
Appendix C
Revised Noise Impact Review

Prepared for

Ten Choice Development Limited

Prepared by

Ramboll Hong Kong Limited

**SECTION 16 PLANNING APPLICATION FOR PROPOSED
SOCIAL WELFARE FACILITY (RESIDENTIAL CARE HOME
FOR THE ELDERLY) IN “RESIDENTIAL (GROUP C)” ZONE
AT PALM SPRINGS PLAZA (SHOP NOS. G1-G3 & G5-G8),
YUEN LONG, NEW TERRITORIES**

NOISE IMPACT REVIEW

Date **10 September 2026**

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Signed



Approved by **Tony Cheng**
Senior Manager



Signed

Project Reference

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1. INTRODUCTION

1.1 Background and Objectives

- 1.1.1 This planning statement is submitted to the Town Planning Board (the Board) under Section 16 of the Town Planning Ordinance to seek permission for proposed Social Welfare Facility (Residential Care Home for the Elderly) use (hereafter referred to as "the Proposed RCHE") at Palm Springs Plaza (Shop Nos. G1-G3 & G5-G8), Yuen Long, New Territories (hereafter referred to as "the Application Premises"). Ramboll Hong Kong Limited (the Consultant) has been commissioned by the Applicant to conduct this Noise Impact Review.

1.2 Project Location and Description

- 1.2.1 The Palm Springs Plaza is located at the middle of the Palm Springs.
- 1.2.2 **Figure 1.1** shows the location and the environs of the Palm Springs Plaza.
- 1.2.3 The approved general building plan of the plaza can be found in **Appendix 1.1**.
- 1.2.4 The applicant proposes to convert an area of around 974m² on the G/F of Palm Springs Plaza (Shop Nos. G1-G3 & G5-G8) to the Proposed RCHE, which will provide 90 private bed spaces. The layout of the Proposed RCHE is shown in **Figure 1.2**.

1.3 Noise Environment Appraisal

- 1.3.1 The Palm Springs Plaza is located at the middle of the Palm Springs and surrounded by residential houses. The Proposed RCHE is located at the western part of the ground floor of the plaza. Therefore, there is no fixed noise sources affecting the proposed RCHE.
- 1.3.2 The only noise source affecting the proposed RCHE is the Palm Springs Boulevard, which is a local road. The major road in the area, such as the Castle Peak Road and San Tin Highway are located about 380m away from the proposed RCHE with clusters of residential blocks located in between. Therefore, there is no line of sight from the proposed RCHE to these major roads.
- 1.3.3 Section 2 reviews whether the Proposed RCHE will be subject to any adverse traffic noise impact from the local road.

2. NOISE IMPACT REVIEW

2.1 Scope of Work

- 2.1.1 The aim of this study is to assess whether the proposed RCHE use on the G/F of Palm Springs Plaza (Shop Nos. G1-G3 & G5-G8) would be subject to any adverse noise impact due to the surrounding road networks. Mitigation measures may be required if any adverse impact is identified.
- 2.1.2 The Palm Springs Plaza is located at the middle of the Palm Springs which is surrounded by residential houses. The major roads of the area (Castle Peak Road and San Tin Highway) are located far away from the plaza (~ 380m) and are separated by clusters of houses in between. As such, it is considered that the noise impact to be experienced by the proposed RCHE would only be from the Palm Springs Boulevard which is a local road.
- 2.1.3 The Sunflower Path is an internal road with a gate bar. This road is connected to 10 houses and the ancillary car carpark which serves the Palm Springs Plaza, and so there would be very limited number of private cars travelling along this internal road. As such, this internal road is not anticipated to induce any adverse road traffic noise impact on the Proposed RCHE.
- 2.1.4 The existing ancillary carpark is a charged carpark with private car parking spaces for the Palm Springs Plaza. As such, only the visitors of the Palm Springs Plaza will use this carpark. With such limited usage, it is anticipated that this ancillary carpark would not induce any adverse noise impact on the Proposed RCHE.

