

LEGISLATIVE COUNCIL

PANEL ON ENVIRONMENTAL AFFAIRS

**PWP Item No. 780TH - Retrofitting of Noise barriers
on Cheung Pei Shan Road, Tsuen Wan**

Supplementary Information

INTRODUCTION

When considering the PWP Item No. **780TH** – Retrofitting of noise barriers on Cheung Pei Shan Road, Tsuen Wan at the EA Panel meeting on 21 December 2004, Members requested the Administration to consider alternative schemes by erecting noise semi-enclosures along the eastbound carriageway, to provide noise assessment results of the Current Scheme, and to assess the acoustic effectiveness of absorptive noise barrier panels.

THE ADMINISTRATION'S RESPONSE

Noise Assessment Results of the Current and Alternative Schemes

2. We have considered two alternative schemes as follows –

Alternative Scheme A - to install the semi-enclosure on the eastbound carriageway with its vertical noise barrier panels erected at the verge of the slow lane; and

Alternative Scheme B - to install the semi-enclosure on the eastbound carriageway with its vertical noise barrier panels erected at the central median.

_____ The above Alternative Schemes are shown on the drawing at Annex A.

3. According to our assessment, the overall percentage of flats protected by the Current Scheme is 63% as compared with 39% and 60% for Alternative Schemes A and B respectively. Although Alternative Scheme B can offer an overall percentage of protection similar to that offered by the Current Scheme, the orientation of the semi-enclosure will not effectively protect the low-rise village houses along the road.

4. On the financial front, since the eastbound carriageway is wider than the westbound by one lane, the cost of each of the two alternative schemes will be \$260 million which is higher than that of the Current Scheme by \$43 million.

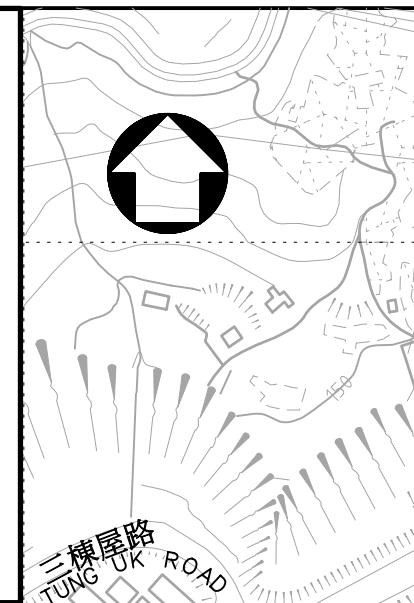
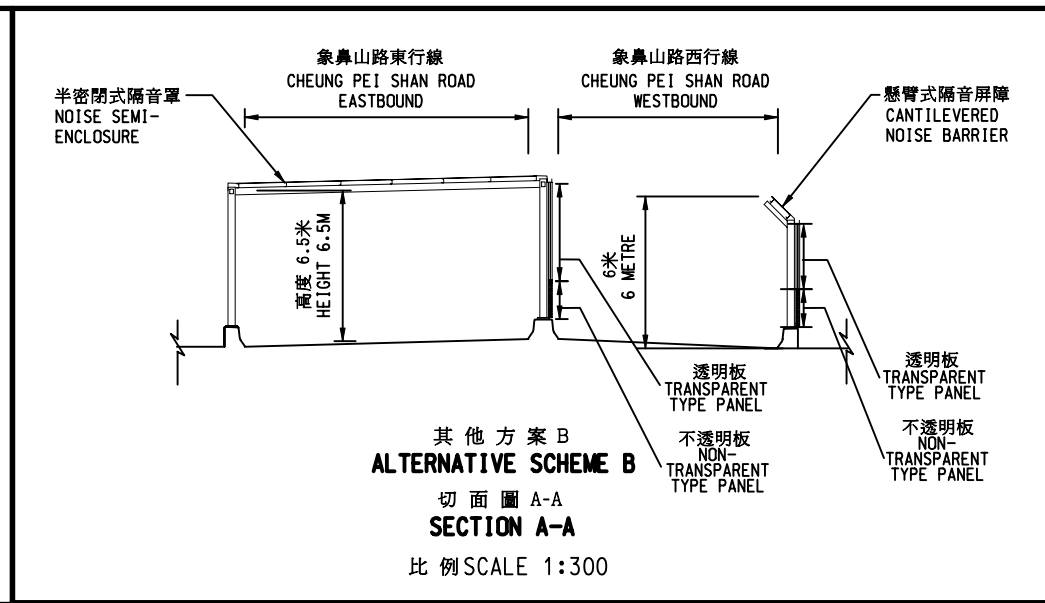
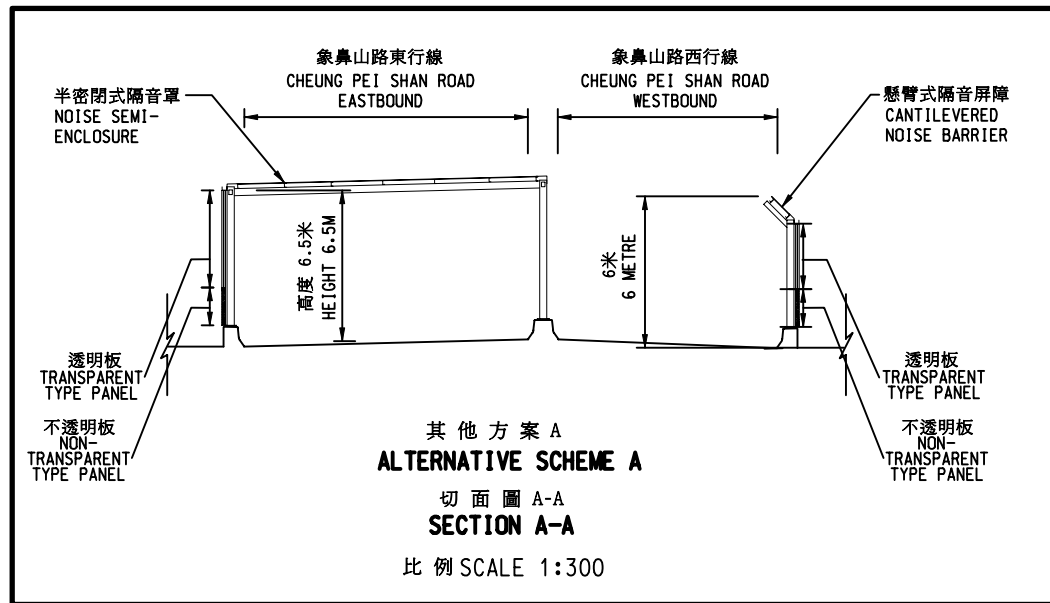
5. Therefore, the overall acoustic performance and cost-effectiveness of the Current Scheme is more favorable than the two Alternative Schemes. The overall acoustic performance and costs for the current and two alternative schemes are summarized at Annex B. Detailed noise assessment results of individual noise sensitive receivers are at Annex C.

Acoustic Effectiveness of Absorptive Noise Barrier Panels

6. Overseas research studies show that the provision of absorptive noise barrier panels for the lower portion of the noise barrier can achieve similar absorptive effects as installing absorptive panels for the entire barrier. This is because road traffic noise is mainly generated from the tyres and engines of vehicles and hence the absorptive noise barrier panels at the lower portion of the noise barrier should be able to absorb most of such noise.

7. According to the "Guidelines on Design of Noise Barriers" issued by the Highways Department and the Environmental Protection Department, noise barriers with absorptive panels at the lower portion of the barriers of 2- to 3-metre high (measured from ground including the concrete profile barrier) can sufficiently avoid reflection of noise to the noise sensitive receivers located on the opposite side of the barriers. The Current Scheme follows the Guidelines where absorptive panels will be installed at the lower portion of the noise barrier of 2.5-metre high from ground.

