

**Appendix 4.4A**  
**Sensitivity Test for Canton  
Road**

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## Appendix 4.4A – Sensitivity Test for Canton Road

- 1.1** For the sensitivity test of Canton Road (Scheme Q and Improvement Works at the Junction of CR/FS/JR), the scenarios for with and without Project in the design year (Year 2030) would also be assessed for all NSRs along Canton Road. The results will be used to evaluate the potential increasing in traffic noise level due to the propose improvement work at Canton Road. The noise impact is considered significant if the increase of noise level due to the Scheme Q and Improvement Works at the Junction of CR/FS/JR is greater than 1.0 dB(A). In that case, the Scheme Q and Improvement Works at the Junction of CR/FS/JR would be considered as a major improvement to existing road and hence do not fall within the meaning of Item A.1 of Schedule 2 of the EIAO.
- 1.2** Refer to the latest EIA for WKCD (EIA reference: EIA-215/2013), the proposed underpass within WKCD development will be connected to the Austin Road West in interim scheme before permanently connected to the Canton Road upon relocation of the existing TST Fire Station. The sensitivity test has been assessed under both the interim and permanent schemes for WKCD underpass for with and without Project scenarios.
- 1.3** For the permanent access in Canton Road, the existing TST fire station will be relocated so NSR FSDO will be removed. Parcel 3 of WKCD, which is facing Canton Road, has been added as a NSR P3b for traffic noise assessment. The location of the NSRs can be found in **Figure A4.4** of this Appendix. The summary of the NSRs can be found in Table 1 below.

**Table 1 Representative Noise Sensitive Receivers**

NSR	Description	Land Use	Status	Height of First NSR Level (mPD)	No. of Storey
YTB	Yue Tak Building	Residential	Existing	11.8	14
ASC	Austin Station Site C	Residential	Planned	14.7	23
GB	Garden Building	Residential	Existing	11	11
VT	The Victoria Towers - Tower 2	Residential	Existing	47	52
ASD1	Austin Station Site D	Residential	Planned	15.2	26
ASD2	Austin Station Site D	Residential	Planned	15.2	30
FSDO	Fire Services Department - Kowloon Regional Office	Residential	Existing	24	7
LCMS	Lai Chack Middle School	Educational	Existing	8	5
P3b	Parcel 03 of WKCD	Residential	Planned	19.4	6

- 1.4** Based on the peak hour traffic flows in 2030 for with and without project (peak hour traffic flow within 15 years upon commencement of the Project in the end of Year 2015), the sensitivity test with the same methodology as DP roads has been conducted for the traffic noise levels for the Canton Road after completion of the Project at the representative NSRs were calculated as shown in **Table 2**. The traffic data for permanent scheme can be found in **Appendix 4.3** for permanent access in Canton Road. The summary of the calculation is provided in **Appendix 4.4B**.

