• MAC

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21 September 2022

MAC201136-03LR4V1

Attention: Michael Fake RW Corkery & Co Pty Limited 62 Hill Street ORANGE NSW 2800

Dear Michael,

Tomingley Gold Extension Project – Response to Request for Additional Information

1 Introduction

Muller Acoustic Consulting Pty Ltd (MAC) has reviewed the additional comments provided (RFI 7) by the NSW Department of Planning and Environment (DPE), following the submission of the Noise and Blasting Impact Assessment (NBIA) that accompanied the Environmental Impact Statement (EIS) for the Tomingley Gold Extension Project (TGEP) (the 'Project').

The NBIA was completed to quantify potential noise and vibration impacts associated with the Project construction, operation and road traffic noise on the surrounding community.

The DPE has reviewed the EIS for the Project and has provided comments requiring additional information and clarifications to address the potential for noise impacts.

Responses are provided for each comment as follows.

2 RFI 7 - Construction Noise Assessment

The Department notes Sections 8.1.1 and 8.1.2 of the Noise and Blasting Impact Assessment which describe:

- 'construction activities associated with SAR mining are expected to satisfy the Noise Management Levels (NMLs) for standard construction hours and out of hours periods at all identified receivers'; and
- 'construction activities associated with road construction for the realignment of the Newell Highway are expected to satisfy the NMLs for standard construction hours at all identified receivers.'

These sections also describe that tabulated results for all scenarios are presented in Appendix E.

Appendix E details that only receiver 'R26' complies with the NMLs (for example, R26 is modelled as being -3 dB LAeq(15min) of the NML for Day-time hours for the 'South' scenario).

Appendix E details that all other receivers are exceeding the NML for Day, Evening and Night hours under all scenarios (for example 'R06', is 24 dB LAeq(15min) over the NML for Day-time hours for the 'North including bridge' scenario').

It is unclear how Appendix E provides evidence for the statement in Section 8.1.1 or the statement in Section 8.1.2.

Further, Section 6.4.7.1 of the EIS describes 'Construction operations associated with the proposed realignment of the Newell Highway and the establishment of the SAR Mine Site are expected to operate within Noise Management Levels for all hours at all identified receptors and all scenarios'. The Noise and Blasting Assessment does not detail that that the Newell Highway construction can satisfy out-of-hours NMLs.



2.1 Response – RFI 7 Construction Noise Assessment

The tabulated results in Appendix E of the NBIA (supporting the outcomes presented in Section 8.1.1 and 8.1.2) are the predicted noise levels from the construction activities. The values are not the difference between the predicted noise levels and the Noise Management Levels (NML).

Appendix E presents the following information:

- the header title as "Construction Predicted Noise Level dB LAeq(15min)";
- columns #1 and #2 containing the receiver name and description;
- columns #3, #4 and #5 are the NMLs for day, evening and night;
- columns #6, #7 and #8 are predicted LA_{eq}(15min) noise levels for the south construction scenario; and
- columns #9, #10 and #11 are predicted LA_{eq}(15min) noise levels for the north construction scenario.

Further, review of Appendix E shows that predicted construction noise levels for the evening and night periods (outside standard hours) are below 30dB LA_{eq}(15min) and are therefore expected to satisfy the out of hours NMLs.

Distances from the SAR pit to receivers are presented in Table 1.



Receiver	Distance, m	Receiver	Distance, m
R01	5933	R41	5331
R02	5738	R42	5746
R03	5101	R43	2688
R04	4568	R44	3197
R05	461	R45	2772
R06	3032	R46	361
R08	8064	R47	3991
R09	7770	R60	3563
R10	6673	R61	3586
R11	6832	R62	3473
R12	8136	R63	5966
R13	6119	R64	5123
R16	5730	R65	7480
R17	5695	R66	7290
R18	5680	R67	7568
R19	5634	R68	7806
R21	5559	R69	7490
R22	5464	R70	6611
R23	5409	R71	4926
R24	5407	R72	5667
R25	5466	R73	5581
R26	5443	R74	5540
R27	5339	R75	7521
R28	5210	R76	9410
R29	5125	R78	8735
R32	5270	R79	5541
R33	5275	R80	5547
R35	5608	R81	5797
R37	5684	R82	3883
R40	5539		



3 RFI 7 – Additional Information

The following additional clarifications have been requested from DPE (*italics*) with responses provided for each in order.

