

Appendix 4

Supplementary Information for the NIA

2 ROAD TRAFFIC NOISE ASSESSMENT

2.1 INTRODUCTION

- 2.1.1. This section presents the assessment of potential traffic noise impacts associated with the operation phase of the proposed development. During the operation phase, road traffic would be the major source of noise pollution. Representative noise sensitive receivers (NSRs) of the proposed development have been identified and potential impacts have been assessed. Suitable mitigation measures where necessary have been recommended to safeguard the representative NSRs.

2.2 TRAFFIC NOISE STANDARD

- 2.2.1. The Hong Kong Government's overall noise policy objectives for new developments are based on prescribed noise standards which apply to building that rely on openable windows for ventilation. It is confirmed that all rooms included dormitory and multi-purpose rooms in the development will not be used for educational uses nor diagnostic rooms/wards. The maximum permissible road traffic noise level at noise sensitive building facades specified in the Hong Kong Planning Standards and Guidelines (HKPSG) is as follows:

$L_{10(1 \text{ hour})}$ 70dB(A), for all domestic and office developments

2.3 ASSESSMENT METHODOLOGY

- 2.3.1. In this assessment, the potential noise impact arising from nearby existing and future road carriageways on the development has been assessed. It involved the prediction of future noise impacts on Noise Sensitive Receivers (NSRs) arising from traffic flows along existing and future road carriageways situated within or in the vicinity of the subject site. Calculations of predicted road traffic noise were based on the peak hour traffic flows projected within a 15-year period from the target completion date of the proposed development, year 2025. For worst-case scenario evaluation, the assessment year was chosen to be year 2040, which has the maximum forecasted traffic data within 15-year period. The year 2040 traffic data [and TD agreement with traffic consultant confirmation](#) are attached in **Appendix 2.1**.
- 2.3.2. The U.K. Department of Transport's procedure "Calculation of Road Traffic Noise" was used to predict the hourly $L_{10(1\text{-hour})}$ noise levels generated from road traffic at selected representative NSRs. Practicable environmental mitigation measures have been recommended, where necessary. The predicted noise levels were compared with the relevant HKPSG noise standards (i.e. $L_{10(1\text{-hour})}$ 70dB(A)).
- 2.3.3. The predicted 2040 peak hour traffic data on the main road carriageways surrounding the Site. Other road carriageways are either with very little traffic volume or already shielded by other buildings in the vicinity so that the impact derived from these road carriageways is considered insignificant. All roads are assumed of impervious surface with speed limit of 50km/hr in this assessment.

2.4 NOISE SENSITIVE RECEIVERS

- 2.4.1. A number of Noise Sensitive Receivers (NSRs), which are likely to be subject to adverse traffic noise impacts, were selected for the assessment. All assessment points were taken at 1.2m above the floor and 1m away from the facade of openable windows (which would be for ventilation purpose) of rooms including mainly dormitory rooms, office and multi-purpose rooms. **Appendix 2.2** shows the locations of the selected NSRs for traffic noise impact assessment.

3.3 NOISE SENSITIVE RECEIVERS

- 3.3.1 The assessment area for noise impact should generally be defined by a distance of 300m from the site boundary. These NSRs include both the existing and planned sensitive developments.
- 3.3.2 The representative existing and planned NSRs are identified by means of reviewing topographic maps, aerial photos, land status plans, relevant Outline Zoning Plans (OZP), Outline Development Plans, Layout Plans and other relevant published land use plans, including plans and drawings published by Lands Department and land use and development applications approved by the Town Planning Board, and supplemented by site inspections.
- 3.3.3 With reference to the RNTPC Paper No. A/YL/252A for Proposed Composite School and Religious Institution (Church) Development in Yuen Long Baptist Church, it is noted that the eastern, southern and northern sides of the building will be installed with fixed windows and will not rely on openable window for ventilation. Therefore, the Yuen Long Baptist Church is not considered as an NSR. The RNTPC Paper is extracted in **Appendix 3.7**.
- 3.3.4 The representative NSRs of the proposed Site are identified in **Table 3.4** and presented in **Figure 2**.

Table 3.4 Representative NSRs

NSR	Location	Type of use	No. of storey	Distance form site boundary (m)
N01	Village House	Residential	1	15
N02	Village House	Residential	2	50
N03	Village House	Residential	2	31
B4	Proposed Development	Residential	5	-
B8		Residential	5	-
B18		Residential	5	-
H4	Siu Lo	Residential	2	-

workshop was observed. Therefore, they are not considered as potential noise source. For conservative approach, the sound power level of previous S.16 application was adopted in the assessment.