2.2 Assessment Data

- 2.2.1 The assessment concerns the prediction of the maximum hourly L10 road traffic noise level at noise sensitive receivers (NSRs) of the Proposed RCHE due to the projected traffic flow on the adjacent major road networks for year 2042, which is considered as the worst-case scenario within 15 years upon occupation of the Proposed RCHE in year 2027. Traffic flow was predicted by the project traffic consultant – Atkins; and it has been updated based on the latest traffic model. Traffic data will be submitted to Transport Department for comment, and endorsement will be provided once it is available.
- 2.2.2 The table below is the traffic flow of the segment of Palm Springs Boulevard in front of the Palm Springs Plaza.

Link no	Road	Road Type	Speed Limit (kph)	Weekday	AM Peak	Weekday	PM Peak
L2	Palm Springs Boulevard	Internal Road	50	230 veh/hour	18% Heavy Vehicle	270 veh/hour	16%

- 2.2.3 Endorsement of the traffic data will be submitted to the Transport Department for comment and endorsement. The reply will be included when it is obtained.

2.3 Review Methodology

- 2.3.1 The U.K. Department of Transport's procedure "Calculation of Road Traffic Noise" is applied to predict the hourly L10 noise level generated from road traffic at selected representative noise sensitive receivers (NSRs) of the Proposed RCHE. The predicted noise levels were then compared with the HKPSG noise criterion for assessing the impact.

2.4 Noise Sensitive Receivers and Relevant Criteria

- 2.4.1 Figure 1.2 shows the proposed layout of the RCHE.
- 2.4.2 Openable window will be provided for the dormitory room and isolation room. For the isolation room, it is confirmed with the applicant that there will be no diagnostic activities, i.e. only for sleeping of the sick. Therefore, the traffic noise standard for the RCHE is 70 dB(A) only.
- 2.4.3 Two representative NSRs are selected for this review, one for the dormitory room and one for the isolation room. **Figure 2.1** shows the location of the two representative NSRs and the associated distance and angle of view from the NSR to the noise source line of the Palm Springs Boulevard.

2.5 Traffic Noise Review

- 2.5.1 The table below shows the predicted traffic noise level at the representative NSRs. Detailed calculations are shown in **Appendix 2.1**.

Table 2.1 Predicted Plaza (GBP)

Representative NSRs	Traffic Noise Level (AM Peak) L10 dB(A)	Traffic Noise Level (PM Peak) L10 dB(A)
Dormitory Room	66	61
Isolation Room	66	61

- 2.5.2 The predicted noise level at the representative NSRs is around 61 to 66 dB(A) which is well below the recommended traffic noise level stipulated in Table 4.1 of Chapter 9 Environment of Hong Kong Planning Standards and Guidelines.
- 2.5.3 The future occupant within the proposed RCHE will not be subject to adverse traffic noise impact. No mitigation measures are required.

3. REVIEW OF THE NOISE FROM ELECTRICAL AND MECHANICAL SYSTEM IN THE PALM SPRINGS PLAZA

3.1 Overall Summary

3.1.1 Based on the approved General Building Plan, the E&M room (including pump room and generator room) is located on the roof of the eastern end of the Palm Springs Plaza. Since the Proposed RCHE is located on the ground floor of the western end of the Palm Springs Plaza, there is no line of sight from the Proposed RCHE to the E&M rooms. As such, there will be no air-borne noise transmission from these E&M facilities to the Proposed RCHE.