1. Clarify the construction scenarios considered in the Noise Impact Assessment. Do all three scenarios (road construction of the southern portion of the Newell Highway, road construction of the northern portion of the Newell Highway and the northern portion of the Newell Highway with the bridge) assess the construction of the Newell Highway inclusive of the SAR Mine establishment works? Do any scenarios consider the SAR Mine construction works on their own?

Three construction scenarios include the simultaneous occurrence of road construction and SAR construction activities. For clarity, the following construction noise assessment scenarios (in combination with SAR construction activities) have been assessed:

- Sc1A SAR construction + road construction activities for the southern portion of the realigned
 Newell Highway only.
- Sc1B SAR construction + road construction activities for the northern portion of the realigned
 Newell Highway only.
- Sc1C SAR construction + road construction activities for the northern portion of the realigned
 Newell Highway including the piling required for the bridge/overpass construction.

SAR Mine Site construction works were not assessed as a separate scenario.

2. Do the construction scenarios include background noise including the existing TGO operations, including RSF2 construction, noting RSF2 construction has not yet commenced and the background levels of TGO operations applied to Appendix E (from the MOD 5 Noise Assessment), where background plus the predicted construction noise would be above both the NMLs and the PNTLs.

Unlike air quality assessments, noise assessments only rely on background noise levels to establish noise criteria (ie PNTL for Operation and NMLs for Construction.) They do not form part of the overall cumulative noise environment (ie background + project).

For noise assessments, typically operational and construction noise are not combined. Each aspect is considered against separate policies that clearly state this - ie NPI for operational noise and ICNG for construction both specifically state that they do not overlap.

Notwithstanding, if construction noise levels (LAeq) and operational noise levels (LAeq) were (logarithmically) added together, the total noise level would be below <40dBA at all receivers, which



is less than the NPI minimum operational (daytime) noise goal of 40dBA (refer to **Attachment A** for detailed predicted noise levels).

3. If existing TGO operations have been included in the construction assessment, provide details of how the anticipated construction noise levels are significantly lower than previously assessed background levels at receivers, e.g. current operations for MOD5 at receiver R40 was modelled as 32 dB, predicted construction of the southern section of the Newell Highway is modelled as 14 dB.

As discussed above, TGO Operations have not and are not required to be included in the construction noise assessment. However, the hypothetical effect of the combined effect of the existing TGO operations (MOD 5) with each of the assessed construction scenarios is presented in **Attachment A**.

Respond to the final paragraph in RFI 7, specifically provide details of cumulative and incremental impacts of the construction of the SAR mine and the Newell Highway construction.

As discussed above, the three construction scenarios include the simultaneous occurrence of road construction and SAR construction activities. No incremental impact assessment was undertaken as the SAR construction and Newell HWY realignment activities will occur simultaneously.

Predicted noise levels from construction activities - ie construction of SAR mine and the realignment of the Newell Highway, are expected to satisfy construction NMLs at all identified non project related receivers. No further breakdown of potential incremental impacts is considered warranted.

Predicted noise levels from construction activities - ie construction of SAR mine and the realignment of the Newell Highway, are expected to satisfy construction NMLs in accordance with the ICNG at all identified non project related receivers. No further breakdown of potential incremental impacts is considered or warranted.

4. Respond to the final paragraph in RFI 7, demonstrating that the proposed operational noise levels from activities at the mine site can be met after the initial construction period, as construction is anticipated to last 9-12 months, and referring to the Department's comment in RFI 7 'the Department provides some allowance for construction noise during the establishment of a mine site, indicatively for a 6-month period, following which it would be expected that operational noise levels would be met.'

Typically, an establishment period of 6-9 months is provided for mining projects to allow for construction activities prior to mining production – ie extraction of the ore/mineral etc where 'construction' activities resemble operational activities as discussed above. However, for the TGEP all construction must be completed prior to the commencement of mining operations, and hence the "construction" activities are not operational activities.



Predicted noise levels from all construction activities - ie construction of SAR mine and the realignment of the Newell Highway, are expected to satisfy construction NMLs as required by the ICNG at all identified non project related receivers. Furthermore, the total noise level from combined construction and TGO operations are expected to satisfy the NPI minimum operational noise goal of 40dBA at all non project related receivers.