- 3.4.8 A Caltex gas station with 24-hour operation was identified during site inspection. Split-typed air conditioners were identified, no detectable noise was observed during the site survey. **No noisy activities was observed during night time.** Therefore, it is not considered as a potential noise source. For conservative approach, the sound power level of previous S.16 application was adopted in the assessment.
- 3.4.9 According to the document of Proposed Amendments to the Approved Yuen Long Outline Zoning Plan No. S/YL/21 (Ref. RNTPC Paper No. 9/15), a planned Petrol cum LPG Filling Station will be located in the far southwest (>250m) to the proposed Site. No direct line of sight from the proposed Site is expected due to the obstruction of the future youth hostel. With a large distance attenuation, it is not considered as a potential noise source. For conservative approach, the sound power level of Caltex gas station of previous S.16 application was adopted in the assessment.
- 3.4.10 The location of existing fixed plant noise source is provided in **Figure 4**. Existing fixed noise source identified on-site and the respective SWL are provided in **Appendix 3.4**.

Planned Fixed Noise Source

- 3.4.11 The information regarding the sound power level and the quantity of the unitary A/C unit is not available from project proponent at this time. The assessment approach is to specify a maximum cumulative allowable sound power level of the plant equipment which is determined by backward calculation with a known maximum allowable impact sound level i.e. the adopted criteria. The proposed maximum cumulative allowable sound power level shall be applicable at any point measured at the site boundary of the proposed development.
- 3.4.12 The proposed maximum allowable Sound Power Level of the planned fixed noise sources are shown in **Table 3.5**. For the planned fixed noise sources, tonality correction of 3 dB(A) has been applied for conservative approach. Detailed calculation of the Maximum Allowable Sound Power Level (SWL) of the corresponding planned fixed noise sources is provided in **Appendix 3.2**. The maximum allowable SWLs of the planned fixed noise sources would be specified in the specification during design and tender stage for noise control purpose. The project applicant shall be responsible to ensure compliance of requirements as stipulated in the HKPSG and the NCO.

Table 3.5: Maximum Cumulative Allowable SWL of Planned Noise Sources at site boundary

Noise Source	Maximum Cumulative Allowable Sound Power Level (SWL), dB(A)	
	Day-time	Night-time
Building Equipment in the Proposed site	67	65

Appendix 2.1 TD Endorsement



本署檔案 Our Ref. : (NKWA9) in TD NR157/161/YLDD-120
來函檔號 Your Ref. : 21120HK/kvl/wkk/03
電話 Tel. : 2399 2565
圖文傳真 Fax : 2381 3799
電郵 Email : szemanfok@td.gov.hk

5 August 2022

CTA Consultants Ltd.
Unit 801, 8/F, Technology Plaza,
651 King's Road, North Point, Hong Kong

Attn: Kelvin LEUNG

Dear Mr LEUNG,

**Proposed Residential Development Conservation of
a Grade 3 Historic Building in Yuen Long Siu Lo**

**Technical Note on Methodology for Estimating Traffic Forecasts for Traffic Noise
Impact Assessment (TNIA) Summary of 'Responses to Comments' (June 2022)**

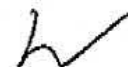
We have no comment on your submission.

Yours faithfully,



(FOK Sze-man)

for Commissioner for Transport



新界分區辦事處
NT Regional Office
九龍聯運街三十號旺角政府合署七樓
7th Floor, Mong Kok Government Offices, 30 Luen Wan Street, Kowloon.
圖文傳真 Fax No.: 2381 3799 (新界區) (NTRO)
網址 Web Site: <http://www.td.gov.hk>

Appendix 2.1 Traffic Consultant Confirmation Letter

用
心
以
誠

CTA CONSULTANTS LIMITED
Transportation, Planning, Engineering, Research and Development

We commit We deliver

Our Ref: 21120HK /kvl/wkk/04

By E-mail

(Email: henry.mak@beexergy.com)

19 May 2023

BeeXergy Consulting Limited (BXG)
Unit 2001-05, Apec Plaza,
49 Hoi Yuen Road, Kwun Tong,
Kowloon, Hong Kong

Attn: Mr. Henry Mak

Dear Mr. Mak,

**Proposed Residential Development Conservation of
a Grade 3 Historic Building in Yuen Long Siu Lo**

**Technical Note on Methodology for Estimating Traffic Forecasts for
Traffic Noise Impact Assessment (TNIA)**

We refer to our submission of traffic forecast and the endorsement letters from Transport Department [Ref No. (NKWA9) in TD NR157/161/YLDD-120] dated 5 August 2022 regarding to the captioned subject as per attached.

We write to confirm that Transport Department's endorsed methodology prepared by us has been strictly adopted in preparing the traffic forecast for the Noise Impact Assessment Report prepared by BeeXergy Consulting Limited (BXG).