3.1.2 The General Building Plan showing the location of the E&M room is attached in **Appendix 1.1.**

3.2 Structure borne noise from Electrical and Mechanical System

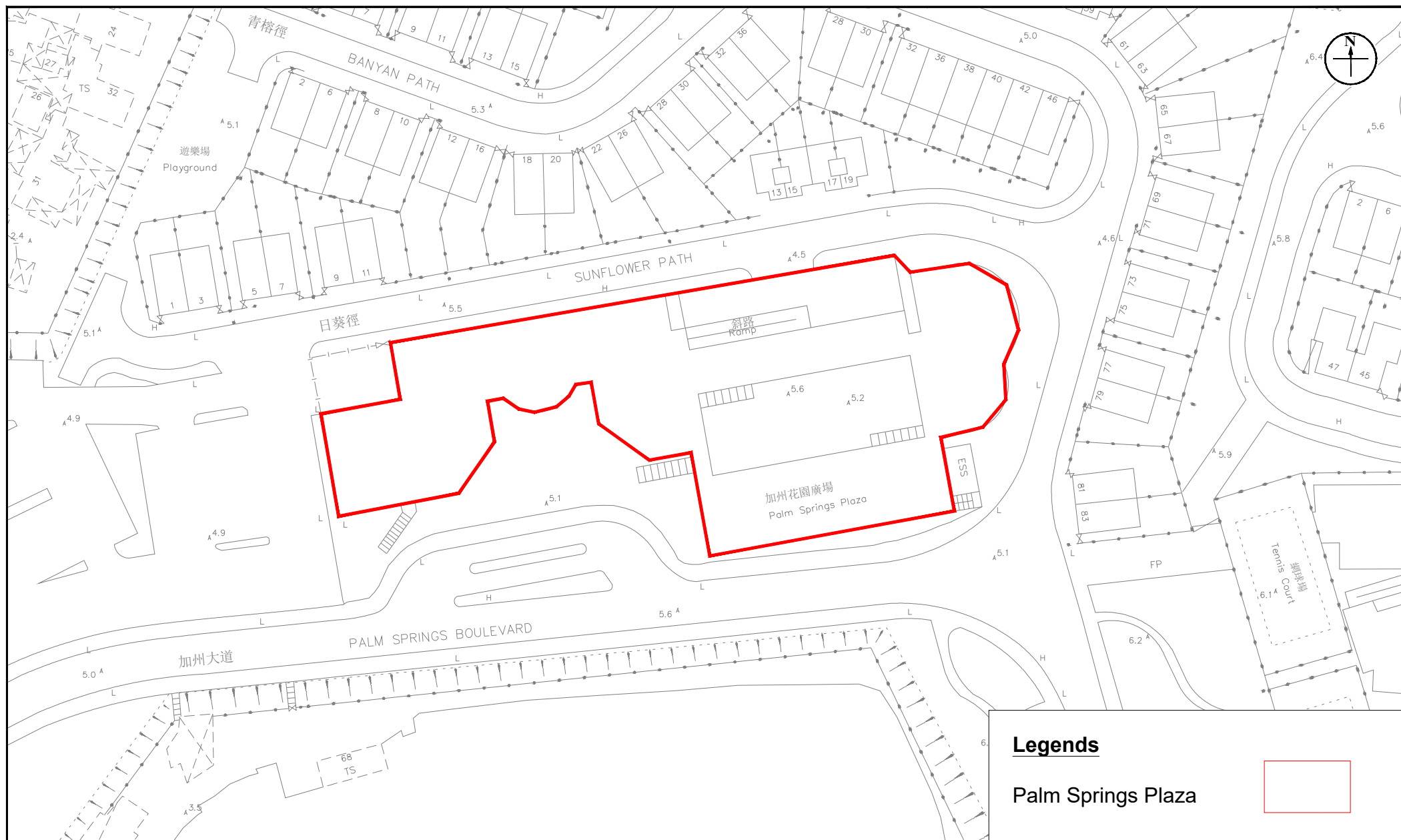
3.2.1 Potential structure-borne noise transmission may be due to the operation of pump. However, since there is a commercial floor between the pump room located on the roof and the Proposed RCHE located on the ground floor, and they are also located at two different ends of the Palm Springs Plaza, it is anticipated that there would be no structure-borne noise transmission impact to the Proposed RCHE.