We trust this response is satisfactory for your current requirements. If you have any further questions or would like to discuss, please contact the undersigned.

Yours sincerely

Rod Linnett

Lead Acoustic Consultant

MAAS, MIOA

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Reviewed: OM



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Attachment A



			tion Noise Mangen			AR Construction So			R Construction N			struction North in			lod5 Existing Op	
Name	Desc.	Day	Evening	Night	Day	Evening	Night	Day	Evening	Night	Day	Evening	Night	Day	Eve	Night
R02-MOU	Non-project Related - Memorandum	45	35	35	13	13	5	15	15	4	17	17	5	34	34	34
R03-MOU	Non-project Related - Memorandum	45	37	37	15	15	5	18	18	4	19	19	5 5	36	36	36
R04-MOU R06	Non-project Related - Memorandum	45 45	35 35	35	17 22	17 22	6 19	20 22	20 22	5 16	19 24	19 24	19	32 35	32 35	32 35
R08	Non-project Related Non-project Related	45	35	35 35	8	8	-1	12	12	-2	12	12	-1	24	24	24
					9	9										
R09 R10	Non-project Related	45 45	35 35	35 35	11	11	-1 1	12 14	12 14	-2 0	13 15	13 15	-1 1	26 29	26 29	26 29
R11	Non-project Related					11	1			0	15	15	1	29	28	29
R12	Non-project Related	45 45	35 35	35 35	11 9	9	-2	14 12	14 12	-2	12	12	-2	24	24	28
R13-MOU	Non-project Related	45	35	35	12	12	3	15	15	-2	16	16	2	31	31	31
R16	Non-project Related - Memorandum Non-project Related	45	37	37	14	14	3	16	16	3	17	17	3	33	33	33
R17-MOU	Non-project Related - Memorandum	45	37	37	14	14	3	16	16	3	17	17	3	33	33	33
R18-COMM	Commercial - Operating	70	70	70	14	14	3	16	16	3	17	17	3	33	33	33
R19	Non-project Related	45	35	35	14	14	4	17	17	3	18	18	4	34	34	34
R21-COMM	Commercial - Operating	45 70	35 70	35 70	14	14	4	17	17	3	18	18	4	34	34	34
R22-MOU	Non-project Related - Memorandum	45	37	37	-3	-3	-14	-3	-3	-15	18	18	4	35	35	35
R23-MOU		45	37	37	-3	-3		-3		-16	18	18		35	35	35
R24-MOU	Non-project Related - Memorandum Non-project Related - Memorandum	45	37	37	-3 -2	-3 -2	-14 -12	-3 -2	-3 -2	-10	18	18	4	35	35	35
R25-MOU				37							18	18	4	35	35	35
R26	Non-project Related - Memorandum Non-project Related	45 45	37 35	35	-3 -3	-3 -3	-14 -14	-3 -3	-3 -3	-15 -16	18	18	4	35	35	35