**Table 2 Unmitigated Road Traffic Noise Level (Permanent Access in Canton Road), dB(A)**

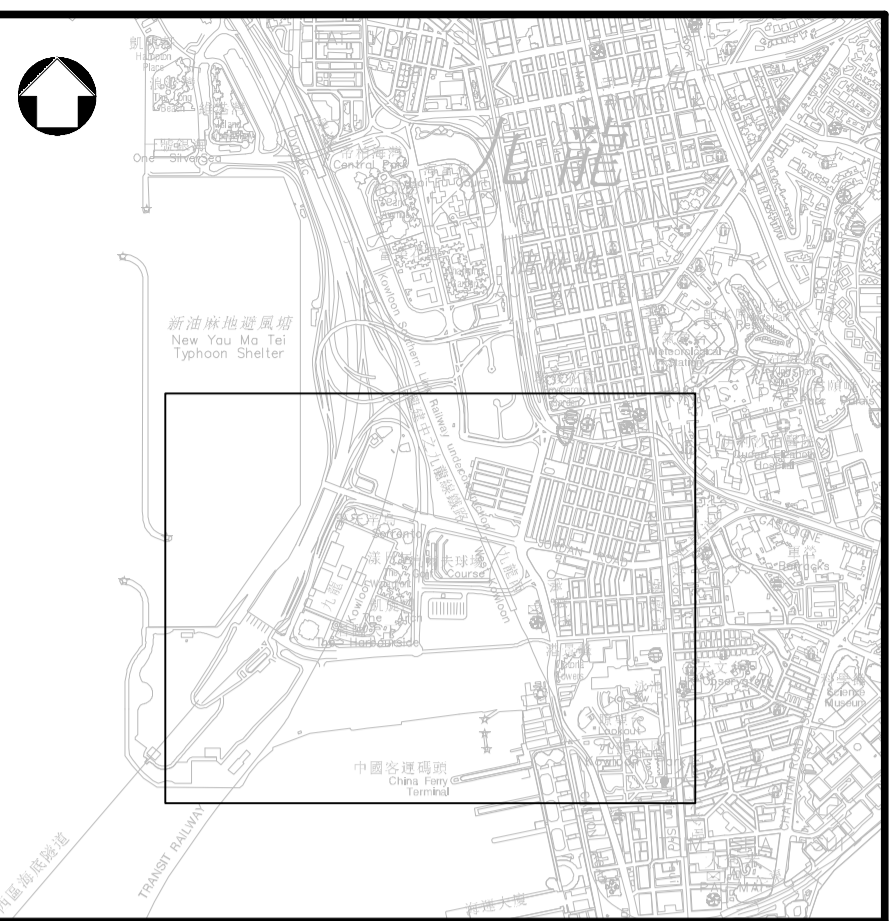
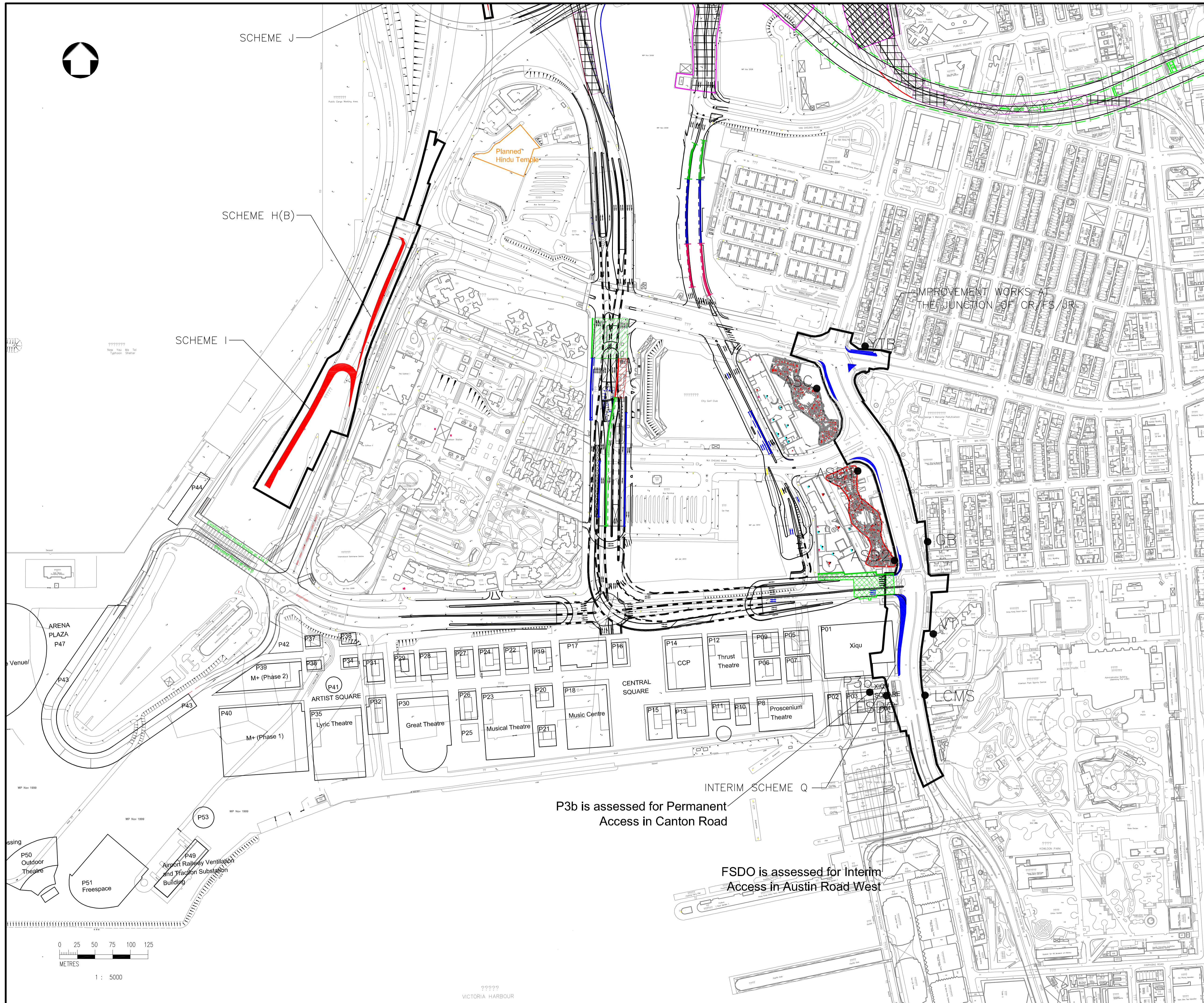
NSR	Noise Criteria	With Project, dB(A)	Without Project, dB(A)	Noise Contribution due to Scheme Q and Improvement Works at the Junction of CR/FS/JR, dB(A)	Significant Impact (> 1.0 dB(A))
YTB	70	<b>77-80</b>	<b>77-80</b>	0.0	No
ASC	70	<b>74-76</b>	<b>74-76</b>	0.0	No
GB	70	<b>78-81</b>	<b>78-81</b>	-0.1 – 0.0	No
VT	70	<b>73-78</b>	<b>73-78</b>	-0.2 – 0.0	No
ASD1	70	<b>76-79</b>	<b>76-79</b>	-0.4 – 0.2	No
ASD2	70	<b>76-82</b>	<b>76-82</b>	-0.1 – 0.4	No
P3b	70	<b>68-72</b>	<b>68-72</b>	0.0 – 0.1	No
LCMS	65	<b>82-84</b>	<b>82-84</b>	-0.1 – 0.0	No