Should you have any queries or require further information, please do not hesitate to contact the undersigned or Mr. W K Kwong at 2214 0849.

Thank you very much for your kind attention and we are looking forward to your favourable reply at your earliest convenience.

Yours Faithfully,
For and on behalf of
CTA Consultants Ltd.



P.P. Kelvin Leung
CEO
Encl.

CTA Consultants Limited 志達顧問有限公司
Unit 801, 8/F, Technology Plaza, 651 King's Road, North Point, Hong Kong
香港北角英皇道 651 號科匯中心 8 樓 801 室
Tel: (852) 2214 0849 / Fax: (852) 2214 0817
Email: cta@ctaconsultants.com / website: www.ctaconsultants.com



Appendix 3.7 Board Paper for Yuen Long Baptist Church

RNTPC Paper No. A/YL/252A
For Consideration by
the Rural and New Town
Planning Committee
on 3.5.2019

APPLICATION FOR PERMISSION UNDER SECTION 16 OF THE TOWN PLANNING ORDINANCE

APPLICATION NO. A/YL/252

<u>Applicant</u>	Yuen Long Baptist Church represented by DeSPACE (International) Limited
<u>Site</u>	Lots 1694, 1695 S.F RP (Part) and 3721 in D.D. 120, Tai Kei Leng, Yuen Long, New Territories
<u>Site Area</u>	1,762.29m ²
<u>Lease</u>	(i) Lots 1694 and 1695 S.F RP :- Block Government Lease (demised for agricultural use) (ii) Lot 3721:- Under New Grant No. 529 (restricted for non-industrial use and only a church is allowed with building height (BH) restriction not exceeding 11m and 2 storeys)
<u>Plan</u>	Approved Yuen Long Outline Zoning Plan (OZP) No. S/YL/23
<u>Zoning</u>	“Government, Institution or Community(1)” (“G/IC(1)”) (about 81%) <i>[Restricted to a maximum BH of 3 storeys (8 storeys for ‘School’ and ‘Hospital’ uses) excluding basement(s). Based on the individual merits of a development or redevelopment proposal, minor relaxation of the BH restriction may be considered by the Town Planning Board on application under s.16 of the Town Planning Ordinance]</i> “Village Type Development” (“V”) (about 19%) <i>[No development restriction for ‘School’ and ‘Religious Institution’ uses]</i>
<u>Application</u>	Proposed Composite School and Religious Institution (Church) Development, with minor relaxation of BH Restriction

1. The Proposal

- 1.1 The applicant seeks planning permission for a proposed composite building comprising school and religious institution (church) on the application site (the Site) which is mainly zoned “G/IC(1)” (81%) and a minor portion zoned “V” (19%) on the OZP. Planning permission is also sought for proposed minor relaxation of BH restriction under the “G/IC(1)” zone from 3 storeys to 8 storeys (excluding 2 basement

Appendix 3.7 Board Paper for Yuen Long Baptist Church

classified as a Class A, B or C site as it does not abut on a specified street, the development intensity should be determined under Building (Planning) Regulation 19(3) unless a right of way not less than 4.5m wide is granted by LandsD for the proposed run-in/out of the Site.

- (b) If the Site is classified as Class A site, the proposed development parameter of the Site is acceptable under Schedule 1 of the Building (Planning) Regulation.
- (c) The Site shall be provided with means of obtaining access thereto from a street under the Building (Planning) Regulation 5 and emergency vehicular access shall be provided for all the buildings to be erected on the Site in accordance with the requirements under the Building (Planning) Regulation 41D.
- (d) Disregarding carparking spaces from GFA calculation under the Buildings Ordinance will be considered on the basis of the criteria set out in PNAP APP-2 during building plan submission stage.
- (e) The proposed development should follow and comply with the pre-requisite for GFA concession in PNAP APP-151 and the Sustainable Building Design guidelines stipulated in PNAP APP-152 during the preparation of detailed building design.
- (f) It is noted in applicant's FI submission in **Appendix Id** that the eastern, southern and northern sides of the building will be installed with fixed windows. The applicant should be reminded that the Building (Planning) Regulation 30 and 36 for natural lighting and ventilation by the provision of prescribed windows should be complied with.
- (g) Detailed comment will only be offered during building plan submission stage.

Traffic

8.1.5 Comments of the Assistant Commissioner for Transport/NT, Transport Department (AC for T/NT, TD)

Having reviewed the FI (**Appendix Id**), he has no further comment on the application. Should the application be approved, the following approval conditions (a) to (c) are recommended to be stipulated :

- (a) the submission and implementation of a detailed traffic management plan to the satisfaction of the Commissioner for Transport (C for T) or of the Board;