9.7.7 Development and redevelopment within the "G/IC" zone is subject to building height restrictions as stipulated on the Plan or the height of the existing building, whichever is the greater. Minor relaxation of the building height restrictions may be considered by the Board on application. Each application for minor relaxation of building height restriction will be considered on its own merits, taking into account the relevant criteria as set out in paragraph 7.6 above.

9.8 Recreation ("REC") : Total Area : 14.95 ha

- 9.8.1 The site comprises a large piece of flat land at the northern part of the Whitehead headland. The planning intention of this zone is primarily for comprehensive recreational developments for the use of the general public. It encourages the development of sports, active and/or passive recreation and tourism/eco-tourism. Given its waterfront location, it may also be suitable for water-related recreational uses and the natural shoreline should be preserved as far as possible. Major recreational/sports facilities and uses in support of the recreational developments may be permitted subject to planning permission. The site is subject to a maximum building height in terms of number of storeys or metres above Principal Datum as stipulated on the Plan. Consideration should be given to keep the building height at the waterfront to a minimum to avoid potential visual impact.
- 9.8.2 Minor relaxation of the building height restriction may be considered by the Board on application under section 16 of the Town Planning Ordinance. The criteria given in paragraph 7.6 above would be relevant for assessment for minor relaxation of building height restriction. Each application for minor relaxation of building height restriction will be considered on its own merits. Given its waterfront location, podium structures should be avoided.

9.9 Open Space (“O”) : Total Area ~~39.29~~ 38.71 ha

- 9.9.1 This zone is intended primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public.
- 9.9.2 Open space provision in the Area is planned in the form of a continuous network. The open spaces are designed to link the Ma On Shan Country Park to the shoreline of Tide Cove/Tolo Harbour. The main feature is the district open space on the waterfront in Planning Area 100, which has been developed as the Ma On Shan Park to serve the Area. A waterfront promenade running from Tai Shui Hang in the south up to the Ma On Shan Park in the north has been completed.
- 9.9.3 In response to the “green finger” concept adopted in the overall planning of the Area, three strips of open spaces running in an east-west direction will be developed in the Area. They serve as green visual corridors separating the high-density developments. They are located to the south and to the north of Heng On Estate and to the north of Yiu On Estate.
- 9.9.4 In addition to the major open spaces as indicated on the Plan, local open spaces will also be provided within the public housing estates and the large private residential developments for the enjoyment of local residents.

9.10 Other Specified Uses (“OU”) : Total Area 13.02 ha

- 9.10.1 This zone is intended for specific development(s) and/or uses, which is/are specified in the annotation of the zone.
- 9.10.2 A site in the north-eastern part of Planning Area 108 ~~is planned~~ **has been developed** for a railway station and public transport interchange with commercial/residential development. The Ma On Shan Rail terminates at this point and is provided with pedestrian linkages and bus feeder services to serve the surrounding areas. Developments or redevelopments in this “OU” site are subject to a maximum domestic GFA of 168,650 m<sup>2</sup>, a maximum non-domestic GFA of 4,000 m<sup>2</sup> and a maximum GFA of 15,066 m<sup>2</sup> for the public transport interchange, or the GFA of the existing building, whichever is the greater. The GFA of the railway station may be exempted from GFA calculation.
- 9.10.3 The Ma On Shan Water Treatment Works at Kwun Hang in Planning Area 81 serves to provide chlorinated water to the Area.
- 9.10.4 Three existing petrol filling stations in Planning Areas 86 and 92 are also covered by this zoning.
- 9.10.5 The existing pier for the Wu Kai Sha Youth Village in Planning Area 110 and a proposed pier in Planning Area 100 are also covered by this zoning.

- 9.10.6 In response to the recommendations of the Visitor and Tourism Study for Hong Kong, a site at the waterfront in Area 100 is designated *and has been developed* specifically for hotel use. Restrictions on plot ratio and building height are imposed on the site to ensure compatibility with the surrounding developments.
- 9.10.7 A site at Nai Chung is designated for educational and recreational development. Recreational uses compatible with the overall setting of the area are permitted as of right. The development of school in this zone requires planning permission from the Board in order to ensure adequate planning control on the proposed use through the submission of layout plan. Moreover, development or redevelopment within the zone is subject to a maximum gross floor area of 17,800m<sup>2</sup> and a maximum building height of seven storeys. Minor relaxation of the stated restrictions may be considered by the Board on application under section 16 of the Ordinance. Each proposal will be considered on its own merits. For any development on this site, special attention should be made to ensure no adverse impact on the surrounding environment (particularly the Nai Chung Site of Special Scientific Interest).
- 9.10.8 An "OU" annotated "Pedestrian Link with Retail Facilities" zone is indicated on the Plan to provide a pedestrian link connecting the public housing developments on both sides of Ma On Shan Road. This footbridge will serve as a major pedestrian connection for easy access to Ma On Shan Town Centre and the MTR Heng On Station. Given the length of the footbridge (about 100m), subject to the Housing Department (HD)'s feasibility study, some retail facilities can be provided along this walkway to help create a better walking experience. As the footbridge is located at the southern entrance of Ma On Shan and would be visually prominent, special consideration would be given by HD to its design so that it would serve to signify a gateway into the new town.
- 9.10.9 Developments or redevelopments in the "OU" sites are subject to maximum building heights in terms of mPD or number of storeys as stipulated on the Plan or at the Notes of the Plan. Minor relaxation of the building height and/or plot ratio/GFA restrictions may be considered by the Board on application under section 16 of the Town Planning Ordinance. The criteria given in paragraph 7.6 above would be relevant for assessment for minor relaxation of building height restrictions. Each application for minor relaxation of building height and/or GFA restrictions will be considered on its own merits.
- 9.10.10 However, for any existing building with plot ratio/GFA already exceeding the plot ratio/GFA restrictions as shown on the Notes of the Plan, there is a general presumption against such application for minor relaxation except under exceptional circumstances.



9.11 Green Belt ("GB") : Total Area 404.53 ha

- 9.11.1 The planning intention of this zone is primarily for defining the limits of urban and sub-urban development areas by natural features and to contain urban sprawl as well as to provide passive recreational outlets. The "GB" zone also provides a buffer between the developments in the Area and the adjacent Ma On Shan Country Park. There is a general presumption against development within this zone.
- 9.11.2 The land within this zoning comprises mainly the hill slopes to the south of Ma On Shan Bypass. The existing wooded knoll near Starfish Bay and the area to the southwest of Li Po Chun United World College are also under this zoning.

9.12 Conservation Area ("CA"): Total Area 11.86 ha

- 9.12.1 This zoning is intended to protect and retain the existing natural landscape, ecological, topographical or archaeological features of the area for conservation, educational and research purposes and to separate sensitive natural environment such as Site of Special Scientific Interest from the adverse effects of development. There is a general presumption against development in this zone. In general, only developments that are needed to support the conservation of the existing natural landscape or scenic quality of the area or the development is an essential infrastructure project with overriding public interest may be permitted. The coastal areas in the eastern and western parts of the Whitehead headland and along Starfish Bay and To Tau are zoned "CA" in recognition of their ecological and archaeological values.
- 9.12.2 The eastern and western coastal areas of the Whitehead headland include patches of dense, undisturbed and mature plantations which support a number of bird species. Starfish Bay has long been recognized as a site of ecological interest for academic investigation of inter-tidal habitats and associated fauna. It is important both as a natural resource asset and because of its educational and scientific values. The "CA" zone at Starfish Bay together with the Nai Chung Site of Special Scientific Interest would form a continuous conservation belt along the coastline. In addition, the "CA" zone at To Tau covers a mature coastal woodland and a prehistoric archaeological site identified on the raised beach south of To Tau, which are of ecological and archaeological values respectively.
- 9.12.3 Uses in support of the conservation purposes such as nature reserve, field study centre, education centre and visitor centre are permitted as of right. New developments which are not necessary to support the conservation objectives are not permitted in this zone. Only a selective range of uses such as public convenience and refreshment kiosk which would have insignificant impact on the ecology, environment and infrastructural provision of the area may be permitted with or without conditions on application to the Board.

9.13 Site of Special Scientific Interest ("SSSI") : Total Area 2.48 ha

9.13.1 The planning intention of this zone is to conserve and protect the features of special geological interest which are designated as Site of Special Scientific Interest (SSSI). It intends to deter human activities or developments within the SSSI. There is a general presumption against development in this zone. No developments are permitted unless they are needed to support the conservation of the features of special scientific interest in the SSSI, to maintain and protect the existing character of the SSSI, or for educational and research purposes.

9.13.2 The Nai Chung Site of Special Scientific Interest, which is of geological interest, was designated on 24 September 1982. It extends about 0.9 km along the coast of Nai Chung near Li Po Chun United World College. Within this site, good contact of granite with sediments and traces of black carbonaceous shales are found. These are all rare geological features in Hong Kong.

9.14 Country Park ("CP") : Total Area 0.60 ha

9.14.1 Country Park means a country park or special area as designated under the Country Parks Ordinance (Cap. 208). All uses and developments require consent from the Country and Marine Parks Authority and approval from the Board is not required.

9.14.2 The only site in the Area covered by this zoning is the Nai Chung Barbecue Site located along Sai Sha Road in Planning Area 81. This site forms part of Ma On Shan Country Park.

10. COMMUNICATIONS

10.1 A comprehensive transportation system comprising roads, pedestrian ways and cycle tracks has been planned for the Area. Only the major road networks (including trunk roads, primary and district distributors) are indicated on the Plan.

10.2 External road links are provided in three directions. Road T6 (comprising a bridge and road interchanges) links the Area with Tolo Highway for access to the northern New Territories. To the south-west, Ma On Shan Road provides connection to Tate's Cairn Tunnel which links up with East Kowloon. Sai Sha Road in the east gives direct access to Sai Kung. Internally, Ma On Shan Bypass, which connects Ma On Shan Road to Sai Sha Road, skirts the south-east of the main development area of the Area. A hierarchy of distributor roads has been planned to provide safe and convenient access to the various planning areas.

10.3 An extensive pedestrian and cycle track network have been planned to link up the residential developments with open spaces, community facilities, and the Town Centre as far as possible. They are, wherever possible, segregated from the road network.

- 10.4 Initially, public transport was only provided by buses and green minibuses. The East Rail Extension – Tai Wai to Ma On Shan (the MOS Rail) was completed in 2004 and provides a convenient passenger link connecting Ma On Shan with Tai Wai via the Sha Tin hinterland. The MOS Rail is provided with interchange facilities with the existing East Rail in Tai Wai. The MOS Rail comprises five stations and a maintenance centre in Sha Tin. Four stations fall within Ma On Shan (Tai Shui Hang, Heng On, Ma On Shan and Wu Kai Sha).
- 10.5 A new ferry pier is proposed near Ma On Shan Park in Planning Area 100 to cater for possible ferry services, public vessels and pleasure boats.

## 11. UTILITY SERVICES

### 11.1 Water Supply

Fresh water supply and sea water supply for flushing are generally available to low-lying area in the Area. Fresh water supply is provided by Ma On Shan Water Treatment Works via Ma On Shan Fresh Water Primary and Secondary Service Reservoirs. Sea water supply is provided by Sha Tin Seafront Salt Water Pumping Station via Ma On Shan Salt Water Service Reservoir.

### 11.2 Sewage Treatment

The sewage in the Area will be pumped via rising mains to the Sewage Treatment Works in Planning Area 47 in Sha Tin. Drainage Services Department is proceeding with the Stage III extension to the Sewage Treatment Works for completion in 2010. There is at present no sewer serving the area to the north of Lok Wo Sha in Area 111. The proposed development at Whitehead and the area near Lok Wo Sha will tie in with the upgrading of the sewerage system in the Ma On Shan area.

### 11.3 Public Utilities

Close liaison and consultation with the various utility companies have been maintained in the planning and development of the Area. Adequate provision has been made for utility networks and for installations such as telephone exchanges and electric sub-stations.

## 12. CULTURAL HERITAGE

- 12.1 ~~Four archaeological sites~~ *Three sites of archaeological interest*, are located within the Area, namely Pak Kong – Mui Tsz Lam Trackway (partial), Wu Kai Sha ~~Archaeological Site~~ *Site of Archaeological Interest*, ~~Sai O Archaeological Site~~ and Che Ha ~~Archaeological Site~~ *Site of Archaeological Interest* (partial). ~~A pre-historic archaeological site has also been identified at To Tau.~~ There are two graded historic buildings in the Area, namely *i.e.* Cheung Village House at No. 6 Tai Shui Hang (Grade 3) and Cheung Village Houses at ~~No. 6 and~~ Nos. 16-18 Tai Shui Hang (Grade 3) ~~within the Area.~~

- 12.2 ~~Besides, there are The Antiquities and Advisory Board (AAB) released~~ a number of new items in addition to the ~~list of~~ 1,444 historic buildings. ~~in Hong Kong proposed for These items are subject to the grading~~ assessment by the ~~Antiquities Advisory Board (AAB) in the Area~~. Details of ~~these the list of~~ 1,444 historic buildings and ~~its new items in addition to the 1,444 historic buildings~~ have been uploaded onto the official website of the AAB at <http://www.aab.gov.hk>.
- 12.3 Prior consultation with the Antiquities and Monuments Office (AMO) of the Leisure and Cultural Services Department should be made if any development, redevelopment or rezoning proposals might affect the above sites/historic buildings, ~~and new items in addition to the 1,444 historic buildings~~, and their immediate environs.
- 12.4 If disturbance of the ~~archaeological sites and sites of archaeological potential sites of archaeological interest~~ is unavoidable, a detailed Archaeological Impact Assessment (AIA) conducted by a qualified archaeologist is required for development works within the sites. The archaeologist shall apply for a licence to conduct the AIA under Antiquities and Monuments Ordinance (Cap.53). A proposal of the AIA shall be submitted to the AMO for agreement prior to applying for a licence.

### 13. IMPLEMENTATION

- 13.1 Although existing uses non-conforming to the statutory zonings are tolerated, any material change of use and any other development/redevelopment must be always permitted in terms of the Plan or, if permission is required, in accordance with the permission granted by the Board. The Board has published a set of guidelines for the interpretation of existing use in the urban and new town areas. Any person who intends to claim an "existing use right" should refer to the guidelines and will need to provide sufficient evidence to support his claim. The enforcement of the zonings mainly rests with the Buildings Department, the Lands Department and the various licensing authorities.
- 13.2 The Plan provides a broad land-use framework within which more detailed non-statutory plans for the Area are prepared by the Planning Department. These detailed plans are used within the Government as the basis for public works planning and site reservation. Disposal of sites is undertaken by the Lands Department. Public works projects are co-ordinated by the Civil Engineering and Development Department in conjunction with the client departments and works departments, such as the Architectural Services Department and the Highways Department. In the course of implementation of the Plan, the Sha Tin District Council would be consulted as appropriate.
- 13.3 Planning applications to the Board will be assessed on individual merits. In general, the Board's consideration of the planning applications, will take into account all relevant planning considerations which may include the departmental outline development plans/layout plans, and Guidelines published by the Board. The outline development plan and layout plans are available for public inspection at the Planning Department. Guidelines published by the Board are available from the Board's website, the Secretariat of the Board and the Technical Services



Division of the Planning Department. Application forms and guidance notes for planning applications can be downloaded from the Board's website and are available from the Secretariat of the Board, and the Technical Services Division and the relevant District Planning Office of the Planning Department. Applications should be supported by such materials as the Board thinks appropriate to enable it to consider the applications.

**TOWN PLANNING BOARD**

***~~DECEMBER 2014~~ MARCH 2015***

**Brief Summary of Technical Assessments on Infrastructure to  
Support a Housing Site near Yiu Sha Road at Whitehead, Ma On Shan**

Background

The 2014 Policy Address stated that the Government accepts the recommendation of the Long Term Housing Strategy Steering Committee to increase housing supply with a new target of providing a total of 470,000 units in the coming ten years. The subject site (the Site), currently zoned "G/IC", located at Whitehead, Ma On Shan is one of the sites identified by the Government as suitable for residential use with a view to meeting the housing supply target. It is proposed to rezone the site from "G/IC" to "R(C)3".

To confirm the technical feasibility of the proposed residential development at the Site in infrastructure aspect, the Civil Engineering and Development Department (CEDD) has carried out the following assessments and the results are summarized as follows:

Traffic Impact Assessment (TIA)

The proposed vehicular access to the Site is located at the un-named access road which connects to Lok Wo Sha Lane. In view of the current condition of Lok Wo Sha Lane, it is proposed to provide a roundabout junction to connect the un-named access road with Yiu Sha Road and Lok Wo Sha Lane. With the implementation of the road connection, Yiu Sha Road will become the primary access for the traffic and pedestrian travelling / walking to and from the Site. Footpaths and cycle track shall be provided alongside the carriageway to link with the future dual-2 lane Yiu Sha Road.

Junction capacity assessment and road link capacity analysis were undertaken based on year 2024 traffic forecast. The results indicated that all the critical junctions, including the proposed roundabout and road links would be operating within capacity with the proposed residential development.

The TIA concluded that the traffic impact imposed onto the local road network due to the proposed residential development at the Site with the implementation of the proposed road works is minimal.

Sewerage Impact Assessment (SIA)

According to the SIA, the existing sewerage facilities including the sewers along Yiu Sha Road, Whitehead Sewage Pumping Station and the associated rising mains, twin gravity sewers across Sai Sha Road to Ma On Shan Area 108 Sewage Pumping Station (MOS108SPS) and MOS108SPS have sufficient capacities to cater for the flows from the proposed residential development at the Site. No sewerage impact due to the development is anticipated and no upgrading of existing sewerage works is required.

As there is no public sewer for the Site at present, a new section of approx. 116m long sewer with 300mm diameter is proposed along Yiu Sha Road at the north of STTL574 to connect GLA 15 site to the existing 375mm diameter sewer along Yiu Sha Road.

Facilities that may generate large amounts of sewage flows such as swimming pools are not

anticipated in the proposed development.

#### Drainage Impact Assessment (DIA)

According to the DIA, it is recommended that the surface runoff from the proposed residential development at the Site will be discharged to the existing 2.5m (W) x 2.5m (H) box culvert on the west side of the Whitehead area via the stormwater drain with diameters varying from 1200mm to 1350mm proposed along Yiu Sha Road under project 756CL – Roads, Drainage and Sewerage Works at Whitehead and Lok Wo Sha Phase 2 as an interim measure. Upon commissioning of the trunk drainage system planned at the east side of Whitehead area, the runoff from the Site will be diverted back to the new box culvert. The stormwater drain proposed under project 756CL and the existing box culvert are assessed to have sufficient capacities to cater for the flows from the proposed residential development at the Site. No drainage impact due to the development is anticipated and no upgrading of existing drainage works is required.

As there is no public stormwater drain for the Site at present, a new section of approx. 92m long drain with 525mm diameter is proposed along Yiu Sha Road at the north of STTL574 to connect the Site to the 1200mm diameter stormwater drain along Yiu Sha Road proposed under project 756CL.

#### Water Supply Impact Assessment (WSIA)

According to the WSIA, the existing waterworks facilities, including the fresh and salt water service reservoirs, the fresh and salt water mains have sufficient capacity to cater for the proposed residential development at the Site. No upgrading of the existing waterworks facilities is required.

It is proposed that a DN150 fresh water main and a DN80 salt water main will be constructed along the existing road to the east of Yiu Sha Road to connect the Site to the existing water mains in the vicinity.

#### Preliminary Environmental Review (PER)

A general environmental appraisal on noise, air quality, water quality, solid waste and ecology was carried out to identify and evaluate the key environmental issues and consequences due to the proposed residential development at the Site and the proposed infrastructure works.

#### *Noise*

No major noise emission sources are anticipated from the proposed residential development at the Site during both construction and operational phases. In view that the rail noise from Ma On Shan Rail is beyond a setback distance of 300m and the adoption of environmentally-conscious design in the proposed roadworks and the sewage pumping station at Whitehead, no adverse noise impact is anticipated.

Regarding the associated infrastructure works, it is considered that the extent is very minor with small changes on roundabout (R/A) connecting to a dead-end local road. The new R/A location is moving further away from other existing/planned developments. With the minor

extent of construction works, it is anticipated to have no adverse noise implication during construction phase after implementation of good site practices.

It is understood that there is no further change in the road alignment/road design for other roads within 300m area. A quick review has been conducted by comparing the maximum noise levels at representative noise sensitive receivers at surrounding sites for cases “without” and “with the proposed development at the Site” in Year 2034. Results indicated that there will be no adverse traffic noise impact due to the associated infrastructure works.

#### *Air Quality*

No major emission sources concerning air quality are anticipated from the proposed residential development at the Site during both construction and operational phases.

With the minor extent and short-term nature of construction works of the proposed infrastructure, it is not anticipated to have adverse dust implication during construction phase after implementation of good site practices. There is no change in the road classification, road design, road alignment and setback distances to other existing / planned development, it is expected that there will be no adverse implication (construction and operation) due to the proposed infrastructure works.

#### *Water Quality*

For the proposed residential development at the Site, with the implementation of mitigation measures, the potential water quality impacts arising from construction works would be acceptable. Wastewater from the site in the operational phase should be conveyed to the public sewerage system with adequate capacity. No operational water quality issue would be anticipated. For the associated infrastructure works, the scale is considered to be minor and can be well-controlled under good site practices. Thus, it is expected there will be no adverse implication due to the associated infrastructure works.

#### *Solid Waste*

Owing to the small site area of the Site, the amount of construction and demolition (C&D) materials generated would be small. Regarding the adjoining infrastructure/utility works, the amount of C&D materials generated would be still minor. It is recommended that various guideline from EPD and DEVB should be followed to achieve good waste management practice.

#### *Ecology*

The Site is currently abandoned with disturbance from urbanized area in the vicinity. The loss of both habitats would not impose major ecological impact, and is considered minor. Buffer planting along the south-eastern boundary and planting at possible landscaping area would compensate for the minor ecological impact due to the loss of low ecological value plantation habitat.

Disturbance impact is anticipated, particularly to the “Conservation Area” (“CA”) adjacent to the the Site. However, with environmental control measure in place, no major adverse impacts are expected from noise, air quality, water quality and glare during construction and



operation phase. Buffer planting with bamboo and/or tree at the Site to reduce human disturbance to the "CA" can be considered.

### *Conclusion*

With the introduction of mitigation measures to be implemented during construction and operation phases, the preliminary environmental review indicated that there would be no insurmountable environmental impact.

**Civil Engineering and Development Department**  
**February 2015**

**Brief Summary of Traffic Review for  
Public Housing Development at Hang Kin Street, Area 90B, Ma On Shan**

Background

The site (northern part of an open space site at Hang Kin Street, Area 90B, Ma On Shan) is zoned “Open Space” (“O”) in the current Ma On Shan Outline Zoning Plan (OZP) No. S/MOS/20. The site is identified for public housing development and requires rezoning on the OZP. It is proposed to rezone the site from “O” to “Residential (Group A)” (“R(A)”).

To ascertain the feasibility of the proposed public housing development, the Hong Kong Housing Authority (HA) has carried out a Traffic Review and the results are summarized as follows:

Traffic Review

Junction capacity assessment has been undertaken for four junctions in the vicinity of the subject site, namely Hang Fai Street/Sai Sha Road, Ning Tai Road/Hang Ming Street/Hang Fai Street, Hang Kin Street/Hang Ming Street and Hang Ming Street/Sai Sha Road. Preliminary traffic review results demonstrated that the four junctions would operate satisfactorily with spare capacity during both morning and evening peaks in 2014, design years 2020 and 2025.

Link capacity assessment has been undertaken for three road links in the vicinity of the subject site, namely Sai Sha Road Northbound (from Ma On Shan Road), Sai Sha Road Northbound (from Hang Tak Street) and Sai Sha Road Southbound. Preliminary traffic review results demonstrated that the three road links would operate satisfactorily with spare capacity during both morning and evening peaks in 2014, design years 2020 and 2025.

Transport provision of public transport services and pedestrian crossing facilities were investigated. Preliminary traffic assessment indicated that the site is well-served by different modes of public transport services in close proximity and well-connected to adjacent developments by existing walkways and pedestrian crossing facilities.

Existing traffic queue problem in the vicinity of the subject site due to school-related traffic was reviewed. Further capacity analysis for the road link of Sai Sha Road Northbound was undertaken. Preliminary traffic review results demonstrated that the road link would operate satisfactorily. The existing traffic queue condition is manageable and would not be deteriorated after population intake.

Existing traffic queue problem at a fuel station at Hang Yiu Street was reviewed. Further capacity analysis for the roundabout of Hang Fai Street/Sai Sha Road was undertaken. Preliminary traffic review demonstrated that the roundabout would operate satisfactorily with ample capacity.

In conclusion, preliminary traffic review results demonstrated that the traffic generated by the proposed public housing development would not induce adverse traffic impact on the surrounding road network. Hence it can be concluded that the proposed public housing development is acceptable from traffic point of view.

**Housing Department  
February 2015**

Planning Department

**Agreement No. PLNQ 56/2012**

**Category A1 - Term Consultancy for  
Expert Evaluation and Advisory Services on  
Air Ventilation Assessment**

**For an Instructed Project for Potential  
Housing Sites in Ma On Shan Area**

**Expert Evaluation – Final Report**

March 2015

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Date: 5 March 2015

**Disclaimer**

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## 1 INTRODUCTION

### Background

- 1.1** To increase land supply to meet the housing needs of Hong Kong, the Government has continued reviewing various land uses and rezoning sites as appropriate and, where the original intended use is no longer required, converting the land for housing development.
- 1.2** There are two potential development sites in Ma On Shan area namely the Whitehead site and Hang Kin Street site. The Whitehead site (namely Study Area A hereafter) is located near the existing Whitehead Golf Driving Range, north of Wu Kai Sha MTR Station while the Hang Kin Street site (namely Study Area B hereafter) is located to the west vicinity of Heng On MTR Station.
- 1.3** In November 2014, AECOM Asia Company Ltd. was commissioned by the Hong Kong Planning Department (PlanD) to undertake an Expert Evaluation Study for the Development Schemes within Study Area A and Study Area B to examine the air ventilation performance of various development building designs and layouts qualitatively.
- 1.4** This expert evaluation report is based on the following materials given by the PlanD to the Consultant:
- Ma On Shan Outline Zoning Plan
  - Indicative Layouts of Potential Residential Developments at Hang Kin Street Site and Whitehead site which are the schemes adopted for assessment within the Study Areas
  - Base Map of Ma On Shan Area
  - Indicative Layouts of Existing and Committed Developments within Ma On Shan Area
  - Term Consultancy for Expert Evaluation on Air Ventilation Assessment for Ma On Shan Area (February 2009)
  - Public Rental Housing Development at Ma On Shan Area 86B (September 2010)
  - Technical Assessment to Support Section 16 Application under the Town Planning Ordinance for “CDA(3)” Site at Whitehead, Ma On Shan (1st Quarter 2014)
- 1.5** In the preparation stage of the expert evaluation report, the Consultant has studied the given materials listed in paragraph 1.4 and carried out site visit and inspection.

### Objectives of the Expert Evaluation Study

- 1.6** The expert evaluation study has made reference to Technical Circular No. 1/06 issued jointly by the Housing, Planning and Lands Bureau and Environment, Transport and Work Bureau.
- 1.7** The key purposes of the Expert Evaluation are to identify the good design features of the proposed development layouts, identify obvious problematic areas (if any) and propose appropriate mitigation measures if necessary. Determination of whether further Initial Study or Detailed Study is required would be based on the findings of the Expert Evaluation.
- 1.8** This Expert Evaluation Report aims to present the following findings in a systematic approach as follows:
- Analyse the relevant wind data to understand the wind environment of the Study Areas and its surroundings;

- Identify and analyse the major topographical features of the Study Areas and their immediate vicinity. In addition, greeneries/landscape characteristics of the Study Areas as well as its surroundings will also be identified;
- Identify and analyse the land use and built form of the Study Areas as well as its immediate surrounding areas including existing developments and committed future developments;
- Based on the wind data, identify wind paths and wind flow characteristics of the Study Areas through open spaces, streets, gaps and non-building areas between buildings and also identify stagnant/shadow zones if they exist;
- Based on the analyses of existing urban conditions, identify existing good features that shall be retained/strengthened at the same time spotting wind problematic regions that warrant attention;
- Based on the understanding of existing urban conditions, evaluate and compare qualitatively the prima facie impact, merits or demerits of different development restrictions within the Study Areas as proposed by the PlanD on pedestrian wind environment, focusing on public areas frequented by pedestrians in the existing/committed/planned condition, and advise on whether the pedestrian wind environment could likely be better, similar or worsen under each restriction. In addition, problematic areas will be highlighted and improvements/mitigation measures will be proposed with reference to the Urban Design Guidelines in the “Hong Kong Planning Standards and Guidelines” and also relevant statutory plans, building regulations and planning briefs; and
- Recommend if further initial study/detailed study for the Study Areas is required.