4. OVERALL CONCLUSION

4.1 Overall Summary

- 4.1.1 The Applicant proposed to convert an area of around 974m² on the G/F of Palm Springs Plaza (Shop Nos. G1-G3 & G5-G8) to the Proposed RCHE, which will provide 90 private bed spaces.
- 4.1.2 The major noise source for the proposed RCHE is the traffic noise from the Palm Springs Boulevard, which is a local road in front of the plaza. A noise review has been carried out and the predicted traffic noise level at the proposed RCHE is well below the relevant HKPSG's traffic noise standard.
- 4.1.3 Therefore, there is no adverse traffic noise impact with the implementation of the Proposed RCHE.
- 4.1.4 The proposed RCHE would not be subject to any adverse air borne or structural borne noise impact from the electrical and mechanical system of the Palm Springs Plaza.

Figures



Legends

Palm Springs Plaza



Figure: 1.1

Title: Location of Palm Springs Plaza and its Environs

Project: Section 16 Planning Application for Proposed Social Welfare Facility (Residential Care Home for the Elderly) in "Residential (Group C)" Zone at Palm Springs Plaza (Shop Nos. G1-G3 & G5-G8), Yuen Long, New Territories

RAMBOLL

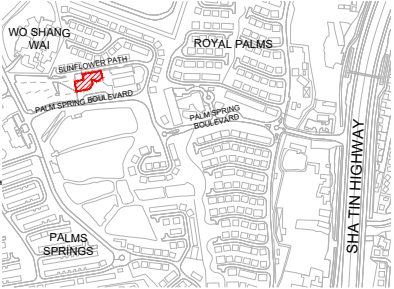
Drawn by: SC

Checked by: TC

Rev.: 1.0

Date: Jun 2026

Figure 1.2 Layout of RCHE



KEY PLAN

REV	DATE	DESCRIPTION	REV	DATE	DESCRIPTION
A	20260609				

Drawn: XX	Date: JUNE 2026	Job No. AA-26-442
Check: DC	Scale: 1:180	Drawing No.

