TOWN PLANNING BOARD

TPB Paper No. 10340

For Consideration by the Town Planning Board on 17.11.2017

PROPOSED AMENDMENTS TO
DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN NO. S/H6/15

Proposed Amendments to Draft Causeway Bay Outline Zoning Plan No. S/H6/15

1. <u>Introduction</u>

This paper is to brief Members on the review of development restrictions for the Causeway Bay area and to seek Members' agreement that:

- (a) the proposed amendments to the draft Causeway Bay Outline Zoning Plan (OZP) No. S/H6/15 as shown on the draft Causeway Bay OZP No. S/16/15A (**Annex B1**) (to be renumbered as S/H6/16 upon exhibition) and its Notes (**Annex B2**) are suitable for exhibition for public inspection under section 7 of the Town Planning Ordinance (the Ordinance); and
- (b) the revised Explanatory Statement (ES) of the OZP (**Annex B3**) is an expression of the planning intentions and objectives of the Town Planning Board (the Board) for the various land use zonings of the draft OZP No. S/H6/15A (to be renumbered as S/H6/16 upon exhibition) and is suitable for exhibition together with the draft OZP.

2. Background

- 2.1 The Causeway Bay Area is characterised by a mix of commercial/residential uses with open space, recreation clubs and government, institution and community (GIC) facilities (**Plan 1**).
- In 2001, building height restrictions (BHRs) of 30 storeys and 6 storeys were introduced to the "Residential (Group B)" ("R(B)") zones (subject to a plot ratio (PR) of 5) and the "Residential (Group C)" ("R(C)") zones (subject to a PR of 2) along the sloping Tai Hang Road in view of the limited road capacity and the intention to preserve the existing low to medium-density character of the area. A BHR of 234.7mPD was stipulated for the "Other Specified Uses" ("OU") annotated "Residential Development with Historical Site Preserved In-situ" zone covering the Haw Par Mansion and the adjoining residential development (Plans 2A and 2B). Subsequently, a review of the building height (BH) of the entire Causeway Bay Area was conducted and BHRs for other development sites were incorporated on the draft Causeway Bay OZP No. S/H6/15 in 2010 to achieve good urban form and to prevent excessively tall and out-of-context developments (Plans 2A and 2C).
- 2.3 Apart from BHRs, non-building area (NBA) and building gap (BG) (including podium BHR) were designated on the OZP to facilitate ventilation along major corridors and creating/preserving air paths. To improve the pedestrian walking environment in the area and to meet the requirement under the Hong Kong

Planning Standards and Guidelines (HKPSG), setback requirements were also stipulated in certain locations for footpath widening based on the advice of the Transport Department (TD) (**Plans 3A to 3C**). Provision for minor relaxation of these development restrictions has been incorporated in the Notes.

- During the statutory exhibition period of the draft Causeway Bay OZP No. S/H6/15 in 2010 (Annexes A1a and A1b), a total of 165 valid representations and 5 related comments were received. After giving consideration to the representations and comments on 11.3.2011, the Board decided to propose amendments to the OZP to meet/partially meet some representations. The proposed amendments were published under section 6C(2) of the Ordinance on 1.4.2011. Three valid further representations were received. On 24.6.2011, the Board decided not to uphold the further representations and confirmed the proposed amendments under sections 6F(8) and 6G of the Ordinance (Annexes A2a and A2b).
- On 10.6.2011, two judicial review applications (JRs) were filed by the Hysan Development Company Limited and its subsidiaries (Hysan Group) and the Excelsior Hotel (BVI) Limited (Excelsior) against the Board's decisions on their representations (R146 to R152), including amending the BHR of the sites at Sunning Road from 100mPD to 130mPD to only partially meet R150 and not upholding R146 to R149, R151 and R152. Submission of the draft Causeway Bay OZP to the Chief Executive in Council (CE in C) had since been stayed. In gist, the Courts have ruled and directed that:

Hysan Group's JR¹

- the 5m NBA restriction at Hysan Place is quashed (Court of First Instance (CFI) on 14.9.2012) (**Plan 3A**);
- Articles 6 and 105 of Basic Law are engaged in cases where planning restrictions imposed by the Board encroach upon a landowner's rights² (Court of Final Appeal (CFA) on 26.9.2016);
- the Board's decisions in respect of Hysan Group's representations (R147 to R152) made on 11.3.2011 are quashed³ and the decisions have to be remitted to the Board for consideration (Court of Appeal (CA) on 19.1.2015

Hysan Group's JR on the Causeway Bay OZP and the related appeals were heard by the Courts together with another JR lodged by the Hysan Group in respect of the Wan Chai OZP No. S/H5/26.

² CFA has also ruled that where such encroachment on landowner's rights is established, the extent, if any, of the encroaching measure's validity is determined by a proportionality analysis. The standard of assessment in the proportionality test is that the encroaching measure should only be struck down if it is imposed "manifestly without reasonable foundation". A four-step process for the proportionality analysis is also set out in CFA's judgement (see CACV No. 232 and 233 of 2012 at http://www.doj.gov.hk/eng/public/significant.html#c).

The Board's decisions of not upholding Representations No. R146 to R149, R151 and R152 were quashed. Regarding R150 in relation to the Sunning Road sites, the Board decided on 11.3.2011 to partially meet the representation by relaxing the BHR for these sites from 100mPD to 130mPD whereas the remaining part of the representation was not upheld. The CA only quashed the Board's decision in respect of not upholding the representation. The amended BHR of the sites (i.e. 130mPD), being the prevailing BHR under the draft plan, is still in force.

- 3 -

and CFA on 26.9.2016); and

Excelsior's JR

- the Board's decision in respect of Excelsior's representation (R146) made on 11.3.2011 is quashed and the decision has to be remitted to the Board for consideration⁴ (CFI on 2.6.2017).
- In considering the appeals arising from Hysan Group's JR, CA has stated that although Sustainable Building Design Guidelines (SBDG) and measures of the OZP belong to two different regimes, SBDG could have an effect on the working assumptions in respect of gross floor area (GFA) concession. There was no reason why the possible impact of SBDG in combination with the proposed restrictions under the draft OZP should not be acknowledged on a general level in the overall assessment of the adverse impact on redevelopment intensity. CA also ruled that it was not open for the Board to rely on the minor relaxation mechanism as one of the substantive reasons for rejecting the representations.

3. Implication of Sustainable Building Design Guidelines on Building Profile

- 3.1 SBDG was first promulgated through practice notes for building professionals issued by the Buildings Department in 2011. It establishes 3 key building design elements i.e. building separation, building setback and site coverage of greenery, with the objectives to achieve better air ventilation, enhance the environmental quality of living space, provide more greenery particularly at pedestrian level; and mitigate heat island effect. Compliance with SBDG is one of the pre-requisites for granting GFA concessions for green/amenity features and non-mandatory/non-essential plant rooms and services by the Building Authority (Annexes C1 and C2). Such requirement would also be included in the lease conditions of new land sale sites or lease modifications/land exchange.
- SBDG and OZP are two different regimes. The former mainly concerns with detailed building design, while OZP is to illustrate board land use zonings and planning principles to guide development and redevelopments. For OZPs, in general, restrictions on PR, BH, and/or site coverage (SC) will be stipulated where appropriate in order to control the development intensity having regard to the local settings and other relevant planning considerations including air ventilation. Stipulation of BHRs on the OZP is an important means to prevent excessively tall and out-of-context developments, especially for Hong Kong Island where there is generally no statutory planning control on PR for "Commercial" ("C") and "Residential (Group A)" ("R(A)") zones. OZP is more concerned with the general building bulk/mass, public space and major air path in a wider district context. Hence, the implications of SBDG on the building profile, particularly BH, and air ventilation of an area would be the focus in the review of development restrictions on the OZP.

⁴ The Court's ruling was based on the Consent Order prepared by both parties and filed on 24.5.2017.

-

- 4 -

- 3.3 Since the specific and relevant building design requirements under SBDG can only be determined at detailed building design stage and there are different options or alternative approaches to meet the requirements, it would be difficult to ascertain at early planning stage precisely the implications on individual development. The extent of implications of SBDG on the building profile can only be estimated in general terms by adopting typical assumptions.
- 3.4 In brief, amongst the 3 key building design elements under SBDG, the SC of greenery requirement is unlikely to have significant implication on the BH of a building as greenery can be provided within the setback area, at podium floors or in the form of vertical greening, etc. The implementation of the building setback and building separation requirements may lead to a reduction in SC of the podium/lower floors of a building (at Low Zone (0-20m)) and the GFA so displaced has to be accommodated at the tower portion of the building, which would result in increase in the number of storeys and thus BH. Details are set out in **Annexes D, D1a and D1b.**
- 3.5 With **assumptions**⁵ set out in **Annexes D2 and D3**, a typical commercial building will have a height ranging from 118m to 126m for incorporating building setback requirement and from 122m to 130m for incorporating building separation requirement, whereas a composite building within "R(A)" zone (with the lowest 3 floors for non-residential use and upper portion for residential use) will have a height ranging from 90m to 93m and from 93m to 96m for implementing building setback and building separation requirements respectively.

4. Scope of Review of Development Restrictions

- 4.1 To follow up on the Court's rulings, a review of development restrictions including BHRs and NBA/BG taking into account the implications of SBDG and permissible development intensity has been conducted for all commercial, "OU" annotated "Mixed Use" ("OU(MU)") and "Residential (Group A) 1" ("R(A)1") sites on the OZP (Plan 4).
- 4.2 For GIC developments⁶ and other "OU" sites, they have special functional and design requirements with a great variation in FTFH or open air design to suit operational needs. As they provide spatial and visual relief amidst the densely built environment, their current BHRs mainly reflect their existing BHs unless there is known committed redevelopment proposal with policy support. As there has been no substantial change in the planning circumstances since 2010, a general review of the BHRs for the "G/IC" and "OU" sites other than "OU(MU)" sites is considered not necessary.

⁵ Including types of building (domestic, non-domestic or composite building), site classification and corresponding permissible PR and SC under Building (Planning) Regulations (B(P)R), possible GFA concessions, podium height up to 15m, floor-to-floor height (FTFH), provision of carpark at basement level and refuge floor requirement.

Including "Government, Institution or Community" ("G/IC") sites and two Buddhist monasteries at Tai Hang Road within "R(A)1" on the OZP.

_

4.3 The "R(B)" and "R(C)" zones are also not covered by the current review as they are intended for medium and low-density developments. The current PR and BH restrictions on the OZP (PR of 5 and 30 storeys for "R(B)" zones; 30 storeys for "R(B)1" zone; and PR of 2 and 6 storeys for "R(C)" zones) would generally not hinder future redevelopments in complying with SBDG.

5. **Building Height Concept on Current OZP**

- 5.1 Set against the background of high redevelopment pressure in the area and the tendency for developers to propose high-rise buildings to maximise views of the harbour, the main purpose of BHRs is to provide better planning control on the BH of developments/redevelopments and to avoid excessively tall and out-of-context developments which will adversely affect the visual quality of the area.
- 5.2 The current BHRs were formulated based on an overall BH concept and other relevant considerations including existing BH profile, topography, site formation level, local characteristics, the waterfront and foothill setting, compatibility with surroundings, predominant land use and development intensity, visual impact, air ventilation, and a proper balance between public interest and private development right.
- 5.3 In line with the Urban Design Guidelines, a stepped height concept progressively ascending from the waterfront towards the inland area has generally been adopted. For the medium-rise belt in the inland area adjoining clusters of GIC facilities and open spaces, a lower BHR has been adopted (**Plan 2A**):
 - (a) For the commercial and "OU(MU)" sites, a **stepped BH profile** is set under the current OZP with **110mPD** for the area to the north of Hennessy Road/Yee Wo Street and generally **130mPD** for the area south of Hennessy Road/Yee Wo Street, except that
 - **200mPD** is stipulated for the street blocks covering two landmark buildings (Hysan Place and Lee Garden One (LG One)); and
 - **30mPD** is stipulated for the existing low-rise Pak Sha Road neighbourhood.
 - (b) **100mPD** is stipulated for the "OU(MU)" sites in Haven Street and area bounded by Moreton Terrace, Tung Lo Wan Road and Causeway Road, which are surrounded by low to medium-rise GIC/open space clusters.
 - (c) Stepped BHRs of 85mPD, 100mPD and 115mPD are stipulated for the northern part of the "R(A)1" zone covering the Wun Sha Street residential cluster. 165mPD is stipulated for the southern part of the zone to generally reflect the existing BH of Illumination Terrace at Tai Hang Road.

6. Proposed Building Height Restrictions

- Based on the analysis of a typical commercial or composite building profile as set out in paragraph 3.5 above, the BHRs for the commercial and "OU(MU)" sites (i.e. 30mPD/100mPD/110mPD/130mPD) and the "R(A)1" sites which are subject to a BHR of 85mPD on the OZP have to be relaxed to make allowance for redevelopments in complying with SBDG and the latest set of assumptions.
- 6.2 For the two landmark buildings (Hysan Place and LG One), the current BHR of 200mPD (which is the tallest BH band on the OZP) generally reflects their existing BHs. Such BH is sufficient to accommodate the requirements of SBDG in their future redevelopments. Likewise, the current BHRs of 100mPD, 115mPD and 165mPD for the "R(A)1" sites in the southern part of the Wun Sha Street residential cluster are generally sufficient for future redevelopments in complying with SBDG. There is no need to relax these BHRs for the sake of SBDG.

6.3 Commercial and "OU(MU)" Sites – Generally relaxed to 135mPD (Plan 5A)

- (a) The commercial and "OU(MU)" sites are concentrated in the north-western part of the Causeway Bay Area, bounded by Gloucester Road in the east and north, Percival Street/Hysan Avenue/Hoi Ping Road in the west and generally Leighton Road in the south. Close to Leighton Road, the development clusters at Haven Street and the area bounded by Tung Lo Wan Road, Moreton Terrace and Causeway Road are also zoned "OU(MU)".
- (b) Taking into account the existing site level (mainly around 5mPD) and the estimated maximum BH requirement of 130m for a typical commercial building to implement SBDG requirements (**Annex D2**), it is proposed to relax the BHRs of these sites from 100/110/130mPD to 135mPD to make allowance for redevelopments to comply with SBDG (**Annex E1**), except for the Pak Sha Road neighbourhood as discussed in paragraph 6.4 below.
- (c) Given the special site circumstances of the Lee Garden Two (LG Two) site, an assessment has been carried out to ascertain that the proposed BHR of 135mPD would be able to accommodate the GFA permissible under B(P)R as well as the SBDG requirements. The site has a narrow and elongated site configuration of over 190m in length and, for most part of the site, less than 19m in width. It abuts three narrow streets (i.e. Jardine's Crescent, Pennington Street and Yun Ping Road) of 9.1m to 12.4m wide. To comply with SBDG, redevelopment at the site is required to have building setback from the narrow streets and to avoid continuous building façade of more than 60m. It should be noted that SBDG has provision for alternative design based on performance based approach to address site constraints when there are genuine difficulties for the future redevelopment to comply with the prescriptive SBDG requirements. As shown in the two indicative schemes at Annexes F1 and F2, there is scope to meet SBDG requirements under the proposed BHR of 135mPD.

- 7 -

6.4 Pak Sha Road Neighbourhood – BHR of 30mPD to be maintained

- (a) Taking into account the distinctive character of this neighbourhood with uniform building style and its low-rise character (4 to 5 storeys (around 20mPD to 30mPD)) providing visual relief and breathing space amid the high-rise developments (**Plan 8A**), it is considered appropriate to maintain the current BHR of 30mPD for the area. Moreover, under the agreement made in the 1950s between the original owner (Lee Hysan Estate Company Limited (LHECL)) and the sub-lease for these sites, there is a restrictive covenant requiring the sub-leasees to "keep and maintain European style dwelling houses of a uniform design".⁷
- (b) Notwithstanding the above, it is recognised that the area would have greater redevelopment potential if the restrictive covenant is relaxed with agreement between LHECL and the current lot owners. To avoid piecemeal redevelopments of individual lots, it has been stipulated in the ES of the OZP that any future redevelopment for this area should be in the form of comprehensive redevelopment supported by an urban design plan and technical assessments. Should the area be ripe for redevelopment in future, the concerned parties could submit a comprehensive redevelopment scheme to the Board for consideration through section 12A application.

6.5 Northern Part of Wun Sha Street Residential Area – Relaxed from 85mPD to 100mPD (Plan 5A)

- (a) The northern part of the "R(A)1" zone covering the Wun Sha Street residential area comprises a number of small street blocks (**Plan 8B**) where future redevelopments will not be subject to the building separation requirement under SBDG⁸.
- (b) As demonstrated in **Annex D3**, the estimated BH requirement for a typical "R(A)" composite building to incorporate building setback to comply with SBDG is ranging from 90m to 93m. Taking into account the site levels (around 4-7mPD), it is proposed to relax the BHR for the sites generally bounded by Tung Lo Wan Road, Wun Sha Street, King Street and Tai Hang Road from 85mPD to 100mPD (**Annex E2**).

7. Review of Air Ventilation Measures

Air Ventilation Assessment

7.1 The air ventilation measures, including NBA and BG, on the current OZP were formulated during the course of the BH review in 2010 before SBDG was put in

⁷ In view of the said restrictive covenant, the Court in 1997 granted LHECL a permanent injunction to restrain the owner of 6-8 Kai Chiu Road to develop a 23-storey commercial building at its lot.

⁸ The concerned street blocks are all less than 2 ha and the maximum length of the street blocks is about 48m (located at Sun Chuen Street) only, which do not meet the criteria requiring building separation under SBDG (i.e. site area of ≥ 2 ha; or proposing continuous building façade ≥ 60 m).

place. An updated AVA (EE) has been undertaken to assess the air ventilation implications should the relaxed BHRs proposed in paragraph 6 above be incorporated into the OZP (AVA (2017)) to facilitate future redevelopments in complying with SBDG. A copy of the AVA (2017) is at **Annex G1**. Major findings are as follows –

- (a) Despite OZP and SBDG are two different regimes, they both contribute to a better built environment. SBDG is an administrative means to promote sustainable building design by granting of GFA concessions. It mainly aims to enhance building porosity to avoid screen wall effect and promote air movement between developments to achieve better dispersion and air mixing. While the adoption of SBDG in any buildings is entirely a commercial decision of the developers, such requirement will be included in the lease conditions of new land sale sites or lease modifications/land exchanges. It is anticipated that the general wind environment of the city would be improved in the long run when the number of redeveloped buildings follow SBDG increases gradually.
- (b) Relying on SBDG alone, however, would not be sufficient to ensure good air ventilation at the district level as concerned building design measures are drawn up on the basis of and confined to individual development sites. The beneficial effect could be localised and may not have taken into account the need of a wider area (e.g. building setback may not be aligned or building separation may not be at the right location to enhance air flow). Hence, incorporating air ventilation measures (such as NBA or BG) at strategic locations on the OZP to maintain major air paths or create inter-connected air paths of district importance is still considered necessary. Otherwise, provision of well-connected air paths of district importance which is important to densely developed area with poor wind environment such as Causeway Bay could not be ensured.
- (c) It is reaffirmed that the existing wind environment in the north-western part of Causeway Bay is poor due to the high building density with tall buildings and narrow streets. Under such high BH to street width ratio (H/W ratio), it is difficult for wind from the roof top level to penetrate to the street level. Incoming wind would mostly skim over the developments. The so-called "downwash" is not expected to be obvious as the streets are narrow and most buildings are not different significantly in height. Under such circumstances, BH alone ceases to be the key consideration for the pedestrian wind environment in this area.
- (d) However, a general increase in BH on an area basis would further elevate the already high urban canopy created by tall buildings. A larger wind shadow at the downstream areas would be created. Yet by improving permeability of developments, such impact of the wind shadow would be alleviated.
- (e) Building design measures, including NBAs, BGs and setbacks, to reduce ground coverage and create building permeability particularly at low level and effective air paths to facilitate airflow from prevailing wind

directions, are more important for improving the pedestrian wind environment in Causeway Bay area. While it is ideal that air paths are as wide as possible, it is the prevailing practice that an effective air path should be at least 15m in width for wind penetration. Such principle is in line with the building setback and building separation requirements stipulated in SBDG.

Great George Street and Sugar Street

- (f) In Causeway Bay area, Great George Street and Sugar Street are important air paths of district significance facilitating penetration of prevailing winds from NE, ENE and E directions to reach Hennessy Road and ventilate Causeway Bay and continue on towards Wan Chai area. The width of Great George Street is 14.1m to 16.4m. As majority part of the street is wider than 15m, an effective air path could be maintained without designated NBA on its two sides (**Plan 5B1**).
- (g) However, Sugar Street is less than 15m wide. NBAs are recommended on both sides of the street in order to create an effective air path of 15m wide. Taking into account the existing width of Sugar Street of about 12.3m, it is proposed to adjust the width of the strips of NBA currently designated on the northern and southern sides of Sugar Street from 2m and 4m respectively to 1.5m (Plan 5B1).

Between Kingston Street and Jaffe Road

(h) Kingston Street is another important wind entrance for this area. The NBA designated between Jaffe Road and Kingston Street should be widened to 15m for effective air flow to Jaffe Road as one of the major east-west air paths having district significance all the way towards Wan Chai area. However, the site at 51 Paterson Street has a width of 23m only. Widening of the NBA would impose severe constraints on its future redevelopment which would in turn hinder the realisation of the NBA. Considering the practical situation, the width of the current NBA of 8m on the OZP is proposed to be maintained (Plan 5B2).

BG between The Excelsior and World Trade Centre

(i) Currently, a ground level BG (10m (W) x 8m (H)) is demarcated on the OZP between The Excelsior and World Trade Centre with an alignment similar to the existing pedestrian walkway there. The updated AVA (2017) recognised that this BG would help enhance the penetration of northerly wind and sea breeze to the busy pedestrian street between Yee On Building and Chee On Building and then to East Point Road. Yet, the wind penetration along such a tunnel-like BG may not be most effective given the length of the site and there are alternative building designs (e.g. ventilated communal garden or BG between podium and building block) that could serve similar air ventilation purpose for the locality other than a prescribed 10m x 8m BG at ground level. To this end, a taller BHR at 135mPD has been proposed for The Excelsior and World Trade Centre

and their adjoining development sites, allowing scope and flexibility for their future redevelopments to adopt building designs conducive to wind permeability. (Plan 5B2)

Between Lockhart Road and Hennessy Road

(j) The 8m to 12m wide NBA currently designated between Lockhart Road and Hennessy Road has limited effect as part of an air path for northerly wind/sea breeze penetration as it is not aligned with Cannon Street. Although it could break up the long façade formed by the line of buildings between Lockhart Road and Hennessy Road to facilitate air movement, such function could be met by the implementation of SBDG through redevelopments in the locality (**Plan 5B3**).

Sunning Road area, Lee Garden One and Lee Garden Two

- (k) The requirements for 2m wide NBA on the two sides of Yun Ping Road between LG One and LG Two and the BHRs of 32mPD and 20mPD for the podium areas of LG One and LG Two respectively on the current OZP are intended to facilitate penetration of prevailing wind along Yun Ping Road to reach the Pak Sha Road area.
- (l) The updated AVA (2017) has reviewed the wind environment in the areas around Sunning Road, LG One and LG Two. Without the requirements of NBAs along Yun Ping Road and BHRs for the podium areas at LG One and LG Two, the pedestrian wind environment at Pak Sha Road area and Jardine's Crescent area would be worsened as the original wind entrance may be lost. Hence, the penetration of prevailing SSE, SSW and SW winds will not be able to reach Yun Ping Road, Lan Fong Road and eventually Pak Sha Road.
- (m) Should SBDG be followed in the redevelopments of LG One and LG Two, a permissible BH of 200mPD and 135mPD respectively would allow sufficient scope and flexibility for the new buildings to provide building setback along narrow streets and building separation among developments to maintain wind permeability of the area, serving similar purpose of the current NBA and BG requirements. (Plan 5B4)

Wun Sha Street Residential Cluster

(n) For the northern part of the Wun Sha Street residential cluster, a stepped BH profile of 85-100-115mPD is imposed on the current OZP to facilitate air movement at the street level. However, as mentioned in paragraph 7.1(c) above, the downwash effect is constrained by the narrow streets in the area with high H/W ratio. While the BHR for the northern part of the area is proposed to be relaxed from 85mPD to 100mPD, the difference between a 2-step and 3-step BH profiles in air ventilation terms is not expected to be significant. On the other hand, the regular street pattern in the cluster, which is well connected and aligned with the NE and SE prevailing wind directions, is more important to air movement particularly

at street level.

Proposed Revisions to Air Ventilation Measures

- 7.2 Based on the above findings, the air ventilation measures on the OZP are proposed to be revised as follows:
 - (a) reduction in the width of the NBAs on the northern and southern sides of Sugar Street from 2m and 4m respectively to 1.5m (Plan 5B1);
 - (b) deletion of the NBAs along Great George Street (Plan 5B1);
 - (c) deletion of the BG between 280 Gloucester Road (World Trade Centre) and 281 Gloucester Road (The Excelsior) (**Plan 5B2**);
 - (d) deletion of the NBA between Lockhart Road and Hennessy Road (Plan 5B3); and
 - (e) deletion of the NBA on both sides of Yun Ping Road and the BG (podium BHRs) for the podium areas of LG One and LG Two (**Plan 5B4**).
- 7.3 The revised NBA requirements along Sugar Street (accounting for 3-8% of the area of the affected development sites⁹) and the NBA between Kingston Street and Jaffe Road to be retained (accounting for 2-18% of the area of the affected development sites¹⁰) have been taken into account in the BH assessment in **Annex E1**.

8. <u>Footpath Widening</u>

8.1 On the current OZP, setback requirements are stipulated for areas where there is a need to improve pedestrian circulation and walking environment. TD has reaffirmed that the footpaths at Jaffe Road (southern side), Lockhart Road, Cannon Street (eastern side) and Lee Garden Road (western side and part of eastern side (between Kai Chiu Road and Pak Sha Road)), Lan Fong Road and Jardine's Bazaar, Haven Street and the Wun Sha Street area should be widened, and the OZP requirements for provision of 0.5m or 1.5m wide setback from the boundary of the lots fronting these roads should be maintained (**Plan 6B**). Yet, the ES of the OZP should be updated to explain that the setback requirements will not apply to underground developments, and that a minimum clear headroom of 3.5m from ground level should be provided within the setback areas for free pedestrian passage without obstruction.

⁹ The affected development sites are Grand View Commercial Centre, Fair View Commercial Building, Causeway Bay Centre, Causeway Bay Commercial Building, V Causeway Bay and Lok Sing Centre (**Plan 5B1**)).

¹⁰ The affected development sites are Fairview Mansion, Paterson Building, Chee On Building, Yee On Building and The Excelsior (**Plan 5B2**)).

- 8.2 Specifically, TD advises that the setback requirements along Lee Garden Road and Lan Fong Road under Hysan Group's JR (**Plan 9A**) are to satisfy the minimum width of 3.5m for footways providing access to buildings generally as stipulated in HKPSG, taking into account desirable pedestrian circulation and walking environment, street activities as well as scarcity of land resources. As the widths of the existing footpaths at some sections of Lee Garden Road and Lan Fong Road are less than the required width of 3.5m, it is necessary to retain the setback requirements of 1.5m for the eastern side of Lee Garden Road between Kai Chiu Road and Pak Sha Road and at the western side of Lee Garden Road between Hennessy Road and Russell Street, and 0.5m for the western side of Lee Garden Road between Russell Street and Hysan Avenue. The setback requirement of 1.5m at both sides of Lan Fong Road also needs to be maintained.
- 8.3 It should be noted that any proposals involving dedication of land for public passage and surrender of land for street widening may be entitled to bonus GFA under B(P)R, and any such claim would be duly considered by the Building Authority in accordance with the established practice. For the setback requirements on the OZP, which account for an average of 7-8% of the area of the affected lots (Plans 3B and 3C), the possible bonus GFA arising from such setback has also been taken into account in the BH assessments in Annexes E1 and E2.

9. <u>Visual Consideration</u>

- 9.1 In the long term, the BH profile of the area will mainly follow the BHRs on the OZP, except for those existing and committed developments (such as approved building plans) already exceed the respective BHRs. However, for the purpose of presenting the proposed BH profile more realistically in the medium term, sites which have higher redevelopment propensity are assumed to be redeveloped up to the BHRs in the photomontages shown in **Plans 7A to 7F**. Taking into account that developments having fewer storeys and therefore smaller number of units would more likely undergo ownership assembly and that older buildings would have a greater opportunity for redevelopments (especially for sites that have not been fully developed to the maximum development potential), only developments with a building age of 30 years or over and with a BH of 15 storeys or below are assumed to have higher redevelopment propensity.
- 9.2 According to the Visual Appraisal (**Annex G2**), the proposed BHR relaxation will reduce the visual openness (e.g. view of the sky and mountain backdrop) and dilute the original stepped BH concept. However, the BH profile under the relaxed BHRs is not incompatible with the surrounding visual context and will not affect the views to the ridgelines to be protected nor protrude into the 20% building free zone below ridgelines. Varieties in redevelopment scales and design styles/considerations would also contribute to the outlook of the city skyline.
- 9.3 The BHR relaxation is to allow design flexibility for future redevelopments in meeting SBDG which will improve the overall building permeability and visual amenity of the pedestrian environment. The proposed BHRs would be a matter of trade-off amongst different urban design considerations in the dense urban core

like Causeway Bay. In overall terms, the proposed BHR relaxation will not result in unacceptable visual impact.

10. Responses to Representations No. R146 to R152

- 10.1 To follow up on the court orders, Representations R146 to R152 have been re-examined with reference to the proposals set out in paragraphs 6 and 7 above, Court's rulings on the JRs and related appeals, and the prevailing circumstances of the representation sites.
- 10.2 **R147** (by Hysan Group) is a general representation against the BHR/NBA/BG/setback requirements and the rezoning of "C/R" sites, whereas **R146** (by Excelsior) and **R148 to R152** (by Hysan Group) are against the restrictions of specific sites, including The Excelsior (**R146**), LG Two (**R148**), Hysan Place and The Goldmark (**R149**), sites along Sunning Road (**R150**), LG One (**R151**) and One Hysan Avenue (**R152**) (**Plans 9, 9A to 9G**).
- 10.3 The Representers propose to delete the NBA, BG and setback requirements from the Plan; and to remove the BHR (for The Excelsior), or to revise the BHRs to reflect the BH of the existing buildings (LG One) or approved building plans (for Hysan Place and The Goldmark, Sunning Road sites and One Hysan Avenue). Full set of the representations are at **Annex H3**.
- 10.4 Under the current OZP proposals, the BHRs for The Excelsior, LG Two, Sunning Road sites and One Hysan Avenue will be relaxed, and the NBA and BG requirements at The Excelsior, LG One and LG Two sites will be deleted as follows:

Representation Site	Representers' Proposal	Current OZP Proposal
R146 (The Excelsior)	No BHRNo BG (10m(W) x 8m(H) from ground)	BHR of 135mPD (relaxed from 110mPD) BG deleted
R148 (LG Two)	 No NBA along Yun Ping Road Relax BHR for podium from 20mPD to 130mPD or 32mPD; or BHR of 150mPD for whole site & SC of 62.5% for tower 	NBA deleted Podium BHR (BG) deleted BHR of 135mPD (relaxed from 130mPD)
R149 (Hysan Place & The Goldmark)	 BHR of 231mPD (BH of approved building plans is 230.7mPD) No NBA along Lee Garden Road 	BHR of 200mPD (remains unchanged) No NBA along Lee Garden Road (quashed by CFI)
R150 (Sunning Road sites)	BHR of 150mPD	BHR of 135mPD (relaxed from 130mPD)

Representation Site	Representers' Proposal	Current OZP Proposal
R151 (LG One)	 BHR of 210mPD (existing BH is 208mPD) No podium BHR (32mPD) No NBA along Yun Ping Road No setback along Lan Fong Road 	BHR of 200mPD (remains unchanged) Podium BHR (BG) deleted NBA deleted Setback along Lan Fong Road (remains unchanged)
R152 (One Hysan Avenue)	 BHR 150mPD (BH of approved building plans is 145.33mPD) No setback along Lee Garden Road 	BHR 135mPD (relaxed from 130mPD) Setback along Lee Garden Road (remains unchanged)

- 10.5 The relaxed BHRs have taken into account the SBDG requirements and permissible development intensity. With general public concern on excessive building bulk and height, further relaxation of the BHR for the Sunning Road sites (R150) and One Hysan Avenue (R152) to 150mPD is not supported. It is also considered inappropriate to adopt the existing BH of LG One at 208mPD (R151) as BHR on the OZP as it would jeopardise the overall BH profile. The current BHR of 200mPD for Hysan Place has already reflected its existing BH (199mPD). The approved building plans for the Hysan Place and The Goldmark site at 231mPD (R149) should not be taken as a basis in determining the BHR on the OZP so as to avoid proliferation of excessively tall buildings. The approved building plans could still be implemented according to the provisions of the Buildings Ordinance.
- 10.6 A summary of the representation grounds and the responses of Planning Department (PlanD) in consultation with relevant government departments is at **Annex H1**.
- 10.7 During the publication of the representations in 2010, one Comment No. C1 was received from Designing Hong Kong Limited opposing to Representations No. R146 to R152, amongst others. But C1 does not contain any views on the specific matters raised in these representations. The comment is at **Annex H4**.
- 10.8 Should the Board agree to the proposed amendments to the OZP as detailed in paragraph 11, Representers No. **R146 to R152** and Commenter **C1** will be informed accordingly. Representers No. **R146 to R152** may submit representations for the Board's consideration under section 6 of the Ordinance if they so wish.

11. Proposed Amendments to OZP

Amendments to Matters Shown on the Plan

Based on paragraphs 6 and 7 above, the following amendments to matters shown on the draft Causeway Bay OZP (Annex B1) are proposed:

- **Item A** Revision of the BHRs for the "C", "C(1)", "C(2)" and "OU(MU)" zones from 100mPD, 110mPD or 130mPD to 135mPD, except for the sites bounded by Lee Garden Road, Hysan Avenue, Yun Ping Road, Kai Chiu Road, Jardine's Crescent, Jardine's Bazaar and Hennessy Road.
- **Item B1** Revision of the BHR of the north-eastern part of the "C(2)" site covering LG One at 33 Hysan Avenue from 32mPD to 200mPD.
- **Item B2** Deletion of the requirement for a 2m wide NBA along Yun Ping Road from the north-eastern part of the "C(2)" site covering LG One at 33 Hysan Avenue and stipulation of BHR of 200mPD for that part of the site.
- **Item C1** Revision of the BHR of the "C" site covering LG Two at 28 Yun Ping Road from 20mPD and 130mPD to 135mPD.
- **Item C2** Deletion of the requirement for a 2m wide NBA along Yun Ping Road from the "C" site covering LG Two at 28 Yun Ping Road and stipulation of BHR of 135mPD for that part of the site.
- **Item D** Revision of the BHR for the "R(A)1" sites generally bounded by Tung Lo Wan Road, Wun Sha Street, King Street and Tai Hang Road from 85mPD to 100mPD.
- **Item E1** Adjustment of the width of the NBA requirements on the northern and southern sides of Sugar Street from 2m and 4m respectively to 1.5m by deleting parts of the NBAs and stipulating BHR of 135mPD for the areas concerned.
- **Item E2** Deletion of the NBA requirements to the south of Lockhart Road and on the two sides of Great George Street and stipulation of BHR of 135mPD for the areas concerned.
- **Item E3** Deletion of the BG requirement between 280 and 281 Gloucester Road.
- **Item F** Stipulation of BHR of 200mPD for a 5m wide strip of land along the lot boundary of Hysan Place fronting Lee Garden Road.
- Opportunity is taken to include the road/tunnel reserve for the proposed Central Wan-Chai Bypass and the railway reserve for the proposed Shatin to Central Link in accordance with the respective Road Scheme and Railway Scheme authorised by CE in C on the Plan for information.

Amendments to the Notes of the OZP

11.3 Amendments to the Notes are proposed as follows:

NBA/BG

(a) Deletion of the Remark under "C" zone requiring the provision of NBA along Yun Ping Road.

- (b) Deletion of the Remark under "C" zone requiring the provision of BG between 280 and 281 Gloucester Road.
- (c) In relation to Amendment Item E3 on the Plan, and paragraphs (a) and (b) above, corresponding revision to the minor relaxation clause under the "C" zone.

Clarification of GFA/PR Exemption Clause

- (d) Revisions to the exemption clause on maximum GFA/PR in the Remarks for the "R(B)", "R(C)" and "OU" annotated "Residential Development with Historical Site Preserved In-situ" zones to clarify that exemption of caretaker's quarters and recreational facilities are only applicable to those facilities for the use and benefit of all the owners or occupiers of the domestic building or domestic part of the building.
- The proposed amendments to the Notes of the OZP (with additions in **bold and italics** and deletions in 'cross-out') are at **Annex B2** for Members' consideration.

12. Revision to the Explanatory Statement of the OZP

The ES of the OZP is proposed to be revised to take into account the proposed amendments as mentioned in the above paragraphs. Opportunity has been taken to update the general information for various land use zones to reflect the latest status and planning circumstances. The proposed amendments to the ES of the OZP (with additions in **bold and italic** and deletions in 'cross-out') are at **Annex B3** for Members' consideration.

13. Plan Number

Upon exhibition for public inspection, the Plan will be renumbered as S/H6/16.

14. Consultation

Departmental Consultation

- 14.1 The proposed amendments to the draft Causeway Bay OZP No. S/H6/15 have been circulated to relevant government bureaux and departments for comment. Representations No. **R146 to R152** have also been circulated to relevant bureaux and departments for re-examination.
- 14.2 Comments of the Commissioner for Transport, Chief Building Surveyor/Hong Kong East and Heritage Unit of Buildings Department, Chief Town Planner/Urban Design and Landscape of PlanD and the District Lands Officer/Hong Kong East of Lands Department have been incorporated in the above paragraphs and **Annexes H1 and H2** where appropriate.

- 14.3 The Director of Environmental Protection advises that adverse environmental impact is not anticipated for the proposed OZP amendments because the relaxation of BHR is minor. He has no objection to the proposed amendments.
- 14.4 The following government bureaux and departments have no objection or no comment on the proposed amendments and representations:
 - (a) Lands Unit, Development Bureau;
 - (b) Planning Unit, Development Bureau;
 - (c) Chief Highway Engineer/Hong Kong, Highways Department (HyD);
 - (d) Major Works Project Management Office, HyD;
 - (e) Chief Engineer/Railway Development 2-2, Railway Development Office, HyD;
 - (f) Commissioner of Police;
 - (g) Chief Engineer/Hong Kong & Islands, Drainage Services Department;
 - (h) Chief Engineer/Construction, Water Supplies Department;
 - (i) Project Manager (Hong Kong Island & Islands), Civil Engineering and Development Department (CEDD);
 - (j) Chief Engineer/Land Works, CEDD;
 - (k) Head of Geotechnical Engineering Office, CEDD;
 - (1) Direct of Fire Services:
 - (m) Chief Architect/Central Management Division 2, Architectural Services Department;
 - (n) Director of Electrical and Mechanical Services;
 - (o) Director of Food and Environmental Hygiene;
 - (p) Director of Agriculture, Fisheries and Conservation;
 - (q) Director of Leisure and Cultural Services;
 - (r) Antiquities and Monuments Office; and
 - (s) District Officer (Wan Chai), Home Affairs Department.

Consultation with Wan Chai District Council and Public Consultation

14.5 The proposed amendments to the OZP are mainly a follow up consequential to the Court's rulings on the JRs and related appeals in respect of the draft Causeway Bay OZP No. S/H6/15. Subject to agreement of the proposed amendments by the Board for gazetting under section 7 of the Ordinance, the Wan Chai District Council will be consulted during the 2-month statutory plan exhibition period. Members of the public can submit representations on the OZP to the Board during the same statutory plan exhibition period.

15. Decision Sought

Members are invited to:

(a) <u>agree</u> to the proposed amendments to the draft Causeway Bay OZP and that the draft Causeway Bay OZP No. S/H6/15A (**Annex B1**) (to be renumbered as S/H6/16 upon exhibition) and its Notes (**Annex B2**) are suitable for exhibition under section 7 of the Ordinance; and

(b) <u>adopt</u> the revised ES at **Annex B3** for the draft Causeway Bay OZP No. S/H6/15A as an expression of the planning intentions and objectives of the Board for the various land use zonings of the OZP and the revised ES will be published together with the draft OZP.

Attachments

Annexes Ala & 1b	Draft Causeway Bay OZP No. S/H6/15 (reduced to A3 size) together
	with Schedule of Amendments to the approved Causeway Bay OZP No.
	S/H6/14
Annexes A2a & 2b	Amendment Plan No. R/S/H6/15-A2 together with Schedule of
, B4	Amendments made under Sections 6F(8) and 6G of the Ordinance
Annex B1	Draft Causeway Bay OZP No. S/H6/15A
Annex B2	Revised Notes for the draft Causeway Bay OZP No. S/H6/15A
Annex B3	Revised Explanatory Statement for the draft Causeway Bay OZP No.
A C1	S/H6/15A
Annexes C1	APP-151 "Building Design to Foster a Quality and Sustainable Built
Annex C2	Environment" A DR 152 "Systemable Building Design Guidelines"
Annexes D, D1a & 1b	APP-152 "Sustainable Building Design Guidelines" Implications of SBDG
Annex D2	Basic Building Profile – Commercial Building
Annex D3	Basic Building Profile – Composite Building
Annex E1	Assessment of Building Height – Commercial and Mixed Use Sites
Annex E2	Assessment of Building Height – Residential (Group A) 1 Sites
Annexes F1 & F2	Notional Schemes for the Lee Garden Two site
Annex G1	Air Ventilation Assessment by Expert Evaluation (2017)
Annex G2	Visual Appraisal
Annex H1	Summary of Representations No. R146 to R152 and Responses
Annex H2	Lease Particulars
Annexes H3-a1 & a2	Representation No. R146
Annexes H3-b1 to b12	Representations No. R147 to R152
Annex H4	Comment No. C1
Annex J1	TPB Paper No. 8762 for Consideration of Group 1 Representations and
	Comments to Draft Causeway Bay OZP No. S/H6/15 (main paper,
	plans and Annex V only)
Annex J2	Extract of the Confirmed Minutes of the TPB Meeting on 11.3.2011
Plan 1	Aerial Photo of Causeway Bay
Plan 2A	Current Building Height Restrictions
Plan 2B	Building Height Restrictions imposed in 2001
Plan 2C	Building Height Restrictions imposed in 2010
Plan 3A	Current Non-building Area, Building Gap and Setback Requirements
Plans 3B, B1 to B3	Footpath Widening Requirements in Commercial and Mixed Use Sites
Plans 3C, C1 & C2	Footpath Widening Requirements in Residential (Group A) 1 Sites
Plan 4	Sites with Building Height Restrictions under Review
Plans 5A	Proposed Building Height Restrictions
Plans 5B1 to 5B4	Proposed Revision to Non-building Area/Building Gap Requirements
Plan 6A	Consolidated Building Height Restrictions

Plan 6B Consolidated Non-building Area/Setback Requirements
 Plan 6C Consolidated Proposal of Development Restrictions

Plans 7, 7A to 7F Viewing Points and Photomontages of Building Height Profile

Plans 8A & 8B Site Photos

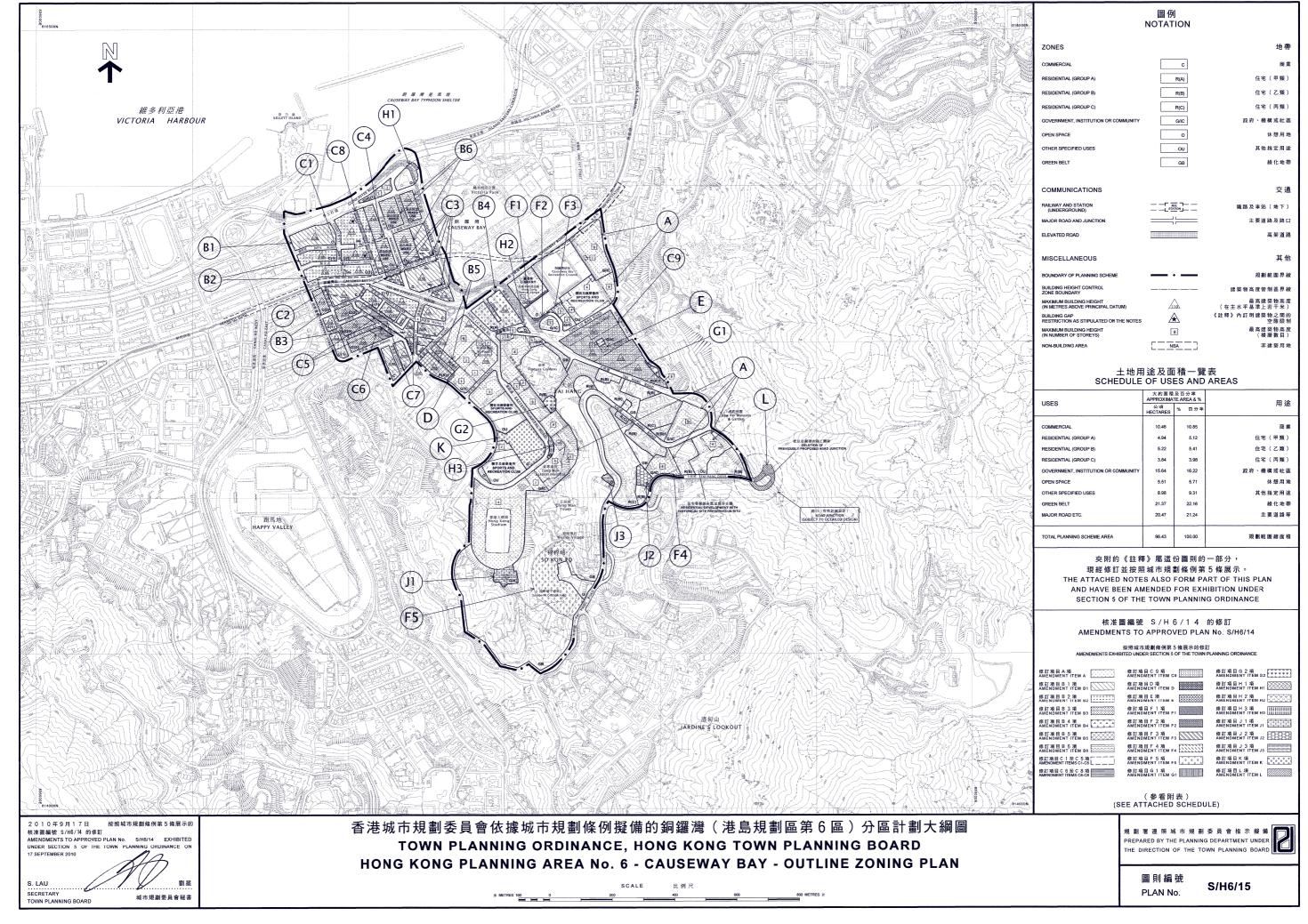
Plans 9, 9A to 9G Representations No. R146 to R152 – Location Plan, Site Plan and

Site Photos

Drawing 1 Proposed Building Heights submitted by Representers No. R147 to

R152

PLANNING DEPARTMENT November 2017



SCHEDULE OF AMENDMENTS TO THE APPROVED CAUSEWAY BAY OUTLINE ZONING PLAN NO. S/H6/14 MADE BY THE TOWN PLANNING BOARD UNDER THE TOWN PLANNING ORDINANCE (Chapter 131)

I. Amendments to Matters shown on the Plan

- Item A Stipulation of building height restrictions for the "Commercial" ("C"), "Commercial(1)" ("C(1)"), "Commercial(2)" ("C(2)"), "Residential (Group A)" ("R(A)"), "Residential (Group A)1" ("R(A)1"), "Government, Institution or Community" ("G/IC") and "Other Specified Uses" ("OU") zones.
- Items B1 Rezoning of the "Commercial/Residential" ("C/R") sites in the area to B3 bounded by Gloucester Road, Percival Street, Hysan Avenue, Hoi Ping Road and Leighton Road (except for the area under Item B6) to "C", "C(1)" and "C(2)", and stipulating building height restrictions for the zones.
- Item B4 Rezoning of an area bounded by Causeway Road, Moreton Terrace and Tung Lo Wan Road from "C/R" to "R(A)", and stipulating building height restriction for the zone.
- Item B5 Rezoning of the sites on the two sides of Haven Street from "C/R" to "R(A)1", and stipulating building height restriction for the zone.
- Item B6 Rezoning of the sites on the two sides of Cleveland Street and Paterson Street north of Great George Street from "C/R" to "OU" annotated "Mixed Use" ("OU(MU)"), and stipulating building height restriction for the zone.
- Item C1 Designation of a strip of land within the "C(1)" zone to the south of Lockhart Road as non-building area.
- Item C2 Designation of a strip of land at the western part of the "C" zone covering 500 Hennessy Road as non-building area.
- Item C3 Designation of strips of land within the "C" and "OU(MU)" zones on the two sides of Great George Street and Sugar Street as non-building areas.
- Item C4 Designation of a strip of land between the western end of Kingston Street and the eastern end of Jaffe Road within the "OU(MU)" and "C(1)" zones as non-building area.
- Item C5 Designation of two strips of land along Yun Ping Road within 28 Yun Ping Road within the "C" zone and 33 Hysan Avenue within the "C(2)" zone as non-building areas.
- Item C6 Demarcation of an area within the "C(2)" zone covering 33 Hysan Road subject to a maximum building height of 32mPD.

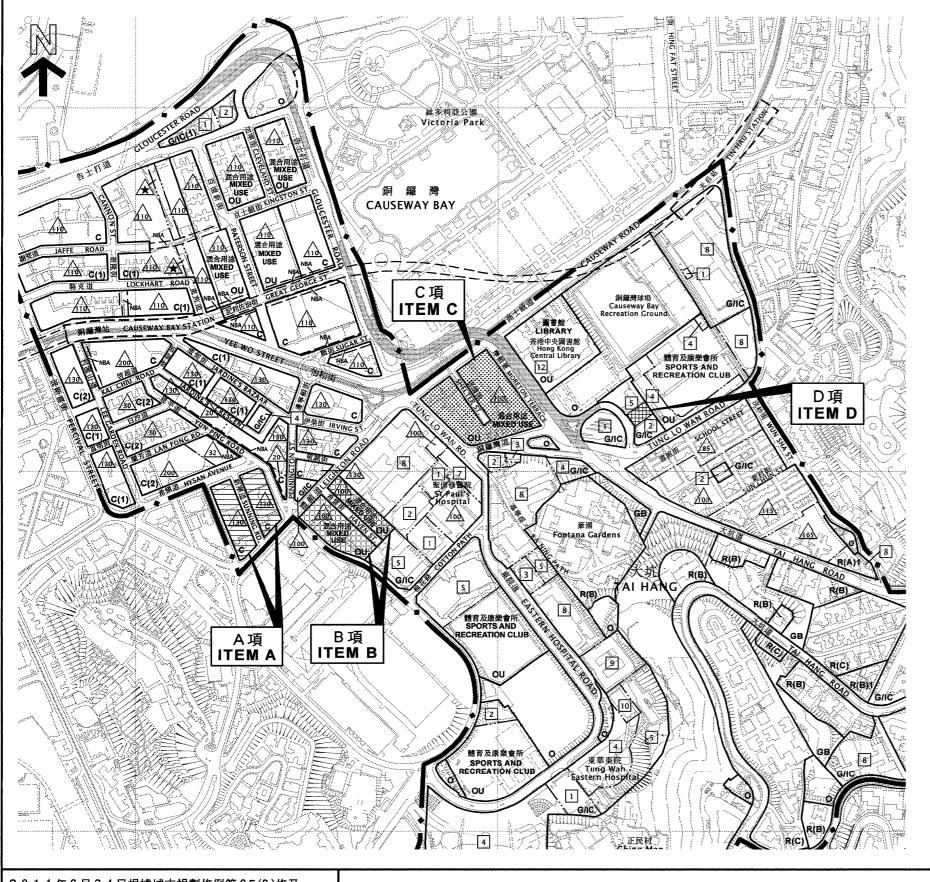
- Item C7 Demarcation of two areas within the "C" zone covering 28 Yun Ping Road subject to a maximum building height of 20mPD.
- Item C8 Designation of strips of land between 280 and 281 Gloucester Road within the "C(1)" zone as building gap with a width of 10m and a vertical clearance of not less than 8m above ground level.
- Item C9 Rezoning of an area bounded by Tung Lo Wan Road, Wun Sha Street and Tai Hang Road from "R(A)" to "R(A)1", and stipulating building height restriction for the zone.
- Item D Rezoning of a site occupied by St. Paul's Convent staff quarters at Caroline Hill Road from "C/R" and 'Road' to "G/IC", and stipulating building height restriction for the zone.
- Item E Rezoning of a site bounded by Warren Street, Shepherd Street, Brown Street and Sun Chun Street from "G/IC" to "R(A)1", and stipulating building height restriction for the zone.
- Item F1 Rezoning of a strip of land occupied by Hong Kong Central Library from "Open Space" ("O") to "OU" annotated "Library", and stipulating building height restriction for the zone.
- Item F2 Rezoning of a strip of land south of Moreton Terrace Temporary Playground from "O" to area shown as 'Road'.
- Item F3 Rezoning of a strip of land occupied by the Civil Aid Service Hong Kong Island Training Centre at Moreton Terrace from "O" and area shown as 'Road' to "G/IC", and stipulating building height restriction for the zone.
- Item F4 Rezoning of a site occupied by Kung Lee College at Tai Hang Drive from "O" to "G/IC", and stipulating building height restriction for the zone.
- Item F5 Rezoning of an area at Tai Hang Road from "O" to "Green Belt" ("GB").
- Item G1 Rezoning of a strip of land occupied by Wun Sha Street Children's Playground at Wun Sha Street from "R(A)" to "O".
- Item G2 Rezoning of the Ka Ning Path Rest Garden site at Ka Ning Path from "Residential (Group B)" to "O".
- Item H1 Rezoning of a site occupied by Tung Lo Wan Garden at Gloucester Road from area shown as 'Road' to "O".
- Item H2 Rezoning of the Tung Lo Wan Road Sitting-out Area site at Tung Lo Wan Road from area shown as 'Road' to "O".

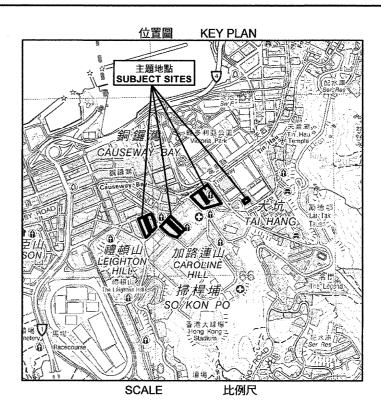
- Item H3 Rezoning of a strip of land occupied by Eastern Hospital Road Rest Garden at Eastern Hospital Road from area shown as 'Road' to "O".
- Item J1 Rezoning of a site south of Hong Kong Stadium occupied by Son Ko Po Pumping Station and Hong Kong and Islands Clearance Unit of the Lands Department from "GB" to "G/IC", and stipulating building height restriction for the zone.
- Item J2 Rezoning of the Tai Hang Drive Playground site at Tai Hang Drive from "GB" to "O".
- Item J3 Rezoning of a site occupied by Tai Hang Road Rest Garden at Tai Hang Road from "GB" to "O".
- Item K Rezoning of So Kon Po Recreation Ground at Eastern Hospital Road from "OU" annotated "Sports and Recreation Club" ("OU(SRC)") to "O".
- Item L Deletion of the previously proposed road junction at Tai Hang Drive.

II. Amendments to the Notes of the Plan

- (a) Deletion of the set of Notes for the "C/R" zone.
- (b) Incorporation of new sets of Notes for the "C" and "OU(MU)" zones.
- (c) Incorporation of building height restrictions and a minor relaxation clause for such restrictions in the Remarks of the Notes for the "C", "C(1)", "C(2)", "R(A)", "R(A)1", "G/IC" and "OU" zones.
- (d) Incorporation of setback requirements for the "C(1)", "C(2)" and "R(A)1" zones, and a minor relaxation clause for such restrictions in the Remarks of the Notes for the zones.
- (e) Incorporation of minor relaxation clause for the non-building area restrictions in the Remarks of the Notes for the "C", "C(1)", "C(2)" and "OU(MU)" zones, and for building gap requirement in the Remarks of the Notes for the "C(1)" zone.
- (f) Incorporation of a clause to disregard basement floors in determining number of storeys in the Remarks of the Notes for the relevant "G/IC" and "OU" zones.
- (g) For the "G/IC" zone covering Hong Kong Stadium and the "OU(SRC)" zones covering Chinese Recreation Club at Tung Lo Wan Road, Disciplined Services Sports and Recreation Club at Cotton Path and Indian Recreation Club at Eastern Hospital Road, stipulation of requirement for planning permission for new development and redevelopment at land where no maximum building height is stipulated on the Plan in the Remarks of the Notes for the relevant "G/IC" and "OU(SRC)" zones.

Town Planning Board 17 September 2010





草圖編號 S/H6/15 的修訂 AMENDMENTS TO DRAFT PLAN No. S/H6/15

根據城市規劃條例第 6 F(8)條及第 6 G條作出的修訂 AMENDMENTS MADE UNDER SECTION 6F(8) AND SECTION 6G OF THE TOWN PLANNING ORDINANCE

A項 ITEM A

最高建築物高度由主水平基準以上100米修改為主水平基準以上130米 MAXIMUM BUILDING HEIGHT AMENDED FROM 100 mPD TO 130 mPD

B項 ITEM B

由「住宅(甲類)1」地帶改劃為「其他指定用途」註明「混合用途」地帶 REZONING FROM "RESIDENTIAL (GROUP A)1" TO "OTHER SPECIFIED USES" ANNOTATED "MIXED USE"

C項 ITEM C

由「住宅(甲類)」地帶改劃為「其他指定用途」註明「混合用途」地帶 REZONING FROM "RESIDENTIAL (GROUP A)" TO "OTHER SPECIFIED USES" ANNOTATED "MIXED USE"

D項 ITEM D

最高建築物高度由 2 層修改為 5 層 MAXIMUM BUILDING HEIGHT AMENDED FROM 2 STOREYS TO 5 STOREYS

夾附的《註釋》屬這份圖則的一部分, 並根據城市規劃條例第 6 F(8)條及第 6 G條作出修訂。 THE ATTACHED NOTES ALSO FORM PART OF THIS PLAN AND HAVE BEEN AMENDED UNDER SECTION 6F(8) AND SECTION 6G OF THE TOWN PLANNING ORDINANCE

> (参看附表) (SEE ATTACHED SCHEDULE)

2011年6月24日根據城市規劃條例第6F(8)條及 第6G條對草圖編號 S/H6/15 作出的修訂 AMENDMENTS TO DRAFT PLAN No. S/H6/15 MADE UNDER SECTION 6F(8) AND SECTION 6G OF THE TOWN PLANNING ORDINANCE ON 24 JUNE 2011

Ophelia Y. S. WONG **A Labi 以** 黃婉霜 SECRETARY, TOWN PLANNING BOARD 城市規劃委員會秘書 銅鑼灣分區計劃大綱草圖編號 S/H6/15 的修訂 AMENDMENTS TO DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN No. S/H6/15

SCALE 比例尺 米 METRES 100 0 100 200 300 400 METRES 米 見割署遵照城市規劃委員會指示擬備 PEDADED BY THE DIANNING DEDADTMENT UND

PREPARED BY THE PLANNING DEPARTMENT UNDER THE DIRECTION OF THE TOWN PLANNING BOARD



圖則編號 PLAN No.

R/S/H6/15 - A2

- 1

Annex A2b of TPB Paper No. 10340

SCHEDULE OF AMENDMENTS TO THE DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN NO. S/H6/15 MADE BY THE TOWN PLANNING BOARD ON 24 JUNE 2011 UNDER SECTION 6F(8) AND SECTION 6G OF THE TOWN PLANNING ORDINANCE (Chapter 131)

I. Amendments to Matters Shown on the Plan

Amendments made under section 6F(8)

- Item A Revision to the building height restriction stipulated for the "Commercial" zone on both sides of Sunning Road from 100mPD to 130mPD.
- Item B Rezoning of the sites on both sides of Haven Street from "Residential (Group A)1" to "Other Specified Uses" annotated "Mixed Use" ("OU(MU)").