#### **Content of this Report**

**1.9** Section 1 is the introduction section. The remainder of the report is organized as follows:

- Section 2 on evaluation of the Whitehead Site (Study Area A);
- Section 3 on evaluation of the development site at Hang Kit Street (Study Area B) and
- Section 4 is the Summary and Conclusion



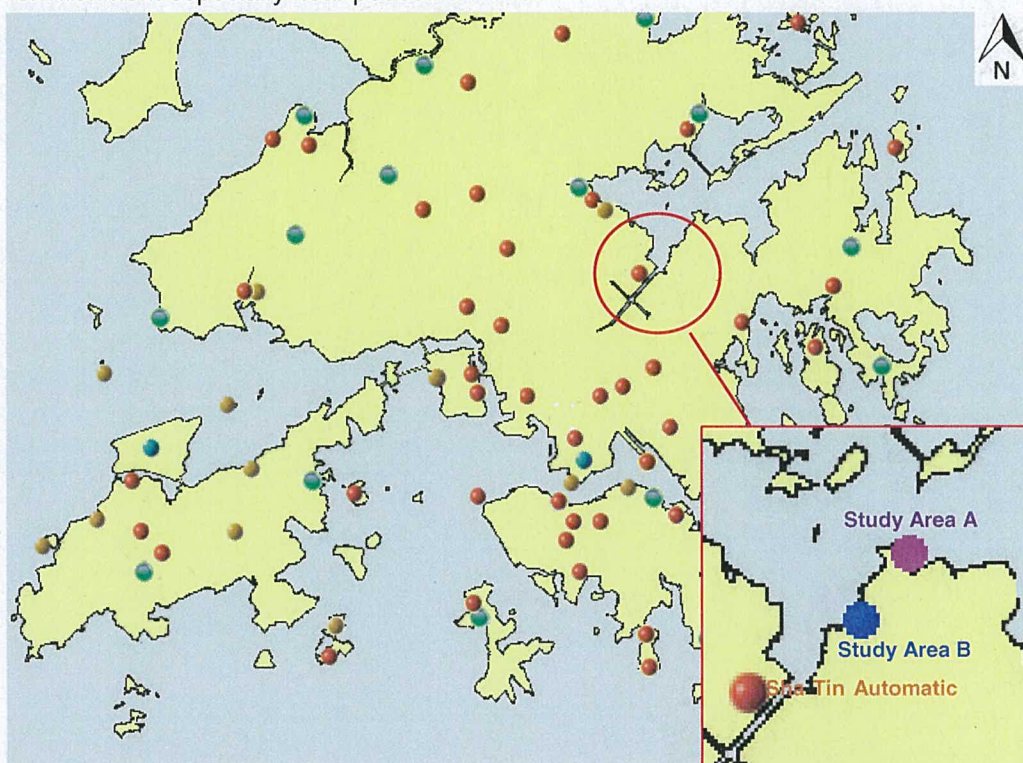
## 2 EVALUATION ON WHITEHEAD SITE – STUDY AREA A

### 2.1 Natural Wind Availability (Whitehead Site – Study Area A)

2.1.1 Natural wind availability is crucial to the investigation of wind ventilation performance. In this section, relevant measured wind data from the Hong Kong Observatory (HKO) weather stations and computed wind data from the MM5 model near the Study Area are analysed and compared to identify the prevailing wind directions.

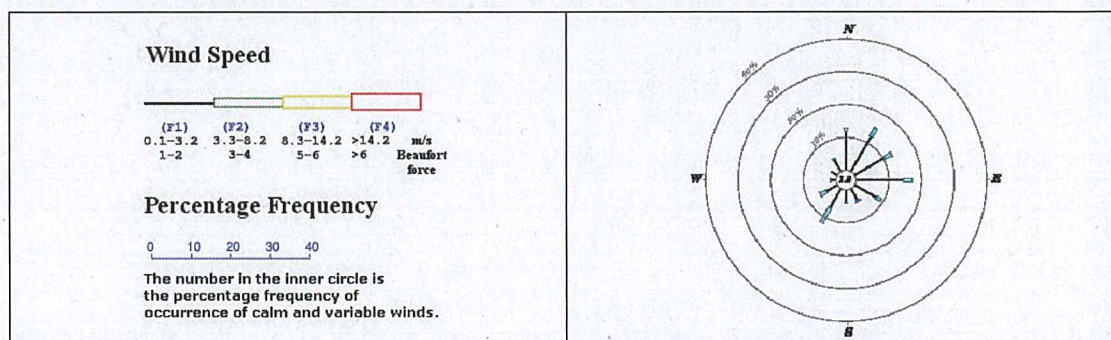
#### Wind Direction Analysis based on HKO Weather Stations' Data

2.1.2 There are a total of 46 weather stations (See **Figure 2.1**) operated by HKO which provide reliable data on the wind environment in Hong Kong. The wind information and weather data from these stations provide reference to aid a general understanding of the surface wind environment especially near pedestrian level.



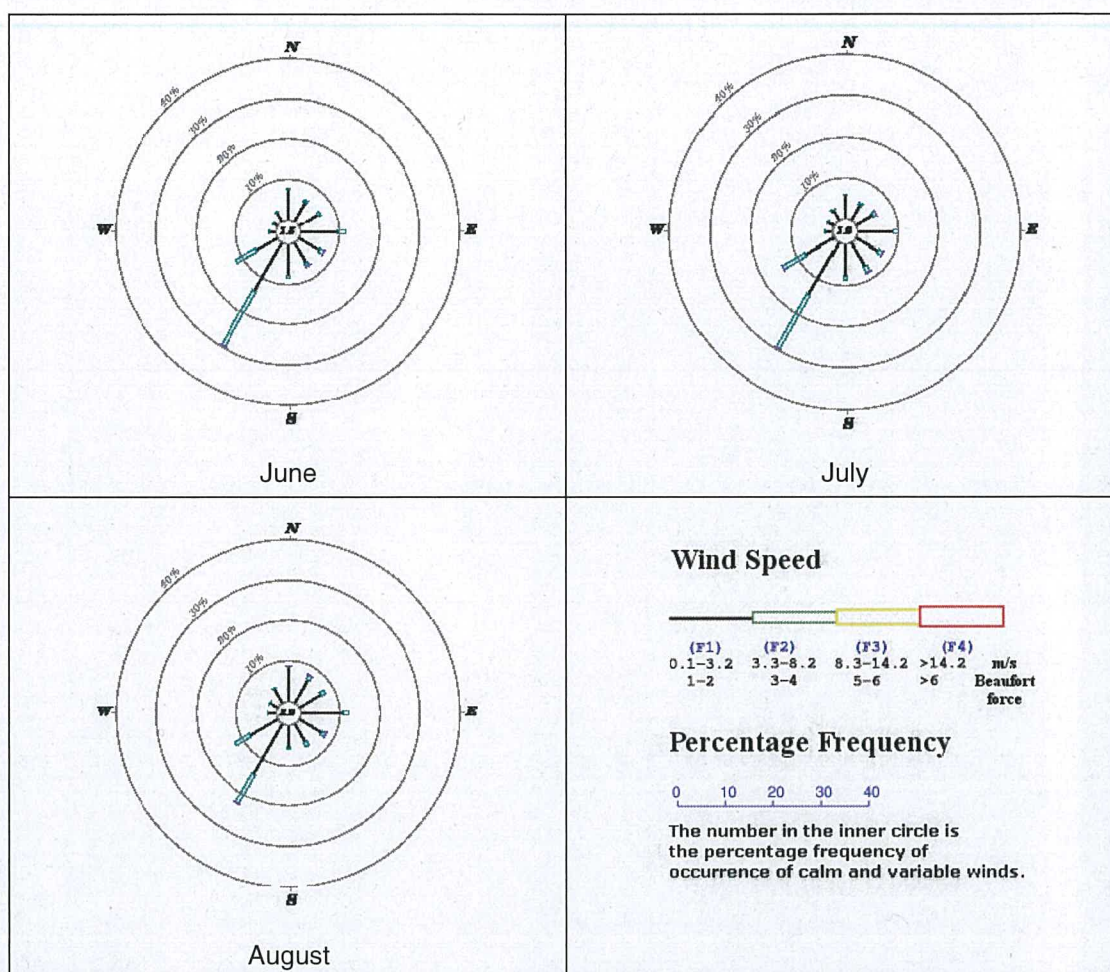
**Figure 2.1** Locations of the Weather Stations and the Study Areas

2.1.3 Study Area A (Whitehead Site) is located in Ma On Shan District, to the south eastern part of Whitehead headland. **Figure 2.1** shows the approximate location of Study Area A and the locations of various automatic weather stations with Sha Tin Automatic Weather Station nearest to the Study Area.



**Figure 2.2** Annual wind rose for Sha Tin, 1985-2013





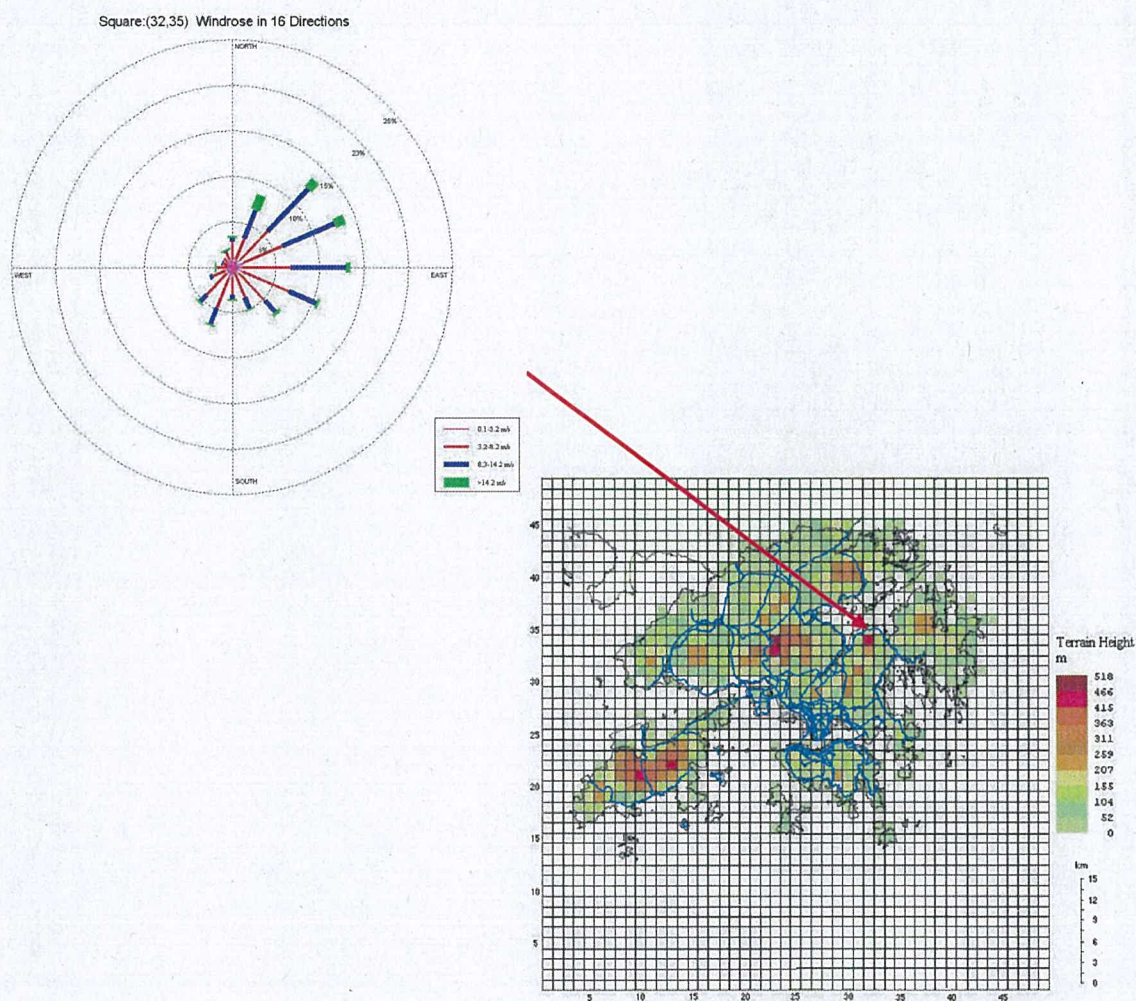
**Figure 2.3 Summer wind roses (June to August) for Sha Tin, 1985-2013**

- 2.1.4 **Figure 2.2** shows the averaged annual wind rose from 1985 to 2013 extracted from the Sha Tin automatic weather station. From the averaged annual wind rose, it is observed that the winds from the north, east and north easterly quadrants (i.e. N, NNE, ENE and E) have more than 10% of frequency occurrence. It is discovered there is an amount of wind from the SSW direction with an approximate frequency occurrence of 10%.
- 2.1.5 In Hong Kong, summer wind is very important and beneficial for thermal comfort; and identification of summer wind characteristics is crucial. By referring to the summer monthly (June to August) wind roses at Sha Tin weather station from 1985 to 2013 as shown in **Figure 2.3**, the summer prevailing winds mainly come from the easterly, south-westerly directions (i.e. E, SSW and WSW) each with frequency occurrence exceeding 10%. There is also an observable amount of wind from the south eastern quadrant. Furthermore, the easterly wind has an occurrence frequency of approximately 10% which should also be considered as one of the dominant summer seasonal winds.
- 2.1.6 By summarizing paragraphs 2.1.4 to 2.1.5, the annual prevailing winds come from the N, NNE, ENE, E, and SSW directions while the summer winds are from E, WSW and SSW directions based on the data from Sha Tin Automatic weather station.



**Wind Direction Analysis based on MM5 model simulation**

- 2.1.7 Apart from the HKO wind data, PlanD has released a set of wind availability data of different locations in Hong Kong using MM5 mesoscale model simulation for AVA studies. This set of wind availability data can be obtained at the official website of PlanD. (<http://www.pland.gov.hk/pland/en/misc/MM5/index.html>).
- 2.1.8 For Study Area A, wind rose from grid (32, 35) shown in Figure 2.4 is appropriate to be used to identify the annual prevailing wind directions. From the figure, winds coming from NE, ENE and E are considered as the prevailing annual winds to Study Area A.



**Figure 2.4 Wind Rose from PlanD Website obtained from MM5 Model (Grid 32, 35)**

- 2.1.9 Apart from the MM5 data from PlanD, the researchers from Hong Kong University of Science and Technology (HKUST) have also simulated a set of wind data using MM5 model, details are found in the Section 3.6 of Cat. A1– Term Consultancy for Expert Evaluation and Advisory Services on Air Ventilation Assessment (PLNQ 37/2007), Final Report – Ma On Shan Area. Based on the dataset obtained from HKUST, annual and summer wind roses (120m and 450m above ground) at the location near Wu Kai Sha MTR station are presented in **Figure 2.5**, while the location of extraction for wind data is presented in **Figure 2.6**.



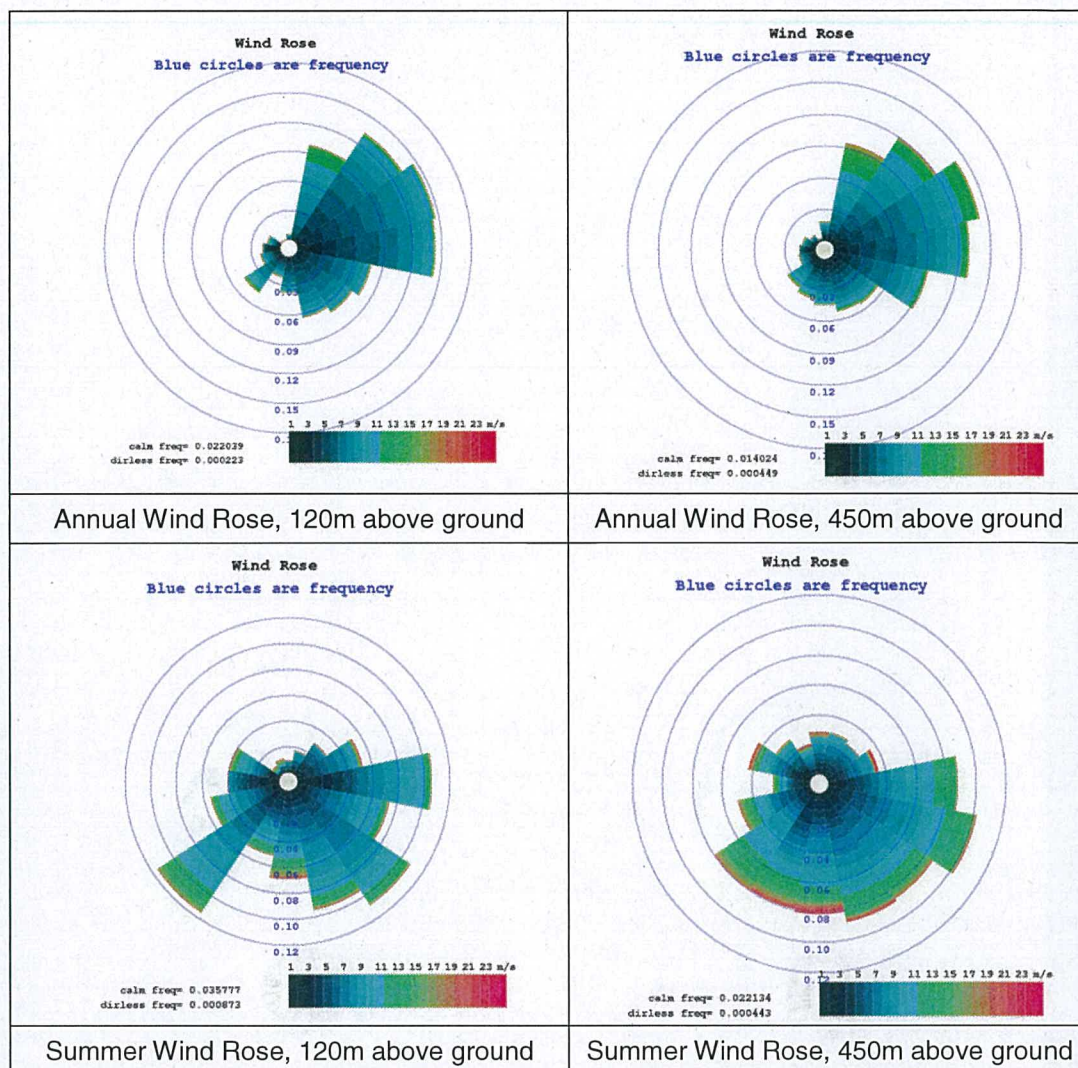


Figure 2.5 Wind Rose from HKUST obtained from MM5 model at Location A near Wu Kai Sha Station

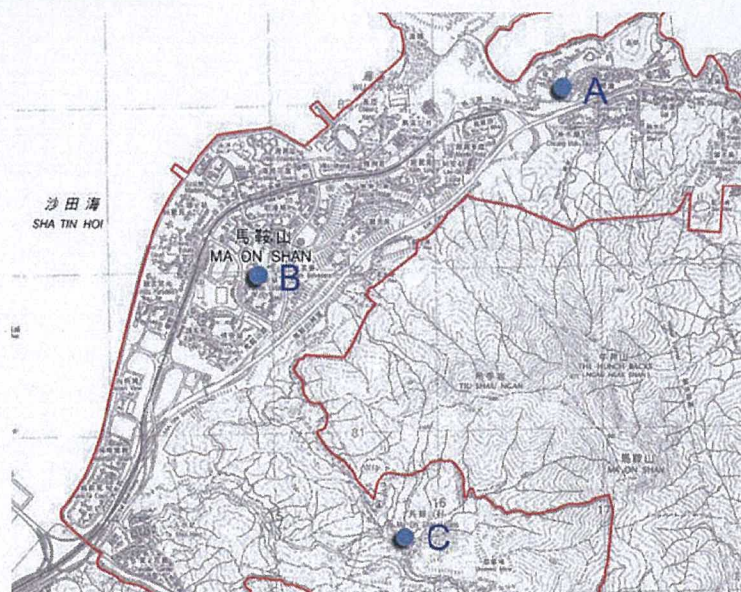


Figure 2.6 Locations of extraction for HKUST MM5 model data

- 2.1.10 The MM5 data (extracted at Location A) from the HKUST shows the annual prevailing winds towards Study Area A are from the north eastern quadrant i.e. NE, ENE and E.
- 2.1.11 The summer MM5 wind rose suggests that the winds during summer seasons towards Study Area A are mainly from E, SE, SSE, and SW.
- 2.1.12 By summarizing paragraphs 2.1.11 to 2.1.12, the annual prevailing winds come from the NE, ENE, E directions while the summer winds are from E, SE, SSE and SW directions based on the data from MM5 model.

**Summary of prevailing winds**

**Table 2.1 Summary Table of Prevailing Winds**

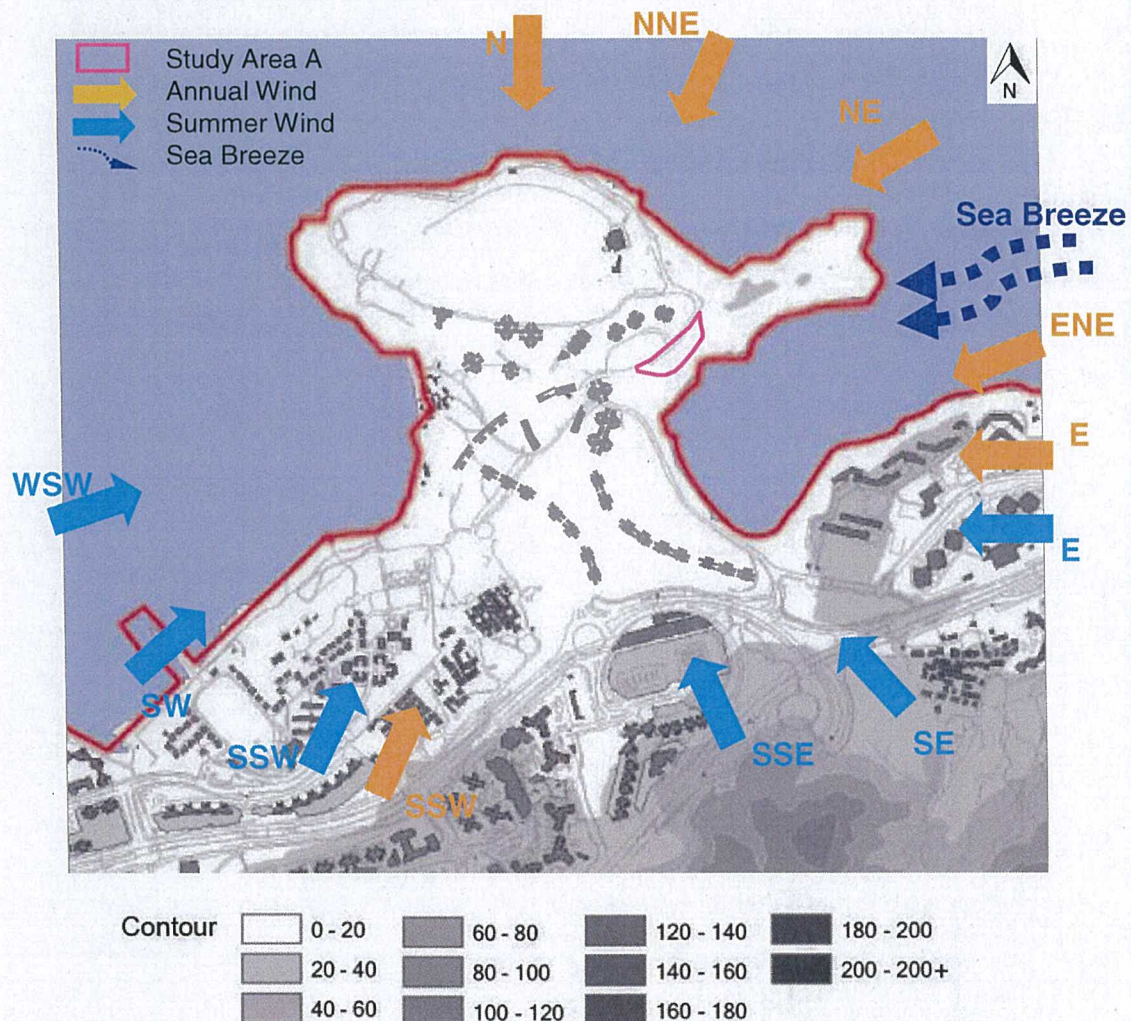
Source	Annual Wind	Summer Wind
HKO Weather Station	N, NNE, ENE, E, SSW	E, WSW, SSW
MM5 Data	NE, ENE, E	E, SE, SSE, SW

- 2.1.13 By comparing the wind data from Sha Tin Weather Station and MM5 model (from both PlanD and HKUST), it is concluded that the prevailing annual winds towards Study Area A are from N, NNE, NE, ENE, E, and SSW. Meanwhile, the summer prevailing winds are mainly from E, SE, SSE, SSW, SW and WSW directions.



## 2.2 Wind Environment due to Topography

- 2.2.1 **Figure 2.7** shows a digital elevation map of the study area. The Whitehead area, where Study Area A is located, is a peninsula surrounded by sea in the east, north and west. It can be seen from the figure that Study Area A is fronting Starfish Bay to its southeast which rises from the sea level to around 3mPD. The Whitehead peninsula is relatively flat and has maximum terrain height of around 23mPD situated to its eastern most regions.
- 2.2.2 The terrain in the region south of the Whitehead area possess a topography profile increasing from north to south, with the terrain heights ranging from around 7mPD to over 60mPD (at the area south of Ma On Shan Bypass). There exists a hilly terrain within 1000m from Study Area A, which is located east-south easterly to it.
- 2.2.3 To the further south is the high hilly terrain (of over 200mPD) of Ma On Shan Country Park, which creates a shelter and weakens the general southerly winds towards Study Area A. However, given the large distance between Study Area A and this hilly terrain, it is not likely this hilly topography will have significant wind impacts on Study Area A.
- 2.2.4 There are no obstacles between Study Area A and Starfish Bay; therefore, sea breeze can reach Study Area A from water front without major obstruction from the east.



**Figure 2.7** Digital Elevation Map and natural air movement around the Study Area A

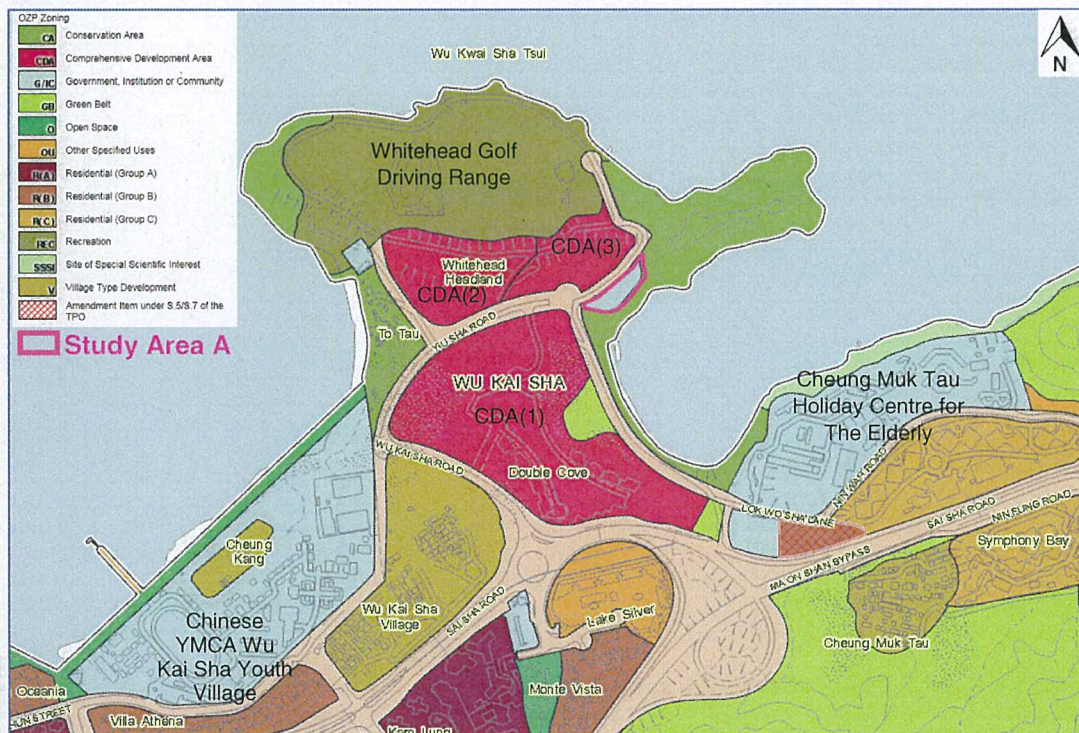


## 2.3 Land Use and Existing Urban Morphology

### Land Use

2.3.1 The Ma On Shan Outline Zoning Plan No. S/MOS/19 (the Plan) is shown in **Figure 2.8**. The portion near Study Area A is presented and the land use types are stated below:

- The areas in brownish green are “Conservation Areas”.
- The areas in red are zoned as “Comprehensive Development Area”
- The areas in light blue are “Government Institution or Community” (G/IC) land uses.
- The areas in reddish brown, brown and light brown are “Residential (Group A)”, “Residential (Group B)” and “Residential (Group C)” respectively.
- The areas coloured in green and yellowish green are “Open Space” and “Green Belt” respectively.
- The areas coloured in dark green are “Recreation” land uses.
- The area in orange is designated for “Other Specified Uses”.