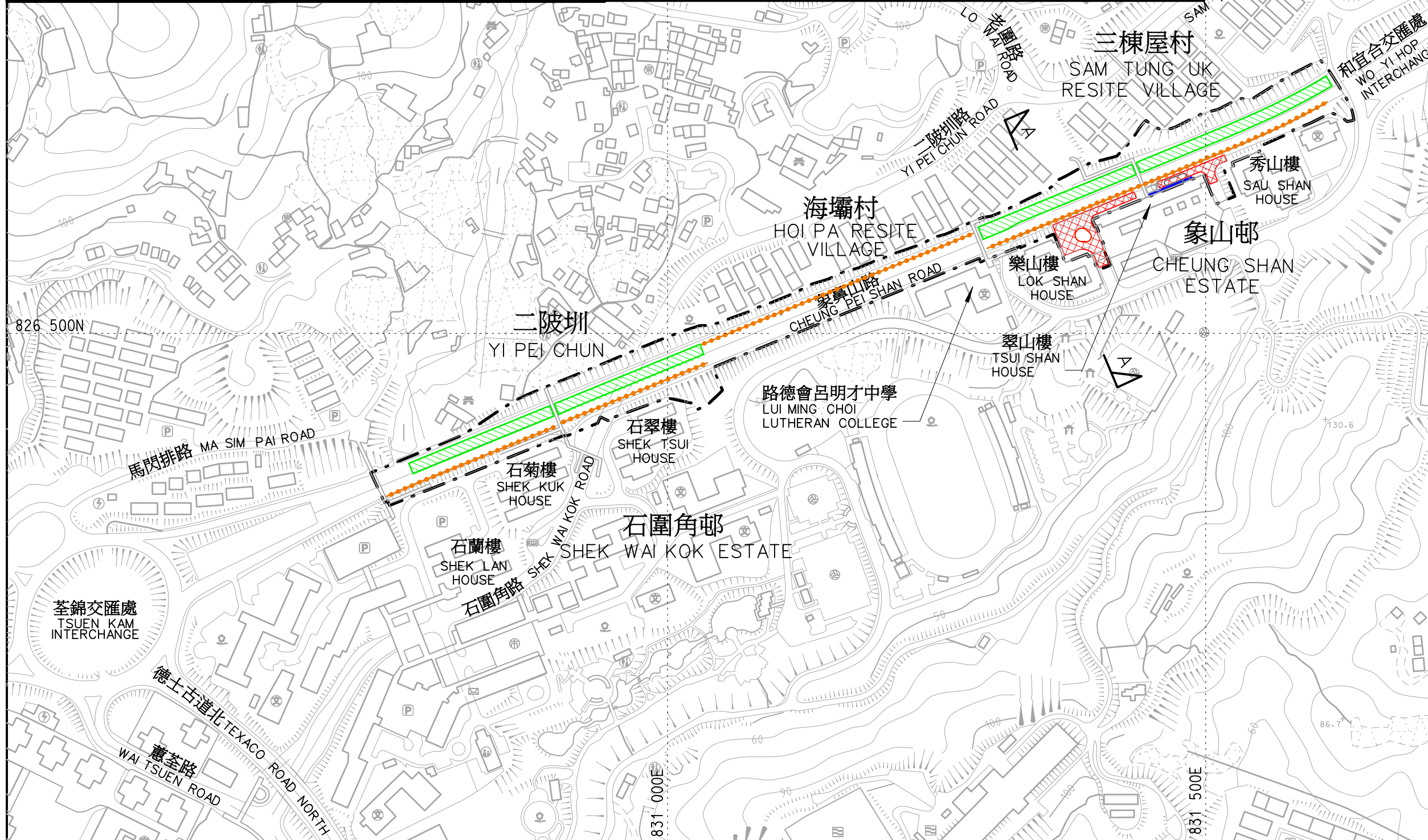
8. The difference in acoustic performance between the Current Scheme using either absorptive or reflective materials for the entire noise barriers is generally less than 1dB(A). Therefore, the amount of absorptive panels used in the Current Scheme should achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier. Detailed noise assessment results for the above comparison are at Annex D.



註釋 NOTES :

LEGENDS:

- 施工區界限 LIMIT OF WORKS AREA
- 擬建懸臂式隔音屏障 PROPOSED CANTILEVERED NOISE BARRIER
- 擬建半密閉式隔音罩 PROPOSED NOISE SEMI-ENCLOSURE
- 擬建緊急車輛通道 PROPOSED EMERGENCY VEHICULAR ACCESS ROAD
- 擬建行人斜道 PROPOSED FOOTWAY RAMP



編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved
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修訂 REVISION

	姓名 name	簽署 initial	日期 date
繪圖 drawn	K H KOR	SIGNED	23.12.04
核對 checked	K L CHEUNG	SIGNED	23.12.04

核准 approved

日期 date

工程編號 project no. 780TH

檔案編號 file no.

合約編號 contract no.

合約 contract

圖則名稱 drawing title

荃灣象鼻山路隔音屏障加建工程 - 平面圖 (其他方案)

RETROFITTING OF NOISE BARRIERS ON CHEUNG PEI SHAN ROAD, TSUEN WAN - LAYOUT PLAN (ALTERNATIVE SCHEMES)

圖則編號 drawing no.	比例 scale
NTWZ 1270	1:4000 OR AS SHOWN

辦事處 office
新界西及北拓展處
NEW TERRITORIES NORTH AND WEST DEVELOPMENT OFFICE

土木工程拓展署
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

不同方案的隔音效果及造價之摘要

Summary of Acoustic Performance and Costs of Various Schemes

		建議的方案 Recommended Scheme	其他方案 A Alternative Scheme A	其他方案 B Alternative Scheme B
暴露於過量噪音的住宅數目 No. of Exposed Flats	鄉村 Villages	142	142	142
	公共屋邨 Housing Estates	1521	1521	1521
	總數 Total	1663	1663	1663
受保護的住宅數目 No. of Flats Protected	鄉村 Villages	117	136	77
	公共屋邨 Housing Estates	926	515	920
	總數 Total	1043	651	997
受保護的住宅的百分比 % of Flats Protected	鄉村 Villages	82%	96%	54%
	公共屋邨 Housing Estates	61%	34%	60%
	整體百分比 Overall Percentage	63%	39%	60%
受惠的住宅總數 Total No. of Flats Benefited		1659	1438	1658
受惠的住宅的百分比 Total % of Flat Benefited		99.76%	86.00%	99.70%
估計造價 Estimated Cost (HK\$)		\$217M	\$260M	\$260M

註釋：

1. 受保護的住宅，是指這些住宅所承受的交通噪音在一小時內有 10% 時間超逾 70 分貝(A)L₁₀(1 小時)，而在實施加建工程後，所承受的噪音水平可減至 70 分貝(A)L₁₀(1 小時)或以下。
2. 受惠的住宅，是指這些住宅所承受的交通噪音在一小時內有 10% 時間超逾 70 分貝(A)L₁₀(1 小時)，而在實施加建工程後，所承受的噪音水平可消減 1 分貝(A)以上。

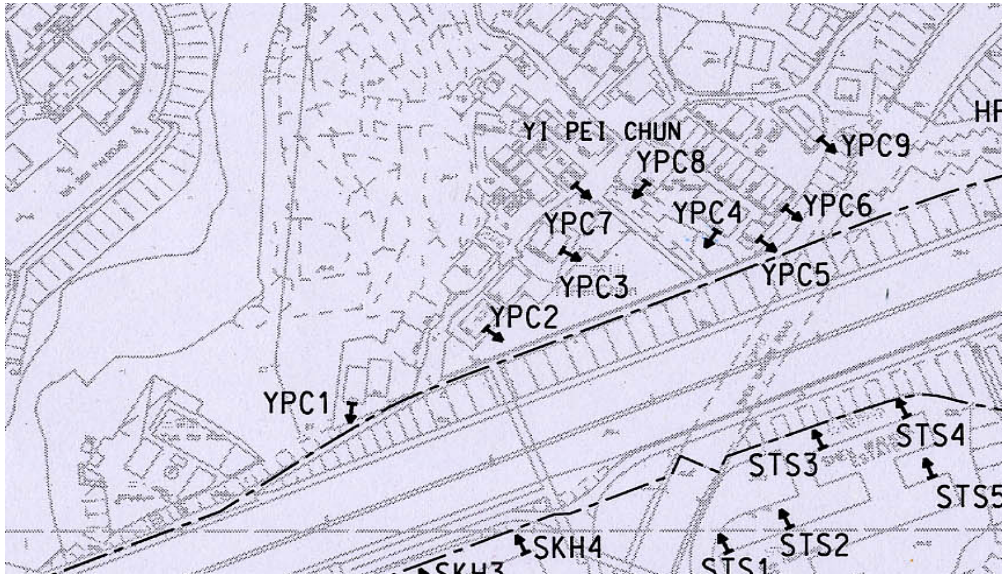
Note :

1. Flats protected refer to flats being exposed to traffic noise above 70dB(A)L₁₀(1 hour) and their mitigated noise levels are reduced to 70dB(A)L₁₀(1 hour) and below after the implementation of the retrofitting project.
2. Flats benefited refer to flats being exposed to traffic noise above 70dB(A)L₁₀(1 hour) and their mitigated noise levels are reduced by more than 1dB(A) after the implementation of the retrofitting project.

工務計劃項目第7780TH號 PWP Item No. 7780TH
荃灣象鼻山路隔音屏障加建工程
Retrofitting of Noise Barriers on Cheung Pei Shan Road, Tsuen Wan

不同方案的噪音評估結果
Noise Assessment Results for the Various Schemes

二陂圳 Yi Pei Chun

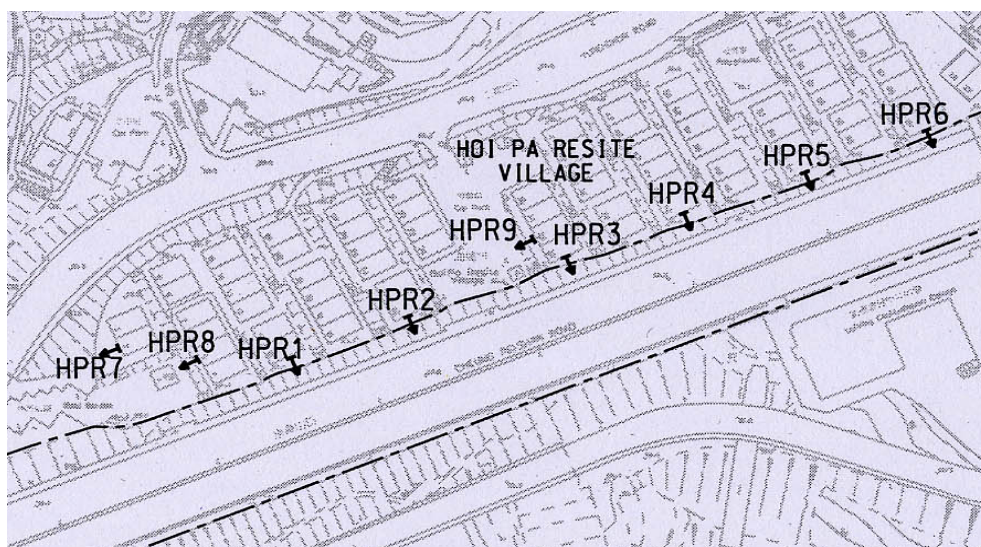


(灰色陰影的數字顯示在該噪音感應強的地方，該方案的減音效果為最佳)
(NSR where the scheme(s) is/are the most effective are shaded in grey)

噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	建議的方案 Recommended Scheme 分貝 dB(A)	其他方案A Alternative Scheme A 分貝 dB(A)	其他方案B Alternative Scheme B 分貝 dB(A)
YPC1	G	74	69	56	72
	1	77	70	57	76
	2	77	72	59	76
YPC2	G	69	64	60	67
	1	74	68	63	72
	2	76	70	66	74
YPC3	G	63	59	53	61
	1	67	61	54	64
YPC4	G	70	62	54	67
YPC5	G	72	65	62	70
YPC6	G	70	63	61	67
YPC7	G	65	61	56	62
	1	68	63	59	65
	2	70	65	62	67
YPC8	G	63	58	52	60
YPC9	G	72	71	70	71
	1	72	70	70	71
	2	73	70	70	72

不同方案的噪音評估結果
Noise Assessment Results for the Various Schemes

海壩村 Hoi Pa Resite Village

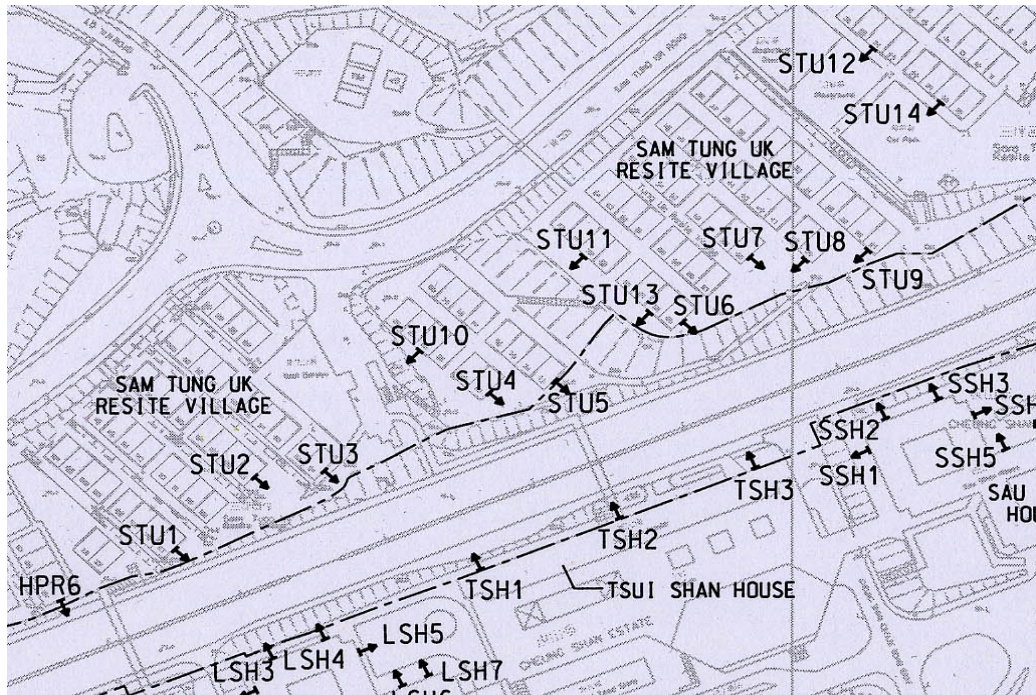


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噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	建議的方案 Recommended Scheme 分貝 dB(A)	其他方案A Alternative Scheme A 分貝 dB(A)	其他方案B Alternative Scheme B 分貝 dB(A)
HPR1	G	78	60	60	62
	1	79	62	62	64
	2	79	66	66	67
HPR2	G	79	61	61	61
	1	79	64	63	64
	2	79	68	68	68
HPR3	G	78	61	61	62
	1	79	64	64	64
	2	79	69	69	69
HPR4	G	74	61	61	61
	1	79	64	64	65
	2	79	69	69	69
HPR5	G	71	62	61	62
	1	80	65	64	67
	2	80	70	69	70
HPR6	G	67	62	60	63
	1	80	69	64	72
	2	80	72	69	73
HPR7	G	71	64	64	66
	1	74	71	71	72
	2	76	73	73	74
HPR8	G	72	59	58	64
	1	74	61	60	67
	2	74	63	62	67
HPR9	G	71	65	65	65
	1	74	66	66	66
	2	75	68	68	68

不同方案的噪音評估結果
Noise Assessment Results for the Various Schemes

三棟屋村 Sam Tung Uk Resite Village (Page 1/2)

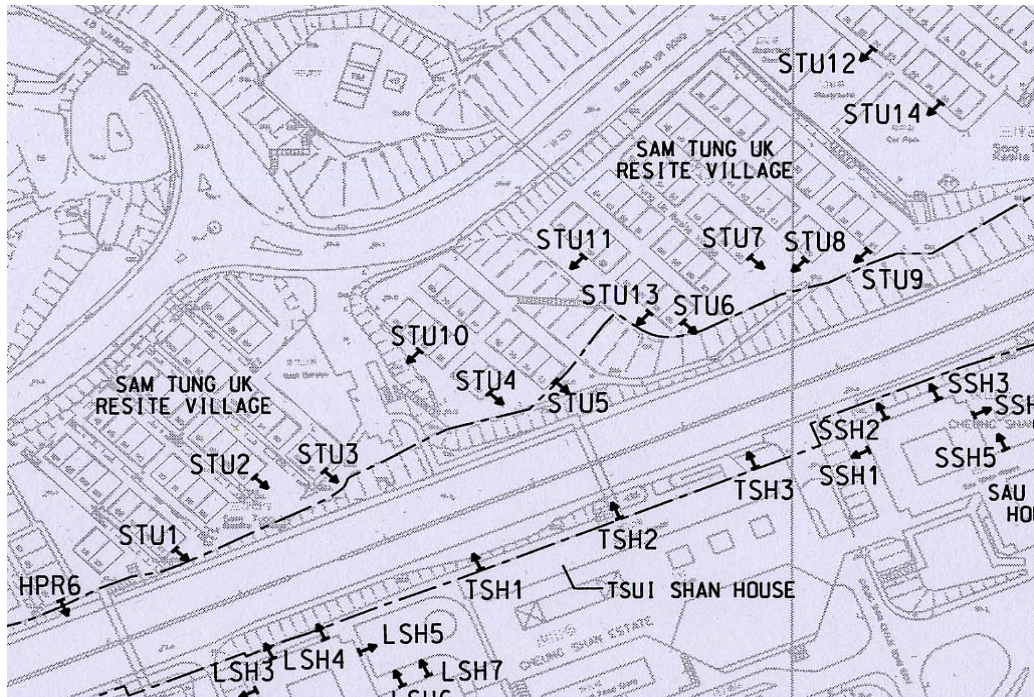


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(NSR where the scheme(s) is/are the most effective are shaded in grey)

噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	建議的方案 Recommended Scheme 分貝 dB(A)	其他方案A Alternative Scheme A 分貝 dB(A)	其他方案B Alternative Scheme B 分貝 dB(A)
STU1	G	77	65	63	76
	1	79	67	64	78
	2	79	70	65	78
STU2	G	72	61	55	70
	1	74	63	57	73
	2	76	64	58	74
STU3	G	76	66	58	74
	1	78	67	59	76
	2	78	68	60	76
STU4	G	71	67	61	69
	1	76	69	65	74
	2	76	69	65	74
STU5	G	74	70	64	72
	1	77	71	68	76
	2	77	72	68	76
STU6	G	70	67	61	67
	1	75	71	62	72
	2	76	72	62	73
STU7	G	62	60	56	60
	1	66	62	57	63
	2	69	65	58	65

不同方案的噪音評估結果
Noise Assessment Results for the Various Schemes

三棟屋村 Sam Tung Uk Resite Village (Page 2/2)