Amendments made under section 6G

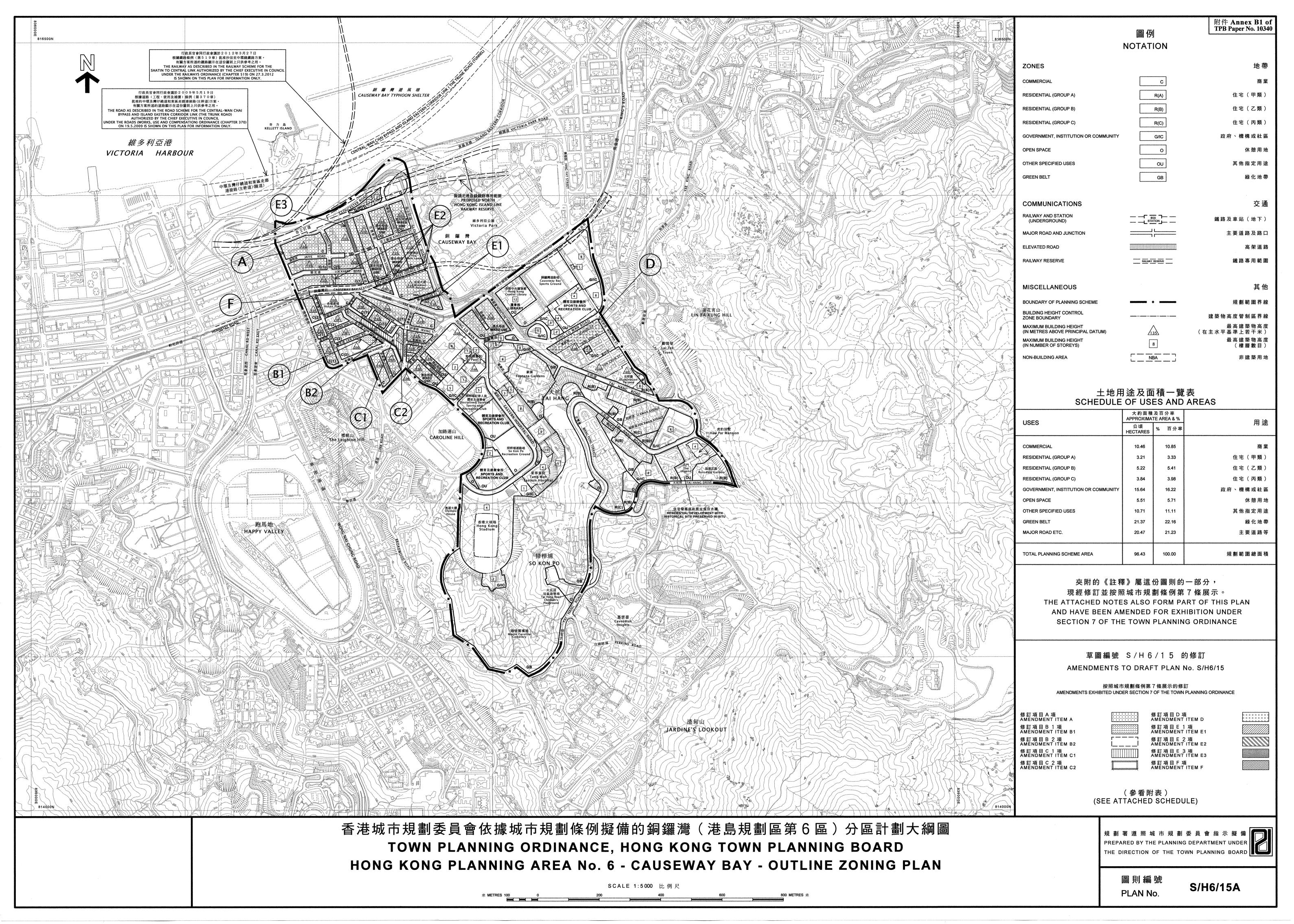
- Item C Rezoning of an area generally bounded by Causeway Road, Moreton Terrace and Tung Lo Wan Road from "Residential (Group A)" ("R(A)") to "OU(MU)".
- Item D Revision to the building height restriction stipulated for the Moreton Terrace Zone Substation site at Tung Lo Wan Drive zoned "Government, Institution or Community" from 2 storeys to 5 storeys.

II. Amendments to the Notes of the Plan

Amendments made under section 6F(8)

- (a) Revision to paragraph (2) of the Remarks of the Notes for the "R(A)" zone to delete the setback requirement on Haven Street.
- (b) Incorporation of setback requirement on Haven Street and provision for application for minor relaxation of the setback requirement in the Remarks of the Notes for the "OU(MU)" zone.

Town Planning Board



HONG KONG PLANNING AREA NO. 6

DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN NO. S/H6/15A

(Being a Draft Plan for the Purposes of the Town Planning Ordinance)

NOTES

(N.B. This forms 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/tram 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 buildings 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 where the uses or developments are specified in Column 2 of the Notes of individual zones:
 - (a) provision, maintenance or repair of plant nursery, amenity planting, open space, rain shelter, refreshment kiosk, road, bus/tram/public light bus stop or lay-by, cycle track, Mass Transit Railway station 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 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:
 - on-street vehicle park, railway track and tram track.
- (9) Unless otherwise specified, all building, engineering and other operations incidental to and all uses directly related and ancillary to the permitted use and developments within the same zone are always permitted and no separate permission is required.
- (10) 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.

HONG KONG PLANNING AREA NO. 6

DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN NO. S/H6/15A

Schedule of Uses

		Page
COMMERCIAL		1
RESIDENTIAL (GROUP A)		3
RESIDENTIAL (GROUP B)		5
RESIDENTIAL (GROUP C)		7
GOVERNMENT, INSTITUTION OR COMMUNITY		9
OPEN SPACE		11
OTHER SPECIFIED USES		12
GREEN BELT		21

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

Commercial Bathhouse/Massage Establishment

Eating Place

Educational Institution

Exhibition or Convention Hall

Government Use (not elsewhere specified)

Hotel

Information Technology and

Telecommunications Industries

Institutional Use (not elsewhere specified)

Library

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

Wholesale Trade

Broadcasting, Television and/or Film Studio

Flat

Government Refuse Collection Point

Hospital

Mass Transit Railway Vent Shaft and/or

Other Structure above Ground Level

other than Entrances
Petrol Filling Station

Residential Institution

Planning Intention

This zone is intended primarily for commercial developments, which may include uses such as office, shop, services, place of entertainment, eating place and hotel, functioning as territorial business/financial centre(s) and regional or district commercial/shopping centre(s). These areas are usually major employment nodes.

(Please see next page)

COMMERCIAL (Cont'd)

Remarks

- (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 the maximum building heights, in terms of metres above Principal Datum, as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (2) For 28 Yun Ping Road, a minimum 2m wide non-building area from the lot boundary fronting Yun Ping Road shall be provided.
- (3)(2) On land designated "Commercial (1)", a minimum setback of 0.5m from the lot boundary fronting Jaffe Road, Lockhart Road, Cannon Street (except 1-7, 3, 5 and 7 Cannon Street), Jardine's Bazaar (except 30-34 and 37-39 Jardine's Bazaar) and Lee Garden Road shall be provided. In addition, a building gap with a width of not less than 10m and a vertical clearance of not less than 8m above ground level shall be provided for the strips of land between 280 and 281 Gloucester Road as stipulated on the Plan.
- (4)(3) On land designated "Commercial (2)", a minimum setback of 1.5m from the lot boundary of 1 Pak Sha Road, 2 Kai Chiu Road, and 1-27 Lee Garden Road fronting Lee Garden Road, and from the lot boundary fronting Lan Fong Road shall be provided.—In addition, a minimum 2mwide non-building area from the lot boundary of 33 Hysan Road fronting Yun Ping Road shall be provided.
- (5)(4) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions stated in paragraph (1) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (6)(5) Under exceptional circumstances, for a development or redevelopment proposal, minor relaxation of the non-building areas restriction and setback requirements as stipulated on the Plan or stated in paragraphs (2) to (4) above, and the building gap requirement setback requirements stated in paragraphs (2) and (3) 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

Ambulance Depot

Flat

Government Use (not elsewhere specified)

House

Library

Market

Place of Recreation, Sports or Culture

Public Clinic

Public Transport Terminus or Station (excluding open-air terminus or station)

Residential Institution

School (in free-standing purpose-designed

building only)

Social Welfare Facility

Utility Installation for Private Project

Commercial Bathhouse/Massage Establishment

Educational Institution

Exhibition or Convention Hall

Government Refuse Collection Point

Hospital

Eating Place

Hotel

Institutional Use (not elsewhere specified)

Mass Transit Railway Vent Shaft and/or

Other Structure above Ground Level other

than Entrances

Office

Petrol Filling Station

Place of Entertainment

Private Club

Public Convenience

Public Transport Terminus or Station (not

elsewhere specified)
Public Utility Installation

Public Vehicle Park

(excluding container vehicle)

Religious Institution

School (not elsewhere specified)

Shop and Services

Training Centre

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

(Please see next page)

RESIDENTIAL (GROUP A) (Cont'd)

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

- (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 the maximum building heights, in terms of metres above Principal Datum or number of storeys, as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (2) On land designated "Residential (Group A) 1", a minimum setback of 0.5m from the lot boundary fronting School Street, King Street, Shepherd Street, Sun Chun Street, Ormsby Street, Brown Street, Warren Street, Jones Street and Lai Yin Street shall be provided.
- (3) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions stated in paragraph (1) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (4) Under exceptional circumstances, for a development or redevelopment proposal, minor relaxation of the setback requirements stated in paragraph (2) above 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

Mass Transit Railway Vent Shaft and/or

Other Structure above Ground Level other

than Entrances

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

- (1) On land designated "Residential (Group 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 5 and a maximum building height of 30 storeys including carports, or the plot ratio and the height of the existing building, whichever is the greater.
- On land designated "Residential (Group 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 building height of 30 storeys including carports, or the height of the existing building, whichever is the greater.
 - (3) In determining the maximum plot ratio for the purposes of paragraph (1) 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 and caretaker's quarters, or 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.
 - (4) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and building height restrictions stated in paragraphs (1) and (2) 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 Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances 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-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Town Planning Board.

RESIDENTIAL (GROUP C) (Cont'd)

Remarks

- (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 2 and a maximum building height of 6 storeys including carports, or the plot ratio and the height of the existing building, whichever is the greater.
- (2) In determining the maximum plot ratio for the purposes of paragraph (1) 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 and caretaker's quarters, or 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.
- (3) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the plot ratio and building height restrictions stated in paragraph (1) 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	0.1
	Column 2
Uses always permitted	Uses that may be permitted with or
	without conditions on application
	to the Town Planning Board
Ambulance Depot	Animal Boarding Establishment
Animal Quarantine Centre	Animal Quarantine Centre (not elsewhere specified)
(in Government building only)	Correctional Institution
Broadcasting, Television and/or Film Studio	Driving School
Cable Car Route and Terminal Building	Eating Place (not elsewhere specified)
Eating Place (Canteen, Cooked Food Centre	Flat
only)	Funeral Facility
Educational Institution	Government Refuse Collection Point (for "G/IC(1)" only)
Exhibition or Convention Hall	Holiday Camp
Field Study/Education/Visitor Centre	Hotel
Government Refuse Collection Point	House
(not elsewhere specified)	Marine Fuelling Station
Government Use (not elsewhere specified)	Mass Transit Railway Vent Shaft and/or Other Structure
Hospital	above Ground Level other than Entrances
Institutional Use (not elsewhere specified)	Off-course Betting Centre
Library	Office
Market	Petrol Filling Station
Place of Recreation, Sports or Culture	Place of Entertainment
Public Clinic	Private Club
Public Convenience	Radar, Telecommunications Electronic Microwave
Public Transport Terminus or Station	Repeater, Television and/or Radio Transmitter
Public Utility Installation	Installation
Public Vehicle Park (excluding container	Refuse Disposal Installation (Refuse Transfer Station
vehicle)	only)
Recyclable Collection Centre	Residential Institution
Religious Institution	Sewage Treatment/Screening Plant
Research, Design and Development Centre	Shop and Services
School	Utility Installation for Private Project
Service Reservoir	Zoo
C ' 1 TT 1 1 C TO 111.	

Planning Intention

Social Welfare Facility

Training Centre Wholesale Trade

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.

GOVERNMENT, INSTITUTION OR COMMUNITY (Cont'd)

Remarks

- (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 the maximum building heights, in terms of metres above Principal Datum or number of storeys, as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (2) For land within the Hong Kong Stadium where no maximum building height is stipulated on the Plan, any new development or redevelopment of an existing building (except in-situ redevelopment of an existing building up to its existing building height) requires permission from the Town Planning Board under section 16 of the Town Planning Ordinance.
- (3) On land designated "Government, Institution or Community (1)" ("G/IC(1)"), any application for permission for development of 'Government Refuse Collection Point' shall include in the submission the following information:
 - (i) the gross floor areas, position, dimensions and heights of all buildings/structures to be erected on the area;
 - (ii) the landscape proposals within the area;
 - (iii) the colour scheme and external finishing of all buildings/structures to be erected on the area;
 - (iv) the proposed mitigation measures to tackle any possible environmental impacts that may be caused by the proposed development during and after construction; and
 - (v) such other information as may be required by the Town Planning Board.
- (4) In determining the relevant maximum number of storey(s) for the purposes of paragraph (1) above, any basement floor(s) may be disregarded.
- (5) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions stated in paragraph (1) 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 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 Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances 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 Tent 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

For "Sports and Recreation Club" Only

Commercial Bathhouse/
Massage Establishment
Eating Place (Canteen only)
Place of Entertainment
Place of Recreation, Sports or Culture
Playground/Playing Field
Private Club
Shop and Services
(Barber Shop and Beauty Parlour only)
Utility Installation for Private Project

Eating Place (not elsewhere specified)
Government Refuse Collection Point
Government Use (not elsewhere specified)
Mass Transit Railway Vent Shaft and/or Other
Structure above Ground Level other than
Entrances
Public Utility Installation
Public Vehicle Park (excluding container vehicle)
Religious Institution
Shop and Services (not elsewhere specified)
Social Welfare Facility

Planning Intention

This zone is primarily to reserve land intended for sports and recreation club uses and its ancillary facilities.

Remarks

- (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 the maximum building heights, in terms of number of storeys, as stipulated on the Plan, or the height of the existing building, whichever is the greater.
- (2) In determining the relevant maximum number of storeys for the purposes of paragraph (1) above, any basement floor(s) may be disregarded.
- (3) For land where no maximum building height is stipulated on the Plan, any new development or redevelopment of an existing building (except in-situ redevelopment of an existing building up to its existing building height) requires permission from the Town Planning Board under section 16 of the Town Planning Ordinance.
- (4) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions stated in paragraph (1) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

Column 1 Uses always permitted

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

For "Library" Only

Exhibition or Convention Hall Library Place of Entertainment Place of Recreation, Sports or Culture Public Convenience Public Utility Installation

Government Use
Mass Transit Railway Vent Shaft and/or Other
Structure above Ground Level other than
Entrances
Utility Installation for Private Project

Planning Intention

This zone is primarily to reserve land intended for the Hong Kong Central Library and its ancillary facilities.

Remarks

- (1) Nó 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.
- (2) In determining the relevant maximum number of storeys for the purposes of paragraph (1) above, any basement floor(s) may be disregarded.
- (3) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (1) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

Column 1 Uses always permitted

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

For "Residential Development with Historical Site Preserved In-situ" Only

Flat

Government Use (Police Reporting Centre

only)

House

Library

Residential Institution

Utility Installation for Private Project

Ambulance Depot **Educational Institution**

Eating Place

Government Refuse Collection Point Government Use (not elsewhere specified)

Hospital Hotel

Market

Off-course Betting Centre Office (not elsewhere specified)

Petrol Filling Station

Place of Entertainment (not elsewhere specified)

Place of Recreation, Sports or Culture (not

elsewhere specified)

Private Club

Public Clinic

Public Convenience

Public Transport Terminus or Station

Public Utility Installation

Public Vehicle Park (excluding container vehicle)

Religious Institution

School

Shop and Services (not elsewhere specified)

(excluding Motor-vehicle Showroom)

Social Welfare Facility

Training Centre

In addition, on land falling within the area delineated by a pecked line on the Plan, the following uses are always permitted:

Education Centre/Visitor Centre **Exhibition or Convention Hall** Government Use (Post Office only) Office (Audio-visual Recording Studio only) Park and Garden Place of Entertainment Place of Recreation, Sports or Culture Shop and Services (Retail Shop only)

For "Residential Development with Historical Site Preserved In-situ" Only (Cont'd)

Planning Intention

This zone is intended primarily to facilitate residential development with the historical Haw Par Mansion and part of its garden preserved in-situ within the site. It should also facilitate the preservation, restoration and conversion of the Haw Par Mansion and its garden to become a local heritage attraction with provision of cultural and selected commercial facilities for the enjoyment of the public.

Remarks

- (1) The area comprising the Haw Par Mansion and its garden, as delineated by a pecked line on the Plan, shall be preserved in-situ. Any demolition of, or addition, alteration and/or modification to (except those minor alteration and/or modification works which are always permitted under the covering Notes) or redevelopment of an existing building or the associated garden/features within this area requires permission from the Town Planning Board.
- (2) No new development, or addition, alteration and/or modification to or redevelopment of an existing building outside the area delineated by a pecked line on the Plan shall result in a total development and/or redevelopment in excess of a maximum gross floor area of 47,300m² and a maximum building height (including roof-top structures) of 234.7mPD.
- (3) No new development, or addition, alteration and/or modification to or redevelopment of an existing building inside the area delineated by a pecked line on the Plan 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 height, whichever is the greater.
- (4) In determining the maximum gross floor area for the purposes of paragraph (2) 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 and caretaker's quarters, or 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.
- (5) In determining the relevant maximum number of storeys for the purposes of paragraph (3) above, any basement floor(s) may be disregarded.
- (6) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restriction stated in paragraph (3) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.

Column 1 Uses always permitted

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

For "Mixed Use" Only

Schedule I: for non-residential building or non-residential portion of a building upon development/redevelopment/conversion

Ambulance Depot

Commercial Bathhouse/

Massage Establishment (in non-residential

building only)

Eating Place

Educational Institution

Exhibition or Convention Hall

Government Use (not elsewhere specified)

Hotel

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 (excluding those involving

residential care)

Training Centre

Utility Installation for Private Project

Wholesale Trade

Broadcasting, Television and/or Film Studio

Commercial Bathhouse/

Massage Establishment (not elsewhere specified)

Flat

Government Refuse Collection Point

Hospital

Mass Transit Railway Vent Shaft and/or

Other Structure above Ground Level other than

Entrances

Petrol Filling Station

Residential Institution

Social Welfare Facility (not elsewhere specified)

Column 1 Uses always permitted Column 2
Uses that may be permitted with or without conditions on application to the Town Planning Board

For "Mixed Use" Only (Cont'd)

Schedule II: for residential building or residential portion of a building upon development/redevelopment/conversion

Flat

Government Use (Police Reporting Centre,

Post Office only)

House

Residential Institution

Social Welfare Facility (residential care

facility only)

Utility Installation for Private Project

Eating Place

Educational Institution

Government Refuse Collection Point

Government Use (not elsewhere specified)

Hote1

Institutional Use (not elsewhere specified)

Library

Mass Transit Railway Vent Shaft and/or

Other Structure above Ground Level other than

Entrances

Office

Place of Entertainment

Place of Recreation, Sports or Culture

Private Club

Public Clinic

Public Transport Terminus or Station

Public Utility Installation

Public Vehicle Park (excluding container vehicle)

Religious Institution

School

Shop and Services

Social Welfare Facility (not elsewhere specified)

Training Centre

Column 1 Uses always permitted

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

For "Mixed Use" Only (Cont'd)

Schedule III: for an existing building before redevelopment/conversion

Ambulance Depot

Exhibition or Convention Hall

Flat

Government Use (not elsewhere specified)

Hotel

House

Library

Market

Office

Private Club

Public Clinic

Public Utility Installation

Public Vehicle Park (excluding container vehicle)

Residential Institution

School (in a free-standing purpose-designed

building only)

Shop and Services (not elsewhere specified)

Social Welfare Facility

Utility Installation for Private Project

Broadcasting, Television and/or Film Studio

Commercial Bathhouse/Massage Establishment

Eating Place

Educational Institution

Government Refuse Collection Point

Hospital

Information Technology and Telecommunications

Industries

Institutional Use (not elsewhere specified)

Mass Transit Railway Vent Shaft and/or Other

Structure above Ground Level other than

Entrances

Petrol Filling Station

Place of Entertainment

Place of Recreation, Sports or Culture

Public Convenience

Public Transport Terminus or Station

Recyclable Collection Centre

Religious Institution

School (not elsewhere specified)

Shops and Services (Motor-vehicle Showroom and

Printing, Publishing and Allied Industries only)

Training Centre

For "Mixed Use" only (cont'd)

Schedule III: for an existing building before redevelopment/conversion (con'd)

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 a 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
Place of Entertainment
Place of Recreation, Sports or Culture
Public Convenience
Recyclable Collection Centre
Religious Institution
School
Training Centre

Planning Intention

This zone is intended primarily for mixed non-industrial land uses. Flexibility for the development/redevelopment/conversion of residential or other uses, or a combination of various types of compatible uses including commercial, residential, educational, cultural, recreational and entertainment uses, either vertically within a building or horizontally over a spatial area, is allowed to meet changing market needs. Physical segregation has to be provided between the non-residential and residential portions within a new/converted building to prevent non-residential uses from causing nuisance to the residents. Some commercial uses are always permitted in an existing mixed use building before its redevelopment/conversion.

Remarks

(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 the maximum building heights, in terms of metres above Principal Datum, as stipulated on the Plan, or the height of the existing building, whichever is the greater.

For "Mixed Use" only (cont'd)

Remarks (Cont'd)

- (2) For sites on the two sides of Haven Street, a minimum setback of 0.5m from the lot boundary fronting Haven Street shall be provided.
- (3) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions stated in paragraph (1) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (43) Upon development/redevelopment/conversion of a building to a mixed use development, the residential and non-residential portions within a building shall be physically segregated through appropriate building design. The provision of residential and non-residential uses on the same floor will not be permitted. Under exceptional circumstances, relaxation of the requirement for physical segregation and no inter-mixing on the same floor may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- (4) Based on the individual merits of a development or redevelopment proposal, minor relaxation of the building height restrictions stated in paragraph (1) above may be considered by the Town Planning Board on application under section 16 of the Town Planning Ordinance.
- Under exceptional circumstances, for a development or redevelopment proposal, minor relaxation of the non-building area—restriction—as stipulated on the Plan or the setback requirement stated in paragraph (2) 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 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 Cable Car Route and Terminal Building Field Study/Education/Visitor Centre Flat Government Refuse Collection Point Government Use (not elsewhere specified) Holiday Camp House Mass Transit Railway Vent Shaft and/or Other Structure above Ground Level other than Entrances Petrol Filling Station 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

Planning Intention

The planning intention of this zone is primarily for the conservation of the existing natural environment amid the built-up areas/at the urban fringe, to safeguard it from encroachment by urban type development, and to provide additional outlets for passive recreational activities. There is a general presumption against development within this zone.

Annex B3 of TPB Paper No. 10340

HONG KONG PLANNING AREA NO. 6

DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN NO. S/H6/15A

EXPLANATORY STATEMENT

HONG KONG PLANNING AREA NO. 6

DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN NO. S/H6/15A

EXPLANATORY STATEMENT

	Contents	Page
1.	Introduction	1
2.	Authority for the Plan and Procedures	1
3.	Object of the Plan	2
4.	Notes of the Plan	3
5.	The Planning Scheme Area	3
6.	Population	3
7.	Building Height Restrictions in the Area	3
8.	Land Use Zonings	6
	 8.1 Commercial 8.2 Residential (Group A) 8.3 Residential (Group B) 8.4 Residential (Group C) 8.5 Government, Institution or Community 8.6 Open Space 8.7 Other Specified Uses 8.8 Green Belt 	6 7 8 8 9 9
9.	Communications	11
10.	Utility Services	11
11.	Cultural Heritage	12
12.	Implementation	12

(Page number to be revised)

HONG KONG PLANNING AREA NO. 6

DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN NO. S/H6/15A

(Being 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. <u>INTRODUCTION</u>

This explanatory statement is intended to assist an understanding of the draft Causeway Bay Outline Zoning Plan (OZP) No. S/H6/4516. It reflects the planning intention and objectives of the Town Planning Board (the Board) for the various land use zonings of the Plan.

2. <u>AUTHORITY FOR THE PLAN AND PROCEDURES</u>

- 2.1 On 20 December 1968, the draft Causeway Bay OZP No. LH6/22, being the first statutory plan covering the Causeway Bay planning area, was gazetted under section 5 of the Town Planning Ordinance (the Ordinance). On 22 July 1969, the approved plan was exhibited under section 8 of the Ordinance. Since then, the OZP had been amended many times to reflect the changing circumstances.
- On 29 November 1988, the then Governor in Council, under section 9(1)(a) of the Ordinance, approved the draft Causeway Bay OZP, which was subsequently renumbered as S/H6/2. On 24 October 1989, the then Governor in Council referred the approved OZP No. S/H6/2 to the Board for amendment under section 12(1)(b) of the Ordinance. Since then, the OZP had been amended four times and exhibited for public inspection under section 5 or 7 of the Ordinance to reflect the changing circumstances.
- 2.3 On 2 May 2000, the Chief Executive in Council (CE in C), under section 9(1)(a) of the Ordinance, approved the draft Causeway Bay OZP, which was subsequently renumbered as S/H6/7. On 10 October 2000, the CE in C referred the approved OZP No. S/H6/7 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. Since then, the OZP had been amended and exhibited for public inspection under section 5 of the Ordinance to reflect the changing circumstances.
- On 10 July 2001, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Causeway Bay OZP, which was subsequently renumbered as S/H6/9. On 25 September 2001, the CE in C referred the approved OZP No. S/H6/9 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. Since then, the OZP had been amended twice and exhibited for public inspection under section 5 or 7 of the Ordinance to reflect the changing circumstances.
- On 11 March 2003, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Causeway Bay OZP, which was subsequently renumbered as S/H6/12. On 9 December 2003, the CE in C referred the approved Causeway Bay OZP No.

S/H6/12 to the Board for amendment under section 12(1)(b)(ii) of the Ordinance. Since then, the OZP had been amended once to incorporate amendments in accordance with the revised Master Schedule of Notes to Statutory Plans endorsed by the Board.

- On 28 May 2004, the draft Causeway Bay OZP No. S/H6/13 incorporating amendments to the Notes of the Plan in accordance with the revised Master Schedule of Notes to Statutory Plans endorsed by the Board, was exhibited for public inspection under section 5 of the Ordinance. During the exhibition period, one objection was received. After giving preliminary and further considerations to the objection on 8 October 2004 and 4 February 2005 respectively, the Board agreed to propose an amendment to partially meet the objection by amending the definition of "existing building" in the covering Notes. On 4 March 2005, the proposed amendment to the draft Causeway Bay OZP No. S/H6/13 was notified in the Gazette under section 6(7) of the Ordinance. During the notification period, no further objection was received. On 8 April 2005, the proposed amendment was confirmed by the Board under section 6(9) of the Ordinance.
- 2.76 On 13 September 2005, the CE in C, under section 9(1)(a) of the Ordinance, approved the draft Causeway Bay OZP, which was subsequently renumbered as S/H6/14. On 30 September 2005, the approved Causeway Bay OZP No. S/H6/14 was exhibited for public inspection under section 9(5) of the Ordinance. On 6 July 2010, the CE in C referred the approved Causeway Bay OZP No. S/H6/14 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 17 September 2010 under section 12(2) of the Ordinance.
- 2.87 On 17 September 2010, the draft Causeway Bay OZP No. S/H6/15 (the Plan) was exhibited for public inspection under section 5 of the Ordinance. The Plan draft OZP incorporated amendments to impose building height restrictions for various development zones, to rezone "Commercial/Residential" ("C/R") sites to "Commercial" ("C"), "Residential (Group A)" ("R(A)"), or "Other Specified Uses" annotated "Mixed Use" ("OU(MU)") zones and to rezone various sites to reflect the planning intention or the as-built conditions. During the plan exhibition period, a total of 165 valid representations and 5 related comments were received. On 11 March 2011, the Board decided to propose amendments to the draft OZP to meet/partially meet some representations. The proposed amendments were published on 1 April 2011 under section 6C(2) of the Ordinance. Three valid further representations were received. On 24 June 2011, the Board gave consideration to the further representations and decided to amend the OZP by the proposed amendments under sections 6F(8) and 6G of the Ordinance.
- 2.8 The Board's decisions on some representations were the subjects of judicial reviews (JRs). According to the Court's rulings on the JRs and the related appeals, the non-building area requirement at Hysan Place was quashed and the Board's decisions made on 11 March 2011 in respect of the representations related to the JRs had to be remitted to the Board for consideration. A review of the development restrictions on the draft OZP was therefore conducted.
- 2.9 On ____ 2017, the draft Causeway Bay OZP No. S/H6/16 (the Plan), incorporating mainly amendments to the building height restrictions, and non-

- 3 -

building area and building gap requirements, was exhibited for public inspection under section 7 of the Ordinance.

3. OBJECT OF THE PLAN

- 3.1 The object of the Plan is to indicate the broad land use zonings and major transport networks so that development and redevelopment within the Planning Scheme Area can be subject to statutory planning control.
- 3.2 The Plan is to illustrate the broad principles of development within the Planning Scheme Area. It is a small-scale plan and the transport alignments and boundaries between the land use zones may be subject to minor adjustment 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 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 calculations. Development within residential zones should be restricted to building lots carrying development right in order to maintain the character and amenity of the Causeway Bay 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 Planning Scheme 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

- The Planning Scheme Area (the Area) is shown by a heavy broken line on the Plan. The Area covers about 96.43 hectares of land. It is bounded by Gloucester Road in the north, Wun Sha Street and Tai Hang Road in the east, So Kon Po in the south and the Hong Kong Stadium and Percival Street in the west.
- 5.2 The Area includes the commercial/residential developments to the west of Victoria Park and the So Kon Po and Tai Hang areas. The developments in So Kon Po are

- mainly for recreation, Government, institution or community (GIC) uses whilst Tai Hang is mainly a residential area.
- 5.3 There are a number of district recreational facilities including the Hong Kong Stadium at So Kon Po, the Causeway Bay Recreation Ground and a number of recreation clubs in the Area.

6. POPULATION

According to the 2006-Based on the 2011 Population By census Census, the population of the Area was estimated by the Planning Department as about 32,800-31,500. It is estimated that the planned population of the Area would be about 43,920 41,500.

7. BUILDING HEIGHT RESTRICTIONS IN THE AREA

- 7.1 The Causeway Bay Area has transformed into a commercial and entertainment district. 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. In order to provide better planning control on the development intensity and building height upon development/redevelopment, to prevent excessively tall or out-of-context buildings and to meet public aspirations for greater certainty and transparency in the statutory planning system, a review of the Causeway Bay OZP has been was undertaken in 2010 with a view to incorporating appropriate building height restrictions on the Plan for various development zones not yet subject to building height restrictions.
- 7.2 The review *in 2010* has taken into account urban design considerations and various factors including preservation of public view from the major vantage point at the Cultural Complex in Tsim Sha Tsui, the stepped height concept in general as recommended in the Urban Design Guidelines Study, the local topography and characteristics, local wind environment, compatibility of building masses in the wider setting, as well as the need to strike a balance between public interest and private development rights.
- 7.3 To comply with the Court's rulings on the JRs and related appeals on the draft OZP, a review of the building height restrictions taking into account the implications of Sustainable Building Design Guidelines (SBDG) and permissible development intensity was conducted in 2017. To provide flexibility for future redevelopment to comply with SBDG, A lower a building height restriction of 110 135 metres above Principal Datum (mPD) is stipulated for the "C", "C(1)", "C(2)" and "OU(MU)" sites generally. to the north of Hennessy Road and generally 130mPD for the "C", "C(1)" and "C(2)" sites to the south are adopted in order to achieve a stepped building height profile and to preserve the existing view from the vantage point at the Cultural Complex in Tsim Sha Tsui as well as from Victoria Park. A maximum building height of 200mPD is adopted for the "C" and "C(2)" zones covering the proposed commercial development at 500 Hennessy Road Hysan Place and Lee Gardens, Manulife Plaza Lee Garden One to generally reflect the existing heights of these two landmark buildings. A lower height band of 30mPD is imposed on the "C(2)" sites on the two sides of Pak Sha Road to maintain the low-rise character of the area. For the inland area, maximum building heights

- of 100mPD to 165mPD are generally stipulated for the "R(A)1" zone west of Wun Sha Street.
- 7.4 Specific building height restrictions for the "Government, Institution or Community" ("G/IC") and "OU" zones in terms of number of storeys or mPD, which mainly reflect the building heights of existing and committed developments, have been incorporated into the Plan to provide visual and spatial relief to the high density environment of the Area.
- 7.5 An Expert Evaluation on Air Ventilation Assessment (AVA) has been was undertaken in 2010 (AVA 2010) 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 and non building area restrictions as well as the setback and building gap requirements incorporated into the Plan have taken According to the findings of AVA into consideration.
- 7.6 In general, the major prevailing annual wind comes from the north-east, north and east directions, and the prevailing summer wind mainly comes from the east, south-east and south-west directions. The major air paths for penetration of wind to the inland area include the existing open spaces and recreational sports grounds, Gloucester Road, Kingston Street, Paterson Street, Cannon Street, Great George Road, Sugar Street, Hennessy Road, and-Yee Wo Street, and Tai Hang Road. With the presence of flat and open area in Victoria Park and sports ground and low-rise "G/IC" and "OU" sites in the Causeway Bay and So Kon Po areas, the southern and eastern parts of the Area enjoy a great deal of breezes from the north.
- 7.76 To facilitate better air ventilation in the Area, the AVA (2010) has recommended that existing open area and low-rise "G/IC" or "OU" sites and the major breezeways should be maintained to allow penetration of wind inland. Non-building areas, building gaps and setbacks- requirements are stipulated on the Plan or in the Notes draft OZP to facilitate the air ventilation at major ventilation corridors. Furthermore, future developments are encouraged to adopt suitable design measures to minimize any possible adverse air ventilation impacts. These include greater permeability of podiums, wider gap between buildings, disposition and perforation of building towers to align with the prevailing winds.
- 7.7 An updated AVA was conducted in 2017 to assess the impact of relaxing the building height restrictions for the "C", "C(1)", "C(2)" and "OU(MU)" sites and the northern part of the "R(A)1" zone in the Wun Sha Street area and to review the non-building area and building gap requirements on the draft OZP based on the assumption that redevelopments would follow SBDG. It is recognized that a general increase in building height on an area basis would further elevate the already high urban canopy created by tall buildings. A larger wind shadow would inevitably be created in the downstream areas. Yet by widening narrow streets, improving permeability among buildings and developments and ensuring effective air paths, such impact would be alleviated. While measures in SBDG are working towards this end, relying on SBDG alone would not be sufficient to ensure good air ventilation at the district level as concerned building design measures are drawn up on the basis of and confined to individual development sites. The beneficial effect could be localized and may not have taken into account the need of a wider area. Designating non-building

area and building gap requirements at strategic level on the OZP to maintain major air paths or create inter-connected air paths and building design measures to reduce ground coverage and create building permeability particularly at low level are considered necessary and more important to densely developed area having poor wind environment. Major air paths should be maintained at a width of at least 15m as far as practicable. On this basis, the non-building areas that can contribute to creating or maintaining an air path of district significance have been incorporated on the Plan. At building design level, developers are strongly encouraged to follow SBDG to achieve higher building permeability and reducing ground coverage in future redevelopments to improve the wind environment.

- 7.8 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 and to cater for circumstances with specific site constraints. Each planning application for minor relaxation of building height restriction 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;
 - (e) accommodating building design to address specific site constraints in achieving the permissible plot ratio under the Plan; and
 - (f) other factors such as need for tree preservation, innovative building design and planning merits that would bring about improvements to townscape and amenity of the locality and would not cause adverse landscape and visual impacts.
- 7.9 However, for any existing building with building height already exceeding the building height restrictions in terms of mPD and/or number of storeys as stated in the Notes of the Plan and/or stipulated on the Plan, there is a general presumption against such application for minor relaxation unless under exceptional circumstances.

Non-Building Areas

7.10 In order to facilitate ventilation along major corridors, non-building areas are designated at 525 Hennessy Road and the western part of 529 555 Hennessy Road (East Point Centre) with 8 to 12m in width to generally align with Cannon Street,

between the western end of Kingston Street and the eastern end of Jaffe Road with 8m in width, and on the two sides of Great George Street with 3 to 5m in width and Sugar Street with 2 to 4-1.5m in width, at the western part of 500 Hennessy Road with 5m in width and on the two sides of Yun Ping Road abutting 28 Yun Ping Road (Caroline Centre Lee Gardens Two) and 33 Hysan Avenue (The Lee Gardens Manulife Plaza) with 2m in width.

7.11 As the designation of non-building areas is primarily for the purpose of above ground air ventilation, the non-building area requirements will not apply to underground developments. No above ground structure is allowed, except that landscape feature, boundary fence/boundary wall, or minor structure (for footbridge connection or covered walkway, etc.) that is designed to allow high air porosity may be allowed.

Building Gaps

7.11 Gaps between buildings play a key role in creating air paths by appropriate design and disposition of building blocks. Maximum building height of 32mPD and 20mPD respectively are imposed for part of the podiums of The Lee Gardens Manulife Plaza and Caroline Centre Lee Gardens Two to maintain the existing building gaps above podium level for air/wind penetration as well as visual permeability. In addition, a building gap of 10m in width and 8m vertical clearance from ground level is designated on the existing wind corridor on ground level between 280 and 281 Gloucester Road (World Trade Centre and The Excelsior) to improve the air ventilation.

Setbacks

- 7.12 To improve the pedestrian *circulation and* walking environment in the Area-and to meet Hong Kong Planning Standards and Guidelines (HKPSG) requirement, setback requirements are imposed for the "C(1)", "C(2)", "R(A)1" and "OU(MU)" sites as stipulated in the Notes for these zones in order to widen the footpaths to 3.5m fronting Lockhart Road, Jaffe Road, Cannon Road-Street, Lan Fong Road, Jardine's Bazaar and Lee Garden Road to about 3.5m; and to 2m to widen the footpaths fronting Haven Street and in the Wun Sha Street area to about 2m to 2.5m (see Plans 1 to 4). These measures would also improve air ventilation in the Area.
- 7.13 The setback requirements will not apply to underground developments. A minimum clear headroom of 3.5m from ground level should be provided for free pedestrian passage without obstruction.

8. <u>LAND USE ZONINGS</u>

- 8.1 <u>Commercial ("C")</u>: Total Area 10.46 hectares
 - 8.1.1 This zone is intended primarily for commercial developments, which may include uses such as office, shop, services, place of entertainment, eating place and hotel, functioning as territorial business/financial centre(s) and regional or district commercial/shopping centre(s). These areas are usually major employment nodes.

- 8.1.2 This zoning mainly covers an area to the north and south of Hennessy Road, generally bounded by Gloucester Road to the north and east, Percival Street to the west and Leighton Road to the south-east.
- 8.1.3 For the "C(2)" sites on the two sides of Pak Sha Road, they are subject to maximum building height of 30mPD having regard to the existing low-rise and special character of this local area. In future, any redevelopment for the area should be comprehensively planned and supported by an urban design plan and technical assessments including in particular traffic impact assessment and visual impact assessment. The concerned parties could submit a comprehensive redevelopment scheme to the Board for consideration through the s.12A-application procedure under section 12A of the Ordinance.
- 8.1.4 On land designated "C(1)", a minimum setback of 0.5m from the lot boundary fronting Jaffe Road, Lockhart Road, Cannon Street (i.e. except 1–7-1, 3, 5 and 7 Cannon Street), Jardine's Bazaar (except 30-34 and 37-39 Jardine's Bazaar) and Lee Garden Road (Plans 1 and 2) shall be provided. On land designated "Commercial (2)", a minimum setback of 1.5m from the lot boundary of 1 Pak Sha Road, 2 Kai Chiu Road, and 1-27 Lee Garden Road fronting Lee Garden Road, and from the lot boundary fronting Lan Fong Road (Plan 2) shall be provided.
- 8.1.5 Minor relaxation of the building height restrictions including 32mPD and 20mPD for the podiums of The Lee Gardens Manulife Plaza and Caroline Centre, may be considered by the Board on application. Each application will be considered on its own merits.
- 8.1.6 Under exceptional circumstances, for development/redevelopments, minor relaxation of the non-building area *or* restrictions and setback requirements, and the building gap-requirement for the land between 280 and 281 Gloucester Road may be considered by the Board on application.

8.2 Residential (Group A) ("R(A)"): Total Area 3.21 hectares

- 8.2.1 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 existing residential areas bounded by Tung Lo Wan Road, Wun Sha Street and Tai Hang Road are zoned for this purpose.
- 8.2.2 On land designated "Residential (Group A)1" "R(A)1", a minimum setback of 0.5m from the lot boundary fronting School Street, King Street, Shepherd Street, Sun Chun Street, Ormsby Street, Brown Street, Warren Street, Jones Street and Lai Yin Street (Plan 4) shall be provided to improve the pedestrian walking environment.
- 8.2.3 The "R(A)1" zone to the west of Wun Sha Street is characterized by arrays of narrow local streets running at right angle to each other and forming a grid pattern. Such street pattern is conductive to physical connectivity, visual permeability and pedestrian movement within the

residential neighbourhood. To preserve the intimately-scaled street character and discourage large developments destroying the street pattern, these local streets should be retained and should not be built over upon development and redevelopment in the area.

- 8.2.4 Minor relaxation of the building height restrictions may be considered by the Board on application. Each application will be considered on its own merits.
- 8.2.5 Under exceptional circumstances, for development/redevelopments, minor relaxation of the setback requirements may be considered by the Board on application.

8.3 Residential (Group B) ("R(B)"): Total Area 5.22 hectares

- 8.3.1 This zoning is intended primarily for medium-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board.
- 8.3.2 This zoning covers the Fontana Gardens and the area in the vicinity of Tai Hang Road and Tai Hang Drive.
- 8.3.3 In view of the limited road capacity and the need to maintain a medium-density character in the area, developments within the "R(B)" zone are subject to a maximum plot ratio of 5 and a maximum building height of 30 storeys including carports, or the plot ratio and the height of the existing building, whichever is the greater.
- 8.3.4 A site at 50A-C to 54 Tai Hang Road is designated as "R(B)1". In this sub-area, developments are subject to a maximum building height of 30 storeys including carports to reflect the medium-rise character of the existing and committed-developments.
- 8.3.5 Minor relaxation of the plot ratio and/or building height restrictions may be considered by the Board. Consideration of such application for minor relaxation would be on individual merits, taking into account site constraints, innovative architectural design and planning merits that would enhance the amenity of the locality. Each application will be considered on its own merits.

8.4 Residential (Group C) ("R(C)"): Total Area 3.84 hectares

- 8.4.1 This zone is intended primarily for low-density residential developments where commercial uses serving the residential neighbourhood may be permitted on application to the Board.
- 8.4.2 This zoning covers two residential areas. One is around Fuk Kwan Avenue, Li Kwan Avenue and Yik Kwan Avenue. Another one is along Tai Hang Road. Developments are restricted to a maximum plot ratio of 2 and a maximum building height of 6 storeys including carports, or the plot ratio and the height of the existing building, whichever is the greater,

mainly on the account of poor road access and the intention to preserve the existing low-density character of the areas.

8.4.3 Minor relaxation of the plot ratio and building height restrictions may be considered by the Board. Consideration of such application for minor relaxation would be on individual merits, taking into account site constraints, innovative architectural design and planning merits that would enhance the amenity of the locality. Each application will be considered on its own merits.

8.5 Government, Institution or Community ("G/IC"): Total Area 15.64 hectares

- 8.5.1 Land zoned for this purpose is intended 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. Such developments, particularly for those which are low-rise, serve to provide visual and spatial relief to the densely built-up environment of the Area.
- 8.5.2 Existing facilities include St. Paul's Hospital, Tung Wah Eastern Hospital, Hong Kong Stadium, the bus terminus at Tung Lo Wan Road, schools, markets and public utility installations, etc.
- 8.5.3 A site at the junction of Victoria Park Road and Gloucester Road is designated as "G/IC(1)". In this sub-area, development of any Government refuse collection point requires planning permission from the Board. Information such as building design, landscape proposal and mitigation measures to tackle any possible environmental impacts shall be included in the planning application for the consideration of the Board.
- 8.5.4 For Hong Kong Stadium, in order to preserve the open character of the site, any new development or redevelopment of an existing building at the open sport field part of the site requires permission from the Board under section 16 of the Town Planning Ordinance.
- 8.5.5 Minor relaxation of the building height restrictions may be considered by the Board on application. Each application will be considered on its own merits.

8.6 Open Space ("O"): Total Area 5.51 hectares

This zone is intended primarily for the provision of outdoor open-air public space for both active and/or passive recreational uses serving the needs of local residents as well as the general public. The major existing open spaces within the Area include the Causeway Bay Recreation Sports Ground at Causeway Road and So Kon Po Recreation Ground at Eastern Hospital Road.

8.7 Other Specified Uses ("OU"): Total Area 10.71 hectares

- 8.7.1 This zone is intended primarily to provide/reserve land for specific purposes or uses. Development and redevelopment in the "OU" zones are subject to maximum building heights in terms of mPD or number of storeys as stipulated on the Plan/in the Notes, or the height of the existing building, whichever is the greater. Such developments, particularly for those which are low-rise, serve to provide visual and spatial relief to the densely built-up environment of the Area. Minor relaxation of the building height restrictions may be considered by the Board on application. Each application will be considered on its own merits.
- 8.7.2 A number of existing sports and recreation clubs are zoned "OU" annotated "Sports and Recreation Club". They are include the Chinese Recreation Club, the Indian Recreation Club and the Disciplined Services Recreation and Sports Club. In order to preserve the open character of these recreation clubs/ground, any new development or redevelopment of an existing building at the open sport field part of the site requires permission from the Board under section 16 of the Town Planning Ordinance.
- 8.7.3 A site at Moreton Terrace is used as the Central Library.
- 8.7.4 The Tiger Balm Garden site between Tai Hang Road and Tai Hang Drive is zoned "OU" annotated "Residential Development with Historical Site Preserved In-situ" with the intention primarily to facilitate residential development with Haw Par Mansion and part of its garden preserved insitu within the site. The site has been developed into a residential development (the Legend) with the historical Haw Par Mansion and part of its garden preserved in-situ, as delineated by a pecked line on the Plan, for public enjoyment through private initiative.
- 8.7.5 The land bounded by Gloucester Road to the north and east, Great George Street generally to the south and The Excelsior to the west, and the sites on Haven Street, and in-the area bounded by Moreton Terrace-area. Tung Lo Wan Road and Causeway Road are zoned "OU(MU)" to reflect the existing mixed commercial/residential land uses. This zone is intended primarily for mixed non-industrial land uses. Flexibility for the development/redevelopment/conversion of residential or other uses, or a combination of various types of compatible uses including commercial, residential, educational, cultural, recreational and entertainment uses, either vertically within a new/converted building or horizontally over a spatial area, is allowed to meet changing market needs. Physical segregation has to be provided between the non-residential and residential portions within a building to prevent non-residential uses from causing nuisance to the residents. Some commercial uses are always permitted in an existing mixed use building before its redevelopment/conversion. In general, for existing buildings, development control on the uses within these buildings is similar to that of a building under the previous "C/R" zone (Schedule III). Separate schedules are provided for residential buildings or residential portion of a composite building (Schedule II), and non-residential buildings or non-residential portion of a composite building (Schedule I) upon development/redevelopment/conversion.

- 8.7.6 The "OU(MU)" sites near Leighton Road, Causeway Road and Tai Hang Road flyover Individual sites close to nearby heavily trafficked road are subject to adverse road traffic noise impacts. Where appropriate, the building design of new development/redevelopment on these sites which include residential use should take into account the need to mitigate the traffic noise impact from these roads.
- 8.7.7 For the "OU(MU)" sites on Haven Street, a minimum setback of 0.5m from the lot boundary fronting Haven Street (Plan 3) shall be provided to improve the pedestrian walking environment.
- 8.7.8 Under exceptional circumstances, for development/redevelopment, minor relaxation of the non-building area restriction and *or* setback requirements may be considered by the Board on application.

8.8 Green Belt ("GB"): Total Area 21.37 hectares

This zone covers the hillslopes to the west of Tai Hang Road. The planning intention of this zone is primarily for conservation of the existing natural environment amid the built-up areas/at the urban fringe, to safeguard it from encroachment by urban type developments and to provide additional outlets for passive recreational uses. It is mainly Government land and is generally not suitable for development. However, with tree planting and landscaping, it can provide a pleasant backdrop to the Area. Passive recreational uses may be possible at selected locations. There is a general presumption against development within this zone to promote conservation of the natural environment.

9. <u>COMMUNICATIONS</u>

9.1 Roads

- 9.1.1 The main arterial roads running through the Area include Gloucester Road and Causeway Road to the north. Access to the Island Eastern Corridor is located to the northeast. Within the Area, there are a number of district distributor roads including Tai Hang Road which provide access to the south.
- 9.1.2 The elevated road system linking Tai Hang Road and Gloucester Road has improved the traffic conditions in the Yee Wo Street area. The Hung Hing Road flyover has been serving as the eastern egress from Wan Chai North to Causeway Bay and North Point.

9.2 Public Transport

The Area is also served by the Mass Transit Railway with 2 stations: the Causeway Bay Station and the Tin Hau Station.

9.3 Pedestrian Streets

- 9.3.1 Pedestrianization of streets is considered an effective way to minimize vehicular-pedestrian conflicts and is favourable to the pedestrian walking environment and safety. Currently, part of the Paterson Street and Jardine's Crescent are used as full time pedestrian streets and Pak Sha Road is used as part time pedestrian street. several streets such as part of Paterson Street and Jardine's Crescent are used as full-time pedestrian streets. Some streets such as Pak Sha Road, part of Lockhart Road, East Point Road and part of Great George Street are used as part-time pedestrian streets.
- 9.3.2 Traffic calming measures are also implemented in a number of streets in Causeway Bay including Russell Street, Lee Garden Road, Lan Fong Road, Yun Ping Road and Kai Chiu Road.
- 9.3.2 According to the "Study on Pedestrian Subways and Related Traffic Improvement Measures in Causeway Bay" undertaken by the Transport Department completed in March 2010, the following streets are recommended for part time pedestrian streets in the short and medium term in order to further improve the pedestrian environment in Causeway Bay:
 - (a) Short term: part of Jaffe Road between Cannon Street and the open space of World Trade Centre is proposed for part time pedestrian street to be implemented within 1 to 2 years' time.
 - (b) Medium term: Kai-Chiu Road, Yun Ping Road and Lee Garden Road are proposed for part time pedestrian street to be implemented in association with future development projects in the area.

10. <u>UTILITY SERVICES</u>

The Area is well served with piped water supply, drainage and sewage systems. Electricity, gas and telephone services are also available and no difficulties are anticipated in meeting the future requirements for utility services upon full development.

11. CULTURAL HERITAGE

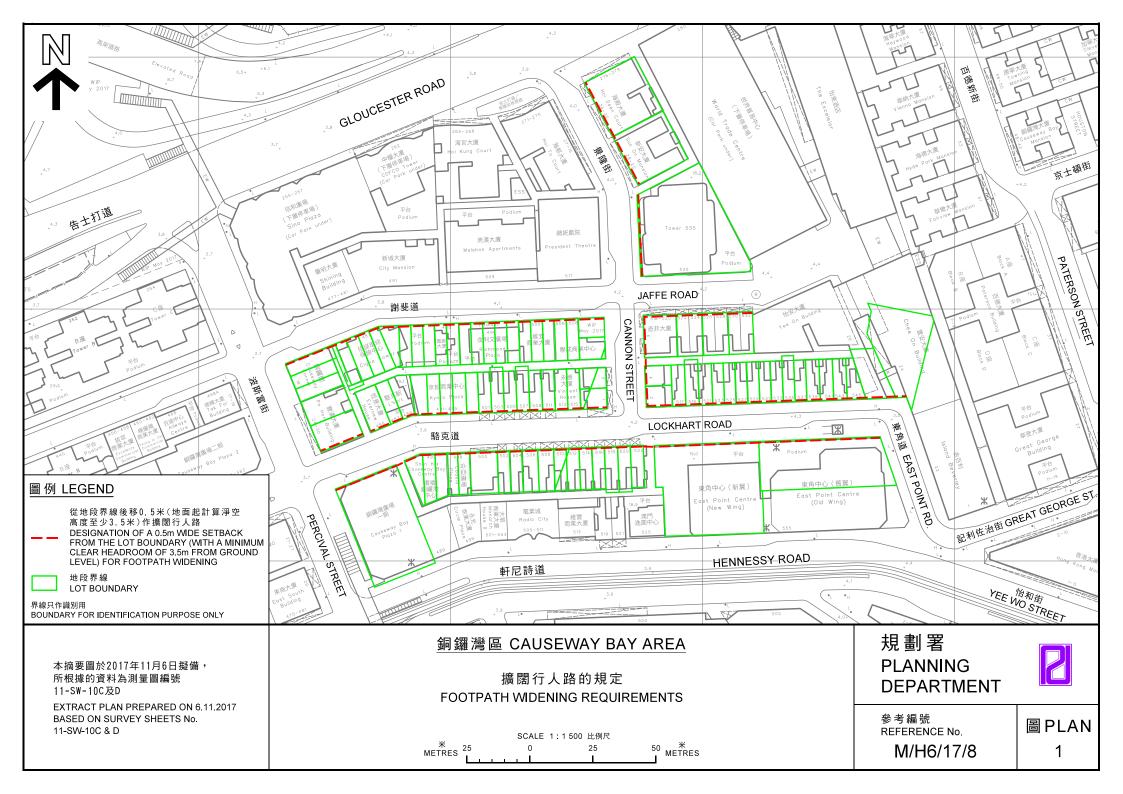
- 11.1 There are one declared monument, namely the Race Course Fire Memorial at So Kon Po, and eight nine graded historical buildings/structures in the Area:
 - (a) St. Mary's Church at 2A Tung Lo Wan Road;
 - (b) St. Paul's Convent Church at Tung Lo Wan Road;
 - (c) Haw Par Mansion at Tai Hang Road;
 - (d) Shing Kwong Church at 7 Eastern Hospital Road;
 - (ed) Tung Wah Eastern Hospital at 19 Eastern Hospital Road;
 - (fe) Scout Den of Queen's College at Causeway Road;

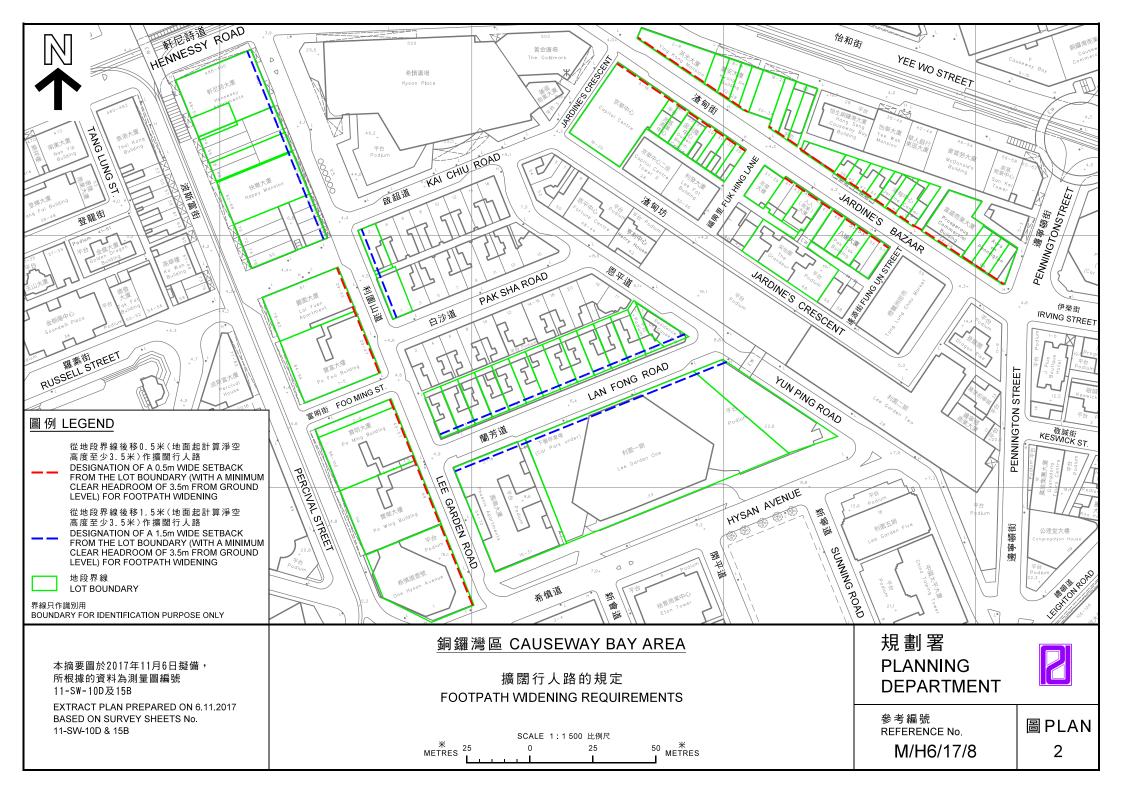
- (gf) 4 Wang Fung Terrace; and
- (hg) 2 Li Kwan Avenue;
- (h) No. 12 School Street; and
- (i) No. 4 Second Lane.
- 11.2 Every effort should be made to preserve the historical buildings/structures mentioned above. Prior consultation with the Antiquities and Monuments Office of the Leisure and Cultural Services Department should be made if any development or rezoning proposals might affect the above declared monument, historical buildings/structures and their immediate environs.

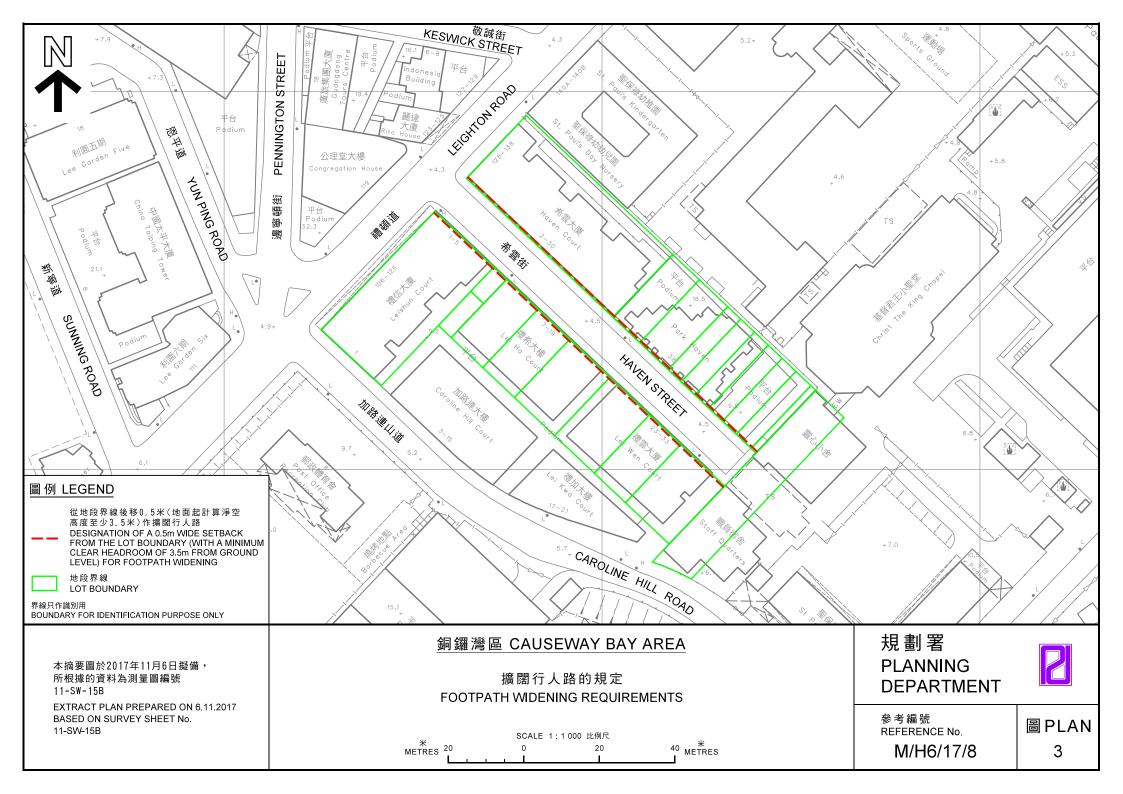
12. <u>IMPLEMENTATION</u>

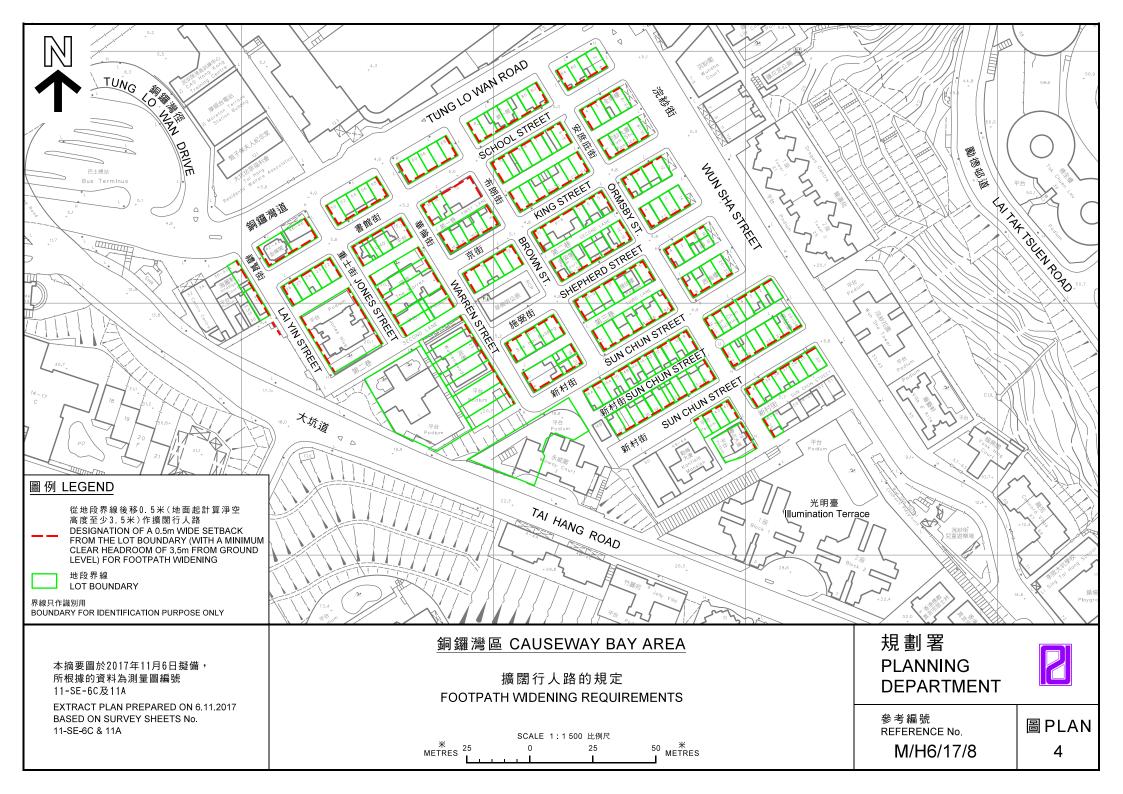
- Although existing uses non-conforming to the statutory zoning are tolerated, any material change of use and any other development/redevelopment must be always permitted in terms of the Plan or, if permission is required, in accordance with the permission granted by the Board. The Board has published 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.
- 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 as the basis for public works planning and site reservation within Government departments. 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 the works departments, such as the Highways Department and the Architectural Services Department. In the course of implementation of the Plan, the Wan Chai District Council would be consulted as appropriate.
- 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 the guidelines published by the Board. The outline development plans 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, 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 SEPTEMBER 2010 2017









Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers

APP-151

Building Design to Foster a Quality and Sustainable Built Environment

There has been rising public concern over the quality and sustainability of the built environment, including issues regarding building bulk and height, air ventilation, greening and energy efficiency in buildings. In 2009, the Council for Sustainable Development launched a public engagement process entitled "Building Design to Foster a Quality and Sustainable Built Environment" in collaboration with the Government. The exercise has pointed to a need for putting in place a package of new measures to foster a quality and sustainable built environment. This practice note sets out a package of measures, covering the following major elements, to promote a quality and sustainable built environment:

- (a) sustainable building design guidelines (SBD Guidelines) on building separation, building set back and site coverage of greenery,
- (b) gross floor area (GFA) concessions, and
- (c) energy efficiency of buildings.

