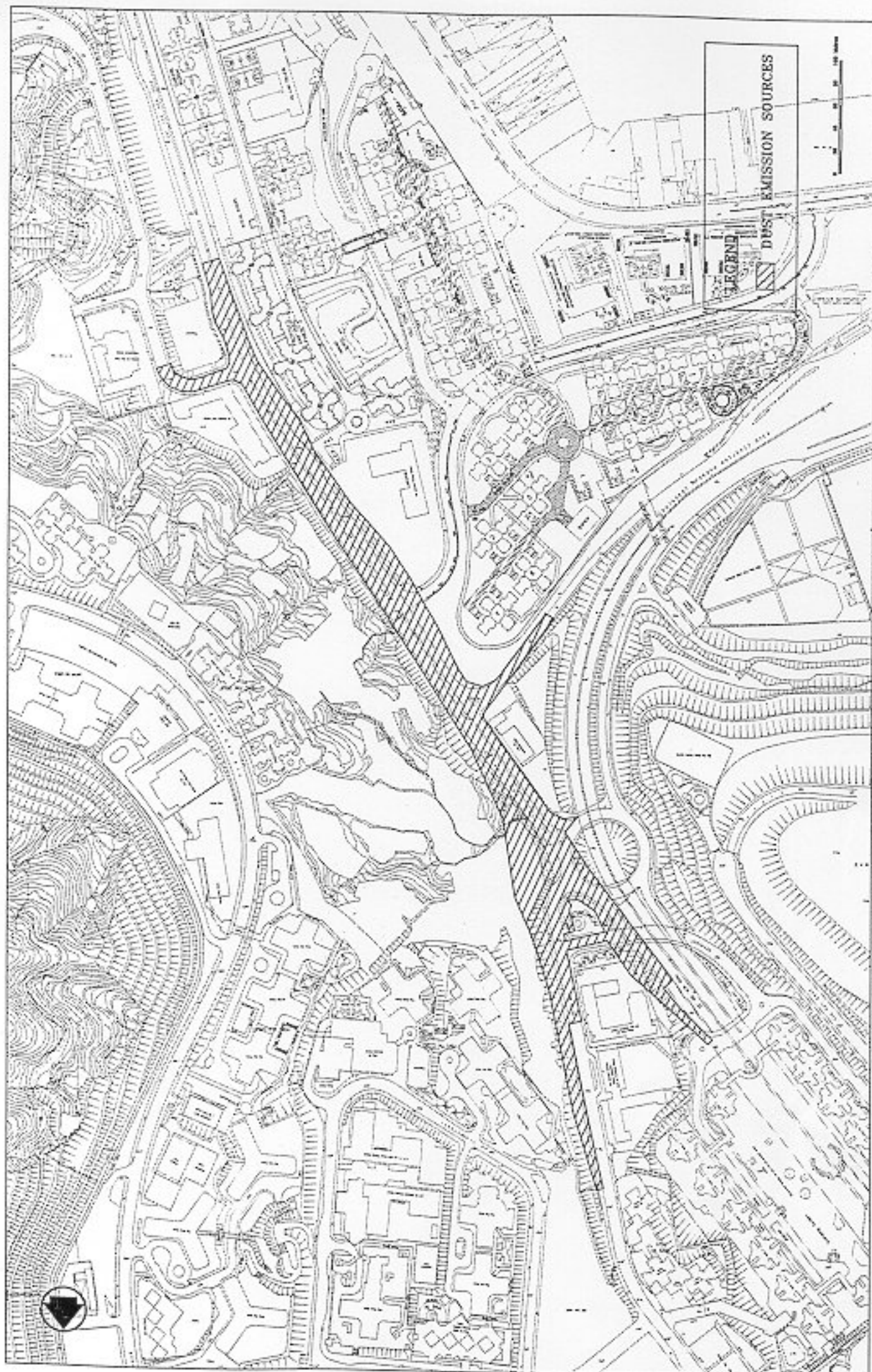


### Appendix 4.1 Calculations of Dust Emission Factors

Description of Dust Emission Source	TSP	Remarks
1 General construction activities		
TSP emission factor (Mg/hectare/month)	2.69 from AP-42 5th edition (S13.2.3.3)	
Area source emissions:		
E (g/m <sup>2</sup> /s)	1.037809E-04 calculated	
Line sources emissions with different width:		
E (g/m/s)	width (m) 7.0 7.264660E-04 calculated	
	8.0 8.302469E-04 calculated	
	9.5 9.859182E-04 calculated	
	10.0 1.037809E-03 calculated	
	10.5 1.089899E-03 calculated	
	11.0 1.141590E-03 calculated	
	12.0 1.245370E-03 calculated	
	13.0 1.349151E-03 calculated	
Percentage area actively operating (%)	50 estimated	
Unmitigated (%)	0	
Area source emissions:		
E (g/m <sup>2</sup> /s)	5.189043E-05 calculated	
Line sources emissions with different width:		
E (g/m/s)	width (m) 7.0 3.632330E-04 calculated	
	8.0 4.151235E-04 calculated	
	9.5 4.929591E-04 calculated	
	10.0 5.189043E-04 calculated	
	10.5 5.48495E-04 calculated	
	11.0 5.707948E-04 calculated	
	12.0 6.226852E-04 calculated	
	13.0 6.745756E-04 calculated	
Percentage area actively operating (%)	50 estimated	
Mitigated (%)	50 watering twice a day	
Area source emissions:		
E (g/m <sup>2</sup> /s)	2.594522E-05 calculated	
Line sources emissions with different width:		
E (g/m/s)	width (m) 7.0 1.816165E-04 calculated	
	8.0 2.075617E-04 calculated	
	9.5 2.464796E-04 calculated	
	10.0 2.594522E-04 calculated	