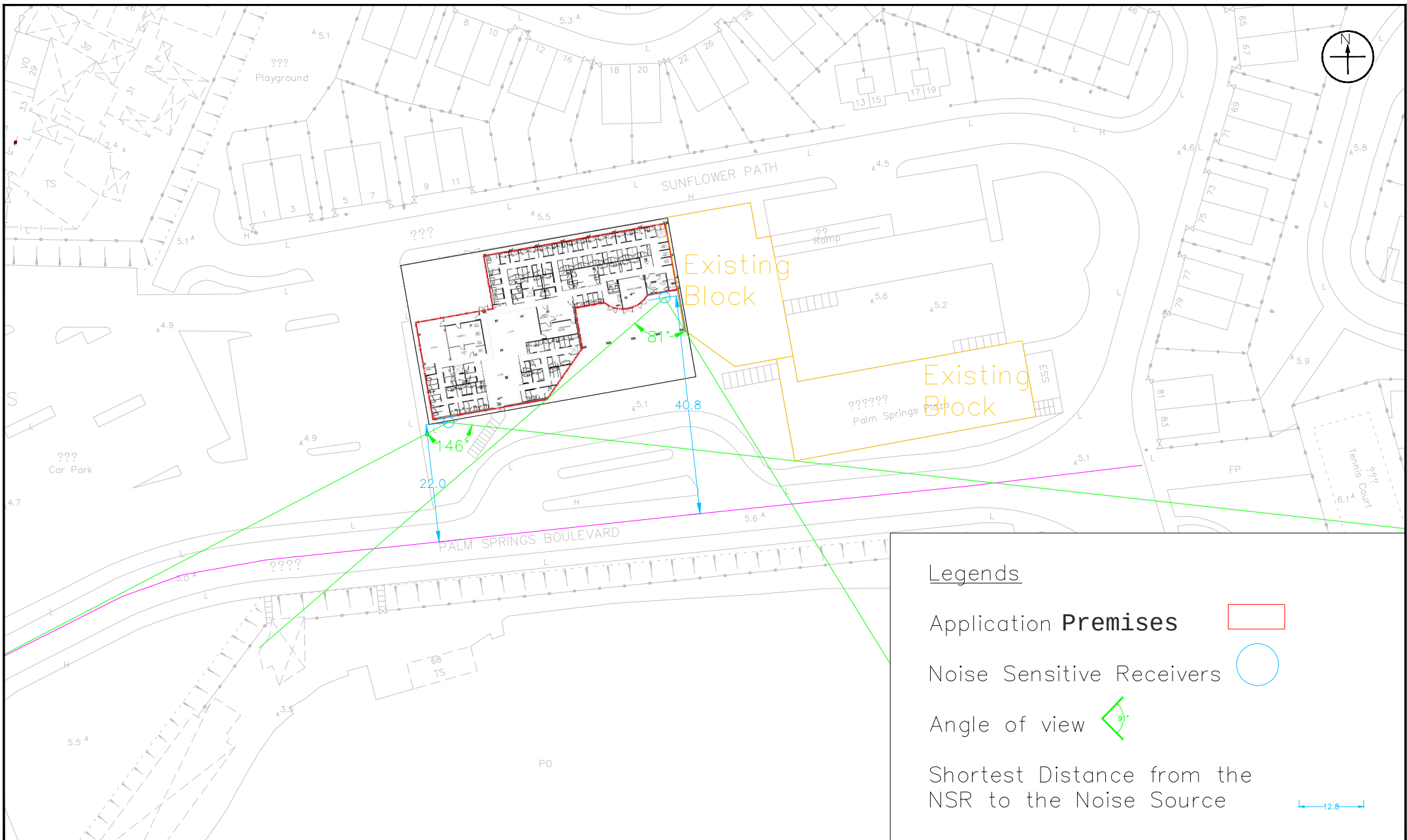


Figure: 2.1

Title: Location of 2 Representative Noise Sensitive Receivers

Project: Proposed RCHE at Palm Springs Plaza

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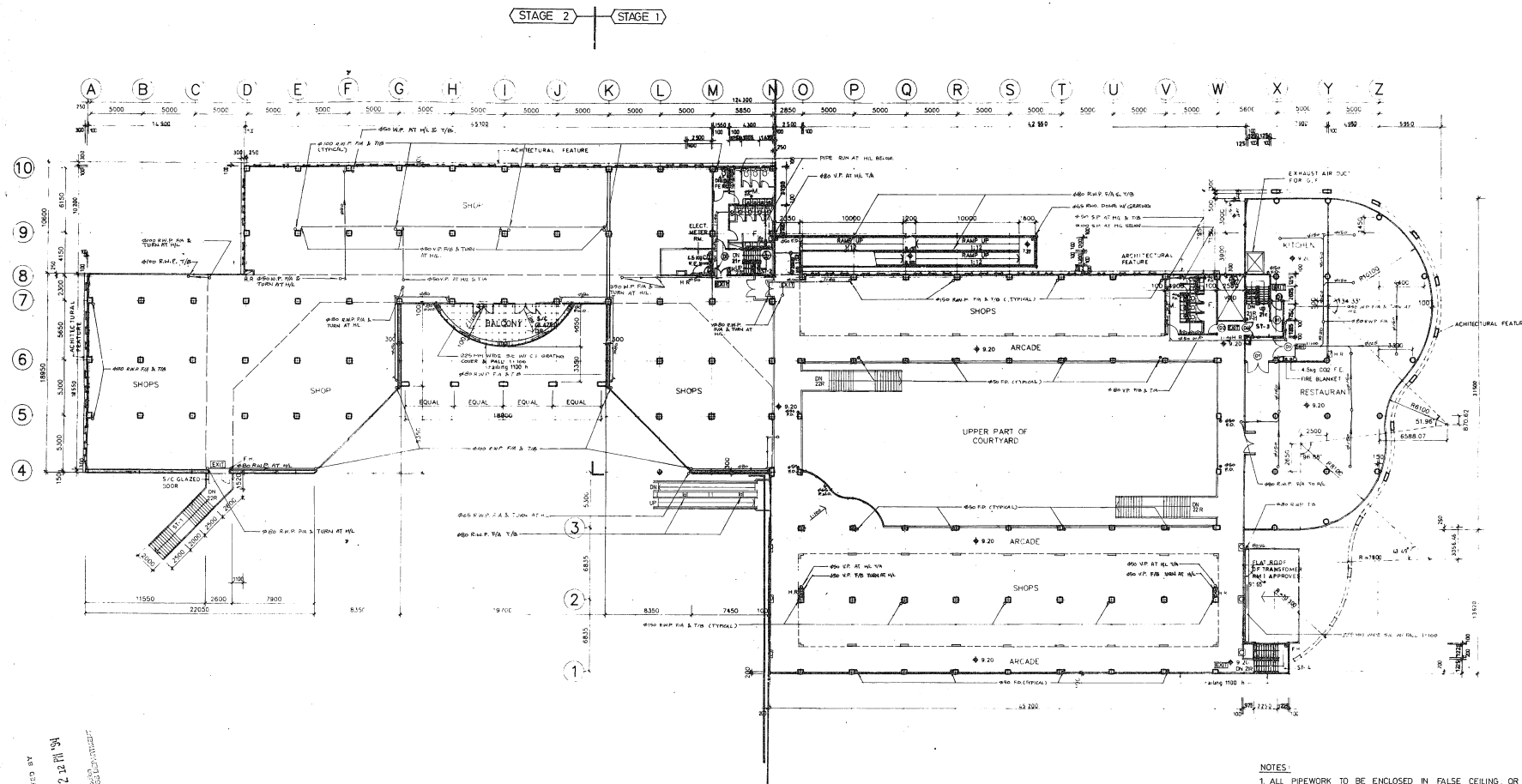
Drawn by: KK