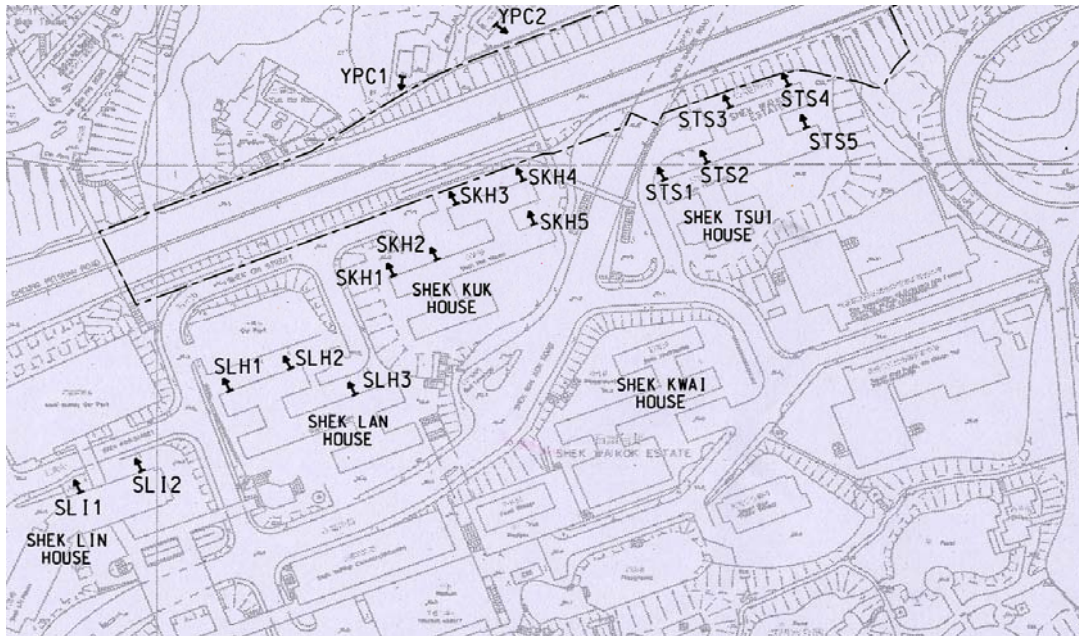


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STU8	G	63	61	55	61
	1	69	64	57	65
	2	72	67	58	69
STU9	G	60	59	53	59
	1	67	64	57	64
	2	73	68	59	70
STU10	G	68	64	62	66
	1	71	67	65	69
	2	72	67	66	70
STU11	G	63	62	61	62
	1	69	68	67	68
	2	71	70	69	70
STU12	G	59	58	58	58
	1	60	60	59	60
	2	62	62	61	61
STU13	G	68	66	60	66
	1	73	70	64	70
	2	74	71	65	71
STU14	G	58	58	56	58
	1	60	59	57	59
	2	62	60	58	60

不同方案的噪音評估結果
Noise Assessment Results for Various Schemes

石圍角邨 Shek Wai Kok Estate (Page 1/3)

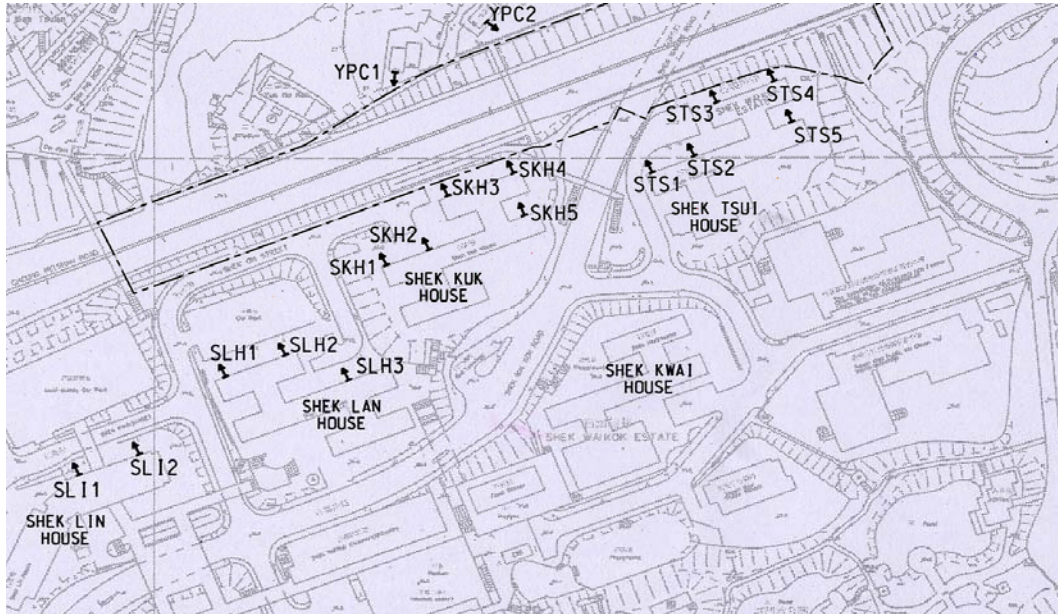


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位置 Location	噪音感應強 的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	建議的方案 Recommended Scheme 分貝 dB(A)	其他方案A Alternative Scheme A 分貝 dB(A)	其他方案B Alternative Scheme B 分貝 dB(A)
石圍角邨 石蓮樓 Shek Wai Kok Estate Shek Lin House	SLI1	1	68	67	67	67
		5	68	67	67	67
		10	70	68	68	68
		13	71	69	70	69
	SLI2	1	64	63	63	63
		5	65	63	64	63
		10	69	67	67	66
		13	70	68	69	68
石圍角邨 石蘭樓 Shek Wai Kok Estate Shek Lan House	SLH1	1	72	71	71	71
		5	73	70	70	70
		10	73	70	71	70
		15	73	70	72	70
		20	72	70	71	70
		25	72	70	71	70
		27	72	70	71	70
		SLH2	1	70	66	66
	5		72	67	67	67
	10		72	68	69	68
	15		72	68	71	68
	20		72	69	71	68
	25		72	69	70	68
	27		71	69	70	68
	SLH3	1	66	60	60	60
		5	68	61	62	61
		10	69	62	63	62
		15	69	62	66	62
		20	69	63	67	62
		25	68	63	67	62
27		68	63	66	62	

不同方案的噪音評估結果
Noise Assessment Results for Various Schemes

石圍角邨 Shek Wai Kok Estate (Page 2/3)

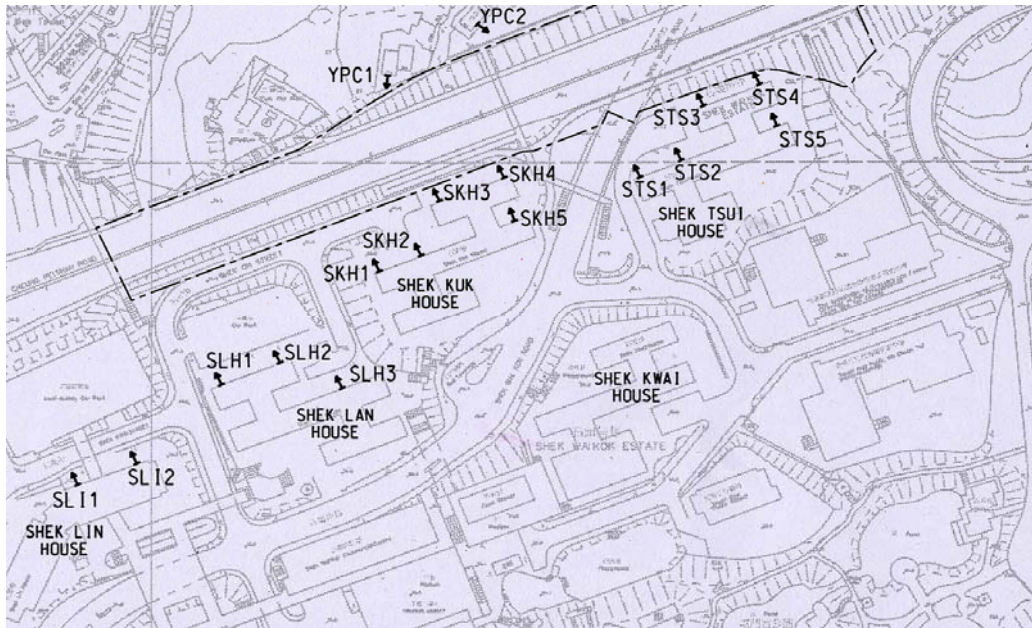


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石圍角邨 石菊樓 Shek Wai Kok Estate Shek Kuk House	SKH1	1	73	63	64	63
		5	74	64	68	64
		10	74	65	71	65
		15	73	67	71	66
		20	72	69	71	67
		25	72	69	70	68
	SKH2	1	71	61	62	61
		5	72	62	66	62
		10	72	63	70	64
		15	72	65	69	64
		20	71	67	69	65
		25	70	68	69	66
	SKH3	1	76	64	67	65
		5	77	65	74	66
		10	76	69	74	70
		15	75	72	74	71
		20	74	72	73	71
		25	73	71	73	70
	SKH4	1	76	68	69	68
		5	77	68	74	69
		10	76	70	74	70
		15	75	72	74	72
		20	74	72	73	71
		25	74	72	73	71
	SKH5	1	71	70	70	70
5		72	69	70	69	
10		71	67	70	67	
15		70	67	69	67	
20		70	67	69	67	
25		69	67	68	67	

不同方案的噪音評估結果
Noise Assessment Results for Various Schemes

石圍角邨 Shek Wai Kok Estate (Page 3/3)