	10.5	7.075247E-06	calculated
	11.0	7.412164E-06	calculated
	12.0	8.085997E-06	calculated
	13.0	6.759830E-06	calculated
<b>Construction Phase:</b>			
24-hour average result = (12/24)*(Highest hourly Average Modelling Result during Daytime)			
+ (12/24)*(Highest hourly Average Modelling Result during Nighttime) + Background			
Remark: Figure A1 shows the locations of the dust emission sources.			

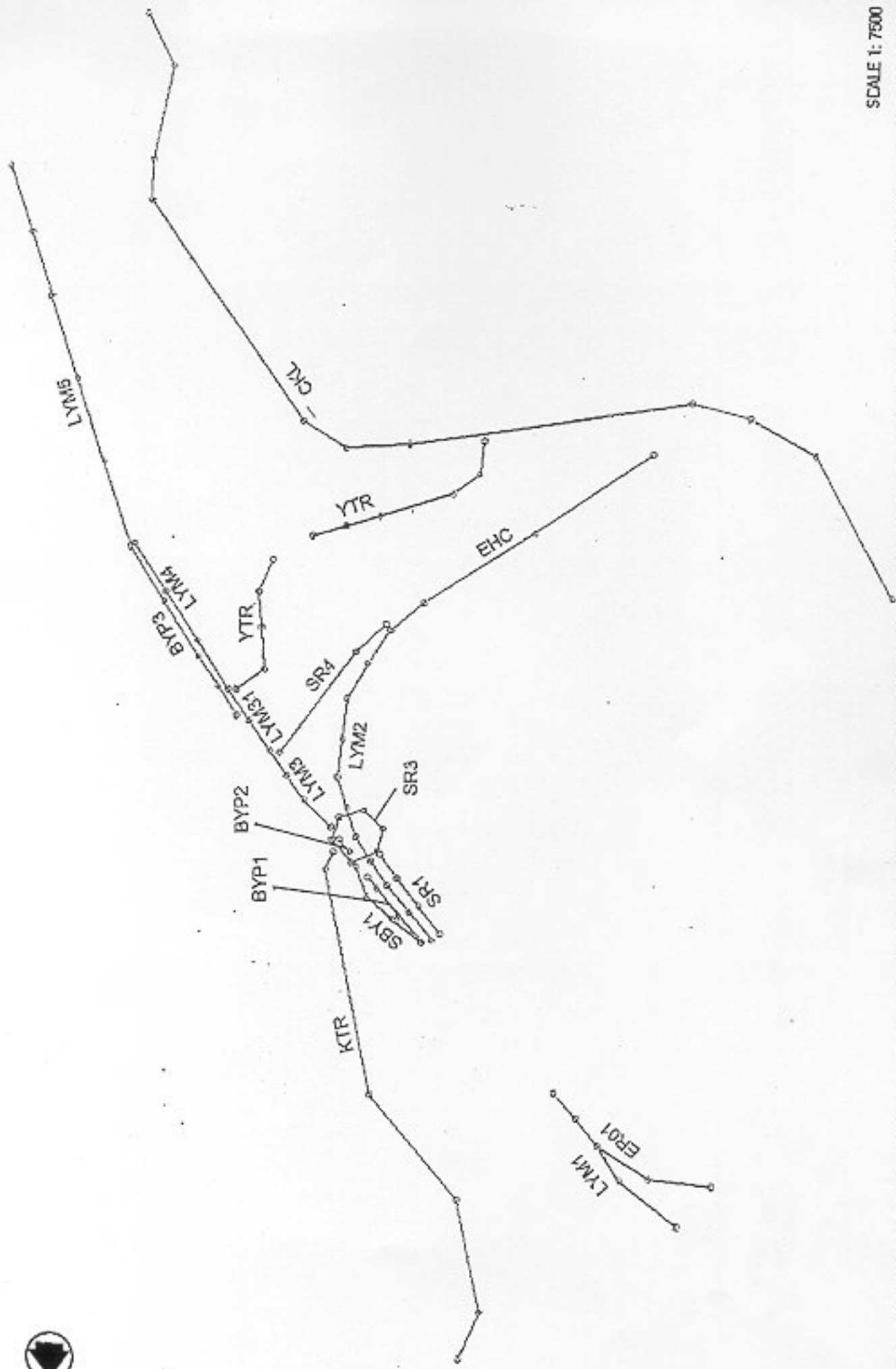


Let Yue Mun Road Underpass, Modification at Junction with Yau Tong Road and Associated Improvement Works

LOCATIONS OF THE DUST EMISSION SOURCES

FIGURE No.