R27-COMM	Commercial - Non-operational	70	70	70	15	15	4	17	17	3	18	18	4	35	35	35
R28-MOU	Non-project Related - Memorandum	45	37	37	15	15	5	18	18	4	19	19	5	36	36	36
R29-MOU	Non-project Related - Memorandum	45	37	37	15	15	5	18	18	4	19	19	5	36	36	36
R32-MOU	Non-project Related - Memorandum	45	37	37	15	15	4	18	18	4	19	19	5	35	35	35
R33	Commercial - Non-operational	70	70	70	15	15	4	17	17	3	18	18	4	35	35	35
R35-MOU	Non-project Related - Memorandum	45	37	37	14	14	4	17	17	3	18	18	4	34	34	34
R37-MOU	Non-project Related - Memorandum	45	37	37	14	14	3	17	17	3	17	17	3	33	33	33
R40	Non-project Related	45	35	35	14	14	4	17	17	3	18	18	4	34	34	34
R41-MOU	Non-project Related - Memorandum	45	35	35	15	15	4	17	17	3	18	18	4	35	35	35
R42	Non-project Related	45	35	35	13	13	3	16	16	2	17	17	3	33	33	33
R43	Non-project Related	45	35	35	25	25	25	27	27	26	28	28	28	33	33	33
R60	Non-project Related	45	35	35	19	19	10	21	21	11	20	20	8			
R63	Non-project Related	45	35	35	11	11	2	15	15	3	14	14	2			
R64	Non-project Related	45	35	35	12	12	6	15	15	8	-6	-6	-12			
R65	Non-project Related	45	35	35	8	8	-1	11	11	0	11	11	-1			
R66	Non-project Related	45	35	35	8	8	-1	12	12	1	11	11	-1			
R67	Non-project Related	45	35	35	7	7	-1	11	11	1	10	10	-1			
R68	Non-project Related	45	35	35	7	7	-1	10	10	1	10	10	0			
R69	Non-project Related	45	35	35	7	7	0	11	11	2	10	10	1			
R70	Non-project Related	45	35	35	10	10	0	14	14	1	13	13	0			
R71	Non-project Related	45	35	35	12	12	8	15	15	10	14	14	8	no results for re	ceivers added in	TGE assessment
R72	Non-project Related	45	35	35	14	14	2	16	16	2	16	16	2			
R73	Non-project Related	45	35	35	14	14	4	17	17	3	18	18	4			
R74-MOU	Non-project Related - Memorandum	45	35	35	14	14	4	17	17	3	18	18	3			
R75	Non-project Related	45	35	35	7	7	1	10	10	3	10	10	2			
R76	Non-project Related	45	35	35	4	4	-3	8	8	-1	8	8	-3			
R78	Non-project Related	45	35	35	8	8	-4	11	11	-4	11	11	-3			
R79-MOU	Non-project Related - Memorandum	45	35	35	14	14	4	17	17	3	18	18	4			
R80-MOU	Non-project Related - Memorandum	45	35	35	14	14	4	17	17	3	18	18	4			
R81	Non-project Related	45	35	35	13	13	3	16	16	2	17	17	3			