Sustainable Building Design Guidelines

- 2. The Buildings Department (BD) has commissioned a consultancy study on "Building Design that Supports Sustainable Urban Living Space in Hong Kong". Based on the study, a set of SBD Guidelines has been developed to promote building separation, building set back and site coverage of greenery as promulgated in the Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) APP-152.
- 3. To enhance the quality and sustainability of the built environment, the Building Authority (BA) will take account of the compliance with the SBD Guidelines as promulgated in the PNAP APP-152, where applicable, as a pre-requisite in exempting or disregarding green / amenity features and non-mandatory / non-essential plant rooms and services from GFA and/or site coverage calculations (GFA concessions) in new building developments. Such green / amenity features and non-mandatory / non-essential plant rooms and services and the relevant practice notes promulgating the criteria and requirements for granting GFA concessions are summarised in Appendix A.

/Overall

Overall Cap on GFA Concessions

4. To contain the effect on the building bulk while allowing flexibility in the design for incorporating desirable green / amenity features and non-mandatory / non-essential plant rooms and services, an overall cap will be imposed on the total amount of GFA concessions for these features, except those features described in paragraph 5 below. This cap is set at 10 % of the total GFA of the development. If a development comprises both domestic and non-domestic buildings or in the case of a composite building, GFA concessions for features serving the domestic part or the non-domestic part of the development will be calculated separately such that GFA concessions for each part will be capped at 10%, based on the total GFA of the respective part of the development. Features that are subject to this overall cap of GFA concessions are listed in the table at Appendix A.

-2-

- 5. GFA concessions for the following features, which may have to satisfy their own individual acceptance criteria, will not be subject to the overall cap:
 - (a) Mandatory features and essential plant rooms such as refuse storage chamber, telecommunications and broadcasting rooms:
 - (b) Communal podium gardens and sky gardens that improve permeability of a development to its neighbourhood;
 - (c) Floor space used solely for parking motor vehicles and loading and unloading of motor vehicles which is separately controlled given its significant impact on building bulk and height and the relevant transport, planning and environmental policies;
 - (d) Voids in front of cinemas or in shopping arcades, etc. with operational needs in non-domestic developments:
 - (e) Bonus GFA and / or GFA exemptions relating to dedication for public passage or surrender for road widening and building set back in accordance with the SBD Guidelines; and
 - (f) Hotel concessions granted under regulation 23A of the Building (Planning) Regulations.

Pre-requisites for Granting GFA Concessions

6. To promote sustainable building designs and energy efficient features in new developments, compliance with the following requirements will be pre-requisites for the granting of GFA concessions for all green / amenity features and non-mandatory / non-essential plant rooms and services provided in a proposed development as described in Appendix A:

/(a)

Annex C1 of TPB Paper No. 10340

- (a) Compliance with the SBD Guidelines on building separation, building set back and site coverage of greenery in PNAP APP-152, where applicable:
- (b) For domestic or composite development, compliance with the requirements of PNAP APP-156 on Design and Construction Requirements for Energy Efficiency of Residential Buildings, where applicable;
- (c) Submission of the official letter issued by the Hong Kong Green Building Council (HKGBC) acknowledging the satisfactory completion of project registration application for BEAM Plus certification:
- (d) Submission of a letter by the developer or owner undertaking to submit to the BD the following documents:
 - (i) Result of the Provisional Assessment under the BEAM Plus certification conferred / issued by the HKGBC to be submitted prior to the application for consent to commence the building works shown on the approved plans (consent);
 - (ii) Information on the estimated energy performance / consumption for the common parts (for domestic developments) or for the entire building (for nondomestic developments including hotels) to be submitted in the standard form (Appendix B) prior to the consent application;
 - (iii) Information specified in item (ii) above to be updated and submitted at the time of submitting application for occupation permit (OP);
 - (iv) Result of the Final Assessment under the BEAM Plus certification conferred / issued by the HKGBC, within 18 months of the date of issuance of the OP by the BA;
 - (v) Provisional energy efficiency report prior to the consent application in accordance with PNAP APP-156, where applicable; and
 - (vi) Final energy efficiency report upon application for an OP in accordance with PNAP APP-156, where applicable;

/ (f)

(e) Compliance with the overall cap on GFA concessions as described in paragraph 4 above, where applicable; and (f) Compliance with the relevant acceptance criteria for the individual green and amenity features.

Conditions for Granting GFA Concessions

- 7. In addition to the acceptance criteria and conditions that may be imposed for granting GFA concessions as detailed in the relevant practice notes for the green / amenity features and non-mandatory / non-essential plant rooms and services described in paragraph 6 above, the following conditions may be imposed:
 - (a) The modification is given in recognition of the undertaking submitted by the developer or owner as described in paragraph 6(d) above:
 - (b) Information described in paragraph 6(d)(i), (ii) and (v) above shall be submitted to the BD prior to the consent application:
 - (c) Information described in paragraph 6(d)(iii) and (vi) above shall be submitted to the BD at the time of submitting application for OP;
 - (d) Information described in paragraph 6(d)(iv) above shall be submitted to the BD within 18 months of the date of the OP; and
 - (e) The modification will be revoked if the consent application is submitted prior to the submission of information specified in item (b) above.
- 8. Authorized persons should consult a registered professional engineer under the Engineers Registration Ordinance of the relevant discipline in assessing the energy efficiency of the building and in completing the standard form at Appendix B;

Disclosure for Public Information

- 9. To increase the transparency of information to the public, the following information will be uploaded onto the BD website after the issuance of the occupation permit:
 - (a) The estimated energy performance / consumption information as described in paragraph 6(d)(iii) above;
 - (b) The results of the Provisional Assessment under the BEAM Plus certification as described in paragraph 6(d)(i) above, which will be replaced by the results of the Final Assessment described in paragraph 6(d)(iv) above, upon receipt; and

(c) The finalised RTTV and OTTV for RRF as recorded in the final energy efficiency report.

(HUI Siu-wai) Building Authority

Ref.: BD GP/BREG/P/49

First issue January 2011

This revision September 2014 (AD/NB1) (paras. 6, 7 and 9, Item 27 in Appendix

A and Appendix B amended and

previous paras. 10 and 11 deleted)

Appendix A (PNAP APP- 151)

List of GFA Concessions

		Practice Notes	Features subject to compliance with the pre- requisites in para. 6 & 7 of PNAP APP-151	Features Subject to the Overall Cap of 10% in para.4 of PNAP APP-151
	rded GFA under Regulation 23(3)(b) of the g (Planning) Regulations (B(P)R)			
1.	Carpark and loading/unloading area	PNAP APP-2 and		
	excluding public transport terminus	APP-111		
2.	Plant rooms and similar services	D		
2.1	Mandatory feature or essential plant room, area of which is limited by respective PNAP	PNAP APP-35 &		
	or regulation, such as lift machine room, TBE	APP-84		
	room, refuse storage chamber, etc.		ŀ	
2.2	Mandatory feature or essential plant room,	PNAP APP-2 and		
,_	areas of which is NOT limited by any PNAP	APP-42		
	or regulation, such as room occupied solely			
	by FSI and equipment, meter room,			
	transformer room, potable and flushing water			
	tank, etc. ²			
2.3	Non-mandatory or non-essential plant room,	PNAP APP-2 and	1	/
such as A/C plant room, AHU room, etc. 3		APP-42		
Disrega B(P)R	rded GFA under Regulation 23A(3) of the			
3.	Area for picking up and setting down persons departing from or arriving at the hotel by vehicle	PNAP APP-40		
4.	Supporting facilities for a hotel	PNAP APP-40		
Green F	Features under Joint Practice Notes (JPNs)			
5.	Balcony for residential buildings	JPN1	1	_/
6.	Wider common corridor and lift lobby	JPN1	/	
7.	Communal sky garden	JPN1 & 2	/	
	<u> </u>	PNAP APP-122	•	
8.	Communal podium garden for non- residential buildings	JPN1	1	
9.	Acoustic fin	JPNI	/	
10.	Wing wall, wind catcher and funnel	JPN1	/	
11.	Non-structural prefabricated external wall	JPN2	/	
12.	Utility platform	JPN2		
13.	Noise barrier	JPN2	· ·	. •
		JIIVZ	'	
	y Features			
14.	Counter, office, store, guard room and lavatory for watchman and management staff, Owners' Corporation Office	PNAP APP-42	/	. 🗸
15.	Residential recreational facilities including	PNAP APP-2,		
13,	void, plant room, swimming pool filtration plant room, covered walkway etc serving	APP-42 and APP-104	*	•
	solely the recreational facilities			
16.	Covered landscaped and play area	PNAP APP-42	1	

-1-

17.	Horizontal screen/covered walkway, trellis	PNAP APP-42	_/_	19
18.	Larger lift shaft	PNAP APP-89		1
19.	Chimney shaft	PNAP APP-2	1	1
20.	Other non-mandatory or non-essential plant room, such as boiler room, SMATV room 4	PNAP APP-2	1	1
21.	Pipe duct, air duct for mandatory feature or essential plant room ⁵	PNAP APP-2 & APP-93		
22.	Pipe duct, air duct for non-mandatory or non- essential plant room ⁶			1
23.	Plant room, pipe duct, air duct for PNAP APP-2 environmentally friendly system and feature ⁷		/	
24.	High headroom and void in front of cinema, shopping arcade etc. in non-domestic development ⁸	PNAP APP-2	1	
25.	Void over main common entrance (prestige entrance) in non-domestic development	PNAP APP-2 & APP-42	1	1
26.	Void in duplex domestic flat and house	PNAP APP-2	√	/
27.	Sunshade and reflector	PNAP APP-19, APP-67 & APP- 156		
28.	Minor projection such as AC box, window cill, projecting window	PNAP APP-19 & APP-42		
29.	Other projection such as air-conditioning box and platform with a projection of more than 750mm from the external wall	PNAP APP-19	1	1
Other	Items			
30.	Refuge floor including refuge floor cum sky garden	PNAP APP-2 & APP-122		
31.	Covered area under large projecting/overhanging feature	PNAP APP-19		
32.	Public transport terminus (PTT)	PNAP APP-2		
33.	Party structure and common staircase	PNAP ADM-2		
34.	Horizontal area of staircase, lift shaft and vertical duct solely serving floor accepted as not being accountable for GFA	PNAP APP-2		
35.	Public passage	PNAP APP-108		
36.	Covered set back area	PNAP APP-152		
Bonus	GFA			<u> </u>

Notes:

- 1 Mandatory feature or essential plant room, area of which is limited by respective PNAP or regulation, include duct for basement smoke extraction system, lift machine room, telecommunications and broadcasting room, refuse storage chamber, refuse storage and material recovery chamber, material recovery chamber, refuse storage and material recovery chamber, and pipe and air ducts which are part of the distribution network for such mandatory feature or essential plant and contained within such room.
- Mandatory feature or essential plant room, area of which is NOT limited by any PNAP or regulation*, include electrical switch room, meter room, transformer room, generator room, potable and flushing water tank and pump room, sewage treatment plant room, refuse chute, refuse hopper room, room occupied solely by fire service installations and equipment such as fire service / sprinkler water tank and pump room, fire control centre, CO2 room, fan for smoke extraction system / staircase pressurization system, hose reel closet, sump pump room/pump room for rainwater, soil and waste disposal, or similar feature / plant room and pipe and air ducts which are part of the distribution network for such mandatory feature or essential plant and contained within such room.

- 2 -

- Non-mandatory feature or non-essential plant room, area of which may be disregarded under regulation 23(3)(b) of the B(P)R, include plant room occupied solely by machinery or equipment for air-conditioning or heating system such as AC plant room, air handling unit room, or similar plant room, and pipe and air ducts which are part of the distribution network for such feature or plant and contained within such room.
- Other non-mandatory feature or non-essential plant room, area of which may be exempted under regulation 23(3)(a) of the B(P)R, include hot water boiler room, filtration plant room for swimming pool in a hotel or for a water feature in a communal garden/landscape area, SMATV room, or similar plant room, and pipe and air ducts which are part of the distribution network for such feature or plant and contained within such room.
- Pipe duct, air duct for mandatory feature or essential plant room, include pipe duct for rainwater, soil and waste disposal and individual pipe and air ducts which are part of the distribution network for such mandatory feature or essential plant as described in notes 1 and 2 above, and located outside such plant room.
- Pipe duct, air duct for non-mandatory feature or non-essential plant room, include individual pipe and air ducts which are part of the distribution network for such non-mandatory feature or non-essential plant as described in notes 3 and 4 above and located outside such plant room.
- Plant room for environmentally friendly system and feature, area of which may be exempted under regulation23(3)(a) of the B(P)R, include plant room for rainwater harvesting / grey water recycling system, battery room for solar panels, or similar system / feature, and pipe and air ducts which are part of the distribution network for such system and feature
- 8 High headroom and void in front of cinema, shopping arcade etc. in non-domestic development include void in front of cinema, theatre balcony, banking hall, shopping arcade, cockloft floor for storage within the ground storey in single-staircase building, auditorium, sporting hall, school hall and religious institution that have operational justifications.
- 9 Horizontal screen / covered walkway / trellis may be excluded from the overall cap on GFA concessions subject to provision of greenery to BA's satisfaction as stipulated under PNAP APP-42.
- * Although the feature or plant room, area of which is not limited by any PNAP or regulation, only the minimum amount of GFA necessary for accommodating and maintaining the services and commensurate with the the development would be allowed to be disregarded as stated in PNAP APP-2.

(9/2014)

Appendix B 附錄B

(PNAP APP- 151)

(《認可人士、註冊結構工程師及註冊岩土工程師作業備考-151》)

Declaration on Annual Energy Use of a Building Development 樓字發展項目每年能源消耗量聲明

Part I: Building Particulars 第一部分: 樓字詳情

(a)	Building name 樓宇名稱 (if known 如知悉): (English)	(中文)					
(b)	Address of site 地盤地址: <u>(English)</u>						
	(中文)						
(c)	Lot number 地段編號:						
(d)	Type of building 樓字類型: * Domestic Building 住宅樓字 / Non –domestic Building 非住	宅樓字/Composite Building 綜合用途樓字					
(e)	Provision of Central Air Conditioning 提供中央空調 *YES是 / NO 否						
(f)	Provision of Energy Efficient Features 提供具能源效益的設施	*YES是/NO否					
(g)	Please list the * proposed / installed Energy Efficient Features (請列出 * 擬安裝 / 已安裝的具能源效益的設施 (如有需要,						
	English	<u>中文</u>					
	1						
	2						
	3						

Part II: Predicted Annual Energy Use[©] of * Proposed / Completed * Building / Part of Building 第二部分: * 擬興建 / 已竣工 * 樓字 / 部分樓字預計每年能源消耗量®

Type of Development 發展項目類型	Location 位置	Internal Floor Area Served (m²) 使用有關裝 置的內部模 面面積	Amular Energy Use of Dascine Building (m'annum) 基線樓中②每年能源消耗量 (平方米/年)		Building (m²/annum) 探*與建/已竣二 基線樓宇②每年能源消耗量 探*與建/已竣二 海東	
		(不方米)			Electricity 電力 kWh 千瓦小時	Town Gas/ LPG 煤氣 / 石油氣 unit 用景單位
Domestic Development (excluding Hotel) 住用發展項目 (不 包括酒店)	Central building services installation 中央屋宇裝備裝置®					
Non-domestic Development (including Hotel)	Podium(s) (central building services installation) 平台(中央屋宇裝備裝置)					
非住用發展項目の	Podium(s) (non - central building services					

(包括酒店)	installation) 平台(非中央屋字裝備裝置) Tower(s)					
	(central building services installation) <u>塔櫻(中</u> 央屋宁裝備裝置)					
	Tower(s) (non - central building services installation) 塔樓 (非中央屋字裝備裝置)					
	the lower the estimated "Annu example, if the estimated "ar					
energy use of base the baseline building	line building", it means the p ng. The larger the reduction, the	redicted use one greater the	of energy is a efficiency.	nore efficient in	the proposed	building than in
宇的預計每年能測	樓宇的預計每年每平方米 原消耗量少於基線樓宇預計					
有效。減少愈多,	效能愈大。					
D						

Part III 第三部分

The following installation(s) * is / are * designed / completed in accordance with the relevant Codes of Practice published by the Electrical and Mechanical Services Department:-

以下裝置乃按機電工程署公布的相關實務守則 設計/完成:-

Type of Installations 裝置類型	YES 是	NO 否	N/A 不適用
Lighting Installations 照明裝置			
Air Conditioning Installations 空調裝置			
Electrical Installations 電力裝置			
Lift & Escalator Installations 升降機及自動梯的裝置			
Performance-based Approach 以總能源爲本的方法			

Please (🗸) where appropriate 訓在適當方格內塌上(🗸)號

Signature 簽署" gistered Professional Engineer註冊專業 : 程師/ Registered Energy Assessor 註冊能源效益評核人)	Signature簽署 [#] (Authorized Person 認可人士)
Certificate of Registration No. 註冊證書編號	Certificate of Registration No. 註冊證書編號"
Date of expiry of registration 註冊到期日"	Date of expiry of registration 註冊到期日"
	Company Chop公司印章/Signature of applicant申諸人
	Date日期

[&]quot;In accordance with the registration record 根據註冊記錄

^{*} Delete whichever is inapplicable 請刪去不適用者

The predicted annual energy use per m² per annum, in terms of electricity consumption (kWh) and town gas/LPG consumption (unit) of the development by the internal floor area served, where:-

设计每年每不方米能源消耗量(以耗電量(干瓦小時)及煤製/石油氣消耗量用最單位)計算),指將勞展項目的每年能源消耗線 量除以使用有關裝置的內部樓面面積所得出的商,其中:

- (a) "total annual energy use" has the same meaning of "annual energy use" under Section 4 and Appendix 8 of the BEAM Plus for New Building (current version); and 每年能源消耗量"與新료樓宇BEAM Plus標準(現行版本)第4節及附錄8中的「年能源消耗」具有相同演義;及
- (b) "internal floor area", in relation to a building, a space or a unit means the floor area of all enclosed space measured to the internal faces of media from a control of a building, a space of a unit means the from area of an enclosed space enclosing external and/or party walls.

 「「內部標面面積」,指外將及/或共用將的內壁之內表面起程度出來的標面面積。
- 20 "Baseline Building" has the same meaning as "Baseline Building Model (zero-credit benchmark)" under Section 4 and Appendix 8 of the BEAM Plus for New Building (current version).

"基線樓字"與新建樓字BEAM Plus標準(現行版本)第4節及附錄8中的"基準建築物模型(零分標準)"具有相同編 £.

(3) 'Central Building Services Installation' has the same meaning as that in the Code of Practice for Energy Efficiency of Building Services Installation issued by the electrical and Mechanical Services Department.

"中央屋宇裝備裝置"與機電工程署發出的〈屋宇裝備裝置能源效益實務守訓〉中的涵義相同。

 Podium(s) normally means the lowest part of the development (usually the lowest 15m of the development and its basement, if any) carrying different use(s) from that of the tower(s) above. For development without clear demarcation between podium(s) and tower(s), the development, as a whole, should be considered as tower(s).

平台 : 般指發展項目的最低部分 (通常爲發展項目最低15米部分及其地庫(如適用)),並與其上的塔樓具有不同用途。對於 並無明確劃分平台與塔樓的發展項目,應視整個發展項目爲塔樓。

(9/2014)

Buildings Department

Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers

APP-152

Sustainable Building Design Guidelines

This practice note promulgates guidelines on building design which will enhance the quality and sustainability of the built environment in Hong Kong. These guidelines are the Sustainable Building Design Guidelines (SBD Guidelines) referred to in Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers (PNAP) APP-151, the compliance with which the Building Authority (BA) will take into account, where applicable, as a pre-requisite in exempting or disregarding green and amenity features and non-mandatory / non-essential plant rooms and services from gross floor area and/or site coverage calculations (GFA concessions) for new building developments. Terminology used in the SBD Guidelines is listed in Appendix A.

Objectives

2. The SBD Guidelines establish 3 key building design elements to enhance the environmental sustainability of our living space. They are building separation, building setback and site coverage of greenery. The objectives are to achieve better air ventilation, enhance the environmental quality of our living space, provide more greenery, particularly at pedestrian level; and mitigate the heat island effect.

Building Separation

- 3. In order to improve air ventilation, enhance the environmental quality at pedestrian level and mitigate heat island effects arising from the undesirable screening effect of long buildings at different levels, building sites of the following categories should comply with the building separation requirements:
 - (a) sites that are 20,000m² or above; or
 - (b) sites that are less than 20,000m² and proposed with building or group of buildings having a continuous projected façade length (Lp) of 60m or above.
- 4. Building separation requirements for each assessment zone:
 - (a) Design Requirement (1) Lp

The Lp of a building or group of buildings along a *street* should not exceed the maximum permissible¹ which is calculated based on 5 times the *mean width of street canyon (U)*; and

/(b)

2

- b) Design Requirement (2) Separating Distance (S) and Permeability (P)
 - (i) The P, comprising a minimum of 2/3 Intervening Space (IS) and a maximum of 1/3 Permeable Element (PE), assessed on two vertical projection planes for the two categories of sites should not be less than those as shown in Table 1.
 - (ii) Along the chosen projection planes, the S for the IS between the projected façade of the building and the site boundaries or the centreline of adjoining streets / lanes should not be less than 7.5m wide: and
 - (iii) If such IS are not sufficient to meet 2/3 of the P, additional IS with S not less than 15m wide can be provided between 2 projected building façades for making up.

Table 1

Height (H) of the	· · · · · · · · · · · · · · · · · · ·	gs in each assessment zone ojection planes		
tallest building	Site area $< 20,000$ m ² and with Lp ≥ 60 m	Site area ≥ 20,000m		
	Each Plane	Plane 1	Plane 2	
H ≤ 60m	20%	20%	25%	
H > 60m	20%	20%	33.3%	

- 5. Detailed requirements and method of measurement on Lp, S and P are given in Appendix B.
- 6. Standalone residential building blocks of height not exceeding 15m can be exempted from the building separation requirements and disregarded in the assessment of such for other buildings.

Building Setback

- 7. In order to improve air ventilation, enhance the environmental quality at pedestrian level and mitigate street canyon effect, buildings fronting a *street* less than 15m wide should be set back to comply with one of the following requirements:
 - (a) For maintaining a ventilation corridor with minimum section of 15m x 15m, no part of the building up to a level of 15m above the street level should be within 7.5m from the centreline of the street as shown in Figures C1 and C2 of Appendix C. Where level of a street varies, the minimum sectional area should be kept along the full frontage following the profile of the street.

/(b)....

See Appendix B for computation of maximum permissible Lp

(b) Where a cross-ventilated communal podium garden with a clear height of not less than 4.5m is provided, no part of the building up to a level of 15m above the street level, should protrude above the 45° inclined plane, the base of which is placed at street level at the site boundary line on the opposite side of the street as shown in Figures C3 and C4 of Appendix C.

Typical examples on the application of building setback requirements are given in Figures C5 to C9 of Appendix C.

- 8. In determining the compliance with the setback requirement, the BA may take into account the following factors:
 - (a) Structures higher than 15m above the street level may be allowed to build over the setback area². If the setback area is uncovered, a canopy that complied with regulation 10 of the B(P)R may be permitted;
 - (b) Minor projecting features and signboards projecting not more than 600mm from the external walls and at a clear height of not less than 2.5m above the *street* level; and single-storey footbridges across the setback area may also be permitted;
 - (c) Columns supporting the building above may be permitted within the setback areas subject to requirements as shown in Figure C2 of Appendix C; and
 - (d) The setback area should be properly landscaped and paved, and be open without any permanent building structures other than landscaped features, perforated balustrades, perforated boundary walls and structural columns.
- 9. Buildings may be exempted from whole or parts of the building setback requirement with reference to a *street* where its height³ is less than 2 times the mean width of the *street*.

Site Coverage of Greenery

10. In order to improve the environmental quality of the urban space, particularly at the pedestrian level and to mitigate the heat island effect, sites with areas of 1,000m² or more should be provided with *greenery areas* in accordance with Table 2. Detail guidelines are provided in Appendix D.

/Table....

Table 2

Site Area	Minimum Site Cov	erage of Greenery
Sile Alea	Primary zone	Overall
1,000 m ² - 20,000 m ²	10%	20%
≥ 20,000 m ²	15%	30%

11. This requirement is not applicable to sites with a single family house only.

Special Considerations

12. There are special circumstances in which genuine difficulties in complying with the SBD Guidelines may be encountered. Examples include new buildings serving special functions such as ferry piers, railway terminals, stadia; and conversion of existing buildings to new buildings especially the adaptive reuse of historic buildings where building façades or even layout are character defining elements. In recognition of such genuine constraints in meeting the prescriptive requirements, the BA takes a flexible and pragmatic stance when considering applicants' proposals holistically to achieve the objectives of the SBD Guidelines. Alternative approaches are provided in Appendix E.

Conditions for Approval

13. PNAP APP-151 specifies the compliance with the SBD guidelines as one of the pre-requisites for granting GFA concessions. When granting such modifications under section 42 of the Buildings Ordinance, the BA may impose relevant conditions for assuring the sustainability of the approved building design.

Information to be Submitted

- 14. To demonstrate compliance with the building separation, building setback and site coverage of greenery requirements, information as detailed in Appendix F should be submitted.
- 15. To increase the transparency of information to the public, plans and details showing the site coverage of greenery as described in Appendix F will be uploaded to the BD's website after the occupation permit is issued.

(HUI Siu-wai) Building Authority

Ref.: BD GR/1-55/187/1 BD GP/BREG/P/49

First issue January 2011

This version January 2016 (AD/NB1) (General revision)

The setback area at ground level under the footprint of such structures or the covered areas under the canopy may be exempted from GFA calculation if it is designated as common parts accessible by occupants of the building and without any commercial activities.

Height of the building in this context is measured from the mean level of the *street* on which the building abuts to the mean height of the roof over the highest usable floor space in the building.

Appendix A (PNAP APP-152)

Terminology

Air	Ventilation Assessmer
(AV	'A)

ant Air ventilation assessment (AVA) is a protocol to objectively assess the effects of planning and development proposals on external air movement for achieving a better pedestrian wind environment. An advisory framework for the methodology to undertake AVA has been outlined in the Technical Guideline for Air Ventilation Assessment available in the Planning Department's website under the Hong Kong Planning Standard and Guidelines.

Assessment Zones

Assessment zones demarcate the vertical spatial division for assessing fulfilment of the building separation requirement. The zonal division consists of low zone (within 20m from level zero), middle zone (20-60m from Level Zero) and high zone (higher than 60m from Level Zero), [Building Separation]

Computational Fluid Dynamics (CFD)

CFD is a branch of fluid mechanics using numerical methods and algorithms to solve and analyze problems that involve fluid flows. Computers are used to perform the millions of calculations required to simulate the interaction of fluids and gases with the complex surfaces used in engineering.

Continuous projected facade length (Lp)

The total projected length of facade of a building or a group of buildings if separation between them is less than 15m. (see Figures B2 & B3 of Appendix B) [Building Separation]

Paving having not less than 50% of floor designed for the growth of grass or Grass paving

groundcovers. [Site Coverage of Greenery]

Greenery area Area with live plants and soil or similar base. Such area may include other

greening features as per Appendix D. [Site Coverage of Greenery]

Intervening Space (IS) Space that is open to above or have a clear height of not less than 2/3 of the

height of the respective assessment zone. [Building Separation]

Level Zero The mean street level on which the site abuts or where the site abuts streets

having different levels, the mean level of the lower or lowest street. [Building

Separation

Mean Width of Street Canvon (U)

The mean distance between (i) an external wall of the subject building which is within 30m perpendicular from the centre line of a street and (ii) the boundary of the other site on the opposite side of the street, as shown in Figures B4 to B7 of Appendix B. It forms the basis for assessing the maximum permissible Lp of the building in the assessment zone, which is 5xU. [Building Separation]

Primary Zone

The 15m vertical zone of a site along the abutting street level. The greenery in this zone is for providing visual contacts or access from a street through common parts of the building for enhancing the walkability of urban space to the public, visitors or occupiers. The top level of soil or similar base for planting should be taken as the reference level for inclusion in the Primary Zone. [Site Coverage of Greenery].

A percentage indicating how permeable a building or group of buildings in that Permeability (P)

assessment zone is. It is obtained by dividing the sum of the areas recognized as intervening space or permeable elements by the area of the assessment zone

as shown in Figure B9 of Appendix B. [Building Separation].

Space provided within, above, below or between buildings within the same site Permeable Element (PE)

with a minimum clear width and clear height of 3m as projected onto the chosen projection plan, e.g. refuge floors, communal sky gardens etc. [Building Separation]

Separating Distance (S)

This is the minimum width of an IS in the following scenarios:-

- between end of the projected building facade and the site boundary:
- between end of the projected building facade and the centerline of adjoining street/lane where the site abuts: or
- (iii) between 2 projected building facades.

Where such distance varies for an IS, the method of arriving at the mean of such distance is shown in Figure B12 of Appendix B. [Building Separation]

Site Coverage of Greenery

The percentage of total live greenery area divided by the area of the site.

Street

A street of width not less than 4.5m vested in the Government and maintained by the Highways Department or a private street on land held under the same Government lease as the site and under the terms of the lease, the lessee has to surrender (when required to do so) the land on which the street is situated to the Government, as described under B(P)R18A(3)(a)(i) & (ii), [Building Separation and Building Setback1

Vertical greening

Greenery that grows within the primary zone on a vertical surface abutting a street or public pedestrian way/public open space accessible from a street, and the top level of the soil or similar base including the frame for greenery is within the primary zone. [Site Coverage of Greenery]

(Rev 1/2016)

Appendix B (PNAP APP-152)

Building Separation Requirements

1. Assessment and Method of Measurement

- 1.1 The design of building(s) above *Level Zero* of the site shall comply with the Design Requirements (1) and (2) below. They shall be assessed separately for each of the three *assessment zones* i.e. the low, middle and high zones.
- 1.2 In general, all measurements for building separation are taken from the external walls of the building. Minor building features that will not materially affect air ventilation around buildings, including single-storey footbridges across buildings (not shadowed vertically by other footbridges), signboards, minor projecting features as described in paragraph 3 of PNAP APP-19, open sided features such as balconies, utility platforms, covered walkways, trellises and other highly permeable features such as railing and perforated fence walls (with free area $\geq 2/3$ or equivalent) may be disregarded in the building separation assessment. Minor noise barriers that are not extensive in height and designed to permit air flow through or over the barriers may also be disregarded subject to the provision of appropriate building features or permeable elements such as communal podium gardens to compensate for the barrier's obstruction to free air flow to the satisfaction of the BA.
- 1.3 Effect on air ventilation around buildings due to topographical features in a site including any slope features and retaining walls may be disregarded. Any parts of a building that are below the original site topography may therefore be disregarded from the assessment zone (see Figure B1).

2. Design Requirement (1) - Lp of building(s) abutting a street

- 2.1 Design Requirement (1) controls the maximum *Lp* of a building or a group of buildings if any part of the building is within 30m from the centreline of the *street* on which the building(s) abuts.
- 2.2 The Lp of a building or a group of buildings along its long side shall not exceed the maximum permissible Lp which is obtained by multiplying 5 and the U on which the building(s) abuts. The U of such a street canyon in the assessment zone is measured perpendicular to the centreline of the street from the external wall of the building that is within 30m from the centreline of the street, to the site boundary of the other site on the opposite side of the street (see Figures B2 to B6). If the building or group of buildings abuts two or more streets having different U, the least U shall be adopted.
- 2.3 If the width of a street canyon varies (on plan), *U* is the width obtained by dividing the area of such a street canyon by its length as measured along the centreline of the *street*. If only a part of the building is within 30m from the centreline of the *street*, *U* is the mean width of the street canyon that abuts such part of the building. If there is more than one such street canyon along the same *street*, *U* is the width obtained by dividing the sum of the areas of such street canyons by the sum of the lengths, as measured along the centreline of the *street*, of such street canyons (see Figure B7).

- 2.4 For the purpose of measuring Lp of a building or a group of buildings along its long side, the part of the building(s) that is within the low zone and of a height of not more than 6.67m (i.e. 1/3 of 20m which is the height of the low zone) may be disregarded
- 2.5 Maximum permissible Lp is not applicable for Design Requirement (1) in the following circumstances:
 - (a) The subject site does not abut a street:
 - (b) There is no building or no parts of building in the assessment zone within 30m from the centreline of any streets on which the site abuts

3. Design Requirement (2) - S & P of Buildings (Projection Planes for Assessment)

- 3.1 Assessment on compliance with Design Requirement (2) shall be made through a pair of vertical projection planes (x, y) at an orthogonal relationship to each other (see Figure B8). At least one of the projection planes for the low zone shall be set parallel to a *street* on which the site abuts. For a site that abuts on a curvilinear *street*, the projection plane for the low zone shall be set along any tangent of the *street*. For the middle/high zones, such pair of projection planes may be set to suit the building disposition or the site wind environment.
- 3.2 To allow more flexibility in building design, the angle between each pair of projection planes may vary from 75 to 105 degrees.
- 3.3 For a site that is less than 20,000 m² and the total width of all projected building facades exceeds 60m along one projection plane only, assessment on compliance with Design Requirement (2) is only required for that projection plane.

4. Assessment of S and P

- 4.1 Elevation of all buildings within the site shall be projected onto the chosen projection planes. On each projection plane, the required *P* of buildings as stipulated in Table I of this PNAP shall be achieved (see Figure B9).
- Not less than 2/3 of the required P shall be provided by IS between the ends of the projected building facades and the adjacent site boundaries or, where the site abuts a street or a lane, the centreline of adjoining *street* or lane¹. Save for the part of building disregarded in paragraph 2.4 above, such IS shall provide a S of not less than 7.5m wide. For S involving site boundary or adjoining street/lane, if it varies on plan, the mean of S shall not be less than 7.5m and no part of the building shall be within 3m from the boundary line. If such IS cannot meet 2/3 of the required P, additional IS can be provided between buildings. Such additional IS shall have an S of not less than 15m (see Figures B10 to B12).

The *street*/lane of width less than 4.5m may also be included in the assessment of S and P. Open space outside the site boundary is not accountable for P. However, where an area is zoned as open space on the Outline Zoning Plan / Development Permission Area Plan and provided such area is a nullah or designated as promenade or non-building area on the aforesaid plan and / or in the explanatory notes of the aforesaid plan, such area may be treated as a lane for the purpose of assessing S and P.

- 4.3 Not more than 1/3 of the required P may be provided by PE. (see Figures B10 & B11)
- 4.4 To allow more design flexibility, the projection line of the *IS* within an assessment zone may follow the path of a notional air corridor that starts at 90° from the projection plane (on plan). The air corridor may flow between buildings and may change direction without changing its width, when it meets the boundary line or anywhere within the site, by not more than 15° provided the direction of the air corridor after the change of course is always within 15° from its original path before it enters the site. The minimum width of the air corridor along its path between buildings shall not be less than 15m (see Figures B13 to B16).
- 4.5 When the site is large and / or of irregular shape, the site may be subdivided into two or more notional sites provided that the line of the sub-division is located along the centreline of a notional wind path that complies with the following requirements:
 - (a) the wind path is open to above from the lowest level of the subject assessment zone (disregarding the minor projecting features and permeable features mentioned in paragraph 1.2 above);
 - (b) it is of a width of not less than 15m;
 - (c) it is continuous across the site in one direction or it may change in direction by not more than 15 degrees provided its direction after the change of course is always within 15 degrees from its original path²;
 - (d) where it meets the site boundaries, there is a street or lane with a mean width of not less than 7.5m.
- 4.6 After subdividing the site, the *P* may be assessed separately for each subdivided site using the same or a different pair of orthogonal projection planes (see Figures B17 & B18).
- 4.7 A sample case on assessment of building separation provisions is given in Figures B19 to B21.

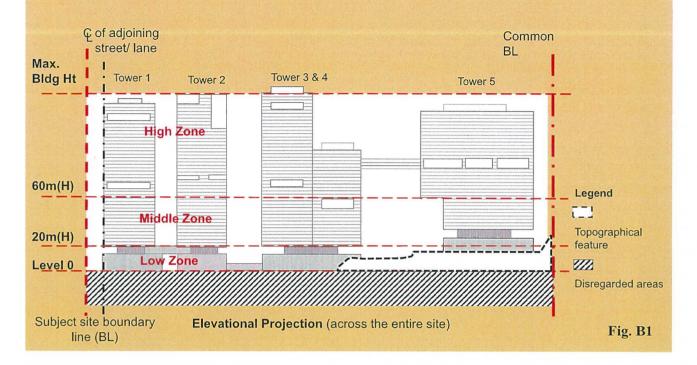
(Rev. 1/2016)

The wind path should preferably align with the summer prevailing wind direction or existing street pattern.

Site Topography & Sunken Buildings

Appendix B (PNAP APP-152)

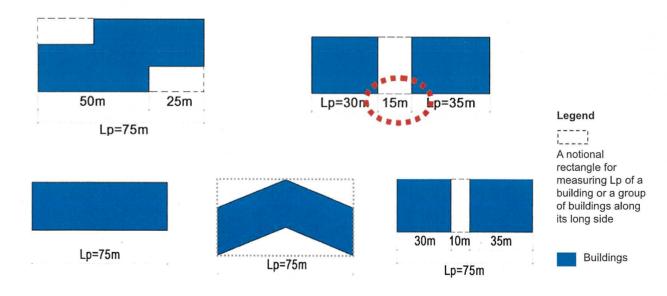
- "Level Zero" is the mean level of the lower or lowest street(s).
- The height of a building shall be measured from Level Zero to the mean height of the roof over the highest usable floor space.
- The effect on air ventilation around buildings due to topographical features or sunken part of a building below Level Zero shall be disregarded. (See Fig.B9-Fig.B11)



Lp Examples of determining Lp

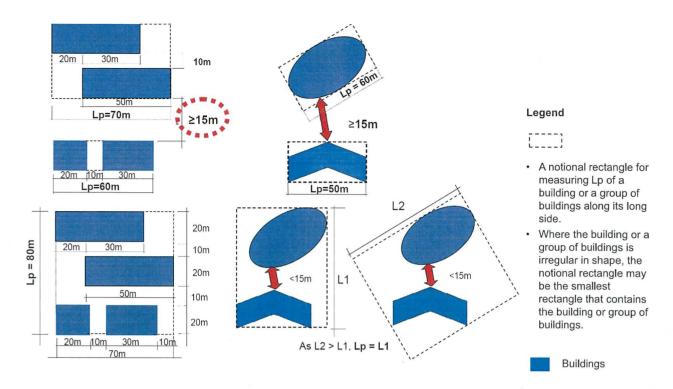
Appendix B (PNAP APP-152)

 Building portions at low zone of height ≤6.67m (1/3H of low zone) are disregarded in Lp measurement



Diagrammatic Plans of Buildings

Lp Examples of Lp of a building or group of buildings along its long side



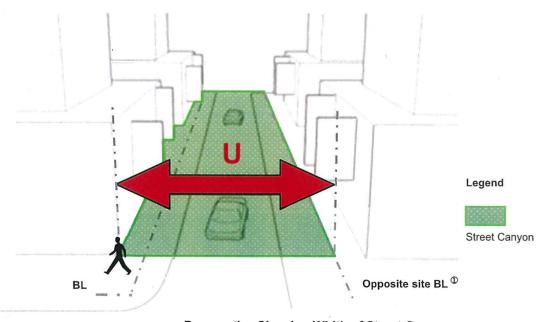
Diagrammatic Plans of Buildings

Fig. B3

Showing U

Appendix B (PNAP APP-152)

• Street canyon shall be vertically unobstructed. Minor projecting features, such as signboard, a covered footbridge and open sided features (balconies, utility platforms, covered walkways, trellises, etc.) may be disregarded.



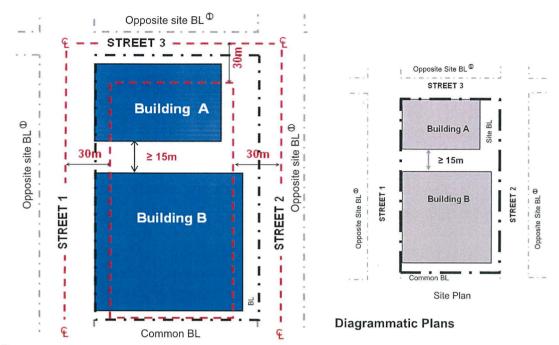
¹Opposite side of the street if no opposite site

Perspective Showing Width of Street Canyon

Adjoining Street Canyons

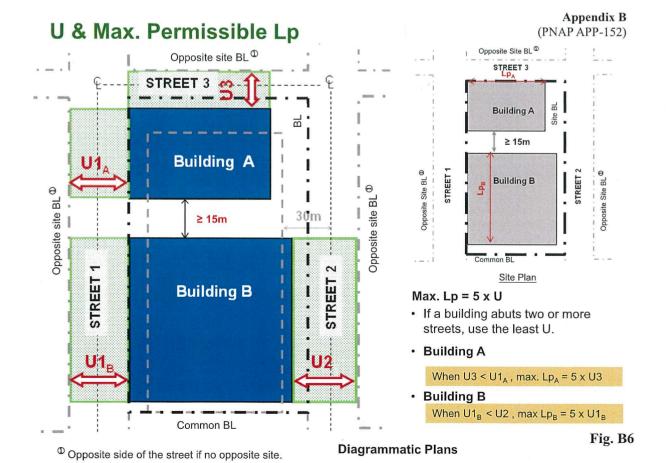
Buildings subject to control on Lp

· Buildings/groups of buildings wholly or partly within 30m from the centreline of an adjoining street.



 $^{\hbox{\scriptsize 1}\hskip -2pt \hbox{\scriptsize 0}}$ Opposite side of the street if no opposite site.

Fig. B5



U & Max. Permissible Lp

Building A

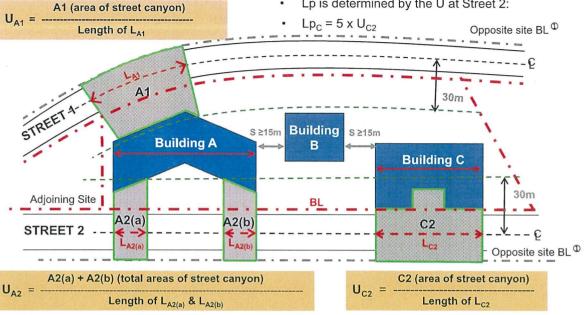
- When width of the adjoining street canyon varies, Lp is determined by the smallest U.
- When $U_{A1} < U_{A2}$, max. $Lp_A = 5 \times U_{A1}$

Building B

No part of the building is closer than 30m to the street centrelines. Building B is not subject to Design Requirement (1).

Building C

Lp is determined by the U at Street 2:

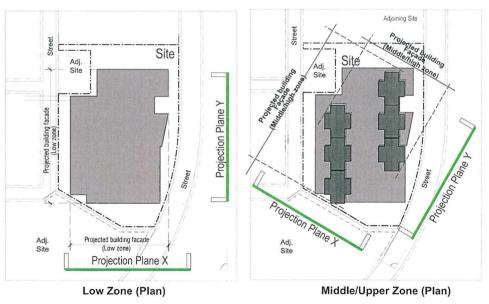


 $^{^{\}hbox{\scriptsize 1}\hspace{-.05in} \hbox{\scriptsize 0}}$ Opposite side of the street if no opposite site.

Diagrammatic Plan Fig. B7

Pair of Projection Planes for Assessment of P

Appendix B (PNAP APP-152)

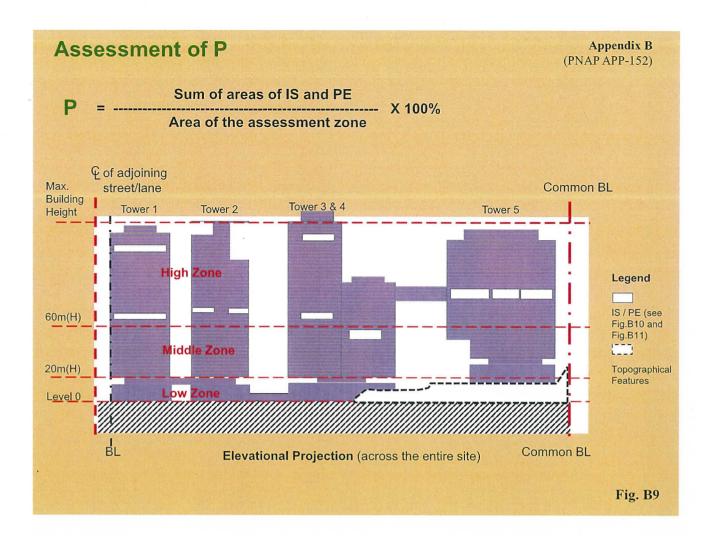


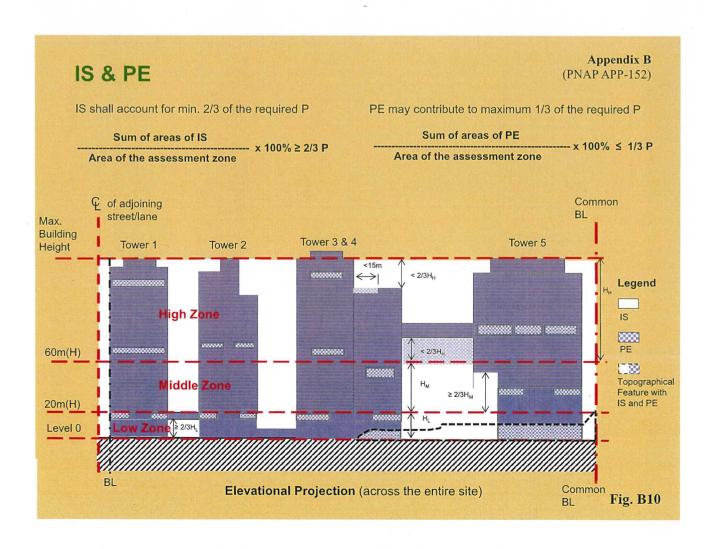
Low Zone

ullet One of the planes ${}^{f D}$ parallel to an adjoining street

- Middle/High Zone ullet Any pair of chosen planes ullet to suit the building disposition or environmental context e.g. prevailing wind direction P assessment on one plane only if:
 - Site < 2ha and Lp > 60m on one projection plane only.

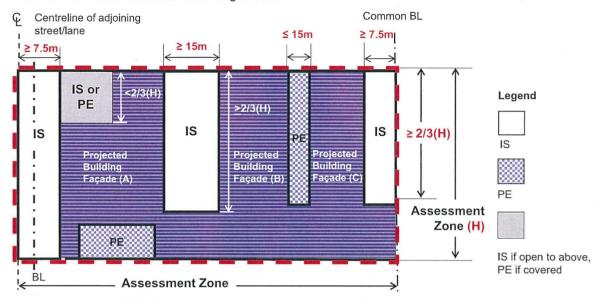
¹ The angle between each pair of projection planes is **75-105**°.





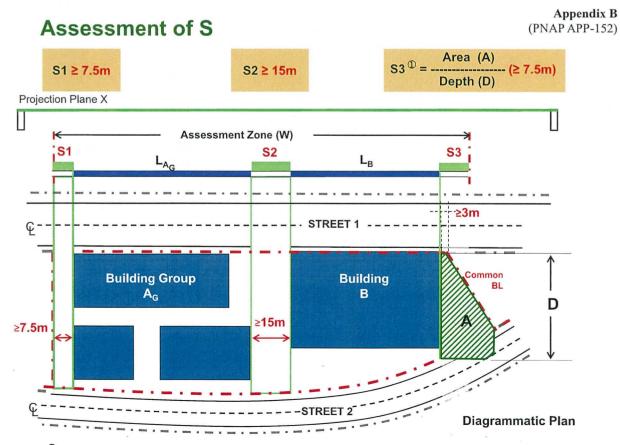
IS and PE

- IS shall be provided between end of a projected façade and adjacent common BL / centreline of adjoining street/lane and has a width or mean width ≥ 7.5m (see Fig.B12, Fig.B14, Fig.B15 and Fig.B16).
- Additional IS between end of projected façades shall be ≥ 15m.
- Height of IS shall be ≥ 2/3H of the Assessment Zone or open to above.
- PE shall have clear width and clear height ≥ 3m.



Elevational Projection (across the entire site)

Fig. B11



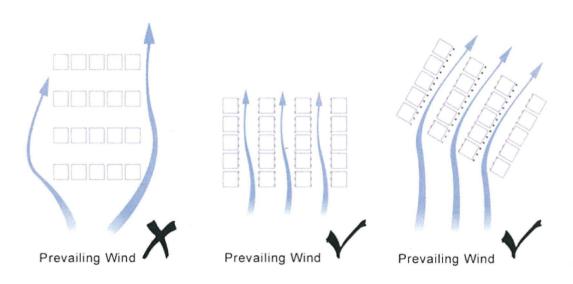
 $^{ extstyle e$

Fig. B12

Notional Air Corridor

Provided that the minimum required width of the IS / notional air corridor is maintained,

- Change in direction is permissible ≤ 15° when it meets the BL or anywhere within the site, and
- Overall direction deviate ≤ 15° from the original path



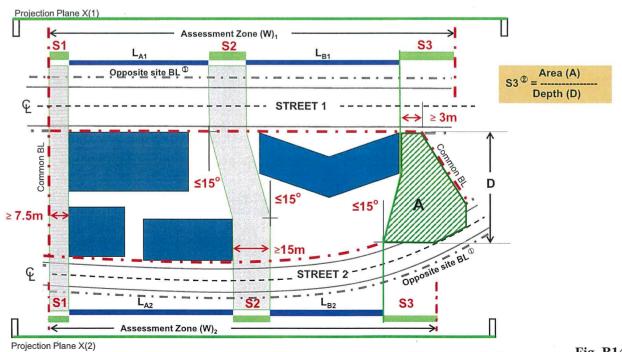
Diagrammatic Plan

Fig. B13

Notional Air Corridor S between buildings & at façade ends

Appendix B (PNAP APP-152)

- · When projection plane X is placed on either side of the site, length of a building façade so projected on the planes may vary.
- Assessment of P may be based on the projection on either Plane X(1) or X(2).
- S1 & S3^② ≥7.5m.
- S2 ≥15m

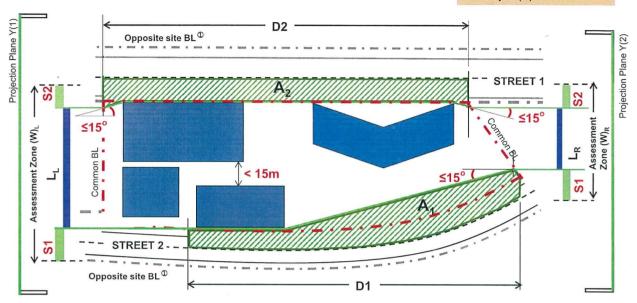


Opposite side of the street if no opposite site.
 No part of the building within 3m from the BL.

Diagrammatic Plan

- When projection plane Y is placed on either side of the site, length of a building façade so projected on the planes may vary.
- Assessment of P may be based on the projection on either Y(1) or Y(2) as chosen.
- S1 & S2 between adjoining street/lane ≥7.5m

S = Area (A) Depth (D) (≥ 7.5m)



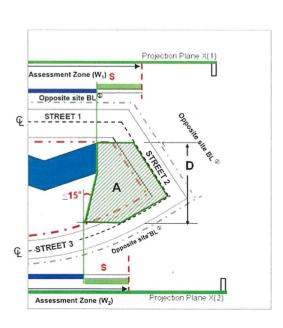
 $^{^{\}mbox{\scriptsize \mathbb{D}}}$ Opposite side of the street if no opposite site.

Diagrammatic Plan Fig. B15

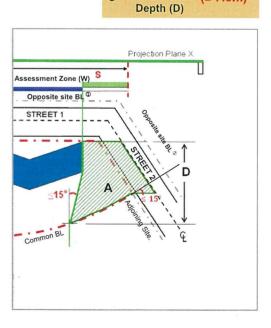
Notional Air Corridor S at facade ends

Appendix B (PNAP APP-152)

(≥ 7.5m)



· When the site abuts three adjoining streets



Area (A)

· When the site abuts two adjoining streets

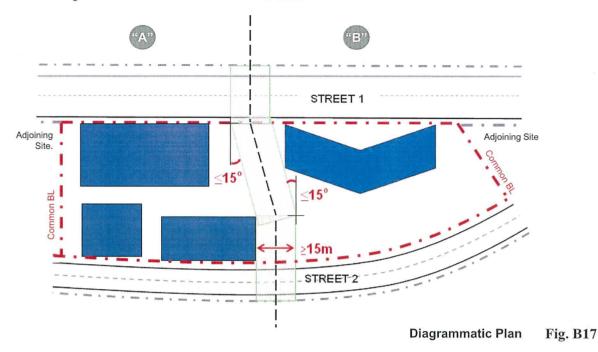
Opposite side of the street if no opposite site.

[©] No part of the building within 3m from the BL.

Wind Path passing through the site

Dividing the site into TWO or more notional sites for assessment of P

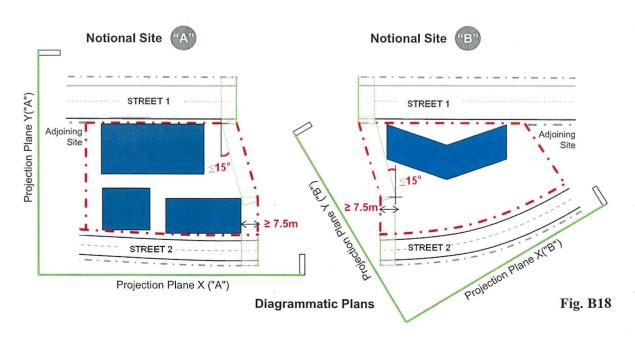
- · vertically uncovered and unobstructed above the lowest level of the assessment zone
- width ≥ 15m
- leading to a street or lane of mean width ≥ 7.5m at both ends



Appendix B (PNAP APP-152)

Sub-divided Notional Sites for Assessment of P

- S at the projected facade end shall be measured to the notional BL at centreline of the wind path.
- Individual pair of projection planes may be chosen for each of the TWO sub-divided sites for P assessment.
- "Level Zero" of the original undivided site shall be used for all notional sites.



Building Separation Assessment Sample Case Opposite site BL 4 Projection Plane X • Site area =1,920m² (< 20,000 m²) U_T • Proposed building: one tower above a podium of 15m(H) Street U_{P} • Max. building height = 78m (> 60m) 4m Adjoining · The site abuts a street of 15m wide Tower 24m • Lp of podium with full site coverage = 80m(>60m, assessment required) Podium 80m Plan High Zone Design Requirement (1) Max. $Lp = 5 \times U$ 60m(H) **Building at Low Zone** • $U_p = 15m$, max. $L_p = U_p \times 5 = 75m$ • Lp of proposed podium = 80 m (> 75m) Tower (i.e. NOT OK) Middle Zone **Building at Middle Zone** 30 m 32 m 18 m • $U_T = 19m$, max. $L_T = U_T \times 5 = 95m$ • Lp of proposed tower = 32m (< 95m) (i.e. OK) 20m(H) **Building at High Zone** Low Zone • $U_T = 19m$, max. $L_T = U_T \times 5 = 95m$ **Podium** • Lp of proposed tower = 32m (< 95m) 15m Level 0 (i.e. OK)



80m

Projected Facade Through Projection Plane X Elevational Projection

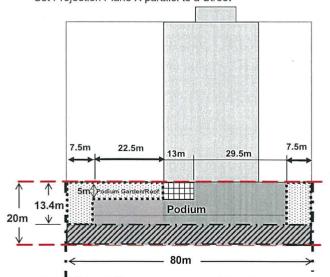
• $U_P = 15m$, max. $L_P = U_P \times 5 = 75m$

^① Opposite side of the street if no opposite site

• Lp = $80m - 7.5m \times 2 = 65m < 75m$

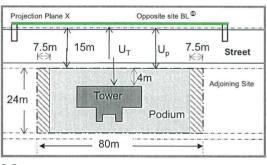
Design Requirement (2) - Low Zone

- Minimum P = 20% (from Table 2)
- · Set Projection Plane X parallel to a Street



Appendix B (PNAP APP-152)

Fig. B19



IS & S

Common BL

min. 7.5m to common B.L.

height ≥ 2/3 of the Assessment Zone or open to above

Total facade area of the IS

= (7.5x13.4)m² + (7.5x13.4 + 22.5x5)m² = 313.5m²

P achieved by the IS

- = 313.5m² / (20x80)m² x 100%
- = 19% (< 20%, but not less than (2/3) x 20% = 13.33%)

Facade area of the PE

 $= 13m \times 5m = 65m^2$

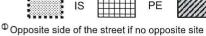
P achieved by the PE

- = 65m² / (20x80)m² x 100%
- = 4% (< (1/3) x 20% = 6.66%, i.e. all accountable)

Overall P achieved at low zone

= 19% +4% = 23% (> 20%, i.e. OK)

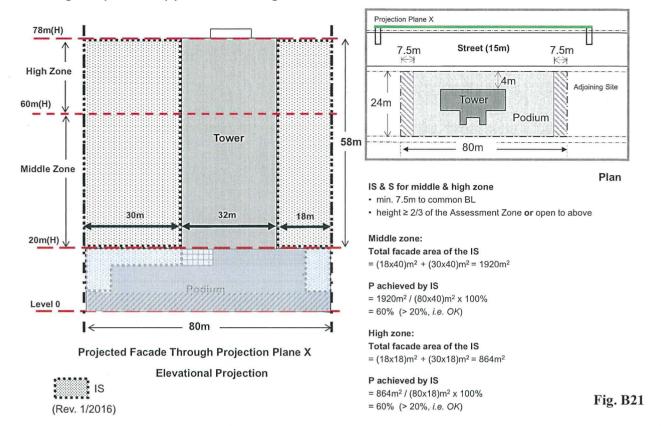
Projected Facade Through Projection Plane X **Elevational Projection**



Plan

Building Separation Assessment

Design Requirement (2) - Middle and High Zone



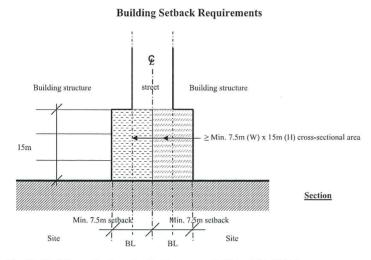


Fig. C1 Building setback as detailed in paragraph 7(a) of this PNAP

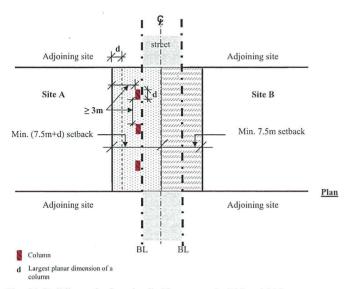


Fig. C2 Building setback as detailed in paragraphs 7(a) and 8(c)

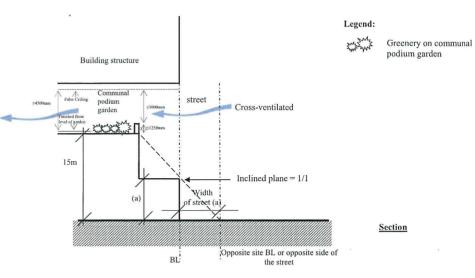


Fig. C3 Stepped building profile with communal podium garden as detailed in paragraph 7(b)

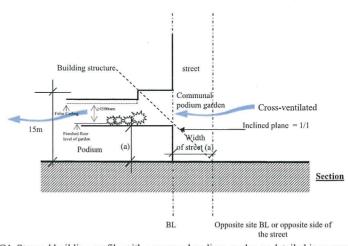


Fig. C4 Stepped building profile with communal podium garden as detailed in paragraph 7(b)

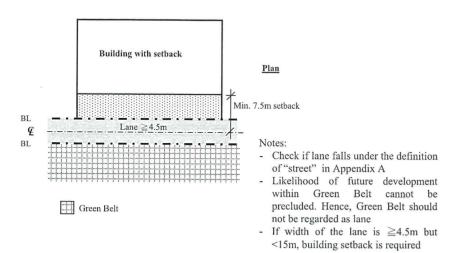


Fig. C5 Example (1) of Building Setback - Site abutting narrow lane with Green Belt beyond

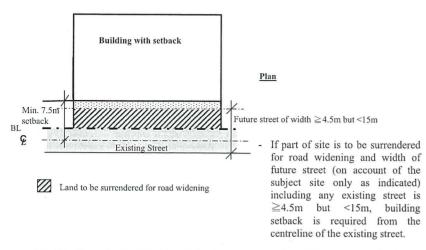


Fig. C6 Example (2) of Building Setback – Portion of Site will be surrendered to form a future street

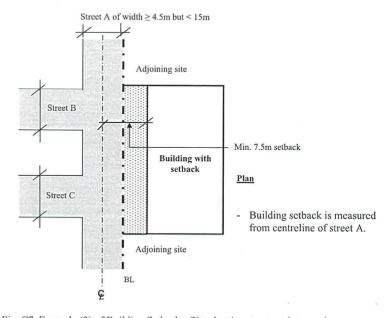


Fig. C7 Example (3) of Building Setback - Site abutting streets at intersections

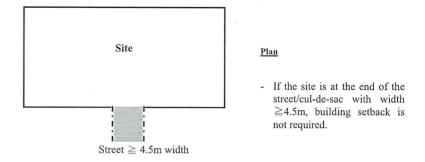
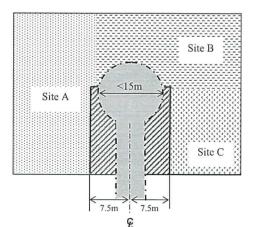


Fig. C8 Example (4) of Building Setback – Site at the end of the street/cul-de-sac



Plan

- For Site B abutting the culde-sac, building setback is not required.
- For Site A & C abutting the street with width ≥4.5m but
 15m, building setback (hatched area) is applicable.

