

Appendix 4.10d Construction Noise Assessment with Implementation of Further Noise Mitigation Measures for STTNV2

NAP: STTNV2

Period	Construction Activities	Work Zone	Location	Reduction of number of PME	Mitigated SWL, dB(A)	Distance from Notional Source Position, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	Predicted Noise Level, dB(A)
Jun 2030 - Sep 2030	Foundation of Noise Barrier	1	Outside 45m Buffer Zone	N/A	107	45	-41.1	0	3	68.9
	Pile Cap, L-retaining Wall and Formation of new road ^(a)	1	Within 45m Buffer Zone		107	32	-38.1	0	3	71.9
	Utilities Diversion	1	Outside 45m Buffer Zone		104	45	-41.1	0	3	65.9
Overall Predicted Noise Level, dB(A)										74
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

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Oct 2030 - Nov 2030	Foundation of Noise Barrier	1	Within 45m Buffer Zone	N/A	107	45	-41.1	0	3	68.9
	Pile Cap, L-retaining Wall and Formation of new road ^(a)	1	Outside 45m Buffer Zone		107	32	-38.1	0	3	71.9
	Utilities Diversion	1	Outside 45m Buffer Zone		104	45	-41.1	0	3	65.9
	Erection of structural steel post for noise barrier	1	Outside 45m Buffer Zone		100	45	-41.1	0	3	61.9
Overall Predicted Noise Level, dB(A)										75
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

Period	Construction Activities	Work Zone	Location	Reduction of number of PME	Mitigated SWL, dB(A)	Distance from Notional Source Position, m	Distance Correction, dB(A)	Screening Correction, dB(A)	Façade Correction, dB(A)	Predicted Noise Level, dB(A)
Feb 2032 - Mar 2032	Slope Formation / Upgrading Works ^(a)	1	Within 45m Buffer Zone	N/A	108	32	-38.1	0	3	72.9
	Foundation of Noise Barrier	1	Outside 45m Buffer Zone		107	45	-41.1	0	3	68.9
Overall Predicted Noise Level, dB(A)										74
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

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Apr 2032 - May 2032	Slope Formation / Upgrading Works ^(a)	1	Within 45m Buffer Zone	N/A	108	32	-38.1	0	3	72.9
	Foundation of Noise Barrier	1	Outside 45m Buffer Zone		107	45	-41.1	0	3	68.9
	Pile Cap and Formation of new road	1	Outside 45m Buffer Zone		107	45	-41.1	0	3	68.9
Overall Predicted Noise Level, dB(A)										75
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

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Jun 2032 - Jul 2032	Foundation of Noise Barrier	1	Outside 45m Buffer Zone	N/A	107	45	-41.1	0	3	68.9
	Pile Cap and Formation of new road ^(a)	1	Within 45m Buffer Zone		107	32	-38.1	0	3	71.9
	Utilities Diversion	1	Outside 45m Buffer Zone		104	45	-41.1	0	3	65.9
Overall Predicted Noise Level, dB(A)										74
Daytime Noise Criteria, dB(A)										75
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Aug 2032	Foundation of Noise Barrier	1	Outside 45m Buffer Zone	N/A	107	45	-41.1	0	3	68.9
	Pile Cap and Formation of new road ^(a)	1	Within 45m Buffer Zone		107	32	-38.1	0	3	71.9
	Utilities Diversion	1	Outside 45m Buffer Zone		104	45	-41.1	0	3	65.9
	Erection of structural steel post for noise barrier	1	Outside 45m Buffer Zone		100	45	-41.1	0	3	61.9
Overall Predicted Noise Level, dB(A)										75
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

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Aug 2033	Erection of steel member and noise barrier panel at north bound	1	Outside 45m Buffer Zone	N/A	100	45	-41.1	0	3	61.9
	Erection of steel member and noise barrier panel at south bound	1	Outside 45m Buffer Zone		100	45	-41.1	0	3	61.9
	Road Drainage	1	Outside 45m Buffer Zone		103	45	-41.1	0	3	64.9
	Road Surfacing ^(a)	1	Within 45m Buffer Zone		109	32	-38.1	0	3	73.9
	Roadlighting and E&M works	1	Outside 45m Buffer Zone		96	45	-41.1	0	3	57.9
	Landscaping works at north bound	1	Outside 45m Buffer Zone		100	45	-41.1	0	3	61.9
Overall Predicted Noise Level, dB(A)										75
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

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Sep 2033	Erection of steel member and noise barrier panel at north bound	1	Outside 45m Buffer Zone	N/A	100	45	-41.1	0	3	61.9
	Erection of steel member and noise barrier panel at south bound	1	Outside 45m Buffer Zone		100	45	-41.1	0	3	61.9
	Road Surfacing ^(a)	1	Within 45m Buffer Zone		109	32	-38.1	0	3	73.9
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Compliance										Yes

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Nov 2033	Erection of steel member and noise barrier panel at south bound	1	Outside 45m Buffer Zone	N/A	100	45	-41.1	0	3	61.9
	Road Drainage	1	Outside 45m Buffer Zone		103	45	-41.1	0	3	64.9
	Road Surfacing ^(a)	1	Within 45m Buffer Zone		109	32	-38.1	0	3	73.9
	Roadlighting and E&M works	1	Outside 45m Buffer Zone		96	45	-41.1	0	3	57.9
	Landscaping works at south bound	1	Outside 45m Buffer Zone		100	45	-41.1	0	3	61.9
Overall Predicted Noise Level, dB(A)										75
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

Note:

(a) The construction activity with the highest SWL.

(b) Only one construction activity would be located in the buffer zone. The activity with the highest SWL located in the buffer zone represents the worst case scenario.