		Constructi	ion Noise Mangen	nent Levels	Combined TG	O Ops + SAR Sou	th Construction	Combined TG0	O Ops + SAR Nor	th Construction	Combined TG	O Ops + SAR Nort incl Bridge	h Construction	
Name	Desc.	Day	Evening	Night	Day	Eve	Night	Day	Eve	Night	Day	Eve	Night	
R02-MOU	Non-project Related - Memorandum	45	35	35	34	34	34	34	34	34	34	34	34	
R03-MOU	Non-project Related - Memorandum	45	37	37	36	36	36	36	36	36	36	36	36	
R04-MOU	Non-project Related - Memorandum	45	35	35	32	32	32	33	33	32	33	33	32	
R06	Non-project Related	45	35	35	35	35	35	35	35	35	36	36	35	
R08	Non-project Related	45	35	35	25	25	24	25	25	24	25	25	24	
R09	Non-project Related	45	35	35	26	26	26	26	26	26	26	26	26	
R10	Non-project Related	45	35	35	29	29	29	29	29	29	29	29	29	
R11	Non-project Related	45	35	35	28	28	28	28	28	28	28	28	28	
R12	Non-project Related	45	35	35	24	24	24	24	24	24	24	24	24	
R13-MOU	Non-project Related - Memorandum	45	35	35	31	31	31	31	31	31	32	32	31	
R16	Non-project Related	45	37	37	33	33	33	33	33	33	33	33	33	
R17-MOU	Non-project Related - Memorandum	45	37	37	33	33	33	33	33	33	34	34	33	
R18-COMM	Commercial - Operating	70	70	70	33	33	33	33	33	33	34	34	33	
R19	Non-project Related	45	35	35	34	34	34	34	34	34	34	34	34	
R21-COMM	Commercial - Operating	70	70	70	34	34	34	34	34	34	34	34	34	
R22-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	35	35	35	35	35	35	
R23-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	35	35	35	35	35	35	
R24-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	35	35	35	35	35	35	
R25-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	35	35	35	35	35	35	
R26	Non-project Related	45	35	35	35	35	35	35	35	35	35	35	35	
R27-COMM	Commercial - Non-operational	70	70	70	35	35	35	35	35	35	35	35	35	
R28-MOU	Non-project Related - Memorandum	45	37	37	36	36	36	36	36	36	36	36	36	
R29-MOU	Non-project Related - Memorandum	45	37	37	36	36	36	36	36	36	36	36	36	
R32-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	35	35	35	35	35	35	
R33	Commercial - Non-operational	70	70	70	35	35	35	35	35	35	35	35	35	
R35-MOU	Non-project Related - Memorandum	45	37	37	34	34	34	34	34	34	34	34	34	
R37-MOU	Non-project Related - Memorandum	45	37	37	33	33	33	33	33	33	33	33	33	
R40	Non-project Related	45	35	35	34	34	34	34	34	34	34	34	34	
R41-MOU	Non-project Related - Memorandum	45	35	35	35	35	35	36	36	35	36	36	35	
R42	Non-project Related	45	35	35	33	33	33	33	33	33	33	33	33	
R43	Non-project Related	45	35	35	25	25	25	29	29	29	32	32	31	
R60	Non-project Related	45	35	35	19	19	10	23	23	13	25	25	15	
R63	Non-project Related	45	35	35	11	11	2	16	16	5	18	18	7	
R64	Non-project Related	45	35	35	12	12	6	16	16	10	17	17	10	
R65	Non-project Related	45	35	35	8	8	-1	13	13	2	15	15	4	
R66	Non-project Related	45	35	35	8	8	-1	13	13	3	15	15	5	
R67	Non-project Related	45	35	35	7	7	-1	13	13	3	15	15	5	
R68	Non-project Related	45	35	35	7	7	-1	12	12	3	14	14	5	
R69	Non-project Related	45	35	35	7	7	0	12	12	4	14	14	6	
R70	Non-project Related	45	35	35	10	10	0	15	15	3	17	17	5	
R71				35	12			17		12	19		14	
K71 R72	Non-project Related Non-project Related	45 45	35 35	35	14	12 14	8 2	17	17 18	5	20	19 20	14 7	
K72 R73		45 45	35	35	14	14	4	18	18	6	20	20	8	
R74-MOU	Non-project Related Non-project Related - Memorandum	45	35	35	14	14	4	19	19	6	21	21	8	
R75					7	7	1						7	
	Non-project Related	45	35	35	4			12	12 9	5 1	14	14	3	
R76 R78	Non-project Related	45 45	35 35	35 35	8	4	-3 -4	9		-1	12 15	12	1	
	Non-project Related					-			13			15		
R79-MOU	Non-project Related - Memorandum	45	35	35	14	14	4	19	19	6	21	21	8	
R80-MOU	Non-project Related - Memorandum	45	35	35	14	14		19	19	6	21	21	8	
R81	Non-project Related	45	35	35	13	13	3	18	18	6	21	21	8	