**Figure 2.8 Zoned land uses near Study Area A**

### Comprehensive Development Areas

- 2.3.2 The regions in red are “Comprehensive Development Area” (“CDA”) zones. There are three CDAs in the vicinity of Study Area A, located in the south, west and northwest vicinity of the Study Area, designated as “CDA(1)”, “CDA(2)” and “CDA(3)” respectively.
- 2.3.3 The southern portion of the “CDA(1)” area covers the existing high-rise Double Cove residential developments, while the committed developments within the northern portion are high-rise Student Hostel. On the other hand, the committed developments in “CDA(2)” and “CDA(3)” are all mid-rise residential developments.

Residential Areas

- 2.3.4 The zone in reddish brown is an area zoned “Residential (Group A)”, which is mainly occupied by Kam Lung Court located to the far south of Study Area A
- 2.3.5 The zones in brown are “Residential (Group B)” areas lying south of the Whitehead area, where Monti Vista and Villa Athena are located.
- 2.3.6 The “Residential (Group C)” areas coloured in light brown scattering to the south and southeast of the Whitehead area, are mainly developments of Lake Silver and Symphony Bay.

G/IC Areas

- 2.3.7 The major “G/IC” areas are located both southeast and southwest of the Whitehead area. These areas are mainly occupied by activity / holiday centres, which include the Chinese YMCA Wu Kai Sha Youth Village and Cheung Muk Tau Holiday Centre for The Elderly.

Recreation Area

- 2.3.8 There is one area designated as “Recreation” (dark green), namely the Whitehead Golf Driving Range, located at the north of Study Area A



## Urban Morphology



1. Study Area A	2. "CDA(3)" area (58mPD)	3. "CDA(2)" area (50mPD)
4. "CDA(1)" north (committed Student Hostel) (93mPD)	5. "CDA(1)" south (Double Cove) (131mPD)	6. To Tau (11.5mPD)
7. Wu Kai Sha Village / Wu Kai Sha Youth Village (23.4mPD)	8. Wu Kai Sha MTR Station / Lake Silver (183mPD)	9. Lee Yan Chun United College (41.5mPD)
10. Symphony Bay (42.4mPD)	11. Whitehead Club Golf Driving Range	

**Figure 2.9 Major developments near Study Area A**

2.3.9 The location of major existing and committed developments in the vicinity of Study Area A are marked in **Figure 2.9**. The regions near Study Area A are generally occupied by mid to high-rise and medium-density developments. The height of the highest residential clusters in the immediate vicinity of Study Area A is approximately 131mPD (which is the Double Cove located in "CDA(1)" south).

2.3.10 To the immediate north of Study Area A are committed mid-rise and medium-density developments (around 60mPD) of the "CDA(3)" zone. To the further north is the Whitehead Club Golf Driving Range, which is generally open area and consists of low-rise houses only.

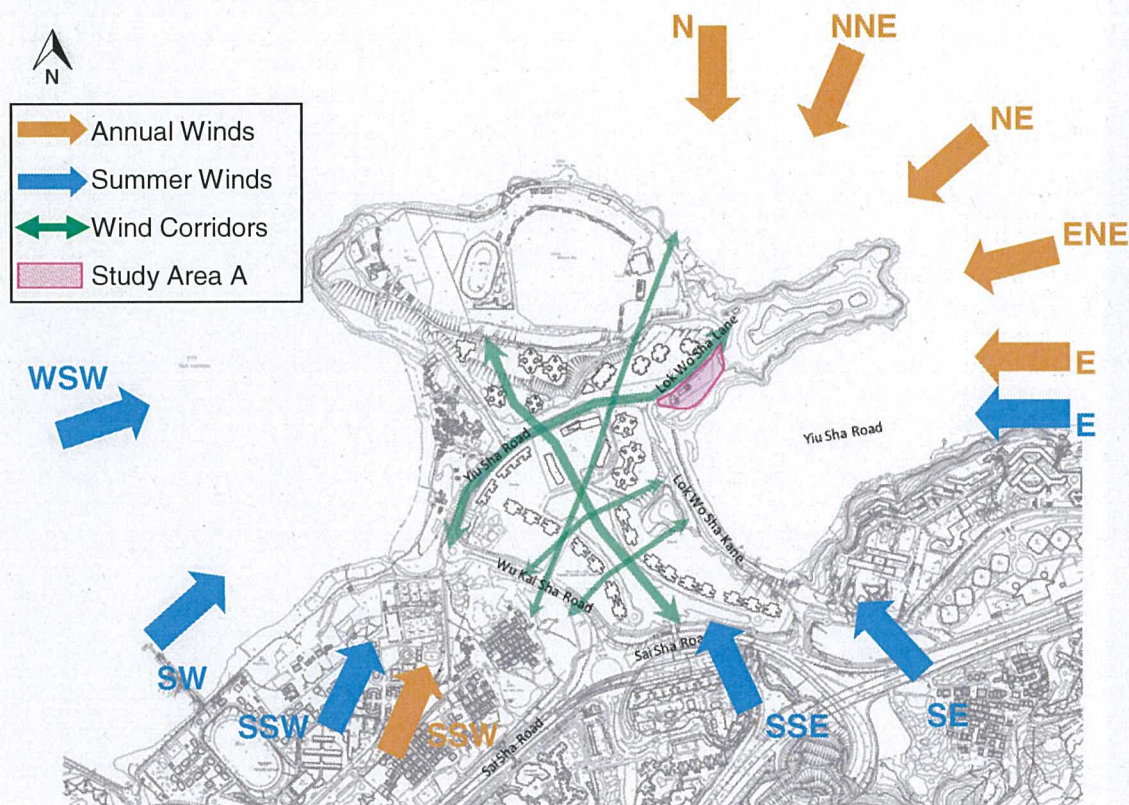


2.3.11 To the immediate west of Study Area A are committed mid-rise development of the “CDA(2)” area, and the developments within are around 50mPD in height. To the further west is To Tau with village-type houses of maximum 12mPD in height.

2.3.12 To the further south are high-rise developments including building clusters of Lake Silver, (183mPD) located south of the Wu Kai Sha Station with a distance of around 600m away from Study Area A. These developments are relatively far from Study Area A and are unlikely to influence the wind environment there.

## 2.4 Wind corridors near Study Area A

2.4.1 As mentioned in **Section 2.1**, the annual prevailing wind comes from the north, east, north eastern quadrant as well as south - southwest directions. Meanwhile, the summer prevailing winds are mainly comprised of east, south eastern quadrant winds and south western quadrant winds. By understanding the prevailing wind directions and studying the building morphology in the vicinity of Study Area A, the major wind corridors are identified and illustrated in **Figure 2.10**.



**Figure 2.10 Major Wind Corridors near Study Area A**

2.4.2 Under the N and NNE annual winds, the wind corridor passing through the “REC”, “CDA(3)” and “CDA(1)” allows the prevailing winds to penetrate through the whole Whitehead area. It also helps the summer SSW wind to ventilate the Whitehead area.

2.4.3 Yiu Sha Road and part of Lok Wo Sha Lane facilitate the annual NE and ENE to flow across the Whitehead area and also help the summer SW wind to penetrate through.

2.4.4 Apart from the roads mentioned in Paragraph 2.4.3 above, there are separation gaps incorporated in the building clusters of Double Cove developments, which serve as air paths through “CDA(1)”, as illustrated in **Figure 2.10**. These separations between buildings would enhance penetration of winds through the “CDA(1)” area under NE and ENE winds while also benefiting the penetration of SW and SSW winds.

- 2.4.5 A visual corridor passing through the building cluster of the Double Cove and “CDA(2)”, which aligns approximately in the SE-NW direction, is considered as an important wind corridor under the SE and SSE winds.

## **2.5 Existing wind environment of Study Area A**

### **Under the Annual Prevailing Winds**

- 2.5.1 It is understood that a building of height H is generally possible to induce a wind wake of approximately H from the building. Inside the wake region, there exist weaker and more turbulent winds which are collectively referred to as a “wind shadow region” behind the building.
- 2.5.2 Under the N and NNE annual wind, the wind wakes generated by the committed developments in “CDA(3)” are likely to reach Study Area A, and may slightly reduced the wind resources. However, there are two 15m width separation gaps aligning in the north-south direction incorporated between the buildings of “CDA(3)”, which will enhance the penetration of wind through the committed developments to the proposed developments within Study Area A. Unfavourable impact in terms of wind environment is expected to be reduced.
- 2.5.3 Under the NE, ENE and E winds, the mid to high-rise developments within Whitehead area are all on the sideways or on the downwind side of Study Area A. The geographical location of the existing and committed developments would not cause adverse impact on the wind environment near Study Area A.
- 2.5.4 Under SSW annual winds, the northern developments in “CDA(1)” (with a building height of around 93mPD) may provide certain obstruction against Study Area A.

### **Under the Summer Prevailing Winds**

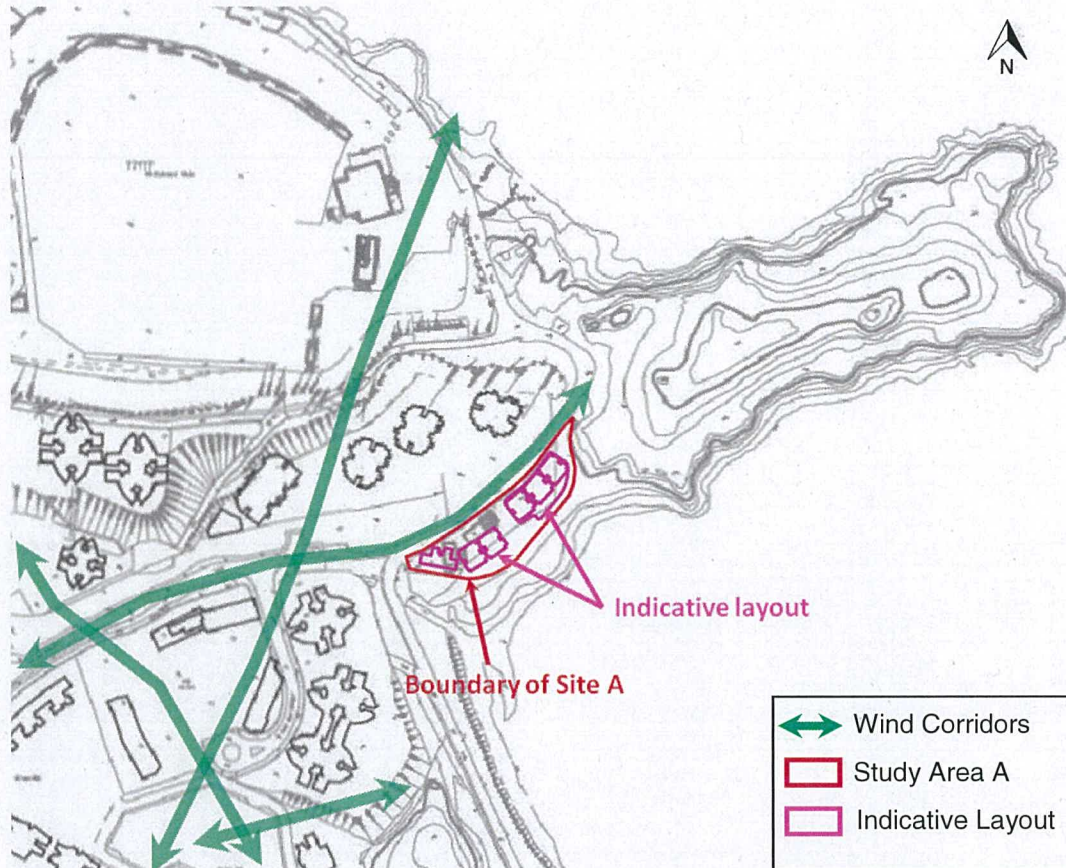
- 2.5.5 Under the E, SE and SSE summer winds, the developments in the vicinity of Study Area A are not expected to cause impacts in terms of wind environment on the Study Area, similar to discussion in Paragraph 2.5.3.
- 2.5.6 Under the SW and WSW summer winds, the wind wakes generated by the buildings in the mid and northern portions of “CDA(1)” would reach Study Area A. Yiu Sha Road and Lok Wo Sha Lane help to divert some of the WSW wind to Study Area A.



## 2.6 Expert Evaluation on the proposed development at Study Area A

### Under the Annual Prevailing Winds

- 2.6.1 The maximum proposed building height of Study Area A is around 39mPD. The indicative proposed building layout is shown in the **Figure 2.11**.



**Figure 2.11 Indicative proposed building layout at Study Area A**

- 2.6.2 The prevailing annual wind directions are mainly from north, east, north eastern quadrant and southwest direction as mentioned in **Section 2.1**. Under the N, NNE prevailing wind condition, the incoming wind can reach the site through the building separation of the "CDA(3)". The wind shadow area generated by the 39mPD tall building in Study Area A is not expected to extend to the area west of Lok Wo Sha Lane and "CDA(1)" which is the most likely affected pedestrian frequent access area ("CDA(1)" area to the west / southwest of Lok Wo Sha Lane) located downwind under the N, and NNE annual wind directions.
- 2.6.3 The slight hilly terrain at the north eastern side of Study Area A may slightly diverts the NE and ENE wind approaching. However, as the hilly terrain is not high, most of incoming wind could enter Study Area A.
- 2.6.4 Under the NE and ENE annual prevailing winds, the proposed developments at Study Area A is likely to provide partial blockage of incoming winds against the northern committed buildings in "CDA(1)" area. However, the site alignment reduces the building frontage toward these prevailing wind directions and helps to minimize the potential impact of the proposed development. Moreover, the low-rise, low-density nature of developments in Study Area A also helps to reduce the possible impact on the downstream "CDA(1)" area. The proposed developments in Study Area A form a stepping building height profile with the buildings in "CDA(1)" (over 90mPD in height). Such profile is expected to introduce some down washed wind to the pedestrian level and enhance the local wind environment.



- 2.6.5 Under the E wind, as the upstream area of Study Area A is vacant, the wind from these directions can enter freely. The area located at the downwind side to Study Area A under E annual prevailing winds is the southern portion of “CDA(3)” area. The separations between the building clusters allow the incoming wind to penetrate through the Study Area and ventilate the downstream “CDA(3)” and minimize the impact on “CDA(3)” area.
- 2.6.6 Although the SSW wind can penetrate the Whitehead area by the wind corridor passing through the “REC”, “CDA(1)” and “CDA(3)”, it may not be able to serve Study Area A and the upstream residential blocks of Double Cove also block some of the incoming wind. The wind resources of Study Area A under SSW are limited. Thus, the potential impact due to the proposed development of Study Area A on the downstream eastern region of the “CDA(3)” is relatively minimal.

**Under Summer Prevailing Winds**

- 2.6.7 E and SSW are the prevailing wind for both annual and summer. The relevant discussion can be referred to Paragraph 2.5.8 and 2.5.9.
- 2.6.8 Under the summer SE and SSE winds, the incoming wind enters the site from the Star Bay area. The 15m building separation between the building clusters allow the incoming wind to enter the downstream CDA(3) area and reduce the potential impact of the proposed development. The low rise nature of the Study Area A also helps to minimize the potential impact. Furthermore, the proposed developments in Study Area A formed a stepping building height profile with the buildings in CDA(3) (which would be around 60mPD in height), such profile are expected to redirect the incoming southern quadrant winds to the pedestrian level and further promote airflow there and further reduce the potential impact of Study Area A.
- 2.6.9 Similar the SSW condition, under the SW summer wind, the Study Area A is located at the downstream area of the high rise residential development of CDA(1). The prevailing wind enters the site through the wind corridor which consists of the Yiu Sha Road and Lok Wo Sha Lane. The wind shadow of the Study Area A will fall to the CA zone with less pedestrian accessed. The impact due to the proposed development is minimal.
- 2.6.10 The low rise To Tau Village allow the WSW prevailing wind to enter the Yiu Sha Road and reach the downstream CDA(3) and Study Area A. similar to the SW wind condition, the wind shadow area cast to the CA region with less pedestrian accessed. Thus the impact of the proposed development to the surrounding area is minimal.
- 2.6.11 Based on the above discussions, the potential impact due to the proposed development which have a low building profile with a 15m separation between the building clusters would be minimal to the surrounding environment. These features should be kept in order to minimize the potential impact to the vicinity. Provided that these features could be maintained in the future development in Study Area A, no further AVA Initial Study is required.

### 3 EVALUATION ON HANG KIN STREET SITE – STUDY AREA B

#### 3.1 Natural Wind Availability (Hang Kin Street Site – Study Area B)

3.1.1 Study Area B (Hang Kin Street Site), is at Hang Kin Street located next to Hang On Station.

##### Wind Direction Analysis based on HKO Weather Stations' Data

3.1.2 The automatic weather station nearest to Study Area B is also the Sha Tin automatic weather station. Therefore, the discussion on automatic station wind data in **Section 2.1** for Study Area A is also valid for Study Area B. Locations of Study Area B and Sha Tin automatic weather station are shown in **Figure 2.1**. Relevant Sha Tin automatic station wind roses are shown in **Figure 2.2** and **Figure 2.3**.

3.1.3 The annual prevailing winds are from the N, NNE, ENE, E, and SSW directions while the summer winds are from the E, SSW and WSW directions based on the data from Sha Tin Automatic weather station.

##### Wind Direction Analysis based on MM5 model simulation

3.1.4 For the Study Area B, wind data from grid (31, 34) as shown in **Figure 3.1** is used as the site wind availability data from PlanD's website for identification of prevailing winds.

3.1.5 By referring to the wind rose (31, 34) as shown in **Figure 3.1**, winds coming from E, ENE and NE are considered as the annual predominate winds.

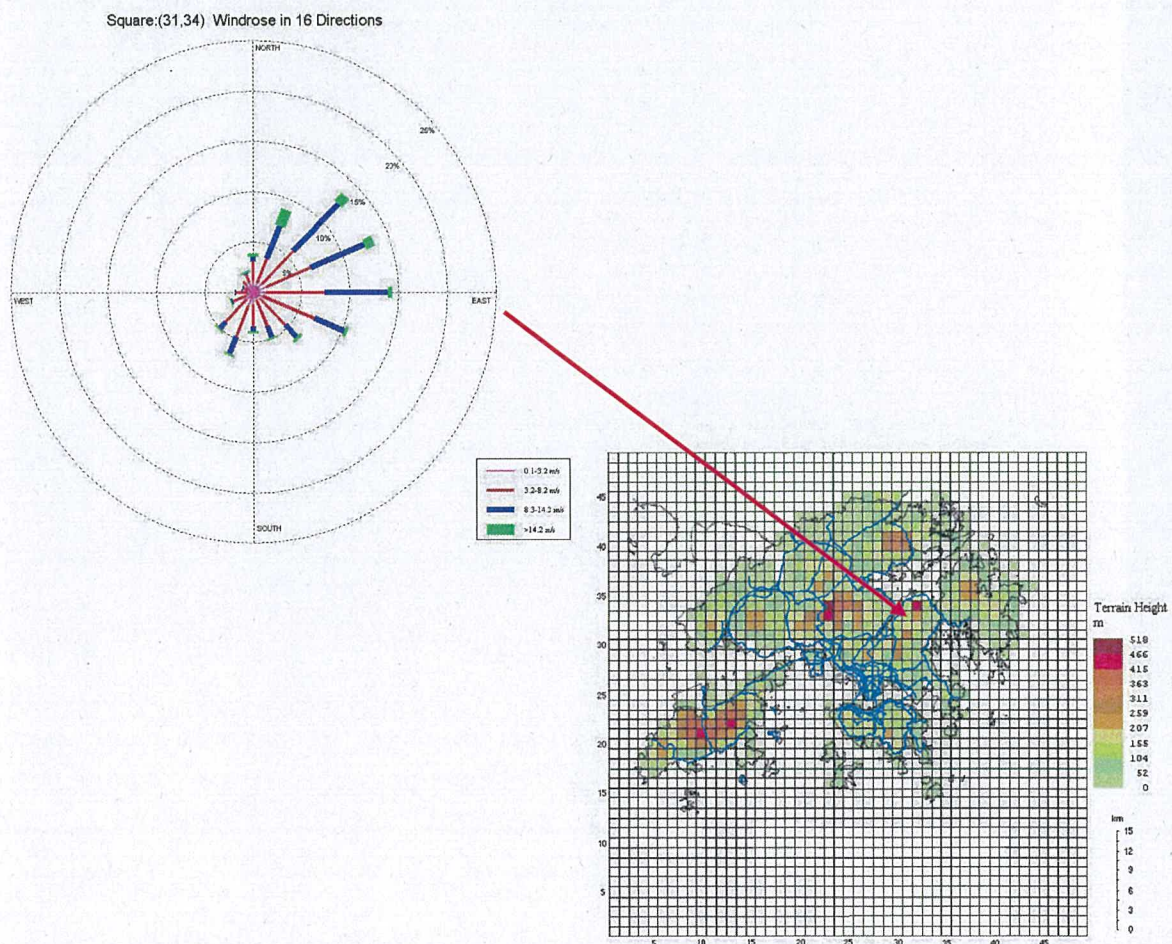
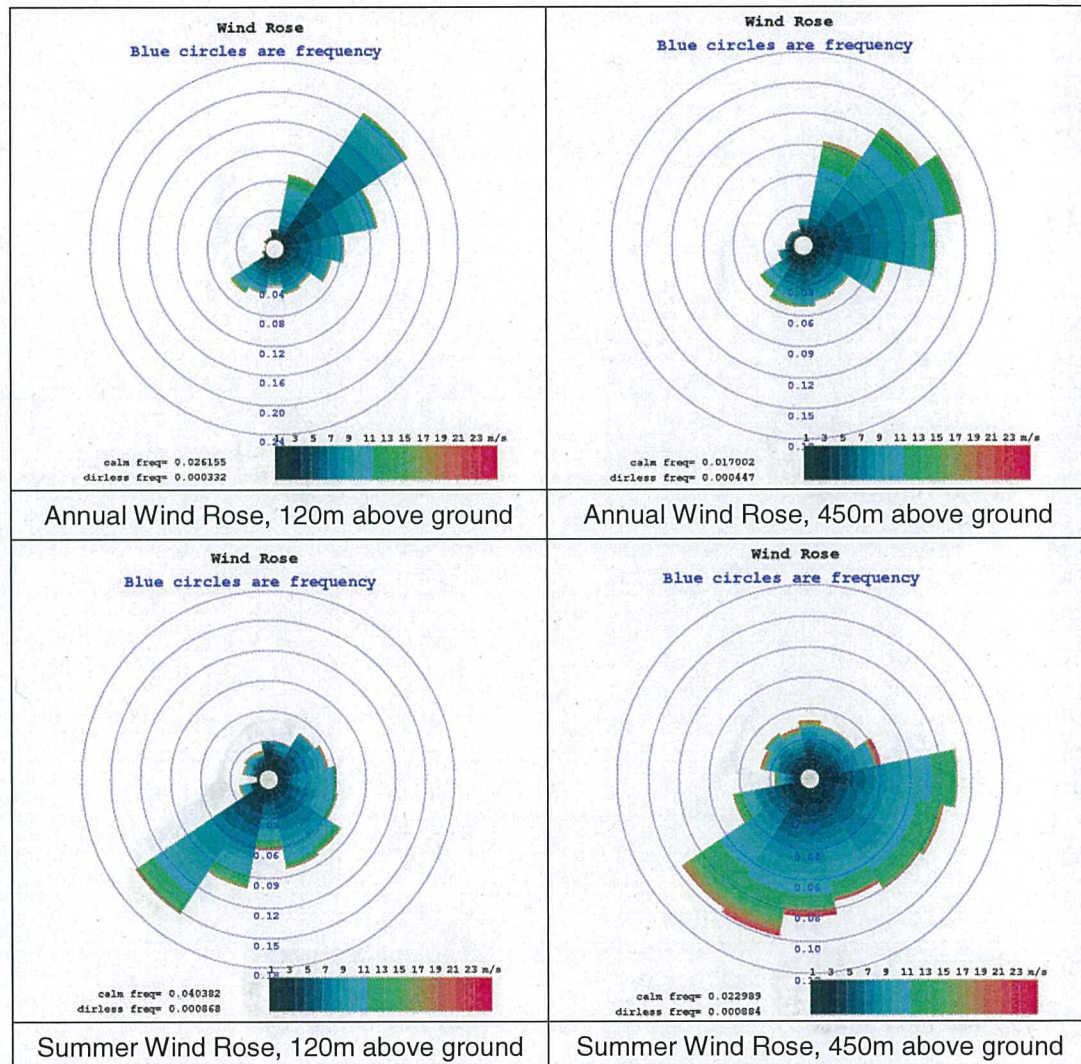


Figure 3.1 Wind Rose from PlanD Website obtained from MM5 Model (Grid 31, 34)



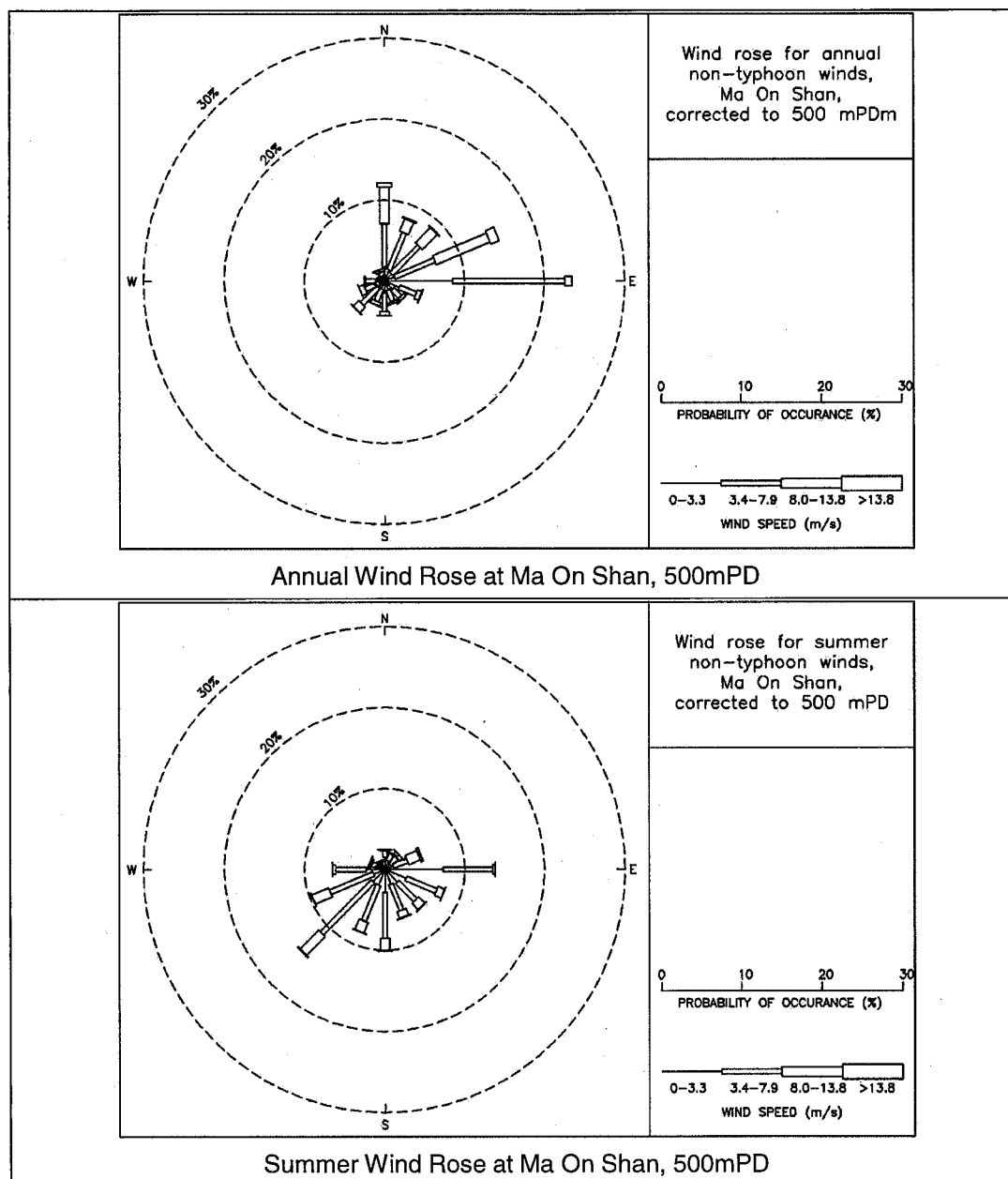
- 3.1.6 Based on the dataset obtained from HKUST, the annual and summer wind roses (120m and 450m above ground) at the location near Yiu On Estate are presented in **Figure 3.2**, while the locations of the extracted wind data is presented in **Figure 2.6**.
- 3.1.7 The MM5 data from the HKUST reveals the annual prevailing winds near Study Area B are coming from the north eastern quadrant. NE, ENE and E are considered as the major annual prevailing wind under this set of wind data.
- 3.1.8 The summer prevailing winds near Study Area B are mainly formed by south eastern and south western quadrant winds and the major summer prevailing wind would be SE, SSE, SW and SSW wind.