**1.5** The unmitigated traffic noise level for interim access in Austin Road West at the representative NSRs were calculated as shown in **Table 3**. The traffic data can be found in **Appendix 4.4C** for interim access in Austin Road West. The summary of the calculation is provided in **Appendix 4.4B**.

**Table 3 Unmitigated Road Traffic Noise Level (Interim Access in Austin Road West), dB(A)**

NSR	Noise Criteria	With Project, dB(A)	Without Project, dB(A)	Noise Contribution due to Scheme Q and Improvement Works at the Junction of CR/FS/JR, dB(A)	Significant Impact (> 1.0 dB(A))
YTB	70	<b>77-80</b>	<b>77-80</b>	-0.1 – 0.0	No
ASC	70	<b>74-76</b>	<b>74-76</b>	0.0	No
GB	70	<b>78-81</b>	<b>78-81</b>	-0.1 – 0.0	No
VT	70	<b>73-78</b>	<b>73-78</b>	-0.2 – 0.0	No
ASD1	70	<b>76-79</b>	<b>76-79</b>	-0.3 – 0.1	No
ASD2	70	<b>76-82</b>	<b>76-82</b>	-0.1 – 0.4	No
FSDO	70	<b>75-76</b>	<b>75-76</b>	0.0 – 0.1	No
LCMS	65	<b>82-84</b>	<b>82-84</b>	-0.1 – 0.0	No

**1.6** Referring to the modelling results, even without the Project, traffic noise impact arising from the Canton Road on the NSRs would exceed the relevant traffic noise criteria. Potential increase in traffic noise level on all NSRs due to the Project are considered insignificant since the noise level different between the with Project and without Project scenario is as low as 0.4 dB(A). Therefore, the Scheme Q and Improvement work at the Junction CR/FS/JR was not considered as a major improvement to existing road and hence do not fall within the meaning of Item A.1 of Schedule 2 of the EIAO.



LOCATION PLAN

- LEGEND:
- NOISE SENSITIVE RECEIVERS
  - ROAD SECTIONS WITHIN THE MEANING OF ITEM A.1 OF THE SCHEDULE 2 OF THE EIAO
  - OTHER ROAD SECTIONS
  - WORKS BOUNDARY

Rev	Description	By	Date

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Project title  
 AGREEMENT NO. CE 44/2011 (HY)  
 PROPOSED ROAD IMPROVEMENT WORKS IN WEST KOWLOON RECLAMATION DEVELOPMENT – PHASE 1 INVESTIGATION, DESIGN AND CONSTRUCTION

Drawing title  
**LOCATION OF NOISE SENSITIVE RECEIVERS FOR SENSITIVITY TEST OF TRAFFIC NOISE ASSESSMENT**

Drawing no. <b>FIGURE A4.4</b>		Rev. -	
Drawn MC	Date AUG13	Checked KS	Approved LC
Scale A3 1:5000		Status PRELIMINARY	

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**路政署**  
**HIGHWAYS DEPARTMENT**  
 主要工程管理處  
 MAJOR WORKS PROJECT MANAGEMENT OFFICE

P3b is assessed for Permanent Access in Canton Road

FSDO is assessed for Interim Access in Austin Road West

IMPROVEMENT WORKS AT THE JUNCTION OF CR/F5/JR

VICTORIA HARBOUR