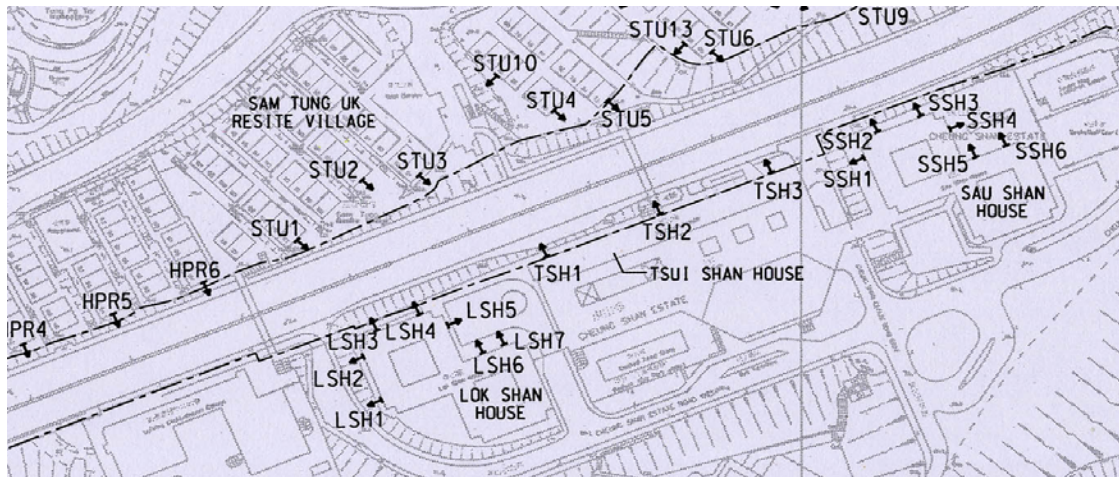


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石圍角邨 石翠樓 Shek Wai Kok Estate Shek Tsui House	STS1	1	71	65	66	65
		5	74	68	69	68
		10	75	71	73	71
		15	75	71	73	71
		20	74	71	73	71
		25	74	71	72	71
		27	73	71	72	71
	STS2	1	68	54	58	55
		5	71	58	63	59
		10	72	61	69	62
		15	72	65	70	65
		20	72	66	70	67
		25	72	67	70	68
		27	71	67	70	68
	STS3	1	71	59	60	59
		5	77	64	68	66
		10	77	68	74	69
		15	76	71	74	72
		20	75	72	74	72
		25	74	72	74	72
		27	74	72	74	71
	STS4	1	70	59	60	59
		5	76	66	68	66
		10	77	68	74	69
		15	76	71	74	71
		20	75	72	74	72
		25	74	72	74	72
		27	74	72	73	72
STS5	1	64	62	62	61	
	5	68	66	66	66	
	10	69	67	68	67	
	15	69	67	68	67	
	20	69	68	68	67	
	25	68	68	68	67	
	27	68	67	68	67	

不同方案的噪音評估結果 Noise Assessment Results for Various Schemes

象山邨 Cheung Shan Estate

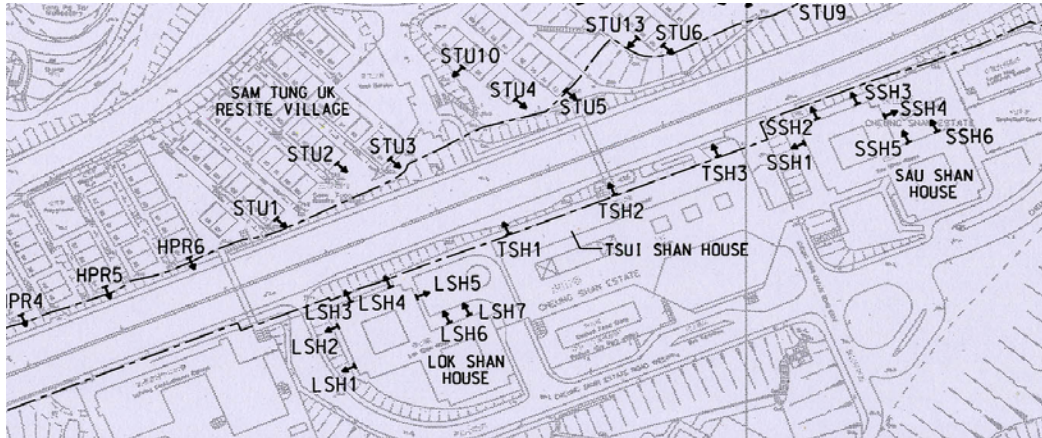


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位置 Location	噪音感應強 的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	建議的方案 Recommended Scheme 分貝 dB(A)	其他方案A Alternative Scheme A 分貝 dB(A)	其他方案B Alternative Scheme B 分貝 dB(A)
象山邨 樂山樓 Cheung Shan Estate Lok shan House	LSH1	1	69	65	66	66
		5	70	66	68	66
		10	70	68	69	68
		15	71	69	70	69
		20	70	69	70	69
	LSH2	1	72	68	68	68
		5	73	68	71	69
		10	72	69	71	70
		15	72	70	71	70
		20	71	70	71	70
	LSH3	1	78	68	72	69
		5	77	70	75	72
		10	76	74	75	74
		15	75	74	75	73
		20	75	73	75	73
	LSH4	1	78	66	70	67
		5	77	69	75	70
		10	76	73	75	73
		15	75	73	75	73
		20	75	73	74	73
	LSH5	1	75	63	66	63
		5	75	66	72	65
		10	74	71	72	69
		15	74	71	72	70
		20	73	71	72	70
	LSH6	1	69	56	59	55
		5	71	59	66	59
		10	71	63	68	61
15		70	67	68	64	
20		70	68	68	66	
23		70	68	69	67	
LSH7	1	69	62	63	62	
	5	72	64	67	64	
	10	72	66	70	65	
	15	71	68	70	66	
	20	71	69	70	67	
	23	71	69	70	68	

不同方案的噪音評估結果
Noise Assessment Results for Various Schemes

象山邨 Cheung Shan Estate (Page 2/2)



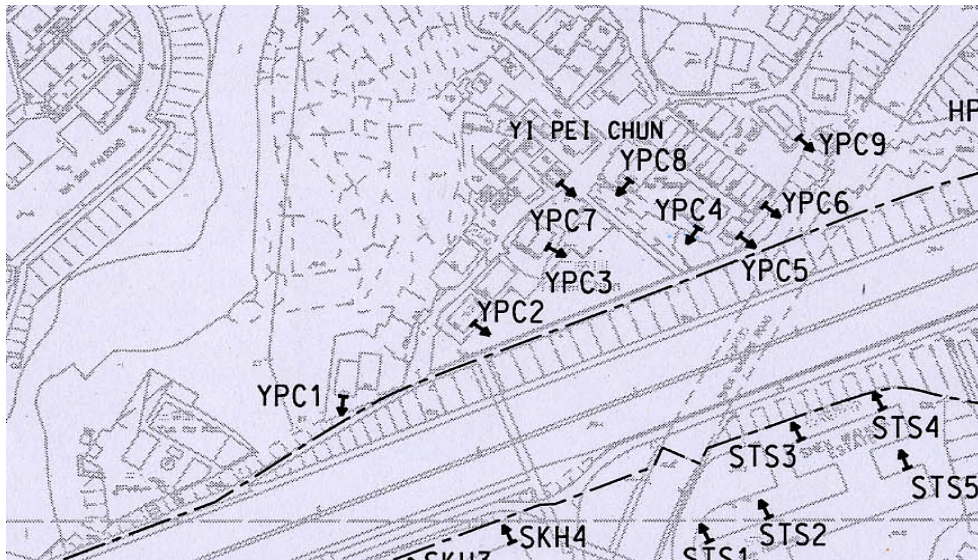
(灰色陰影的數字顯示在該噪音感應強的地方，該方案的減音效果為最佳)
(NSR where the scheme(s) is/are the most effective are shaded in grey)

位置 Location	噪音感應強 的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	建議的方案 Recommended Scheme 分貝 dB(A)	其他方案A Alternative Scheme A 分貝 dB(A)	其他方案B Alternative Scheme B 分貝 dB(A)
象山邨 翠山樓 Cheung Shan Estate Tsui Shan House	TSH1	1	78	66	75	69
		5	77	73	75	73
		10	76	73	75	73
		12	76	73	75	73
	TSH2	1	78	69	75	70
		5	77	73	75	73
		10	76	74	75	73
		12	76	74	75	73
	TSH3	1	78	63	72	64
		5	77	70	75	71
		10	76	73	75	73
		12	76	73	75	73
象山邨 秀山樓 Cheung Shan Estate Sau Shan House	SSH1	1	72	66	71	66
		5	73	68	72	67
		10	73	70	71	69
		15	72	71	71	69
		20	72	70	71	69
	SSH2	1	78	67	75	68
		5	77	72	75	73
		10	76	73	75	73
		15	75	73	75	72
		20	74	72	74	72
	SSH3	1	78	67	74	69
		5	77	72	75	73
		10	76	73	75	73
		15	75	73	75	72
		20	74	72	74	72
	SSH4	1	72	65	70	65
		5	74	68	72	68
		10	74	71	72	71
		15	73	71	72	71
		20	72	71	72	71
	SSH5	1	65	61	63	61
		5	70	63	68	63
		10	71	68	70	68
		15	71	70	70	69
20		71	70	70	69	
SSH6	1	65	62	64	62	
	5	71	64	69	64	
	10	73	70	72	70	
	15	73	71	72	70	
	20	73	71	72	71	
23	73	71	72	71		

工務計劃項目第7780TH號 PWP Item No. 7780TH
荃灣象鼻山路隔音屏障加建工程
Retrofitting of Noise Barriers on Cheung Pei Shan Road, Tsuen Wan