**Figure 3.2 Wind Rose from HKUST obtained from MM5 model at Location B near Yiu On Estate**

- 3.1.9 In 2009, an AVA detailed study for Ma On Shan Area 86B through wind tunnel experiment. Details can be found in AVR/G/19 Public Rental Housing at Ma On Shan Area 86B. According to the wind tunnel result, the annual and summer wind rose at the location of current Yan On Court are illustrated as in **Figure 3.3** below.





**Figure 3.3 Annual and Summer Wind Roses based on wind tunnel experiment result**

3.1.10 By referring to the annual and summer wind roses of the wind tunnel experiment, the annual prevailing winds near Site B are mainly come from N, ENE and E directions. Meanwhile, the summer prevailing wind is mainly comprised by E and SW incoming winds.

#### **Summary of prevailing winds**

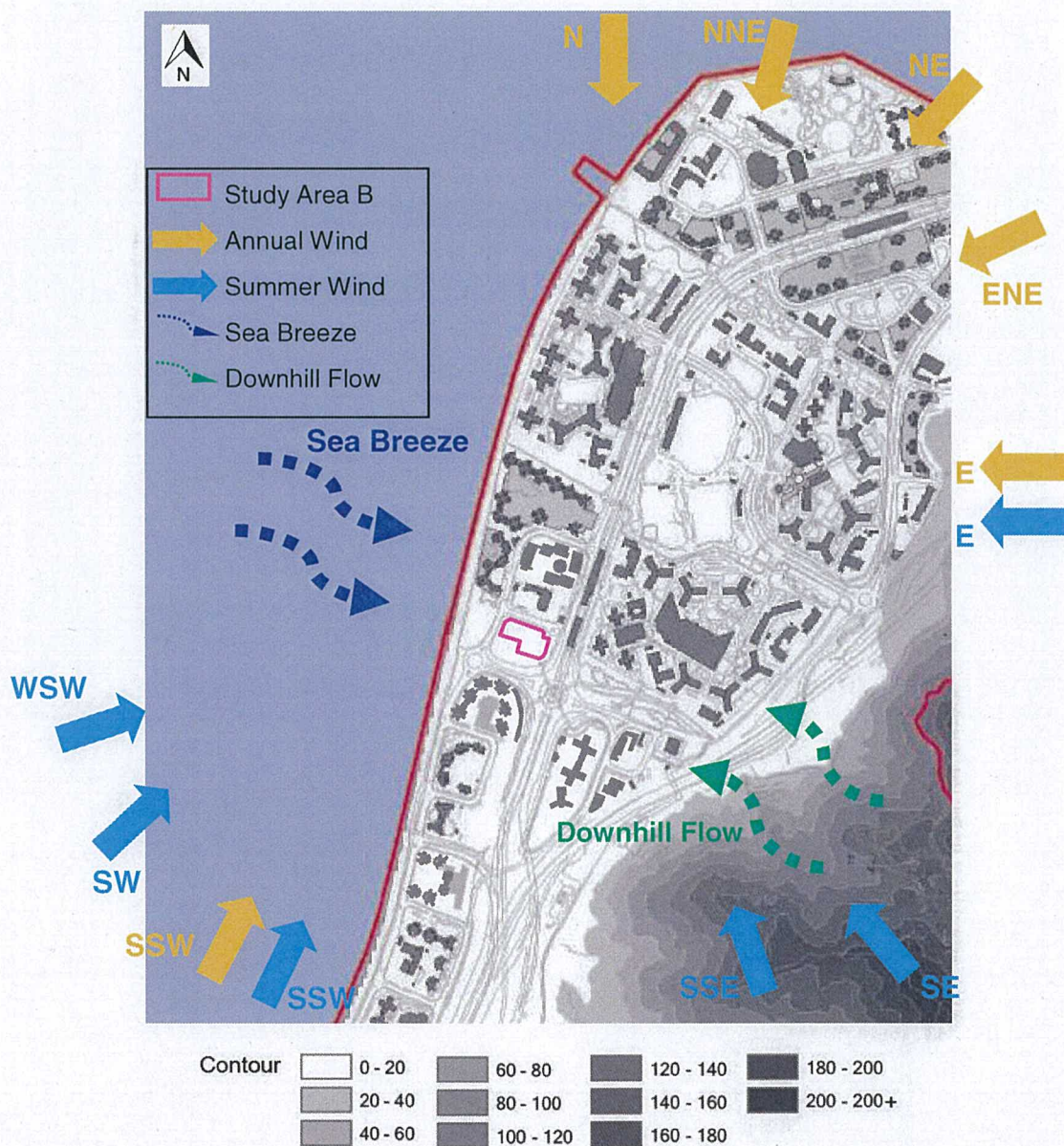
3.1.11 By summarizing the wind availability data from HKO observation, MM5 model simulation (from both PlanD and HKUST) and the wind tunnel experimental site wind availability, it can be concluded that the prevailing annual winds at the Study Area B comes from the N, NNE, NE, ENE, E, SSW directions. Meanwhile, the summer prevailing winds are mainly comprised by east, south, south eastern quadrant winds and south western quadrant winds which include winds from E, SE, SSE, SSW, SW and WSW.

**Table 3.1 Annual and summer prevailing winds from different sources of information**

Source	Annual	Summer
HKO Sha Tin Weather Station	N, NNE, ENE, E, WSW	E, SSW, WSW
MM5 (Plan D)	NE, ENE, E	-
MM5 (HKUST)	NE, ENE, E	SE, SSE, SSW, SW
Wind Tunnel Experiment	N, ENE, E	E, SW

### 3.2 Wind Environment due to Topography

3.2.1 **Figure 3.3** shows a digital elevation map near Study Area B. It reveals from the figure that Study Area B is fronting Sha Tin Hoi which rises from the sea level to around 6mPD. The region where Study Area B is located is relatively flat, but there are hilly topographies lying to the east and southeast directions beyond the Study Area B boundary with increasing topological heights further away from the water front.



**Figure 3.4 Digital Elevation Map and natural air movement around the Study Area B**



3.2.2 The hilly terrain to the east and southeast directions of the Study Area B will shelter the summer prevailing winds coming from the south eastern directions as well as E annual wind thus weakens the magnitude of these winds towards it. On the other hand, the katabatic (downhill) air movement is expected during summer seasons from the vegetated hill slopes located east and southeast, and may promote the air flow in local regions near Study Area B during summer seasons.

3.2.3 The land where Study Area B is situated is relatively flat with no topographies to hinder the flow of the winds from the open sea towards Study Area B.

### 3.3 Land Use and Existing Urban Morphology

#### Land Use

3.3.1 The Ma On Shan Outline Zoning Plan No. S/MOS/19 (the Plan) is shown in **Figure 3.5**. The land use types located at the surroundings of Study Area B are stated below:

- The areas in light blue are “Government Institution or Community” (G/IC) land uses.
- The areas in reddish brown and brown are “Residential (Group A)” and “Residential (Group B)” respectively.
- The areas coloured in green and yellowish green are “Open Space” and “Green Belt” zones respectively.
- The areas coloured in orange is zoned as “Other Specified Uses” and
- The area in pink is designated as “Commercial” zone.

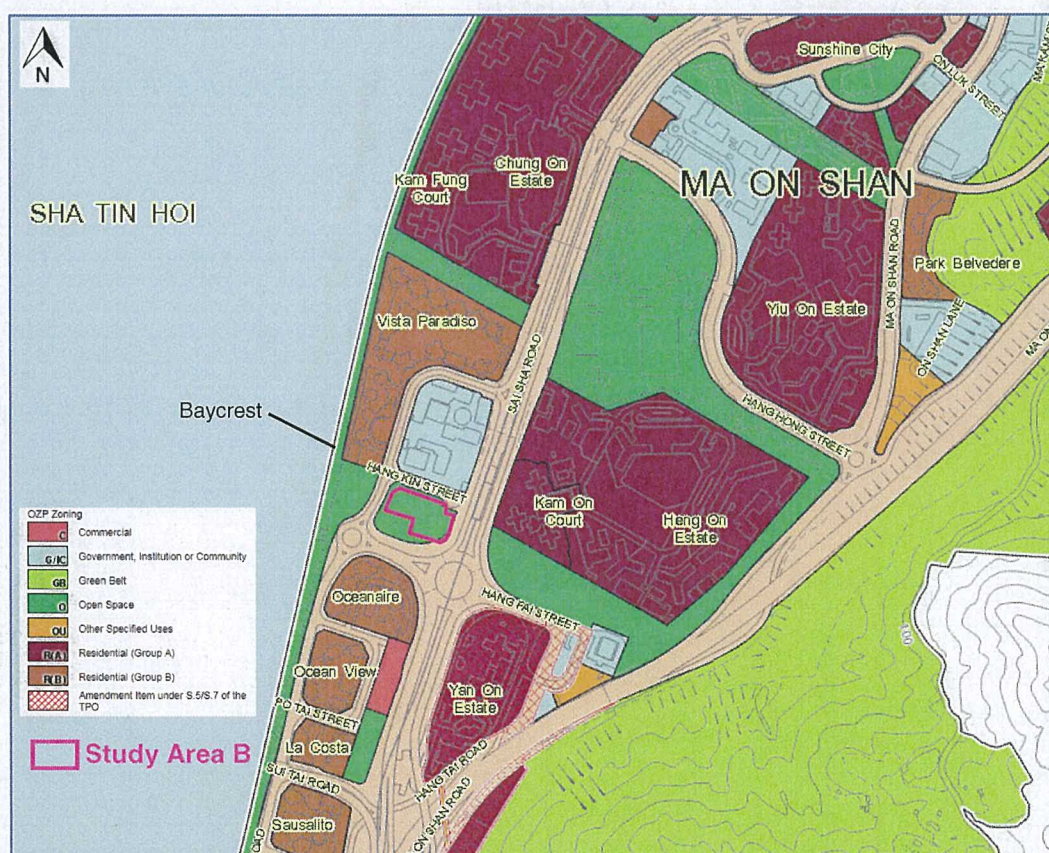


Figure 3.5 Zoned land uses near Study Area B



### Residential Areas

- 3.3.2 There are four major “Residential (Group A)” (“R(A)”) areas in the near vicinity of Study Area B, located to the southeast, east, northeast and north of Study Area B. They are Yan On Estate, Kam On Court / Heng On Estate, Yiu On Estate, and Kam Fung Court / Chung On Estate.
- 3.3.3 It is noticed that Yan On Estate and the areas to its immediate east are zoned “Residential (Group A)”. This zone comprises the existing Yan On Estate and its proposed extension with maximum BH of 140 mPD.
- 3.3.4 The zones in brown are “Residential (Group B)” (“R(B)”). There are two “R(B)” areas located to both south and north of Study Area B. The one located to south is occupied by residential developments of the Oceanaire, Ocean View, La Costa and Sausalito, while the one to the north is mainly occupied by residential buildings of the Vista Paradiso and Baycrest.

### G/IC Areas

- 3.3.5 Major “G/IC” areas are located to the northeast of Study Area B. There is one “G/IC” area to the immediate north east of Study Area B where the Renaissance College is located. Other “G/IC” areas are mainly occupied by schools and churches, such as Ma On Shan Methodist Primary School, St. Francis Church and Tsang Pik Shan Secondary School, and YCH Tung Chi Ying Memorial Secondary School.

### Commercial

- 3.3.6 There is an area zoned as “Commercial” in the vicinity of Study Area B (coloured pink), which is sandwiched between Ocean View and Sai Sha Road. It is currently an open area used as car park.

### Other Specified Uses

- 3.3.7 There is an area zoned as “Other Specified Uses” in the surrounding of Study Area B (coloured orange), which is located east of Yiu On Estate. It is currently a forested hill slope.

### Open Spaces

- 3.3.8 Open Spaces are in green in **Figure 3.5**. The major Open Spaces within Ma On Shan area is the Ma On Shan Sports Ground and the Ma On Shan Recreation Field. The Open Space fronting the sea consist an existing waterfront promenade running along the western boundary of the Ma On Shan Area. There are also Open Spaces between the residential developments of the “R(A)” zone (Kam Fung Court) and “R(B)” zone (Vista Paradiso), as well as that between the “G/IC” zone (Tsang Pik Shan Secondary School) and “R(A)” zone (Sun Shine City). It is noticed that currently, Study Area B is also zoned as “Open Space”. It is linking up the open spaces between Kam On Court and Yan On Estate.

### Green Belt

- 3.3.9 The areas designated as “Green Belt” are in yellowish green. These areas are mainly the forested hilly slopes of Ma On Shan, located to the east/southeast of Ma On Shan Bypass.



## Building Morphology



1. Study Area B	2. Ma On Shan Methodist Primary School / Renaissance College (29.7mPD / 38.1mPD)	3. Baycrest (79.7mPD)
4. Vista Paradiso (106mPD)	5. Kam Fung Court / Chung On Estate (114.8mPD / 108.6mPD)	6. Ma On Shan Sports Ground
7. Ma On Shan Recreation Ground	8. Yiu On Estate (113.1mPD)	9. Park Belvedere (131.5mPD)
10. Heng On Estate (106.1mPD)	11. Kam On Court (105.7mPD)	12. Yan On Estate (119.9mPD)
13. Oceanaire (80mPD)	14. Ocean View (98.8mPD)	15. La Costa (97.8mPD)

**Figure 3.6 Major developments near Study Area B**

3.3.10 The regions near the Study Area B are generally occupied by high-rise and medium to high-density developments. The maximum building heights of the residential clusters in the vicinity of Study Area B ranges from approximately 68mPD to 120mPD. Meanwhile, the schools (Renaissance College, Tsang Pik Shan Secondary School, etc.) located north and northeast to Study Area B have relatively lower profile (around 30mPD) compared to the residential developments.

3.3.11 The tallest building is located at Yiu On Court. These developments are located to the southeast of Study Area B with a distance of approximately 180m away. It is also noticed that the high-density clusters of Heng On Estate and Kam On Court are located around 90m east and northeast of Study Area B and the building height of these residential developments is approximately 105mPD.



- 3.3.12 To the immediate north of Study Area B are existing low-rise developments (around 30mPD) of Ma On Shan Methodist Primary School and Renaissance College, as well as high-rise residential blocks (around 80mPD to 106mPD) of the Baycrest and Vista Paradiso. To the further north of Study Area B are Chung On Estate and Kam Fung Court with developments at around 115mPD.
- 3.3.13 To the immediate south of Study Area B are the Oceanaire with developments at around 80mPD in height. To the further south are residential blocks of Ocean View, La Costa and Sausalito. These are high-rise buildings with height ranging from 90mPD to 99mPD.



### 3.4 Wind Corridors near Study Area B

3.4.1 Determining the prevailing wind directions in **Section 3.1** is important in identification of wind corridors. The annual prevailing wind comes from the north, east, north eastern quadrant as well as southwest directions. Meanwhile, the summer prevailing winds are mainly comprised of east, south eastern quadrant winds and south western quadrant winds. By understanding the prevailing wind directions and studying the building morphology in the vicinity of Study Area B, the major wind corridors are illustrated in **Figure 3.7**.

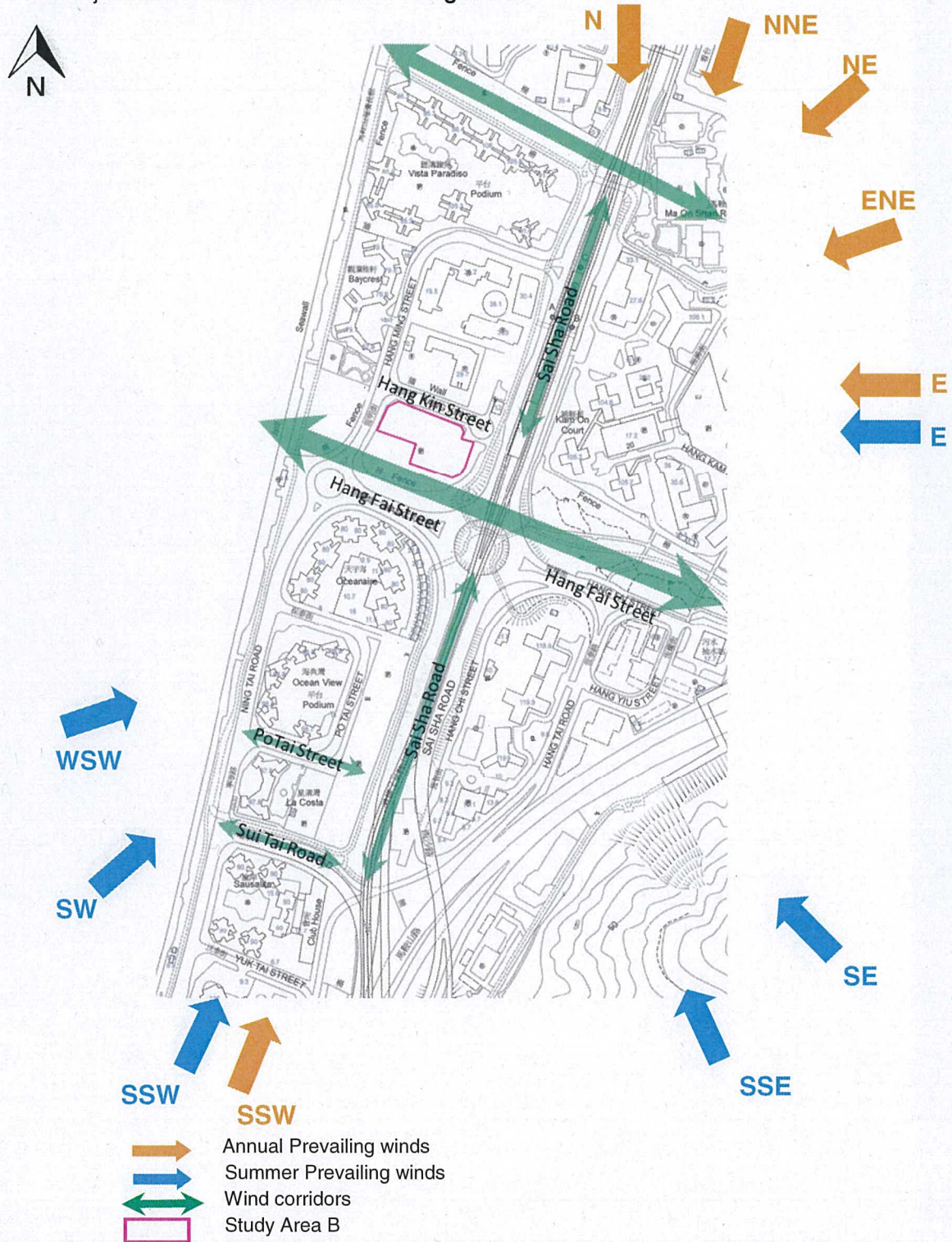


Figure 3.7 Major Wind Corridors near Study Area B

**Wind corridors near Study Area B**

- 3.4.2 Major roads are important in maintaining air ventilation in the local region. Sai Sha Road passing acts as an important wind corridor allowing the annual N and NNE wind to ventilate the surrounding area near Study Area B. It also facilitates the summer SSW to flow through the area.
- 3.4.3 Two important wind corridors are also identified. One is the open space between Vista Paradiso and Chung On Estate. The other one is the open space between Heng On Estate and Yan On Estate, together with Hang Fai Street and Hang Kin Street, it becomes an important wind corridor in the area. These two wind corridors allow the E and SE wind, also the land-sea breeze to pass through the area.
- 3.4.4 Apart from the roads mentioned in Paragraph 3.4.2 and 3.4.3, Sui Tai Road and Po Tai Road, aligned in perpendicular to Sai Sha Road act as wind corridors under the annual E wind.

**3.5 Existing wind condition of Study Area B**

**Under the Annual Prevailing Winds**

- 3.5.1 It is understood that a building of height H is generally possible to induce a wind wake of approximately H from the building. Inside the wake region, there exist weaker and more turbulent winds which are collectively referred to as a “wind shadow region” behind the building.
- 3.5.2 Under the N and NNE annual winds, the wind would enter the site along Sai Sha Road. At the same time, the schools located to the north would likely to generate a “wind shadow region” at the downstream side. Study Area B has a distance of approximately 40 meters away from the schools and is not expected to fall within the low wind region. It is also noticed that the residential clusters of Baycrest and Vista Paradiso are located far from Study Area B and are unlikely to cast negative air ventilation impacts on it.
- 3.5.3 As Study Area B is located at the junction of the two wind corridors, Sai Sha Road and the open space between Heng On Estate and Yan On Estate, the wind resources under these prevailing wind is expected to be satisfactory under NE, ENE and E wind condition. However, the wind wake generated by the western most development (around 105mPD in height) of Kam On Court is expected to reach the east portion of Study Area B which lies around 90m west and west-south westerly to Kam On Court.
- 3.5.4 Under the annual SSW wind condition, the prevailing wind enters the site from the promenade area and Sai Sha Road. Slight decline in the wind environment would be expected due to the influence of the Oceanaire which is located the south of Study Area B.

**Under the Summer Prevailing Winds**

- 3.5.5 E and SSW are the common prevailing direction under both annual and summer conditions. Relevant discussion can be found in Paragraph 3.5.3 and 3.5.4.
- 3.5.6 Under the south-eastern quadrant prevailing wind (SE and SSE), the wind corridor between the Yan On Estate and the Heng On Estate allows the prevailing wind to enter the study area freely and there would be abundant of wind resources under these two prevailing wind directions.
- 3.5.7 Under the SW and SSW and WSW winds, the upwind side of the Study Area B is the Ma On Shan Promenade and open sea. No significant blockage of these winds towards Study Area B is expected resulting in satisfactory wind performance.



### 3.6 Expert Evaluation on the Proposed Development Schemes within Study Area B

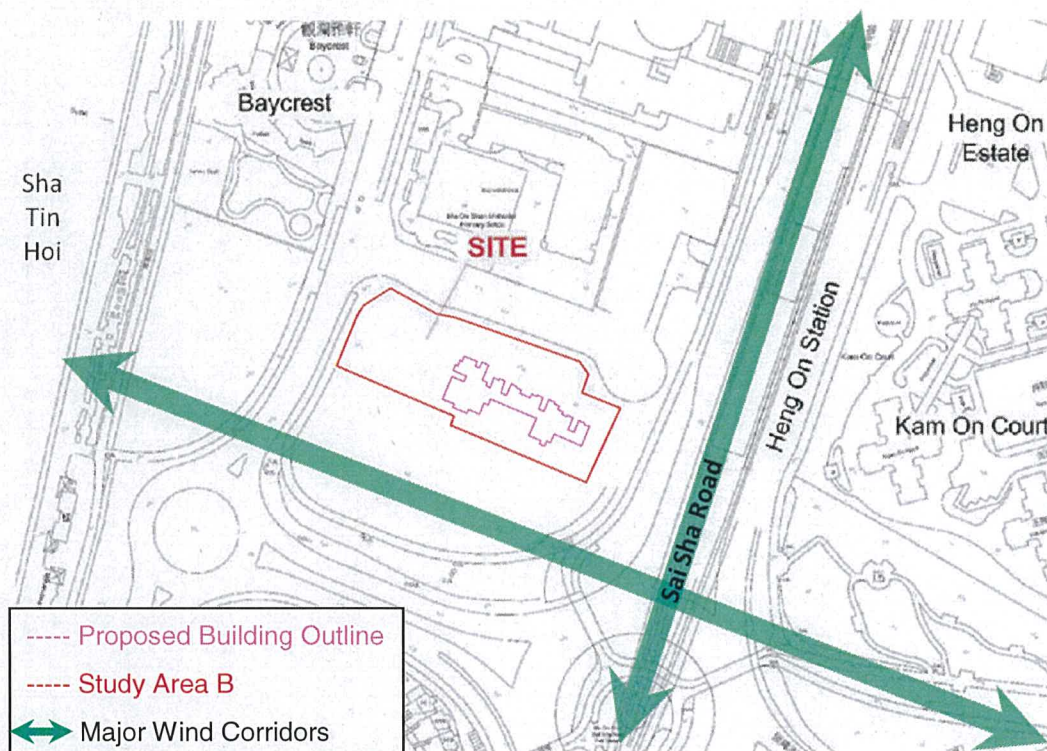
3.6.1 Three different design scenarios are evaluated in this Study and their corresponding parameters are shown in **Table 3.1**.

**Table 3.2 Parameters of Proposed Development under Different Scenarios**

	Scenario A	Scenario B	Scenario C
Maximum Overall P.R.	4.0	6.0	6.0
Maximum Building Height	80mPD	120mPD	120mPD
Gross Site Area	4185m <sup>2</sup>	4185m <sup>2</sup>	5253m <sup>2</sup>
Net Site Area	4185m <sup>2</sup>	4185m <sup>2</sup>	5253m <sup>2</sup>
No. of Storeys	25	38	38

#### Scenario A

3.6.2 The building in Scenario A is a 25-storey building at 80mPD in height and a maximum overall plot ratio 4.0. The longer length of the building block aligns with the ESE/WNW prevailing wind direction. The design outline is shown in **Figure 3.8**.



**Figure 3.8 Building Outline for Scenario A**



**Under the Annual Prevailing Winds**

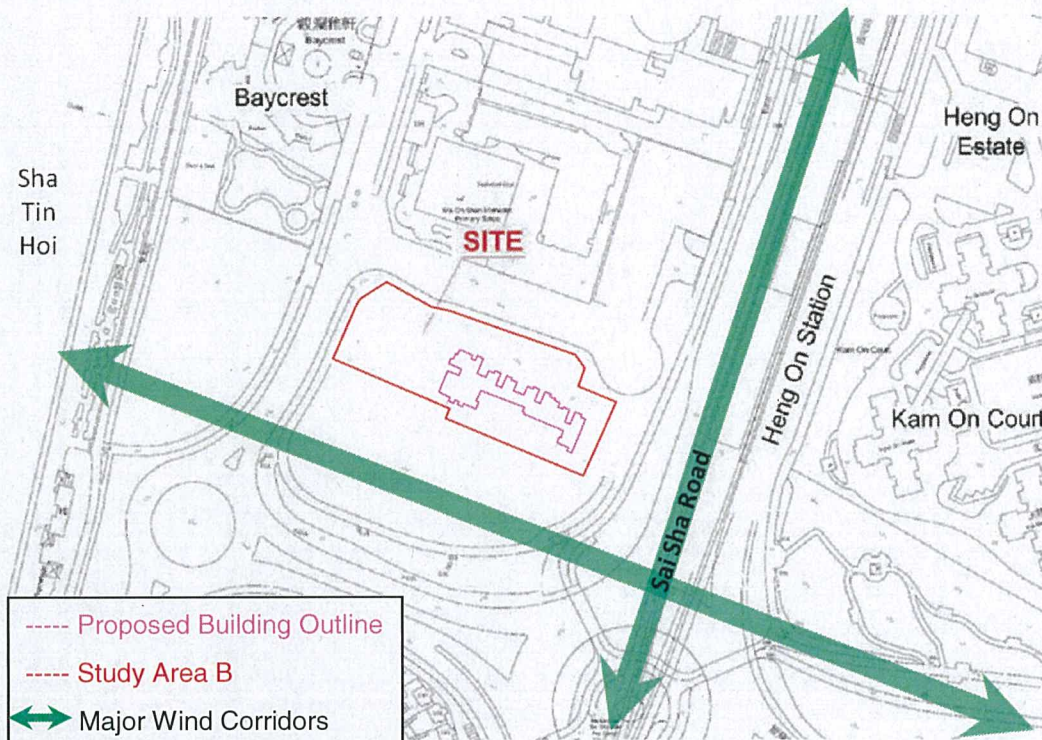
- 3.6.3 Under the N, NNE and NE annual prevailing winds, the Oceanaire residential developments and Hang Fai Road located at the downwind region are most likely to be affected after the proposed development is in place. However, the proposed development in Scenario A is 80mPD in height and the wind shadow region generated is expected to reach Hang Fai Street. The Oceanaire is less affected by the proposed development. Furthermore, the proposed building (80mPD in height) in Study Area B form a stepping building height profile with Ma On Shan Methodist Primary School buildings (around 30mPD in height) located to its upwind side. This helps to redirect the N and NNE prevailing winds to the pedestrian level, maintaining pedestrian wind comfort.
- 3.6.4 The most likely affected pedestrian accessible area located at downwind under the ENE and E annual wind directions is the Ma On Shan Promenade. However, the wind wake region generated by the 80mPD tall building in Scenario A is not expected to reach the Ma On Shan Promenade area and no wind ventilation issues are anticipated.
- 3.6.5 Under the SSW wind, the prevailing wind enters the site from the promenade area and slight decline in wind environment is expected at the Ma On Shan Methodist Primary School when compared to the existing condition.
- 3.6.6 Further to the discussion in paragraph 3.5.7, reduction in width of this major wind corridor will result in a localised channelling effect (i.e. after the development of the proposed building (Scenario A) is in place). Wind magnitude is expected to increase at locations between the proposed development and the Ma On Shan Methodist Primary School buildings (i.e. Hang Kin Street).

