
Appendix C
Drainage Impact Assessment

Section 16 Planning Application for Proposed Mixed-Use Development (Proposed Flat with Permitted Commercial Uses) in Planning Area 32B, Hung Shui Kiu, New Territories (Application No.: A/HSK/619)

Drainage Impact Assessment

August 2026

Prepared by:

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AREA 32B/DIA/Figure 2	Master Layout Plan
AREA 32B/DIA/Figure 3	Drainage Layout Plan

1. Introduction

1.1 Background

- 1.1.1 AECOM Asia Company Limited (AECOM) has been commissioned by the project proponent to act as the engineering consultant to conduct a Drainage Impact Assessment (DIA) for a private mixed-use development in Hung Shui Kiu, Yuen Long.
- 1.1.2 The S16 Planning Application involves Area 32B with total area of 13,601m²; referred as the "Application Site". The Site is located next to the Kong Sham Western Highway. Location plan of the Application Site refers to figure no. **AREA 32B/DIA/Figure 1**.
- 1.1.3 The Application Site falls within "C(1)" zone on the Draft Hung Shui Kiu and Ha Tsuen OZP No. S/HSK/3 and lies within Hung Shui Kiu / Ha Tsuen (HSK/HT) New Development Area (NDA). According to the OZP, commercial uses including 'Hotel', 'Office', 'Eating Place', 'Shop and Services', etc. are always permitted in "C(1)" zone; while 'Flat' use is under Column 2, planning permission is therefore required for the proposed residential use in Site A of the Application Site.
- 1.1.4 This DIA report reviews the drainage impact of the proposed development and serves as a supporting document for the S16 Planning Application.

1.2 Base Case and Proposed Mixed-Use Development for Area 32B

- 1.2.1 A base case is assumed by following the development mix specified in the Outline Development Plan No. D/HSK/1 with maximum plot ratio of 9.5 and the total non-domestic GFA of not more than 129,210m². The development mix for Area 32B consists of retail (i.e. 35% of non-domestic GFA), hotel (i.e. 20% of non-domestic GFA) and office (i.e. 45% of non-domestic GFA).
- 1.2.2 The proposed mixed-use development for Area 32B (i.e. Proposed Development) consists of residential, retail, hotel and office. Details of development parameter refers to **Table 1**.

2. Development Proposal

2.1 The Proposed Development

- 2.1.1 The Application Site area is approximately 13,601m². The Proposed Development total plot ratio is not more than 9.5. (i.e. the total GFA is not more than 129,210m²) The Applicant proposed 71,066m² as non-domestic GFA which is for the as-of-right permitted commercial use, whereas the remaining 58,144m² as domestic GFA would be used for the proposed residential development.
- 2.1.2 The proposed residential use would be clustered in Site A with some as of right permitted commercial use (e.g. retail) provided. Site B would only be used for commercial purpose (e.g. office, hotel and retail) without any residential element. The anticipated completion year of the Application Site (except for the remaining non-domestic GFA to be implemented at a later stage under the arrangement of “Pay for What You Build” Pilot Scheme) is 2033.

2.1.3 The Master Layout Plan (MLP) of the Application Site is shown in figure no. **AREA 32B/DIA/Figure 2**. The comparison table of development parameters between the base case and proposed development is summarized in **Table 1** below.

	Base Case	Proposed Development (Site A)	Proposed Development (Site B)
Site Area	13,601m ²	8,967m ²	4,634m ²
Total PR (not more than)	9.5	7.1	14.2
		9.5 (Site A + Site B)	
Total GFA (not more than)	129,210m ²	63,365m ²	65,845m ²
		129,210m ² (Site A + Site B)	
Domestic Portion			
Total Domestic GFA (not more than)	-	58,144m ²	-
No. of Units	-	1,240	-
Population ⁽¹⁾	-	3,348	-
Non-Domestic Portion – Resident’s Recreational Facilities ⁽²⁾	-	2,325m ²	-
Non-Domestic Portion – Retail			
Total Non-Domestic GFA	45,223.5m ²	5,221m ² ⁽³⁾	354m ² ⁽³⁾
Non-Domestic Portion – Hotel			
Total Non-Domestic GFA	25,842m ²	-	27,871m ² ⁽³⁾
No. of Hotel Rooms	-	-	924
Non-Domestic Portion – Office			
Total Non-Domestic GFA	58,144.5m ²	-	37,620m ²
Non-Domestic Portion – Office (Completed in 2033)			
Total Non-Domestic GFA	-	-	9,290m ² ⁽³⁾
Non-Domestic Portion – Office (Remaining)			
Total Non-Domestic GFA	-	-	28,330m ²