Street ≥ 4.5m width

Fig. C9 Example (5) of Building Setback – Site abutting cul-de-sac

(Rev 1/2016)

Site Coverage of Greenery

- All greenery areas should be measured horizontally based on the uncovered soil
 areas as shown on the plan except for the following scenarios in the primary zone:-
 - (i) greenery areas in the form of projecting planters (see Figure D1) may be shadowed vertically by other projecting features, provided that the clear height of the projecting features above the covered area is not less than 8 times the horizontal width of the covered area and fronting or visible to the public from a street/a public pedestrian way/ public open space; or
 - (ii) greenery areas may be shadowed vertically by buildings (including overhangs), provided that when measured from the 45° projected line taken from the edge of the building, they should fall within the area and be accessible to the public, visitors or occupiers from the adjoining open areas (see Figure D2).
- The summation of following greening features may be accepted to contribute not more than 30% of the total required *greenery areas* of the overall provision as specified in Table 2 of this PNAP subject to its location and application of a reduction factor where applicable.

Greening Features	Location	Reduction Factor in Computing the Greenery Areas		
Covered greenery areas ² accessible to public, occupiers or visitors from adjoining open space	Primary zone (measured from 45° projected line taken from the edge of building)	50%		
Water features ³	Primary zone or uncovered communal roof	50%		
Grass paving	Except carparking spaces or loading / unloading areas	50%		
Planters along the perimeter of an inaccessible roof ⁴	Primary zone	50%		
Vertical greening ⁵	Primary zone	Nil		
Landscape-treated Greening on slopes / retaining structures ⁶ with gradient steeper than 45°	No restriction	Nil		

For reference, the recommended minimum soil depths for trees, shrubs, grass/ground covers are 1.2m, 0.6m and 0.3m respectively.

In planting design and species selection for covered greenery, reference should be made to "Proper Planting Practice – Provide Sufficient Growing Space between Trees and Adjacent Buildings / Structures" issued by Greening, Landscape & Tree Management Section of DEVB (www.greening.gov.hk).

Water features should be measured by the horizontal water surface area. Swimming pool and jacuzzi are not considered as water features. Filtration plant room for water feature may be exempted from

GFA but subject to compliance with the pre-requisites and the overall GFA cap on GFA concessions stipulated in PNAP APP-151.

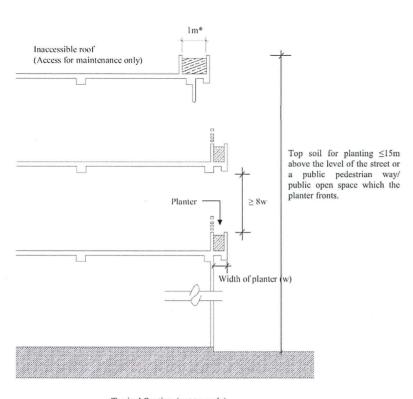
- 3. Irrigation points and drainage provision should be provided at greenery areas to facilitate future maintenance. In addition, where greenery is provided on the roof, the roof should be of impervious construction and the design and calculation of the minimum imposed load on the roof should also take into account the anticipated loads of the soil, plants, trees, etc.
- 4. Greenery in removable pots/planters that are not permanently fixed or built into the development; and covered greenery above the *primary zone* such as in covered communal podium garden or sky garden cannot be counted as *greenery area*.
- 5. All greenery areas for the purpose of this PNAP should be designated as common part of the building. As for the perimeter planters on the inaccessible flat roofs, communal access paths should still be provided from the common areas for maintenance of the planters.
- When granting modifications under section 42 of the Building Ordinance for GFA
 concessions applied under PNAP APP-151, the Building Authority (BA) may
 impose, but not limited to, the following conditions: -
 - (a) The *greenery areas* should not be used for any other purposes without the prior consent of the BA.
 - (b) The restriction on the use as stated in item (a) above and the greenery areas to be designated as common parts should be incorporated into the Deed of Mutual Covenant (DMC) with details of their size (in area), locations and the common access thereto clearly indicated on a plan(s). Where no DMC is to be in force, such restriction and designation should be incorporated into the Sales and Purchase Agreement, Assignment or Tenancy Agreement.
 - (c) The letter of undertaking for complying with the requirements as stated in items (a) and (b) above, submitted by the developer or owner in support of the application for GFA concessions should be registered in the Land Registry before applying for the occupation permit.

Irrespective of the size of planters, only the soil areas within 1m from the perimeter of the roof are

Vertical greening should be measured by the elevational area of the vegetated panel/modular planter or panel, and the vertical frame (for climbing and/or weeping plants) where the greenery will grow. For greenery areas provided by climbing or weeping plants, vertical frames with a height more than 7.5m are not accountable. The horizontal area of soil in planters under the vertical frame/modular planter/panel already counted for vertical greening as aforesaid should be excluded from the greenery area calculation. Self-clinging climbing plants on hard surfaced walls should be measured horizontally based on the soil areas as shown on the plan (not counted as vertical greening and therefore not subject to the restriction in the table).

Greening on slopes/retaining structures should be measured by the projected elevational area of the soil where the greenery will grow. Greening on slopes/retaining structures with gradient equal or less than 45° will be measured horizontally based on the soil area as shown on the plan.

Greenery Area at Primary Zone



Typical Section (not to scale)

* Irrespective of the size of planters, only maximum 1m wide soil areas of planters along the perimeter of an inaccessible flat roof in the *primary zone* can be accountable.

Fig. D1 Greenery in primary zone as per paragraph 1(i) of this Appendix

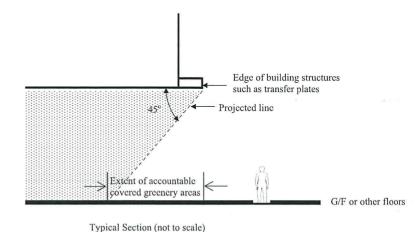


Fig. D2 Covered greenery in primary zone as per paragraph 1(ii)

- 5 -

Appendix E (PNAP APP-152)

Alternative Approaches

Principles

Pursuant to paragraph 12 of this PNAP, in recognition of the genuine constraints in compliance with the SBD Guidelines under the special circumstances of individual cases, the BA takes a flexible and pragmatic stance in accepting:

- (a) performance-based approach in justifying alternative designs that can achieve equivalent standards, or
- (b) inadequate provisions of a particular key design element when mitigated by other effective compensatory measures such as enhancement in the provision of other key elements or by the consideration of the unique context of the site e.g. sites with unobstructed surrounds, such as piers.
- 2. Alternative design proposals and applications for exemption or modification of the building separation, building setback and site coverage of greenery requirements should be supported by justifications. Where necessary, such proposals and applications may be examined by the Building Committee or the Expanded Building Committee (collectively as BC) composing of external experts in the relevant fields. The BA may take into account recommendations from the BC and other relevant considerations in determining acceptance of the proposal.

Building Separation

Alternative Design for Waiving Low Zone Assessment

- 3. The building separation requirement at the low zone may be waived for buildings with:
 - (a) less dominating building bulk the site coverage for the building including any podium does not exceed 65% of the site; and
 - (b) adequate setback along street frontage the full height of the building is set back¹ from a site boundary abutting any street such that the total frontage of such setback is not less than 50% of the length of that boundary and not less than 10m long or the full frontage for site with frontage less than 10m; and the total setback area is not less than 15% of the site area.

Performance-based Design Alternative

Reference is made to the design criteria on the setback approach under PNAP APP-132

- 4. To allow for flexibility in building design where the prescriptive requirements specified in Design Requirements (1) and (2) as mentioned in paragraph 4 of this PNAP cannot be fully met, the adoption of performance-based design alternative on the provision of building separation may be accepted on the conditions that:-
 - (a) Provision of the minimum P as specified in Table 1 for each assessment zone; and
 - (b) Satisfactory demonstration by air ventilation assessment (AVA) that the buildings' potential impact on the local wind environment has been duly considered and that by comparing with a baseline case which complies with the above Design Requirements (1) and (2), the proposed design is equivalent or better in external air ventilation terms.
- 5. The AVA shall be done by referring to the latest methodology and requirements of Technical Guide for Air Ventilation Assessments² using wind tunnel modelling or digital representation of the physical and wind environment using Computational Fluid Dynamics (CFD) simulations.
- 6. For projects adopting a performance-based design alternative, the following information with full justifications for deviation from the prescribed requirements should be submitted preferably in two stages to avoid abortive work:

Stage 1 Submission

- (a) An expert evaluation on whether the tools and methodologies for AVA employed are fit for the purpose and are suitably verified and scientifically validated with practical merits shall be carried out. In this connection, submission for prior acceptance of all information listed below covering factors like site configuration, local topography, wind characteristic and sensitive receivers in the surrounding areas, relevant urban climatic considerations, etc. is required:
 - a baseline case that fully complies with all the prescriptive Design Requirements (1) and (2);
 - (ii) details of scientific bases to assess performance;
 - (iii) analysis tools and/or design procedures;
 - (iv) modeling input, settings and parameters for the analysis and/or design;
 - (v) limitation and applicability of the proposal in context;
 - (vi) interpretation of results;
 - (vii) method of verification;
 - (viii) similar established standard and implementation in other places; and
 - (ix) documented references of the scientific bases.

The Technical Guide is issued by the Planning Department and is available from the website at (http://www.pland.gov.hk/pland_en/p_study/comp_s/avas/avas_eng/avas_mtguide_p01.html)

Stage 2 Submission

- (b) A study report on whether the proposed scheme will be in line with urban climatic considerations and such similar requirements as imposed through the town planning approval process or in Government lease; and
- (c) An AVA report on whether the proposed scheme will perform better in external air ventilation terms, demonstrated by the simulation results of the proposed scheme as compared to the simulation results of the baseline case.
- 7. Upon approval of the proposal, additional three hard copies and an electronic copy in Acrobat format for each AVA report shall be submitted together with a copy of the completed AVA register³ for inclusion in the register kept by the Planning Department.

Special Considerations for Buildings with Unique Functional Requirements or Heritage Value

- 8. For alteration and addition of an existing building resulting in a new building involving the adaptive reuse of historic building or for certain new buildings with special functional requirements in building length and/or bulk e.g. infrastructural facilities, transport terminus, sports and civic facilities, the BA may exempt such historic buildings or special facilities from the building separation Design Requirements (1) & (2) if the equivalent performance is proven and compensatory measures are provided as follows:
 - (a) An AVA by wind tunnel or CFD has been conducted to demonstrate that the design for the proposed new building has outperformed another viable notional scheme⁴ in accordance with the methodology and requirements stipulated under the category of Microclimate Around Buildings (S_A8) of the BEAM Plus⁵ certification; and either one of the following three requirements under the aforesaid category has been complied with; and the results of which are considered acceptable by the BA:
 - wind amplification no pedestrian areas will be subject to excessive wind speeds;
 - (ii) elevated temperatures providing shade; or
 - elevated temperatures providing suitable roofing material or vegetation roof.

AP is requested to seek consent from the owners to release the information contained in the AVA proforma (https://www.devb.gov.hk/filemanager/en/content_679/hplb-etwb-tc-01-06.pdf) and / or the AVA reports for public inspection. For projects which cannot be disclosed to the public due to confidentiality or consent from owners has not been given, the information would be kept solely for the government's internal reference.

(b) Building features such as additional building setback, stepped profile of the podium from the adjoining streets and communal podium garden to separate the podium from the tower above and to promote air flow at pedestrian level, etc. have been considered in the assessment described in item (a) above and incorporated in the design, where appropriate; and

(c) Building separation requirement is fully complied with for other buildings on the same site or other parts of the building that are located above such special facilities or historic buildings, where applicable.

Proposal involving both new and existing buildings in a site

9. In principle, provided that new buildings will not increase the *Lp* of the existing building, the BA may exempt the existing building from the building separation requirement by disregarding them from the assessment zone.

Building Setback

- 10. Where the setback of a building will result in a setback area of more than 15% of the area of the site, requirement for building setback may be relaxed if the following compensatory measures are provided:
 - (a) Full height and full frontage setback of the building from the site boundaries abutting any narrow streets from the respective site boundaries with a total setback area which is not less than 15% of the area of the site provided that such area will contribute to improving the street environment; and
 - (b) For small sites not exceeding 1,000 m², greenery should be provided at the Primary Zone such that the greenery area is not less than 50% of the setback area. All greenery areas shall comply with the requirements in Appendix D where applicable.

Site Coverage of Greenery

- 11. For sites with genuine difficulties in providing greenery along the street frontage or in the primary zone but with abundance of sustainable natural landscape at the back, the BA may favourably consider the provision of welcoming "green" path to the street pedestrian for viewing such natural landscape as an alternative.
- 12. For sites with development in phases, while the level of provision of greenery should base on the area of the whole site, notional site area may be applicable to a certain phase of the development for the greenery area to be provided for that particular phase.

(1/2016)

Viable notional scheme is a practically viable scheme complying with relevant statutory and allied requirements but excluding those on building separation for demonstrating the improvements to be achieved by the proposed design.

BEAM Plus for New Buildings. (http://www.hkgbc.org.hk/eng/beamplus-main.aspx)

Appendix F (PNAP APP-152)

Information and Documents to be Submitted

To demonstrate compliance with the building separation, building setback and site coverage of greenery requirements, the following information should be provided for consideration: -

Building Separation

- (a) 1:500 layout plans each showing the site in relation to its adjoining streets and surrounding buildings and features. The footprint (external walls) of the proposed buildings within the site, the provided IS, PE, the selected orthogonal projection planes, air corridors and air paths are to be clearly shown to demonstrate compliance with the building separation requirements for each low, middle and high zones.
- (b) Plans, elevations and sections at a legible ratio (preferably not less than 1:300) with supporting calculations showing the *U*, the maximum *Lp* of buildings and groups of buildings in comparison to the permissible *Lp*; *S* provided in comparison to the required *S*; and *P* of buildings achieved at each low, middle and high zone, in comparison to the minimum *P*.

Building Setback

- (c) A block plan showing the location of the subject site and the width of all adjoining streets;
- (d) Where the width of any *street* is less than 15m, further details such as level(s) of the *street* for computing the amount of required setback.
- (e) 1:100 plan(s) and section(s) with calculations demonstrating compliance with the building setback requirements.
- (f) Information showing the compliance of *greenery areas* requirement under paragraph 10(b) of Appendix E (as detailed in items (g) and (h) below).

Site Coverage of Greenery

- (g)* Plans at a legible ratio (preferably not less than 1:300) showing the locations of the proposed *greenery areas*, the common access thereto and details of relevant street, public pedestrian way, public open space for compliance with the requirement of *greenery areas* at *Primary Zone*(s).
- (h)* A schedule with calculations and illustrated diagrams showing the area of proposed greenery at each location for compliance with the minimum site coverage of greenery requirements.

Note

* Information to be updated and soft copy to be submitted at the time of submitting application for occupation permit. The soft copy should be in PDF format with 200 dpi resolution.

(Rev 1/2016)

			(c) c 1.
	÷		

Implications of Sustainable Building Design Guidelines

1. Sustainable Building Design Guidelines

- 1.1 In October 2010, the Government promulgated that a series of measures would be put in place to enhance the design standard of new buildings to foster a quality and sustainable built environment as well as to address local concerns about the negative impact of excessive building bulk and height. The new requirements were subsequently imposed through administrative means by way of new practice notes for building professionals (i.e. PNAP APP-151 "Building Design to Foster a Quality and Sustainable Built Environment" (Annex C1) and APP-152 "Sustainable Building Design Guidelines" (SBDG) (Annex C2)) first issued by the Buildings Department in January 2011.
- 1.2 SBDG establishes 3 key building design elements i.e. building separation, building setback and site coverage of greenery, with the objectives to achieve better air ventilation, enhance the environmental quality of living space, provide more greenery particularly at pedestrian level; and mitigate heat island effect (Annex C2).
 - (a) <u>Building Separation</u> Building sites that are 20,000m² or above; or proposing with continuous building façade length of 60m or above are required to control the maximum façade length and provide 20%, 25% or 33.3% permeability depending on site area, façade length and building height (BH) in three assessment zones (i.e. 0-20m (Low Zone), 20-60m (Middle Zone) and above 60m (High Zone)).
 - (b) <u>Building Setback</u> Buildings fronting a street less than 15m wide should be set back so that no part of the building up to a level of 15m above street level is within 7.5m from the street centreline; or to provide a cross-ventilated communal podium garden as specified and with a clear height of not less than 4.5m.
 - (c) <u>Site Coverage of Greenery</u> For sites not less than 1,000m², greenery areas of 20% or 30% of the site area should be provided depending on the size of site; and not less than half of greenery areas should be within a 15m vertical zone along the abutting street level (i.e. the Primary Zone).
- 1.3 In recognition of special circumstances in which genuine difficulties in complying with the prescriptive requirements of SBDG may be encountered, a flexible and pragmatic stance has been taken by the Building Authority (BA) when considering proposals holistically to achieve the objectives of SBDG. Alternative approaches (e.g. performance-based design alternatives, mitigation by effective compensatory measures, or consideration of the unique context of the site) are provided in SBDG (Appendix E of APP-152 in Annex C2).

1.4 Compliance with SBDG is one of the pre-requisites for granting gross floor area (GFA) concessions for green/amenity features and non-mandatory/ non-essential plant rooms and services by the BA (Annex C1). Such requirements would also be included in the lease conditions of new land sale sites or lease modifications/land exchanges.

2. <u>Implications on Building Profile</u>

2.1 Since the specific and relevant building design requirements under SBDG can only be determined at detailed building design stage and there are different options or alternative approaches to meet the requirements, it would be difficult to ascertain at early planning stage precisely the implications on individual development such as its eventual build form, block layout and BH. As such, the extent of implications of SBDG on building profile can only be estimated in general terms by adopting typical assumptions.

Building Setback

- 2.2 For building setback, to maintain a building line of 7.5m from the street centreline up to 15m from street level, the likely implication would be a reduction of site coverage (SC) of podium/lower floors. The extent of building setback, however, depends on the width of existing street.
- 2.3 In recognition that a significant portion of the site might be required to be set back resulting in development constraints particularly in cases of small site or site having long street frontage, SBDG has made provision that the maximum land area to be set back could be capped at 15% of the site area if compensatory measures including full height/frontage setback and prescribed greenery areas are provided.
- In this connection, it could be assumed that the maximum reduction in SC in podium/lower floors to meet the building setback requirement would be 15% of the site area and the GFA incurred would be three times (i.e. three podium floors up to 15m) of the 15% site area (i.e. 45% of the site area). The GFA so displaced would need to be accommodated on top of the original BH and thus be equivalent to about 0.75 storey (Annex D1a). The impact of the option of providing cross-ventilated communal podium garden would be similar i.e. addition of one storey of BH (i.e. about 5m).

Building Separation

2.5 In devising building separation, there would be more variations in design options for the Low Zone (i.e. 0-20m) which is usually occupied by continuous podium floors having long façade length and 100% SC. Some of the floor space would need to be redistributed from lower to upper floors to allow for the prescribed building separations. For the tower block at the assessment zones above, the maximum façade length and the 20% to 33% permeability requirements could usually be met without much difficulty given that the size of tower block is already capped by the maximum permissible SC

- (i.e. 60% to 65% for non-domestic buildings and 33.33% to 40% for domestic buildings) under Building (Planning) Regulations (B(P)R).
- 2.6 To cater for possible difficulties in meeting the building separation requirement in Low Zone, SBDG has allowed flexibility to waive such requirement if less dominating building bulk and adequate setback along street frontage are provided. The maximum SC allowed in this alternative design is set at 65%. The impact on BH would be equivalent to about 1.75 storeys (Annex D1b). It should be noted that the above reduction in SC and setback could also be counted towards the building setback requirement mentioned in paragraphs 2.2 to 2.4 above. Thus the cumulative impact of building setback and building separation on BH would be about two storeys or about 10m (depending on building types and floor-to-floor height (FTFH)).

Site Coverage of Greenery

2.7 Since greenery can usually be provided within the building setback area, at podium floors or in form of vertical greening etc., the requirement would unlikely have any significant implication on BH and building massing.

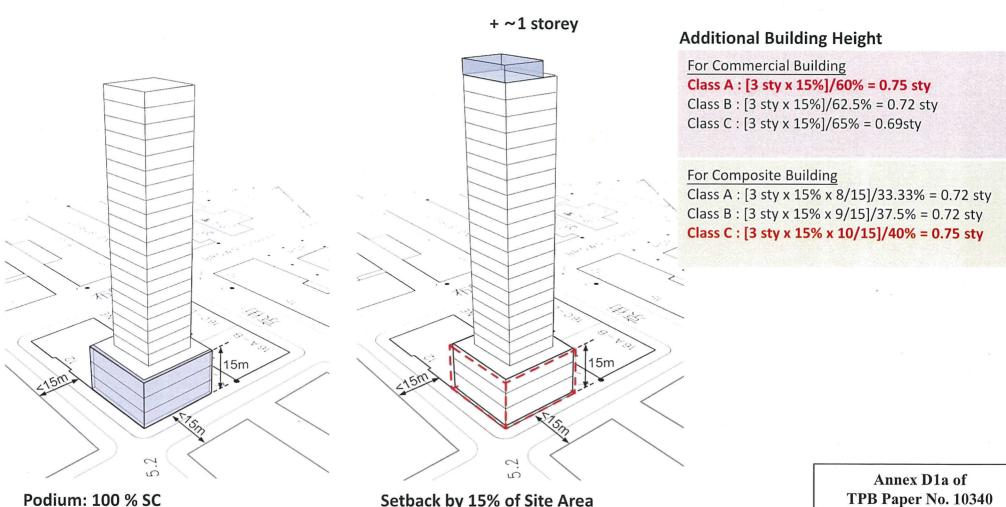
3. Assumptions for Assessment of Building Height

- 3.1 To estimate the implications of SBDG on BH, a conservative approach is adopted. It is assumed that the maximum achievable SC for the podium/lower floors to meet the building setback requirement is 85%, and that for meeting the building separation requirement is 65%. BH will then be derived based on the types of building (domestic, non-domestic or composite building), site classification and corresponding permissible plot ratio (PR) and SC under B(P)R, possible GFA concessions, podium height up to 15m, FTFH, provision of carpark at basement level and refuge floor requirement.
- 3.2 With assumptions set out in Annexes D2 and D3, where building setback and building separation requirements of SBDG are implemented, the BH of a typical commercial building will be ranging from 118m to 130m and that of a composite building within "R(A)" zone (with lowest 3 floors for non-residential use and upper portion for residential use) will be ranging from 90m to 96m.
- 3.3 However, it should be noted that the assessment in **Annexes D2 and D3** is only generic one where site-specific constraints have not been factored. For sites with odd shape and constraints, for example, sites with narrow and elongated site configuration abutting narrow streets may constrain future redevelopment in achieving the building separation requirements under SBDG, notional schemes should be drawn up to review the possible building profiles and BH.
- 3.4 It should also be noted that **Annexes D2 and D3** do <u>not</u> apply to land use zones where lower PR restrictions have been imposed on the OZP for planning related reasons.

Sustainable Building Design Guidelines

Implication of Building Setback Requirement

- Full height and full frontage setback from narrow street(s)
- Setback can be from **one or more** narrow street(s)
- Total setback area not less than 15% of the site area
- Provides at least half of the setback area with greenery

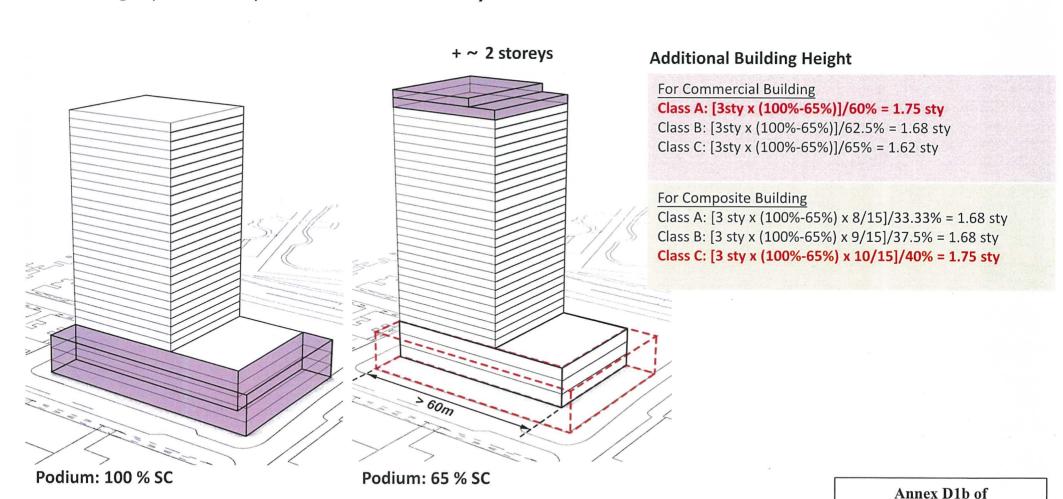


TPB Paper No. 10340

Sustainable Building Design Guidelines

Implication of Building Separation Requirement

- Site coverage ≤ **65**%
- Setback along street frontage ≥ **50%** of the boundary/**10m**
- Setback area from street(s) ≥ **15**%
- → Building separation requirement at low zone may be waived



TPB Paper No. 10340

BASIC BUILDING PROFILE - COMMERCIAL BUILDING

ASSUMPTIONS	Basic Building Profile		SBDG Building Setback + Basic Building Profile			SBDG Building Separation + Basic Building Profile			
Building Height above Ground (m)	122	118	114	126	122	118	130	126	122
Site Class	Α	В	С	Α	В	C	Α	В	С
Plot Ratio - Non-domestic GFA Concession [a]	15 25%	15 25%	15 25%	15 25%	15 25%	15 25%	15 25%	15 25%	15 25%
Basement - No. of Storeys [b]	0	0	0	0	0	0	0	0	0
Podium - Site Coverage Podium - Floor-to-Floor-Height (m) Podium - No. of Storeys	100% 5 3	100% 5 3	100% 5 3	85% 5 3	85% 5 3	85% 5 3	65% 5 3	65% 5 3	65% 5 3
Typical Floor - Site Coverage above 15m Typical Floor - Floor-to-Floor-Height (m) Typical Floor - No. of Storeys	60% 4 26.3	62.5% 4 25.2	65% 4 24.2	60% 4 27.0	62.5% 4 25.9	65% 4 24.9	60% 4 28.0	62.5% 4 26.9	65% 4 25.8
No. of Refuge Floor (Floor to Floor Height - 3m) [c]	1	1	1	1	1	1	1	1	1
Total No. of Storeys above Ground [d]	30	29	28	31	30	29	32	31	30

General Notes:

Annex D2 of TPB Paper No. 10340

[[]a] The assumption takes into account (i) the average "disregarded GFA (e.g. plant rooms, etc. other than carparks)" for non-domestic buildings of 15% under the "Sample Study on GFA Concessions Granted to Buildings" conducted by a Government inter-departmental working group led by the Buildings Department in 2006; and (ii) the overall cap of 10% for the total amount of GFA concession for green/amenity features and non-mandatory/non-essential plant rooms and services under APP-151.

[[]b] This refers to the no. of basement levels required in addition to underground carpark. Underground carpark is assumed in all scenarios.

[[]c] According to B18.1 & B18.2 of the Code of Fire Safety in Buildings 2011, one refuge floor is required for buildings exceeding 25 storeys in height above the lowest ground storey, but the no. of storeys may exclude storeys which contains solely mechanical plants. The refuge floor should have a clear headroom of 2.3m. A domestic building or composite building exceeding 25 storeys but not exceeding 40 storeys in height above the lowest ground storey is not required to comply with B18.1 and B18.2 if its main roof is designed as a refuge floor complying with the design requirements under B18.3 and B18.4.

[[]d] In general, roof-top strucures accommodating GFA exempted facilities and occupying not more than 50% of the area of the floor below will not be counted as a storey.

BASIC BUILDING PROFILE - COMPOSITE BUILDING

ASSUMPTIONS	Basic Building Profile			SBDG Building Setback + Basic Building Profile		SBDG Building Separation + Basic Building Profile			
AGGUMP HORG									
Building Height above Ground (m)	87	87	90	90	90	93	93	93	96
Site Class Permitted Plot Ratio - Domestic Permitted Plot Ratio - Non-domestic	A 8 15	B 9 15	C 10 15	A 8 15	B 9 15	C 10 15	A 8 15	B 9 15	C 10 15
GFA Concession [a]	20%	20%	20%	20%	20%	20%	20%	20%	20%
Basement - No. of Storeys [b]	0	0	0	0	0	0	0	0	0
Podium - Site Coverage Podium - Floor-to-Floor Height (m) Podium - No. of Storeys	100% 5 3	100% 5 3	100% 5 3	85% 5 3	85% 5 3	85% 5 3	65% 5 3	65% 5 3	65% 5 3
Proposed Non-domestic Plot Ratio Proposed Domestic Plot Ratio	2.50 6.67	2.50 7.50	2.50 8.33	2.13 6.87	2.13 7.73	2.13 8.58	1.63 7.13	1.63 8.03	1.63 8.92
Typical Floor - Site Coverage above 15m Typical Floor - Floor-to-Floor Height (m) Typical Floor - No. of Storeys	33.33% 3 24.0	37.5% 3 24.0	40% 3 25.0	33.33% 3 24.7	37.5% 3 24.7	40% 3 25.8	33.33% 3 25.7	37.5% 3 25.7	40% 3 26.8
No. of Refuge Floor (Floor-to-Floor Height - 3m) [c]	0	0	0	0	0	0	0	. 0	0
Total No. of Storeys above Ground [d]	27	27	28	28	28	29	29	29	30

General Notes:

Annex D3 of TPB Paper No. 10340

[[]a] The assumption takes into account (i) the average "disregarded GFA (e.g. plant rooms, etc. other than carparks)" for domestic/ composite buildings in Residential Zones 1, 2 and 3 of 9%, 10% and 11% respectively under the "Sample Study on GFA Concessions Granted to Buildings" conducted by a Government inter-departmental working group led by the Buildings Department in 2006; and (ii) the overall cap of 10% for the total amount of GFA concession for green/amenity features and non-mandatory/non-essential plant rooms and services under APP-151.

[[]b] This refers to the no. of basement levels required in addition to undgerground carpark. Underground carpark is assumed in all scenarios.

[[]c] According to B18.1 & B18.2 of the Code of Fire Safety in Buildings 2011, one refuge floor is required for buildings exceeding 25 storeys in height above the lowest ground storey, but the no. of storeys may exclude storeys which contains solely mechanical plants. The refuge floor should have a clear headroom of 2.3m. A domestic building or composite building exceeding 25 storeys but not exceeding 40 storeys in height above the lowest ground storey is not required to comply with B18.1 and B18.2 if its main roof is designed as a refuge floor complying with the design requirements under B18.3 and B18.4.

[[]d] In general, roof-top strucures accommodating GFA exempted facilities and occupying not more than 50% of the area of the floor below will not be counted as a storey.

ASSESSMENT OF BUILDING HEIGHT - COMMERCIAL & MIXED USE SITES IN CAUSEWAY BAY

		SCENARIO (1) on of SBDG Building S g with Bonus Plot Rat		SCENARIO (2) Implementaion of SBDG Building Separation and Footpath Widening with Bonus Plot Ratio & Site Coverage		
Building Height Restriction (mPD)	135	135	135	135	135	135
Achievable No. of Storeys (above ground)	32	32	32	32	32	32
Site Level (mPD) [e] Building Height above Ground (m)	5	5	5	5	5	5
	126	122	118	130	126	122
Site Classification	Α	В	C	Α	В	С
Permitted Site Coverage above 15m Permitted Plot Ratio - Non-domestic	60%	62.5%	65%	60%	62.5%	65%
	15	15	15	15	15	15
GFA Concession [a]	25%	25%	25%	25%	25%	25%
Ave. Footpath Widening Area (affected lots only) Bonus Site Coverage Bonus Plot Ratio	7%	7%	7%	7%	7%	7%
	0.83%	0.86%	0.89%	0.81%	0.83%	0.86%
	0.35	0.35	0.35	0.35	0.35	0.35
Basement - No. of Storeys [b]	0	0	0	0	0	0
Podium - Site Coverage Podium - Floor-to-Floor-Height (m) Podium - No. of Storeys	85%	85%	85%	65%	65%	65%
	5	5	5	5	5	5
	3	3	3	3	3	3
Typical Floor - Site Coverage above 15m	60.83%	63.36%	65.89%	60.81%	63.33%	65.86%
Typical Floor - Floor-to-Floor-Height (m) [f]	4	4	4	4	4	4
Typical Floor - No. of Storeys	27.3	26.3	25.3	28.3	27.2	26.2
No. of Refuge Floor (Floor-to-Floor-Height - 3m) [c]	1	1	1	1	1	1
Total No. of Storeys above Ground [d] [f]	31	30	29	32	31	30

General Notes:

For C and OU(MU) sites in Causeway Bay:

- [e] While higher site levels are found in Yun Ping Road (7.9 8.5mPD) and Sunning Road (6.1 8.8mPD), the concerned sites are either not subject to SBDG building separation or being Class B or C sites.
- [f] The total no. of storeys (assuming 4m FTFH for typical floor) for Scenario (1) and Classes B & C sites under Scenario (2) are less than the achievable no. of storeys under BHR of 135mPD (i.e. 32 storeys). Hence, a higher FTFH of 4.5m is possible for some typical floors under these sites.

Annex E1 of TPB Paper No. 10340

[[]a] The assumption takes into account (i) the average "disregarded GFA (e.g. plant rooms, etc. other than carparks)" for non-domestic buildings of 15% under the "Sample Study on GFA Concessions Granted to Buildings" conducted by a Government inter-departmental working group led by the Buildings Department in 2006; and (ii) the overall cap of 10% for the total amount of GFA concession for green/amenity features and non-mandatory/non-essential plant rooms and services under APP-151.

[[]b] This refers to the no. of basement levels required in addition to underground carpark. Underground carpark is assumed in all scenarios.

[[]c] According to B18.1 & B18.2 of the Code of Fire Safety in Buildings 2011, one refuge floor is required for buildings exceeding 25 storeys in height above the lowest ground storey, but the no. of storeys may exclude storeys which contains solely mechanical plants. The refuge floor should have a clear headroom of 2.3m. A domestic building or composite building exceeding 25 storeys but not exceeding 40 storeys in height above the lowest ground storey is not required to comply with B18.1 and B18.2 if its main roof is designed as a refuge floor complying with the design requirements under B18.3 and B18.4.

[[]d] In general, roof-top strucures accommodating GFA exempted facilities and occupying not more than 50% of the area of the floor below will not be counted as a storey.

ASSESSMENT OF BUILDING HEIGHT - RESIDENTIAL (GROUP A) 1 SITES IN CAUSEWAY BAY

SCENARIO: Implementation of SBDG Building Setback and Footpath Widening with Bonus Plot Ratio and Site Coverage

Building Height Restriction (mPD)	100	100	100
Achievable No. of Storeys above ground	29	29	29
Site Level (mPD) [e] Building Height above Ground (m)	6.8	6.8 90	6.8 93
Site Class Permitted Site Coverage above 15m Permitted Plot Ratio - Domestic Permitted Plot Ratio - Non-domestic	A	B	C
	33.33%	37.5%	40%
	8	9	10
	15	15	15
GFA Concession [a]	20%	20%	20%
Average Footpath Widening Area (affected lots only) Bonus Site Coverage - Domestic Bonus Plot Ratio - Domestic	8%	8%	8%
	1.33%	1.33%	1.29%
	0.40	0.40	0.40
Basement - No. of Storeys [b]	0	0	0
Podium - Site Coverage Podium - Floor-to-Floor Height (m) Podium - No. of Storeys	85%	85%	85%
	5	5	5
	3	3	3
Proposed Non-domestic Plot Ratio	2.13	2.13	2.13
Proposed Domestic Plot Ratio	7.27	8.13	8.98
Typical Floor - Site Coverage above 15m Typical Floor - Floor-to-Floor Height (m) [f] Typical Floor - No. of Storeys	34.66%	38.83%	41.29%
	3	3	3
	25.2	25.1	26.1
No. of Refuge Floor (Floor-to-Floor Height - 3m) [c]	0	0	0
Total No. of Storeys above Ground [d] [f]	28	28	29

General Notes

- [a] The assumption takes into account (i) the average "disregarded GFA (e.g. plant rooms, etc. other than carparks)" for domestic/ composite buildings in Residential Zones 1, 2 and 3 of 9%, 10% and 11% respectively under the "Sample Study on GFA Concessions Granted to Buildings" conducted by a Government inter-departmental working group led by the Buildings Department in 2006; and (ii) the overall cap of 10% for the total amount of GFA concession for green/amenity features and non-mandatory/non-essential plant rooms and services under APP-151.
- [b] This refers to the no. of basement levels required in addition to undgerground carpark. Underground carpark is assumed in all scenarios,
- [c] According to B18.1 & B18.2 of the Code of Fire Safety in Buildings 2011, one refuge floor is required for buildings exceeding 25 storeys in height above the lowest ground storey, but the no. of storeys may exclude storeys which contains solely mechanical plants. The refuge floor should have a clear headroom of 2.3m. A domestic building or composite building exceeding 25 storeys but not exceeding 40 storeys in height above the lowest ground storey is not required to comply with B18.1 and B18.2 if its main roof is designed as a refuge floor complying with the design requirements under B18.3 and B18.4.
- [d] In general, roof-top strucures accommodating GFA exempted facilities and occupying not more than 50% of the area of the floor below will not be counted as a storey.

For R(A)1 sites in Causeway Bay [SBDG building separation is not applicable] :

- [e] The levels of the R(A)1 sites are between 4.7mPD and 6.8mPD. The highest level is assumed for assessment.
- [f] The total no. of storeys (assuming 3m FTFH for typical floor) for Classes A & B sites are less than the achievable no. of storeys under BHR of 100mPD (i.e. 29 storeys). Hence, a higher FTFH of 3.15m is possible for some typical floors under these sites.

Annex E2 of TPB Paper No. 10340

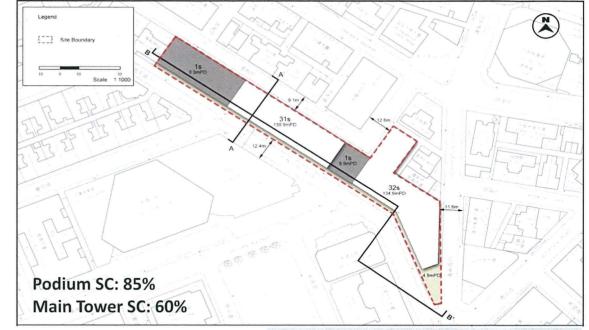
Lee Garden Two - Scheme 1

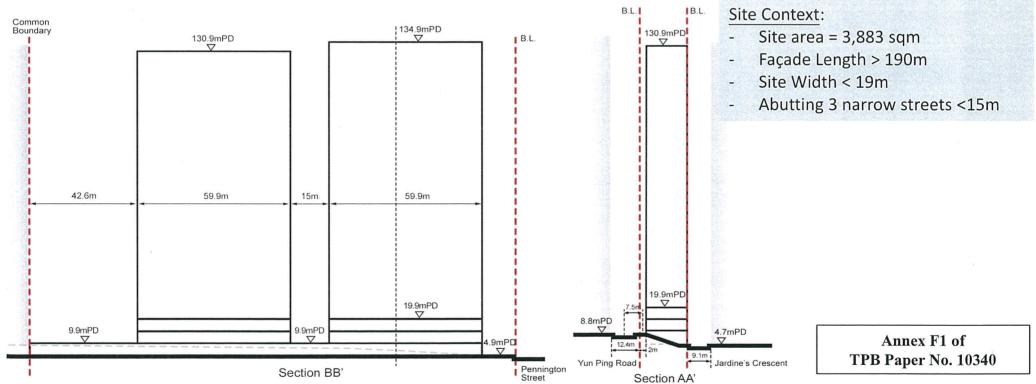
Setback:

 Whole building sets back from narrow street(s) by 15% of the site area

Separation:

- Site area < 20,000 sqm
- LP < 60m (the ground level of 6.67m is disregarded)
- → No need to meet building separation & permeability requirements





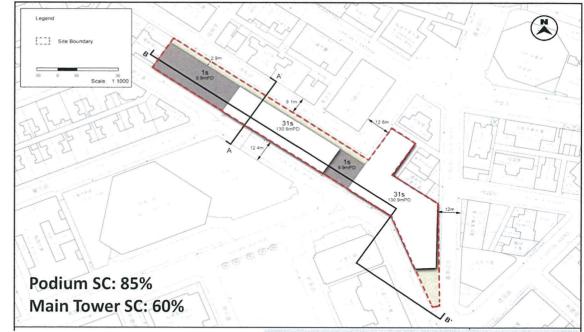
Lee Garden Two – Scheme 2

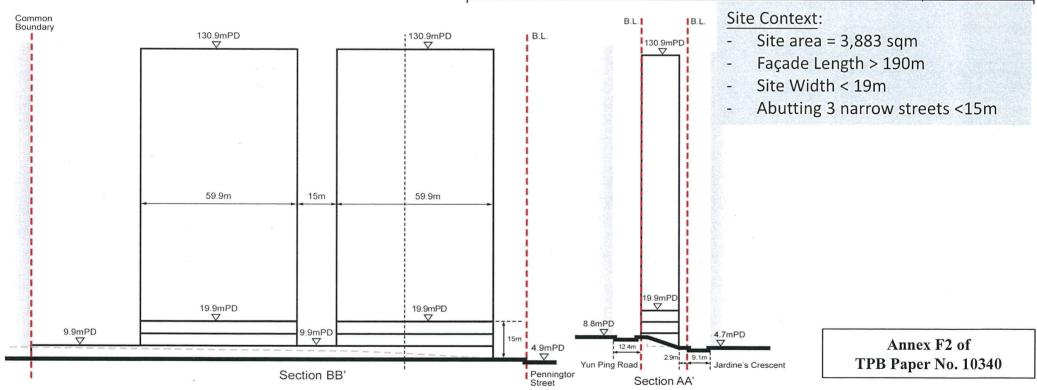
Setback:

 Whole building sets back from narrow street(s) by 15% of the site area

Separation:

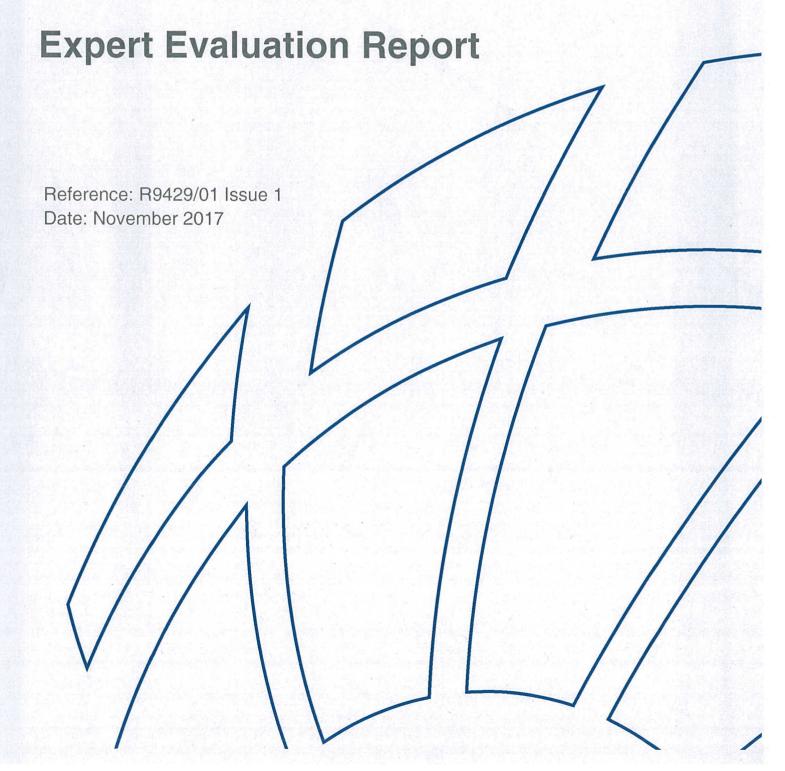
- Site area < 20,000 sqm
- LP < 60m (the ground level of 6.67m is disregarded)
- → No need to meet building separation & permeability requirements







Category A1 – Term Consultancy for Expert Evaluation on Air Ventilation Assessments for an Instructed Project for Causeway Bay Area





Category A1 – Term Consultancy for Expert Evaluation on Air Ventilation Assessments for an Instructed Project for Causeway Bay Area

Expert Evaluation Report

Prepared under the Management of:

Name:

Claudine Lee

Position:

Associate Director

Signature:

Reviewed and Approved by:

Name:

Derek Ho

Position:

Director

Signature:

Reference: R9429/01 Issue 1

Date:

November 2017

Filename: J:9429 - Cat A AVA Term Con - An Instructed Project for Causeway Bay and Wan Chai Planning Areas\Report\1. CWB\R9429-01-I1-EE(final).doc

5/F, FWD Financial Centre, 308 Des Voeux Road Central, Hong Kong

Tel: (852) 2815 2221

BMT Asia Pacific Ltd. assumes no responsibility and shall not be liable for any loss, damage or expense caused by reliance on the information or advice in this document to any third parties. BMT Asia Pacific Ltd. also assumes no responsibility and shall not be liable for any loss, damage or expense caused by reliance on the information or advice in this document to the client unless the same is proved to have arisen solely from the negligence or wilful default of BMT Asia Pacific Ltd in which case our contractual limit of liability shall apply.

Fax: (852) 2815 3377

Contents

Acı	ronyn	ns & Abbreviation	1
Exc	ecutiv	ve Summary	2
1	Intr	oduction	4
	1.1	Background	4
	1.2	Task of Study	5
		1.2.1 The Assignment	5
		1.2.2 Reference Materials	5
2	The	e Wind Environment	7
	2.1	Site Location and Its Environs	7
	2.2	Weather Data from HKO's Weather Station	8
	2.3	Weather Data from RAMS	9
	2.4	Experimental Site Wind Data from Previous Studies	11
	2.5	Summary	11
3	Top Pat	oography, Urban Morphology and Major Ventilation	12
	3.1	Topography	12
	3.2	Urban Morphology	12
	3.3	Major Ventilation Pathways	14
	3.4	Potential Areas of Concern	20
4	Exp	pert Evaluation of Baseline Scenario	21
	4.1	Introduction	21
	4.2	Expert Review of Baseline Scenario	21
		4.2.1 Northwest Region	21
		4.2.2 East Region	27
		4.2.3 South Region	29
		4.2.4 North Region	29
		4.2.5 Centre Region 4.2.6 Footpath widening	29
		4.2.6 Footpath widening	29

30

5	Ехр	ert Evaluation of Initial Scenario	30
	5.1	Introduction	30
	5.2	Analysis and Observations	34
		5.2.2 Northwest Region	34
		5.2.3 Eastern Region – Wun Sha Street Residential Cluster	37
		5.2.4 Centre Region – Haven Street and Shelter Street	37
	5.3	Summary of Recommendations	38
		5.3.1 Northwest Region	38
		5.3.2 Eastern Region and Centre Region	38
6	Con	nclusion	39
List	of Fi	gures	
	re 2.1	The study area and subdivided regions	
	re 2.2	Location of North Point Automatic Weather Station	
	re 3.1	General Wind Environment under N Wind	
	re 3.2	General Wind Environment under NE Wind	
	re 3.3	General Wind Environment under ENE and E Winds	
	re 3.4	General Wind Environment under SSE Wind	
	re 3.5	General Wind Environment under S Wind	
Figu	re 3.6	General Wind Environment under SSW and SW Winds	
Figu	re 4.3	Overall Wind Environment of Northwest Region under N wind	
Figu	re 4.4	Overall Wind Environment of Northwest Region under NE, ENI and E	E
Figu	re 4.5	Overall Wind Environment of Northwest Region under SSE and winds	d S
Figu	re 4.6	Overall Wind Environment of Northwest Region under Prevailin Wind from SW and SSW	ng
Figu	re 4.7	Building Height Restriction in the southern part of the East Reg	jion
Figu	re 5.1	Buildings with different wind enhancement features including building setbacks and building separations (see Case A) and permeable elements (see Case B).	
Figu	re 5.2	Building setback along prevailing wind	

Figure 5.3	Linkage of Roads, Open Spaces and Low-rise Buildings to Form Breezeways
Figure 5.4	Orientation of Street Grids
Figure 5.5	Different stepped podium designs,
Figure 5.6	Building Height Relaxation in the Northwest Region
Figure 5.7	Building Height Relaxation in the Centre Region

List of Tables

Table 2.1 Details of the subdivided regions in the study area

Table 2.2 Summary of RAMS Wind Data

Table 2.3 Summary of Wind Data References

List of Appendices

Appendix A Development Plans

Appendix B RAMS Wind Rose

Appendix C Schematic representation of wind flow pattern around a high-rise

building

Acronyms & Abbreviation

AVA	Air Ventilation Assessment
BG	Building Gap
"C"	Commercial
EE	Expert Evaluation
"G/IC"	Government, Institution or Community
"GB"	Green Belt
"O"	Open Space
"OU"	Other Specified Uses
"R(A)"	Residential (Group A)
"R(B)"	Residential (Group B)
"R(C)"	Residential (Group C)
BHR	Building Height Restriction
BMT	BMT Asia Pacific Limited
ETWB	Environment, Transport and Works Bureau
H/W	Height/Width
НКО	Hong Kong Observatory
HKSAR	The Hong Kong Special Administrative Region
HPLB	Housing, Planning and Lands Bureau
JR	Judicial Review
NBA	Non-Building Area
OZP	Outline Zoning Plan
RAMS	Regional Atmospheric Modeling System
SBDG	Sustainable Building Design Guidelines

Executive Summary

- 1.1.1.1 An Expert Evaluation on Air Ventilation Assessment on the Causeway Bay area (the study area) was conducted in 2010. Upon its recommendations and other planning considerations, control measures including building height restrictions (BHRs), non-building areas (NBAs), building gaps (BGs) and setback requirements at various locations were designated on the draft Causeway Bay OZP No. S/H6/15 (the current OZP).
- 1.1.1.2 Pursuant to the court rulings on the two judicial reviews against the BHRs, NBAs, BGs and setback requirements designated on the OZP, a review on the BHRs and the air ventilation measures (NBAs/BGs) under the current OZP taking into account the implementation of Sustainable Building Development Guidelines (SBDG) and the permissible development intensity has been conducted. This Expert Evaluation is to review the wind condition, urban morphology, committed & planned developments under the current OZP (Baseline Scenario), evaluate the wind environment of the relaxed BHR to be incorporated into the OZP (Initial Scenario), and provide recommendations (if any) to mitigate possible impact on the wind environment.
- 1.1.1.3 The wind environment of Baseline Scenario and Initial Scenario have been reviewed and compared. It is identified that the area to the north of Leighton Road (the Northwest Region) and that bounded by Tung Lo Wan Road, Wun Sha Street and Tai Hang Road in the eastern part of the current OZP (East Region) are the more problematic areas due to the high building height to street width (H/W) ratio and congested urban morphology narrow streets and tall buildings.
- 1.1.1.4 For Baseline Scenario, the wind environment in Northwest Region is considered to be poor due to high H/W ratio and the long façades across the high-rise buildings. Under the circumstance, road network is important for air ventilation. The NBA along the two sides of Yun Ping Road and the BGs at the podia of Lee Garden One and Lee Garden Two at middle zone altogether provide air path to help bringing wind into the streets. The NBAs along Kingston Street/Jaffe Road is considered to be useful in facilitating air flow in the locality. The BG between World Trade Centre and The Excelsior serves similar purpose to allow sea breeze from North to the inner streets. The NBA at Great George Street and Sugar Street would enlarge the wind corridor to promote air ventilation to the district.
- 1.1.1.5 The area bounded by Tai Hang Road, Tung Lo Wan Road and Wun Sha Street in the East Region consists of narrow streets which are not favourable to air movement. A stepped building height profile of 85mPD-100mPD-115mPD was introduced to encourage downwash to reach the street level. However, in view of the prevailing wind directions and H/W ratio, the downwash is not considered to be very effective.
- 1.1.1.6 For the Initial Scenario, the BHRs in Northwest Region are generally revised to 135mPD with exceptions on a few sites. All in all, the relaxation of the BHRs will

not bring much difference in wind environment to pedestrians as compared to Baseline Scenario due to the already high H/W ratio in the area. To improve the wind environment at street level, widening of narrow streets, improving permeability among buildings and developments and ensuring effective air paths would be more relevant. In this regard, measures recommended in SBDG are working towards this end and when implemented, could serve to certain extent the similar purposes of NBAs and BGs on OZP.

- 1.1.1.7 Nevertheless, relying on SBDG alone would not be sufficient to ensure good air ventilation from district point of view since these measures, in a diversified manner, are designed for and confined to developments on the basis of each individual site that may not have taken into account the need of a wider area and thus benefits would very often be localised only. Hence, designating NBA and BG requirements at strategic locations on the OZP to maintain major air paths or create interconnected air paths is considered necessary and important to densely developed area having poor wind environment like, Causeway Bay. Width of the major air paths should be maintained at 15m as far as practicable as advocated in SBDG. Therefore, some NBAs in the Baseline Scenario, are recommended to be retained or modified, i.e. the NBA requirements along Sugar Street and between Kingston Street and Jaffe Road.
- 1.1.1.8 Generally, other areas in the current OZP have relatively low ground coverage, occupied by open areas or low-rise buildings. As such, no specific air ventilation issues for these areas are identified.

行政摘要

- 1.1.1.1 於 2010 年完成的空氣流通專家評估報告分析了銅鑼灣地區(研究區域)的風環境, 因應報告的建議和其他規劃考慮,銅鑼灣分區計劃大綱草圖編號 S/H6/15 (「草 圖」)收納了包括建築物高度限制、非建築用地、建築物間距及建築線後移等規 定。
- 1.1.1.2 就法院在司法覆核中對草圖內所規定的措施(包括建築物高度限制、非建築用地、建築物間距及建築線後移)的裁決,當局在考慮了《可持續建築設計指引》以及准許發展密度的情況下,檢討了草圖內建築物高度限制以及與空氣流通有關的緩解措施(非建築用地及建築物間距)。本專家評估檢視草圖的風環境,當中包括城市形態及既有及規劃中的發展情況(基準方案)。同時,亦就建議放寬草圖內建築物高度限制情況下的風環境(初始方案)進行評估,以及按需要提供優化該區風環境的建議。
- 1.1.1.3 本專家評估已經對基準方案和初始方案的風環境進行了檢視和比較。評估確定了由於研究區域建築高度(H)與鄰近街道寬度(W)的比率(「高寬比率」)較高和擁擠的城市形態(狹窄街道和高層建築),造成研究區域中禮頓道北面一帶(西北部)以及東部以銅鑼灣道、浣紗街及大坑道為界的範圍是較為有問題的部分。
- 1.1.1.4 在基準方案下,研究區域內高寬比率較高及外牆長形的高層建築造成了區內西北部的風環境不佳。在這種情況下,道路網對於通風非常重要。恩平道兩旁的非建築用地連同利園一期和利園二期平台上的中層建築物間距提供了通道,幫助空氣灌入街道。京士頓街及謝斐道的非建築用地有效地促進空氣流通。世界貿易中心與怡東酒店之間的建築物間距同樣促使海風從北方吹到西北部。記利佐治街和糖街的非建築用地將通風廊擴大而促進通風。
- 1.1.1.5 位於東部以大坑道、銅鑼灣道及浣紗街為界的範圍內街道狹窄,不利於空氣流動。 引入主水平基準以上 85 米、100 米及 115 米的階梯式建築物高度輪廓能促使空氣可 以下灌到行人區域。然而,鑑於主風向和高寬比率,此下灌方法效果不顯著。
- 1.1.1.6 在初始方案下,西北部的大部分地帶的建築物高度限制放寬至主水平基準以上 135 米。總括而言,由於該部分範圍的高寬比率已經很高,放寬建築物高度限制不會對行人風環境帶來與基準方案相比很大的差異。透過擴闊狹窄街道、增加建築物的通透性、在不同發展用地和建築物之間保留空間及確保有效的通風廊反而更能改善街道風環境。在這情況下,《可持續建築設計指引》的針對性措施亦有同樣的功能,並在實施後可以達到類似的目的。
- 1.1.1.7 然而,單靠《可持續建築設計指引》並不足以確保此區的通風良好,因為這些措施 甚為多樣化,並只局限和針對個別私人發展項目而設計,而這些項目可能未能考慮 到更廣泛地區的需要而只能對風環境帶來局部的好處。因此,為維持主要的通風廊 或建立有持續連接的風道,有必要在分區計劃大綱圖的適當位置提供非建築用地和 建築物間距。這尤其是對風環境較差的密集發展地區一如銅鑼灣一非常重要。因

此,於基準方案中的一些非建築用地要求,即糖街以及京士頓街與謝斐道之間的非建築用地,均建議保留。

1.1.1.8 一般而言,草圖的其他部分地面上蓋面積相對較低,甚為空曠或只有低層建築,並 沒有具體的通風問題。

1 Introduction

1.1 Background

- An Expert Evaluation (EE) on Air Ventilation Assessment (AVA) on the Causeway Bay area was conducted in 2010 ("Term Consultancy for Expert Evaluation and Advisory Services on Air Ventilation Assessment Services under Agreement No. PLNQ 35/2009") (AVA EE 2010). The recommendations from the AVA EE 2010 formed an important basis to the formulation of the draft Causeway Bay Outline Zoning Plan (OZP) No. S/H6/15 (the current OZP), which incorporated building height restrictions (BHRs), non-building areas (NBAs), building gaps (BGs) and setback requirements at various locations. The locations of these measures are illustrated in Plans 1 and 2 in Appendix A.
- 1.1.1.2 The current OZP covers an area of about 96.43 hectares. The extent of the study area is presented in Plans 5 and 6 in Appendix A. It is bounded by Gloucester Road to the north, Wun Sha Street and Tai Hang Road to the east, So Kon Po to the south, and the Hong Kong Stadium and Percival Street to the west.

Previous Court Decisions

- Two judicial review (JR) applications were filed by Hysan Development Company Limited and its subsidiaries (hereafter known as "Hysan Group") and Excelsior Hotel (BVI Limited) (Excelsior) against the decisions of Town Planning Board (hereafter as "TPB") on their representations in respect of the current OZP. Their views included that the restrictions imposed by TPB would affect the development potential and options of the private landowners and the restrictions have not taken into account Sustainable Building Design Guidelines (SBDG) that should be relevant to achieving better air ventilation.
- 1.1.1.4 The Courts have ruled that TPB's decisions in respect of the representations by Hysan Group and Excelsior are quashed and TPB's decisions have to be remitted to TPB for consideration. In considering the JRs, the Court has stated that SBDG could have an effect on the working assumptions in respect of gross floor area (GFA) concession. The possible impact of SBDG in combination with the proposed restrictions under the current OZP should be acknowledged on a general level in the overall assessment of the adverse impact on redevelopment intensity. A review on the development restrictions on the OZP is therefore conducted.

1.2 Task of Study

1.2.1 The Assignment

1.2.1.1 The main tasks of the study are to:

- Review the existing wind environment of the Causeway Bay area;
- Review the wind environment under the planned scenario of the current Draft Causeway Bay OZP No. S/H6/15 (i.e. Baseline Scenario);
- Assess the air ventilation performance under the Initial Scenario with revised BHRs taking account of the SBDG;
- Highlight impact on problematic areas/concerned sites and their surrounding areas;
- Recommend improvement/mitigation measures and further studies, if needed; and
- Analyse and recommend mitigation measures having regard to the general issues raised in the representations to the Draft Causeway Bay OZP No. S/H6/15.

1.2.2 Reference Materials

1.2.2.1 Reference materials have included the followings:

- EE on AVA for Causeway Bay Area (September 2010)
- EE on AVA for Wan Chai Area (September 2010)
- EE on AVA for Wong Nai Chung Area (December 2008)
- Draft Causeway Bay Outline Zoning Plan No. S/H6/15
- Amendment Plan No. R/S/H6/15-A2
- HCAL No. 38 of 2011 and HCAL No. 57 of 2011
- CACV No. 232 of 2012 and CACV No. 233 of 2012
- FACV No. 21 of 2015 and FACV No. 22 of 2015
- Relevant affirmations by the applicants and respondent in relation to the judicial review cases HCAL No. 38/2011 and HCAL No. 39/2011
- Town Planning Board Paper No. 8849
- Town Planning Board Paper No. 8762
- Minutes of the 977th Town Planning Board Meeting held on 11.3.2011
- Tabled Information submitted by Hysan Group (R147 to R152) in the TPB Meeting dated 11.3.2011
- Practice Note for Authorized Persons (PNAP-APP 152) Sustainable Building Design Guidelines
- Committed Developments Approved GBPs and Planning Applications
- A. Kovar-Panskus, P. Louka, J.- F. Sini, E. Savory, M. Czech, A. Abdelqari,
 P. G. Mestayer and N. Toy (2002) Influence of Geometry on the Mean Flow

- within Urban Street Canyons A Comparison of Wind Tunnel Experiments and Number Simulations, *Water, Air and Soil Pollution: Focus* 2 (5-6), 365-380.
- Building Department, HKSAR (2009) Consultancy Study on Building Design that Supports Sustainable Urban Living Space in HK: Executive Summary
- Chao Yuan, Edward Ng and Leslie Norford (2014) Design Science to Improve Air Quality in High Density Cities. 30th International Plea Conference, CEPT University, Ahmedabad.
- Chao Yuan and Edward Ng (2012) Building porosity for better urban ventilation in high-density cities — A computational parametric study. Building and Environment. 50,176-189.
- Department of Architecture, Chinese University of Hong Kong (2005)
 Feasibility Study for Establishment of Air Ventilation Assessment System –
 Final Report
- Edward Ng, Chao Yuan, Liang Chen, Chao Ren and Jimmy C.H. Fung (2011) Improving and wind environment in high-density cities by understanding urban morphology and surface roughness: A study in Hong Kong. *Landscape and Urban Planning*. 101(1), 59-74.
- Fazia Ali-Toudert and Helmut Mayer (2007) Numerical study on the effects of aspect ratio and orientation of an urban street canyon on outdoor thermal comfort in hot and dry climate. *Building and Environment*. 42(3), 1553-1554.
- Jae-Jin Kim and Jong-Jin Baik (1999) A Numerical Study of Thermal Effects on Flow and Pollutant Dispersion in Urban Street Canyons. *Journal of Applied Meteorology*.38, 1249-1261
- Marcus Oliver Letzel, Carolin Helmke, Edward Ng, Xipo An, Alan Lai and Siegfried Raasch (2012) LES case study on pedestrian level ventilation in two neighbourhoods in Hong Kong. *Meteorologische Zeitschrift*. 21(6), 575-589.
- Nastaran Shishegar (2013) Street Design and Urban Microclimate Analyzing the Effects of Street Geometry and Orientation of Air Flow and Solar Access in Urban Canyons. *Journal of Clean Energy Technologies*. 1(1), 52-56.
- Peter Moonen, Thijs Defraeye, Viktor Dorer, Bert Bloken and Jan Carmeliet (2012) Effect of the micro-climate on comfort, health and energy demand. Frontiers of Architectural Research. 1(3),197-228
- Planning Department (2015) Hong Kong Planning Standards and Guidelines, Chapter 11 Urban Design Guidelines.
- P.P. Panchonly, K.Clemens, P. Geoghegan, M. Jermy, M. Moyers-Gonzalex and P.L. Wilson. (2016) Numerical Study of Flow Pattern and Pedestrian Level Wind Comfort Inside A Uniform Street Canyon at Different Angles of Attack. 20th Australian Fluid Mechanics Conference, 5-8 December 2016, Perth, Australia.
- Suhas U. Pol and Michael J. Brown (2008) Flow Patterns at the Ends of a Street Canyon: Measurements from the Joint Urban 2003 Field Experiment. American Meteorological Society.47,1413-1426
- Tobias Gronemeier, Siegfried Raasch and Edward Ng (2017) Effects of Unstable Stratification on Ventilation in Hong Kong, *Atmosphere*. 8, 168
- Yingsheng Zheng, Yuan Shi., Chao Ren. and Edward Ng (2016) Urban Ventilation Strategies for Micro Climate Improvement in Subtropical Highdensity Cities: A Case Study of Tai Po Market in Hong Kong, *Urban Planning International*, 1673-9493.