**Under the Summer Prevailing Winds**

- 3.6.7 The SE, SSE summer winds after flowing down the hills of Ma On Shan will be directed into the wind corridor along the open space between Heng On Estate and Yan On Estate and reach the Baycrest and the primary school. There would be slight decline in wind environment at the Baycrest and the primary school.
- 3.6.8 The SW and WSW summer winds coming from the promenade are able to reach Study Area B without obstruction. The proposed development would divert some prevailing wind to the pedestrian level and enhance the localized wind environment. Slight decline in wind environment would be found at the southern region of Kam On Court due to the wind shadow of the proposed development.

## Scenario B

- 3.6.9 The building in Scenario B is increased to a 38-storey building at 120mPD in height and a maximum overall plot ratio 6.0. Similar to Scenario A, the longer length of the building block aligns with the ESE /WNW prevailing wind direction. The design outline is very similar to Scenario A and is shown in **Figure 3.9**.



**Figure 3.9 Building Outline for Scenario B**

### Under the Annual Prevailing Winds

- 3.6.10 Similar phenomena are expected to be observed under Scenario B when compared to Scenario A with a difference that Scenario B is likely to generate a larger wind shadow zone due to the increment in building height.
- 3.6.11 Under the N, NE and NNE annual prevailing winds, the Oceanaire residential developments and the Ma On Shan Promenade located at the downwind region are likely to lie within the shadow zone generated by the proposed development of 120mPD in Scenario B. Further strengthening of downwash wind is expected when compared to Scenario A due to a taller building.
- 3.6.12 The area located at downwind under the ENE and E annual wind directions is the promenade area. Slight decline in wind environment may be introduced when compared to Scenario A.
- 3.6.13 Further decline in wind environment at Ma On Shan Methodist Primary School is expected due to a taller building under Scenario B.

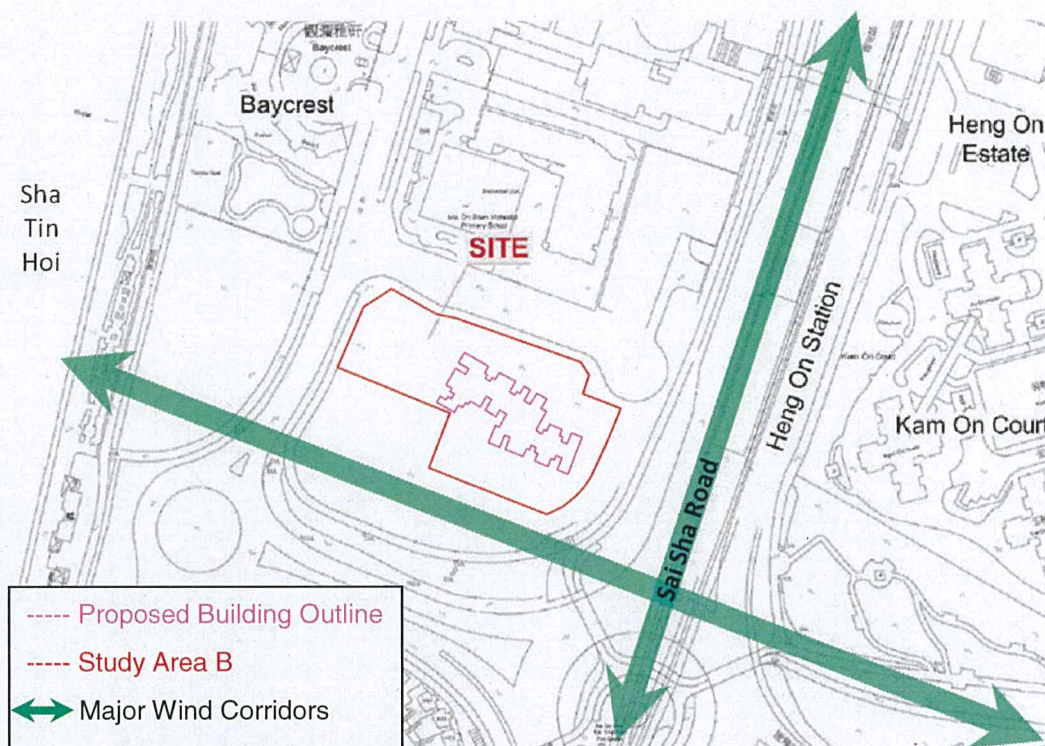
### Under the Summer Prevailing Winds

- 3.6.14 Under SE and SSE, further decline in the Baycrest and the primary school is expected. Under the SW and WSW wind, slight decline in the wind environment is expected near Kam On Court.



**Scenario C**

- 3.6.15 The building in Scenario C is increased to a 38-storey building at 120mPD in height and a maximum overall plot ratio 6.0. Similar to Scenarios A and B, the longer length of the building block aligns with the ESE/WNW prevailing wind direction. However, the design layout of Scenario C has a larger footprint and occupies a greater site area. The design outline of Scenario C is shown in **Figure 3.10**.



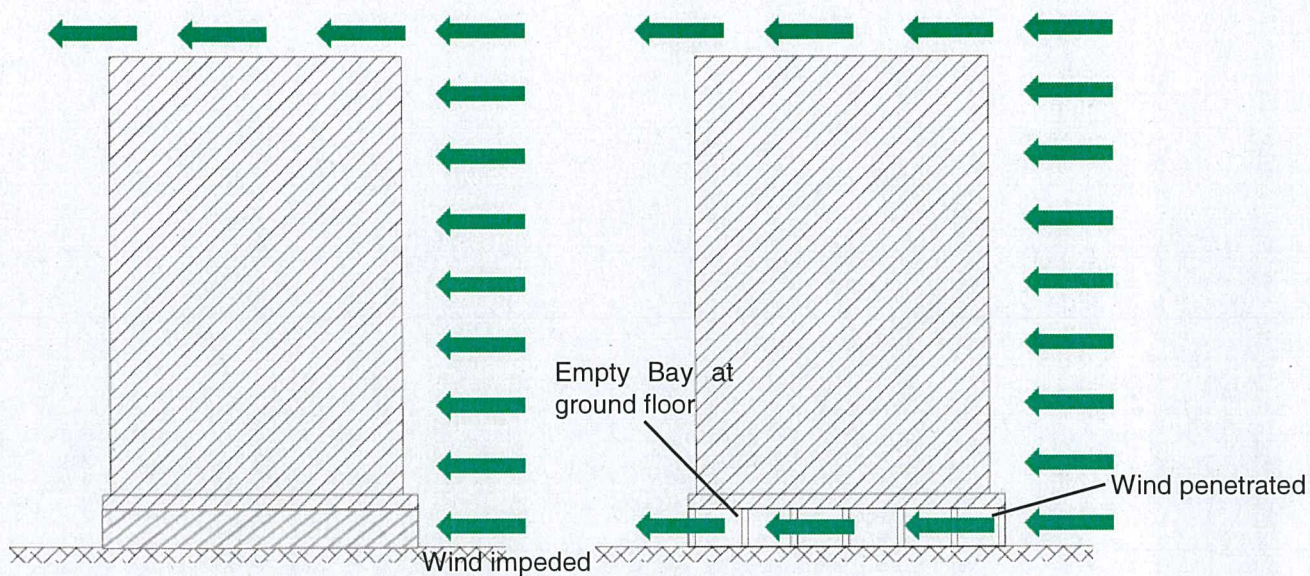
**Figure 3.10 Building Outline for Scenario C**

- 3.6.16 The difference between Scenarios B and C is that Scenario C has a larger footprint. The general wind environment would be very similar between the two schemes but Scenario C would generally create a larger wind shadow area due to larger footprint area. Further decline in the wind environment would be observed under individual wind directions.

**Suggested mitigation measures and further study**

- 3.6.17 Inevitable adverse impact would be induced to the surrounding environment when comparing the existing vacant site condition with any proposed development schemes.
- 3.6.18 By increasing the ground floor permeability, the adverse impact on the pedestrian wind environment can be alleviated. The entire ground level of the proposed development is suggested to be designed as ground floor empty bay of at least 6m in height. Effect of this design is illustrated in **Figure 3.11**. Quantitative analysis is recommended to further evaluate the potential impacts of the proposed development on the surrounding area and effectiveness of any proposed mitigation measures at a later stage.





**Figure 3.11 Illustration of the empty bay design**

## **4 SUMMARY AND CONCLUSION**

- 4.1** There are two Study Areas evaluated in this Expert Evaluation study, the first one is located at Whitehead area (Study Area A), while the second one is situated at Hang Kin Street (Study Area B).
- 4.2** By summarizing the wind data from both the Hong Kong Observatory, the MM5 model and experimental site wind availability data (only Study Area b), it can be concluded that the annual wind for both Study Areas come from the North, East, Northeast quadrant as well as SSW. Meanwhile the summer winds for the two Study Areas come from the East, south eastern and south western quadrant directions.
- 4.3** The major wind corridors near Study Area A include:
- Wind corridor passing through the REC, CDA(3) and CDA(1)
  - Yiu Sha Road and Lok Wo Shan Lane
  - Visual corridor passing through CDA(1) and CDA(2)
- 4.4** The major wind corridors near Study Area B include:
- Sai Sha Road
  - Open space between Heng On Estate and Yan On Estate
  - Open space between Vista Paradiso and Ching On Estate
  - Po Tai Road
  - Sui Tai Road.

### **Summary of the evaluation on Study Area A**

- 4.5** Due to the low rise nature with a 15m building separation between the building clusters of proposed development at Study area A, the impact induced by the proposed development is minimal under all studied prevailing wind directions. No further AVA Initial Study is recommended to be carried out for this Study Area.

### **Summary of the evaluation on Study Area B**

- 4.6** A single block building is proposed to be developed within Study Area B. Three design options (Scenarios A, B and C) are evaluated in this study.
- 4.7** Inevitable impact is expected when comparing the existing vacant condition with any proposed development scenario.
- 4.8** In general, Scenario A is expected to perform the best among all three Scenarios. Scenarios B and C have a taller building height compared to Scenario A, while Scenario C has the largest building footprint among the three Scenarios.
- 4.9** Ground floor empty bay is suggested to alleviate the potential ventilation impact and quantitative assessment is suggested to carry out in the detailed design stage to evaluate the potential impact due to the development. It is suggested that a site-specific quantitative assessment for the proposed housing development at the site should be conducted to assess the possible impact in air ventilation performance of the proposed housing development under different development scenarios.



Planning Department

**Agreement No. PLNQ 56/2012  
Term Consultancy for AVA by  
CFD for an Instructed Project for  
a Potential Housing Site at Hang  
Kin Street in Ma On Shan**

Executive Summary of Final Report

240627-00

Issue 1 | 9 March 2015

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 240627-00

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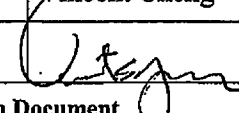
**ARUP**



# Document Verification

ARUP

<b>Job title</b>		Agreement No. PLNQ 56/2012 Term Consultancy for AVA by CFD for an Instructed Project for a Potential Housing Site at Hang Kin Street in Ma On Shan		<b>Job number</b> 240627-00	
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		Name	Tony Tang	Sui-Hang Yan	Vincent Cheng
		Signature			



Issue Document Verification with Document ☒

## Executive Summary

To increase land supply to meet the housing needs of Hong Kong, the Government has continued reviewing various land uses and rezoning sites as appropriate and, where the original intended use is no longer required, converting the land for housing development. A potential housing site in Ma On Shan area, namely the Hang Kin Street site, has been identified.

The Project Area covers the potential housing site at Hang Kin Street (Figure 1), with an area of about 0.4 to 0.5 ha. It falls within an area zoned “Open Space” on the approved Ma On Shan Outline Zoning Plan (OZP) No. S/MOS/20. It is located at the western part of Ma On Shan planning area and near the waterfront, and situated on an air path identified in the Ma On Shan Area Expert Evaluation (EE) Study (February 2009)<sup>1</sup>. The surrounding areas are primarily of high density residential developments of about 80mPD to 140mPD with provision of open areas and supporting commercial and Government, Institution or Community (GIC) facilities. The project site and its surrounding is shown in Figure 2. An AVA (EE) for the Hang Kin Street site was conducted in late 2014. The AVA (EE) indicates that, given that the scale and blocking of the proposed housing development at the Hang Kin Street site is not significant and the continuous open space network running in an east-west direction serving the function of an air path could largely be maintained, it is unlikely that the proposed housing development will have significant adverse air ventilation impacts on the surrounding areas. However, the AVA (EE) indicates that a site-specific quantitative assessment (i.e. Computational Fluid Dynamics (CFD)) for the proposed housing development at the site should be conducted to assess the possible impact in air ventilation performance of the proposed housing development under different development scenarios.

According to the “Technical Circular No. 1/06 on Air Ventilation Assessments” (the Technical Circular) jointly issued by the Housing, Planning and Lands Bureau (HPLB) and the Environment, Transport and Works Bureau (ETWB) on 19<sup>th</sup> July 2006, the proposed rezoning requires an Air Ventilation Assessment (AVA) during the planning stage, i.e. “Buildings with height exceeding 15 metres within a public open area or breezeway designated on layout plans/outline development plans/outline zoning plans or proposed by planning studies” (Item (h) under Paragraph 7 of the Technical Circular). To support the rezoning proposal to be submitted for the Town Planning Board (TPB)’s consideration, a site-specific quantitative assessment on the possible air ventilation impacts is required.

Ove Arup & Partners Hong Kong Ltd. (Arup) was commissioned by Planning Department (PlanD) to carry out a quantitative AVA by CFD for Hang Kin Street in Ma On Shan planning area.

<sup>1</sup> TERM CONSULTANCY FOR AIR VENTILATION ASSESSMENT SERVICES, Cat. A1–  
Term Consultancy for Expert Evaluation and Advisory Services on Air Ventilation Assessment  
(PLNQ 37/2007), Final report – Ma On Shan Area (February 2009)



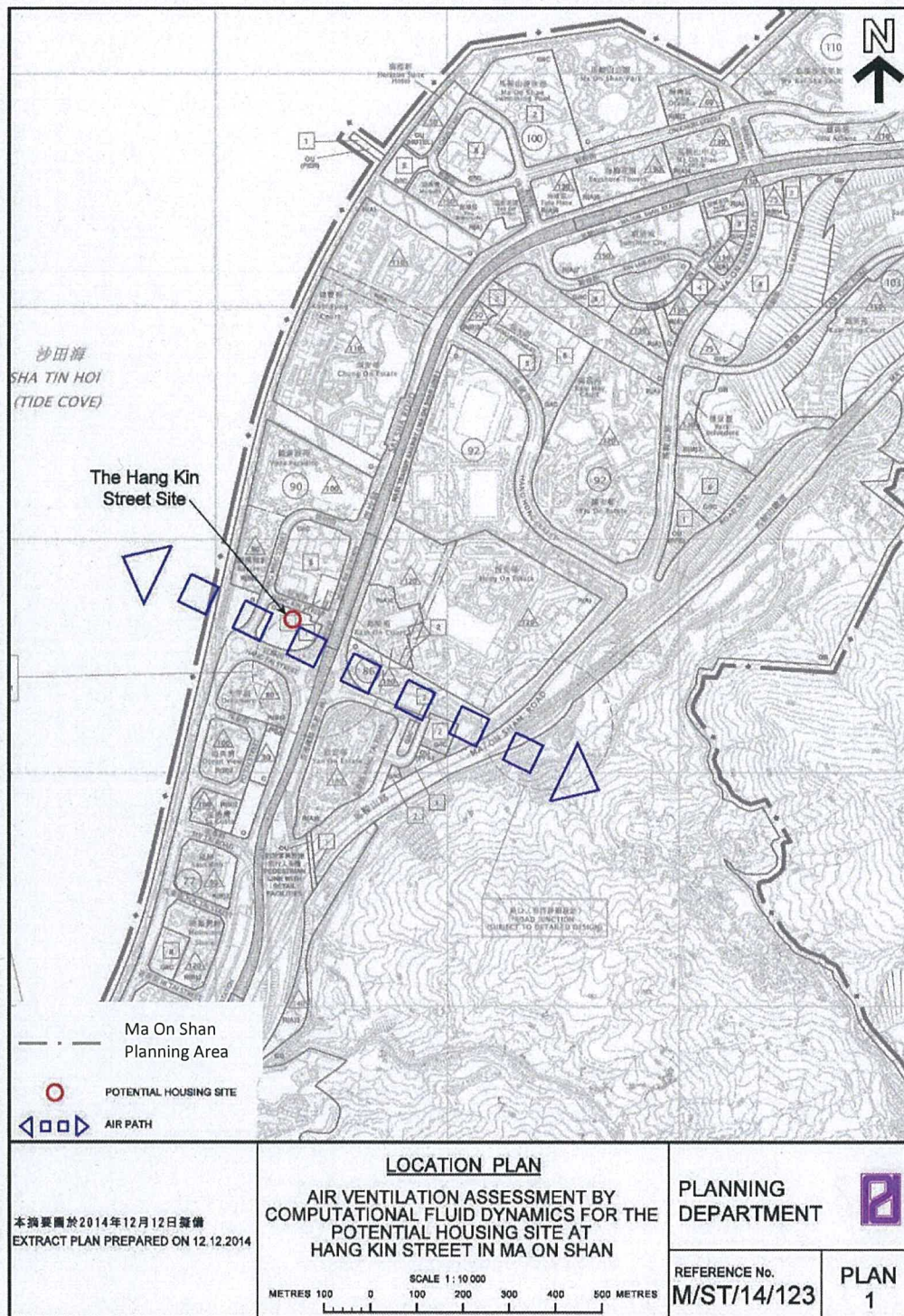


Figure 1 Potential housing site and air path location (Source: Planning Department; air path location referenced from the Ma On Shan Area EE Study (February 2009))





Figure 2 Location of the Project Site and its surrounding developments (Image Source: Google Map)

### **Previous AVA(s) Conducted near the Project Site**

The following listed out the previous / ongoing air ventilation assessment(s) conducted for the Project Area and its surrounding.

- Term Consultancy for Expert Evaluation on Air Ventilation Assessment for Ma On Shan Area
- Public Rental Housing Development at Ma On Shan Area 86B
- Technical Assessments to Support Section 16 Application under the Town Planning Ordinance for “CDA(3)” Site at Whitehead, Ma On Shan
- Term Consultancy for Expert Evaluation on Air Ventilation Assessment for Potential Housing Sites in Ma On Shan Area

### **Site Wind Availability**

Wind tunnel data in Ma On Shan Area 86B report<sup>2</sup> is adopted for the site wind availability in this study.

For annual condition, eight prevailing wind directions were considered in this AVA Study which covers 81.6% of the total annual wind frequency. They are northerly (12.1%), north-north-easterly (8.2%), north-easterly (8.7%), east-north-easterly (15.1%), easterly (23.4%), east-south-easterly (4.8%), southerly (4.3%) and south-westerly (5%) winds.

<sup>2</sup> Detailed Air Ventilation Assessment for Public Housing Development Project Batch C3, Proposed Public Housing Development at Ma On Shan Area 86B



For summer condition, eight prevailing wind directions were considered in this AVA Study which covers 77.1% of the total summer wind frequency. They are easterly (13.8%), east-south-easterly (7.9%), south-easterly (6.5%), southerly (10.0%), south-south-westerly (8.2%), south-westerly (14.4%) and west-south-westerly (9.7%) and westerly (6.6%) winds.

The power law equation is used to approximate the wind profiles as the inlet boundary of the CFD model. The  $n$ -value of 0.35 was employed for N, NE, NNE, ENE, S, SSW, SW, WSW and W wind directions, while 0.15 was employed for E, ESE and SE wind directions.

### **Qualitative Assessment of the Existing Wind Condition**

Under annual wind condition, the prevailing winds are mainly from northeast quarter. Various air paths are identified around the Project Area, such as Sai Sha Road and Ma On Shan Promenade as major wind corridors, while Hang Ming Street, Po Tai Street, Hang Fai Street, Hang Kin Street, and open area 2 as local air paths.

For summer wind condition, the majority of the wind would come from southeast quarter (E, ESE and SE) and southwest quarter. Sai Sha Road and Ma On Shan Promenade still serve as major wind corridors, while the waterfront and open area 2 could serve as wind entrance and air path for the Project Site.

#### **Annual Wind - N, NNE and NE prevailing wind**

- Incoming wind would mainly travel along Sai Sha Road and reach the Project Site.
- The GIC buildings ( $\approx 30\text{mPD}$ ) located at the upwind area would not impose significant impacts on the wind environment of the Project Site.

#### **Annual Wind - ENE and E prevailing wind**

- The wind environment at the Project Site Ma On Shan is relatively calm due to the presence of Ma On Shan (up to  $700\text{mPD}$ ), Kam On Court and Heng On Estate ( $\approx 105\text{mPD}$ ) at the upwind direction.

#### **Summer Wind - E prevailing wind**

- Ma On Shan (up to  $700\text{mPD}$ ) and Kam On Court and Heng On Estate ( $\approx 105\text{mPD}$ ) would shield the prevailing wind to the Project Site and relatively calm wind environment is expected.

#### **Summer Wind - ESE and SE prevailing wind**

- The presence of the open area 2 could serve as an air path for the Project Site.

#### **Summer Wind - S and SSW prevailing wind**

- Oceanaire ( $\approx 80\text{ mPD}$ ), Yan On Estate Phase I ( $\approx 120\text{ mPD}$ ) and Phase II ( $\approx 140\text{ mPD}$ ) would potentially cast wind shadow to part of Project Site.

- Sai Sha Road between Oceanaire and Yan On Estate would act as an air path and allow wind penetration to the Project Site.

### **Studied Scenarios**

In this study, there are four scenarios – namely Baseline Scenario, Scenario A, Scenario B, and Scenario C.

#### **Baseline Scenario**

The Baseline Scenario represents the existing situation of an open space facility with no significant above-ground structures.

#### **Scenario A**

Scenario A presents a residential development at a site area of about 4,185m<sup>2</sup> with a plot ratio of 4.0 and maximum building height of 80mPD. The building footprint covers an area of about 680 m<sup>2</sup> (about 16%) of the site. It is assumed that a proposed soccer pitch is located adjacent to the project site at the SW direction.

#### **Scenario B**

Scenario B presents a residential development at a site area of about 4,185m<sup>2</sup> with a plot ratio of 6.0 and maximum building height of 120mPD. The building footprint covers an area of about 650 m<sup>2</sup> (about 15%) of the site. It is assumed that a proposed soccer pitch is located adjacent to the project site at the SW direction.

#### **Scenario C**

Scenario C presents a residential development at a larger site area of about 5,253m<sup>2</sup> with a plot ratio of 6.0 and maximum building height of 120mPD. The building footprint covers an area of about 960 m<sup>2</sup> (about 18%) of this larger site. It is assumed that a proposed soccer pitch is located adjacent to the project site at the SW direction.



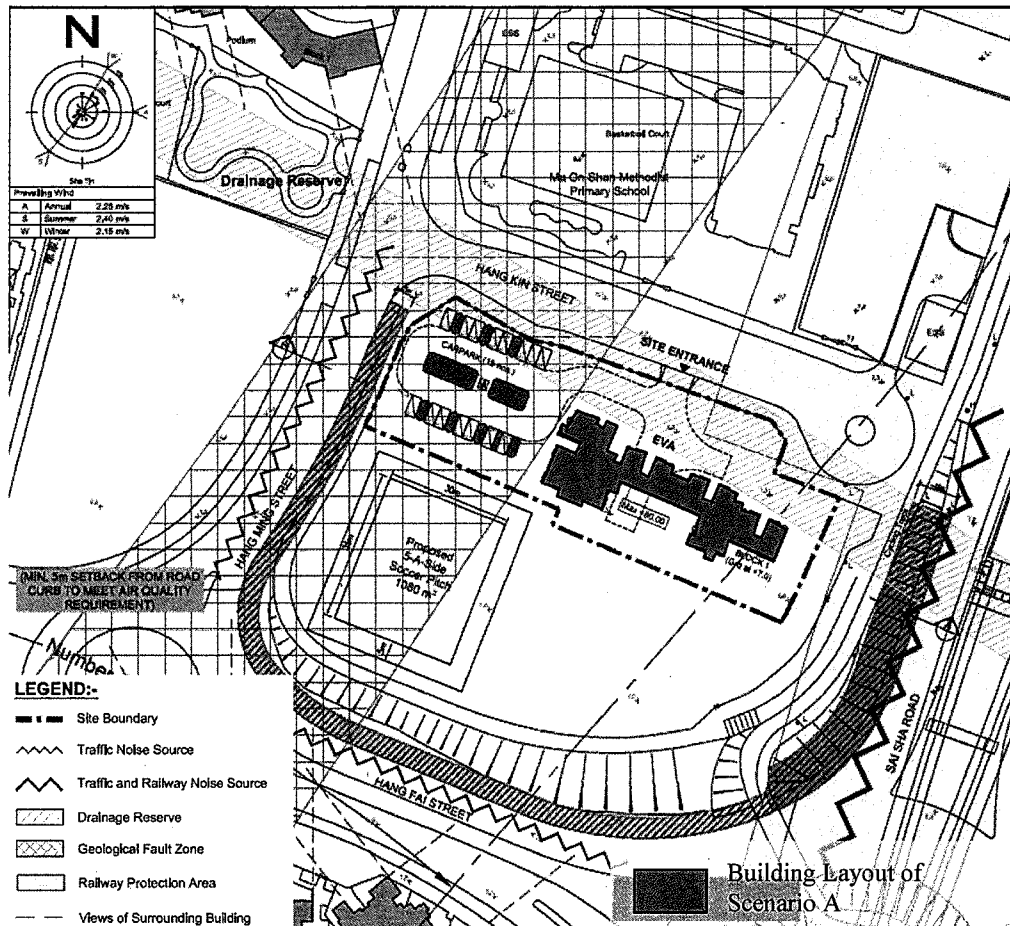


Figure 3 Building Layout of Scenario A

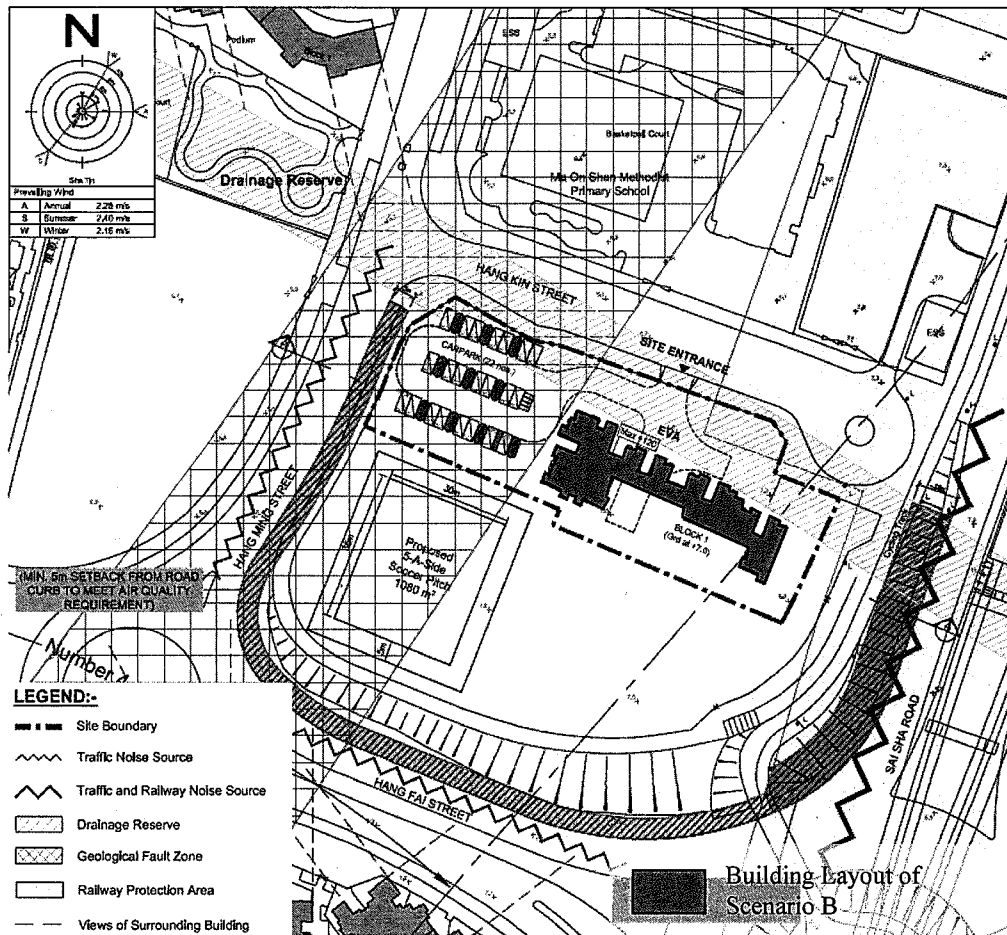


Figure 4 Building Layout of Scenario B

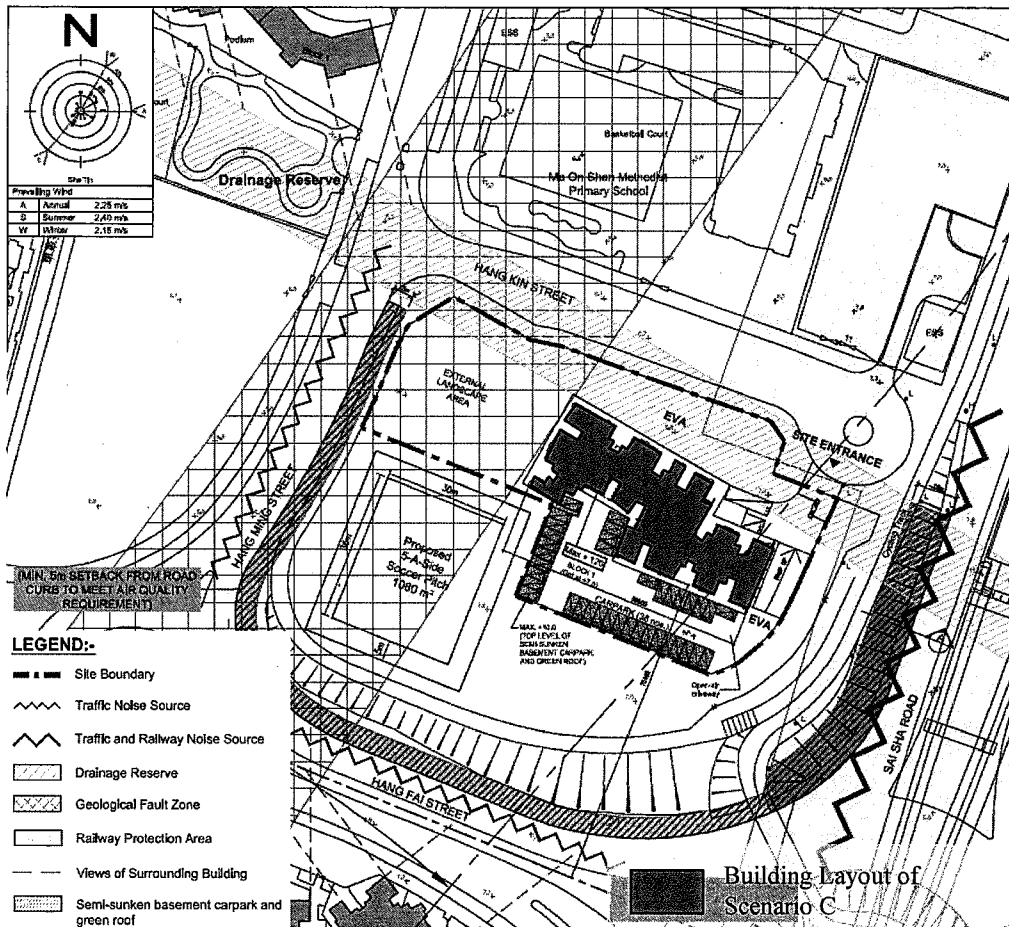


Figure 5 Building Layout of Scenario C

### Qualitative Assessment on Scenario A

This section discussed on the anticipated air ventilation performance under the Scenario A as compared with Scenarios B and C. As detailed in the AVA (EE) for the Hang Kin Street site conducted in late 2014, the building bulk of Scenarios A and B are similar except the building height. Both Scenarios A and B have a same site area of about 4,185 m<sup>2</sup> and a building footprint of 15-16% of the site. They are only different in terms of plot ratio and building height, of which Scenario A has a lower plot ratio and building height.