選擇不同性質的垂直隔音板之效果
Effects of Choice of Vertical Panels

二陂圳 Yi Pei Chun



(灰色陰影的數字顯示在某該噪音感應強的地方，全部吸音板的減音交效果較全部反音板為佳)
(NSRs where absorptive panels are more effective than reflective panels are shaded in grey)

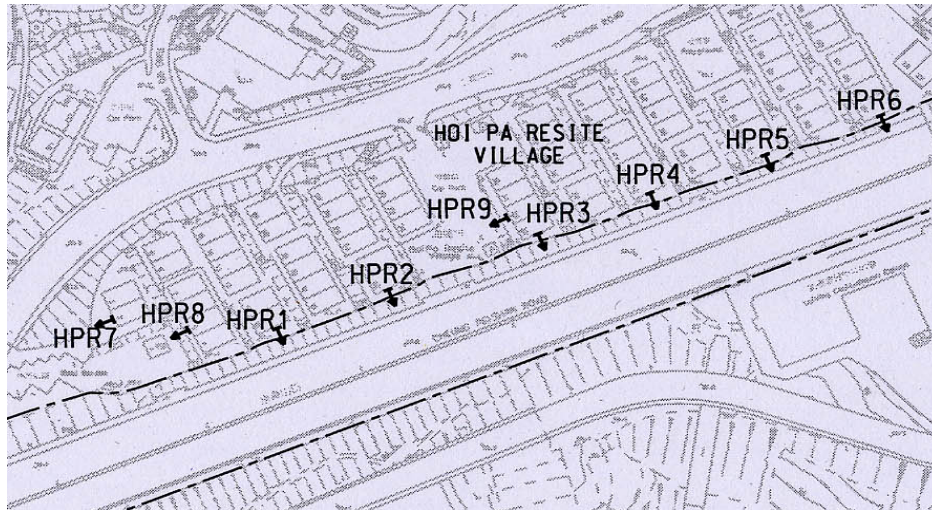
噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	全部吸音板 All Absorptive Panels 分貝 dB(A)	全部反音板 All Reflective Panels 分貝 dB(A)
YPC1	G	74	69	69
	1	77	70	70
	2	77	72	72
YPC2	G	69	64	64
	1	74	68	68
	2	76	70	71
YPC3	G	63	59	59
	1	67	61	61
YPC4	G	70	62	62
YPC5	G	72	65	65
YPC6	G	70	63	63
YPC7	G	65	61	61
	1	68	63	63
	2	70	65	65
YPC8	G	63	58	58
YPC9	G	72	71	71
	1	72	70	70
	2	73	70	70

註釋： 在隔音屏障底部安裝吸音板如建議的方案，能夠大致達到整件隔音屏障安裝吸音板的吸音效果。

Note : The provision of absorptive noise barrier panels for the lower portion of the noise barrier (as in the Recommended Scheme) can achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier.

選擇不同性質的垂直隔音板之效果
Effects of Choice of Vertical Panels

海壩村 Hoi Pa Resite Village



(灰色陰影的數字顯示在某該噪音感應強的地方，全部吸音板的減音效果較全部反音板為佳)
(NSRs where absorptive panels are more effective than reflective panels are shaded in grey)

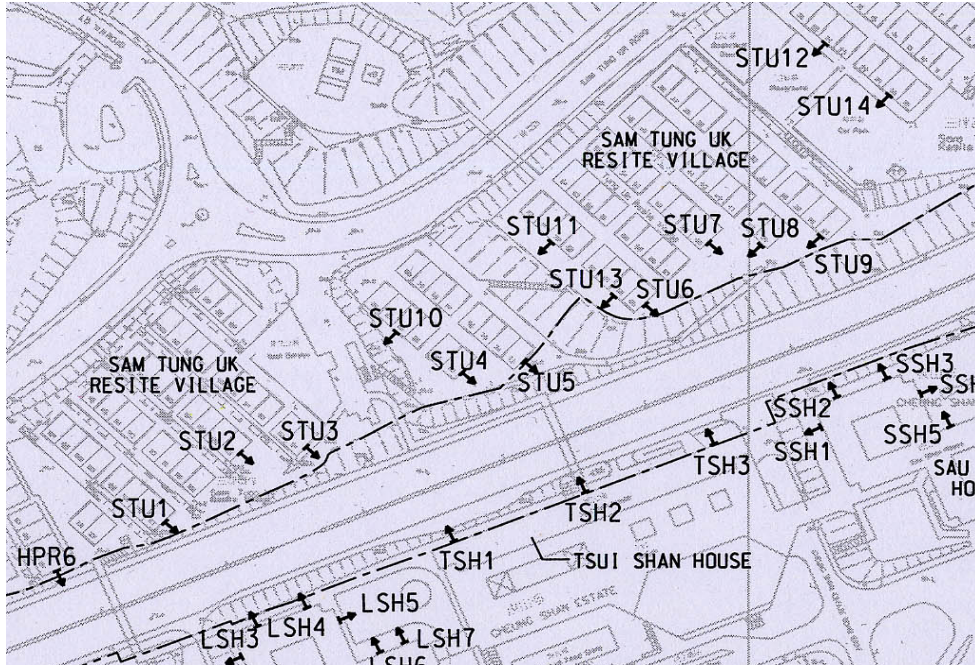
噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	全部吸音板 All Absorptive Panels 分貝 dB(A)	全部反音板 All Reflective Panels 分貝 dB(A)
HPR1	G	78	60	60
	1	79	62	62
	2	79	66	66
HPR2	G	79	61	61
	1	79	64	64
	2	79	68	68
HPR3	G	78	61	61
	1	79	64	64
	2	79	69	69
HPR4	G	74	61	61
	1	79	64	64
	2	79	69	69
HPR5	G	71	62	62
	1	80	65	65
	2	80	70	70
HPR6	G	67	62	62
	1	80	69	70
	2	80	72	72
HPR7	G	71	64	64
	1	74	71	71
	2	76	73	73
HPR8	G	72	59	59
	1	74	61	61
	2	74	63	63
HPR9	G	71	65	65
	1	74	66	66
	2	75	68	68

註釋： 在隔音屏障底部安裝吸音板如建議的方案，能夠大致達到整件隔音屏障安裝吸音板的吸音效果。

Note : The provision of absorptive noise barrier panels for the lower portion of the noise barrier (as in the Recommended Scheme) can achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier.

選擇不同性質的垂直隔音板之效果
Effects of Choice of Vertical Panels

三棟屋村 Sam Tung Uk Resite Village (Page 1/2)



(灰色陰影的數字顯示在某該噪音感應強的地方，全部吸音板的減音效果較全部反音板為佳)
(NSRs where absorptive panels are more effective than reflective panels are shaded in grey)

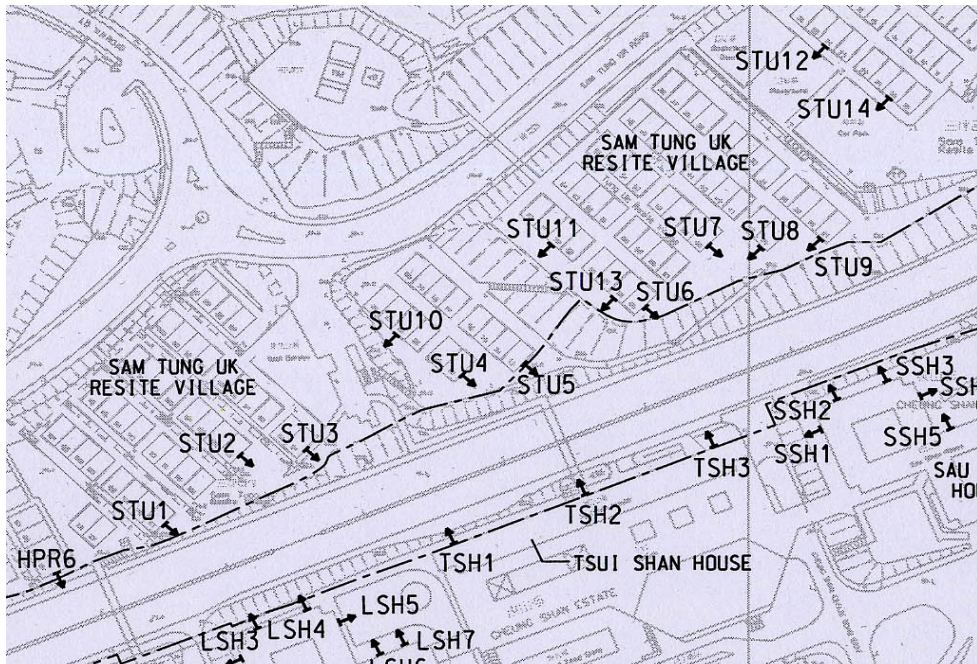
噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	全部吸音板 All Absorptive Panels 分貝 dB(A)	全部反音板 All Reflective Panels 分貝 dB(A)
STU1	G	77	65	65
	1	79	67	67
	2	79	70	71
STU2	G	72	61	61
	1	74	63	63
	2	76	64	64
STU3	G	76	66	66
	1	78	67	67
	2	78	68	69
STU4	G	71	67	67
	1	76	69	69
	2	76	69	70
STU5	G	74	70	70
	1	77	71	71
	2	77	72	72
STU6	G	70	67	68
	1	75	71	71
	2	76	72	73
STU7	G	62	60	60
	1	66	62	62
	2	69	65	65

註釋： 在隔音屏障底部安裝吸音板如建議的方案，能夠大致達到整件隔音屏障安裝吸音板的吸音效果。

Note : The provision of absorptive noise barrier panels for the lower portion of the noise barrier (as in the Recommended Scheme) can achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier.