2

The Wind Environment

2.1 Site Location and Its Environs

- 2.1.1.1 The purpose of this section is to discuss the different sources of wind availability data and discuss which set of wind availability data would be adopted for this study.
- According to "Technical Circular No. 1/06 on Air Ventilation Assessment (2006), Annex A Technical Guide for Air Ventilation Assessment for Developments in Hong Kong" jointly published by Housing, Planning and Lands Bureau (HPLB) and Environment, Transport and Works Bureau (ETWB), it is considered acceptable and recommended to make reference to (i) wind data of the closest weather station of Hong Kong Observatory (HKO) (i.e. North Point Automatic Weather Station), (ii) simulated site wind availability data available on the website of the Planning Department (PlanD) and (iii) relevant experimental site wind data for assessment.
- 2.1.1.3 The study area is divided into five regions for ease of representation and analysis. The division is based on site characteristics of each region as well as the boundaries set out in the AVA EE 2010. Figure 2.1 presents the boundaries of the subdivided regions, and detailed information on these regions are presented in Table 2.1 below.

Table 2.1 Details of the subdivided regions in the study area

Sub Regions	Location	Descriptions
Northwest Region	Bounded by Gloucester Road to the NW and NE, Percival Street to the SW and Leighton Road to the SE	Predominately commercial and mixed use buildings
North Region	Bounded by Causeway Road to the NW, and Moreton Terrace and Tung Lo Wan Road to the SW, SE and NE	Mostly open space and recreational grounds with G/IC land use
Centre Region	Bounded by Leighton Road to the NW, Moreton Terrace to the NE, Caroline Hill Road to the SW including Hong Kong Stadium (but excludes Caroline Hill) and hillsides to the SE	Predominately open space and recreational grounds, interspersed with mixed use, GIC and residential uses
East Region	Includes the majority of area along Tai Hang Road and SE of Tung Lo Wan Road and SW of Wun Sha Street	Mainly residential with some G/IC land and Green Belt
South Region	Bounded by the developments located along Eastern Hospital Road, including natural landscape areas of So Kon Po and Tai Hang	Predominately Green Belt with open areas and little built-up area

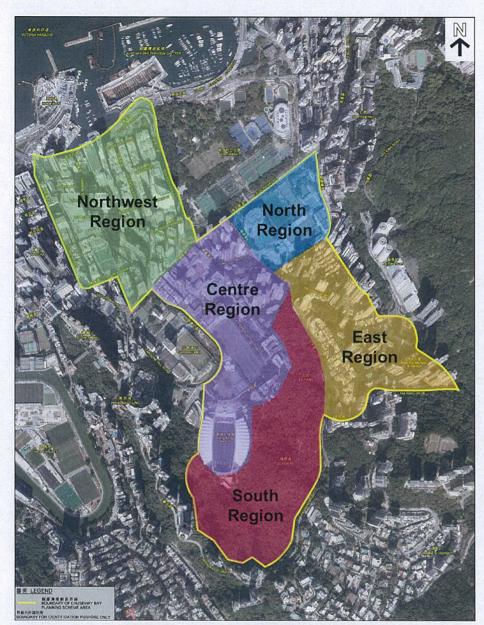


Figure 2.1 The study area and subdivided regions

Weather Data from HKO's Weather Station

2.2

2.2.1.1

According to the automatic weather stations operated by HKO, North Point Automatic Weather Station is the closest weather station to the study area. Figure 2.2 presents the location of the North Point Automatic Weather Station and the study area.



Figure 2.2 Location of North Point Automatic Weather Station

- 2.2.1.2 The North Point Automatic Weather Station is situated near the North Point Ferry Pier, and is approximately 2.5km from the centre of the study area. The anemometer for this station is at 26m above the mean sea-level (mamsl).
- According to Climatological Database of HKO¹, the recorded monthly wind data from January 2000 to April 2017 indicate that winds are mainly from 90 degree (67%) throughout the years, with contribution from 68 degree (19%) and 270 degree (12%). For the summer months, winds are mainly from 90 degree (41%) and 270 degree (38%).

2.3 Weather Data from RAMS

With reference to the simulated site wind availability data (i.e. RAMS) for Hong Kong available on PlanD's website², the study area spans over 9 grid cells. The wind data at 200m (approximate urban canopy layer height) is adopted as it is the best data available taken into account topographical effects. The data obtained from these grids of the RAMS simulation shows that the annual prevailing winds are mainly from the NE, ENE and E, while the summer prevailing winds are mainly from the E, S, SSW and SW. The wind roses from RAMS at 200m and wind frequencies of annual and summer prevailing winds are presented in Appendix B and Table 2.2 respectively.

¹ http://www.hko.gov.hk/cis/awsMonthlyElement_e.htm?stn=NP&ele=PREV_DIR

² http://www.pland.gov.hk/pland_en/info_serv/site_wind/site_wind/index.html

Table 2.2 Summary of RAMS Wind Data

RAMS Grid No.	Annual Prevailing Winds	Summer Prevailing Winds (i
	E (29.5%)	SSW (16.7%)
(092 024)		SW (16.3%)
(082,034)	ENE (13.8%)	S (12.4%)
	NE (9.4%)	E (12.2%)
	F (00 00()	SSW (17.1%)
(000,004)	E (30.8%)	SW (17.1%)
- (083,034)	ENE (14.0%)	E (13.0%)
	NE (9.2%)	S (10.9%)
		SW (17.9%)
	E (32.3%)	SSW (15.6%)
(084,034)	ENE (14.0%)	E (13.8%)
	NĘ (9.1%)	S (9.6%)
		SSW (16.4%)
	E (27.7%)	SW (15.3%)
(082,033)	ENE (14.7%)	S (13.5%)
	NE (9.1%)	E (11.7%)
		SSW (17.0%)
	E (28.5%)	SW (16.6%)
(083,033)	ENE (15.3%)	E (12.3%)
	NE (8.9%)	S (11.8%)
		SW (17.8%)
	E (29.5%	SSW (15.5%)
(084,033)	ENE (15.6%)	E (13.0%)
	NE (9.1%)	S (10.7%)
		SSW (16.6%)
	E (26.8%)	SW (15.7%)
(083,032)	ENE (15.1%)	S (12.0%)
	NE (9.8%)	E (11.8%)
		SW (16.4%)
	E (27.4%)	SSW (15.6%)
(084,032)	ENE (15.0%)	E (12.1%)
	NE (10.1%)	S (11.3%)
		SSW (16.3%)
	E (25.1%)	SW (14.8%)
(083,031)	ENE (15.1%)	S (12.7%)
	NE (9.7%)	E (11.2%)

⁽i) Summer months refer to June, July and August

2.4 Experimental Site Wind Data from Previous Studies

In the AVA EE 2010 conducted for the study area, the wind availability data was adopted from the experimental site wind data conducted by the CLP Power Wind/ Wave Tunnel Facility (WWTF) at the Hong Kong University of Science and Technology. According to the wind tunnel test, the annual prevailing winds are mainly from the N, NE and E, while the summer prevailing winds are mainly from the E, SSE and SW.

2.5 Summary

2.5.1.1 In summary, various sources of wind availability data at lower level (i.e. HKO weather station) and upper level (RAMS) have been reviewed. Table 2.3 summarises the annual and summer prevailing wind direction from different wind data references as discussed above.

Table 2.3 Summary of Wind Data References

Sources	Annual Prevailing Winds	Summer Prevailing Winds
<u>н</u> і	(O Weather Station	
North Point Automatic Weather Station (at 26 mamsl)	68 degree 90 degree,	90 degree, 270 degree
	RAMS	
RAMS Grid Cells (at 200mPD)	NE, ENE, E	E, S, SSW, SW
Previous Studies	(CLP Wind/Wave Tunnel	Facility)
Term Consultancy for Expert Evaluation and Advisory Services on Air Ventilation Assessment Services under Agreement No. PNLQ 35/2009	N, NE, E	E, SSE, SW

2.5.1.2 Given the North Point Automatic Weather Station is located to the further east of the study area and at a relatively low level, such measured wind data, which is affected by the local topography, cannot represent the characteristics of the study area. Thus, it will not be considered in this study.

2.5.1.3 Based on the modelled wind data obtained from RAMS as well as experimental site wind data from the wind tunnel, the annual prevailing winds for the study area are from the N, NE, ENE and E, whilst summer prevailing winds are from the E, SSE, S, SSW and SW.

Topography, Urban Morphology and Major Ventilation Paths

3.1 Topography

- 3.1.1.1 The extent of the study area in shown in Plans 5 and 6 in Appendix A, and the subdivided regions have already been defined in Table 2.1. The study area is generally flat with elevation gradually increasing from areas near the perimeter of the East and South Regions to the surrounding mountains, such as Mount Butler (417mPD), Jardine's Lookout (433mPD) and Mount Parker (532mPD) to the east and southeast of the study area.
- 3.1.1.2 The Northwest Region of the study area is relatively flat as it is mostly reclaimed land, and is situated at around 4mPD, with some isolated elevated areas such as Yun Ping Road and Hysan Avenue (around 8mPD).
- 3.1.1.3 Land within the East Region is situated on two levels, having the greatest variation in elevation within the study area. In general, the area bounded by Tung Lo Wan Road, Tai Hang Road and Wun Sha Street is situated at about 4mPD to 6mPD although it gradually increases upwards along Tai Hang Road. Hence, much of the area further south of Tai Hang Road is situated on higher grounds, in the range of 20mPD to110mPD.
- 3.1.1.4 The South Region includes So Kon Po and a portion of Tai Hang area, both of which are generally natural vegetated slopes. The area adjoining the Centre Region is generally at lower level (approximately 9mPD), but gradually increases upwards to 120mPD near the southern perimeter, and eastern perimeter towards Tai Hang Road.
- 3.1.1.5 The North Region is also generally flat, with a site level ranging from 4mPD to 5mPD. The Centre Region is also mostly flat, at about 4mPD to 5mPD with some increases in elevation to the range of 11mPD to 15mPD in areas next to the South Region (i.e. Eastern Hospital Road, Indian Recreation Club and Hong Kong Stadium).

3.2 Urban Morphology

Overall, building density is generally higher at the area near the Victoria Harbour (i.e. Northwest Region and part of the Centre Region). Building density is lower in the South Region, as well as in the North Region and part of the East Region. The existing building height profile in the study area is illustrated in Plan 5 in Appendix A.

Northwest Region

This region is densely developed, characterised by land zoned as "Commercial" ("C") and "Other Specified Uses" annotated "Mixed Use" ("OU(MU)"). There are prominent high-rise buildings in this region, including The Excelsior (119mPD), World Trade Centre (over 140mPD), Hysan Place (199mPD), Lee Garden One (208mPD), Sino Plaza (over 130mPD) and Windsor House (over 130mPD). However, there are also clusters of medium rise (40mPD to 80mPD) developments

along Paterson Street and Cleveland Street, as well as low-rise developments

East Region

3.2.1.3 Land use in this region is predominately zoned as "Residential (Group A)" ("R(A)"), "Residential (Group B)" ("R(B)") and "Residential (Group C)" ("R(C)"). The remaining open area is mostly zoned as "Green Belt" ("GB"). Others are zoned "Government, Institution or Community" ("G/IC").

(<30mPD) along Lockhart Road, Pak Sha Road and Percival Street.

3.2.1.4 Located to the west of Lai Tak Tsuen, there is a grid-like arrangement of residential clusters at Tai Hang with building height ranging from 20mPD to 39mPD (hereafter known as Wun Sha Street Residential Cluster). The other developments situated at the southwest along Tai Hang Road are generally 20m to 30m in height, with some mid-rise and high-rise developments interspersed between. At the most eastern area near Haw Par Mansion and Tai Hang Drive, there are several developments at 100m in height.

South Region

3.2.1.5 Most of the area in the South Region are natural vegetated slopes and mainly zoned "GB". There are only few low-rise buildings (with a building height below 15m) near the eastern perimeter of the South Region and south of Hong Kong Stadium.

North Region

A large proportion of land in the North Region is zoned "G/IC" or "OU" annotated "Library" and "Sports and Recreation Club". Except for the Central Library, the areas at the east of Moreton Terrace is characterised by open space, recreational grounds or developments less than 20mPD (e.g. Moreton Terrace Temporary Playground, Causeway Bay Sports Ground, Chinese Recreation Club and Queen's College, etc.).

Centre Region

- 3.2.1.7 Similar to the North Region, the Centre Region is also characterised by a large proportion of open spaces and recreational grounds. These include the sports and recreational grounds east of Caroline Hill as well as the Hong Kong Stadium. Land within this region are mainly zoned "G/IC", "OU(MU)", "OU(Sports and Recreation Club)" and "O". Land abutting Tai Hang Road is zoned "R(B)" and "GB". Most of the buildings in Centre Region are low-rise schools, hospital and recreational area with a building height of 20mPD to 39mPD.
- 3.2.1.8 There are also isolated tall developments in the "R(B)" and "OU(MU)" zones at the junction of Caroline Hill Road/Leighton Road, having building height ranging from

60mPD to 119mPD. Developments in the block bounded by Causeway Road, Moreton Terrace and Tung Lo Wan Road vary in building heights from 40mPD to 119mPD.

3.3 Major Ventilation Pathways

3.3.1.1 As discussed in Section 2.5, annual prevailing winds are mainly from the N, NE, ENE and E, while summer prevailing winds are from the E, SSE, S, SSW and SW.

N wind

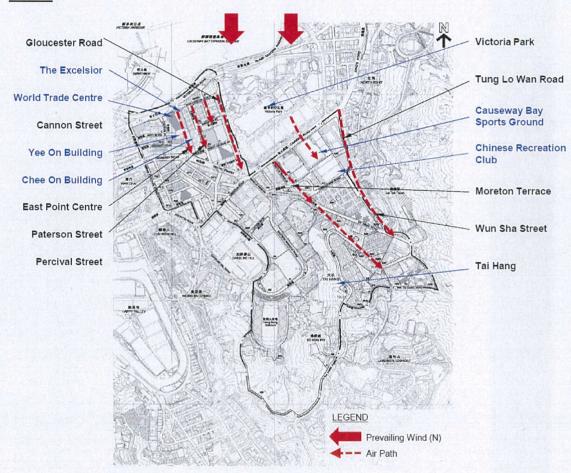


Figure 3.1 General Wind Environment under N Wind

3.3.1.2 Northwest Region serves as one of the major wind entrances of the study area. In this densely developed area, air paths mainly follow the existing road network. N wind travels along Percival Street, Cannon Street, Paterson Street and Gloucester Road to reach the inland areas. The existing BG between The Excelsior and World Trade Centre is an effective air pathway in enhancing the penetration of N wind to the busy pedestrian street between Yee On Building and Chee On Building and then to East Point Road.

3.3.1.3 Presence of Victoria Park also allows N wind to freely reach the North Region and northern part of Centre Region. N wind further penetrates through these regions

via the major roads (i.e. Tung Lo Wan Road, Wun Sha Street and Moreton Terrace) and open areas (i.e. Causeway Bay Sports Ground and Chinese Recreation Club) to reach the East Region (i.e. Wun Sha Street residential cluster).

Given the southern part of the study area (i.e. Centre Region, East Region and South Region) is located at a relatively higher elevation when compared to its northern part, it would facilitate N wind to reattach at pedestrian level around southern part of the study area after skimming over the existing development at the northern part.

In addition, considering Victoria Harbour is located to the north of the study area, sea breezes can reach the study area from the north and would have similar wind pattern as N wind discussed above.

NE wind

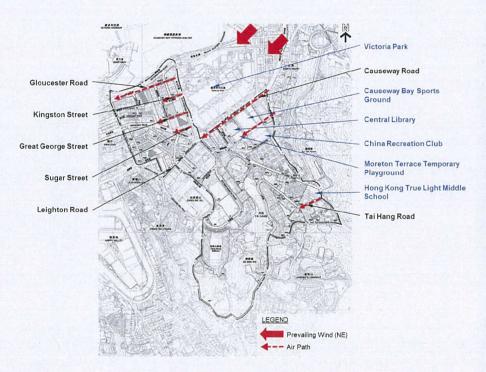


Figure 3.2 General Wind Environment under NE Wind

NE wind from Victoria Park enters the Northwest Region via the major wind corridors of Causeway Road/Leighton Road as well as a series of parallel streets (i.e. Gloucester Road, Kingston Street, Great George Street and Sugar Street).

NE wind could also enter the North Region via Causeway Road and Causeway Bay Sports Ground. Since the North Region consists of a number of open areas (i.e. Causeway Bay Sports Ground, Chinese Recreation Club and Moreton Terrace Temporary Playground) and mid-rise development (i.e. Central Library with a building height of about 64mPD), potentially stagnant areas within the region are not anticipated. Passing through the North Region, wind flows into the northern part of the Centre Region via open areas (i.e. Causeway Bay Sports Ground, Chinese Recreation Club and Moreton Terrace Temporary Playground).

3.3.1.5

3.3.1.7

3.3.1.6

3.3.1.8

For the northern part of the East Region, the existing roads in the Wun Sha Street residential cluster are well aligned with NE wind. However, the streets are narrow at approximately 9m in width. Together with the low-rise nature of some existing buildings (i.e. maximum building height of about 46mPD), NE wind partly skims over this residential cluster and reattaches near the Centre Region/South Region.

3.3.1.9

For the southern part of the East Region, the existing mid-rise and high-rise buildings mainly zoned "R(B)" and "OU" annotated "Residential Development with Historical Site Preserved In-situ" creates blockages for NE wind. NE wind travels along the existing roads (e.g. part of Tai Hang Road at Hong Kong True Light Middle School).

3.3.1.10

Since the South Region mainly consists of natural vegetated slopes, NE wind penetrates through this region to reach the southern part of the Centre Region.

ENE and E winds

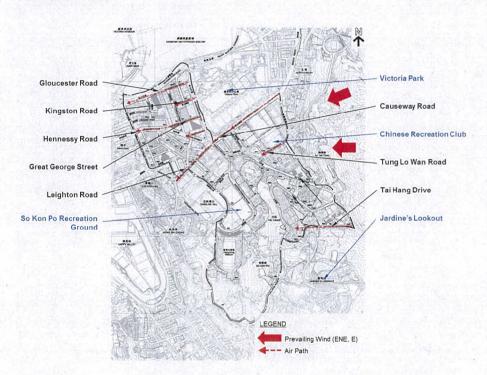


Figure 3.3 General Wind Environment under ENE and E Winds

3.3.1.11

ENE and E winds flow into the North Region via the open areas (e.g. Chinese Recreation Club) and flow along Tung Lo Wan Road. E wind also flows along Tai Hang Drive and reattach downhill into the open areas of the Centre Region (i.e. So Kon Po Recreation Ground) via the vegetated areas in the South Region.

3.3.1.12

Also, easterlies downhill wind pass through the northern part of the North Region and Victoria Park, then reach the Northwest Region. Since the orientation of some of the major roads within the region (e.g. Gloucester Road, Kingston Street and Great George Street and Sugar Street) are similar to this wind direction, they have district significance in allowing wind to penetrate fairy easily into the inland area,

and continue to flow along Hennessy Road to Wan Chai areas. Extending from Causeway Road, ENE wind could also flow into the region along Leighton Road.

SSE wind

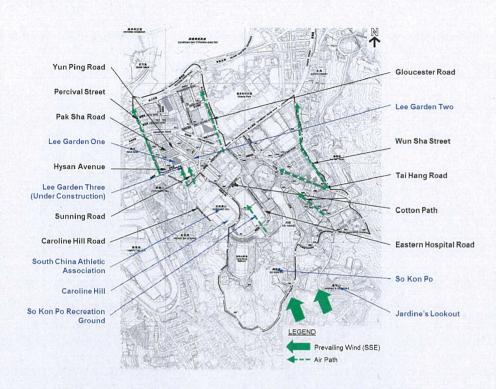


Figure 3.4 General Wind Environment under SSE Wind

SSE wind approaches the East and South Regions of the study area from the Jardine's Lookout area. For these two regions, the open areas between the developments would act as the air pathway for wind penetration. Although the southern part of the East Region is occupied by high-rise buildings, the alignment of road networks (e.g. Tai Hang Road) and the open areas (e.g. sports ground at Hong Kong True Light Middle School) facilitate the penetration of SSE wind into the downstream area, i.e. the southern part of the North Region.

Given a large portion of the South Region is natural vegetated slope, approaching SSE wind would be able to reach the downstream areas without much obstruction. It then reaches the northern part of the Centre Region via Eastern Hospital Road and Caroline Hill Road and the "O" zone sandwiched between these two roads (i.e. So Kon Po Recreation Ground).

SSE wind reaches Yun Ping Road and Sunning Road in the Northwest Region through the South China Athletic Association and the existing open areas at Caroline Hill. Further penetration of SSE wind to Pak Sha Road area is limited because the existing high-rise developments along Sunning Road such as Lee Garden One and the proposed Lee Garden Three (under construction at the ex-Sunning Court and Sunning Plaza site) would narrow the wind entrance to Yun Ping Road and Hysan Avenue and the street patterns do not align well with the prevailing wind direction with sharp bends. Passing through the southern part of

3.3.1.13

3.3.1.14

3.3.1.15

this region, SSE wind also travels along Gloucester Road and Percival Street at the eastern and western boundaries of the study area to the waterfront.

S wind

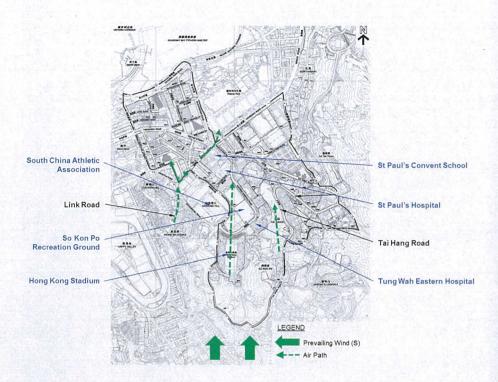


Figure 3.5 General Wind Environment under S Wind

- 3.3.1.16 The southern portion of the study area (i.e. parts of the East and South Region) are situated on higher elevation. The approaching S wind would reach the study area without much obstruction, given that the South Region is largely natural vegetated area.
- S wind enters the South Region and descends into the Centre Region via Hong Kong Stadium. The southern part of the Centre Region (e.g. So Kon Po Recreation Ground and Hong Kong Stadium) as well as the adjoining areas (e.g. South China Athletic Association) are relatively open. Hence, S wind is able to penetrate into that area. However, further penetration into the northern part of the Centre Region is slightly hindered by the medium rise developments (e.g. St. Paul's Hospital) and roads which do not align well in the N-S direction.
- 3.3.1.18 The natural vegetated slope between Tung Wah Eastern Hospital and Tai Hang Road as well as the alignment of Link Road also allow S wind reaches North Region and the southern part of Northwest Region respectively. It then follows the road network to Victoria Park.

SSW and SW winds



Figure 3.6 General Wind Environment under SSW and SW Winds

SSW and SW winds from Wong Nai Chung area could reach the boundary of the Northwest Region along Leighton Road and Hysan Avenue. It can penetrate further downstream along these roads. Wind penetration to Pak Sha Road area and to areas north of Hennessy Road/Yee Wo Street is blocked by the existing high-rise buildings along Percival Street, Lee Garden One and Hysan Place. SSW and SW winds also reach the northern part of the Northwest Region (i.e. area to the north of Hennessy Road) via Lockhart Road and Hennessy Road.

The relatively open areas (i.e. the Caroline Hill area and South China Athletic Association) and low- to mid-rise developments in the southern part of the Centre Region allow penetration of SSW and SW winds to reach the North Region through Cotton Path.

Since the South Region comprises mainly open area, SSW and SW winds would flow downhill from the natural vegetated slopes into the Hong Kong Stadium/So Kon Po area. Then, it would skim over the low- to mid-rise developments along Eastern Hospital Road, and eventually enter the East Region at Tung Lo Wan Road Sitting-Out Area near Fontana Gardens. However, the group of residential developments in the East Region limits further flow into the downstream areas.

3.3.1.20

3.3.1.21

3.4 Potential Areas of Concern

- 3.4.1.1 Northwest Region and northern part of East Region having higher building density with tall buildings and narrow streets when compared with the other regions in the study area, are considered as potential areas of concern. Under such high building height to street width (H/W) ratio, it is difficult for wind from the roof top level to reach the street level³. Wind penetration is largely dependent on the existing road network which serves as major air paths ventilating the study area.
- 3.4.1.2 With reference to the SBDG, these two areas which consist of (i) streets of less than 15m in width in general (e.g. streets in the part of Northwest Region south of Hennessy Road, around Moreton Terrace and in Wun Sha Street Residential Cluster) and/or (ii) development sites with street frontage over 60m in length (e.g. Windsor House, Lfplaza, Sogo Causeway Bay, Hysan Place, Lee Garden One, Lee Garden Two, Lee Garden Three (under construction), Regal Hong Kong, Regent Heights and Bay View Mansion, etc.) are also having concern from the air ventilation and environmental quality at pedestrian level perspectives.

³ Fazia Ali-Toudert and Helmut Mayer (2007) Numerical study on the effects of aspect ratio and orientation of an urban street canyon on outdoor thermal comfort in hot and dry climate. *Building and Environment*. 42(3), 1553-1554.

4 Expert Evaluation of Baseline Scenario

4.1 Introduction

- 4.1.1.1 The Baseline Scenario refers to the scenario under Draft Causeway Bay OZP No. S/H6/15 with BHRs, NBAs, BGs and setbacks for footpath widening as stipulated.
- 4.1.1.2 This section evaluates the wind environment for different subdivided regions (i.e. Northwest, East, South, North and Centre) and potential areas of concern identified in Section 3.4.

4.2 Expert Review of Baseline Scenario

4.2.1 Northwest Region

4.2.1.1 The Northwest Region of Causeway Bay is one of most densely-built environment in Hong Kong. In the Baseline Scenario, the BHRs of the Region are generally 110mPD and 130mPD. Assuming the widest road of Great George Street is about 25m (NBA inclusive), the resulting high H/W ratio of 4 or above would make it difficult for wind from the roof top level to reach the street level (see Figure 4.1). The so-called "downwash" (Refer to Appendix C) is not expected to be obvious as the streets are narrow (i.e. less than 15m) and most buildings are not different significantly in height.

4.2.1.2

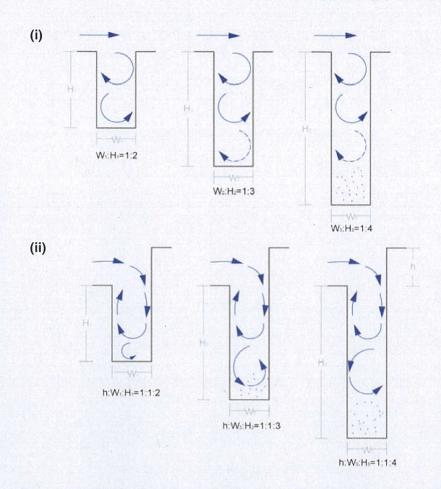


Figure 4.1 Wind regimes in (i) canyons and (ii) canyons with downwash under different H/W ratios⁴

Under such high density built environment, redevelopments up to the permissible building height under the current OZP as in the Baseline Scenario would result in a general increase in building height in an area that would further elevate the already high urban canopy created by tall buildings (see Figure 4.2). According to the AVA EE (2010), it is recommended to improve permeability by stipulating building setback requirements or recess on the lower floors, and by delineating NBAs wherever possible.

BMT Asia Pacific, ref: R9429/01 Issue 1, dated November 2017

⁴ A. Kovar-Panskus, P. Louka, J.- F. Sini, E. Savory, M. Czech, A. Abdelqari, P. G. Mestayer and N. Toy (2002) Influence of Geometry on the Mean Flow within Urban Street Canyons - A Comparison of Wind Tunnel Experiments and Number Simulations, *Water, Air and Soil Pollution: Focus* 2 (5-6), 365-380.

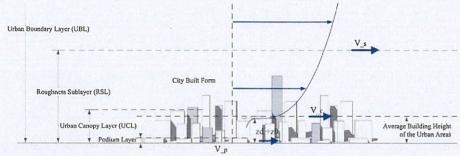


Figure 4.2 Wind speed profile at urban canopy layer, roughness sublayer and urban boundary layer ⁵

(a) North Wind

4.2.1.3

Percival Street, Cannon Street, Paterson Street, and Gloucester Road in the region are wider than 15m and allow penetration of North wind and sea breeze. It is expected that the requirement of a BG with a dimension of 10m (width) by 8m (height) between World Trade Centre and The Excelsior would help enhance the penetration of northerly wind and sea breeze to the busy pedestrian street between Yee On Building and Chee On Building and then to East Point Road. Under the current restriction on OZP, however, developments are allowed on top of such BG which would become a tunnel-like structure. Pressure drop⁶ along such a BG resembling a tunnel will affect the effectiveness of wind penetration.

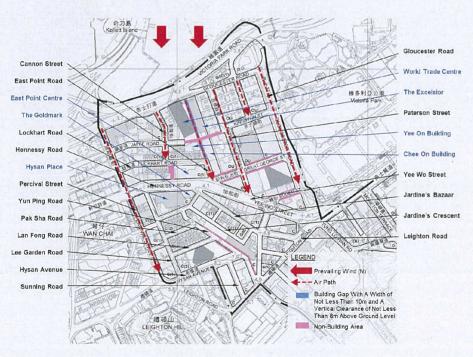


Figure 4.3 Overall Wind Environment of Northwest Region under N wind

BMT Asia Pacific, ref: R9429/01 Issue 1, dated November 2017

⁵ Edward Ng, Chao Yuan, Liang Chen, Chao Ren and Jimmy C.H. Fung (2011) Improving and wind environment in high-density cities by understanding urban morphology and surface roughness: A study in Hong Kong. *Landscape and Urban Planning*. 101(1), 59-74.

⁶ Refer to website: https://www.engineersedge.com/fluid_flow/pressure_drop/pressure_drop.htm

4.2.1.4

The 8m to 12m wide NBA designated to the west of East Point Centre can help in breaking the long façade formed by the line of buildings between Lockhart Road and Hennessy Road. Its present alignment however does not form a continuous air path connecting with Cannon Street for northerly wind/sea breeze penetration. As such, its performance as part of a connected air path is compromised though it is beneficial in enhancing the permeability in this area.

4.2.1.5

The wind environment in the southern part of the Northwest Region bounded by Hennessy Road, Yee Wo Street, Leighton Road, Hysan Avenue and Percival Street is of particular concern under N wind. Hysan Place together with The Goldmark form a rather long facade along Hennessy Road blocking penetration of N wind. Although some permeable elements such as podium garden have been incorporated at mid-level of Hysan Place to lessen the impact, low level winds to the downstream areas, particularly Pak Sha Road area, are blocked. Under the N wind, Percival Street is the major air path in this area. Lee Garden Road may only facilitate very localized air flows. While the original requirement for a 5m wide NBA along the Lee Garden Road frontage of Hysan Place has been quashed by the Court, the provision of setbacks along Lee Garden Road for footpath widening would bring some improvement to the local pedestrian wind environment.

4.2.1.6

The high-rise buildings along Jardine's Bazaar hinder penetration of N wind and affect the pedestrian wind environment at Jardine's Crescent. Similarly, the tall Lee Garden One impedes N wind to reach its downstream areas (i.e. Hysan Avenue and Sunning Road). However, the BG at the podia of Lee Garden One and Lee Garden Two together maintains building permeability at middle level and promote air movement in this area.

(b) Northeast, East-Northeast, and East Winds

4.2.1.7

The presence of Victoria Park as a large open space allows NE, ENE and E winds to travel along the major air paths including Gloucester Road, Kingston Street, Great George Street, Sugar Street, Hennessy Road and Causeway Road and ventilate the western part of Northwest Region of Causeway Bay and continue on towards the northern Wan Chai area.

4.2.1.8

As the road network is important for the air ventilation in the region, the 8m NBA connecting Kingston Street and Jaffe Road forms a continuous east-west air path at district level. The channelisation effect brings the air flow to Jaffe Road all the way towards Wan Chai area for prevailing winds from the NE, ENE and E. Similarly, the NBA requirements along Great George Street and Sugar Street would further widen the wind corridors which are considered to be effective measures to facilitate penetration of prevailing winds from the NE, ENE and E to reach Hennessy Road.

4.2.1.9

The southern part of Northwest Region is mainly ventilated by the NE, ENE and E winds coming from Causeway Road via Irving Street, Keswick Street and Leighton Road. High-rise buildings in this area would block the incoming NE, ENE and E winds from reaching Jardine's Crescent area and Pak Sha Road area. Provision of the BG at the podia of Lee Garden One and Lee Garden Two as imposed in the

current OZP increases building permeability at middle level and promote air movement in this area.

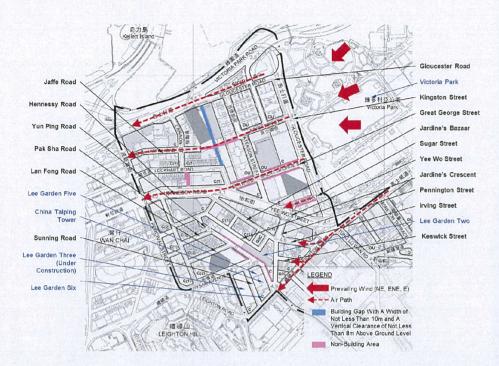


Figure 4.4 Overall Wind Environment of Northwest Region under NE, **ENE and E winds**

(c) South-Southeast and South Winds

Winds from the SSE and S enter the region from the open space such as Hong Kong Stadium and Caroline Hill area. It is noted that the ground coverage of the upstream area is relatively low. Therefore, the incoming wind is generally unobstructed. However, the planned commercial/GIC developments at the northwest of the Caroline Hill would impede SSE and S winds from entering Sunning Road and Hoi Ping Road. SSE and S winds coming from Caroline Hill Road and its adjacent open spaces continue to flow along Yun Ping Road. Provision of 2m-wide NBAs from lot boundaries fronting Yun Ping Road (about 10m to 12m in width) under the current OZP widen the existing air path in enhancing penetration of SSE and S winds.

- The BGs in terms of BHRs of 32mPD and 20mPD at Lee Garden One and Lee Garden Two maintain a degree of building permeability at mid- and high-levels as existing condition also allow SSE and S winds at middle level reaching Yun Ping Road.
- Part of Leighton Road aligned in SE-NW direction allows penetration of SSE wind 4.2.1.12 to flow along Percival Street ventilating the area around Northwest Region and northern part of Wan Chai area. Similarly, Yee Wo Street/Hennessey Road allows penetration of SSE wind to ventilate the northern part of Northwest Region. Gloucester Road also allows penetration of SSE wind coming from Tung Lo Wan Road. S wind, however, would not able to penetrate through Leighton Road and Hennessey Road effectively.

4.2.1.11

4.2.1.10

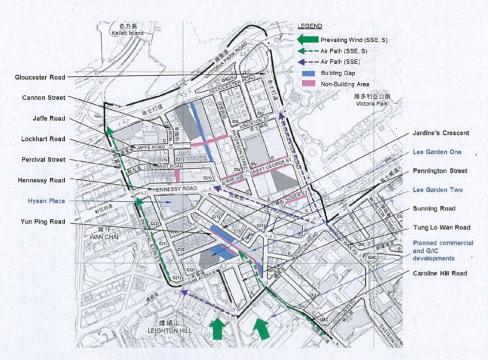


Figure 4.5 Overall Wind Environment of Northwest Region under SSE and S winds

(d) South-Southwest and Southwest Winds

4.2.1.13

SSW and SW winds enter the Northwest Region from Wong Nai Chung area. Although both Leighton Road and Hysan Avenue allow penetration of SSW and SW winds towards the Northwest Region, the high-rise buildings along Lee Garden Road and Hysan Avenue create a wind shadow in Pak Sha Road area with relatively calm wind environment. The northern part of Northwest Region is ventilated by SSW and SW winds coming from Jaffe Road, Lockhart Road and Hennessy Road.

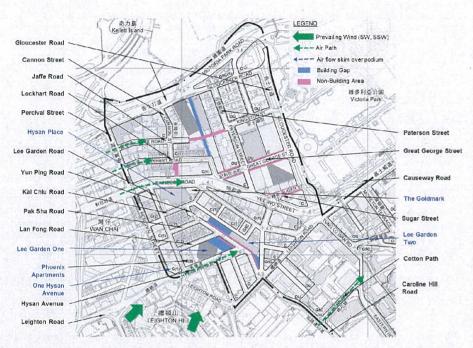


Figure 4.6 Overall Wind Environment of Northwest Region under Prevailing Wind from SW and SSW

4.2.1.14

As mentioned above, two BGs in form of BHRs of 32mPD and 20mPD stipulated at the northeastern part of Lee Garden One and northwestern part of Lee Garden Two would also facilitate penetration of SSW and SW winds and mitigate calm pedestrian wind environment around Pak Sha Road area.

4.2.2 East Region

4.2.2.1

The East Region of the study area has a hilly terrain to the east and south (i.e. the area bounded by Tai Hang Road and Tai Hang Drive). This area consists of mainly residential developments. These developments are generally ten storeys or below. Under the Baseline Scenario, various BHRs from 85mPD to 234.7mPD and from 6 storeys to 30 storeys are stipulated in the Region.

4.2.2.2

For the southern part of the East Region (area along the upper portion of the sloping Tai Hang Road), BHRs of 6 storeys and 30 storeys are stipulated. Given the elevation of the surrounding hills, the effect of the natural terrain will dominate that of the buildings. In summer, katabatic wind⁷ from vegetated hillsides could be

⁷ Refer to website: https://www.metlink.org/wp-content/uploads/2013/11/teenagers/wind.pdf

enjoyed in the area from SSE, S, SSW and SW. Given that the ground coverage of the region is moderate and majority of the buildings are low-rise, the air flow could skim over such low-rise developments and penetrate into this area easily under both annual and summer prevailing winds.

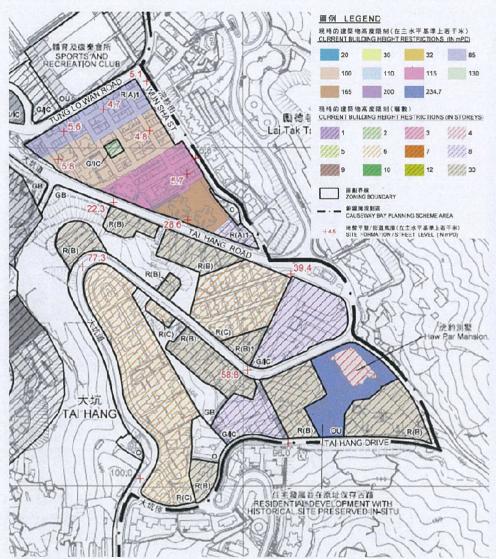


Figure 4.7 Building Height Restriction in the southern part of the **East Region**

The northern part of the East Region (i.e. area bounded by Tai Hang Road, Tung Lo Wan Road and Wun Sha Street or otherwise known as Wun Sha Street Residential Cluster) mainly consists of aged low-rise residential developments. In such built environment, the road network is generally important air path. Although the road network of the cluster generally align with the annual prevailing wind directions, the widths of the streets are relatively narrow that their effectiveness as air pathways are undermined.

4.2.2.4 Under the Baseline Scenario, a stepped building height profile of 85mPD-100mPD-115mPD has been introduced. Together with the requirement of 0.5m-wide setback for the purpose of footpath widening, effective widths of the street

4.2.2.3

generally ranging from 9m to 10m are formed in this area. Yet the High H/W ratio of 8:1 or above and small building height variation limit the effectiveness for promoting air movement at pedestrian level. Prevailing winds would skim over the future developments that are redeveloped up to the permissible building height under the Baseline Scenario and reattach to pedestrian level in further downstream. Nevertheless, the regular grid streets aligning to prevailing NE, SE and SW winds allow some penetration in this area.

4.2.3 South Region

4.2.3.1 There is no big difference between the existing conditions and the Baseline Scenario in the South Region. The wind environment is expected to be the same as the existing conditions as discussed in Section 3.

4.2.4 North Region

4.2.4.1 Similar to the South Region, the wind environment of the region shall remain unchanged as the BHRs stipulated in the region generally reflect the existing building heights as discussed in Section 3.

4.2.5 Centre Region

4.2.5.1 Except for the BHRs for "OU(MU)" (100mPD) and "R(B)" zones (30 storeys), the BHRs for open recreational grounds and "G/IC" zones under the Baseline Scenario generally reflect their existing building heights in the Region. Whilst redevelopments in the "OU(MU)" and "R(B)" zones up to the permissible building height would block the penetration of prevailing winds to its adjacent areas, the openness of the Region can be maintained and the road network continues to serve as effective air paths in the Baseline Scenario. Thus, the change in wind environment is expected to be minimal under the circumstances.

4.2.6 Footpath widening

4.2.6.1 Under the Baseline Scenario, there are setback requirements for footpath widening at Jaffe Road (southern side), Lockhart Road, Cannon Street (eastern side) and Lee Garden Road (western side and part of eastern side between Kai Chiu Road and Pak Sha Road), Lan Fong Road, Jardine's Bazaar, Haven Street and at Wun Sha Street Residential Cluster. Such setback requirements are primarily intended for pedestrian circulation, but also contribute to improving environmental quality at pedestrian level.

Expert Evaluation of Initial Scenario

5.1 Introduction

It should be noted that the air ventilation measures including NBAs and BGs stipulated on the current OZP under the Baseline Scenario were formulated in 2010 before the SBDG's promulgation in 2011. To follow up on the court's rulings, the PlanD has reviewed the BHRs under the current OZP and come up with the Initial Scenario, in which BHRs for the commercial sites, "OU(MU)" sites and some "R(A)" sites are to be relaxed to make allowance for future redevelopments to comply with SBDG. Assuming that SBDG will be followed in future redevelopments, the NBA and BG requirements on the current OZP (Baseline Scenario) are initially taken out as shown on Plans 3 and 4 in Appendix A.

This section evaluates the implication and potential impacts of the Initial Scenario, focusing on the amendments made to the Baseline Scenario as elaborated in the following paragraphs. Pedestrian wind environment is the result of interplay amongst many factors including ground coverage, building permeability, podium size, building height and street orientation, etc.⁸. The following principles and considerations have been taken on board in assessing the Initial Scenario and recommending essential air ventilation measures for incorporation at OZP level alongside with relaxation of BHRs to facilitate future redevelopments to comply with SBDG:

(a) Sustainable Building Design Guidelines (SBDG) at Building Design Level and Measures at District Level

The SBDG is an administrative means to promote sustainable building design by granting GFA concessions with a view to contribute to a better built environment. In air ventilation perspective, SBDG aims to enhance building porosity (see Figure 5.1) in avoiding screen wall effect and to promote air movements amongst developments to enhance better dispersion and air mixing. Meanwhile, building setback requirement recommended by SBDG as well as HKPSG also mitigates street canyon effect to benefit the pedestrian wind environment (see Figure 5.2). It is anticipated that the general wind environment of the city would be improved in the long run when the number of redeveloped buildings follow SBDG increases gradually. The proposed increase in permissible building height allows developments to comply with SBDG in providing permeable design measures. Although overall taller developments may create larger wind shadow in the downstream areas⁸, incorporation of SBDG's recommended measures increases building permeability, especially around the low zone⁹ and ultimately helps improve the pedestrian wind environment.

5.1.1.2

5

5.1.1.3

⁸ Marcus Oliver Letzel, Carolin Helmke, Edward Ng, Xipo An, Alan Lai and Siegfried Raasch (2012) LES case study on pedestrian level ventilation in two neighbourhoods in Hong Kong. *Meteorologische Zeitschrift*. 21(6), 575-589

⁹ Chao Yuan, Edward Ng and Leslie Norford (2014) Design Science to Improve Air Quality in High Density Cities. 30th International Plea Conference, CEPT University, Ahmedabad.

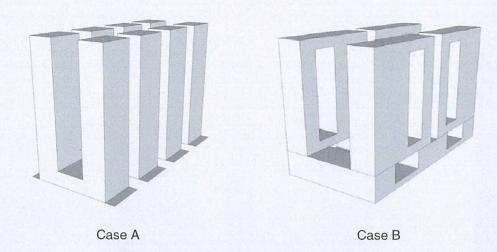


Figure 5.1 Buildings with different wind enhancement features including building setbacks and building separations (see Case A) and permeable elements (see Case B) 10.

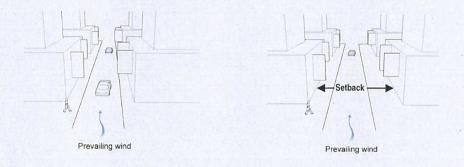


Figure 5.2 Building setback along prevailing wind¹¹

However, relying on SBDG alone would not be sufficient to ensure good air ventilation at the district level as concerned building design measures are drawn up for and confined to developments on the basis of each individual site. Building permeability can be provided at low, middle and high zones involving detailed building design matters. These measures, in a diversified manner, may not take into account the need of the wider area and benefits would be localised only. Therefore, incorporation of NBAs and BGs at strategic locations at the OZP level should still be a means to maintain or create connected air paths for good wind penetration at district level. An appropriate mix use of strategies with planning measures (e.g. NBAs and BGs) at district level and design measures (e.g. SBDG's recommendations) at building/site level should be adopted.

Street orientation and connectivity

5.1.1.4

¹⁰ Chao Yuan and Edward Ng (2012) Building porosity for better urban ventilation in high-density cities – A computational parametric study. Building and Environment. 50,176-189.

¹¹ Planning Department (2015) Hong Kong Planning Standards and Guidelines, Chapter 11 Urban Design Guidelines.

5.1.1.5

5.1.1.6

Street orientation is another crucial factor governing the microclimatic changes in a street canyon. For better wind penetration within the urban areas, streets should best run parallel to the prevailing wind directions and be connected with each other or with open spaces. HKPSG also recommends connecting the principal roads, interlinked open spaces, amenity areas, non-building areas, building setbacks and low-rise building corridors, through the high-density/high-rise urban form (See Figure 5.3 and Figure 5.5).

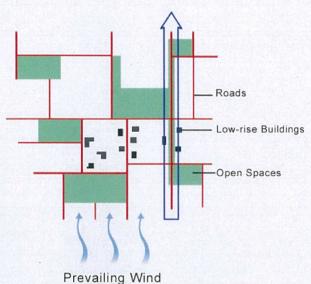


Figure 5.3 Linkage of Roads, Open Spaces and Low-rise Buildings to Form Breezeways 12

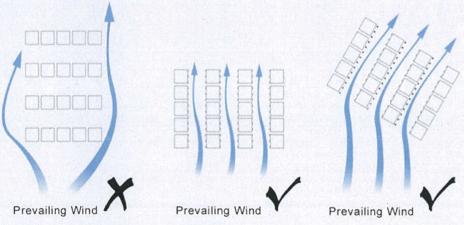


Figure 5.4 Orientation of Street Grids¹³

(b) Reduction of Podium Bulk and Ground Coverage

Given the urban air ventilation performance mostly depends on the pedestrian-level building porosity, both reduction of podium bulk by incorporating permeable elements as well as reduction of ground coverage help to improve pedestrian wind

¹² Planning Department (2015) Hong Kong Planning Standards and Guidelines, Chapter 11 Urban Design Guidelines.

¹³ Planning Department (2015) Hong Kong Planning Standards and Guidelines, Chapter 11 Urban Design Guidelines.

environment. Stepped podium design and towers above podium are also good building design measures at site level for promoting pedestrian air movement. Increase in permissible building height to allow more scope for reducing site coverage at low zone could result in better pedestrian wind environment¹⁴.

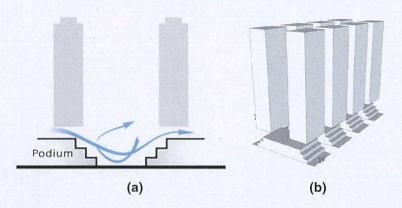


Figure 5.5 Different stepped podium designs 15,16

(c) Width of effective air paths

In general, air paths should be as wide as possible from air ventilation perspective. However, it is the prevailing practice that an effective air path should at least be 15m in width for wind penetration. This principle is in line with the building setback and building separation requirements set out in SBDG.

(d) Height/Width Ratio (H/W ratio)

Causeway Bay is an area of high H/W ratio (see Figure 4.1). With the H/W ratio greater than 2, wind is difficult to penetrate from the roof top level to the pedestrian level because of the slower airflow under deep street canyon 17,18. Incoming wind would skim over the developments. The "downwash" effect is not effective with narrow streets and in particular where building height difference is not significant. Under such circumstances, building height alone ceases to be the key consideration for the pedestrian wind environment in an area. Other design measures including provision of connected air paths, NBAs, BGs, building separations, building setbacks, open spaces and green areas etc., especially at the low zone, are more effective strategies to improve air ventilation at the pedestrian level.

5.1.1.7

5.1.1.8

¹⁴ Yingsheng Zheng, Yuan Shi., Chao Ren. and Edward Ng (2016) Urban Ventilation Strategies for Micro Climate Improvement in Subtropical High-density Cities: A Case Study of Tai Po Market in Hong Kong, Urban Planning International, 1673-9493.

¹⁵ Planning Department (2015) Hong Kong Planning Standards and Guidelines, Chapter 11 Urban Design Guidelines

¹⁶ Chao Yuan and Edward Ng (2012) Building porosity for better urban ventilation in high-density cities – A computational parametric study. *Building and Environment*. 50,176-189.

¹⁷ Fazia Ali-Toudert and Helmut Mayer (2007) Numerical study on the effects of aspect ratio and orientation of an urban street canyon on outdoor thermal comfort in hot and dry climate. *Building and Environment.* 42(3), 1553-1554.

¹⁸ Nastaran Shishegar (2013) Street Design and Urban Microclimate Analyzing the Effects of Street Geometry and Orientation of Air Flow and Solar Access in Urban Canyons. *Journal of Clean Energy Technologies*. 1(1), 52-56

5.2 **Analysis and Observations**

- 5.2.1.1 Under the Initial Scenario, the following amendments to the BHRs in Baseline Scenario are proposed:
 - BHR of Northwest Region is generally increased from 110mPD/130mPD to 135mPD except that the BHR for Hysan Place and Lee Garden One is maintained at 200mPD, and that for Pak Sha Road neighbourhood is maintained at 30mPD;
 - BHR of northern part of Wun Sha Street Residential Cluster in the Eastern Region is increased from 85mPD to 100mPD; and
 - BHR at Haven Street and Shelter Street in the Centre Region is increased from 100mPD to 135mPD.

5.2.2 **Northwest Region**

(a) Overall increase in building height in the Northwest Region

It is recognised that under the Initial Scenario, there is a general increase in permissible building height in an area basis in the Northwest Region. This would further elevate the already high urban canopy created by tall buildings. A larger wind shadow would inevitably be created in the downstream areas. However, with the adoption of SBDG's design measures within the Northwest Region in future, building permeability, in particular around the low zone, would be enhanced. Together with the existing and future good wind penetration along major air paths following the road network, impact of the wind shadow on the pedestrian wind environment would be alleviated.

(b) North of Hennessy Road

This part of Causeway Bay to the north of Hennessy Road is congested with high H/W ratio. As discussed under the Baseline Scenario, wind penetration in this area mainly relies on the road network. Major wind corridors of district significance are Percival Street, Cannon Street, Paterson Street and Gloucester Road under prevailing northerly winds as well as the sea breeze; whereas Gloucester Road, Kingston Street, Great George Street and Sugar Street are important air corridors for penetration of prevailing NE, ENE and E winds into the district. In general, summer prevailing SSW and SW winds are blocked by high-rise developments to the south of Hennessy Road to reach this area. Some southwesterly winds however can reach the Northeast Region via Lockhart Road and Hennessy Road.

Great George Street and Sugar Street

Great George Street and Sugar Street are important air corridors at the district level, allowing prevailing NE, ENE and E winds from Victoria Park to reach Hennessy Road and ventilate the congested Causeway Bay area and continue towards Wan Chai area. The width of Great George Street ranges from 14.1m to 16.4m. Since most parts of the street is wider than 15m, it is considered that an effective air path can be maintained. The NBAs designated along both sides of

5.2.2.1

5.2.2.2

Great George Street under the current OZP are beneficial, but not absolutely essential for an effective air path according to current practice.

5.2.2.4

On the other hand, Sugar Street is narrower at less than 15m wide. It is recommended that NBAs be designated on both sides of Sugar Street to create a 15m wide effective air path. Taking into account the existing width of Sugar Street (12.3m), it is proposed to adjust the width of the NBAs on the northern and southern sides of the street from 2m and 4m respectively on the current OZP to 1.5m on both sides. With an increase in BHR to 135mPD, the future redevelopments concerned would have scope to accommodate the revised NBA requirements for providing an effective air path.

Between Kingston Street and Jaffe Road

5.2.2.5

Similarly, Kingston Street is another important wind entrance and air corridor for the prevailing NE, ENE and E winds from Victoria Park. Its connection to Jaffe Road is essential having district significance for these prevailing winds to reach the rest of Causeway Bay and Wan Chai area to the west. The NBA designated between Kingston Street and Jaffe Road on the current OZP should be retained and preferably be widened to 15m. However, the site at 51 Paterson Street where the NBA is situated has a site width of 23m only. Widening the NBA would impose severe constraints on its future redevelopment which would in turn hinder the provision of the NBA. Considering the practical situation, the current width of the NBA at 8m is proposed to be maintained.

Between Lockhart Road and Hennessy Road

5.2.2.6

The street block zoned "C(1)" between Lockhart Road and Hennessy Road bounded by Percival Street is very long at more than 200m. The 8m to 12m wide NBA currently designated between Lockhart Road and Hennessy Road can break up the line of building blocks upon redevelopment to facilitate air movement. However, the NBA does not align with Cannon Street and its effect as part of an air path could be limited. The objective of having better permeability along the street block for air movement could similarly be met by the implementation of building separation measures following SBDG. General adoption of SBDG in this locality would also result in improvement in the pedestrian wind environment. Under such circumstances, the 8m to 12m wide NBA requirement on the current OZP is not considered as essential.

Between The Excelsior and World Trade Centre

5.2.2.7

It is agreed that the existing walkway between The Excelsior and World Trade Centre would help enhance the penetration of northerly wind and sea breeze to the pedestrian street between Yee On Building and Chee On Building and reach East Point Road. Performing such function, however, is not confined to the BG of $10m(W) \times 8m(H)$ as demarcated on the current OZP which more or less is in a tunnel form with effectiveness of wind penetration diminishes as pressure drops.

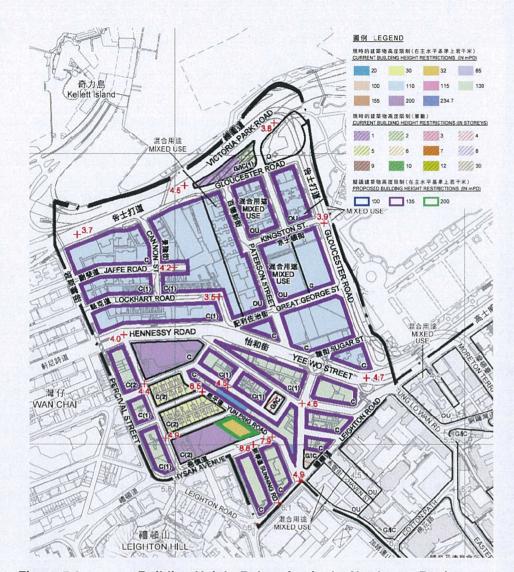


Figure 5.6 Building Height Relaxation in the Northwest Region

The higher permeability within this street block can also be achieved through other building design measures, e.g. ventilated communal gardens or BG above podium level, upon redevelopment of the site concerned. The higher BHR of 135mPD has made room for such good building design measures conductive to air ventilation of the local area.

(c) Northwest Region - South of Hennessy Road

5.2.2.8

5.2.2.9

Sunning Road, Lee Garden One and Lee Garden Two

Under the existing condition, the tall buildings along Sunning Road and Lee Garden Three (under construction) will narrow the wind entrance to Yun Ping Road and Hysan Avenue for prevailing SSE wind. As proposed under the Initial Scenario without requirements of the NBAs along Yun Ping Road and BGs at Lee Garden One and Lee Garden Two, BHR of 200mPD would be adopted for the entire Lee Garden One site, while BHR of Lee Garden Two will be relaxed from 130mPD to 135mPD. These proposed changes will affect the pedestrian wind environment as the original wind entrance through the BGs at Lee Garden One

5.2.3

5.2.3.1

5.2.4

5.2.4.1

and Lee Garden Two may be lost. Hence, the penetration of prevailing SSE, SSW and SW winds will not be able to reach Yun Ping Road, Lan Fong Road and eventually Pak Sha Road. Under the circumstances, the poor pedestrian wind environment at Pak Sha Road area and Jardine's Crescent area is not expected to be improved in the long run and could be worsened.

Without the current BG and NBA measures, it is important that the future redevelopment of Lee Garden One and Lee Garden Two have to adhere to the building setback and building separation requirements of SBDG to widen narrow streets (Yun Ping Road and/or Jardine's Crescent), avoid wall-like building façade and provide building separation(s) amongst development blocks to maintain wind permeability of the area. A permissible building height of 200mPD and 135mPD for the two developments respectively would allow sufficient scope and flexibility for the new buildings to follow SBDG and incorporate building setbacks for increasing building permeability at the low zone and thus improve pedestrian wind environment. If implemented, these measures would serve similar purpose of the current NBA and BG requirements.

Eastern Region - Wun Sha Street Residential Cluster

For the Wun Sha Street residential cluster, a stepped building height profile of 85mPD-100mPD-115mPD is imposed on the current OZP to facilitate air movement. However, the downwash effect is constrained by the narrow streets in the area with high H/W ratio. The difference between a 2-step as proposed and 3-step building height profiles in air ventilation terms is not expected to be significant. Such building height increase in the northern part of the residential cluster would also have limited impact on the overall urban canopy. On the other hand, the regular street pattern in the cluster, which is well connected and aligned with the NE and SE prevailing wind directions, would be important to air movement particularly at street level. The compliance with SBDG upon redevelopment would improve the permeability of individual buildings/street blocks.

Centre Region – Haven Street and Shelter Street

The proposed increase in BHR at Haven Street and Shelter Street from 100mPD to 135mPD will inevitably impose some adverse air ventilation impact on the downstream areas under annual and summer prevailing winds. Nevertheless, such adverse impact could be mitigated by improving building permeability and facilitating wind penetration at the low zone by adoption of SBDG's design measures made possible by relaxation of BHR.

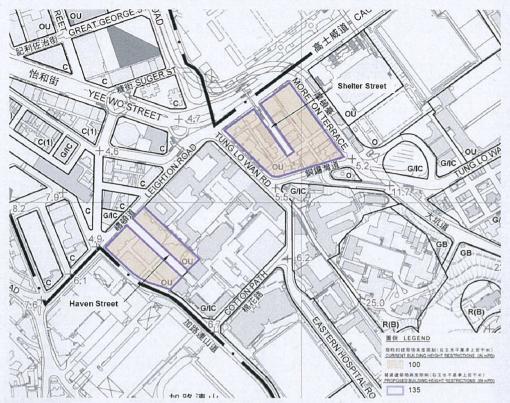


Figure 5.7 Building Height Relaxation in the Centre Region

Summary of Recommendations

5.3.1 Northwest Region

5.3

- It is proposed to impose 1.5m wide NBAs on the northern and southern sides of Sugar Street respectively to widen the air path to 15m.
- The current NBA requirement between Kingston Street and Jaffe Road of 8m wide is proposed to be maintained.
- High permeability between The Excelsior and World Trade Centre, such as ventilated communal gardens or building separations above podium level, is recommended.
- Adoption of SBDG for higher building permeability and reduced ground coverage especially in the building design of low zone at site level is recommended to improve the pedestrian wind environment.

5.3.2 Eastern Region and Centre Region

 Adoption of SBDG for higher building permeability and reduced ground coverage especially in the building design of low zone at site level is recommended to improve the pedestrian wind environment.