As shown in “*Studied Scenarios*” section above, Scenario A has lower building height than Scenarios B and C, as well as slimmer overall building bulk as compared with Scenario C. Thus, Scenario A’s overall building permeability would be larger than Scenario B, while further larger than Scenario C. Furthermore, the lower building height of Scenario A (80mPD) could also create a stepping building height profile with surrounding developments, such as Vista Paradiso (105mPD) and Kam On Court (105mPD), as shown in Figure 2, which facilitates capturing downwind to the lower zone.

In short, it is expected that Scenario A would induce less ventilation impact to the surrounding areas as compared with Scenarios B and C due to overall smaller building bulk.



## **Quantitative Assessment – Initial Study**

Quantitative assessment has been conducted comparing among Baseline Scenario and Scenarios B and C using computational fluid dynamics.

### **Test Point Location**

Test points are evenly placed along the site boundary and within the assessment area of the potential development to determine the ventilation performance. There are three types of test points in the study:

#### **Perimeter Test Points**

Perimeter test points are the points positioned at the boundary of the Project Area. In accordance with the Technical Circular, perimeter points (**red spots**) are positioned at interval of around 15m along the site boundary. As the site boundaries for Scenarios B and C are not identical, there are two sets of perimeter test points for separate comparisons, namely PB points (21 points) for comparison of Scenario B with Baseline Scenario and PC Points (23 points) for comparison of Scenario C with Baseline Scenario. The test point location are shown in Figure 6 and Figure 7.

#### **Overall Test Points**

Overall test points are those points evenly positioned in the open area, on the streets and places where pedestrian frequently access within the assessment area. 110 overall test points (**green spots**) are selected and shown in Figure 9.

#### **Special Test Points**

12 Special test points (black spots) have been placed on the Ma On Shan Promenade, Open Area (O1) at seafront, and at the proposed 'External Landscape Area' within the site under Scenario C, as shown in Figure 8.

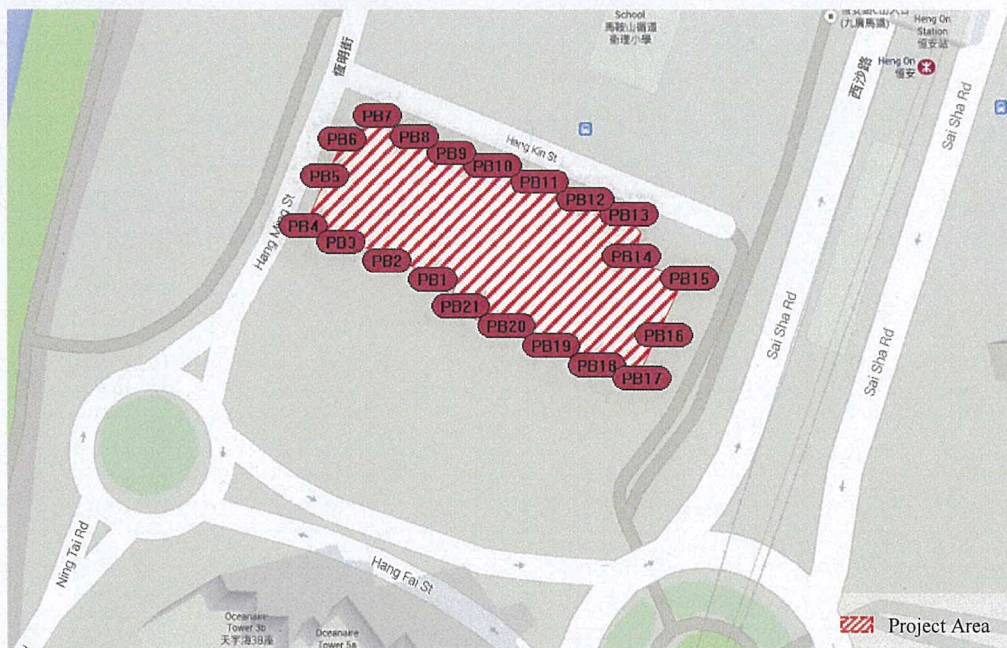


Figure 6 Location of Perimeter Test Points for Scenario B



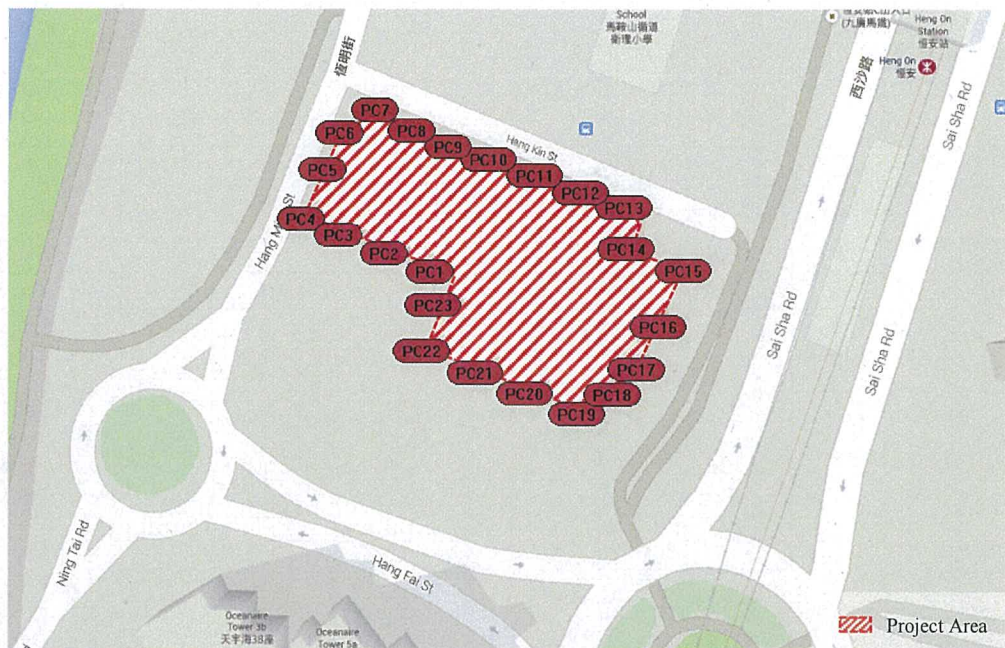


Figure 7 Location of Perimeter Test Points for Scenario C

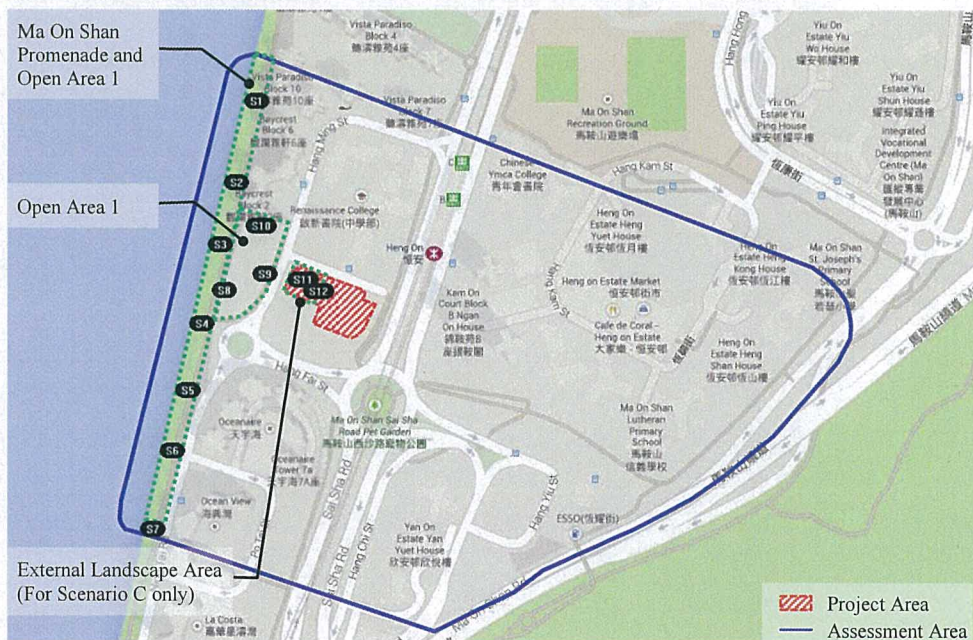


Figure 8 Location of Special Test Points for Scenario C



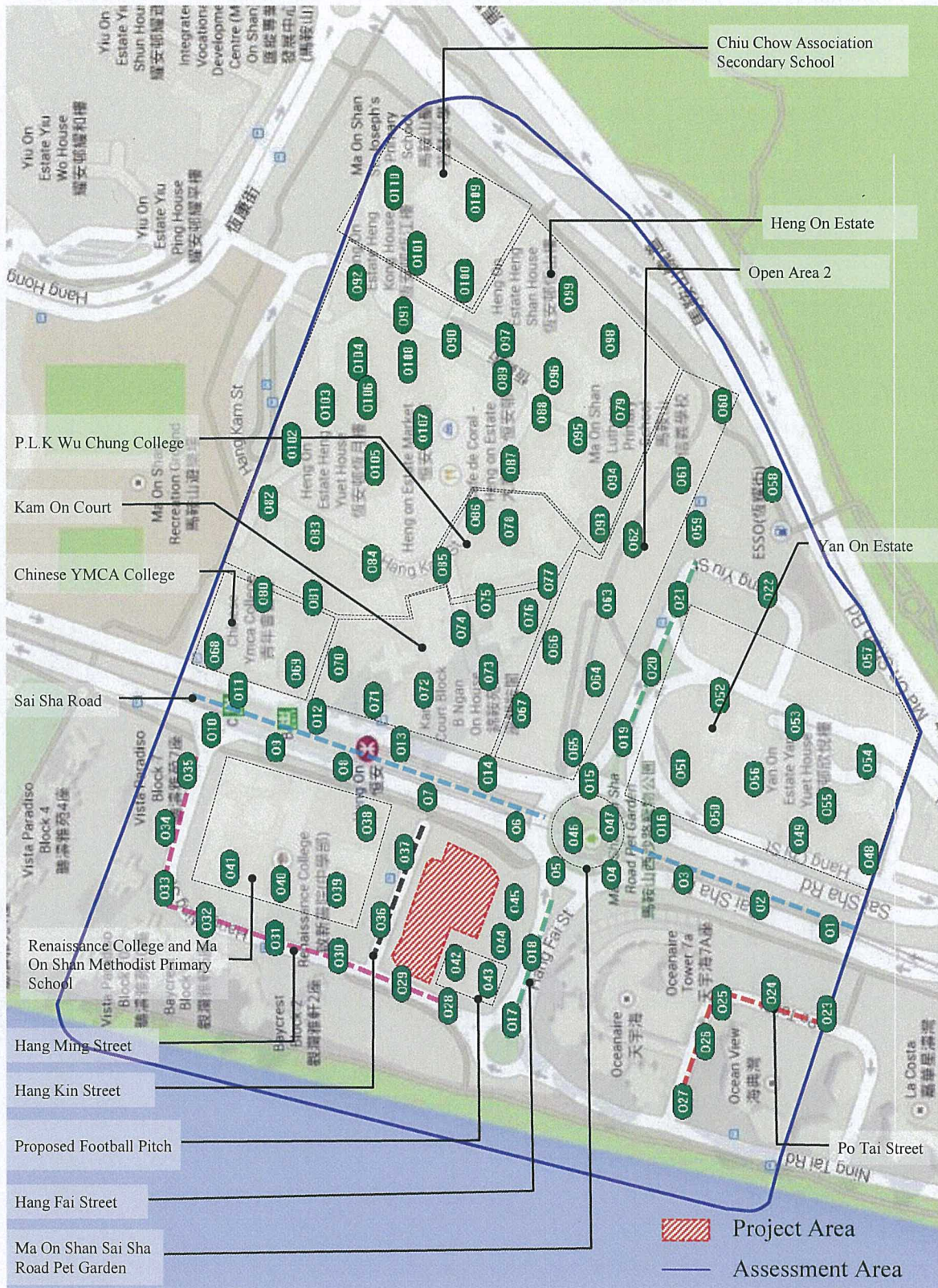


Figure 9 Location of Overall Test Points



## **Results and Discussion**

The Wind Velocity Ratio (VR) as proposed by the Technical Circular was employed to assess the ventilation performances of the Proposed Development and surrounding environment. VR is defined as the ratio of the wind velocity at the pedestrian level (2m above ground) to the wind velocity at the top of the wind boundary layer. Higher VR implies better ventilation.

The Site spatial average velocity ratio (SVR) represents the average VR of all perimeter test points at the site boundary. The Local spatial average velocity ratio (LVR) represents the average VR of all perimeter and overall test points. The SVR and LVR under annual and summer conditions were calculated respectively.

### **Annual Condition**

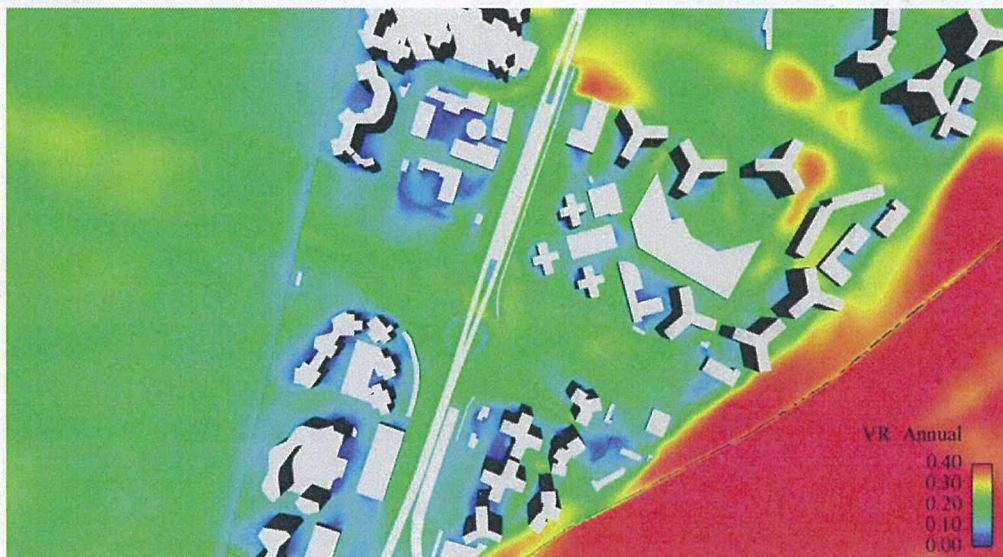


Figure 10 Average annual VR contour plots for Baseline Scenario

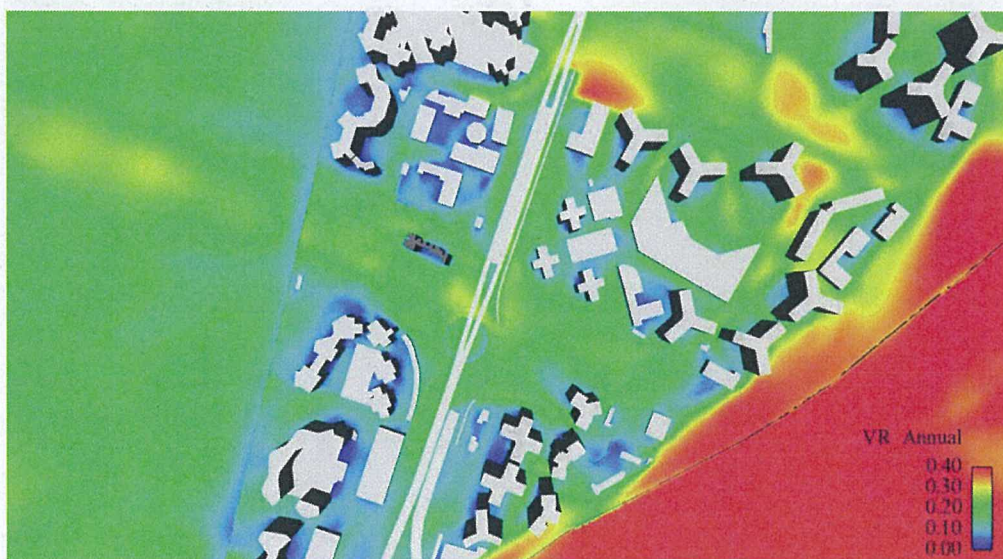


Figure 11 Average annual VR contour plots for Scenario B



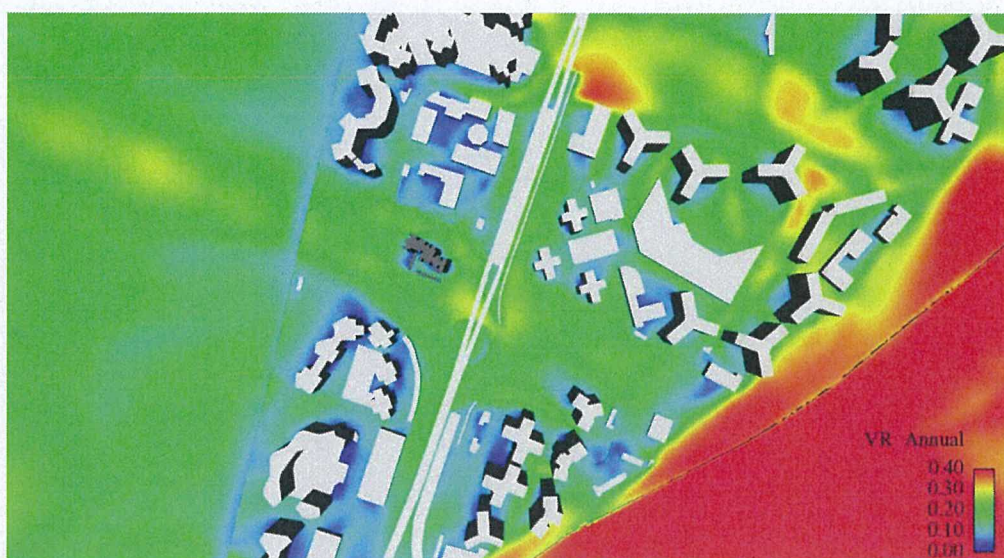


Figure 12 Average annual VR contour plots for Scenario C

Table 1 SVR and LVR under Annual Condition

	Comparison between Baseline Scenario and Scenario B		Comparison between Baseline Scenario and Scenario C	
	Baseline Scenario	Scenario B	Baseline Scenario	Scenario C
SVR	0.15	0.21	0.16	0.19
LVR	0.17	0.18	0.17	0.18

Under annual condition, both Scenarios B and C achieved a higher SVR as compared with Baseline Scenario. This suggests that the Scenarios B and C achieved a better ventilation performance at the immediate surroundings of the Project Area as compared to the Baseline Scenario. Furthermore, the results also show that the SVR of Scenario B is higher than SVR of Scenario C, which indicates that the Scenario B would achieved a better ventilation performance at the immediate surroundings as compared with Scenario C.

Meanwhile, both Scenarios B and C achieved a slightly higher LVR as compared with Baseline Scenario, and the LVR of Scenarios B and C are similar. The result suggests that both Scenarios B and C achieved a slightly better ventilation performance at the local surrounding areas of the Project Area as compared to the Baseline Scenario.

The higher SVR and LVR of Scenarios B and C are mainly due to the downwash effect of proposed development. The proposed development could help to capture the high-level wind towards the pedestrian level, and enhances the ventilation performance at the nearby focus areas, such as Hang Kin Street, Proposed Football Pitch, and Ma On Shan Sai Sha Road Pet Garden.

On the contrary, the presence of the high-rise proposed development would inevitably induce wind shadow to the downstream regions and induce ventilation impacts to the areas. It is found that Hang Fai Street achieves a lower VR under Scenarios B and C as compared with Baseline Scenario under NE, ENE and E wind directions. Detailed discussion is presented in the “*Focus Area*” section.



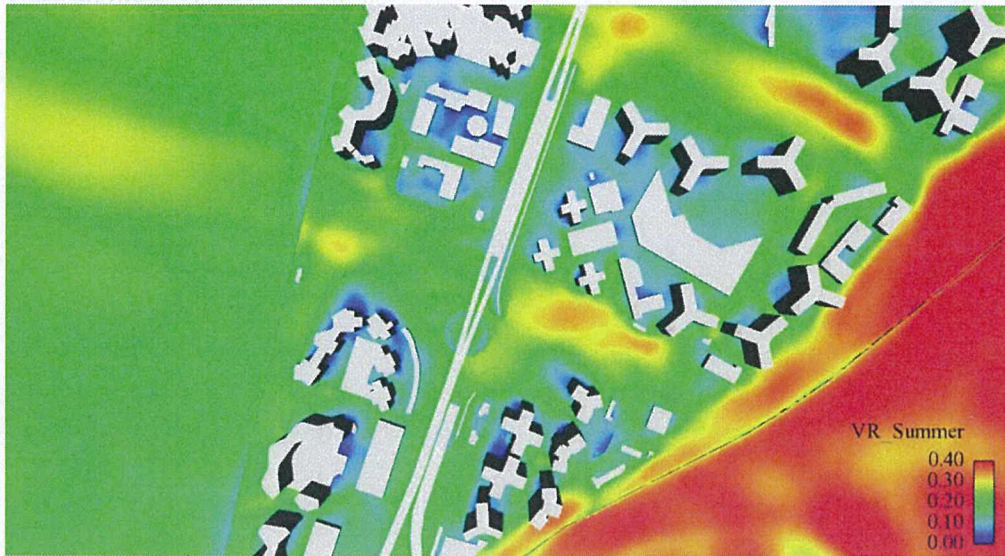
Summer Condition

Figure 13 Average summer VR contour plots for Baseline Scenario

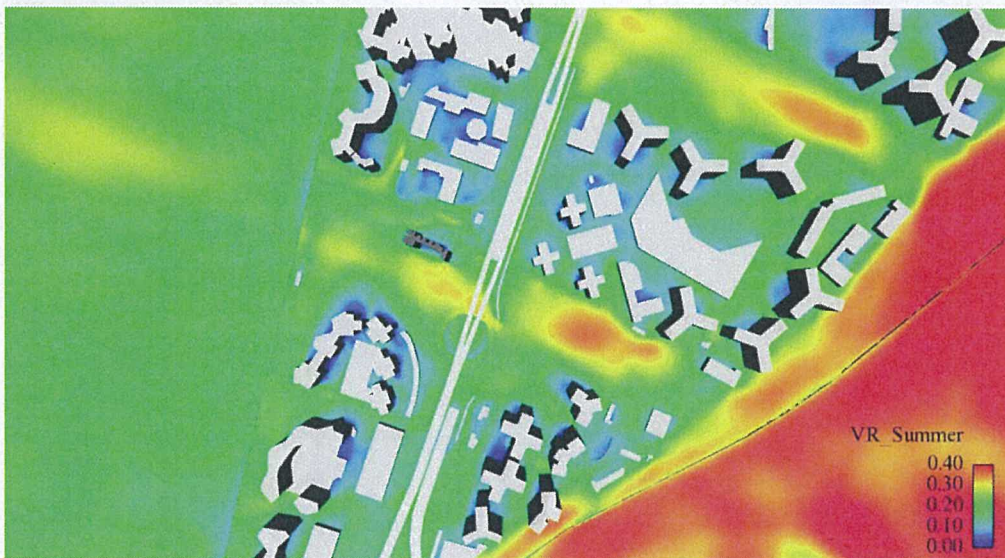


Figure 14 Average summer VR contour plots for Scenario B



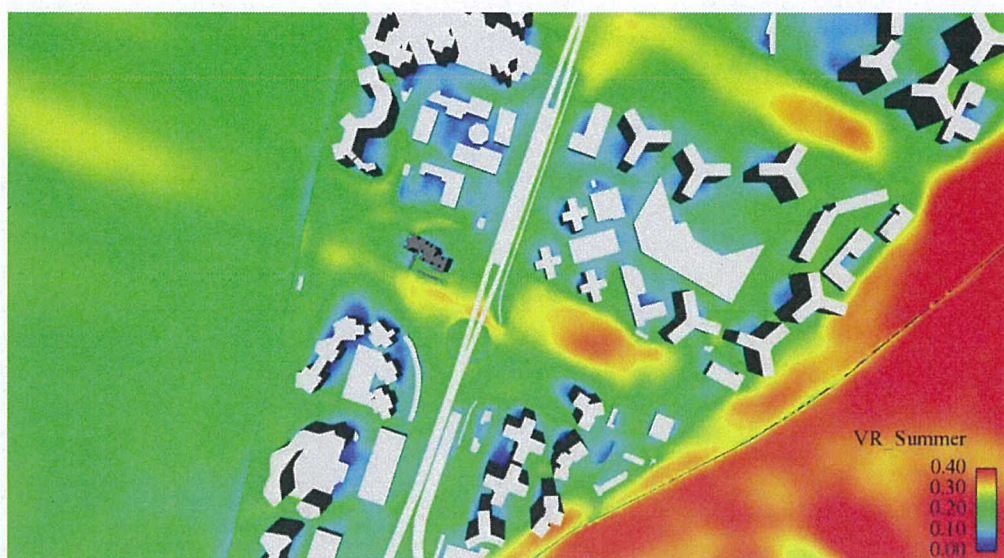


Figure 15 Average summer VR contour plots for Scenario C

Table 2 SVR and LVR under Summer Condition

	Comparison between Baseline Scenario and Scenario B		Comparison between Baseline Scenario and Scenario C	
	Baseline Scenario	Scenario B	Baseline Scenario	Scenario C
SVR	0.22	0.22	0.22	0.21
LVR	0.19	0.19	0.19	0.19

Under summer condition, Baseline Scenario and Scenario B achieved a similar SVR, while Scenario C achieved a slightly lower SVR compared to others. The results indicate that the ventilation performance at the immediate surroundings at both Baseline Scenario and Scenario B are quite similar, while Scenario C would induce slight ventilation impacts to the area.