選擇不同性質的垂直隔音板之效果
Effects of Choice of Vertical Panels

三棟屋村 Sam Tung Uk Resite Village (Page 2/2)



(灰色陰影的數字顯示在某該噪音感應強的地方，全部吸音板的減音交效果較全部反音板為佳)
(NSRs where absorptive panels are more effective than reflective panels are shaded in grey)

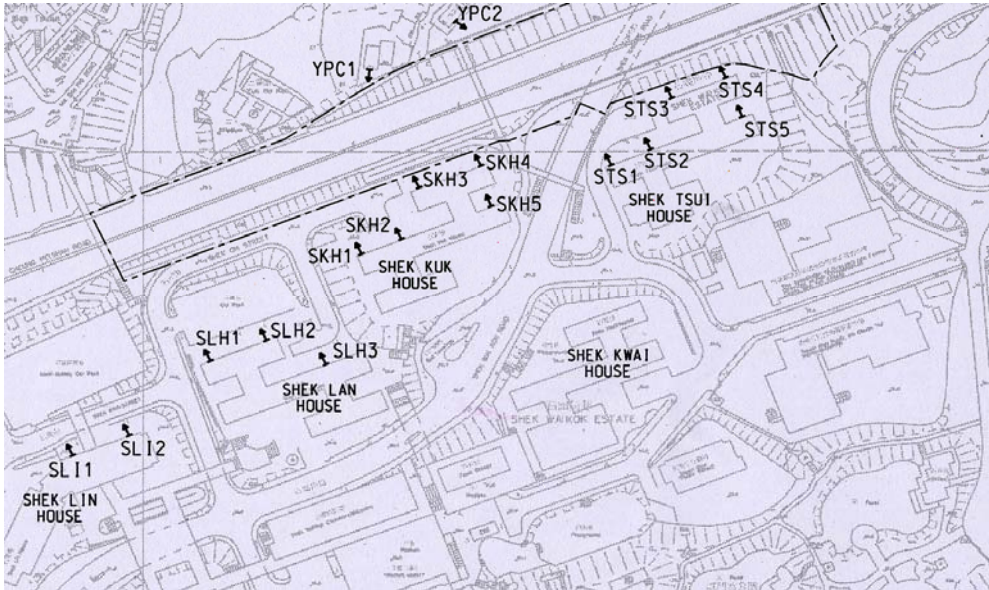
噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	全部吸音板 All Absorptive Panels 分貝 dB(A)	全部反音板 All Reflective Panels 分貝 dB(A)
STU8	G	63	61	61
	1	69	64	64
	2	72	67	67
STU9	G	60	59	59
	1	67	64	64
	2	73	68	69
STU10	G	68	64	64
	1	71	67	67
	2	72	67	67
STU11	G	63	62	62
	1	69	68	68
	2	71	70	70
STU12	G	59	58	58
	1	60	60	60
	2	62	62	62
STU13	G	68	66	66
	1	73	70	70
	2	74	71	71
STU14	G	58	58	58
	1	60	59	59
	2	62	60	60

註釋： 在隔音屏障底部安裝吸音板如建議的方案，能夠大致達到整件隔音屏障安裝吸音板的吸音效果。

Note : The provision of absorptive noise barrier panels for the lower portion of the noise barrier (as in the Recommended Scheme) can achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier.

選擇不同性質的垂直隔音板之效果
Effects of Choice of Vertical Panels

石圍角邨 Shek Wai Kok Estate (Page 1/3)



(灰色陰影的數字顯示在某該噪音感應強烈的地方，全部吸音板的減音交效果較全部反音板為佳)
(NSRs where absorptive panels are more effective than reflective panels are shaded in grey)

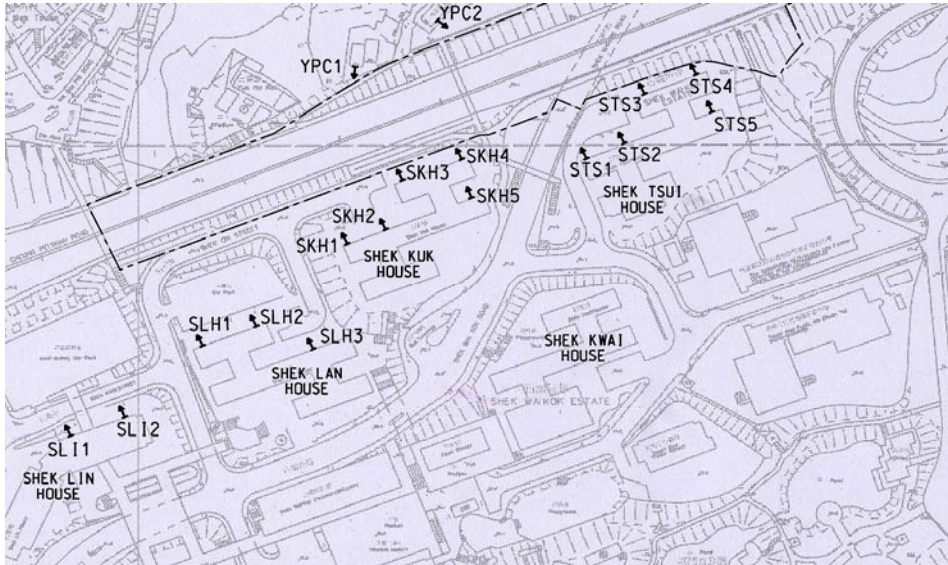
位置 Location	噪音感應強烈的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	全部吸音板 All Absorptive Panels 分貝 dB(A)	全部反音板 All Reflective Panels 分貝 dB(A)
石圍角邨 石蓮樓 Shek Wai Kok Estate Shek Lin House	SLI1	1	68	67	67
		5	68	67	67
		10	70	68	68
		13	71	69	69
	SLI2	1	64	63	63
		5	65	63	63
		10	69	67	67
		13	70	68	68
石圍角邨 石蘭樓 Shek Wai Kok Estate Shek Lan House	SLH1	1	72	71	71
		5	73	70	70
		10	73	70	70
		15	73	70	70
		20	72	70	70
		25	72	70	70
	SLH2	1	70	66	66
		5	72	67	67
		10	72	68	68
		15	72	68	68
		20	72	69	69
		25	72	69	69
	SLH3	1	66	60	60
		5	68	61	61
		10	69	62	62
		15	69	62	62
		20	69	63	63
		25	68	63	63
		27	68	63	63

註釋： 在隔音屏障底部安裝吸音板如建議的方案，能夠大致達到整件隔音屏障安裝吸音板的吸音效果。

Note : The provision of absorptive noise barrier panels for the lower portion of the noise barrier (as in the Recommended Scheme) can achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier.

選擇不同性質的垂直隔音板之效果
Effects of Choice of Vertical Panels

石圍角邨 Shek Wai Kok Estate (Page 2/3)



(灰色陰影的數字顯示在某該噪音感應強的地方，全部吸音板的減音交效果較全部反音板為佳)
(NSRs where absorptive panels are more effective than reflective panels are shaded in grey)

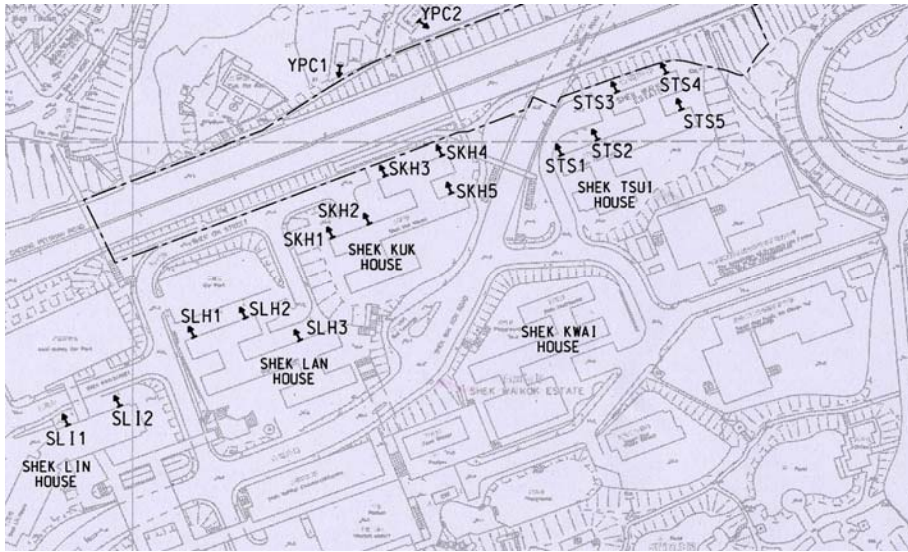
位置 Location	噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	全部吸音板 All Absorptive Panels 分貝 dB(A)	全部反音板 All Reflective Panels 分貝 dB(A)
石圍角邨 石菊樓 Shek Wai Kok Estate Shek Kuk House	SKH1	1	73	63	63
		5	74	64	64
		10	74	65	66
		15	73	67	68
		20	72	69	70
		25	72	69	70
	SKH2	1	71	61	61
		5	72	62	62
		10	72	63	64
		15	72	65	66
		20	71	67	68
		25	70	68	68
	SKH3	1	76	64	64
		5	77	65	65
		10	76	69	70
		15	75	72	73
		20	74	72	72
		25	73	71	71
	SKH4	1	76	68	68
		5	77	68	69
		10	76	70	71
		15	75	72	73
		20	74	72	73
		25	74	72	72
	SKH5	1	71	70	70
5		72	69	69	
10		71	67	67	
15		70	67	67	
20		70	67	67	
25		69	67	67	

註釋： 在隔音屏障底部安裝吸音板如建議的方案，能夠大致達到整件隔音屏障安裝吸音板的吸音效果。

Note: The provision of absorptive noise barrier panels for the lower portion of the noise barrier (as in the Recommended Scheme) can achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier.