6 Conclusion

- An Expert Evaluation on Air Ventilation Assessment on the Causeway Bay area was conducted in 2010. Upon its recommendations and other planning and urban design considerations, control measures including BHRs, NBAs, BGs and setback requirements at various locations were designated on the current OZP.
- 6.1.1.2 The wind environment of Baseline Scenario and Initial Scenario have been reviewed and compared. It is identified that the Northwest Region and East Region are the more problematic areas due to the high H/W ratio and congested urban morphology narrow streets and tall buildings.
- In light of the implementation of SBDG in 2011, the recommended mitigation measures in previous EE have been reviewed to compare their similarity and recommend further mitigation measures if necessary. In general, to improve the wind environment at street level, widening of narrow streets, reducing ground coverage, improving permeability among buildings and developments and ensuring effective air paths of 15m wide would be more relevant. In this regard, measures recommended in SBDG are working towards this end and when implemented, could serve the similar purposes of some NBA and BG requirements which were stipulated on the current OZP before SBDG was put in place.
- Nevertheless, relying on SBDG alone would not be sufficient to ensure good air ventilation at the district level since these measures, in a diversified manner, are designed for and confined to developments on the basis of each individual site that may not have taken into account the need of the wider area and thus benefits would be localised only. Hence, designating NBA and BG requirements at strategic locations on the OZP to maintain major air paths or create inter-connected air paths is considered necessary and important to densely developed area having poor wind environment like, Causeway Bay. Width of the major air paths should be maintained at 15m as far as practicable. Therefore, some NBAs in the Baseline Scenario, are recommended to be retained or modified, i.e. the NBA requirements along Sugar Street and between Kingston Street and Jaffe Road.
- 6.1.1.5 Generally, other areas in the current OZP have relatively low ground coverage.

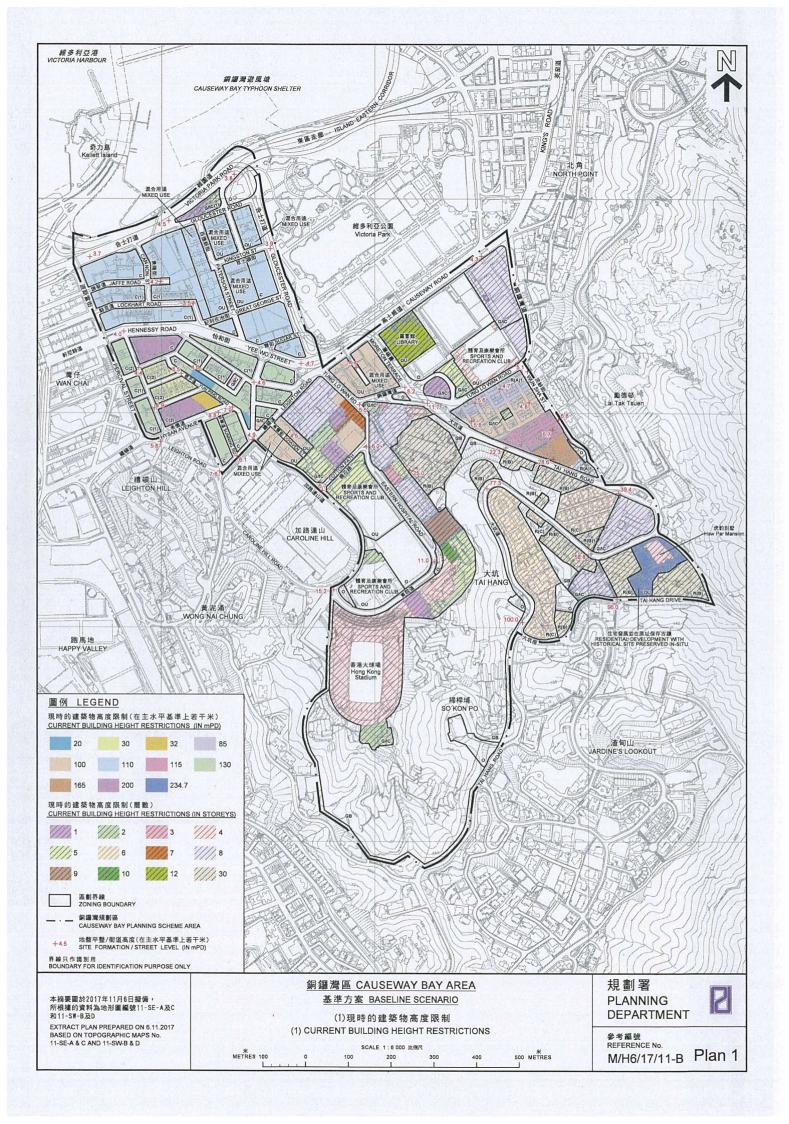
 Most of areas are occupied by open areas or low-rise buildings. No specific air ventilation issue for these areas are identified.

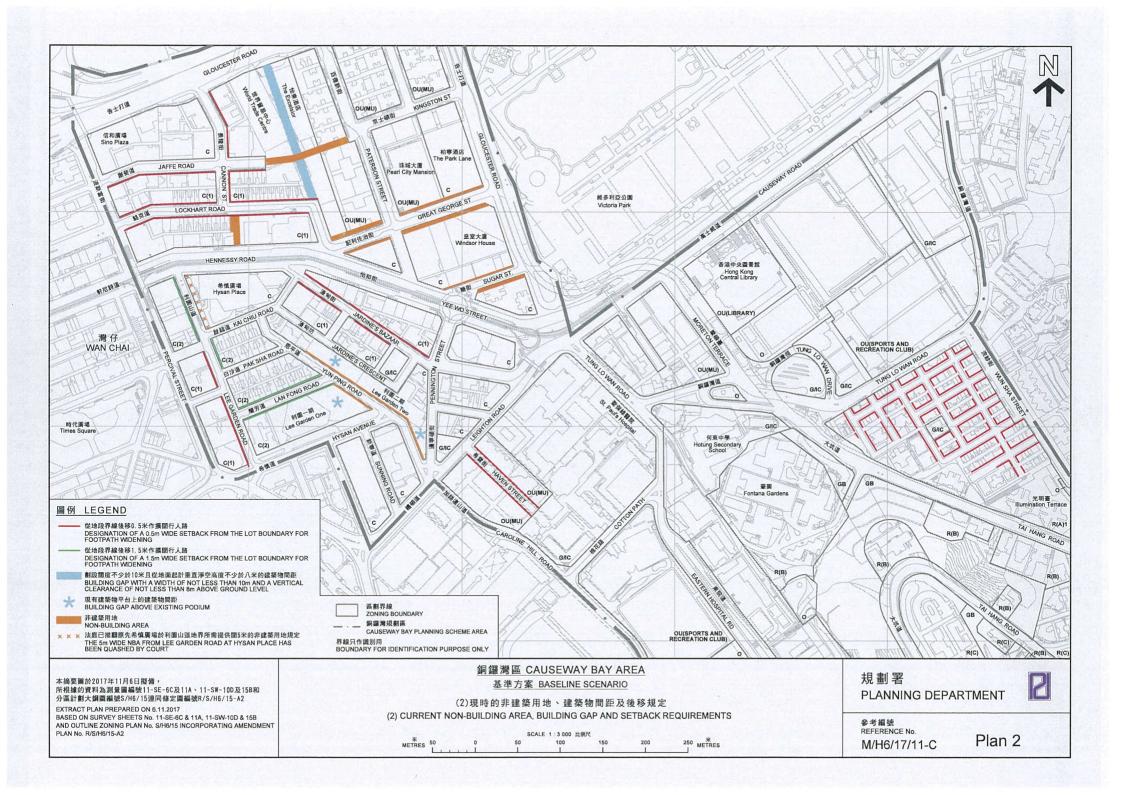
Planning Department

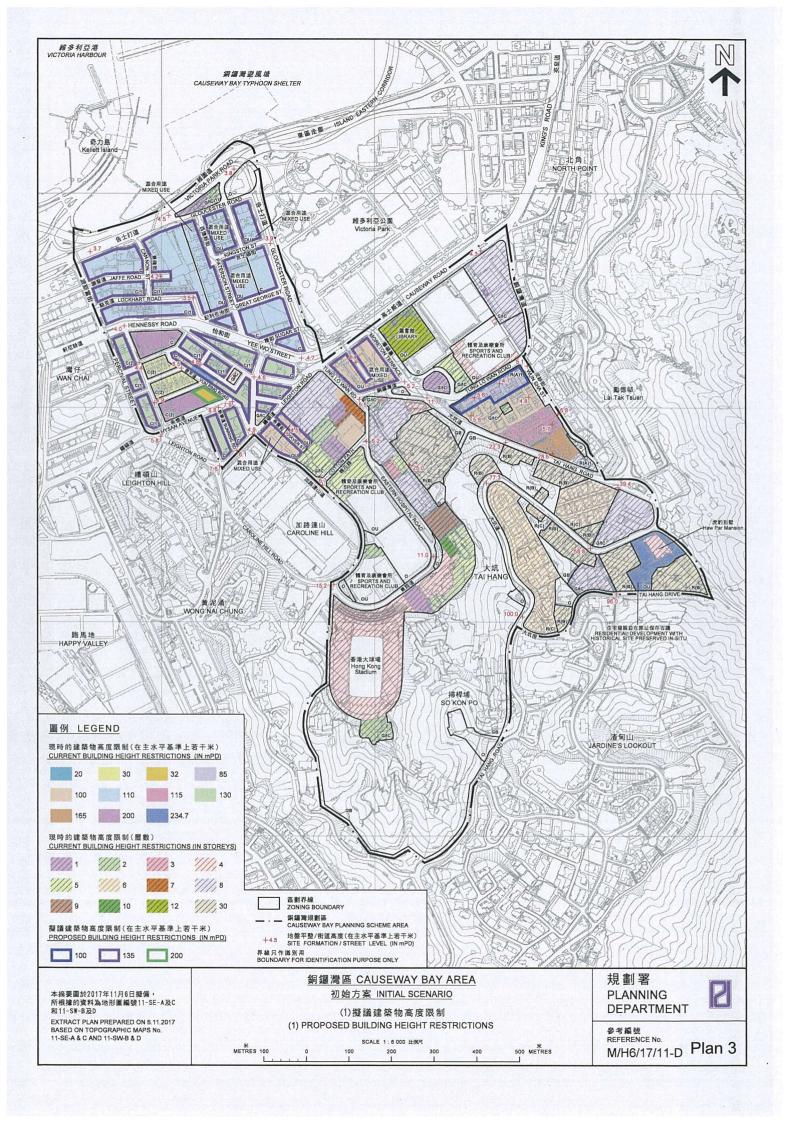
Category A1 – Term Consultancy for Expert Evaluation on Air Ventilation Assessment for an Instructed Project for Causeway Bay Area

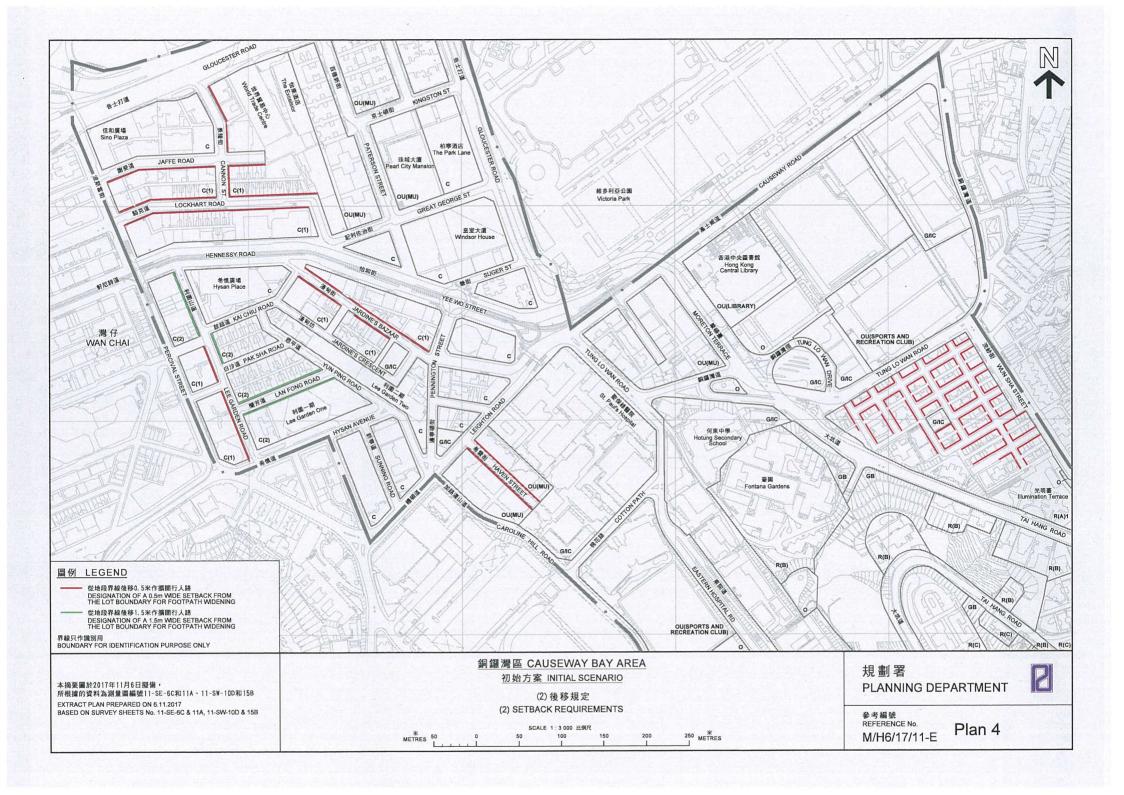
Appendix A

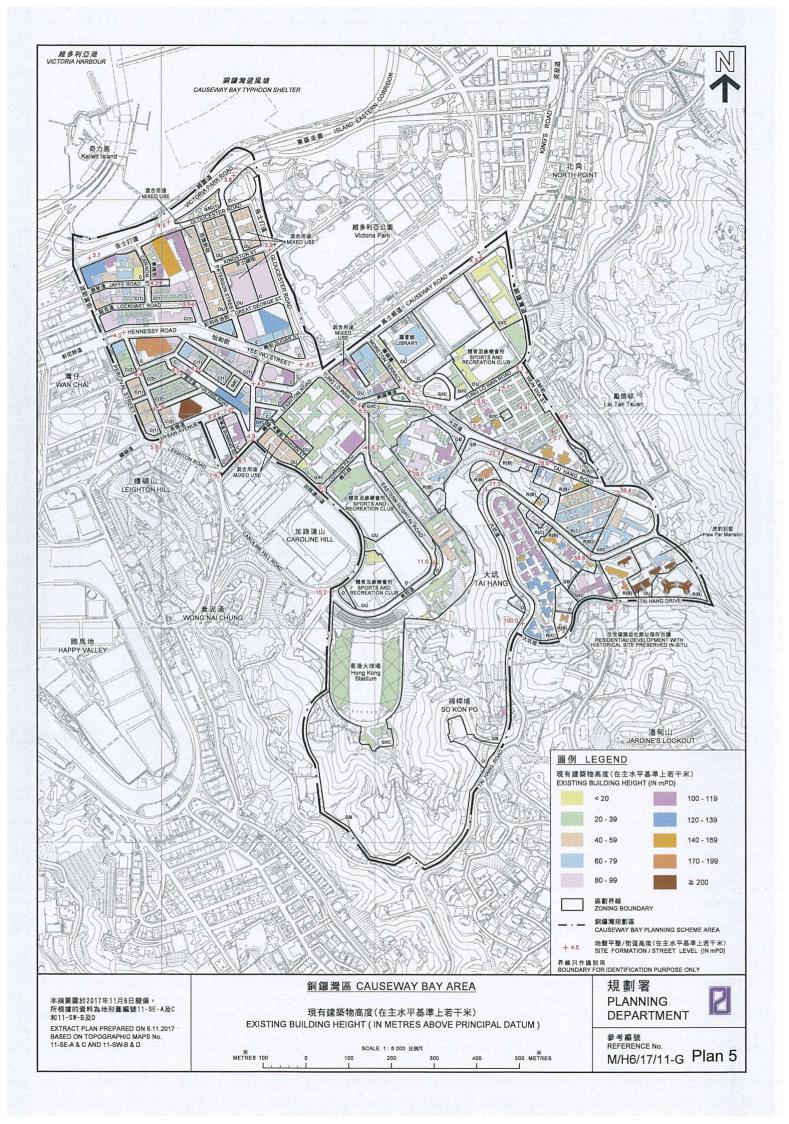
Development Plans

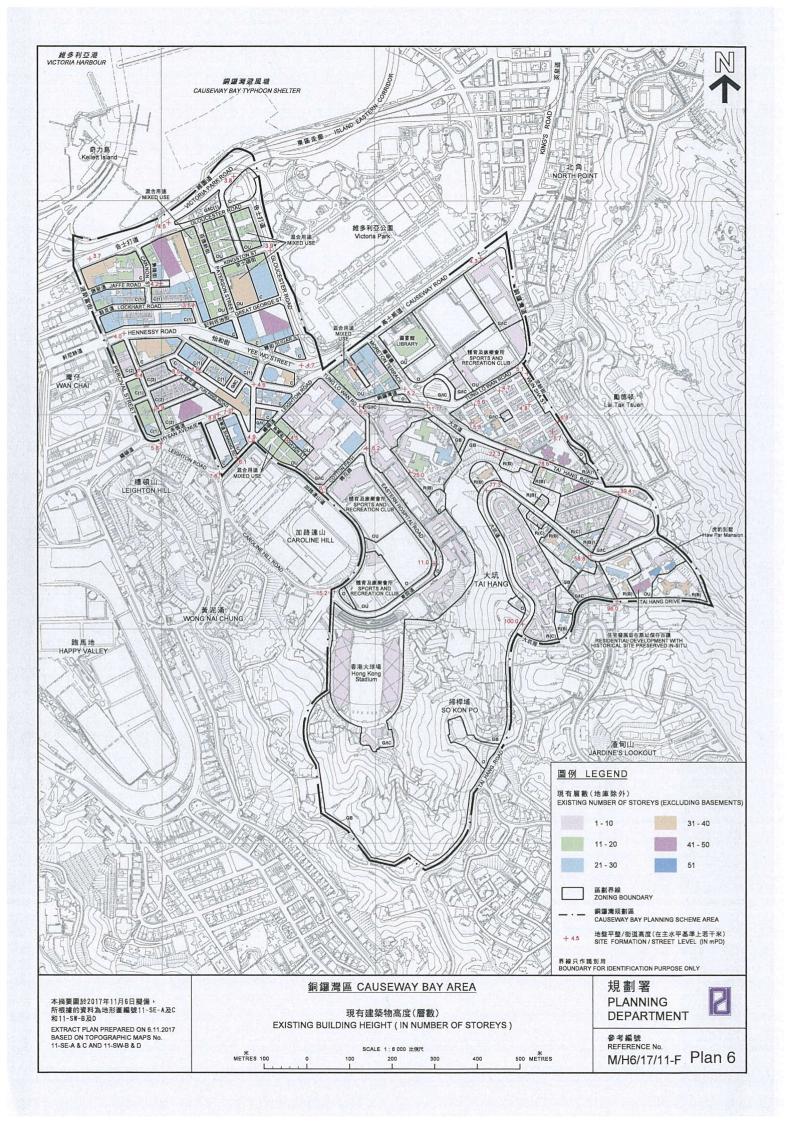










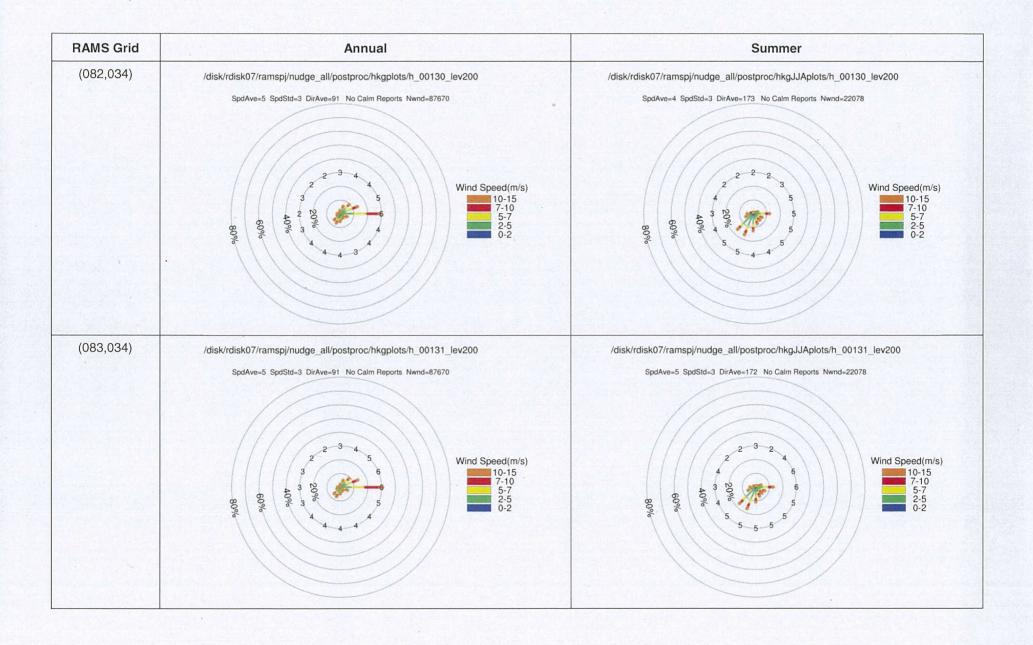


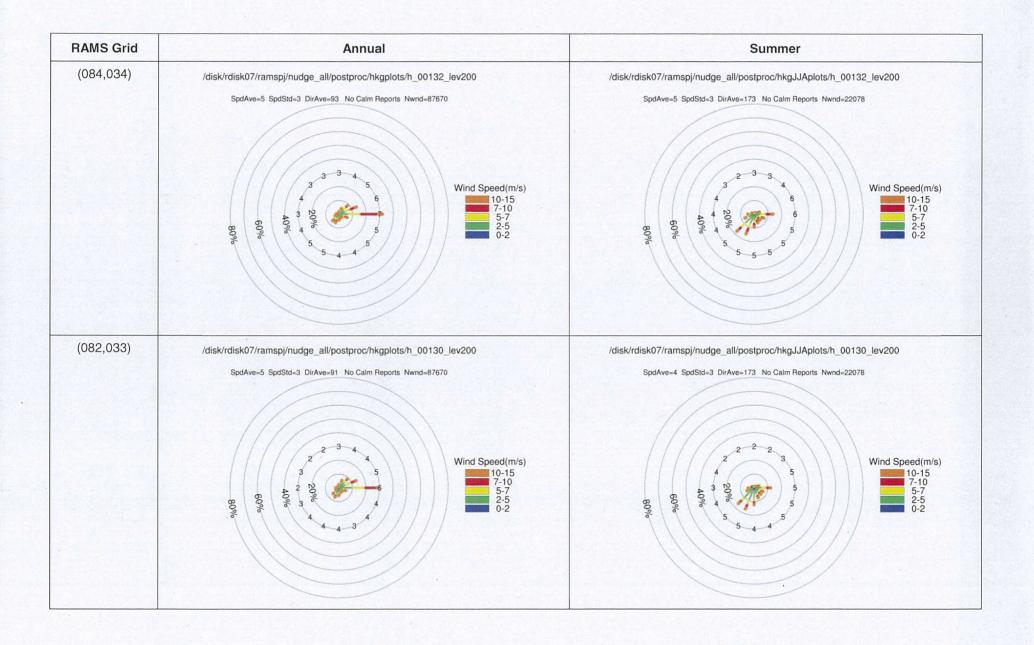
Planning Department

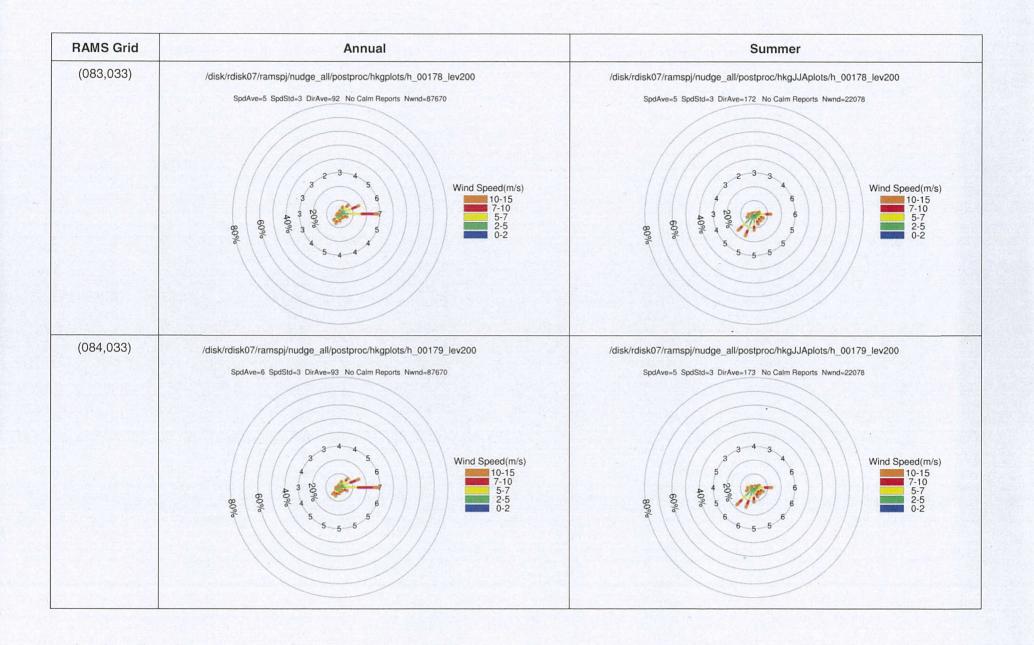
Category A1 – Term Consultancy for Expert Evaluation on Air Ventilation Assessment for an Instructed Project for Causeway Bay Area

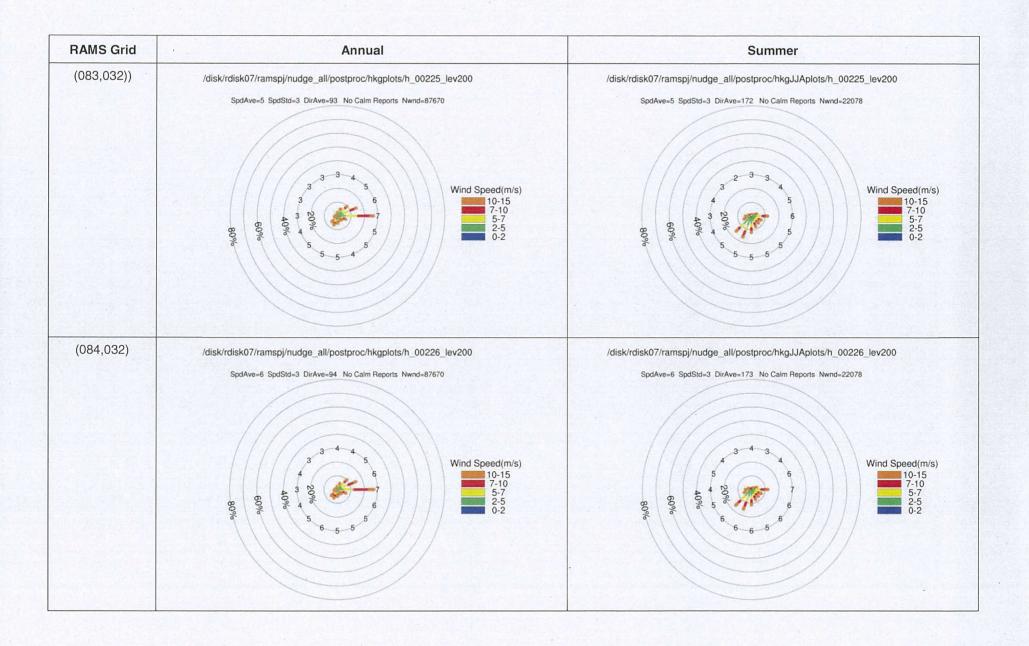
Appendix B

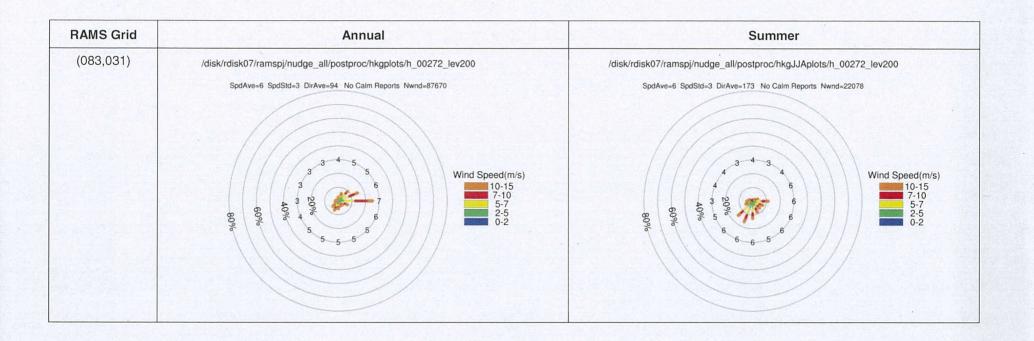
RAMS Wind Rose









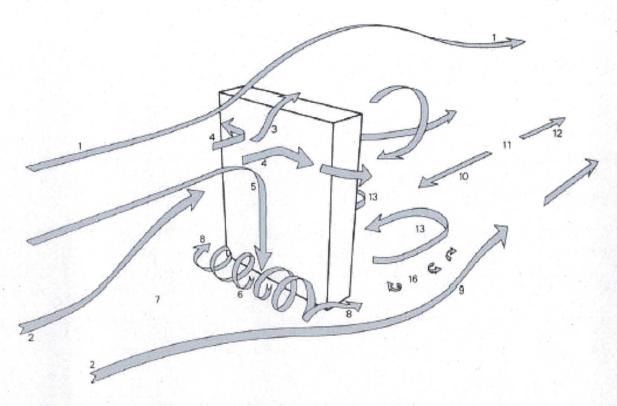


Category A1 – Term Consultancy for Expert Evaluation on Air Ventilation Assessment for an Instructed Project for Causeway Bay Area

Appendix C

Schematic representation of wind flow pattern around a high-rise building

APPENDIX C: Schematic representation of wind flow pattern around a high-rise building



The approaching wind is partly guided over the building (1,3), partly around the vertical edges (2,4), but the largest part is deviated to the ground-level, where a standing vortex develops (6) that subsequently wraps around the corners (8) and joins the overall flow around the building at ground level (9)

Figure C1 -Schematic representation of wind flow pattern around a high-rise building¹

BMT Asia Pacific, ref: R9429/01

¹ Peter Moonen, Thijs Defraeye, Viktor Dorer, Bert Bloken and Jan Carmeliet (2012) Urban Physics: Effect of the micro-climate on comfort, health and energy demand. *Frontiers of Architectural Research*. 1(3), 197-228

Annex G2 of TPB Paper No. 10340

VISUAL APPRAISAL IN RELATION TO
PROPOSED AMENDMENTS TO
DRAFT CAUSEWAY BAY
OUTLINE ZONING PLAN NO. S/H6/15



PLANNING DEPARTMENT NOVEMBER 2017

1. BACKGROUND

On 17.9.2010, the draft Causeway Bay Outline Zoning Plan (OZP) No. S/H6/15 was gazetted. The development restrictions on the draft OZP were the subjects of judicial reviews (JRs). To follow up on the court's rulings on the JRs and related appeals, a review of the development restrictions taking into account the implications of the Sustainable Building Design Guidelines (SBDG) and permissible development intensity has been conducted. It is proposed to relax the building height restrictions (BHRs) for the commercial, "Other Specified Use" annotated "Mixed Use" ("OU(MU)"), and some "Residential (Group A) 1" ("R(A)1)" sites. In this connection, a Visual Appraisal on the impact of the BHR relaxation proposals is prepared.

2. BUILDING HEIGHT CONCEPT ON DRAFT CAUSEWAY BAY OZP NO. S/H6/15

- 2.1 The BHRs on the draft Causeway Bay OZP No. S/H6/15 were formulated based on an overall building height (BH) concept and other relevant considerations including existing BH profile, topography, site formation level, local characteristics, the waterfront and foothill setting, compatibility with surroundings, predominant land use and development intensity, visual impact, air ventilation, and a proper balance between public interest and private development right.
- 2.2 In line with the Urban Design Guidelines, a stepped height concept progressively ascending from the waterfront towards the inland area has generally been adopted. For the medium-rise belt in the inland area adjoining clusters of government, institution and community (GIC) facilities and open spaces, a lower BHR has been adopted (Figure 1):
 - (a) For the commercial and "OU(MU)" sites, a **stepped BH profile** is set under the current OZP with **110mPD** for the area to the north of Hennessy Road/Yee Wo Street and generally **130mPD** for the area south of Hennessy Road/Yee Wo Street, except that —

200mPD is stipulated for the street blocks covering two landmark buildings (Hysan Place and Lee Garden One); and

30mPD is stipulated for the existing low-rise Pak Sha Road neighbourhood.

- (b) **100mPD** is stipulated for the "OU(MU)" sites surrounded by low to medium-rise GIC/open space clusters.
- (c) **Stepped BHRs of 85mPD, 100mPD and 115mPD** are stipulated for the northern part of the "R(A)1" zone covering the Wun Sha Street residential cluster. **165mPD** is stipulated for the southern part of the zone to generally reflect the existing BH of Illumination Terrace.

- (d) The medium-density "Residential (Group B)" ("R(B)") and low-density "Residential (Group C)" ("R(C)") zones along the sloping Tai Hang Road are subject to maximum BHs of **30 storeys** and **6 storeys** respectively.
- (e) Specific BHRs for the "Government, Institution or Community" ("G/IC") and other "OU" zones in terms of number of storeys or mPD, which mainly reflect the BHs of existing and committed developments, have been incorporated into the OZP to provide visual and spatial relief to the high density environment of the area.

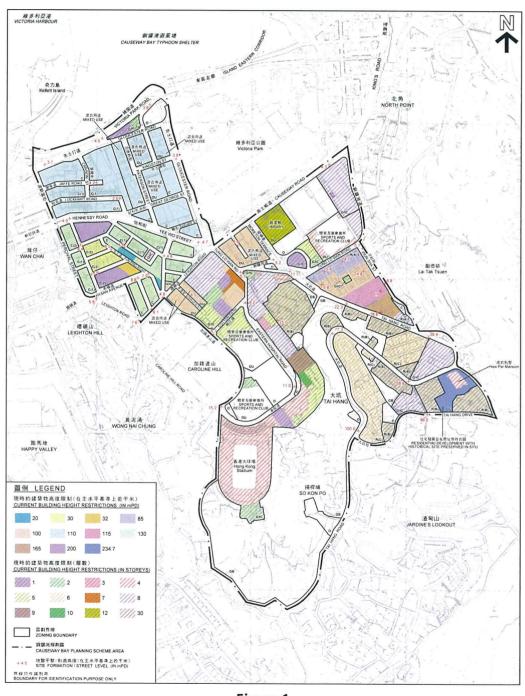


Figure 1
Building Height Restrictions on Current Draft Causeway Bay OZP No. S/H6/15

3. PROPOSED BUILDING HEIGHT RESTRICTIONS

- 3.1 To provide flexibility for future redevelopments in complying with SBDG, it is proposed to relax the BHRs for the commercial and "OU(MU)" sites from 100/110/130mPD to 135mPD (except for the landmark buildings and Pak Sha Road area) and the northern part of the "R(A)1" zone in the Wun Sha Street area from 85mPD to 100mPD.
- 3.2 **No change** is proposed for the BHRs of the other development sites, including 200mPD for the two landmark buildings (Hysan Place and Lee Garden One), 30mPD for the low-rise Pak Sha Road neighbourhood, 100/115/165mPD for the southern part of the "R(A)1" zone in the Wun Sha Street area, 30 storeys for "R(B)" zones, 6 storeys for "R(C)" zones, and the BHRs for GIC uses and other "OU" sites.
- 3.3 Details of the proposed BHRs are at Figure 2A and Figure 2B.

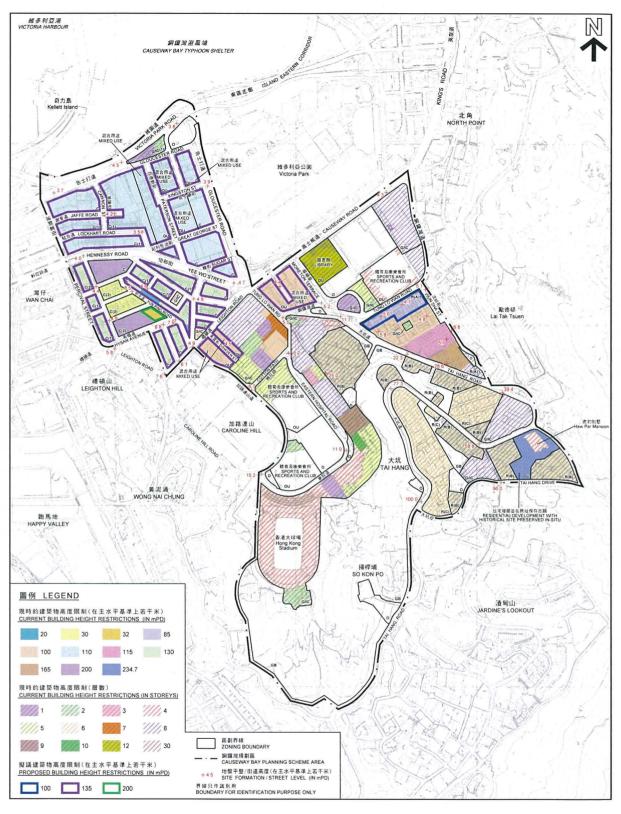


Figure 2A
Proposed Building Height Restrictions

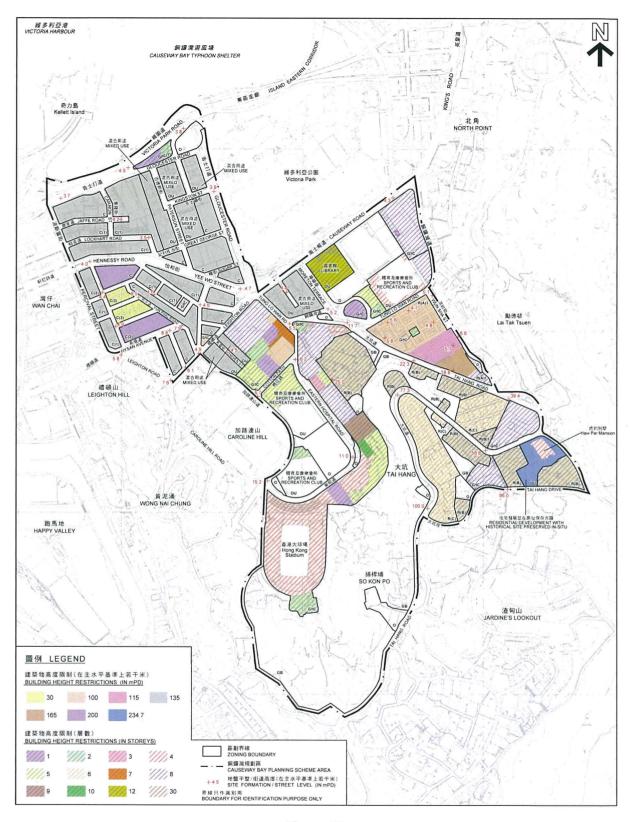


Figure 2B
Consolidated Building Height Restrictions

VISUAL APPRAISAL

4. <u>Selection of Viewing Points</u>

- 4.1 The following viewing points (VPs) are selected to assess the visual impact of the BHR relaxation proposals (Figure 3):
 - VP A Hung Hom Promenade (looking southwards)
 - VP B Hong Kong Cultural Complex in Tsim Sha Tsui (looking south-eastwards)
 - VP C Victoria Park (looking southwards)
 - VP D Victoria Park (looking westwards)
 - VP E Victoria Park (looking south-westwards)
 - VP F So Kon Po (looking northwards)
- 4.2 The selected VPs are easily accessible and frequented by the public for leisure and recreation. VPs A, B, C, D and E are major open spaces/waterfront promenade, whereas VP F is on the key travelling route to the recreational fields in So Kon Po including Hong Kong Stadium. In addition, VP B is one of the 8 strategic VPs specified in the Urban Design Guidelines under the Hong Kong Planning Standards and Guidelines (HKPSG). It is a tourist destination for sight-seeing and appreciation of the city's skyline with harbour view and mountain backdrop. There is another strategic VP at the West Kowloon Cultural District¹ under HKPSG, but it is not selected as its view overlaps with that of VP B and is further away from the latter.

5. Building Height Profile

5.1 In the long term, the BH profile of the area will mainly follow the BHRs on the OZP (except for those existing and committed developments already exceed the respective BHRs). However, for the purpose of presenting the proposed BH profile more realistically in the medium term, sites which have high redevelopment propensity are assumed to be redeveloped up to the BHRs² in preparing the photomontages of the selected VPs. Taking into account that developments having fewer storeys and therefore smaller number of units would more likely undergo ownership assembly and that older buildings would have a greater opportunity for redevelopments (especially for sites that have not been fully developed to the maximum development potential), only developments with a building age of 30 years or over and with a BH of 15 storeys or below are assumed to have high redevelopment propensity (Figure 4).

The panoramic view of the West Kowloon Cultural District strategic VP is available at: http://www.pland.gov.hk/pland en/info serv/via/web/image/VP1-HKE.jpg

As stated in paragraph 2.2(a), the BHR for the street blocks covering Hysan Place and Lee Garden One is set at 200mPD to reflect the existing BHs of these 2 landmark buildings. For the redevelopment of the other buildings within these street blocks, it is assumed to follow the general BH band to the south of Hennessy Road/Yee Wo Street on the OZP (i.e. generally 130mPD under the current OZP and 135mPD under the BHR relaxation proposal).

- 5.2 Committed developments, including sites with planning permission or approved building plans (Figure 4), are also included in the photomontages.
- 5.3 The BH profile under the current BHRs in Section 2 above and the proposed BHRs in Section 3 above are demonstrated in the photomontages on **Figures 5A to 5F**.

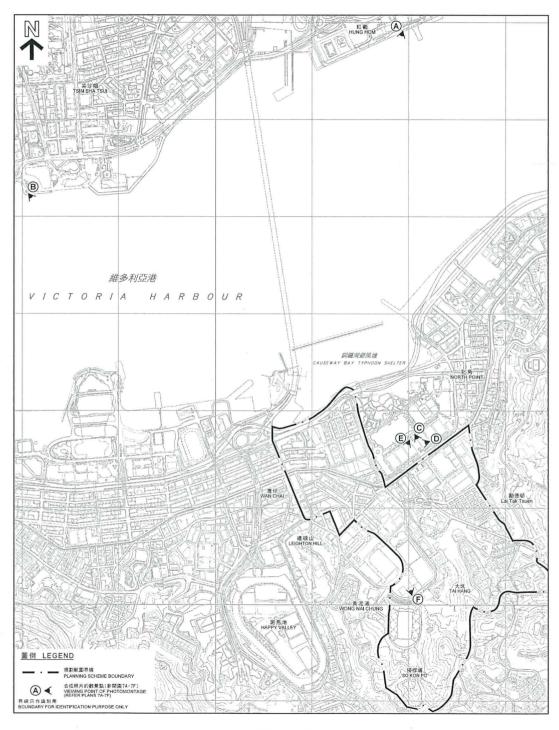


Figure 3
Viewing Points

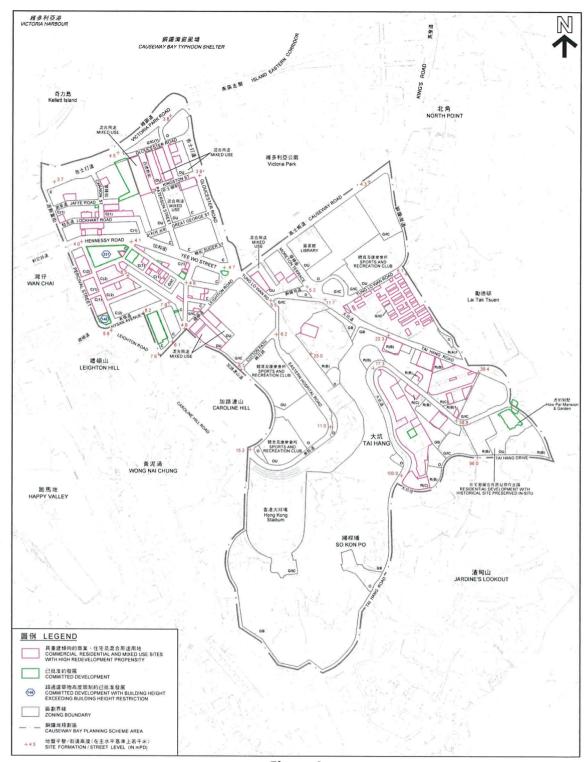


Figure 4
Sites with High Redevelopment Propensity and Committed Developments

6. <u>Viewing Point A – Hung Hom Promenade</u> (Figure 5A)

- 6.1 This VP is located about 2,000m away from the Causeway Bay area. It captures a panoramic view of the northern Hong Kong Island shore from Wan Chai to North Point, with Causeway Bay lying in between. At this long range VP, the sensitivity of public viewers is medium.
- 6.2 *Key visual elements and resources* Victoria Harbour and the compact high-rise developments with mountain backdrop are the key visual elements and resources of the VP. Amongst the developments, Lee Garden One and the committed development at the Hysan Place (approved building plans together with The Goldmark with a BH of 231mPD) stand out sharply above the mountain range.

- 6.3 **Visual composition** The redevelopments under the relaxed BHRs proposed are not incompatible with the existing visual context and will not lead to substantial change in the visual composition.
- 6.4 *Visual obstruction and effect of visual resources* Under the proposed BHR relaxation, the BHs of redevelopments will increase and cause partial obstruction of the view of the mountain backdrop. However, such visual obstruction is minor in the panoramic view at this VP.
- 6.5 *Effect on public viewers* Although the proposed BHR relaxation will dilute the original stepped height profile under the current OZP, it reinforces the perception of the Causeway Bay area as a high-rise node and will not change the view of the city skyline.

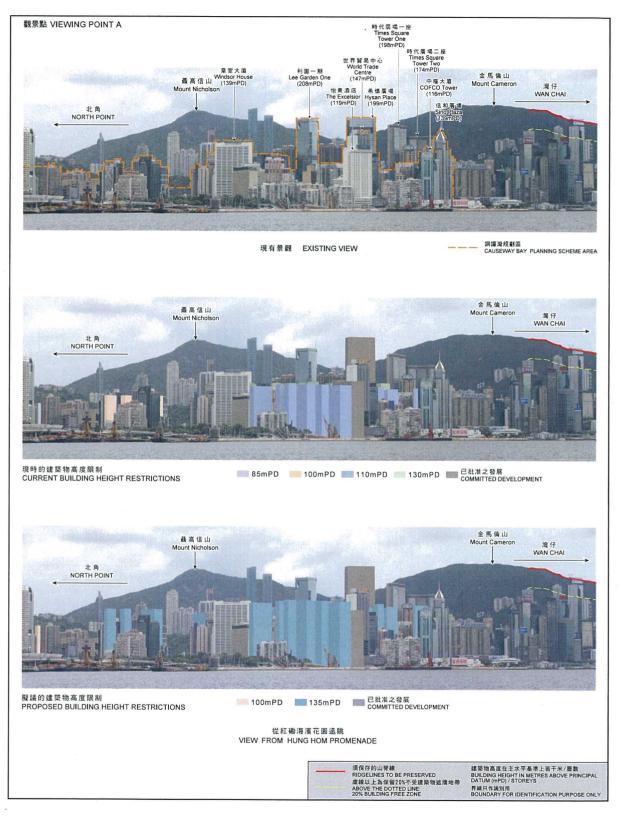


Figure 5A

Photomontages of Building Height Profile

Viewing Point A – Hung Hom Promenade (Looking Southwards)

7. <u>Viewing Point B – Hong Kong Cultural Complex in Tsim Sha Tsui</u> (Figure 5B)

- 7.1 VP B is located about 1,800m to the northwest of the Causeway Bay area. As compared with VP A, it captures a slightly closer view of the Causeway Bay harbourfront areas. Sensitivity of the public viewers at this long range VP is medium.
- 7.2 **Key visual elements and resources** Similar to VP A, Victoria Harbour and the compact high-rise developments with mountain backdrop are the key visual elements of the VP. The ridgeline of Mount Parker and the 20% building free zone below ridgelines as valuable visual resources within the adjoining North Point OZP area have been preserved according to HKPSG.

- 7.3 **Visual composition** The proposed BHR relaxation will result in an increase in the height of the redevelopments in Causeway Bay area. When compared with the view of the current BHRs of the OZP, the visual contrast particularly between the landmark buildings (i.e. Lee Garden One and the committed development at Hysan Place) and the redeveloped buildings is reduced. However, the overall setting of the view at this VP is generally maintained.
- 7.4 Visual obstruction and effect on visual resources The increase in height of the redevelopments under the proposed BHR relaxation will result in slight visual obstruction of the mountain backdrop and reduce the visual permeability of the VP. However, as shown in the photomontage, the redevelopments would not beach the ridgeline of Mount Parker and the 20% building free zone within the adjoining North Point area.
- 7.5 *Effect on public viewers* Although the visual permeability of the VP is reduced after the relaxation of BHRs, the redevelopments with the proposed relaxed BHRs do not appear out of place from the wider visual and townscape context. Thus, the overall impact on public viewers is considered slightly adverse when compared with the current BHRs of the OZP.



Figure 5B

Photomontages of Building Height Profile – Viewing Point B

Hong Kong Cultural Complex in Tsim Sha Tsui (Looking South-eastwards)

8. <u>Viewing Point C – Victoria Park</u> (Figure 5C)

- 8.1 This VP captures the view of the Wun Sha Street residential cluster covered by the the Causeway Bay OZP and the neighbouring North Point area. Sensitivity of the public viewers at this VP in close range is high.
- 8.2 *Key visual elements and resources* The view is dominated by the vegetation of Victoria Park in the foreground and the Wun Sha Street residential cluster (within the Causeway Bay OZP) as well as other high-rise developments in the background. This VP also captures a wide and open sky view.

- 8.3 *Visual composition* The relaxation of BHR does not alter the overall composition and visual relationship amongst the key visual elements and visual resources identified in Section 8.2 above.
- 8.4 *Visual obstruction and effect on visual resources* The proposed relaxation of BHR for the northern part of the Wun Sha Street area from 85mPD to 100mPD will slightly obstruct the sky view. But the loss is barely noticeable and there is no negative impact on the visual amenity and character of the area.
- 8.5 *Effect on public viewers* Although the proposed BHR relaxation would dilute the original stepped BH profile for the Wun Sha Street area, the redeveloped buildings are not incompatible with the surrounding developments. As such, the effect on public viewers is considered negligible.

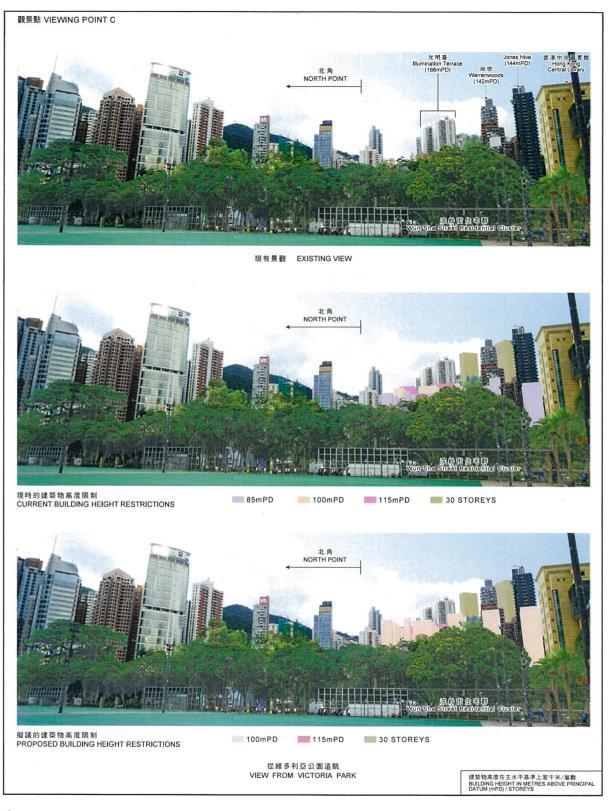


Figure 5C
Photomontages of Building Height Profile – Viewing Point C
Victoria Park (Looking Southwards)

9. <u>Viewing Point D – Victoria Park</u> (Figure 5D)

- 9.1 This VP captures the view of the Causeway Bay area from the east. Developments in the commercial and "OU(MU)" sites to the north of Leighton Road are visible. Sensitivity of the public viewers at this close range VP is high.
- 9.2 **Key visual elements and resources** The visual context is characterised by Victoria Park in the foreground and high-rise commercial buildings in the background. Amongst the commercial buildings, The Park Lane, Windsor House, Regal Hong Kong Hotel and Lee Garden One are noticeable due to their height and disposition.

- 9.3 **Visual composition** Although the BH of redeveloped buildings is increased under relaxation of the BHRs, the scale and height of the redevelopments are not incompatible with the existing developments. The overall composition and visual relationship amongst the key visual elements and resources identified in Section 9.2 are generally maintained.
- 9.4 *Visual obstruction and effects on visual resources* The proposed relaxation of BHR from 110mPD to 135mPD will partially block the sky view and reduce the visual openness. However, the visual obstruction is considered slight.
- 9.5 *Effect on public viewers* Although there is a slight obstruction of the visual openness, the relaxation of BHRs will not cause significant visual change to the context and result in incompatible redevelopments in visual terms.



Figure 5D
Photomontages of Building Height Profile – Viewing Point D
Victoria Park (Looking Westwards)

10. <u>Viewing Point E – Victoria Park (looking south-westwards)</u> (Figure 5E)

- 10.1 This VP captures the view of the developments in the Causeway Bay area from the north-east. Sensitivity of the public viewers at this close range VP is high.
- 10.2 *Key visual elements and visual resources* With Victoria Park in the foreground, the view is dominated by medium to high-rise developments under a relatively wide and open sky view.

- 10.3 *Visual composition* The relaxation of BHRs will increase the height of the redeveloped buildings and result in slight impact to the visual composition. However, the scale of the redevelopments is not incompatible with the existing visual context and the overall setting of the view is generally maintained.
- 10.4 *Visual obstruction and effects on visual resources* The proposed relaxation of BHRs from 100mPD to 135mPD will partially block the sky view and reduce the visual openness of the VP. However, the visual obstruction is considered not significant since the scale and height of the redevelopments are similar to the existing developments.
- 10.5 *Effect on public viewers* Although there is a slight reduction in the visual openness, the relaxation of BHRs will not cause significant visual change to the context and the redevelopments are not incompatible with the surrounding developments. As such, the effect on public viewers is considered slight.



Figure 5E
Photomontages of Building Height Profile – Viewing Point E
Victoria Park (Looking South-westwards)

11. Viewing Point F – So Kon Po (Figure 5F)

- 11.1 VP F is at Eastern Hospital Road in So Kon Po where redevelopments in the commercial, mixed use and residential areas (about 600m away) can be seen. Given this is a kinetic VP on the travel route to the recreational grounds, the sensitivity of public viewers at this intermediate range is low.
- 11.2 **Key visual elements and visual resources** The view is dominated by the recreation fields in the foreground and residential and commercial buildings with a wide and open sky view at the background

- 11.3 *Visual composition* The proposed BHR relaxation will result in slight impact to the visual composition, as the redevelopments with the relaxed BHRs are similar to the surrounding buildings in terms of scale and height, and considered not incompatible with the visual context.
- 11.4 *Visual obstruction and effects on visual resources* The increase in BH of redevelopments will cause obstruction of the sky view, but the loss is negligible and the overall visual quality of the VP will be maintained.
- 11.5 *Effect on public viewers* The redeveloped buildings with the relaxed BHRs are not incompatible with the existing high-rise developments and they are mostly screened off by the recreation fields and existing buildings in front. The visual obstruction is slight and the impact on the public viewers is considered negligible.

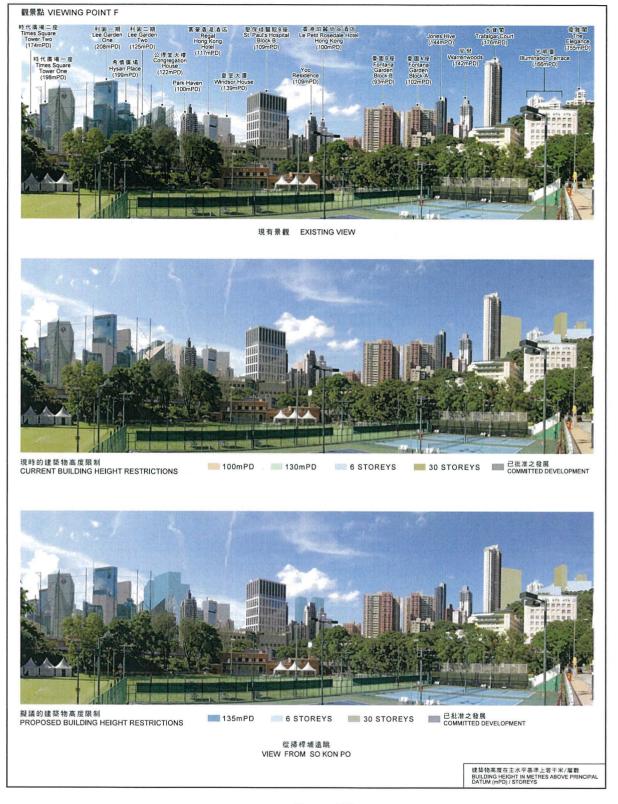


Figure 5F
Photomontages of Building Height Profile – Viewing Point F
So Kon Po (Looking Northwards)

12. CONCLUSION

The proposed BHR relaxation will reduce the visual openness with partial blockage to the view of the sky and mountain backdrop, and dilute the original stepped BH concept. However, the redevelopments under the relaxed BHRs are not incompatible with the surrounding visual context. Varieties in redevelopment scales and design styles/considerations would contribute to variation in the skyline of the area. The proposal will not affect the views to the ridgelines to be protected nor result in redevelopments protruding into the 20% building free zone below ridgelines. Moreover, the BHR relaxation is to allow design flexibility for future redevelopments in meeting SBDG which will improve the overall building permeability and the visual amenity of the pedestrian environment. The proposed BHRs would be a matter of trade-off amongst different urban design considerations in the dense urban core like Causeway Bay. In overall terms, the proposed BHR relaxation will not result in unacceptable visual impact.

Summary of Representations and Responses

Representation No. R146

Representers: Excelsior Hotel (BVI) Limited and The Excelsior Hotel (Hong Kong) Limited

SUBJECTS OF REPRESENTATION	REPRESENTER'S PROPOSALS	,
Representation Site: The Excelsior at 281 Gloucester Road * • BHR of 110mPD • BG between The Excelsior and World Trade Centre	No BHRNo BG	

^{*}See Annex H2 for lease particulars

GROUNDS OF REPRESENTATION

Building Height Restriction

- The BHR would materially impede the owner's response to the changing needs of the customers and the growth of visitors, given the shortage of hotel accommodation in the Area. This could have negative impact on the tourism industry and the economy.
- The BHR would prevent the hotel from maximising its allowable GFA while addressing the trend of increasing floor-to-floor height (FTFH) for hotel for better internal ventilation.
- The BHR would discourage development of high points as visual features (b) and reference points and create a monotonous height profile. This is not in line with the principles in the Urban Design Guidelines and adopted by the Harbour-front Enhancement Committee and the Board.

RESPONSES

- BHR is an important means to prevent excessively tall and out-of-context developments. In formulating the BHRs, relevant considerations including existing BH profile, topography, site formation level, local characteristics, the waterfront and foothill setting, compatibility with surrounding areas, predominant land use and development intensity, visual impact, air ventilation, and a proper balance between public interest and private development right have been taken into account.
- (b) To follow up on the Court's ruling's, a review of the BHR taking into account the implications of SBDG has been conducted, and it is proposed to relax the BHR on the site to 135mPD for future redevelopment to comply with SBDG. The proposed BHR has taken into account the permissible development intensity for commercial

Annex H1 of TPB Paper No. 10340

• The provisions of the OZP are not consistent with the development allowance including GFA concession under the Building (Planning) Regulations (B(P)R).

Building Gap

The 10m wide BG is physically unachievable at present due to the
existing disposition of the hotel and the adjoining World Trade Centre.
Any attempt to accommodate this requirement would require
structural redevelopment and modification of the porte-cochere area
and the pedestrian link between the hotel and World Trade Centre,
which would not be commercially feasible. The restriction affects the
owners' right under the lease.

RESPONSES

buildings with a FTFH of 4m to 4.5m (Annex E1).

openness (e.g. view of the sky and mountain backdrop) and dilute the original stepped BH concept, the BH profile under the relaxed BHRs is not incompatible with the surrounding visual context and will not affect views to the ridgelines to be protected nor protrude into the 20% building free zone below ridgelines. Varieties in redevelopment scales and design styles/considerations would also contribute to the outlook of the city skyline. Moreover, the BHR relaxation is to allow design flexibility for future redevelopments in meeting SBDG which will improve the overall building permeability and visual amenity of the pedestrian environment. The proposed BHRs would be a matter of trade-off amongst different urban design considerations in the dense urban core like Causeway Bay. In overall terms, the proposed BHR relaxation will not result in unacceptable visual impact.

d) Currently, a ground level BG (10m (W) x 8m (H)) is demarcated on the OZP between The Excelsior and World Trade Centre with alignment similar to an existing pedestrian walkway there. The updated AVA (2017) recognised that this BG would help enhance the penetration of northerly wind and sea breeze to the busy pedestrian street between Yee On Building and Chee On Building and then to East Point Road. Yet, the wind penetration along such a tunnel-like BG may not be most effective given the length of the site and there are alternative building designs (e.g. ventilated communal garden or BG between podium and building block) that could serve similar air ventilation purpose for the locality other than a prescribed 10m x 8m BG at ground level. To this end, a taller BHR at 135mPD has been proposed for The Excelsior and

RESPONSES

World Trade Centre and their adjoining development sites, allowing scope and flexibility for their future redevelopments to adopt building designs conducive to wind permeability. It is proposed to delete the current BG requirement (**Plan 5B2**).