Meanwhile, all three scenarios achieved a similar LVR values. This suggests that the overall ventilation performance at the local surrounding areas would be similar under all three scenarios.

Similar to the under annual condition, the downwash effect from the proposed development under Scenarios B and C would result a higher VR at Ma On Shan Sai Sha Road Pet Garden. Furthermore, Scenario C's building bulk is slightly extended towards south as compared with Scenario B. As such, the SE facade also effectively orientated towards pet garden. These design features facilitates the downwash effect towards the pet garden under SW and WSW winds and resulting a higher VR under Scenario C.

On the contrary, the presence of the high-rise proposed development would inevitably induce wind shadow to the downstream regions and induce ventilation impacts to the areas. It is found that Kam On Court and Renaissance College & Ma On Shan Methodist Primary School Site achieve a lower VR under Scenarios B and C as compared with Baseline Scenario under SW and S wind directions respectively. Detailed discussion is presented in the "Focus Area" section.



### Focus Area

Various Focus Areas with frequent pedestrian access and within major activity zones were defined, as shown in Figure 16

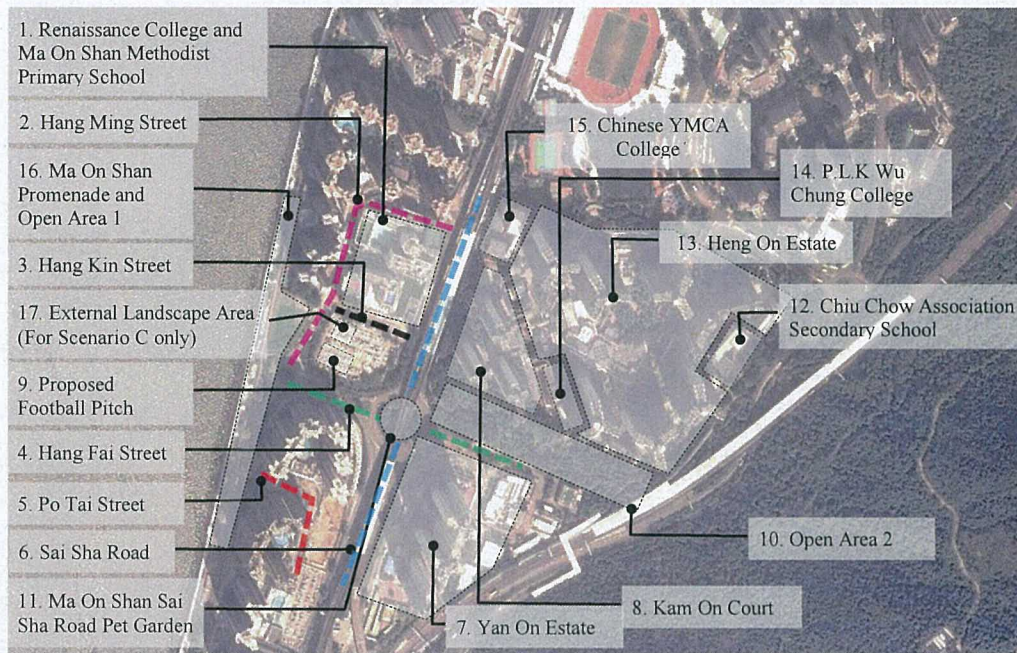


Figure 16 Focus Areas location



The average VR for these Focus Areas under annual and summer conditions respectively are presented below.

### Annual Condition

Table 3 Focus Area Results under Annual Condition

	Focus Areas	Test Points	Baseline Scenario	Scenario B	Scenario C
1	Renaissance College and Ma On Shan Methodist Primary School	O38-O41	0.09	0.09	0.09
2	Hang Ming Street	O28-O35	0.16	0.17	0.17
3	Hang Kin Street	O36-O37	0.11	0.22	0.21
4	Hang Fai street	O17-O21	0.18	0.16	0.16
5	Po Tai Street	O23-O27	0.10	0.11	0.11
6	Sai Sha Road	O1- O16	0.19	0.18	0.19
7	Yan On Court	O48-O56	0.13	0.14	0.14
8	Kam On Court	O70-O76	0.15	0.15	0.14
9	Proposed Football Pitch	O42-O43	0.19	0.22	0.21
10	Open Area 2	O60-O67	0.23	0.22	0.22
11	Ma On Shan Sai Sha Road Pet Garden	O46-O47	0.18	0.19	0.20
12	Chiu Chow Association Secondary School	O100-O101, O109-O110	0.22	0.22	0.21
13	Heng On Estate	O79, O81-O84, O87-O99, O102-O108	0.19	0.20	0.20
14	P.L.K. Wu Chung College	O77-O78, O85-O86	0.14	0.14	0.14
15	Chinese YMCA College	O68-O69, O80	0.13	0.13	0.13
16	Ma On Shan Promenade and Open Area 1	S1 - S10	0.14	0.15	0.15
17	External Landscape Area	S11-S12	0.18	-	0.20

Under annual condition, most of the focus areas achieved a similar VR values indicating their ventilation performance is quite similar among the scenarios, except at Hang Kin Street, Proposed Football Pitch, Hang Fai Street, and External Landscape Area.

It is noteworthy that the averaged VR at Renaissance College and Ma On Shan Methodist Primary School is relatively lower as compared with other focus areas and LVR. This is mainly due to the upwind developments, such as Vista Paradiso and Heng On Estate would shield a portion of the incoming wind and resulting a slight stagnant area.

Similarly, Po Hai Street is also shielded by Oceanaire development and resulting relatively lower average VR compared with other focus areas and LVR.

At Hang Kin Street, Scenarios B and C achieved a higher VR as compared with Baseline Scenario, while Scenario B would achieve a higher VR than Scenario C. The downwash effect from the proposed development helps to capture the high



level wind towards the pedestrian level and enhance the ventilation performance at the areas, under N, NNE, and NE winds.

At Proposed Football Pitch, Scenarios B and C also achieved a higher VR as compared with Baseline Scenario due to the downwash effect of the proposed development under N and NNE winds.

Similarly, at Ma On Shan Sai Sha Road Pet Garden, Scenarios B and C also achieved a slightly higher VR as compared with Baseline Scenario due to the downwash effect of the proposed development under N, NE, and ENE winds.

At Hang Fai Street, Scenarios B and C achieved a lower VR as compared with Baseline Scenario. It is mainly due to the wind blockage effect of the proposed development, under NE, ENE, and E winds.

At Special focus area - External Landscape Area, Scenario C achieved a higher VR as compared with Baseline Scenario. It is mainly due to the downwash effect from the proposed development under N, NNE, and NE winds.

### Summer Condition

Table 4 Focus Area Results under Summer Condition

	Focus Areas	Test Points	Baseline Scenario	Scenario B	Scenario C
1	Renaissance College and Ma On Shan Methodist Primary School	O38-O41	0.11	0.10	0.10
2	Hang Ming Street	O28-O35	0.19	0.18	0.18
3	Hang Kin Street	O36-O37	0.22	0.22	0.23
4	Hang Fai street	O17-O21	0.17	0.18	0.18
5	Po Tai Street	O23-O27	0.14	0.14	0.14
6	Sai Sha Road	O1-O16	0.18	0.19	0.19
7	Yan On Court	O48-O56	0.16	0.16	0.16
8	Kam On Court	O70-O76	0.16	0.15	0.14
9	Proposed Football Pitch	O42-O43	0.22	0.24	0.22
10	Open Area 2	O60-O67	0.29	0.29	0.29
11	Ma On Shan Sai Sha Road Pet Garden	O46-O47	0.17	0.18	0.21
12	Chiu Chow Association Secondary School	O100-O101, O109-O110	0.22	0.21	0.22
13	Heng On Estate	O79, O81-O84, O87-O99, O102-O108	0.16	0.17	0.17
14	P.L.K. Wu Chung College	O77-O78, O85-O86	0.13	0.13	0.14
15	Chinese YMCA College	O68-O69, O80	0.12	0.11	0.11
16	Ma On Shan Promenade and Open Area I	S1 - S10	0.22	0.21	0.21
17	External Landscape Area	S11-S12	0.32	-	0.22

Similar to the annual condition, the VR at most of the focus areas is generally similar among the three scenarios under summer condition, except at Ma On Shan

Sai Sha Road Pet Garden, Proposed Football Pitch, Renaissance College and Ma On Shan Methodist Primary School, Chinese YMCA College, Kam On Court, and External Landscape Area.

At Ma On Shan Sai Sha Road Pet Garden, Scenarios B and C achieved higher VR as compared with Baseline Scenario, due to the downwash effect from the proposed development under WSW wind.

Furthermore, Scenario C's building bulk is slightly extended towards south as compared with Scenario B. As such, the SE facade also effectively orientated towards pet garden. These design features facilitates the downwash effect towards the pet garden under SW and WSW winds and resulting a higher VR under Scenario C.

Under S wind direction, the "C-shaped" building frontage under Scenario B is favourable in terms of capturing the high-level wind towards the street level. The design features allows the Proposed Football Pitch achieved a higher VR as compared with both Baseline Scenario and Scenario C.

It is noted that the averaged VR at the Renaissance College and Ma On Shan Methodist Primary School and Chinese YMCA College are relatively low as compared to other focus areas and LVR under Baseline Scenario, while the VR under Scenarios B and C are even worse. It is mainly because that the proposed development would induce wind shadow at the area under S and W winds respectively and resulting in slight stagnant areas.

Compared with the Baseline Scenario, Kam On Court is also found to achieve a lower VR under both Scenarios B and C, while Scenario C would achieve even lower VR than Scenario B. The presence of the proposed development would inevitably induce ventilation impacts to the downstream region, especially under SW wind and resulting in slight stagnant area.

At Special focus area - External Landscape Area, Scenario C also achieved a lower VR as compared with Baseline Scenario due to the wind blockage effect from the proposed development under ESE and SE winds.



## **Recommendations**

Through the Initial Study, it is found that some surrounding areas have been experiencing comparatively less favourable wind environment under particular wind directions. These areas include Renaissance College and Ma On Shan Methodist Primary School, Hang Fai Street, Kam On Court and Chinese YMCA College.

### **Focus Area 1 – Renaissance College and Ma On Shan Methodist Primary School**

The GIC site is located at the north of the proposed development with building height around 30 mPD. The assessment findings indicate that the proposed development would induce wind shadow at the GIC site under S wind resulting a slight stagnant area.

In order to reduce the ventilation impact to this focus area, it is recommended to enhance the low level permeability of the proposed development for S prevailing wind which accounts for 4.3% and 10% of the annual and summer prevailing winds respectively. The possible wind enhancement features include but not limited to empty bay, podium garden urban window, etc.

### **Focus Area 4 – Hang Fai Street**

Hang Fai Street is situated to the south of the project site. The assessment findings indicate that the proposed development would induce wind shadow at the street under NE, ENE, and E winds that resulting lower VR under Scenarios B and C. In order to reduce the ventilation impact to this area, it is recommended to enhance the low level permeability of the proposed development, especially for the NE, ENE, and E winds directions.

### **Focus Areas 8 and 15 – Kam On Court and Chinese YMCA College**

The project site is situated at the wind entrance of the wind corridor as shown in Figure 1. The presence of the proposed development would inevitably induce ventilation impact to the downwind regions. The assessment findings indicate that both Kam On Court and Chinese YMCA College would achieve a lower VR under Scenarios B and C. In order to reduce the ventilation impact to the areas, it is recommended that the proposed development shall consider to implement effective wind enhancement features as stipulated in Chapter 11 of the Hong Kong Planning Standards and Guidelines (HKPSG) in the later stage. Some possible features extracted from HKPSG as example, such as optimizing building orientation, building disposition, building permeability, building setback, varying building height profile, terrace podium design and so on.

Furthermore, further study is recommended at the later detail design stage to assess the ventilation performance and impacts to the surroundings.

## **Conclusion**

The major findings of this study could be summarized as follows:

### *Qualitative Assessment on Scenario A*

Scenario A is expected to induce less ventilation impacts to the surrounding areas as compared with Scenarios B and C due to smaller overall building bulk.

### *Quantitative Assessment – Initial Study on Baseline Scenario, Scenarios B and C*

#### **Annual Wind Condition**

- Both Scenarios B and C achieved a higher SVR as compared with Baseline Scenario, while Scenario B achieved a higher SVR than Scenario C;
- Both Scenarios B and C achieved a slightly higher LVR as compared with Baseline Scenario, while both Scenarios B and C are similar;
- At Proposed Football Pitch, Hang Kin Street and Ma On Shan Sai Sha Road Pet Garden, Scenarios B and C achieved a higher VR as compared with Baseline Scenario.
- At Hang Fai Street, Scenarios B and C achieved a lower VR as compared with Baseline Scenario, due to the wind blockage effect of the proposed development, under NE, ENE, and E winds.
- Compared with the Baseline Scenario, the special focus area - External Landscape Area achieved a higher VR at both Scenarios B and C.

#### **Summer Wind Condition**

- All three scenarios achieved a similar LVR values.
- Baseline Scenarios and Scenario B achieved a similar SVR, while Scenario C achieved a slightly lower SVR compared to others.
- At Proposed Football Pitch and Ma On Shan Sai Sha Road Pet Garden, Scenarios B and C achieved higher VR as compared with Baseline Scenario.
- Scenarios B and C achieved lower VR as compared with Baseline Scenario at Renaissance College and Ma On Shan Methodist Primary School, Kam On Court, and Chinese YMCA College.
- Compared with the Baseline Scenario, the special focus area - External Landscape Area achieved a lower VR under summer condition at both Scenarios B and C.



### Way Forward

- Renaissance College and Ma On Shan Methodist Primary School, Kam On Court, Hang Fai Street and Chinese YMCA College is identified as a problematic areas.
- Increasing the low level permeability of the proposed development to reduce the ventilation impacts on Renaissance College and Ma On Shan Methodist Primary School and Hang Fai Street.
- Further study is recommended at the later stage to assess the ventilation performance and impacts to the surroundings.

The results indicate Scenario B would achieved a slightly better ventilation performance at the immediate surroundings as compared with Scenario C under both conditions. On the contrary, the ventilation performance at the local surrounding areas would be similar between Scenarios B and C.

The proposed development could induce downwash effect and enhance the ventilation performance at the surrounding regions, such as Hang Kin Street, Proposed Football Pitch, and Ma On Shan Sai Sha Road Pet Garden under annual condition, as well as Proposed Football Pitch and Ma On Shan Sai Sha Road Pet Garden under summer condition.

Nevertheless, the presence of the proposed development would inevitably induce ventilation impacts to the downstream regions. It is found that wind shadow would be induced to Hang Fai Street under annual condition as well as Renaissance College and Ma On Shan Methodist Primary School, Kam On Court, External Landscape Area and Chinese YMCA College under summer condition.

**VISUAL APPRAISAL FOR THE PROPOSED  
PRIVATE RESIDENTIAL DEVELOPMENT NEAR  
YIU SHA ROAD, WHITEHEAD**

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**PLANNING DEPARTMENT  
FEBRUARY 2015**



**Visual Appraisal**  
**for the Proposed Private Residential Development**  
**near Yiu Sha Road, Whitehead**

**Background**

1. A site at a local road leading to Lok Wo Sha Lane and to the east of Yiu Sha Road (the Site) is zoned "Government, Institution or Community" ("G/IC") on the approved Ma On Shan Outline Zoning Plan (OZP) No. S/MOS/20. It covers an area of about 0.46ha and is located at the southeastern part of Whitehead headland and near Starfish Bay. It is currently a piece of vacant Government land reserved to meet the needs of the community in the long term. It has been reserved for provision of GIC facilities in the long term. Since sufficient land has been reserved for the provision of GIC facilities in the locality, the relevant Government departments have confirmed that there was no need to reserve the site for GIC uses. It is proposed to rezone the site from "G/IC" to "Residential (Group C)3" ("R(C)3") for low-rise residential development subject to a maximum plot ratio (PR) of 2.4 and a maximum building height (BH) of 40mPD. It is estimated that the site could provide about 180 flats.

**Purpose**

2. The purpose of this visual appraisal (VA) is to examine the possible visual impact of the proposed housing development on the surrounding areas in terms of the development scale and its spatial relationship with the surrounding environment. This VA could facilitate the Rural and New Town Planning Committee of the Town Planning Board to visualise the three-dimensional relationship of the proposed housing development with the surrounding context.

**The Proposed Development and Its Surroundings**

3. The Site is proposed to be rezoned as "R(C)3" subject to maximum plot ratio of 2.4 and maximum building height of 40mPD.
4. To the further south of the Site is the Wu Kai Sha Station and topside high-rise property development (Lake Silver) subject to PR of 5 and BH of 185mPD. To the south and southwest is the "Comprehensive Development Area (1)" ("CDA(1)") zone for medium-density residential developments subject to PR of 3 and BH of 130/120/105mPD descending from south to north. To the west and northwest are the "CDA(2)" and "CDA(3)" zones for low to medium-density residential developments subject to GFA of 40,000m<sup>2</sup> and 30,000m<sup>2</sup> (equivalent to PRs of 1.06 and 1.26) respectively and BH of 50mPD. To the further north is the "Recreation" ("REC") zone for low-rise and low-density recreational and sports facilities

subject to BH of 30mPD. Having regard to its waterfront location near Starfish Bay, the low-to-medium density residential character of the neighbourhood, the general gradation in development intensity and building height from Wu Kai Sha Station inland towards the waterfront, it is considered that the proposed PR of 2.4 and BH of 40mPD at the Site can minimize the visual impacts to the adjacent developments while achieving the intended development intensity.

### **Visual Appraisal**

5. The building bulk of the proposed development based on an indicative schematic layout comprising the proposed development parameters is adopted for the purpose of VA. Indicatively, there could be six residential blocks with BH not more than 40mPD (i.e. about 8 - 9 storeys) at the Site. The following three viewpoints from different directions and distances are selected where there are major pedestrian or visitor flow (location of the viewpoints is at **Figure 1**):

- (i) Yiu Sha Road from the west;
- (ii) Lok Wo Sha Lane from the southeast; and
- (iii) Local road leading to Lok Wo Sha Lane from the north.

Possible viewing angles from the east (i.e. across Starfish Bay on the other side along the areas zoned "Site of Special Scientific Interest" ("SSSI") and "Conservation Area" ("CA") at the north of the Li Po Chun United World College) have also been explored. Those areas are densely vegetated and not easily accessible by the public. As such, it is expected viewing from this direction that future development on the Site would be partially screened by the vegetation and would not induce significant visual impact.

6. Three photomontages (**Figures 2, 3 and 4**) are prepared to illustrate the possible visual impact of the proposed development of the Site at the selected viewpoints.

#### **Viewpoint 1 - Yiu Sha Road (from the west)**

7. For the view from the west at Yiu Sha Road (about 200m from the Site) (**Figure 2**), the proposed development is not visually incompatible with the height profile in the surrounding areas, taking into account the existing medium-rise residential development of Double Cove (Phase 5) at about 73.5mPD, the proposed medium-rise residential development in STTL 574 in the "CDA(1)" zone at about 58.5mPD to 90mPD, the proposed student hostel in STTL 600 in the "CDA(1)" zone at about 50.65mPD to 66.4mPD, and the proposed medium-rise residential development at STTL 601 in the "CDA(3)" zone at about 58mPD along both sides of Yiu Sha Road. In addition, building separations in the proposed residential development at the Site and the existing/proposed residential developments in the vicinity could also allow visual permeability.

#### Viewpoint 2 – Lok Wo Sha Lane (from the southeast)

8. For the view from the southeast at Lok Wo Sha Lane (about 500m from the Site) (**Figure 3**), the proposed residential development will be largely screened off by rows of trees along the eastern side of Lok Wo Sha Lane. Besides, the proposed residential development is not visually incompatible with the surrounding areas, taking into account the existing medium-rise residential development of Double Cove (Phases 2 and 3) at about 127.5mPD, the proposed medium-rise residential development in STTL 574 in the “CDA(1)” zone at about 58.5mPD to 90mPD, and the proposed student hostel in STTL 600 in the “CDA(1)” zone at about 50.65mPD to 66.4mPD along the western side of Lok Wo Sha Lane. In addition, building separations in the proposed residential development at the Site and the existing/proposed residential developments in the vicinity could also allow visual permeability.

#### Viewpoint 3 – Local road leading to the Lok Wo Sha Lane (from the north)

9. For the view from the north at the local road leading to Lok Wo Sha Lane (about 150m from the Site) (**Figure 4**), the proposed residential development at the Site will be largely screened off by rows of trees along the local road. Besides, the proposed residential development is not visually incompatible with the surrounding areas, taking into account the existing high-rise residential development of Lake Silver at about 183mPD at MTR Wu Kai Sha Station to the further south, the existing medium-rise residential development of Double Cove (Phases 2 and 3) at about 127.5mPD to the south and the proposed medium-rise residential development at STTL 601 in the “CDA(3)” zone at about 58mPD to the northwest.

#### Conclusion

10. Based on the above, the proposed residential development at the Site is considered not visually incompatible with the surrounding area. Besides, future developer of the Site is required to demonstrate that the proposed development can comply with the Sustainable Building Design Guidelines (including building separation, building setback and greenery coverage) promulgated in the Practice Note for Authorised Persons, Registered Structural Engineers and Registered Engineers APP-152 issued by the Building Authority in order to implement building design to foster a quality and sustainable built environment.

#### Attachments

**Figure 1** Location of the three viewpoints

**Figure 2** Photomontage viewing from Yiu Sha Road from the west

**Figure 3** Photomontage viewing from Lok Wo Sha Lane from the southeast

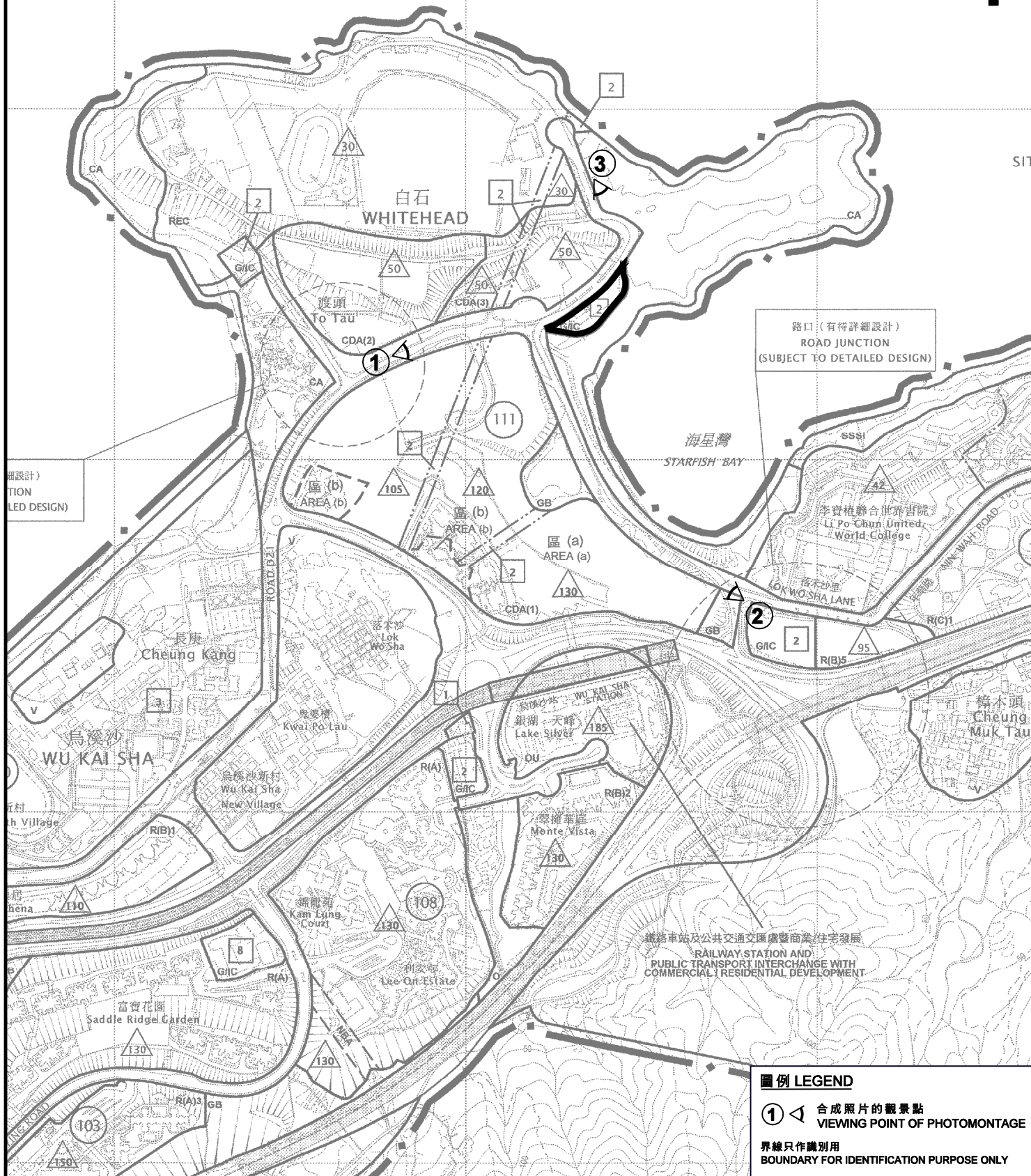
**Figure 4** Photomontage viewing from the local road leading to Lok Wo Sha Lane from the north

**PLANNING DEPARTMENT**

**FEBRUARY 2015**



烏龜沙咀  
WU KWAI SHA TSUI



**圖例 LEGEND**

① ◁ 合成照片的觀景點  
VIEWING POINT OF PHOTOMONTAGE

界線只作識別用  
BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本摘要圖於2015年2月24日擬備，  
所根據的資料為於2014年12月2日  
核准的分區計劃大綱圖編號S/MOS/20  
EXTRACT PLAN PREPARED ON 24.2.2015  
BASED ON OUTLINE ZONING PLAN No.  
S/MOS/20 APPROVED ON 2.12.2014

**合成照片的觀景點  
VIEWPOINTS OF PHOTOMONTAGE**

在馬鞍山分區計劃大綱核准圖編號S/MOS/20作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

SCALE 1:7 500 比例尺  
米 100 0 100 200 300 米  
METRES

**規劃署  
PLANNING  
DEPARTMENT**



參考編號  
REFERENCE No.  
**M/ST/15/7**

**FIGURE  
1**



實地照片  
SITE PHOTO



合成照片  
PHOTOMONTAGE



圖例 LEGEND

- 主題地點  
SUBJECT SITE
- CDA(1)地帶沙田市地段第600號的擬議學生宿舍  
PROPOSED STUDENT HOSTEL AT STTL No. 600 IN "CDA(1)" ZONE
- CDA(1)地帶沙田市地段第574號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 574 IN "CDA(1)" ZONE
- CDA(3)地帶沙田市地段第601號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 601 IN "CDA(3)" ZONE
- CDA** 綜合發展區  
COMPREHENSIVE DEVELOPMENT AREA

本圖於2015年2月24日擬備，所根據的資料為攝於2015年1月27日的實地照片  
PLAN PREPARED ON 24.2.2015  
BASED ON SITE PHOTO TAKEN ON 27.1.2015

合成照片 - 項目A  
PHOTOMONTAGE - ITEM A  
在馬鞍山分區計劃大綱核准圖編號S/MOS/20  
作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

規 劃 署  
PLANNING DEPARTMENT



參考編號  
REFERENCE No.  
M/ST/15/7

FIGURE  
2



實地照片  
SITE PHOTO



合成照片  
PHOTOMONTAGE



圖 例 LEGEND

- 主 題 地 點  
SUBJECT SITE
- CDA(1)地帶沙田市地段第600號的擬議學生宿舍  
PROPOSED STUDENT HOSTEL AT STTL No. 600 IN "CDA(1)" ZONE
- CDA(1)地帶沙田市地段第574號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 574 IN "CDA(1)" ZONE
- CDA(3)地帶沙田市地段第601號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 601 IN "CDA(3)" ZONE
- CDA 綜 合 發 展 區  
COMPREHENSIVE DEVELOPMENT AREA

本圖於2015年2月24日擬備，所根據的資料為攝於2015年1月27日的實地照片  
PLAN PREPARED ON 24.2.2015  
BASED ON SITE PHOTO TAKEN ON 27.1.2015