		Construction Noise Mangement Levels			ROAD Construction - South				ROAD Construction - North			struction - North	incl Bridge	TGO Mod5 Existing Operations		
Name	Desc.	Day	Evening	Night	Day	Evening	Night	Day	Evening	Night	Day	Evening	Night	Day	Evening	Night
02-MOU	Non-project Related - Memorandum	45	35	35	16	16	16	26	26	26	28	28	28	34	34	34
03-MOU	Non-project Related - Memorandum	45	37	37	16	16	16	30	30	30	35	35	35	36	36	36
RO4-MOU	Non-project Related - Memorandum	45	35	35	17	17	17	30	30	30	27	27	27	32	32	32
R06	Non-project Related	45	35	35	25	25	25	35	35	35	40	40	40	35	35	35
R08	Non-project Related	45	35	35	11	11	11	20	20	20	21	21	21	24	24	24
R09	Non-project Related	45	35	35	12	12	12	21	21	21	22	22	22	26	26	26
110	Non-project Related	45	35	35	13	13	13	24	24	24	25	25	25	29	29	29
R11	Non-project Related	45	35	35	13	13	13	23	23	23	25	25	25	28	28	28
R12	Non-project Related	45	35	35	11	11	11	20	20	20	21	21	21	24	24	24
R13-MOU	Non-project Related - Memorandum	45	35	35	14	14	14	26	26	26	27	27	27	31	31	31
R16	Non-project Related	45	37	37	15	15	15	27	27	27	29	29	29	33	33	33
R17-MOU	Non-project Related - Memorandum	45	37	37	15	15	15	27	27	27	29	29	29	33	33	33
R18-COMM	Commercial - Operating	70	70	70	15	15	15	28	28	28	29	29	29	33	33	33
R19	Non-project Related	45	35	35	15	15	15	28	28	28	29	29	29	34	34	34
21-COMM	Commercial - Operating	70	70	70	15	15	15	28	28	28	30	30	30	34	34	34
R22-MOU	Non-project Related - Memorandum	45	37	37	1	1	1	9	9	9	30	30	30	35	35	35
R23-MOU	Non-project Related - Memorandum	45	37	37	-2	-2	-2	9	9	9	31	31	31	35	35	35
R24-MOU	Non-project Related - Memorandum	45	37	37	4	4	4	10	10	10	31	31	31	35	35	35
R25-MOU	Non-project Related - Memorandum	45	37	37	0	0	0	9	9	9	30	30	30	35	35	35
26	Non-project Related	45	35	35	-3	-3	-3	9	9	9	30	30	30	35	35	35
27-COMM	Commercial - Non-operational	70	70	70	15	15	15	29	29	29	31	31	31	35	35	35
28-MOU	Non-project Related - Memorandum	45	37	37	16	16	16	30	30	30	34	34	34	36	36	36
R29-MOU	Non-project Related - Memorandum	45	37	37	16	16	16	30	30	30	32	32	32	36	36	36
R32-MOU	Non-project Related - Memorandum	45	37	37	16	16	16	30	30	30	34	34	34	35	35	35
133	Commercial - Non-operational	70	70	70	15	15	15	29	29	29	31	31	31	35	35	35
R35-MOU	Non-project Related - Memorandum	45	37	37	15	15	15	28	28	28	29	29	29	34	34	34
R37-MOU	Non-project Related - Memorandum	45	37	37	15	15	15	28	28	28	29	29	29	33	33	33
R40	Non-project Related	45	35	35	15	15	15	28	28	28	30	30	30	34	34	34
R41-MOU	Non-project Related - Memorandum	45	35	35	15	15	15	29	29	29	31	31	31	35	35	35
R42	Non-project Related	45	35	35	15	15	15	27	27	27	29	29	29	33	33	33
R43	Non-project Related	45	35	35	41	41	41	35	35	35	33	33	33			
R60	Non-project Related	45	35	35	20	20	20	27	27	27	25	25	25			
R63	Non-project Related	45	35	35	15	15	15	20	20	20	19	19	19			
R64	Non-project Related	45	35	35	23	23	23	20	20	20	0	0	0			
165	Non-project Related	45	35	35	14	14	14	17	17	17	16	16	16			
166	Non-project Related	45	35	35	17	17	17	17	17	17	16	16	16			
167	Non-project Related	45	35	35	16	16	16	17	17	17	15	15	15			
168	Non-project Related	45	35	35	18	18	18	16	16	16	15	15	15			
169	Non-project Related	45	35	35	21	21	21	16	16	16	15	15	15			
170	Non-project Related	45	35	35	14	14	14	19	19	19	19	19	19	no results for re	eceivers added in	TGE assessmer
71	Non-project Related	45	35	35	30	30	30	21	21	21	20	20	20			
172	Non-project Related	45	35	35	15	15	15	24	24	24	24	24	24			
173	Non-project Related	45	35	35	15	15	15	28	28	28	30	30	30			
74-MOU	Non-project Related - Memorandum	45	35	35	15	15	15	28	28	28	28	28	28			
75	Non-project Related	45	35	35	21	21	21	17	17	17	16	16	16			
76	Non-project Related	45	35	35	17	17	17	14	14	14	14	14	14			
78	Non-project Related	45	35	35	10	10	10	18	18	18	18	18	18			
79-MOU	Non-project Related - Memorandum	45	35	35	15	15	15	28	28	28	30	30	30			
R80-MOU	Non-project Related - Memorandum	45	35	35	15	15	15	28	28	28	30	30	30			
R81	Non-project Related	45	35	35	15	15	15	27	27	27	29	29	29	_		