Representations No. R147 to R152

Representers:

R147 – Hysan Development Company Limited

R148 – Barrowgate Limited

R149 – Earn Extra Investments Limited

R150 - Silver Nicety Company Limited, Minsal Limited and Mondsee Limited

R151 – Perfect Win Properties Limited

R152 - OHA Property Company Limited

SUBJECTS OF REPRESENTATION (REPRESENTATION SITE)	REPRESENTER'S PROPOSALS
R147 (General Representation)	
 Oppose stipulation of BHR, rezoning of "C/R" sites, designation of NBA and demarcation of areas within sites with lower BHRs Oppose the Notes for "C" and "OU(MU)" zones, BHR, setback and minor relaxation clause for BHR/NBA/BG/setback; and deletion of "C/R" Notes Oppose paragraph 7.9 of the ES indicating a general presumption against minor relaxation of BHRs for existing buildings already exceeding BHRs unless under exceptional circumstances 	 BHR should be in a broad and general manner, consistent with adjacent areas and BH of existing or approved buildings, encourage redevelopment of old buildings and provide flexibility for building design No "spot" zoning/remove BHR within a single site Delete NBA/BG/setback. If not, including clause allowing for bonus GFA. Delete paragraph 7.9 of ES so that applications for minor relaxation would be considered on its own merits.
R148 (Lee Gardens Two Caroline Centre (now known as Lee Garden Two (LG	Two)*)
 Oppose BHR of 130mPD for the tower block of LG Two Oppose 2m wide NBA from lot boundary along Yun Ping Road Oppose BHR of 20mPD for the two podia of LG Two 	 No NBA along Yun Ping Road Relax BHR for podium to 130mPD or 32mPD; or BHR of 150mPD for whole site and SC of 62.5% for tower Alternative amendments meeting Representer's requirements
R149 (Hysan Place and The Goldmark*)	•
 Oppose BHR of 200mPD Oppose 5m wide NBA from lot boundary along Lee Garden Road 	 BHR of 231mPD No NBA along Lee Garden Road

R150 (C zones along Sunning Road)*	
Oppose BHR of 100mPD	BHR of 150mPD (Based on the revised proposal made by the Representers at the TPB meeting on 11.3.2011)
R151 (The Lee Gardens (now known as Lee Garden One (LG One)*)	
 Oppose BHR of 200mPD for the tower block of LG One Oppose BHR of 32mPD for the north-eastern podium of LG One Oppose 2m wide NBA from lot boundary along Yun Ping Road Oppose 1.5m wide setback from lot boundary along Lan Fong Road 	 BHR of 210mPD No BHR for podium No NBA along Yun Ping Road No setback along Lan Fong Road
R152 (One Hysan Avenue*)	
 Oppose BHR of 130mPD Oppose 0.5m wide setback from lot boundary along Lee Garden Road 	BHR of 150mPD No setback along Lee Garden Road

^{*}See Annex H2 for lease particulars

Building Height Restrictions

Urban Design Considerations

- It is essential to have a variety of BHs within the Area to provide interest and a more sensitive approach to the types of uses and characteristics of the area.
- The BHRs are overly restrictive and prevent creative and innovative design to meet the needs of a changing market. The BHRs are rigid, inflexible and arbitrary. The excessively low BHRs will discourage redevelopment of old buildings which has high density, and fail to take into account the economic impact on the objectives of maintaining Hong Kong's international competitiveness as a major financial centre.
- There is a need for a comprehensive urban design plan, which may

RESPONSES

- (a) BHR is an important means to prevent excessively tall and out-of-context developments. In formulating the BHRs, relevant considerations including existing BH profile, topography, site formation level, local characteristics, the waterfront and foothill setting, compatibility with surrounding areas, predominant land use and development intensity, visual impact, air ventilation, and a proper balance between public interest and private development right have been taken into account.
- (b) To follow up on the Court's rulings, a review of the BHRs taking into account the implications of SBDG has been conducted. It is proposed to relax the BHR for future redevelopments in commercial and "OU(MU)"

address the impacts of multiple factors affecting the local environment at one time and enable all landowners and the Government to work together to create a plan which utilises the public and private spaces for the best long-term benefit for the area.

 The imposition of BHRs which are lower than that of the existing buildings or the approved building plans is unrealistic in that the buildings exceeding the BHRs would remain in-situ in the foreseeable future.

RESPONSES

zones from 100mPD/110mPD/130mPD to generally 135mPD, and that for the northern part of the "R(A)1" zone in the Wun Sha Street area from 85mPD to 100mPD to make allowance for future redevelopments to comply with SBDG. The proposed BHRs have taken into account the permissible development intensity with a FTFH of 4m to 4.5m for commercial buildings in commercial and "OU(MU)" zones and a FTFH of 3m to 3.15m for composite buildings in "R(A)1" zone. The various NBA and setback requirements on the OZP have also been taken into account in the BH assessment in **Annexes E1 and E2**.

- c) Although the proposed relaxation of BHRs will reduce the visual openness (e.g. view of the sky and mountain backdrop) and dilute the original stepped BH concept, the BH profile under the relaxed BHRs is not incompatible with the surrounding visual context and will not affect views to the ridgelines to be protected nor protrude into the 20% building free zone below ridgelines. Varieties in redevelopment scales and design styles/considerations would also contribute to the outlook of the city skyline. Moreover, the BHR relaxation is to allow design flexibility for future redevelopments in meeting SBDG which will improve the overall building permeability and visual amenity of the pedestrian environment. The proposed BHRs would be a matter of trade-off amongst different urban design considerations in the dense urban core like Causeway Bay. In overall terms, the proposed BHR relaxation will not result in unacceptable visual impact.
- (d) The BHRs have provided reasonable scope for redevelopment while avoiding out-of-context buildings. The BHRs would not jeopardise the incentive for private redevelopment.
- (e) While existing buildings with BH exceeding BHRs are allowed to be redeveloped up to their existing BHs, it would not be appropriate to

Floor-to-Floor Height

There is no information on the FTFH assumed in formulating BHRs.
With the BHRs for the commercial sites, the maximum permissible GFA
can only be accommodated if a FTFH height of 3.6m is adopted. The
contemporary standard for international quality Grade A office buildings
is 4.5m and the BHRs should be revised on the basis of such standard.

Spot Zoning

 The imposition of BHRs, NBA, BG and setback requirements on individual sites constitutes a form of spot zoning. It is not permitted under sections 3 and 4 of the Ordinance. It violates the broad principle of planning indicated in paragraph 3.2 of the ES that the object of the OZP is to indicate only the broad principles of development. Site-specific BHRs are matters which should not be shown on OZP, but incorporated in other forms of control such as leases or the Buildings Ordinance.

RESPONSES

adopt these existing BHs as BHRs on the OZP as it would jeopardise the integrity of the BH profile. Previously approved building plans would be allowed to proceed. However, BHs of approved general building plans should not be taken as a basis in determining the BHRs on the OZP so as to avoid proliferation of excessively tall and out-of-context buildings in the area.

- (f) The FTFH of 3.6m stated by the Representers is only relevant to the original BHR of 100mPD for the Sunning Road sites (R150), which had already been amended to 130mPD, as confirmed by the Board under section 6F(8) of the Ordinance on 24.6.2011.
- In formulating the BHRs, reasonable assumptions on FTFHs have been adopted. To follow up on the Court's rulings, a review of the BHR taking into account the implications of SBDG and permissible development intensity has been conducted. As shown in **Annex E1**, a FTFH of 4m to 4.5m could be achieved for commercial buildings under the proposed BHR of 135mPD.
- (h) CA has held that 'spot zoning' is not ultra vires and falls within the Board's statutory power under the Ordinance and that there is no uncertainty in the meaning of the restrictions imposed.
- The objectives of setback and NBA are set out in the ES. NBA is designated for air ventilation or urban design considerations, while setback is to facilitate widening of footpath to improve pedestrian circulation and walking environment.

• The meanings of NBA and setback and their difference are not clear.

Minor Relaxation of BHRs for Buildings Exceeding the BHRs

• For minor relaxation of the BHR, there should not be a presumption against case with existing BH of building exceeding the BHR.

Air Ventilation / Non-building Area / Building Gap

- There is little data in the PlanD's AVA (2010) and the assessment is subjective and devoid of any analysis as to how effective the proposed measures would be in improving air flows. There is inadequate justification for the NBAs and setbacks and their introduction significantly impinges on private development rights.
- Sunning Plaza, Sunning Court, LG One and LG Two are far from major wind corridors. The mitigation measures on improving air ventilation performance through BH reduction and/or provision of setback as

RESPONSES

- (j) It will be further explained in the ES that both setback and NBA requirements, given their nature to facilitate footpath widening and/or air ventilation, would not apply to underground developments. For setback areas, a minimum clear headroom of 3.5m from ground level should be provided for free pedestrian passage without obstruction. Minor structures which are designed with high porosity may be allowed within the NBA (please refer to paragraphs 7.11 and 7.13 of the revised ES at Annex B3).
- k) Existing developments with BH already exceeding the BHR will not be affected by the BHR. However, relaxation of BHR for excessively tall buildings upon redevelopment would jeopardise the intention of BHRs. As such, for existing buildings already exceeding the BHR stipulated on the OZP, there is a general presumption against application for minor relaxation of BHR unless under exceptional circumstances and minor relaxation should only be granted to proposals with special planning and design merits. This is to avoid even taller buildings resulting in out-of-context developments. This principle is generally applied to all the OZPs with BHRs and should not be deleted from the ES.
- I) According to the Technical Guide for AVA for Developments in Hong Kong (Annex A to Housing, Planning and Lands Bureau and Environmental, Transport and Works Bureau Technical Circular No. 1/06), there are 3 types of AVAs which are intended to achieve different tasks, namely EE, Initial Study and Detailed Study. As set out in the Technical Guide, EE is particularly useful for large areas and/or sites with specific and unique wind features, issues, concerns and problems. EE may achieve the tasks of (i) identifying good design features, (ii) identifying obvious problem areas and proposing some mitigation

recommended in PlanD's AVA report (2010) might not be effective nor a good solution to the air ventilation problem in the area due to the existing complex high-rise urban context.

- PlanD's AVA report (2010) did not provide any specific recommendation for Sunning Plaza regarding the BHR. There was no adverse comment on the proposed BHR of 180mPD for the Sunning Plaza. There was no specific reason for imposing a BHR of 100mPD for the Sunning Plaza site. The BHR of Sunning Plaza of 100mPD seems to just keep similar BH to its areas, without any obvious benefits to the local ventilation. A clear BH variation was recommended in PlanD's AVA (2010) that "the difference in BH helps to encourage downwash to reach the street level". The Sunning Plaza and Sunning Court sites should be allowed a higher BHR than those at its northern side (i.e. 130mPD) to facilitate downwash effect towards the pedestrian level. The approved building plans for the sites would be 180mPD. This would provide a positive effect by stepping up BH along Ming An Plaza. Redevelopment of Sunning Plaza and LG One would encourage wind downwash to pedestrian level of these areas. Together with the wind corridor in Sunning Road and Hoi Ping Road, this positive effect could enhance the ventilation performance in this area. The stepped height profile of allowing a higher BH for Sunning Plaza and Sunning Court to around 150-180mPD would likely benefit the ventilation performance in the presence of downwash.
- There was no detailed discussion in PlanD's AVA report (2010) on the wind performance of Yun Ping Road in relation to LG One and LG Two.
 The report has not provided any supporting reasons regarding the podium BHRs for LG One and LG Two. The actual merits of provision of setback and reduction of podium height are questionable.

RESPONSES

measures, (iii) defining "focuses" and methodologies of Initial and/or Detailed studies; and (iv) determining if further study should be staged into Initial Study and Detailed Study or Detailed Study alone. On the other hand, quantitative AVA (including Initial Study and Detailed Study), which relies on the use of Computational Fluid Dynamic simulations or wind tunnel tests, would be based on detailed development schemes. While it is impractical to draw up detailed development schemes precisely for such a wide area covered by the OZP, it is also unrealistic for PlanD to do so since a majority of the sites are privately owned and developments/redevelopments would rely on private initiatives.

- (m) An updated AVA by EE for Causeway Bay area has been undertaken to assess the air ventilation implications should the relaxed BHR be incorporated into OZP. It is reaffirmed that the existing wind environment in the north-western part of Causeway Bay is poor due to the high building density with tall buildings and narrow streets. Under such high BH to street width ratio (H/W) ratio, it is difficult for wind from the roof top level to penetrate to the street level. Incoming wind would mostly skim over the developments. The so-called "downwash" is not expected to be obvious as the streets are narrow and most buildings are not different significantly in height. Under such circumstances, BH alone ceases to be the key consideration for the pedestrian wind environment in this area.
- (n) However, a general increase in BH on an area basis would further elevate the already high urban canopy created by tall buildings. A larger wind shadow at the downstream areas would be created. Yet by improving permeability of developments, such impact of the wind shadow would be alleviated.

- The 2m NBA along the entire length of LG One and LG Two frontage on Yun Ping Road is not required as the NBA ends abruptly midway through the street block and does not carry on to the remaining buildings on the road. The 32mPD and 20mPD BHRs imposed for the podium areas of the developments are too low and inflexible (R148 and R151).
- The podia of LG One and LG Two were surrounded by buildings with a BHR of 130mPD or above. Retaining the podium height at 20mPD for LG Two would unlikely improve local ventilation or wind permeability because the prevailing winds have already been blocked by surrounding buildings. The BHR stipulated on the OZP would result in a wake zone in Yun Ping Road. Instead of reducing the podia to 20mPD. They should be kept to certain height to create downwash toward the pedestrian level of Yun Ping Road. For example, the height of the podia at LG Two could be higher than the adjacent low-rise buildings (i.e. 30mPD).
- The 2m setback recommended at Yun Ping Road is questionable and might be negligible on its intention to improve local ventilation performance for the following reasons: (i) Yun Ping Road is not identified as a wind corridor in PlanD's AVA report (2010) and widening of the street gives little contribution to the surrounding wind environment; (ii) discrete provision of setback (which would potentially induce neck effect (might eliminate wind penetration)); and (iii) Yun Ping Road is not leading to Hennessy Road and is a dead end.
- There is no merit to provide setback at Yun Ping Road. Provision of setback at LG One and LG Two is not preferred. Podia of LG One and LG Two should be designed to have sufficient height variation to the surrounding so as to catch more downwash towards the pedestrian level and improve the air ventilation along Yun Ping Road.

RESPONSES

- (o) Building design measures, including NBAs, BGs and setbacks, to reduce ground coverage and create building permeability particularly at low level and effective air paths to facilitate airflow from prevailing wind directions are more important for improving the pedestrian wind environment in Causeway Bay area. While it is ideal that air paths are as wide as possible, it is the prevailing practice that an effective air path should be at least 15m in width for wind penetration. Such principle is in line with the building setback and building separation requirements stipulated in SBDG.
- (p) In Causeway Bay area, Great George Street and Sugar Street are important air paths of district significance facilitating penetration of prevailing winds from NE, ENE and E directions to reach Hennessy Road and ventilate Causeway Bay and continue on towards Wan Chai area. The width of Great George Street is 14.1m to 16.4m. As majority part of the street is wider than 15m, an effective air path could be maintained without designated NBA on its two sides. It is therefore proposed to delete the relevant NBA requirements (Plan 5B1).
- (q) However, Sugar Street is less than 15m wide. NBAs are recommended on both sides of the street in order to create an effective air path of 15m wide. Taking into account the existing width of Sugar Street of about 12.3m, it is proposed to adjust the width of the strips of NBA currently designated on the northern and southern sides of Sugar Street from 2m and 4m respectively to 1.5m (Plan 5B1).
- (r) Kingston Street is another important wind entrance for this area. The NBA designated between Jaffe Road and Kingston Street should be widened to 15m for effective air flow to Jaffe Road as one of the major east-west air paths having district significance all the way towards Wan Chai area. However, the site at 51 Paterson Street has a width of 23m

 Subsequent to the OZP amendment, new Practice Notes for SBDG were issued. The two controls overlap and conflict with each other. The OZP restrictions are set too low and introduce duplicated controls on BG, setback, site coverage, etc. A decision on the Representations should not be made without considering this impact.

RESPONSES

only. Widening of the NBA would impose severe constraints on its future redevelopment which would in turn hinder the realisation of the NBA. Considering the practical situation, the width of the current NBA of 8m on the OZP is proposed to be maintained (Plan 5B2).

- The 8m to 12m wide NBA currently designated between Lockhart Road and Hennessy Road has limited effect as part of an air path for northerly wind/sea breeze penetration as it is not aligned with Cannon Street. Although it could break up the long façade formed by the line of buildings between Lockhart Road and Hennessy Road to facilitate air movement, such function could be met by the implementation of SBDG through redevelopments in the locality. It is therefore proposed to delete this NBA requirement (Plan 5B3).
- The requirements for 2m wide NBA on the two sides of Yun Ping Road between LG One and LG Two and BGs with BHRs of 32mPD and 20mPD for the podium areas of LG One and LG Two respectively on the current OZP are intended to facilitate penetration of prevailing wind along Yun Ping Road to reach the Pak Sha Road area. The updated AVA (2017) has reviewed the wind environment in the areas around Sunning Road, LG One and LG Two. Without the requirements of NBAs along Yun Ping Road and BHRs for the podium areas at LG One and LG Two, the pedestrian wind environment at Pak Sha Road area and Jardine's Crescent area would be worsened as the original wind entrance may be lost. Hence, the penetration of prevailing SSE, SSW and SW winds will not be able to reach Yun Ping Road, Lan Fong Road and eventually Pak Sha Road. Nevertheless, should SBDG be followed in the redevelopments of LG One and LG Two, a permissible BH of 200mPD and 135mPD respectively would allow sufficient scope and flexibility for the new buildings to provide building setback along narrow streets and building separation among developments to maintain wind

RESPONSES

permeability of the area, serving similar purpose of the current NBA and BG requirements. The NBA and BG requirements at the LG One and LG Two sites are therefore proposed to be deleted (Plan 5B4).

Pedestrian Traffic / Setback for Footpath Widening

- The OZP is not an appropriate statutory framework for the implementation of building setback as other ordinances (i.e. Buildings Ordinance (BO) and the Roads (Works, Use and Compensation) Ordinance) provide means for compensating private land owners for the loss of land for setback for a public purpose.
- It is an important principle that all improvements for public passage must be carried out on public land unless there is no alternative. This principle has been ignored under both PlanD's AVA (2010) and the pedestrian requirements. Hysan Group's proposal to put vehicular traffic underground and to create an extensive pedestrian area is an alternative which maximises the use of public land.
- Instead of designating NBA and setback, the management of pedestrian movements, road traffic and car parking is the key issue in the core Causeway Bay area. There is scope to use traffic management and pedestrian priority areas to make best use of public street. As an alternative to the NBAs and setback along Yun Ping Road, a long term solution would be to separate vehicles and pedestrians by providing underground roads. This would allow for good vehicular movement, free up the ground level streets for pedestrians use, improve local air quality and create a high quality pedestrian environment.
- Some setback requirements are prescribed along footpaths which are adequate to meet the requirements under Hong Kong Planning

- (u) Setbacks are designated on OZP for areas where there is a need to improve pedestrian circulation and walking environment. There is no intention to resume private land to provide the setback area. Given the intention to facilitate footpath widening for improving the pedestrian circulation and walking environment, underground structure and structures from 3.5m above ground level would be allowed within the setback area. This will be set out in the ES of the OZP. Moreover, proposals involving dedication of land for public passage and surrender of land for street widening would be entitled to bonus GFA under B(P)R, and any such claim would be duly considered by the Building Authority in accordance with the established practice.
- (v) TD from time to time explores feasibility of implementing suitable traffic management scheme to enhance pedestrian circulation. The OZP restrictions do not preclude the possibility for provision of underground road to segregate pedestrian and vehicular traffic. Three planning applications submitted by Hysan Group for 2 vehicular tunnels connecting LG One, LG Two and the proposed Lee Garden Three under construction (Applications No. A/H6/78 and 79), and minor relaxation of the NBA at Yun Ping Road for provision of an elevated footbridge linking up LG Two and Lee Garden Five (Application No. A/H6/81) were approved on 24.6.2016 and 3.3.2017 respectively (Plan 9A).
- (w) The concerned streets under JR are Lee Garden Road and Lan Fong Road. The relevant setback requirements have been reviewed by TD.

Standards and Guidelines (HKPSG) and/or are adequate to accommodate the pedestrian flow.

- Lee Garden Road and Yun Ping Road have already wide footpath to facilitate good pedestrian movement.
- A Report on Pedestrian Traffic in Causeway Bay Area was tabled at the TPB hearing on 11.3.2011 (please refer to Annex H3-b8 (Part 1) and Annex H3-b11). Based on the result of pedestrian forecast and assessment —

Yun Ping Road

The footpaths along both sides of Yun Ping Road (2.3m - 4m) can fully cater for the known future pedestrian demand without the need for footpath widening.

Lan Fong Road

The width of the footpaths of Lan Fong Road is 2m – 4m. The southern footpath of Lan Fong Road is slightly crowded during the evening peak period due to the passenger queue for the mini-bus stops. The Executive Summary of the Study on Planning for Pedestrians by PlanD has indicated a public transport interchange (PTI) at the EMSD site at Caroline Hill. It is understood from the past that one of the objectives of the PTI is to accommodate the green mini-bus (GMB) services currently occupying the Lan Fong Road area. As the availability of the new PTI is very likely to precede the redevelopment of LG One, the need for widening the footpath by 1.5m becomes questionable. Assuming the GMB stands are relocated to the future PTI, the performance of the footpaths would be improved and acceptable Level of Service will be expected without any footpath widening.

RESPONSES

They are to satisfy the minimum footpath width of 3.5m for footpaths providing access to buildings generally as stipulated in HKPSG, taking into account desirable pedestrian circulation and walking environment, street activities as well as scarcity of land resources.

(x) As the widths of the existing footpaths at some sections of Lee Garden Road and Lan Fong Road are less than the required width of 3.5m, it is necessary to retain the setback requirements of 1.5m for the eastern side of Lee Garden Road between Kai Chiu Road and Pak Sha Road and at the western side of Lee Garden Road between Hennessy Road and Russell Street, and 0.5m for the western side of Lee Garden Road between Russell Street and Hysan Avenue. The setback requirement of 1.5m at both sides of Lan Fong Road also needs to be maintained.

Yun Ping Road

(y) The 2m wide NBA along Yun Ping Road was originally designated to facilitate air ventilation. Response (t) above is relevant.

Lan Fong Road

z) The proposed public transport facilities (PTF) for GMB at the EMSD site at Caroline Hill Road are to facilitate relocation of the termini of certain existing GMB routes at Lan Fong Road and Lee Garden Road. However, how the GMB routes would be adjusted in future would be subject to the prevailing traveling pattern and the result of local consultation. The traffic impacts of the proposed PTF are subject to confirmation, too. Furthermore, taking into account the kerbside activities, street furniture and shop front areas, the existing footpath width on the majority part of the southern side of Lan Fong Road of about 2m is considered not adequate for pedestrian circulation.

Two proposed schemes for Lan Fong Road:

Option 1 (Relocation of GMB Stands) — If a footpath widening is still considered being desirable, a footpath width of some 3m can be adopted, taking into account the footpath requirement in the Transport Planning Design Manual (Table 3.4.11.1) which suggests a clear footpath width of 2m (for pedestrian flow less than 60 pedestrians per minute) and assuming 0.5m dead areas on both sides, amounting to a total footpath width of 3m. In future when the GMB stops are no longer present, Lan Fong Road can be reconfigured to provide 3m footpath on both sides without the need for any setback as shown in Figure 3.4 of the "Tabled Information" (see Annex H3-b11)

Option 2 (Elimination of Loading/Unloading (L/UL) Area) — The L/UL area along the northern kerbside of Lan Fong Road is mostly occupied by private car parking. The western kerbside of Yun Ping Road between Pak Sha Road and Lan Fong Road and the southern kerbside of Pak Sha Road, which are more commonly used for general L/UL, could be capable of absorbing the loading demand from Lan Fong Road. Eliminating the L/UL area on Lan Fong Road could accommodate widening of the footpath up to 3m wide on both sides with approximate 3.5m wide traffic lane and maintaining the GMB stops aside as existing as shown in Figure 3.6 of the "Tabled Information" (see Annex H3-b11)

Western footpath of Lee Garden Road

The current width of Lee Garden Road footpath (3m) is fully sufficient to cater for the observed as well as future pedestrian flows. The footpath in the area in general exhibits an average width of 3m, more relevant being Foo Ming Street. 3m footpath fully satisfies the prevailing transport standard. The 0.5m setback requirement is not considered necessary.

RESPONSES

- (aa) Regarding the 2 proposed schemes for Lan Fong Road, as mentioned above, whether the GMB stands at Lan Fong Road could be relocated is subject to uncertainties.
- (bb) Many buildings around Lan Fong Road area do not have any internal transport facilities. L/UL activities have to be carried out on street and there are high demands for such kerbside facilities. It is uncertain whether the existing L/UL can be eliminated in the future.
- (cc) The setback requirement at Lan Fong Road is to be maintained as mentioned in (x) and (z) to (bb) above.

Lee Garden Road

(dd) The footpath width along the western kerbside of Lee Garden Road varies. Please refer to response in (w) and (x) above.

Bonus under Building (Planning) Regulations

 There is no provision in the OZP for PR to be exceeded as defined in B(P)R 22(1) and (2). There is no statement in the Notes or ES indicating that the private land taken for setback or air ventilation purposes is for public passage and that bonus GFA could be considered by the Building Authority in accordance with the normal practice.

Lee Garden Two (R148)

- The LG Two site has significant constraints due to its narrow and unusual shape. The BHRs in conjunction with the NBA requirement make the site more difficult to redevelop. The 2m NBA along Yun Ping Road reduces the prime frontage space of the site and width of the podium floor plate by 10% to approximately 17m, which also affects the office tower for its full height. It would also be impossible to include all floor area loss for the NBA into additional upper floors because of the BHR. The effect of the 2m wide NBA alone would remove floor space to a value of greater than \$1 billion.
- A development scheme has been worked out taking into account the OZP restrictions. The actual PR that could be achieved was 10.9 and a SC of 49.2% (about 20% less than the maximum permissible). Another option with a lower floor height (3.7m for retail floor and 3.6m for office floor) shows that the actual PR accommodated is about 14.5 with a SC of 49.2%, but this is far from a quality office building.

RESPONSES

- (ee) Setback requirements are only stipulated for certain streets in the commercial, "OU(MU)" and "R(A)1" zones. Since there is no PR restriction for these zones, inclusion of provision for PR to be exceeded as defined in B(P)R 22(1) and (2) is not necessary.
- (ff) As stated above, proposals involving dedication of land for public passage and surrender of land for street widening would be entitled to bonus GFA under B(P)R, and any such claim would be duly considered by the Building Authority in accordance with the normal practice.
- (gg) The design schemes put forward by the Representers to demonstrate the amount of GFA taken away by the OZP and SBDG (Annex H3-b8) have a number of deficiencies and inaccuracies in the approach. For example,
 - The actual PR of all development options is grossly understated as it only takes into account the GFA of the office tower, without including the GFA of the retail podium.
 - One podium garden and one sky garden are presented in all development options. However, both of them are not compulsory building features, without which a lower BH is possible.
 - For Redevelopment Option 1 under the current OZP and Buildings Ordinance, the Representers have adopted a floor height of 4.5m for the refuge floor. Based on the Code of Practice of Fire Safety in Buildings 2011, the clear headroom of refuge floor is 2.3m only. As such, there is scope to reduce the floor height of the refuge floor of these options.
 - The alternative approach to provide a communal garden (instead of

• Development potential and options would be affected by both the OZP restrictions and SBDG. Three development options have been worked out taking both into account. All three options fail to achieve the maximum permissible PR of 15. The actual PR of the development ranges from 3.72 to 9.3 while SC ranges from 15.9% to 42.7%. All the options are not acceptable. There is no development scheme that subject to both OZP restrictions and SBDG could achieve the permissible development intensity. The development potential of LG Two is substantially jeopardised by the OZP restrictions and SBDG. The OZP restrictions and SBDG share the good intention of improving air ventilation and enhance pedestrian environment, but it is not the intention of both the OZP and SBDG to down zone the development intensity. Both controls are overlapping and the dual controls add up has resulted in disproportional loss of the value of the site that needed to be addressed.

Hysan Place and The Goldmark site (R149)

• While there is a voluntary setback along the area designated as NBA, it is inappropriate to make this a permanent NBA as it unduly restricts future flexibility of design to adapt the building over time. Hysan Place is an example of good design with setbacks and varied podium heights, and urban windows to facilitate air ventilation. These design initiatives have unfortunately been made into rigid and inflexible permanent requirements by the restrictions on the OZP. The NBA is just restricted to the site and does not carry on to the remaining buildings on the eastern side of Lee Garden Road.

RESPONSES

setting back the building for 7.5m from the centreline of Yun Ping Road) under SBDG has not been tested out.

- (hh) Notwithstanding, a review of the BHR taking into account the implications of SBDG and permissible development intensity has been conducted as per the Court's rulings, and it is proposed to relax the BHR of the site from 130mPD to 135mPD to make allowance for future redevelopment to comply with SBDG. It should be noted that SBDG also has provision for alternative design based on performance based approach to address site constraints when there are genuine difficulties to comply with the prescriptive SBDG requirements. Given the narrow and elongated configuration of the site, indicative schemes have been drawn up which have demonstrated that there is scope to accommodate the permissible GFA and SBDG requirements under the proposed BHR of 135mPD (Annexes F1 and F2).
- (ii) The air ventilation measures on the OZP have been reviewed and it is proposed to delete the podium BHR (BG) and NBA requirement along Yun Ping Road for the site. Please refer to point (t) above.
- (jj) As per CFI's order, the NBA requirement at the Lee Garden Road frontage of Hysan Place has been quashed.
- (kk) The BHR of 200mPD for the site generally reflects the existing BH of Hysan Place (completed in 2012) at 199mPD. It is the highest BH band adopted on the OZP which is sufficient to accommodate the SBDG requirements. The other set of approved building plans involving Hysan Place and The Goldmark site with a BH of 231mPD, which is substantially higher than the existing building clusters (Plans 7A and

Building plans for a 45-storey commercial/office development with a BH of 199mPD at 500 Hennessy Road was firstly approved. The second building plan submission with a larger site area covering the adjoining Goldmark site and a BH of 230.7mPD was approved. The BHR for the site is lower than that of the second submission.

Sunning Road sites (R150)

- According to the Representer's AVA EE, Sunning Road would provide an air ventilation path for the summer winds. The height of the buildings would have no significant negative effect on air ventilation generally. There are no issues of poor air ventilation and no issues regarding ridgeline or harbourfront related to the Sunning Road area. It is immediately opposite LG One standing at 209mPD.
- There is no need to apply the 100mPD BHR from the Wong Nai Chung OZP which was made at a time when the BHR concept for the Causeway Bay and Wan Chai areas had not been developed. The location of the site being adjacent to the tallest building has not been given any consideration.
- Building plans for a redevelopment of a 42-storey office and hotel building with a BH of 180mPD at the Sunning Court and Sunning Plaza site were approved in 2009. A compromised BHR of 150mPD is proposed to be adopted. (Drawing 1)

Lee Garden One (R151)

 The BHR of 200mPD is lower than the height of the existing building, which is 208mPD.

RESPONSES

7B), should not be taken as a basis in determining the BHR so as to avoid proliferation of out-of-context developments. The approved building plans could still be implemented according to the provisions of the Buildings Ordinance.

- (II) The original BHR of 100mPD for the Sunning Road sites was already amended to 130mPD, as confirmed by the Board under section 6F(8) of the Ordinance on 24.6.2011. The site is now under construction for a proposed commercial/office building (i.e. LG Three) with a BH of 130mPD as per another set of approved general building plans.
- (mm) The proposed BH of 180mPD in the set of general building plans for a 42-storey office and hotel building mentioned by the Representers should not be the basis of formulating BHRs on the OZP as it is substantially higher than the BH band for the area.
- (nn) To follow up on the Court's rulings, a review of the BHR taking into account the implications of SBDG and permissible development intensity has been conducted. It is proposed to relax the BHR of the sites from 130mPD to 135mPD to make allowance for compliance with SBDG. With general public concern on excessive building bulk and height, further relaxation of the BHR to 150mPD is considered not appropriate.
- (oo) The BHR of 200mPD generally reflects the existing BH of LG One. The same has been adopted for Hysan Place to its north and Times Square to its west (in Wan Chai OZP), which together form a triangular node of

 The NBA and setback, combined with the 32mPD BHR for the podium, restrict any future redevelopment of the building to smaller than its existing size and permanently restrict the building to a form similar to the existing.

One Hysan Avenue (R152)

- The BHR of 130mPD is lower than the BH of 145.33mPD in approved building plans for the site.
- The three dominant buildings (Times Square, LG One and Hysan Place) in the area formed a triangle each with height of approximately 200mPD. One Hysan Avenue is located between Times Square and LG One, and therefore within the high-rise triangle.
- There is no issue of harbourfront relationship or obstruction of ridgeline relevant to this site. The site also has no air ventilation issue as it faces a wide junction. There is no apparent consideration as to why in this location there should not be an additional step in the BH profile at 150mPD which is relative to LG One and would be a medium rise step in the BHR profile. The integrity of the overall stepped BH profile of 100mPD, 130mPD and 200mPD would not be jeopardised by introducing a step of 150mPD, but would be strengthened. The stepping

RESPONSES

landmark buildings. This is the tallest BHR on the OZP which is sufficient to accommodate the SBDG requirements. Relaxation of the BHR would jeopardise the overall BH profile on the OZP. Nevertheless, redevelopment up to the existing BH is permitted under the Notes for the "C" zone.

- (pp) The air ventilation measures on the OZP have been reviewed and it is proposed to delete the podium BHR (BG) and NBA requirement along Yun Ping Road for the site. Please refer to point (t) above.
- (qq) For the setback requirement along the Lan Fong Road frontage of the site, please see points (z) to (cc) above.
- (rr) To follow up on the Court's rulings, a review of the BHR taking into account the implications of SBDG and permissible development intensity has been conducted. It is proposed to relax the BHR of the site from 130mPD to 135mPD to make allowance for compliance with SBDG.
- (ss) While building plans approved before the imposition of BHR could still be implemented according to the provisions of the Buildings Ordinance, it is inappropriate to adopt it as a basis in determining the BHR on the OZP. With general public concern on excessive building bulk and height, further relaxation of the BHR is considered not appropriate.

GROUNDS OF REPRESENTATION

process would be more gradual and progressive. (Drawing 1)

Public consultation

- Prior to the exhibition of the OZP amendments, there was no consultation with the affected owners and the development industry. The public have not been informed of the justifications and visual impact assessment for the BHRs and other development restrictions. Without such information, the public cannot reasonably comment on the need for the restrictions.
- BHRs have been systematically imposed in neighbouring planning areas since 2007, and land owners in the Area have known that BHRs were likely to be imposed on the Area. The increase in submission of building plans should have occurred a long time ago. There is no public benefit in not doing the prior public consultation.

RESPONSES

- (tt) The established practice of not releasing proposed OZP amendments involving BHR to the public prior to gazetting is to avoid prompting an acceleration of developers' submission of building plans to established 'fait accompli' which would pre-empt and defeat the purpose of imposing BHRs and other development restrictions.
- (uu) The current review of BHRs is to follow up the Court's rulings on the JRs and related appeals. For visual considerations of the proposed BHRs, please refer to response (c) above.
- (vv) Subject to the agreement of the proposed development restrictions by the Board for gazetting the amended draft OZP under section 7 of the Ordinance, Wan Chai District Council will be consulted during the two-month statutory plan exhibition period. Members of the general public can submit representations on the OZP amendments under the same period.

Lease Particulars

Representation No. R146

Representation site: Excelsior Hotel at 281 Gloucester Road

- Marine Lot 52 s.G ss.7 and ext. [virtually unrestricted except for non-offensive trades clause and rate and range clause]; and
- The non-offensive trades clause has been removed by licence.

Representation No. R148

Representation Site: Lee Garden Two, 28 Yun Ping Road

- Various subsections of Inland Lot (IL) 29 [virtually unrestricted except for non-offensive trades clause and rate and range clause];
- Various subsections of IL 457 [first class European Houses or Godowns only (with no objection letter covering the existing commercial development) with non-offensive trades clause and rate and range clause];
- Various subsections of IL 461 [virtually unrestricted except for non-offensive trades clause];
- Licences/no-objection letters have been given for various offensive trades; and
- IL 457 s.H (with s.L) is subject to a Modification Letter dated 3.8.1992 which permits the construction of a covered single storey pedestrian footbridge over Government land at Yun Ping Road.

Representation No. R149

Representation Site: 500-502 Hennessy Road

500 Hennessy Road (Hysan Place):

- IL 29, s.FF and IL 365 R.P. [both virtually unrestricted except for non-offensive trades clause and rate and range clause]; and
- The non-offensive trades clauses have been removed by licence.

502 Hennessy Road (Goldmark):

- IL 8584 [restricted to non-industrial (excluding godown, hotel and/or car parking purposes) and MTR Station Entrance; and public pedestrian passage's right to the Dedicated Area]; and
- IL 81 s.Q [virtually unrestricted except for non-offensive trades clause and rate and range clause; and public's right to use the Passage Area].

Representation No. R150

Representation Site: "C" zones along Sunning Road (covering the proposed Lee Garden Three (under construction at the ex-Sunning Plaza and Sunning Court site), Lee Garden Five at 18 Hysan Avenue, Lee Garden Six at 111 Leighton Road and other buildings)

- Various subsections of IL 29 [virtually unrestricted except for the non-offensive trades clause and rate and range clause];
- IL 457 s.N [first class European Houses or Godowns only with non-offensive trades clause and rate and range clause]; and
- Licences have been issued for various offensive trades.

Representation No. R151

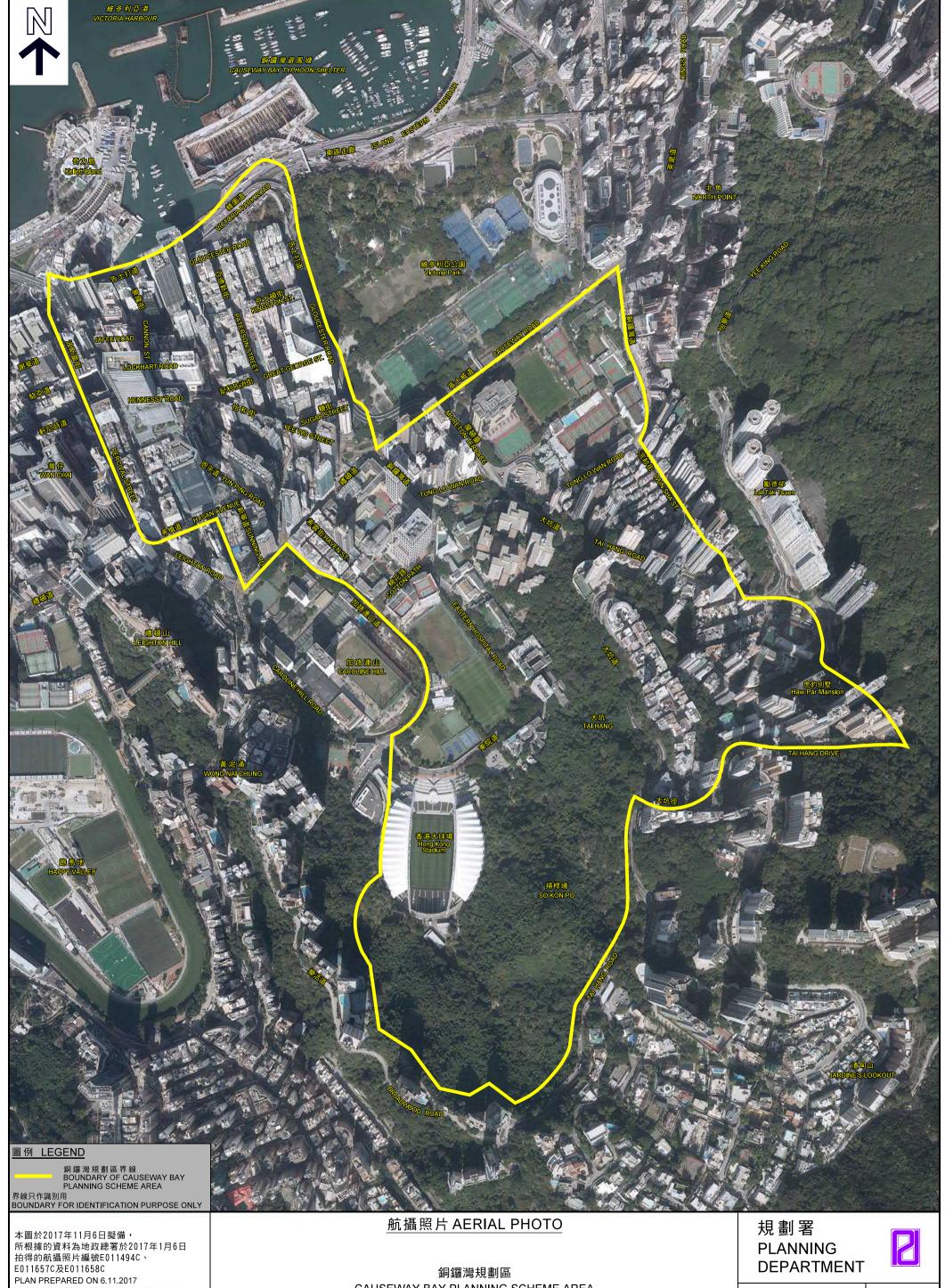
Representation Site: Lee Garden One at 33 Hysan Avenue

- Various subsections of IL 29 [virtually unrestricted except for the non-offensive trades clause and rate and range clause];
- Various subsections of IL 457 [first class European Houses or Godowns only (with no objection letter covering the existing commercial development] with non-offensive trades clause and rate and range clause];
- Licences have been given for various offensive trades; and
- IL 457 s.L (with s.H) is subject to a Modification Letter dated 3.8.1992 which permits the construction of a covered single storey pedestrian footbridge over Government land at Yun Ping Road.

Representation No. R152

Representation Site: 1 Hysan Avenue

• IL 29 s. GG R.P. [virtually unrestricted except for the non-offensive trades clause and rate and range clause].

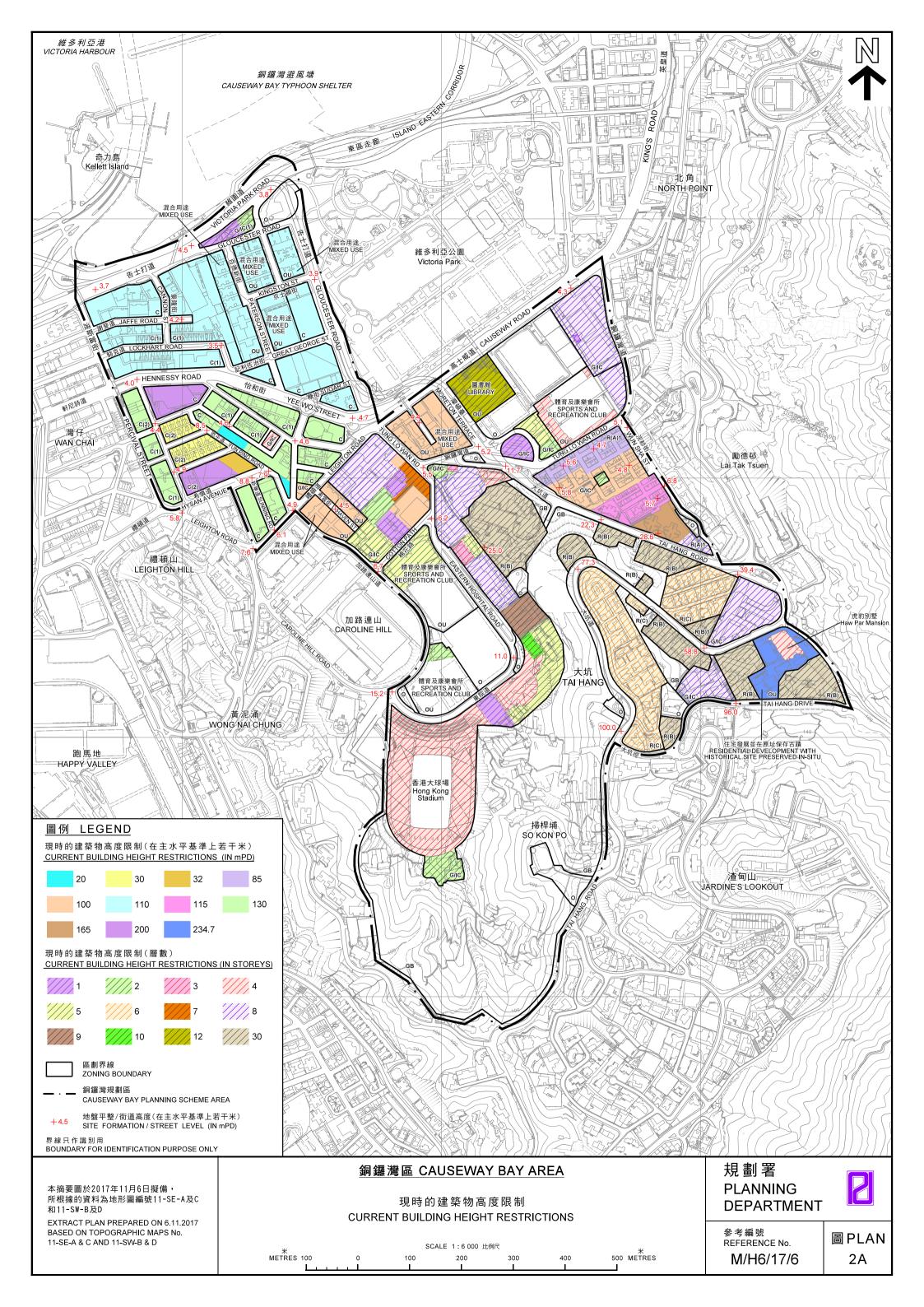


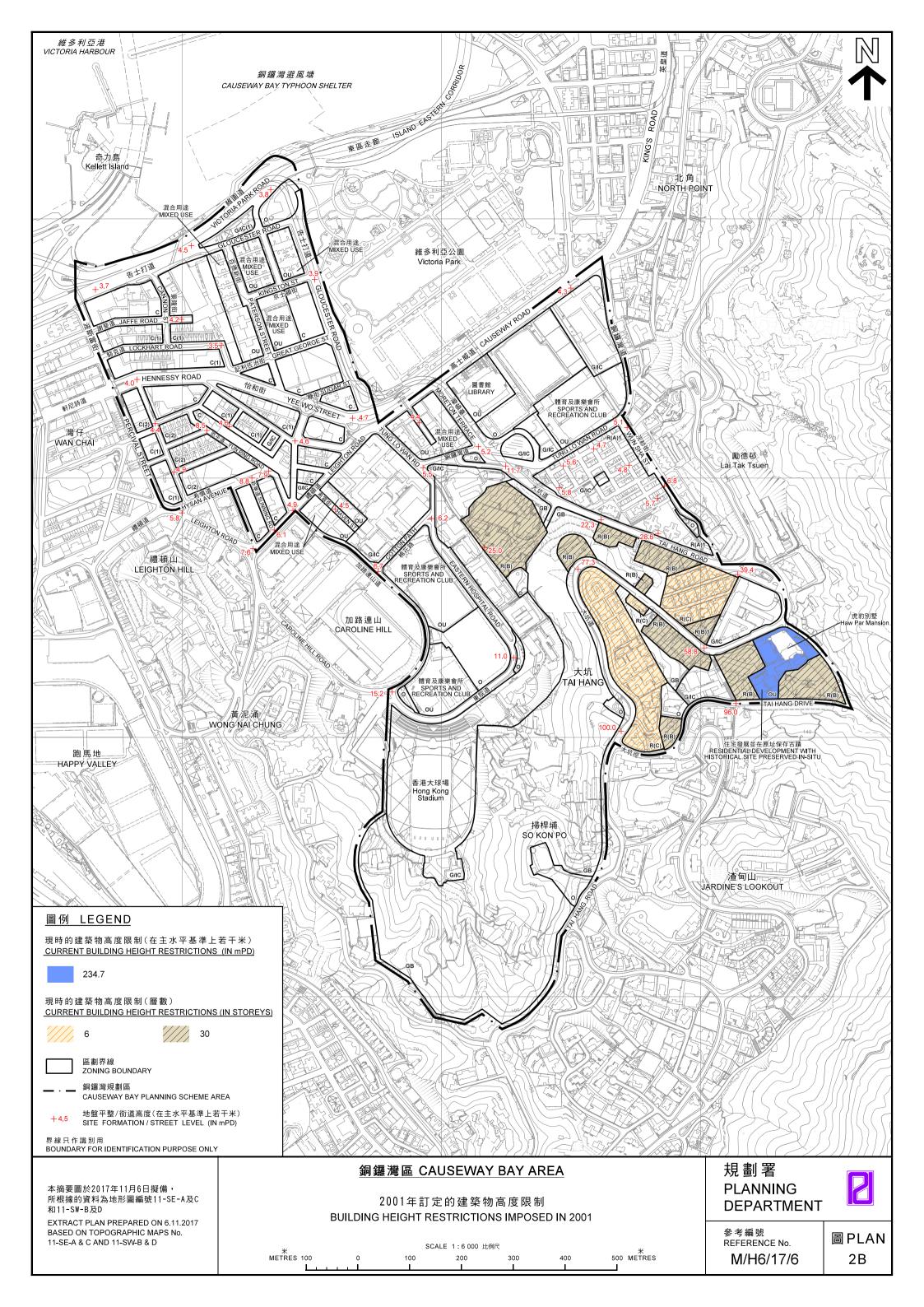
BASED ON AERIAL PHOTOS No. E011494C, E011657C AND E011658C TAKEN ON 6.1.2017 BY LANDS DEPARTMENT

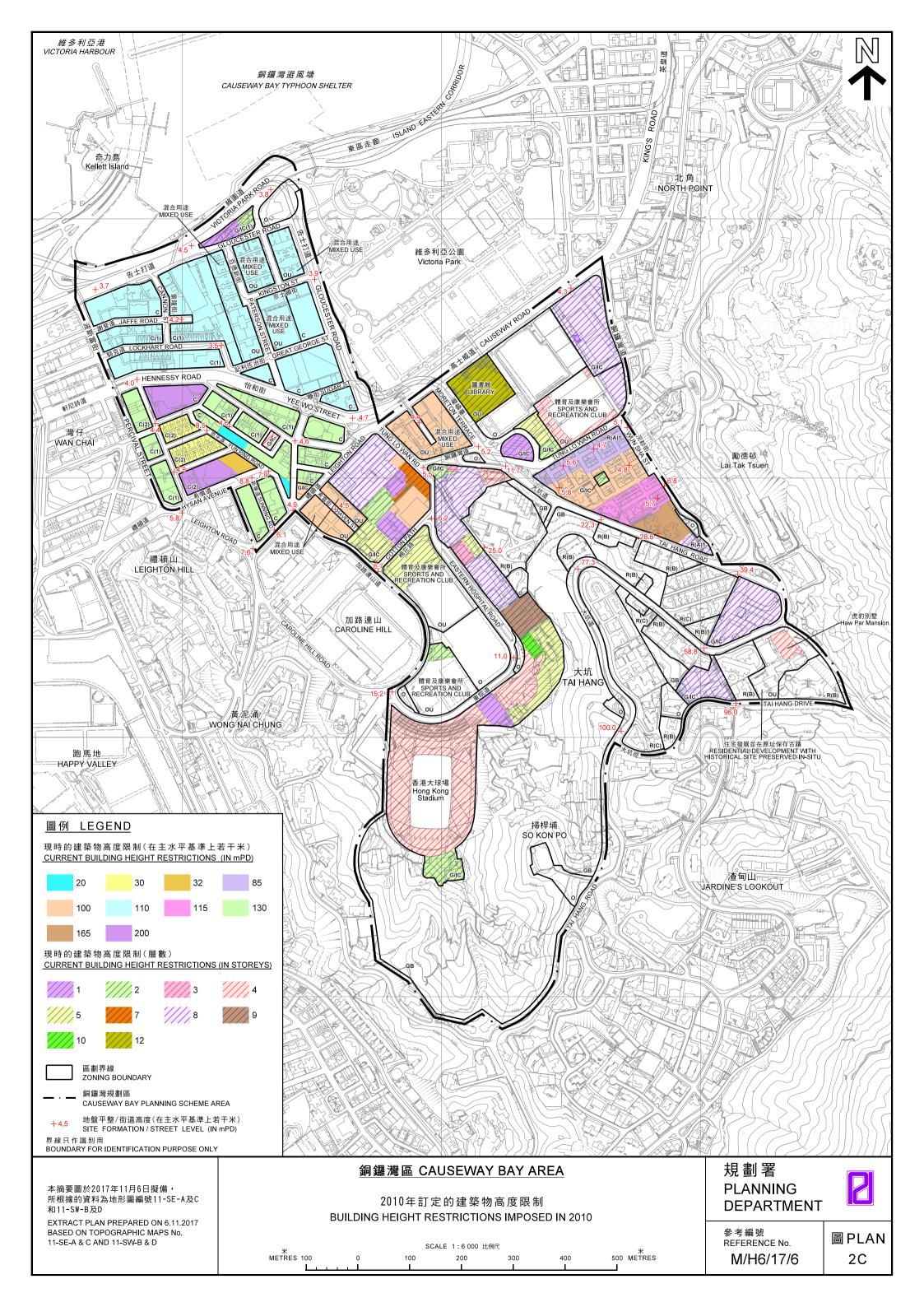
CAUSEWAY BAY PLANNING SCHEME AREA

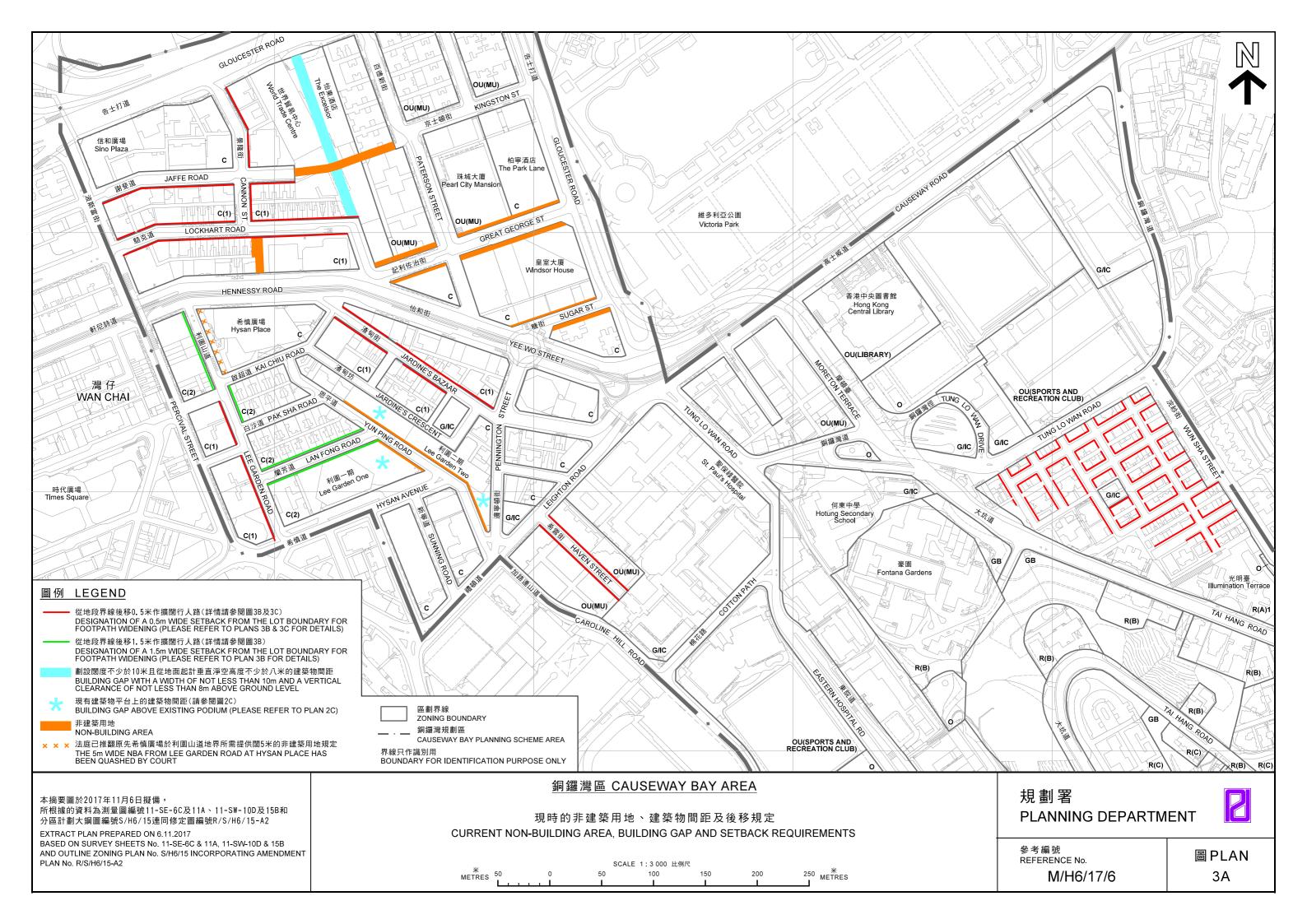
參考編號 REFERENCE No. M/H6/17/6

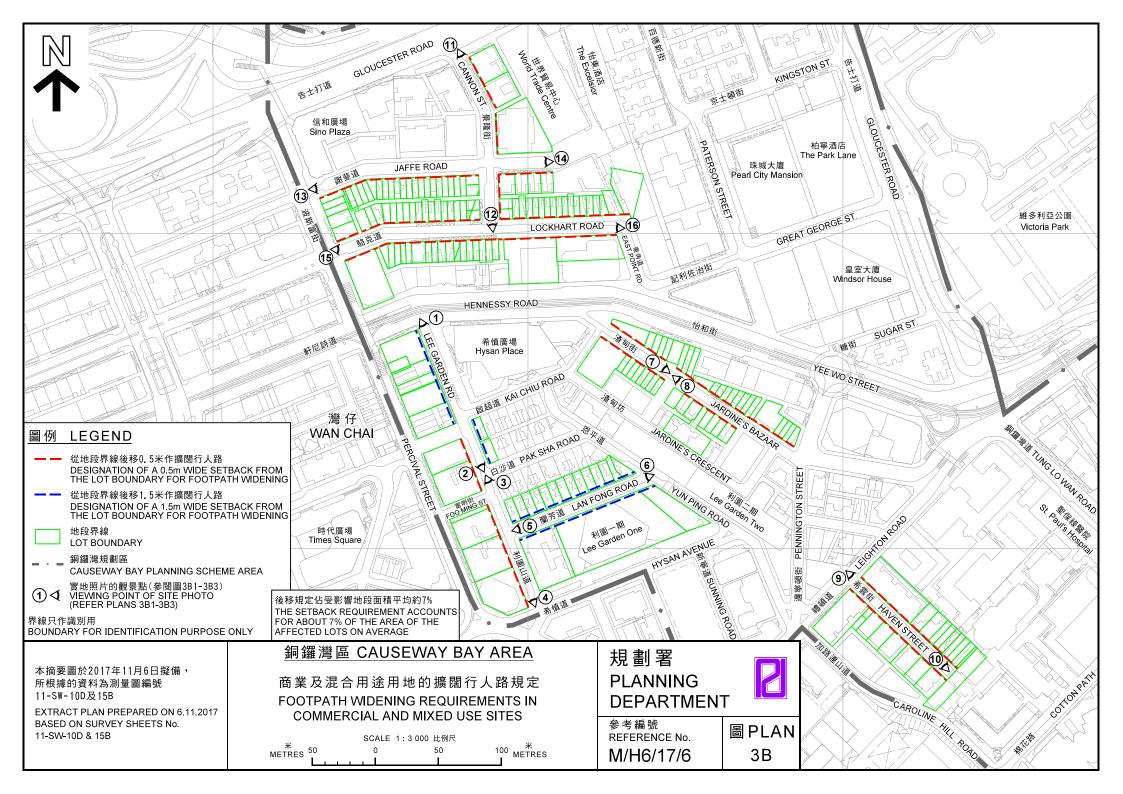
圖PLAN 1













利園山道 LEE GARDEN ROAD



利園山道 LEE GARDEN ROAD



蘭芳道 LAN FONG ROAD



利園山道 LEE GARDEN ROAD



利園山道 LEE GARDEN ROAD



蘭芳道 LAN FONG ROAD

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年7月14日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 14.7.2017

商業及混合用途用地的擴闊行人路規定 FOOTPATH WIDENING REQUIREMENTS IN COMMERCIAL AND MIXED USE SITES

規劃署 **PLANNING DEPARTMENT**



參考編號 REFERENCE No.