Checked by: TC

Rev.: 1.0

Date: Jun 2026

Appendix 1.1 Approved General Building Plan



FIRST FLOOR PLAN

1:200

SUPERIMPOSED LOAD = 4KPa
 ALL MEASUREMENTS TO FACE UNLESS OTHERWISE SPECIFIED

NOTES:
 1. ALL PIPEWORK TO BE ENCLOSED IN FALSE CEILING, OR CONCEALED INSIDE COLUMN, WALL WHEREVER PRACTICABLE.

THIS IS A TRUE COPY OF THE PLAN SUBMITTED BY
 MA AND ASSOCIATES FOR THE PROJECT AND APPROVED
 BY THE BUILDING DEPARTMENT ON 15 AUG 1994
 DATED 15 AUG 1994
 B. L. D. RAO
 ARCHITECT

RECORD PLAN

BLD REFERENCE 2/9024/90			
FSD REFERENCE 8/21357			
WNO REFERENCE			
NO	REVISIONS / NOTES	DATE	BY
A	ORIGINAL DESIGN OF THE FIRST FLOOR PLAN	1/94	WY
B	GENERAL DESIGN TO THE BUILDING DEPARTMENT	6/94	TC
C	FINAL 2-DIMENSIONAL LAYOUT HAS BEEN APPROVED BY THE BUILDING DEPARTMENT	6/94	WY
D	STAGE 2 DIMENSIONAL LAYOUT HAS BEEN APPROVED BY THE BUILDING DEPARTMENT	7/94	TC
ARCHITECT MA LEUNG & ASSOCIATES PLANNING & LANDSCAPE CONSULTANT			
CONSOLIDATED CONSULTING ENGINEERS LTD. S. & M. CONSULTANT			
PROJECT WO SHANG WAI DEVELOPMENT PHASE I			
SCALE 1:200			
DATE SEPT. 92			
DRAWN BY CCE/484/CC/			
CHECKED BY D			
JOB NO. CCE/484/CC/			
DRAWING NO. D			
REV. D			

UPPER ROOF

UPPER ROOF

UPPER ROOF

Electrical and Mechanical Plant Room

ROOF PLAN

SUPERIMPOSED LOAD = 2.5kPa

1 : 200

THIS IS A TRUE COPY OF THE PLAN SUBMITTED BY
ON 24 SEP 1994
BY THE BUILDING DEPARTMENT
DATE 24 SEP 1994
B. L. D. REF. 2/9024/90
AUTHORISED PERSON