		Construct	tion Noise Manger	ment Levels	Combined TG	O Ops + Road Con	struction South	Combined TG	O Ops + Road Cons	struction North	Combined TGO Ops + Road Const North Construction incl Bridge			
Name	Desc.	Day	Evening	Night	Day	Evening	Night	Day	Evening	Night	Day	Evening	Night	
R02-MOU	Non-project Related - Memorandum	45	35	35	34	34	34	34	34	34	35	35	35	
R03-MOU	Non-project Related - Memorandum	45	37	37	36	36	36	37	37	37	39	39	39	
R04-MOU	Non-project Related - Memorandum	45	35	35	32	32	32	34	34	34	35	35	35	
R06	Non-project Related	45	35	35	36	36	36	38	38	38	42	42	42	
R08	Non-project Related	45	35	35	25	25	25	26	26	26	27	27	27	
R09	Non-project Related	45	35	35	26	26	26	27	27	27	28	28	28	
R10	Non-project Related	45	35	35	29	29	29	30	30	30	31	31	31	
R11	Non-project Related	45	35	35	28	28	28	29	29	29	31	31	31	
R12	Non-project Related	45	35	35	24	24	24	25	25	25	27	27	27	
R13-MOU	Non-project Related - Memorandum	45	35	35	31	31	31	32	32	32	34	34	34	
R16	Non-project Related	45	37	37	33	33	33	34	34	34	35	35	35	
R17-MOU	Non-project Related - Memorandum	45	37	37	33	33	33	34	34	34	35	35	35	
R18-COMM	Commercial - Operating	70	70	70	33	33	33	34	34	34	35	35	35	
R19	Non-project Related	45	35	35	34	34	34	35	35	35	36	36	36	
R21-COMM	Commercial - Operating	70	70	70	34	34	34	35	35	35	36	36	36	
R22-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	35	35	35	36	36	36	
R23-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	35	35	35	36	36	36	
R24-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	35	35	35	36	36	36	
R25-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	35	35	35	36	36	36	
R26	Non-project Related	45	35	35	35	35	35	35	35	35	36	36	36	
R27-COMM	Commercial - Non-operational	70	70	70	35	35	35	36	36	36	37	37	37	
R28-MOU	Non-project Related - Memorandum	45	37	37	36	36	36	37	37	37	39	39	39	
R29-MOU	Non-project Related - Memorandum	45	37	37	36	36	36	37	37	37	38	38	38	
R32-MOU	Non-project Related - Memorandum	45	37	37	35	35	35	36	36	36	38	38	38	
R33	Commercial - Non-operational	70	70	70	35	35	35	36	36	36	37	37	37	
R35-MOU	Non-project Related - Memorandum	45	37	37	34	34	34	35	35	35	36	36	36	
R37-MOU	Non-project Related - Memorandum	45	37	37	33	33	33	34	34	34	35	35	35	
R40	Non-project Related	45	35	35	34	34	34	35	35	35	36	36	36	
R41-MOU	Non-project Related - Memorandum	45	35	35	35	35	35	36	36	36	37	37	37	
R42	Non-project Related	45	35	35	33	33	33	34	34	34	35	35	35	
R43	Non-project Related	45	35	35	41	41	41	42	42	42	43	43	43	
R60	Non-project Related	45	35	35	20	20	20	27	27	27	29	29	29	
R63	Non-project Related	45	35	35	15	15	15	21	21	21	23	23	23	
R64	Non-project Related	45	35	35	23	23	23	25	25	25	25	25	25	
R65	Non-project Related	45	35	35	14	14	14	19	19	19	21	21	21	
R66	Non-project Related	45	35	35	17	17	17	20	20	20	21	21	21	
R67	Non-project Related	45	35	35	16	16	16	20	20	20	21	21	21	
R68	Non-project Related	45 45	35	35	18	18	18	20	20	20	21	21	21	
R69	Non-project Related	45	35	35	21	21	21	23	23	23	23	23	23	
R70	Non-project Related	45 45	35	35	14	14	14	23	23	23	23	23	23	
K7U R71	Non-project Related	45 45	35	35	30	30	30	30	30	30	30	30	30	
K71 R72	Non-project Related	45 45	35	35	15	30 15	30 15	24	30 24	24	30 27	30 27	30 27	
K72 R73	Non-project Related	45 45	35	35	15	15	15	24	28	28	32	32	32	
							15							
R74-MOU	Non-project Related - Memorandum	45	35	35	15	15		28	28	28	31	31	31	
R75	Non-project Related	45	35	35	21	21	21	23	23	23	23	23	23	
R76	Non-project Related	45	35	35	17	17	17	18	18	18	20	20	20	
R78	Non-project Related	45	35	35	10	10	10	19	19	19	22	22	22	
R79-MOU	Non-project Related - Memorandum	45	35	35	15	15	15	28	28	28	32	32	32	
R80-MOU	Non-project Related - Memorandum	45	35	35	15	15	15	28	28	28	32	32	32	
R81	Non-project Related	45	35	35	15	15	15	27	27	27	31	31	31	