圖PLAN M/H6/17/6 3B1



渣甸街 JARDINE'S BAZAAR



渣甸街 JARDINE'S BAZAAR



希雲街 HAVEN STREET



希雲街 HAVEN STREET

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年7月14日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 14.7.2017

商業及混合用途用地的擴闊行人路規定 FOOTPATH WIDENING REQUIREMENTS IN COMMERCIAL AND MIXED USE SITES

規劃署 PLANNING DEPARTMENT



參考編號 REFERENCE No. M/H6/17/6

圖PLAN 3B2



景隆街 CANNON STREET



謝斐道 JAFFE ROAD



駱克道 LOCKHART ROAD



景隆街 CANNON STREET



謝斐道 JAFFE ROAD



駱克道 LOCKHART ROAD

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年7月14日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 14.7.2017

商業及混合用途用地的擴闊行人路規定 FOOTPATH WIDENING REQUIREMENTS IN COMMERCIAL AND MIXED USE SITES

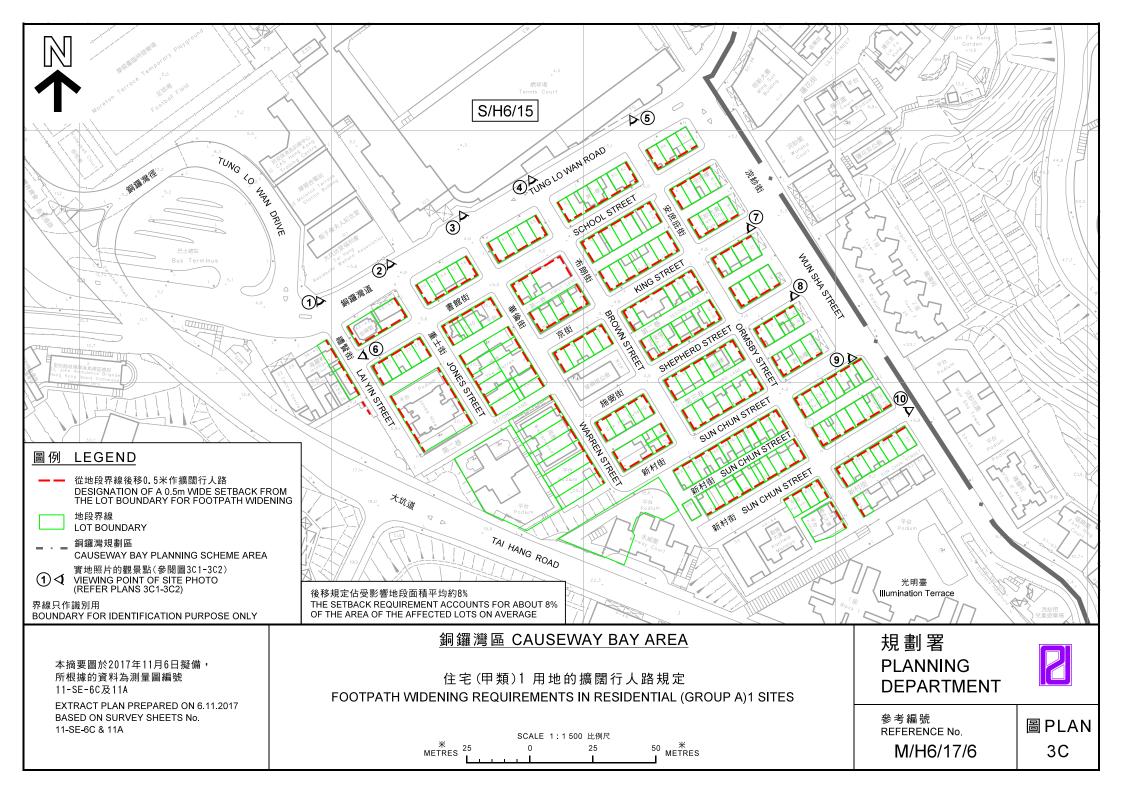
規劃署 PLANNING DEPARTMENT



M/H6/17/6



圖PLAN 3B3









華倫街 WARREN STREET

禮賢街 LAI YIN STREET

重士街 JONES STREET



布朗街 BROWN STREET



安庶庇街 ORMSBY STREET

所根據的資料為攝於 2017年7月14日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 14.7.2017

本圖於2017年11月6日擬備,

住宅(甲類)1 用地的擴闊行人路規定 FOOTPATH WIDENING REQUIREMENTS IN RESIDENTIAL (GROUP A)1 SITES

規劃署 PLANNING DEPARTMENT



參考編號 REFERENCE No. M/H6/17/6

圖PLAN 3C1







京街 KING STREET



施弼街 SHEPHERD STREET



新村街 SUN CHUN STREET



新村街 SUN CHUN STREET

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年7月14日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 14.7.2017

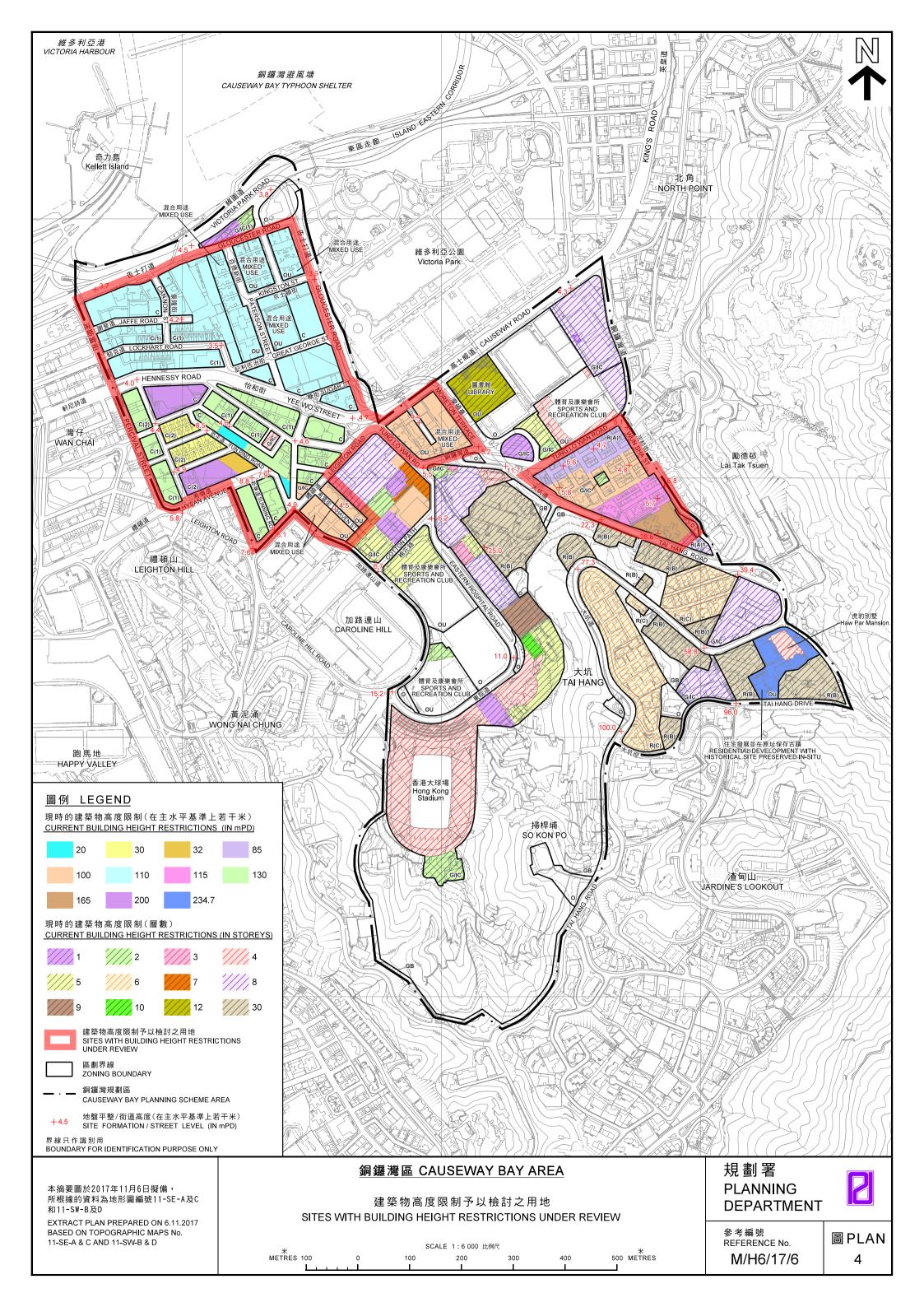
住宅(甲類)1 用地的擴闊行人路規定 FOOTPATH WIDENING REQUIREMENTS IN RESIDENTIAL (GROUP A)1 SITES

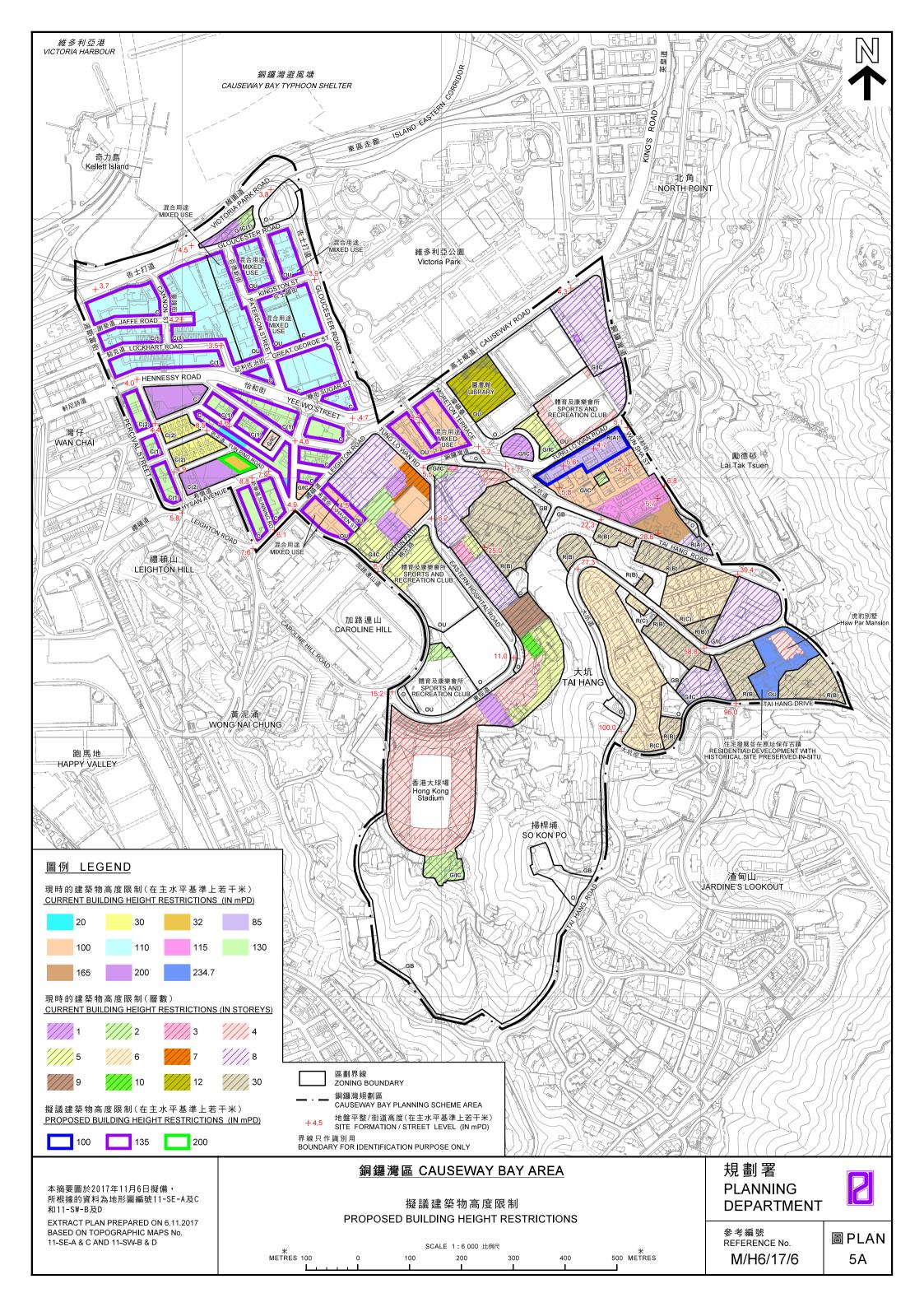
規劃署 PLANNING DEPARTMENT

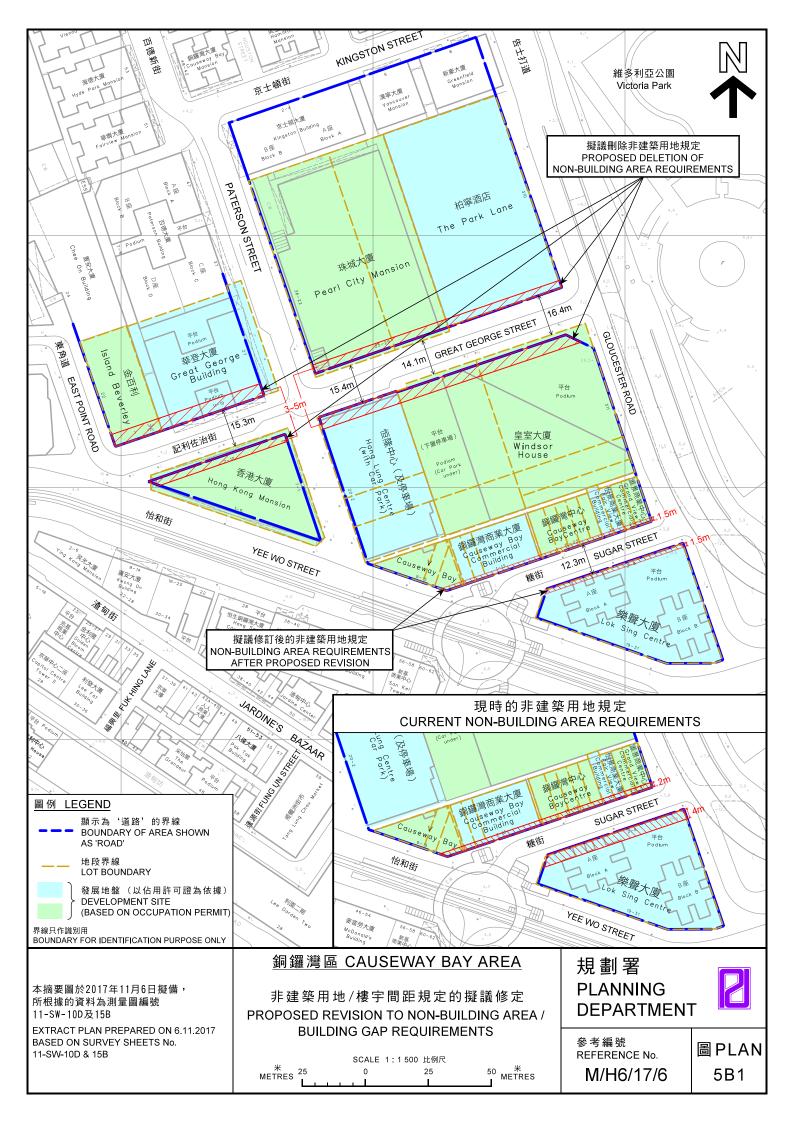


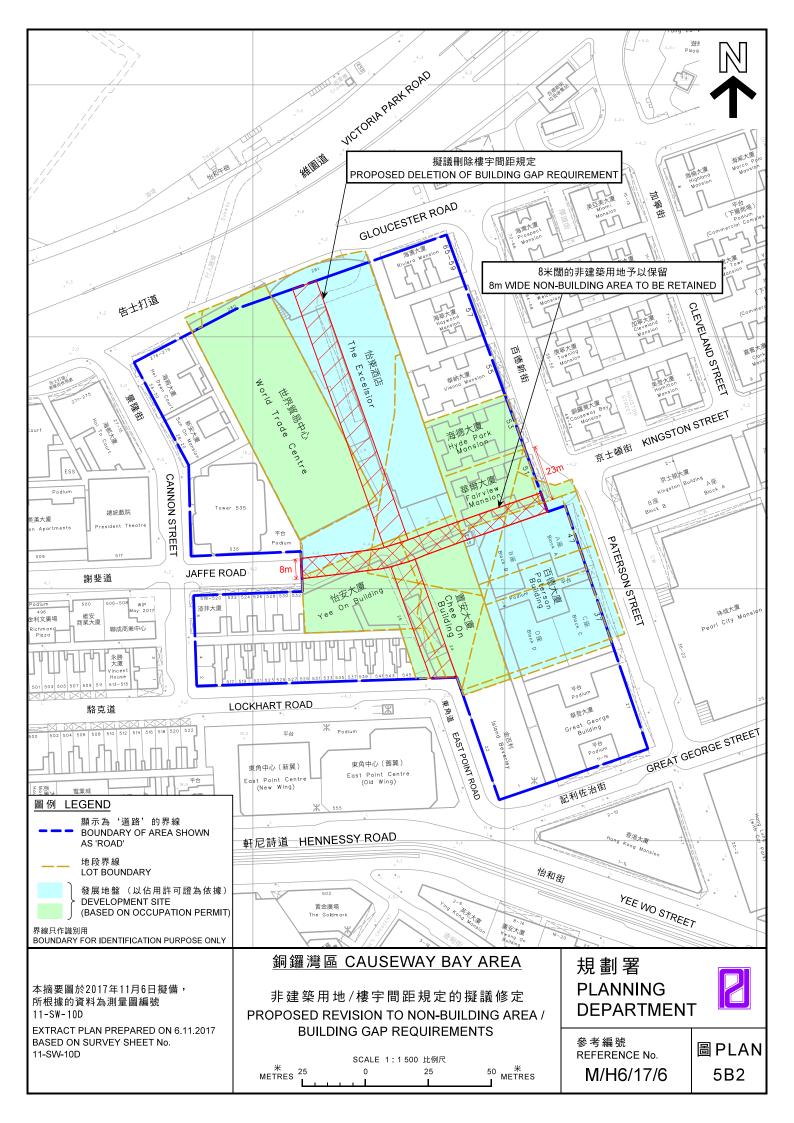
參考編號 REFERENCE No. M/H6/17/6

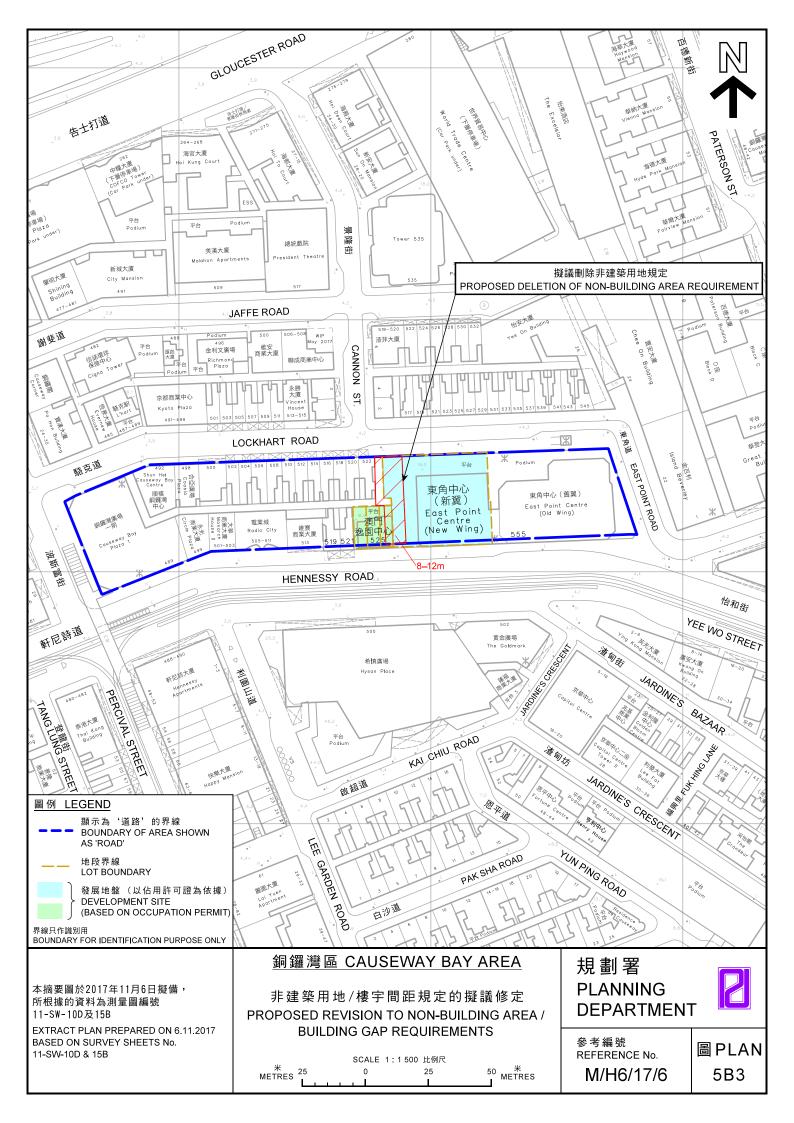
圖PLAN 3C2

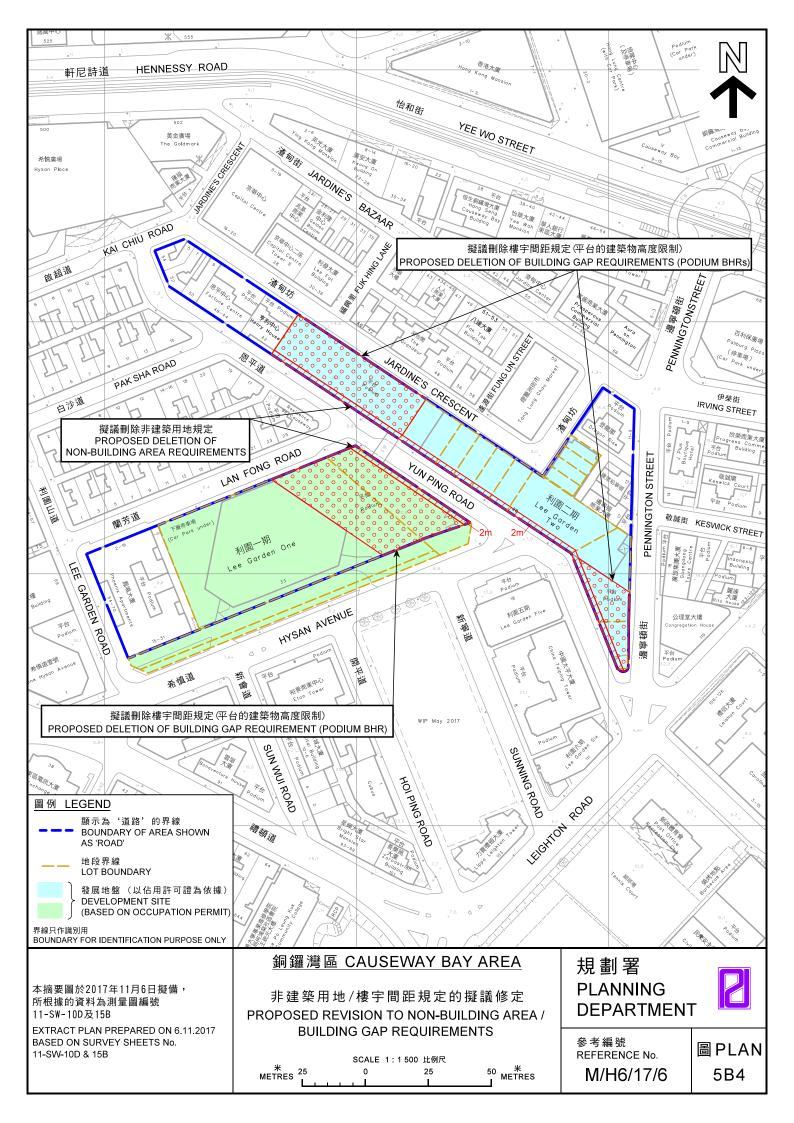


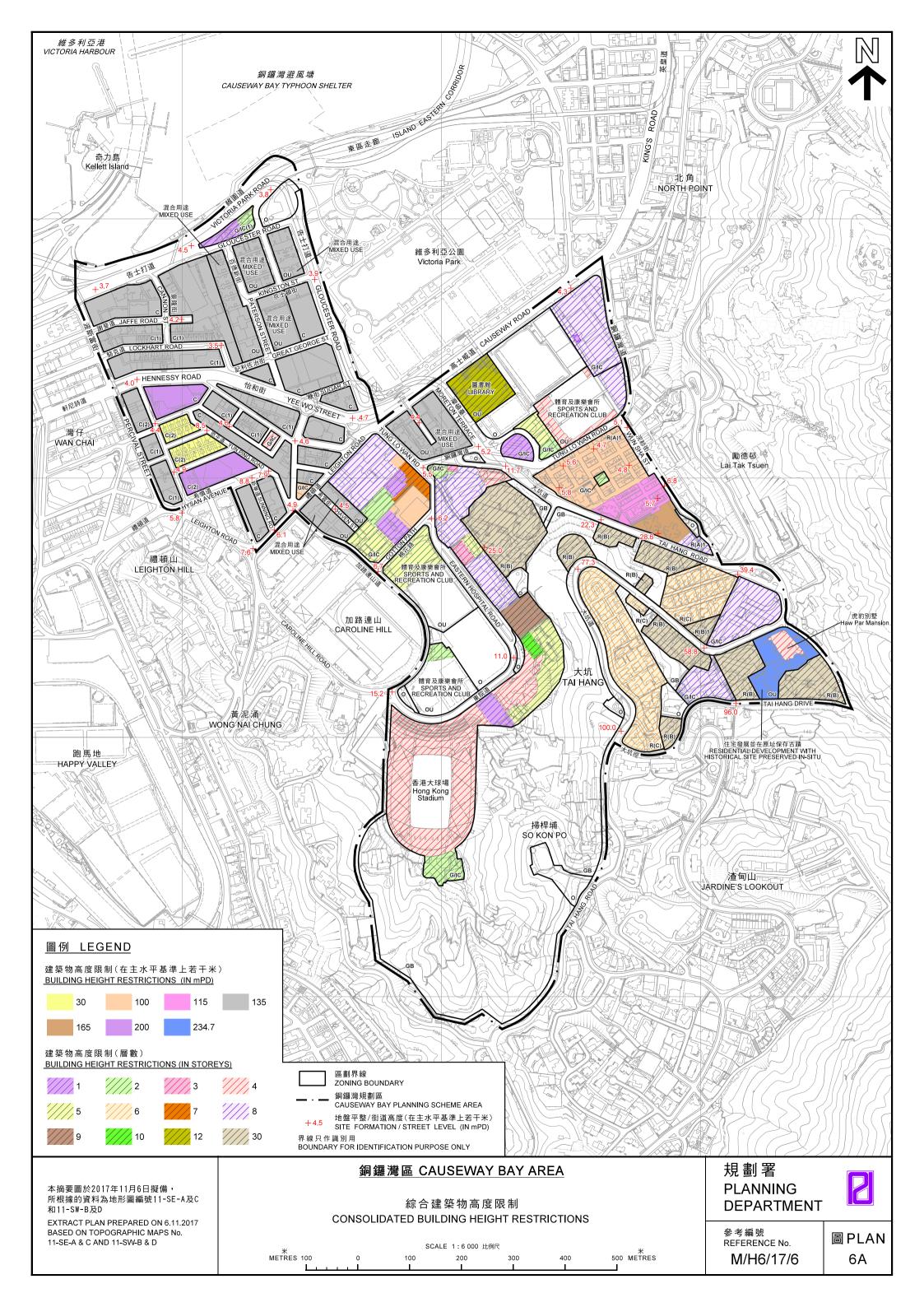


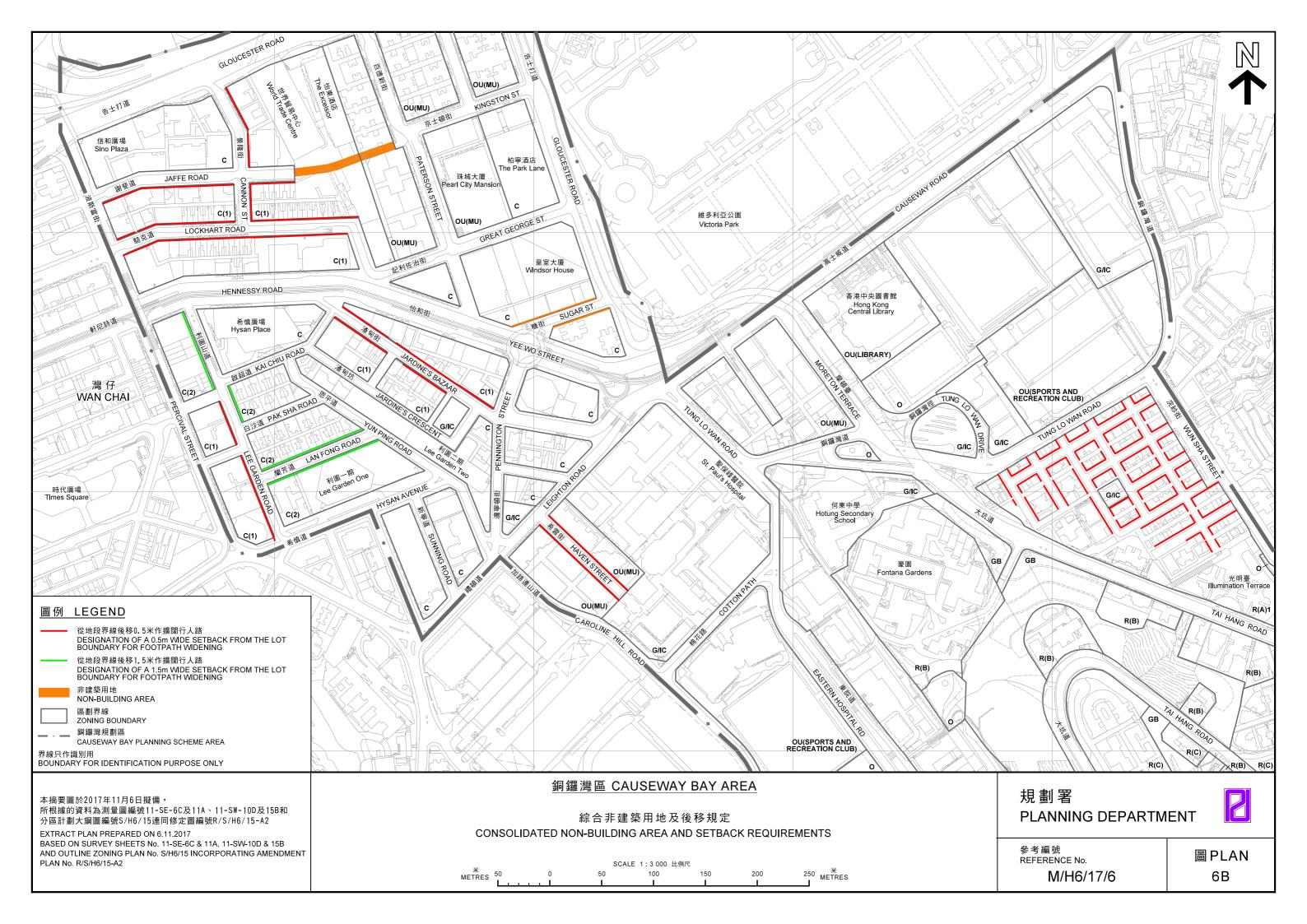


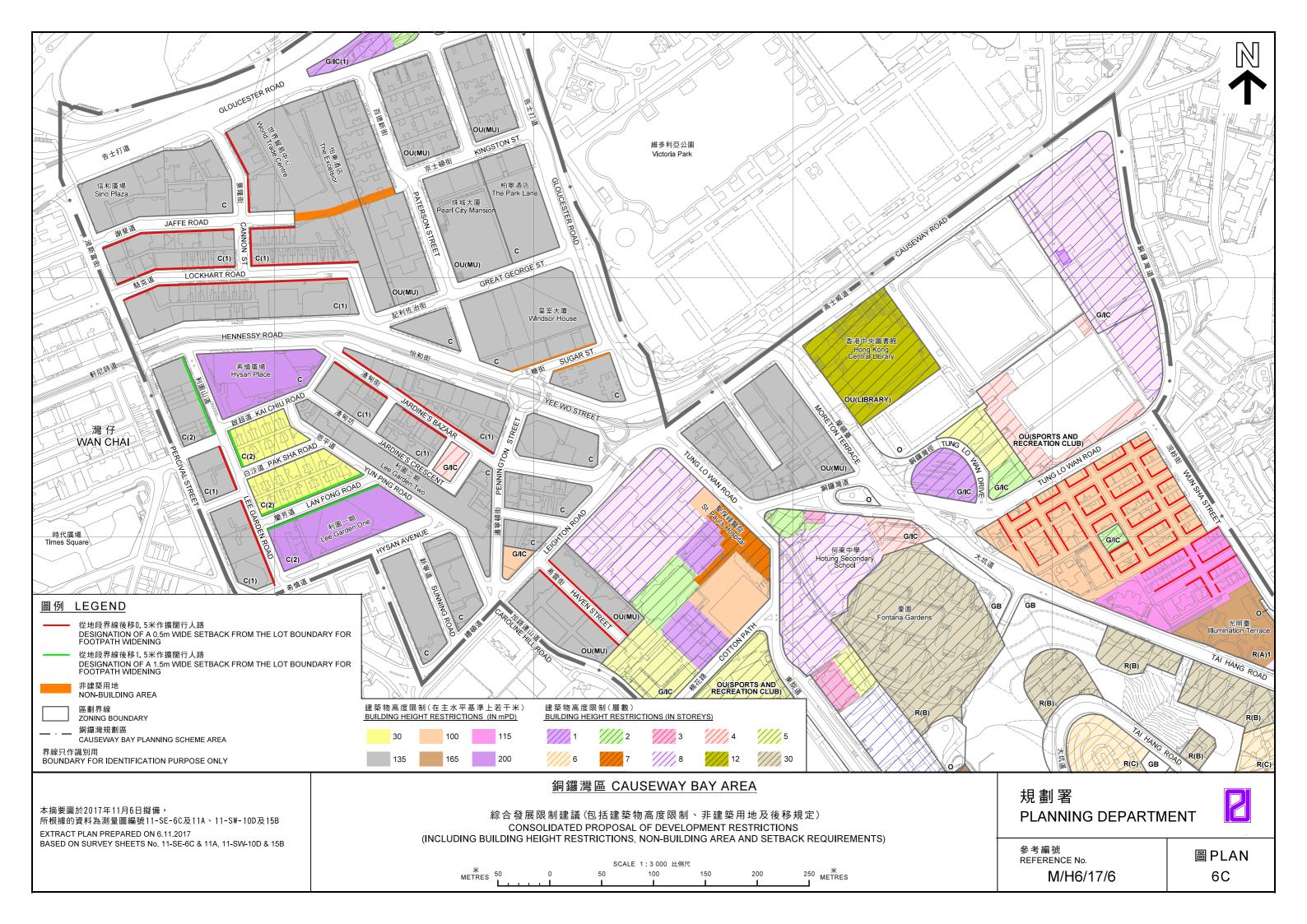


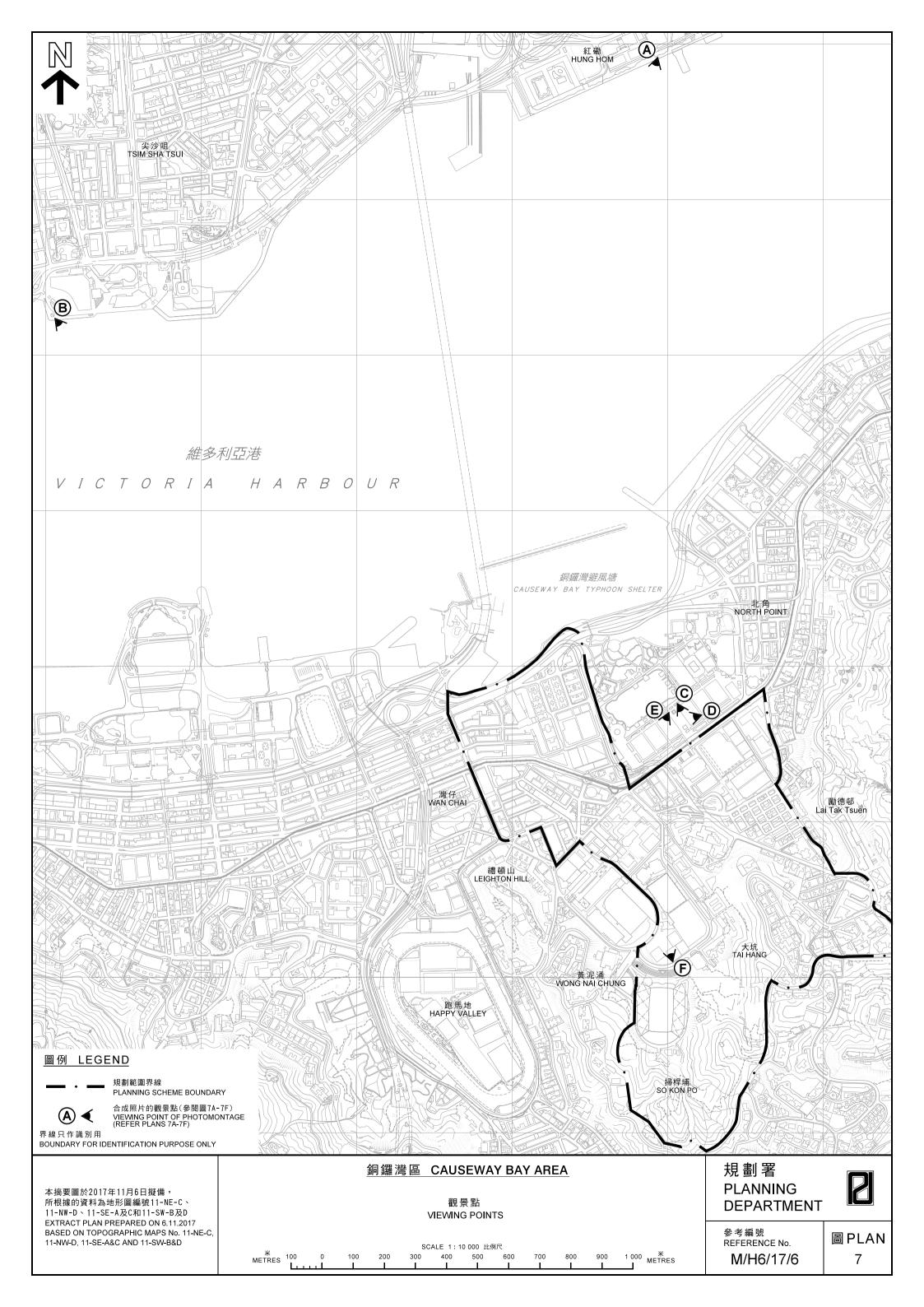






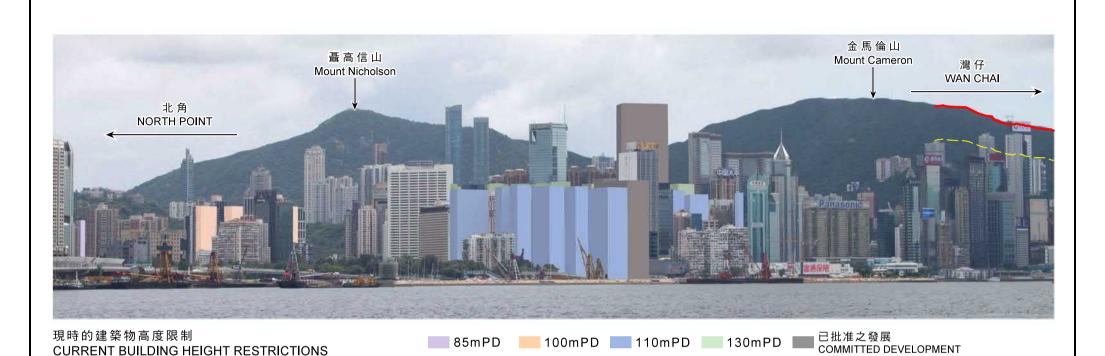






EXISTING VIEW

現有景觀





從紅磡海濱花園遠眺

須保存的山脊線 RIDGELINES TO BE PRESERVED 虚線以上為保留20%不受建築物遮擋地帶 ABOVE THE DOTTED LINE: 20% BUILDING FREE ZONE

建築物高度在主水平基準上若干米/層數 BUILDING HEIGHT IN METRES ABOVE PRINCIPAL DATUM (mPD) / STOREYS 界線只作識別用 BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

銅鑼灣區 CAUSEWAY BAY AREA

VIEW FROM HUNG HOM PROMENADE

本圖於2017年11月6日擬備,所根據的 資料為攝於2017年7月20日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTO TAKEN ON 20.7.2017

CURRENT BUILDING HEIGHT RESTRICTIONS

建築物高度的合成照片 PHOTOMONTAGES OF BUILDING HEIGHT PROFILE

規劃署 **PLANNING** DEPARTMENT

銅鑼灣規劃區

CAUSEWAY BAY PLANNING SCHEME AREA



參考編號 REFERENCE No. M/H6/17/6

圖PLAN 7A

現有景觀 EXISTING VIEW

銅鑼灣規劃區 CAUSEWAY BAY PLANNING SCHEME AREA



現時的建築物高度限制 **CURRENT BUILDING HEIGHT RESTRICTIONS**

85mPD

100mPD

110mPD

115mPD

130mPD

■ 30 STOREYS □ 已批准之發展 COMMITTED DEVELOPMENT



擬議的建築物高度限制 PROPOSED BUILDING HEIGHT RESTRICTIONS

100mPD

115mPD 135mPD

已批准之發展 COMMITTED DEVELOPMENT

從尖沙咀(香港文化中心)遠眺 VIEW FROM TSIM SHA TSUI (HONG KONG CULTURAL COMPLEX)

> 須保存的山脊線 RIDGELINES TO BE PRESERVED 虚線以上為保留20%不受建築物遮擋地帶 ABOVE THE DOTTED LINE: 20% BUILDING FREE ZONE

建築物高度在主水平基準上若干米/層數 BUILDING HEIGHT IN METRES ABOVE PRINCIPAL DATUM (mPD) / STOREYS 界線只作識別用

BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

銅鑼灣區 CAUSEWAY BAY AREA

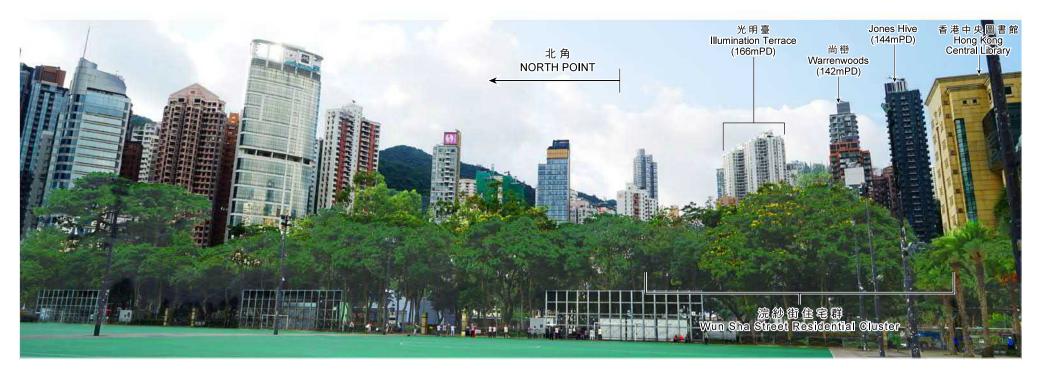
本圖於2017年11月6日擬備,所根據的 資料為攝於2017年7月9日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTO TAKEN ON 9.7.2017

建築物高度的合成照片 PHOTOMONTAGES OF BUILDING HEIGHT PROFILE 規劃署 **PLANNING DEPARTMENT**



參考編號 REFERENCE No. M/H6/17/6

圖PLAN 7B



現有景觀 EXISTING VIEW



現時的建築物高度限制 85mPD 100mPD 115mPD 30 STOREYS URRENT BUILDING HEIGHT RESTRICTIONS



擬議的建築物高度限制 PROPOSED BUILDING HEIGHT RESTRICTIONS

100mPD 115mPD 30 STOREYS

從維多利亞公園遠眺

建築物高度在主水平基準上若干米/層數 BUILDING HEIGHT IN METRES ABOVE PRINCIPAL DATUM (mPD) / STOREYS

銅鑼灣區 CAUSEWAY BAY AREA

VIEW FROM VICTORIA PARK

本圖於2017年11月6日擬備,所根據的 資料為攝於2017年7月10日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTO TAKEN ON 10.7.2017

建築物高度的合成照片 PHOTOMONTAGES OF BUILDING HEIGHT PROFILE 規劃署 PLANNING DEPARTMENT



參考編號 REFERENCE No. M/H6/17/6

圖PLAN 7C

觀景點 VIEWING POINT D



現有景觀 EXISTING VIEW



現時的建築物高度限制 CURRENT BUILDING HEIGHT RESTRICTIONS

110mPD

130mPD

已批准之發展 COMMITTED DEVELOPMENT



擬議的建築物高度限制 PROPOSED BUILDING HEIGHT RESTRICTIONS

135mPD

■已批准之發展 COMMITTED DEVELOPMENT

從維多利亞公園遠眺 VIEW FROM VICTORIA PARK

建築物高度在主水平基準上若干米/層數 BUILDING HEIGHT IN METRES ABOVE PRINCIPAL DATUM (mPD) / STOREYS

銅鑼灣區 CAUSEWAY BAY AREA

本圖於2017年11月6日擬備,所根據的 資料為攝於2017年7月10日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTO TAKEN ON 10.7.2017

建築物高度的合成照片 PHOTOMONTAGES OF BUILDING HEIGHT PROFILE 規劃署 PLANNING DEPARTMENT



參考編號 REFERENCE No. **M/H6/17/6**

圖 PLAN 7D

現有景觀 EXISTING VIEW



現時的建築物高度限制 CURRENT BUILDING HEIGHT RESTRICTIONS

100mPD

130mPD

30 STOREYS



擬議的建築物高度限制 PROPOSED BUILDING HEIGHT RESTRICTIONS

100mPD

135mPD

30 STOREYS

從維多利亞公園遠眺 VIEW FROM VICTORIA PARK

建築物高度在主水平基準上若干米/層數 BUILDING HEIGHT IN METRES ABOVE PRINCIPAL DATUM (mPD) / STOREYS

銅鑼灣區 CAUSEWAY BAY AREA

本圖於2017年11月6日擬備,所根據的 資料為攝於2017年9月29日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTO TAKEN ON 29.9.2017

建築物高度的合成照片 PHOTOMONTAGES OF BUILDING HEIGHT PROFILE

規劃署 **PLANNING DEPARTMENT**



參考編號 REFERENCE No. M/H6/17/6

圖PLAN 7E

觀景點 VIEWING POINT F 時代廣場二座 香港珀麗尚品酒店 利園一期 利園二期 Lee Garden One Two 大寶閣 Trafalgar Court (176mPD) 富豪香港酒店 聖保祿醫院B座 Times Square Tower Two St. Paul's Hospital Block B Le Petit Rosedale Hotel Hong Kong (100mPD) The Elegance Regal Hong Kong Hotel (144mPD) (155mPD) (174mPD) (208mPD) (125mPD) (109mPD) 尚戀 (117mPD) 公理堂大樓 Congregation House 豪園 A座 Fontana Garden Block A (102mPD) Warrenwoods (142mPD) Illumination Terrace (166mPD) 豪園B座 時代廣場一座 Times Square 希慎廣場 Fontana Garden Block B (93mPD) Hysan Place Yoo (122mPD) 皇室大廈 Windsor House Residence (109mPD) (199mPD) (198mPD) Park Haven (139mPD) (100mPD)

現有景觀 EXISTING VIEW



現時的建築物高度限制 CURRENT BUILDING HEIGHT RESTRICTIONS

100mPD

130mPD

6 STOREYS

30 STOREYS

已批准之發展 COMMITTED DEVELOPMENT



擬議的建築物高度限制 PROPOSED BUILDING HEIGHT RESTRICTIONS

135mPD

6 STOREYS

30 STOREYS

■ 已批准之發展 COMMITTED DEVELOPMENT

從掃桿埔遠眺 VIEW FROM SO KON PO

> 建築物高度在主水平基準上若干米/層數 BUILDING HEIGHT IN METRES ABOVE PRINCIPAL DATUM (mPD) / STOREYS

銅鑼灣區 CAUSEWAY BAY AREA

本圖於2017年11月6日擬備,所根據的資料為攝於2017年8月15日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTO TAKEN ON 15.8.2017

建築物高度的合成照片 PHOTOMONTAGES OF BUILDING HEIGHT PROFILE 規劃署 PLANNING DEPARTMENT

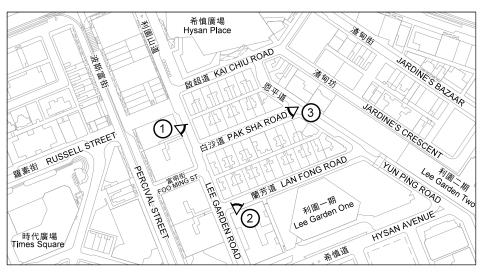


參考編號 REFERENCE No. **M/H6/17/6**

圖PLAN 6 7F







觀景點位置 LOCATION OF VIEWING POINT



PAK SHA ROAD NEIGHBORHOOD

白沙道一帶

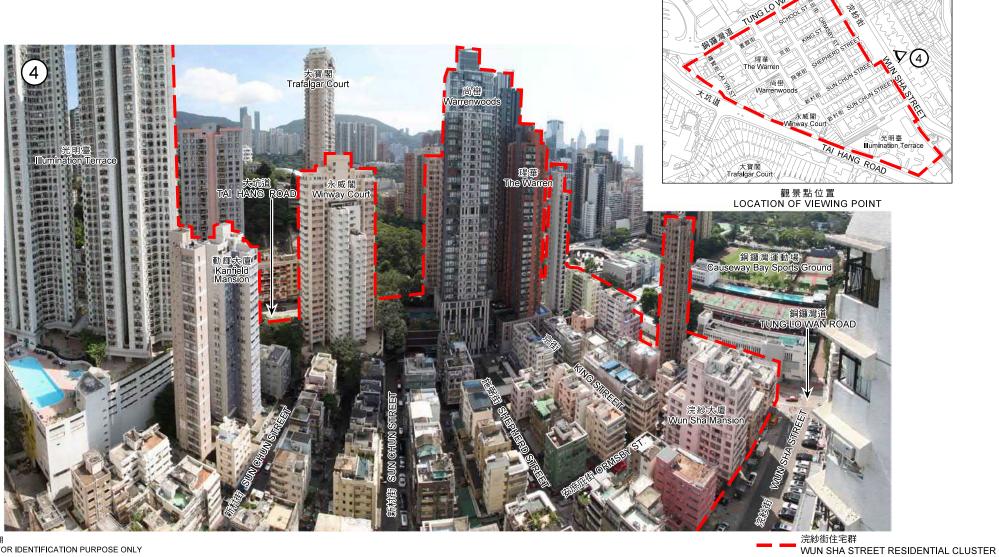
規劃署 **PLANNING DEPARTMENT**



參考編號 REFERENCE No. M/H6/17/6

圖PLAN 8A

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年7月14日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 14.7.2017



界線只作識別用 **BOUNDARY FOR IDENTIFICATION PURPOSE ONLY**

> 本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年5月31日的實地照片

PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTO TAKEN ON 31.5.2017

實地照片 SITE PHOTO

浣紗街住宅群 WUN SHA STREET RESIDENTIAL CLUSTER

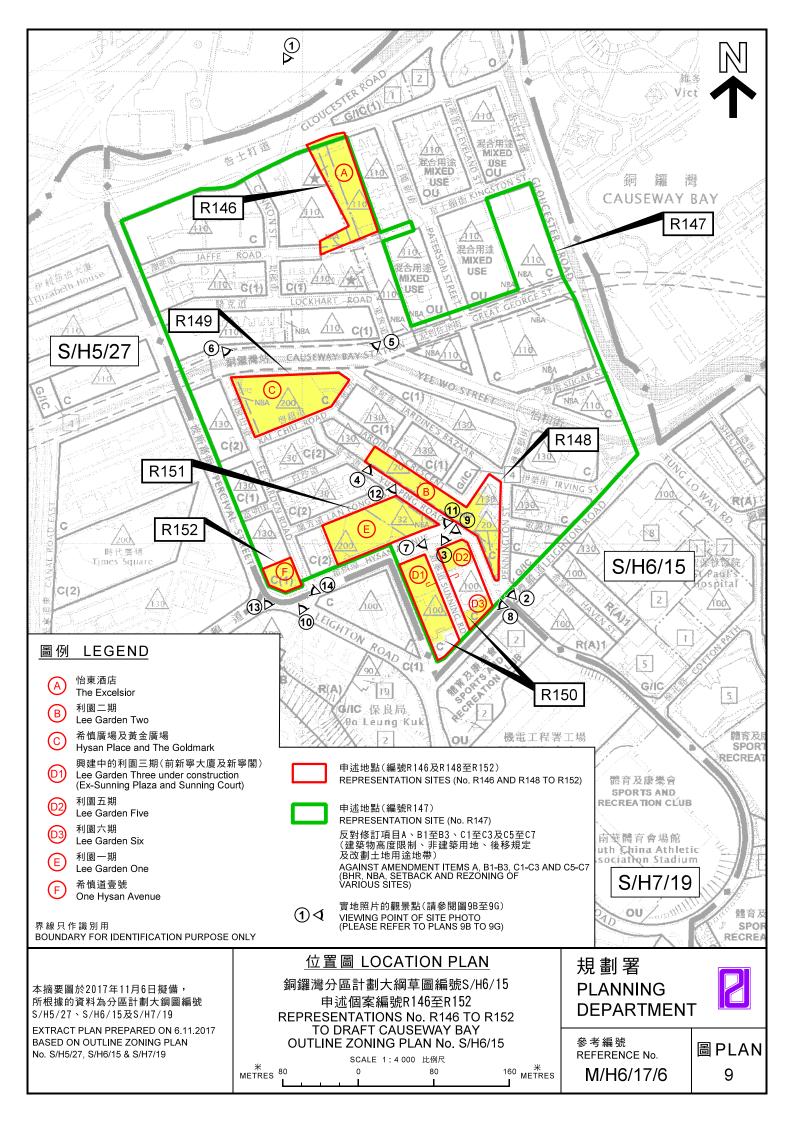
規劃署 **PLANNING DEPARTMENT**

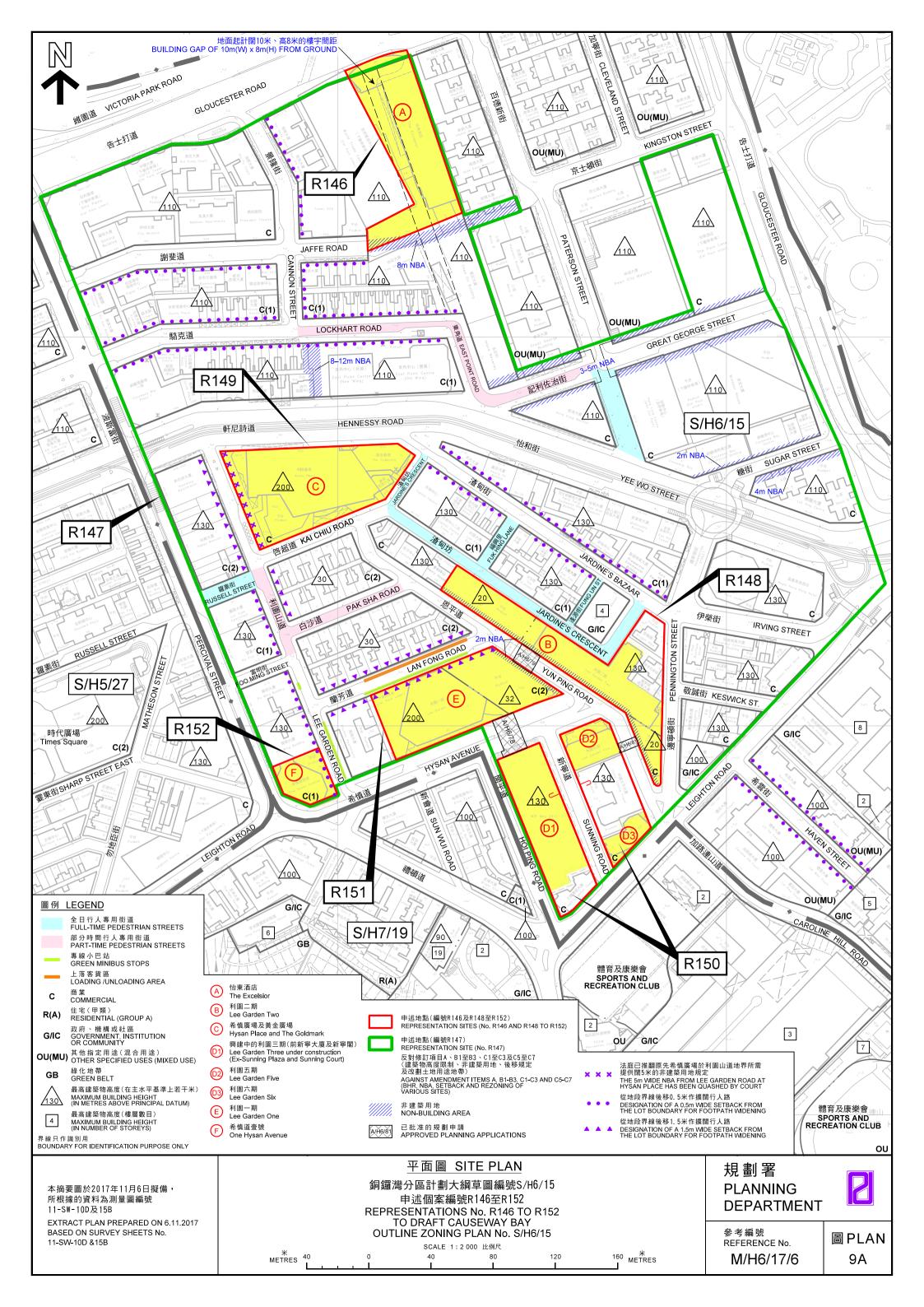


參考編號 REFERENCE No.

M/H6/17/6

圖PLAN 8B







A 怡東酒店
The Excelsior

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年5月31日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTO TAKEN ON 31.5.2017

實地照片 SITE PHOTO

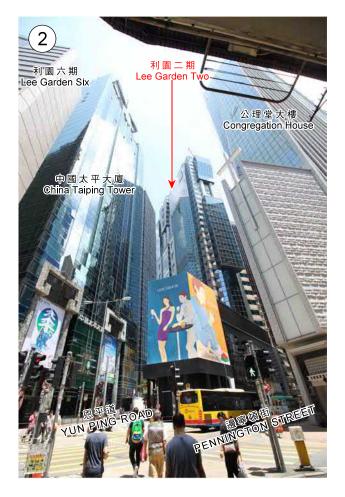
銅鑼灣分區計劃大綱草圖編號S/H6/15 申述個案編號R146 REPRESENTATION No. R146 TO DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN No. S/H6/15

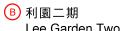
規劃署 PLANNING DEPARTMENT



參考編號 REFERENCE No. M/H6/17/6

圖PLAN 9B









Lee Garden Two

實地照片 SITE PHOTOS

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年5月31日的實地照片 PLAN PREPARED ON 6.11.2017 **BASED ON SITE PHOTOS** TAKEN ON 31.5.2017

銅鑼灣分區計劃大綱草圖編號S/H6/15 申述個案編號R148 REPRESENTATION No. R148 TO DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN No. S/H6/15 規劃署 **PLANNING DEPARTMENT**



參考編號 REFERENCE No.

M/H6/17/6

圖PLAN 9C





© 希慎廣場及黃金廣場 Hysan Place and The Goldmark

實地照片 SITE PHOTOS

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年5月31日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 31.5.2017

銅鑼灣分區計劃大綱草圖編號S/H6/15 申述個案編號R149 REPRESENTATION No. R149 TO DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN No. S/H6/15

規劃署 PLANNING DEPARTMENT



參考編號 REFERENCE No.

M/H6/17/6

圖PLAN 9D







- 回 興建中的利園三期(前新寧大廈及新寧閣) Lee Garden Three under construction (Ex-Sunning Plaza and Sunning Court)
- 利園六期
 Lee Garden Six

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年5月31日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 31.5.2017

實地照片 SITE PHOTOS

銅鑼灣分區計劃大綱草圖編號S/H6/15 申述個案編號R150

REPRESENTATION No. R150
TO DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN No. S/H6/15

規劃署 PLANNING DEPARTMENT



參考編號 REFERENCE No.

M/H6/17/6

圖PLAN 9E







E 利園一期 Lee Garden One

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年5月31日的實地照片 PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 31.5.2017

實地照片 SITE PHOTOS

銅鑼灣分區計劃大綱草圖編號S/H6/15 申述個案編號R151

REPRESENTATION No. R151
TO DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN No. S/H6/15

規劃署 PLANNING DEPARTMENT



參考編號 REFERENCE No. M/H6/17/6

圖 PLAN 9F





F 希慎道壹號 One Hysan Avenue

本圖於2017年11月6日擬備, 所根據的資料為攝於 2017年5月31日的實地照片

PLAN PREPARED ON 6.11.2017 BASED ON SITE PHOTOS TAKEN ON 31.5.2017

實地照片 SITE PHOTOS

銅鑼灣分區計劃大綱草圖編號S/H6/15 申述個案編號R152

REPRESENTATION No. R152 TO DRAFT CAUSEWAY BAY OUTLINE ZONING PLAN No. S/H6/15

規劃署 PLANNING DEPARTMENT



參考編號 REFERENCE No.

M/H6/17/6

圖PLAN 9G

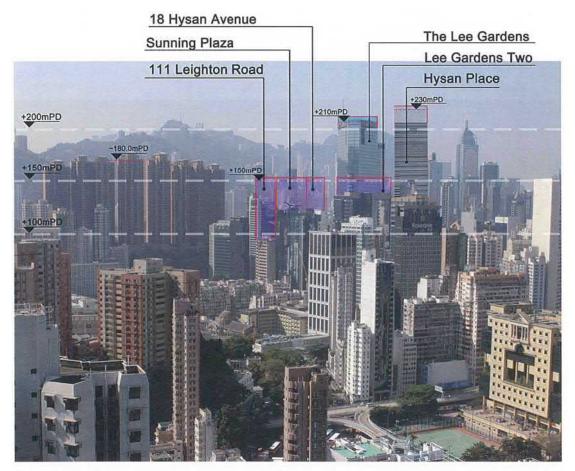


Diagram 1:

Legend:

Proposed Building Height for Hysan Place, The Lee Gardens, Lee Gardens Two, Hysan Avenue, Sunning Plaza and 111 Leighton Road

Proposed Building Height Profile

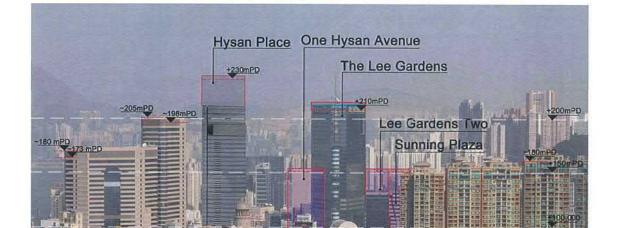


Diagram 2:

Proposed building height for Hysan Place, The Lee Gardens, One Hysan Avenue, Lee Gardens Two and Sunning Plaza

Legend: Proposed Building Height Profile

資料來源:合成照片由申述人編號R147至R152提供

SOURCE: PHOTOMONTAGES SUBMITTED BY REPRESENTERS No. R147 TO R152

參考編號 REFERENCE No. M/H6/17/6