A1



SCALE 1: 7500

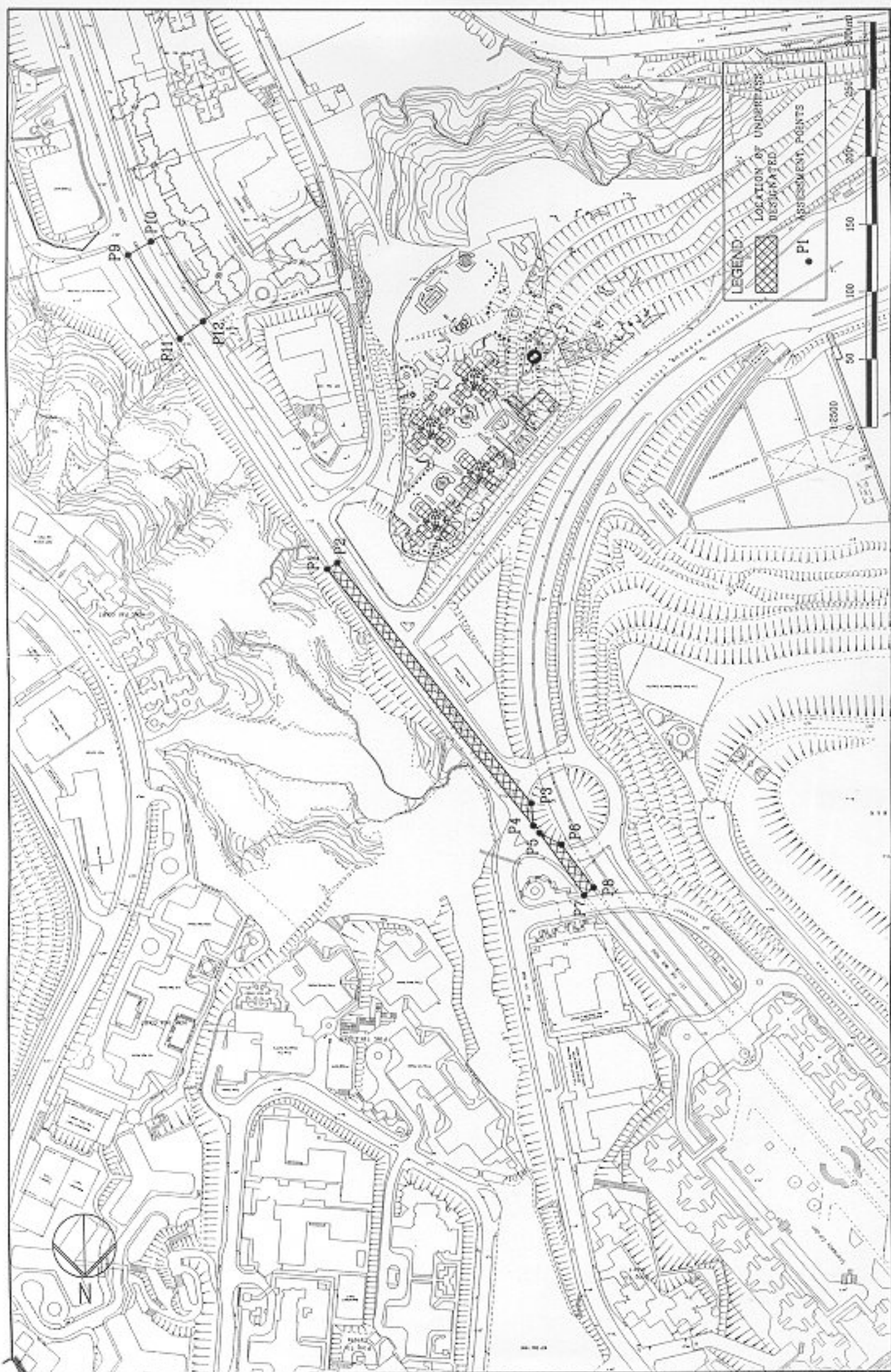
FIGURE No.

A2

Let Yee Mun Road Underpass, Modification at Junction with Yau Tong Road and Associated Improvement Works

LOCATIONS OF ROAD LINKS





Lei Yue Mun Road Underpass, Modification at Junction with Yau Tong Road and Associated Improvement Works

DESIGNATED ASSESSMENT POINTS FOR UNDERPASS AIR QUALITY

FIGURE NO.

A3