選擇不同性質的垂直隔音板之效果
Effects of Choice of Vertical Panels

石圍角邨 Shek Wai Kok Estate (Page 3/3)



(灰色陰影的數字顯示在某該噪音感應強的地方，全部吸音板的減音交效果較全部反音板為佳)
(NSRs where absorptive panels are more effective than reflective panels are shaded in grey)

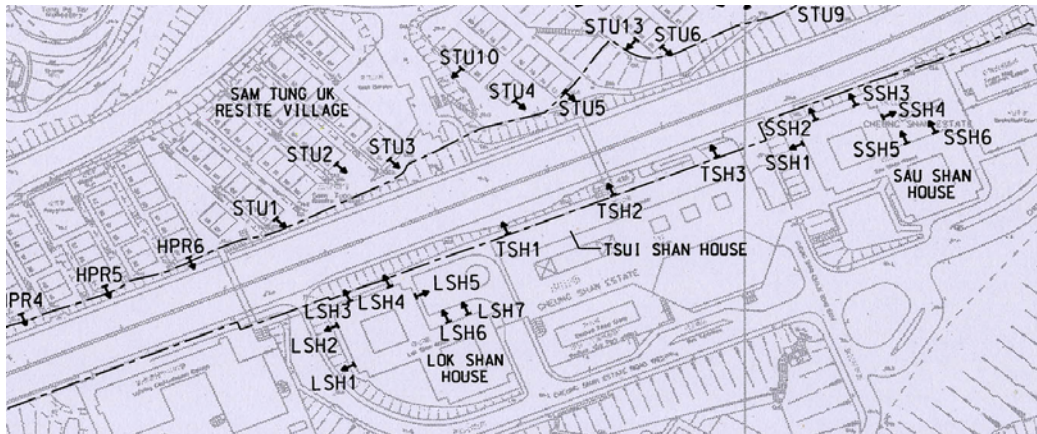
位置 Location	噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	全部吸音板 All Absorptive Panels 分貝 dB(A)	全部反音板 All Reflective Panels 分貝 dB(A)
石圍角邨 石翠樓 Shek Wai Kok Estate Shek Tsui House	STS1	1	71	65	65
		5	74	68	68
		10	75	71	71
		15	75	71	71
		20	74	71	71
		25	74	71	71
		27	73	71	71
	STS2	1	68	54	54
		5	71	58	58
		10	72	61	61
		15	72	65	65
		20	72	66	67
		25	72	67	68
		27	71	67	68
	STS3	1	71	59	59
		5	77	64	64
		10	77	68	68
		15	76	71	72
		20	75	72	73
		25	74	72	72
		27	74	72	72
	STS4	1	70	59	59
		5	76	66	66
		10	77	68	69
		15	76	71	73
		20	75	72	73
		25	74	72	72
27		74	72	72	
STS5	1	64	62	62	
	5	68	66	66	
	10	69	67	68	
	15	69	67	68	
	20	69	68	68	
	25	68	68	68	
	27	68	67	68	

註釋： 在隔音屏障底部安裝吸音板如建議的方案，能夠大致達到整件隔音屏障安裝吸音板的吸音效果。

Note: The provision of absorptive noise barrier panels for the lower portion of the noise barrier (as in the Recommended Scheme) can achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier.

選擇不同性質的垂直隔音板之效果
Effects of Choice of Vertical Panels

象山邨 Cheung Shan Estate (Page 1/2)



(灰色陰影的數字顯示在某該噪音感應強的地方，全部吸音板的減音交效果較全部反音板為佳)
(NSRs where absorptive panels are more effective than reflective panels are shaded in grey)

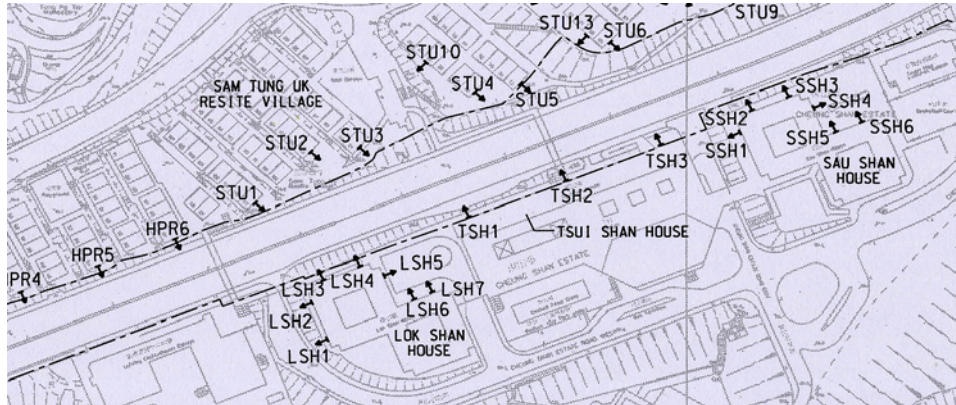
位置 Location	噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	全部吸音板 All Absorptive Panels 分貝 dB(A)	全部反音板 All Reflective Panels 分貝 dB(A)
象山邨 樂山樓 Cheung Shan Estate Lok shan House	LSH1	1	69	65	66
		5	70	66	67
		10	70	68	68
		15	71	69	69
		20	70	69	70
	LSH2	1	72	68	68
		5	73	68	69
		10	72	69	70
		15	72	70	71
		20	71	70	70
	LSH3	1	78	68	68
		5	77	70	71
		10	76	74	75
		15	75	74	74
		20	75	73	73
	LSH4	1	78	66	66
		5	77	69	70
		10	76	73	74
		15	75	73	74
		20	75	73	73
	LSH5	1	75	63	63
		5	75	66	67
		10	74	71	72
		15	74	71	72
		20	73	71	71
	LSH6	1	69	56	56
		5	71	59	59
		10	71	63	63
		15	70	67	67
		20	70	68	69
		23	70	68	69
	LSH7	1	69	62	62
		5	72	64	64
		10	72	66	66
		15	71	68	69
20		71	69	70	
23		71	69	70	

註釋： 在隔音屏障底部安裝吸音板如建議的方案，能夠大致達到整件隔音屏障安裝吸音板的吸音效果。

Note: The provision of absorptive noise barrier panels for the lower portion of the noise barrier (as in the Recommended Scheme) can achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier.

選擇不同性質的垂直隔音板之效果
Effects of Choice of Vertical Panels

象山邨 Cheung Shan Estate (Page 2/2)



(灰色陰影的數字顯示在某該噪音感應強的地方，全部吸音板的減音交效果較全部反音板為佳)
(NSRs where absorptive panels are more effective than reflective panels are shaded in grey)

位置 Location	噪音感應強的地方 NSR	樓層 Floor	現在的噪音聲級 Existing Noise Level 分貝 dB(A)	全部吸音板 All Absorptive Panels 分貝 dB(A)	全部反音板 All Reflective Panels 分貝 dB(A)
象山邨 翠山樓 Cheung Shan Estate Tsui Shan House	TSH1	1	78	66	66
		5	77	73	73
		10	76	73	74
		12	76	73	74
	TSH2	1	78	69	69
		5	77	73	74
		10	76	74	74
		12	76	74	74
	TSH3	1	78	63	63
		5	77	70	71
		10	76	73	74
		12	76	73	74
象山邨 秀山樓 Cheung Shan Estate Sau Shan House	SSH1	1	72	66	66
		5	73	68	69
		10	73	70	71
		15	72	71	71
		20	72	70	70
	SSH2	1	78	67	67
		5	77	72	74
		10	76	73	74
		15	75	73	73
		20	74	72	72
	SSH3	1	78	67	67
		5	77	72	73
		10	76	73	74
		15	75	73	73
		20	74	72	72
	SSH4	1	72	65	65
		5	74	68	69
		10	74	71	72
		15	73	71	72
		20	72	71	71
	SSH5	1	65	61	61
		5	70	63	63
		10	71	68	69
		15	71	70	70
20		71	70	70	
SSH6	1	65	62	62	
	5	71	64	64	
	10	73	70	70	
	15	73	71	72	
	20	73	71	72	
		23	73	71	72

註釋： 在隔音屏障底部安裝吸音板如建議的方案，能夠大致達到整件隔音屏障安裝吸音板的吸音效果。

Note: The provision of absorptive noise barrier panels for the lower portion of the noise barrier (as in the Recommended Scheme) can achieve almost the same absorptive effect when compared with installing absorptive panels for the entire barrier.