合成照片 - 項目A  
PHOTOMONTAGE - ITEM A  
在馬鞍山分區計劃大綱核准圖編號S/MOS/20  
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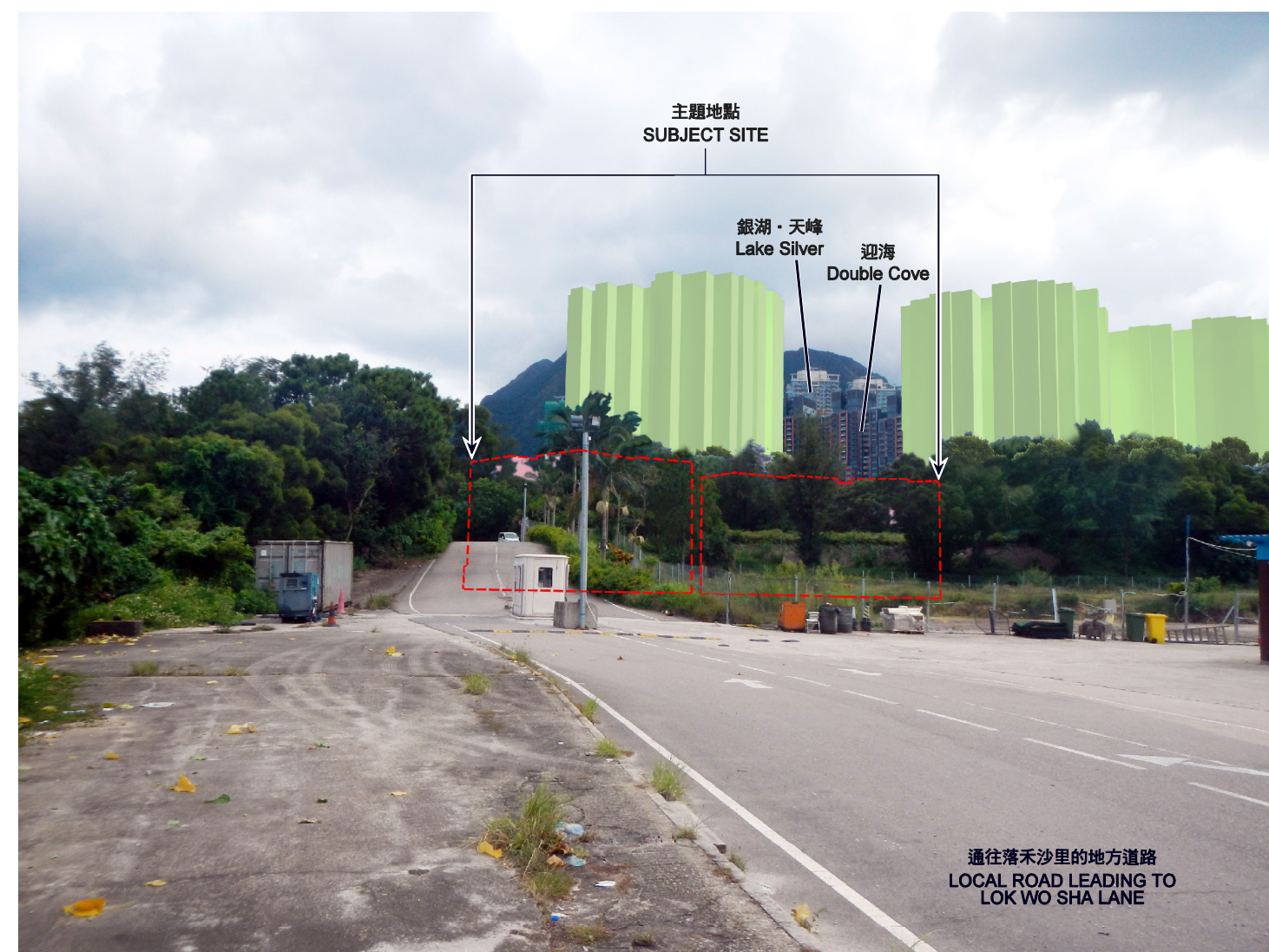
參考編號 REFERENCE No. <b>M/ST/15/7</b>	<b>FIGURE</b> <b>3</b>
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實地照片  
SITE PHOTO



合成照片  
PHOTOMONTAGE



圖例 LEGEND

- 主題地點  
SUBJECT SITE
- CDA(3)地帶沙田市地段第601號的擬議住宅發展  
PROPOSED RESIDENTIAL DEVELOPMENT AT STTL No. 601 IN "CDA(3)" ZONE
- CDA** 綜合發展區  
COMPREHENSIVE DEVELOPMENT AREA

本圖於2015年3月6日擬備，所根據  
的資料為攝於2015年1月27日  
的實地照片  
PLAN PREPARED ON 6.3.2015  
BASED ON SITE PHOTO TAKEN ON  
27.1.2015

合成照片 - 項目A  
PHOTOMONTAGE - ITEM A  
在馬鞍山分區計劃大綱核准圖編號S/MOS/20  
作出的擬議修訂  
PROPOSED AMENDMENTS TO THE APPROVED  
MA ON SHAN OUTLINE ZONING PLAN No. S/MOS/20

規 劃 署  
PLANNING DEPARTMENT



參考編號  
REFERENCE No.  
M/ST/15/7

FIGURE  
4



**Visual Appraisal  
for the Proposed Public Housing Development  
at Hang Kin Street, MOS Area 90B**

**Purpose**

1. The subject site is situated at Hang Kin Street and is located near the waterfront whilst surrounded by residential developments to its north and south. To the east of the subject site across Sai Sha Road are some high-rise buildings (such as Kam On Court, Heng On Estate) and Open Space. To the southeast across Sai Sha Road is Yan On Estate of high-rise buildings. The subject site is zoned "Open Space" ("O") under the Ma On Shan Outline Zoning Plan (OZP) No. S/MOS/20. It covers an area of about 5,300 sqm and is currently used as a temporary public car park. This visual appraisal (VA) is to examine the possible visual effect of the proposed public housing development so as to facilitate the rezoning of the subject site from "O" to "Residential (Group A)10" ("R(A)10").

**The Proposed Development**

2. The Hong Kong Housing Authority (HA) proposes to develop the public housing development with a maximum plot ratio of 6 and a maximum building height of 120mPD within the subject site. The proposed public housing development will deliver about 800 flats (subject to review) for a design population of about 2,500 persons.
3. The proposed development has taken into account the existing local context including the building height of the proposed Yan On Estate extension (130mPD-140mPD), the proposed Home Ownership Scheme at Ma On Shan Road North & South (125mPD-140mPD), Heng On Estate (106mPD), the private residential developments at the waterfront (80mPD-120mPD), the mountain backdrop and the air path/open space spine along Hang Fai Street towards inland of Ma On Shan.

**Visual Appraisal**

4. The following three viewpoints from different directions and distances have been identified (**Figure 1**), which can represent the views of pedestrian node accessible by the public and from key public open spaces:
  - (i) Ma Liu Shui Ferry Pier (from the west)
  - (ii) Pak Shek Kok Promenade (from the northwest)
  - (iii) Ma On Shan Recreation Ground (from the northeast)
5. Three photomontages (**Figures 2, 3 and 4**) are prepared to illustrate the possible visual impact of the proposed development at the selected viewpoints.

**Viewpoint 1 – Ma Liu Shui Ferry Pier (from the west)**

6. This viewpoint shows a panoramic view of Ma On Shan which is taken from the Ma Liu Shui Ferry Pier. The photomontage (**Figure 2**) shows that this panoramic view is rather predominated by the high-rise buildings in the surrounding areas, including the nearby Ocean View (99mPD), Mountain Shore (120mPD) and Kam Tai Court (121mPD) at the waterfront, the proposed Yan On Estate extension (130-140mPD) and Ma On Shan Road North & South (125-140 mPD) in the vicinity. The proposed development would generally follow the height profile of the surrounding high-rise residential developments. Besides, the proposed development is well

below the Ma On Shan ridgeline, viewing from the opposite side of Tolo Harbour. The proposed development is visually compatible with the surrounding areas. Also, the air path/open space spine along Hang Fai Street towards inland of Ma On Shan would only be partially obstructed by the proposed development. The air path/open space spine would be largely maintained.

Viewpoint 2 – Pak Shek Kok Promenade (from the northwest)

7. This panoramic view of Ma On Shan is taken from the popular open space at the waterfront at Science Park. The photomontage shows that the proposed development is generally blend in well with the high-rise residential buildings in the surrounding areas, taking into account the proposed Yan On Estate extension (130mPD-140mPD) and Ocean View (99mPD), Mountain Shore (120mPD) & Kam Tai Court (121mPD) at the waterfront (**Figure 3**). Though the proposed development would inevitably reduce the visual relief afforded by the existing strip of open space, the building mass of the proposed development is considered to be not excessive when viewing from this distant viewpoint. The proposed development is below the Ma On Shan ridgeline viewing from the Pak Shek Kok Promenade. The proposed development is visually compatible with the surrounding areas.

Viewpoint 3 – Ma On Shan Recreation Ground (from the northeast)

8. This view is taken at the middle of Ma On Shan Recreation Ground (MOSRG) which is easily accessible to the public. The proposed development would be largely screened off by the Chinese YMCA College adjacent to Heng On Estate and the trees located at the north of MOSRG (**Figure 4**). Besides, this view is also partially predominated by the existing high-rise residential development (Vista Paradiso Tower 7) located across Sai Sha Road. The proposed development is visually negligible from this viewpoint.

Conclusion

9. To mitigate the impact on the air path, linear building layout in an east-west direction would be adopted and podium design would be avoided. To further improve the visual outlook, the colour scheme of the domestic block would be carefully worked out, together with appropriate façade design and treatments such as provision of green features, planter boxes and harmonized colour scheme etc. which would help add visual interest to the development.

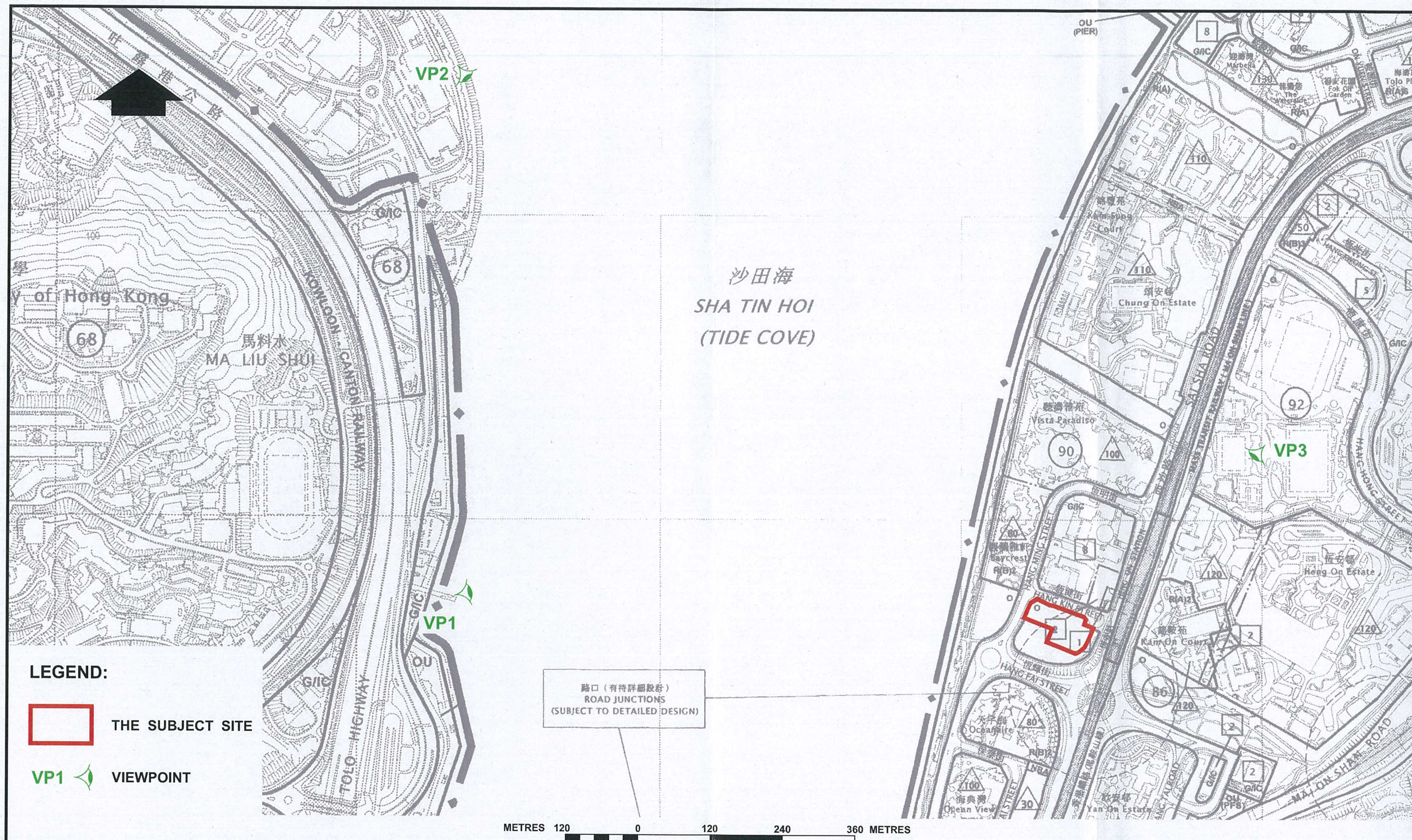
10. Based on the above, the proposed development is considered visually compatible with the surrounding areas.

Attachments

- |                 |  |
|-----------------|--|
| <b>Figure 1</b> | Location of the Three Selected Viewpoints  |
| <b>Figure 2</b> | Viewpoint 1 – Photomontage viewing from Ma Liu Shui Ferry Pier (from the west)           |
| <b>Figure 3</b> | Viewpoint 2 –Photomontage viewing from Pak Shek Kok Promenade (from the northwest)       |
| <b>Figure 4</b> | Viewpoint 3 –Photomontage viewing from Ma On Shan Recreation Ground (from the northeast) |

**HOUSING DEPARTMENT**  
**February 2015**





## LOCATION OF THE THREE SELECTED VIEWPOINTS


**HOUSING DEPARTMENT  
PLANNING SECTION**

### Figure 1

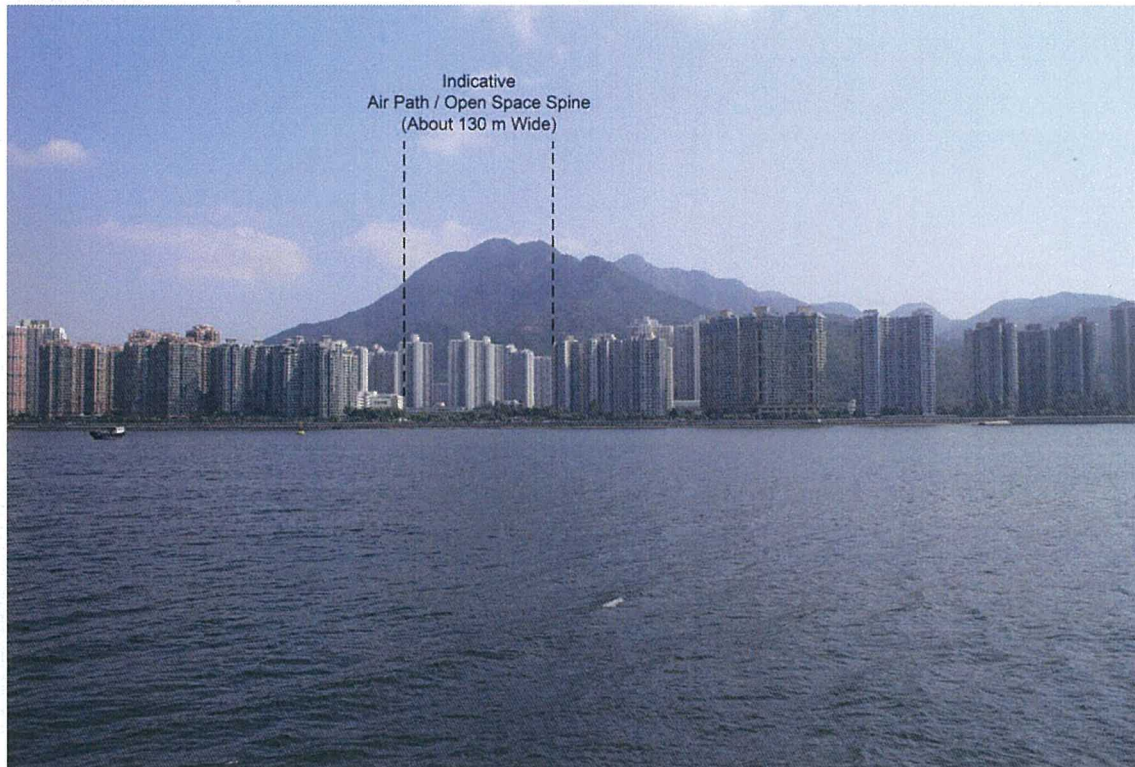
DATE :  
29. 1. 2015



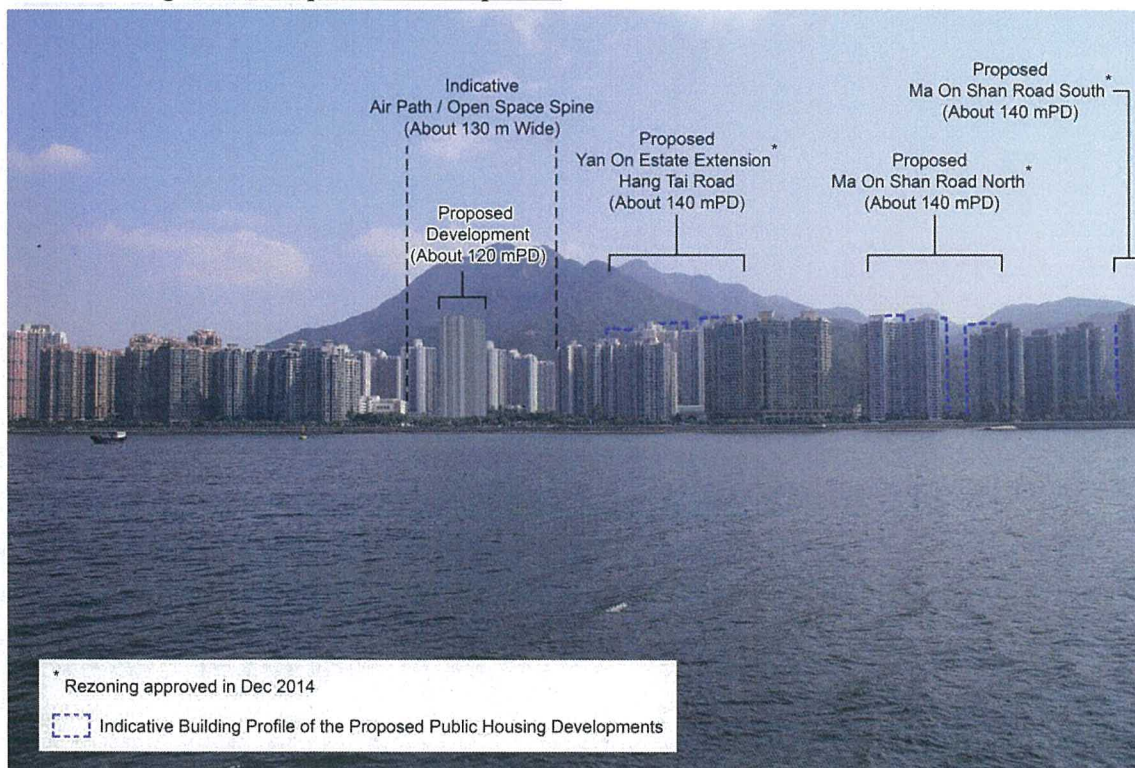
**Figure 2**

**Viewpoint 1 - Photomontage viewing from Ma Liu Shui Ferry Pier (from the west)**

Existing Condition without Proposed Development



Photomontage with Proposed Development





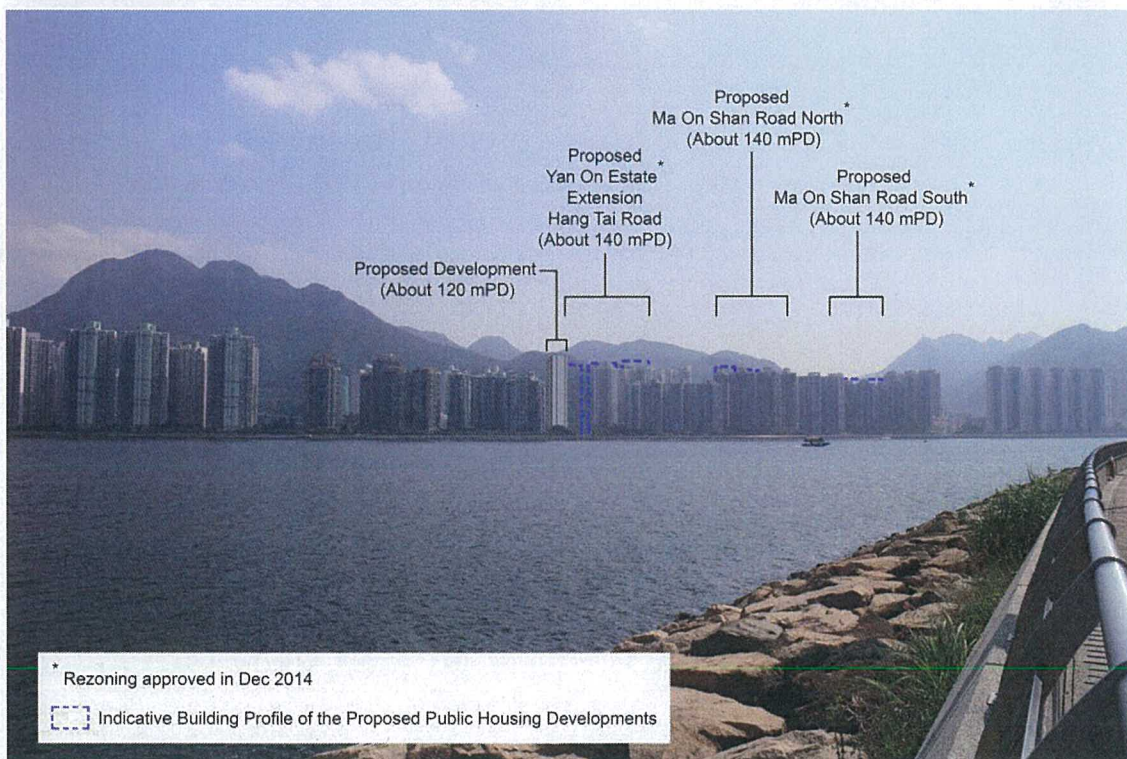
**Figure 3**

**Viewpoint 2 - Photomontage viewing from Pak Shek Kok Promenade (from the northwest)**

Existing Condition without Proposed Development



Photomontage with Proposed Development





**Figure 4**

**Viewpoint 3 - Photomontage viewing from Ma On Shan Recreation Ground (from the northeast)**

Existing Condition without Proposed Development



Photomontage with Proposed Development





**Provision of Open Space and Major G/IC Facilities in**  
**Draft Ma On Shan Outline Zoning Plan No. S/MOS/20A Planning Area**  
(as at February 2015)

Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population)	Provision		Surplus/ Shortfall (against planned provision)
			Existing Provision	Planned Provision	
District Open Space	10 ha per 100,000 persons	23.79ha	22.41	31.76	+7.97ha
Local Open Space	10 ha per 100,000 persons	23.79ha	37.62	42.06	+18.27ha
Secondary School	1 whole-day classroom for 40 persons aged 12 -17	275 classrooms	317	317	+42 classrooms
Primary School*	1 whole-day classroom for 25.5 persons aged 6 - 11	399 classrooms	301	301	-98 classrooms
Kindergarten/ Nursery	24 classrooms for 1,000 children aged 3 to 6	100 classrooms	141	155	+55 classrooms
Hospital #	5.5 beds per 1,000 persons	1,368	0	0	-1,368 beds
Clinic/Health Centre	1 per 100,000 persons	2	1	2	0
Divisional Police Station	1 per 100,000 to 200,000 persons	1	1	1	0
Magistracy (with 8 courtrooms)	1 per 660,000 persons	0	0	0	0
Divisional Fire Station	No specific population standard	N.A.	1	1	N.A.
Ambulance Station/Depot	No specific population standard	N.A.	1	1	N.A.
Sports Centre	1 per 50,000 to 65,000 persons	4	2	4	0
Sports Ground/ Sports Complex	1 per 200,000 to 250,000 persons	1	1	1	0

Type of Facilities	Hong Kong Planning Standards and Guidelines (HKPSG)	HKPSG Requirement (based on planned population)	Provision		Surplus/ Shortfall (against planned provision)
			Existing Provision	Planned Provision	
Swimming Pool Complex - standard	1 complex per 287,000 persons	1	1	1	0
Community Hall	No specific population standard	N.A.	2	3	N.A.
Integrated Children and Youth Services Centre	1 for 12,000 persons aged 6-24	4	5	5	+1
Integrated Family Services Centre	1 for 100,000 to 150,000 persons	2	2	2	0
Neighbourhood Elderly Centre	No specific population standard	N.A.	2	2	N.A.
Day Care Centre for the Elderly	No specific population standard	N.A.	2	3	N.A.
Residential Care Home for the Elderly	No specific population standard	N.A.	88 places	88 places	N.A.
Library	1 district library for every 200,000 persons	1	1	1	0
Post Office	1 per not less than 30,000 persons	Not more than 7	4	4	N.A.

\* Secretary for Education advised that, among the 304 existing primary school classrooms in Ma On Shan, only 230 primary school classrooms are in use and there is still an existing surplus of 74 primary school classrooms.

# Provision of hospitals is determined within a regional context and the Hospital Authority and Food and Health Bureau should comprehensively review the overall demand and provision of hospital facilities in the territory and determine whether there is a need for site reservation for hospitals to meet the demand.



**Summary of the consultation with the Development and Housing Committee (DHC) of Sha Tin District Council (STDC) regarding the proposed amendments to the draft Ma On Shan Outline Zoning Plan No. S/MOS/20 on 5 March 2015\***

On 5.3.2015, PlanD consulted DHC on the proposed amendments to the draft OZP. The view of DHC members are summarized below:

General

- (a) Members generally supported the initiative of increasing housing land supply to meet the acute housing demand but it should be a balancing act in that site selection should be careful to minimise impacts on the neighbourhood. Adequate transport and supporting facilities should also be provided for the new housing developments.
- (b) A holistic approach should be taken in the rezoning exercises such that the cumulative impacts on the already congested and crowded environment, as well as the demand for GIC facilities and open space, could be considered and assessed in one go.

Proposed public housing development at Hang Kin Street

- (c) Some members indicated that they had received objections from many local residents to the proposed public housing development as it was an open space situated at the air path of Ma On Shan and this would have adverse impacts on air ventilation/quality and urban greening of the new town.
- (d) Some members were concerned about the viability of the proposed development as there were busy roads around the site, as well as drainage reserve and fault zone/cavities beneath the site. These constraints would impose high cost of construction as well as potential difficulties for subsequent building maintenance in this single block development. The suitability of the site should be critically examined and the Town Planning Board (TPB) should be fully informed of these constraints.
- (e) Some members considered that the proposed use of site, which is currently zoned as "Open Space" ("O"), for public housing development is not acceptable as there is currently insufficient open space for the local residents and it will affect the air ventilation corridor for the district. A number of sites zoned "O" in the district had yet to have implementation programme. New GIC facilities should also be provided to cater for the new population.

- (f) A few members also indicated that carpark were highly inadequate in the area and it was congested outside the two schools at Hang Kin Street and Hang Ming Street near the site. The deletion of the existing temporary carparks at the site would worsen the situation. Besides, the proposed development would overstrain the public transport facilities including the railway and bus services.
- (g) Some members pointed out that the proposed building height of 120mPD was not compatible with the surrounding developments at a waterfront location. Housing Department should try to reduce the building height as far as possible.

Proposed private residential development near Yiu Sha Road

- (h) A few members opined that the proposed development was so close to the “Conservation Area” (“CA”) zone and that it might cause adverse ecological, visual and environmental impacts. Views of Agriculture, Fisheries and Conservation Department (AFCD) and Environmental Protection Department (EPD) on the proposed development should be sought.
- (i) There were also views that the subject site should not be developed into grand residence for rich persons only. It should be reserved for GIC use as there were insufficient community facilities like clinic in the area.

*\*The minutes of the DHC meeting on 5.3.2015 is not yet available. The recording of the meeting (in Chinese) is available on STDC web site:*

[http://www.districtcouncils.gov.hk/st/tc/2012\\_2015/committee\\_meetings.html](http://www.districtcouncils.gov.hk/st/tc/2012_2015/committee_meetings.html)