

Appendix 4.10a Construction Noise Assessment with Implementation of Further Noise Mitigation Measures for WWG8

NAP: WWG8

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)
Jul 2026 - Aug 2026	Foundation of Noise Barrier	3	Outside 50m Buffer Zone	N/A	106	50	-42.0	0	3	67.0
	Pile Cap, L-retaining Wall and Formation of new road ^(a)	3	Within 50m Buffer Zone		107	25	-36.0	0	3	74.0
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)
Sep 2026 - Jan 2027	Foundation of Noise Barrier	3	Outside 50m Buffer Zone	N/A	106	50	-42.0	0	3	67.0
	Pile Cap, L-retaining Wall and Formation of new road ^(a)	3	Within 50m Buffer Zone		107	25	-36.0	0	3	74.0
	Utilities Diversion	3	Outside 50m Buffer Zone		104	50	-42.0	0	3	65.0
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 2027 - May 2027	Foundation of Noise Barrier	3	Outside 50m Buffer Zone	N/A	106	50	-42.0	0	3	67.0
	Pile Cap, L-retaining Wall and Formation of new road ^(a)	3	Within 50m Buffer Zone		107	25	-36.0	0	3	74.0
	Utilities Diversion	3	Outside 50m Buffer Zone		104	50	-42.0	0	3	65.0
	Erection of structural steel post for noise barrier	3	Outside 50m Buffer Zone		100	50	-42.0	0	3	61.0
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)
Jun 2027 - Jul 2027	Pile Cap, L-retaining Wall and Formation of new road ^(a)	3	Within 50m Buffer Zone	N/A	107	25	-36.0	0	3	74.0
	Utilities Diversion	3	Outside 50m Buffer Zone		104	50	-42.0	0	3	65.0
	Erection of structural steel post for noise barrier	3	Outside 50m Buffer Zone		100	50	-42.0	0	3	61.0
Maximum noise contribution from construction activities in Zone 4 during this period:										52
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)
Oct 2028 - Nov 2028	Foundation of Noise Barrier	3	Outside 50m Buffer Zone	N/A	106	50	-42.0	0	3	67.0
	Pile Cap and Formation of new road ^(a)	3	Within 50m Buffer Zone		107	25	-36.0	0	3	74.0
Maximum noise contribution from construction activities in Zone 4 during this period:										56
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)
Dec 2028 - Jan 2029	Foundation of Noise Barrier	3	Outside 50m Buffer Zone	N/A	106	50	-42.0	0	3	67.0
	Pile Cap and Formation of new road ^(a)	3	Within 50m Buffer Zone		107	25	-36.0	0	3	74.0
	Utilities Diversion	3	Outside 50m Buffer Zone		104	50	-42.0	0	3	65.0
Maximum noise contribution from construction activities in Zone 4 during this period:										54
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 2029	Foundation of Noise Barrier	3	Outside 50m Buffer Zone	N/A	106	50	-42.0	0	3	67.0
	Pile Cap and Formation of new road ^(a)	3	Within 50m Buffer Zone		107	25	-36.0	0	3	74.0
	Utilities Diversion	3	Outside 50m Buffer Zone		104	50	-42.0	0	3	65.0
	Erection of structural steel post for noise barrier	3	Outside 50m Buffer Zone		100	50	-42.0	0	3	61.0
Maximum noise contribution from construction activities in Zone 4 during this period:										54
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)
Mar 2029 - Apr 2029	Pile Cap and Formation of new road ^(a)	3	Within 50m Buffer Zone	N/A	107	25	-36.0	0	3	74.0
	Utilities Diversion	3	Outside 50m Buffer Zone		104	50	-42.0	0	3	65.0
	Erection of structural steel post for noise barrier	3	Outside 50m Buffer Zone		100	50	-42.0	0	3	61.0
Maximum noise contribution from construction activities in Zone 4 during this period:										54
Overall Predicted Noise Level, dB(A)										75
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

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Aug 2029 - Oct 2029	Foundation of Noise Barrier	3	Outside 50m Buffer Zone	N/A	106	50	-42.0	0	3	67.0
	Pile Cap and Footing ^(a)	3	Within 50m Buffer Zone		107	25	-36.0	0	3	74.0
Maximum noise contribution from construction activities in Zone 4 during this period:										55
Overall Predicted Noise Level, dB(A)										75
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

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Nov 2029 - Dec 2029	Foundation of Noise Barrier	3	Within 50m Buffer Zone	N/A	106	50	-42.0	0	3	67.0
	Pile Cap and Formation of new road ^(a)	3	Outside 50m Buffer Zone		107	25	-36.0	0	3	74.0
	Erection of structural steel post for noise barrier	3	Outside 50m Buffer Zone		100	50	-42.0	0	3	61.0
Maximum noise contribution from construction activities in Zone 4 during this period:										56
Overall Predicted Noise Level, dB(A)										75
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

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Apr 2030	Erection of steel member and noise barrier panel at north bound	3	Outside 50m Buffer Zone	N/A	100	50	-42.0	0	3	61.0
	Road Drainage	3	Outside 50m Buffer Zone		106	50	-42.0	0	3	67.0
	Road Surfacing ^(a)	3	Within 50m Buffer Zone	No. of Compactor, vibratory reduce from 6 to 4	107	25	-36.0	0	3	74.0
Maximum noise contribution from construction activities in Zone 4 during this period:										50
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)
May 2030	Erection of steel member and noise barrier panel at north bound	3	Outside 50m Buffer Zone	N/A	100	50	-42.0	0	3	61.0
	Road Surfacing ^(a)	3	Within 50m Buffer Zone	No. of Compactor, vibratory reduce from 6 to 4	107	25	-36.0	0	3	74.0
	Roadlighting and E&M works	3	Outside 50m Buffer Zone	N/A	96	50	-42.0	0	3	57.0
Maximum noise contribution from construction activities in Zone 4 during this period:										55
Overall Predicted Noise Level, dB(A)										74
Daytime Noise Criteria, dB(A)										75
Compliance										Yes

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Sep 2030	Erection of steel member and noise barrier panel at south bound	3	Outside 50m Buffer Zone	N/A	100	50	-42.0	0	3	61.0
	Road Drainage	3	Outside 50m Buffer Zone		106	50	-42.0	0	3	67.0
	Road Surfacing ^(a)	3	Within 50m Buffer Zone	No. of Compactor, vibratory reduce from 6 to 4	107	25	-36.0	0	3	74.0
Roadlighting and E&M works	3	Outside 50m Buffer Zone	N/A	96	50	-42.0	0	3	57.0	
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Compliance										Yes

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Oct 2030	Erection of steel member and noise barrier panel at south bound	3	Outside 50m Buffer Zone	N/A	100	50	-42.0	0	3	61.0
	Road Surfacing ^(a)	3	Within 50m Buffer Zone	No. of Compactor, vibratory reduce from 6 to 4	107	25	-36.0	0	3	74.0
	Roadlighting and E&M works	3	Outside 50m Buffer Zone	N/A	96	50	-42.0	0	3	57.0
Maximum noise contribution from construction activities in Zone 4 during this period:										53
Overall Predicted Noise Level, dB(A)										74
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.