Table 1 – Key Development Parameters

Remarks:

- (1) A person per flat of 2.7 is assumed.
- (2) Or such other areas of clubhouse as may be approved by the Buildings Department based on the total permissible domestic GFA for individual land parcel (site under the Buildings Ordinance) at the future General Building Plans.
- (3) Drawing upon the spirit of the "Pay for What You Build" Pilot Scheme, about 60% of the non-domestic GFA in Area 32B (i.e. about 42,736m²) will be implemented first by the target completion year 2033. The GFA to be distributed in both Site A and Site B are 5,221m² and 37,515m² respectively.

3. Discussion

3.1 Existing Drainage System

- 3.1.1 The Application Site is situated located at the north of Yick Yuen Road in Hung Shui Kiu, Yuen Long and adjoins the riverside promenade to the north. The Application Site is currently used for open storage and car parking.
- 3.1.2 According to GEOINFO Map, an existing 3m wide rectangular nullah is identified at the north of the Application Site.

3.2 Proposed Public Drainage Arrangement under Hung Shui Kiu/Ha Tsuen New Development Area by CEDD

- 3.2.1 The Application Site is within the drainage catchments of Hung Shui Kiu/Ha Tsuen New Development Area (HSK/HT NDA). With reference to DIA of Planning Application No. A/HSK/452, it is noted a hydraulic model was established in accordance with Drainage Services Department's guidelines to assess the hydraulic performance of the proposed drainage system within HSK/HT NDA. The result showed that the proposed drainage system is sufficient to cater for the peak flows arising from the planned HSK/HT NDA.
- 3.2.2 According to CEDD's information provided, drainage lead-in is proposed under the design of Contract 4 of HSK/HT SPD for runoff discharge from the Proposed Development. The Proposed Development will adopt the proposed drainage arrangements implemented by CEDD under HSK/HT NDA project.
- 3.2.3 The drainage arrangement of the Application Site refers to figure no. **AREA 32B/DIA/Figure 3**.

