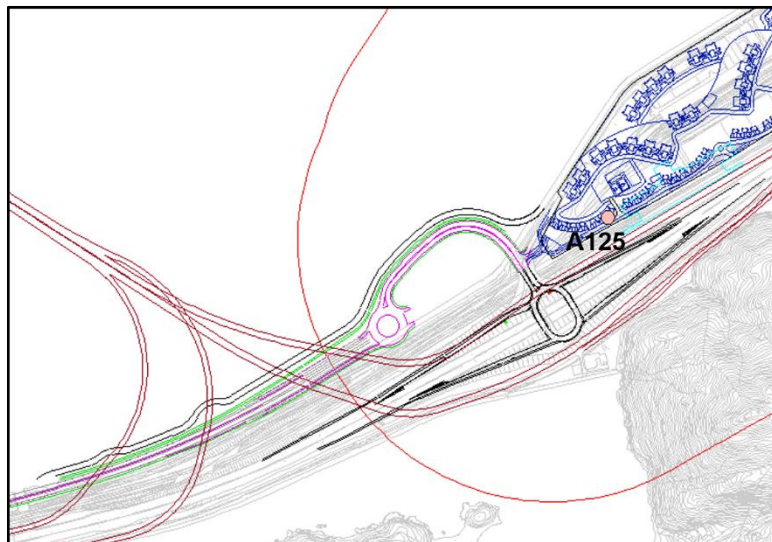


Sensitivity Test on Contribution from Tuen Mun-Chek Lap Kok (TM-CLK) Link

Sections of the Tuen Mun-Chek Lap Kok (TM-CLK) Link within the 500m Assessment Area are up to 20m above ground. Owing to the constraint of the CALINE4 model in modelling elevated roads higher than 10m, the road heights of elevated road sections in excess of 10m high above local ground or water surface will be set to 10m in the model.

As a conservative assumption, the maximum contribution from the TM-CLK Link is adopted for all assessment heights at each discrete ASR. A sensitivity test was conducted to identify the height where the vehicle emission contribution from the TM-CLK Link is the highest. For all the relevant parameters (i.e. 1-hour NO₂, 24-hour RSP and FSP, annual NO₂, RSP and FSP), contributions from vehicles on TM-CLK Link at ASR A125 (Proposed development atop Siu Ho Wan Depot (Phase 1b)), the ASR closest to the TM-CLK Link, have been calculated at 1.5m, 2m, 3m, and so forth up to 20m above ground.



The results are summarized in the following table, which shows that emission contribution from the TM-CLK Link at ASR A125 is the highest at 1.5m above ground. Thus emission contribution from the TM-CLK Link at 1.5m above ground is adopted for all assessment heights at each discrete ASR.

Assessment Height (mAG)	Contribution from TM-CLK Link ($\mu\text{g}/\text{m}^3$)					
	NO ₂		RSP		FSP	
	1-hour Maximum	Annual	24-hour Maximum	Annual	24-hour Maximum	Annual
1.5	18.58	2.34	0.284	0.123	0.265	0.1143
2	18.56	2.32	0.283	0.122	0.264	0.1137
3	18.49	2.29	0.280	0.120	0.261	0.1112
4	18.40	2.24	0.275	0.118	0.256	0.1096
5	18.28	2.18	0.269	0.115	0.251	0.1067
6	18.14	2.11	0.263	0.111	0.245	0.1031
7	17.97	2.02	0.255	0.106	0.237	0.0991
8	17.78	1.93	0.246	0.102	0.229	0.0946
9	17.57	1.83	0.237	0.096	0.221	0.0898
10	17.34	1.73	0.227	0.091	0.212	0.0847
11	17.08	1.62	0.217	0.086	0.202	0.0796
12	16.81	1.51	0.207	0.080	0.192	0.0743
13	16.51	1.41	0.196	0.074	0.182	0.0692
14	16.20	1.30	0.186	0.069	0.173	0.0641
15	15.87	1.20	0.175	0.064	0.163	0.0593
16	15.53	1.11	0.165	0.059	0.154	0.0548
17	15.18	1.02	0.155	0.054	0.144	0.0505
18	14.81	0.94	0.146	0.050	0.136	0.0465
19	14.43	0.87	0.137	0.046	0.127	0.0429
20	14.04	0.80	0.129	0.043	0.119	0.0395

Note: Bolded values indicate highest concentration among all levels.