RECORD PLAN

BLD REFERENCE 2/9024/90			
FSD REFERENCE 8/21357			
WVO REFERENCE			
NO.	REVISIONS / NOTES	DATE	BY
A.	GENERAL EXPLANATION OF THE LAYOUT AND PLAN	1/94	WY
B.	REVISIONS / NOTES TO THE SITE PLAN	2/94	WY
C.	REVISIONS / NOTES TO THE ELECTRICAL PLAN	3/94	WY
D.	REVISIONS / NOTES TO THE MECHANICAL PLAN	4/94	WY
ARCHITECT MA LEUNG & ASSOCIATES ARCHITECTS & ENGINEERS (S) LTD. PLANNING & LANDSCAPE CONSULTANT			
CIVIL & STRUCTURAL CONSULTANT URBIS URBIS SYSTEMS (HONG KONG) LIMITED ARCHITECTS & ENGINEERS (S) LTD.			
E & M CONSULTANT CONSOLIDATED CONSULTING ENGINEERS LTD. CONSOLIDATED CONSULTING ENGINEERS LTD.			
PROJECT WO SHANG WAI DEVELOPMENT PHASE I ALL MEASUREMENTS MUST BE CHECKED AT THE WORK BY THE CONSULTANT DO NOT SCALE DRAWINGS ALL SPECIFICATIONS AND THEIR COPIES ARE THE PROPERTY OF THE CONSULTANT AND SHALL BE RETURNED AT THE COMPLETION OF THE WORK.			
DRAINAGE LAYOUT FOR ROOF & UPPER ROOF (COMMERCIAL CENTRE)			
SCALE 1 : 200	DATE SEPT. 92		
DRAWN BY CCE48/CC/	CHECKED BY D-8		
JOB NO. CCE48/CC/	REV D		

Appendix 2.1 Calculation of the Predicted Traffic Noise at Representative NSRs

Weekday													
Isolation Room	No. of vehicle	Speed	% of HV	BNL [1]	HV Corr. [2]	Façade	Road Surface	Basic Noise Level [3]	Distance	Distance correction [4]	Angle of view	Angle of View Correction [5]	Predicted Noise Level [6]
L2	230	50	18.0	65.8	1.7	2.5	-1.0	69.0	40.8	4.8	81	-3.5	61
Dormitory	No. of vehicle	Speed	% of HV	BNL [1]	HV Corr. [2]	Façade	Road Surface	Basic Noise Level [3]	Distance	Distance correction [4]	Angle of view	Angle of View Correction [5]	Predicted Noise Level [6]
L2	230	50	18.0	65.8	1.7	2.5	-1.0	69.0	22	2.1	146	-0.9	66
													66

Weekend													
Isolation Room	No. of vehicle	Speed	% of HV	BNL [1]	HV Corr. [2]	Façade	Road Surface	Basic Noise Level [3]	Distance	Distance correction [4]	Angle of view	Angle of View Correction [5]	Predicted Noise Level [6]
L2	270	50	16.0	66.5	1.3	2.5	-1.0	69.4	40.8	4.8	81	-3.5	61
Dormitory	No. of vehicle	Speed	% of HV	BNL [1]	HV Corr. [2]	Façade	Road Surface	Basic Noise Level [3]	Distance	Distance correction [4]	Angle of view	Angle of View Correction [5]	Predicted Noise Level [6]
L2	270	50	16.0	66.5	1.3	2.5	-1.0	69.4	22	2.1	146	-0.9	66
													66

Remark

- [1] $BNL = 10 \cdot \log(\text{No. of vehicle}) + 42.2$
[2] $HV \text{ Corr.} = 33 \cdot \log(\text{Speed} + 40 + (500/\text{Speed})) + 10 \cdot \log(1 + (5\% \text{ of } HV/\text{Speed})) - 68.8$
[3] Basic Noise Level = BNL + HV Corr. + Façade + Road Surface
[4] Distance Correction = $10 \cdot \log(\text{Distance}/13.5)$
[5] Angle of View Correction = $10 \cdot \log(\text{Angle of View}/180)$
[6] Predicted Noise Level = Basic Noise Level - Distance Correction + Angle of View Correction