3.3 Impact on Proposed Public Drainage System

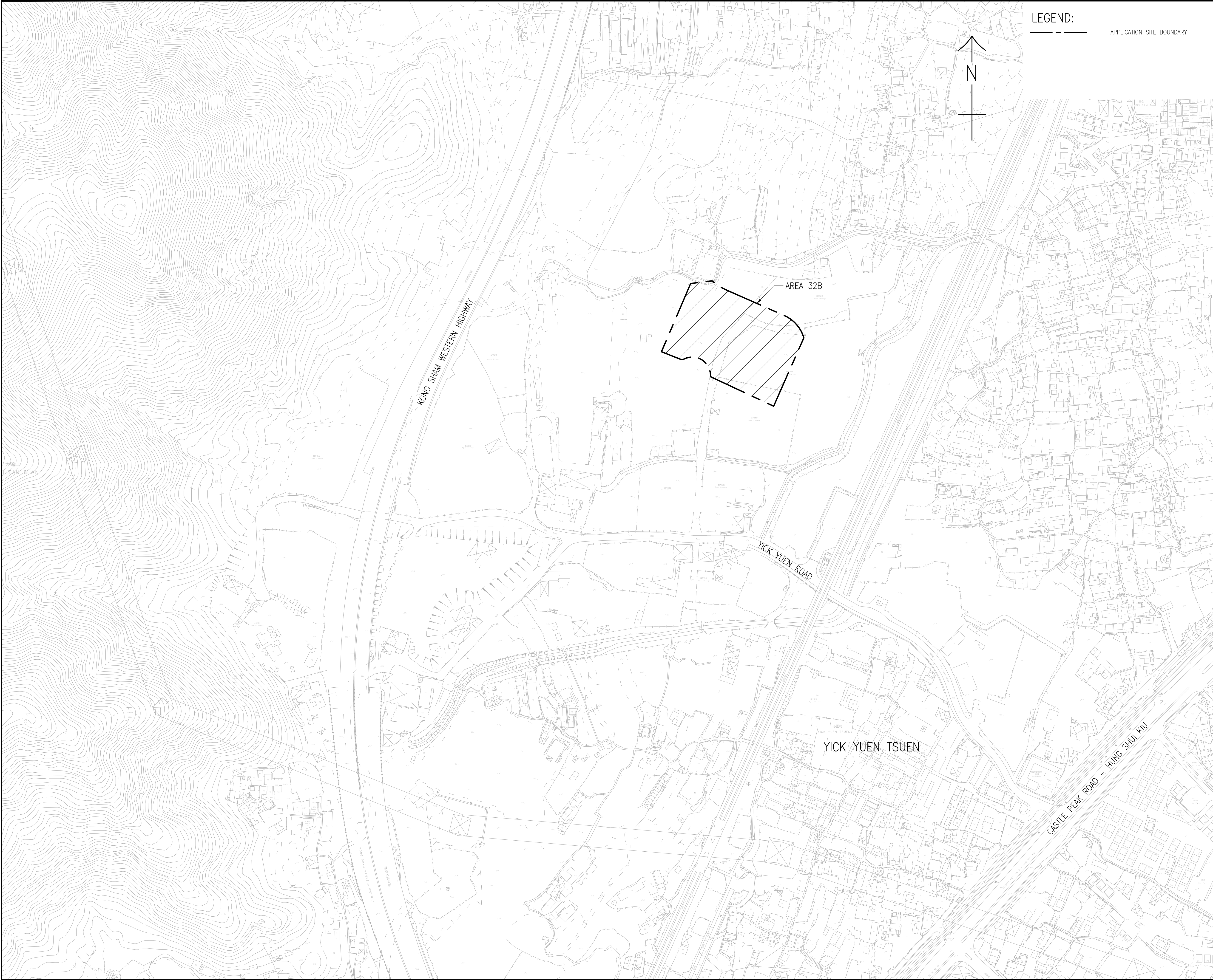
- 3.3.1 Stormwater of the Proposed Development will be discharged to the planned revitalised river to be constructed by HSK/HT NDA. The Proposed Development will introduce residential component in this zone to form a mixed-use development without changing the site area of Area 32B. The drainage characteristics are considered similar as HSK OZP. (i.e. similar paved/unpaved ratio) No significant change in drainage discharge proposal due the Proposed Development is anticipated.
- 3.3.2 Therefore, no adverse impact on the proposed drainage system is anticipated.

4. Conclusion

- 4.1.1 The Application Site is within the drainage catchments of HSK/HT NDA. A hydraulic model was established to show that the proposed drainage system is sufficient to cater for the peak flows arising from the planned HSK/HT NDA.
- 4.1.2 The Proposed Development will introduce residential component in this zone to form a mixed-use development without changing the site area. The drainage characteristics are considered similar as HSK OZP. (i.e. similar paved/unpaved ratio) Therefore, no adverse impact on existing/planned drainage system is anticipated.
- 4.1.3 The change in land-use over the same site would not influence the drainage characteristics at all. Therefore, it can be concluded that, the proposed development would not pose adverse drainage impact.

End of Report

Figure



LEGEND:
APPLICATION SITE BOUNDARY

AECOM

PROJECT
項目
SECTION 16 PLANNING
APPLICATION FOR
PROPOSED RESIDENTIAL
DEVELOPMENT WITH
PERMITTED COMMERCIAL
USES IN PLANNING AREA 32B,
HUNG SHUI KIU,
NEW TERRITORIES

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STATUS
階段

SCALE
比例
A1 1: 1000

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
HUNG SHUI KIU

SHEET TITLE
圖紙名稱
LOCATION PLAN

SHEET NUMBER
圖紙編號
AREA 32B/DIA/FIGURE 1

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STATUS
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SCALE
比例
A1 1: 500

DIMENSION UNIT
尺寸單位
METRES

KEY PLAN
索引圖

PROJECT NO.
項目編號
HUNG SHUI KIU

AGREEMENT NO.
協議編號

SHEET TITLE
圖紙名稱
MASTER LAYOUT PLAN

SHEET NUMBER
圖紙編號
AREA 32B/DIA/FIGURE 2

