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Proposed Service Station Redevelopment 24 – 26 Glen Innes Road, and 1 – 7 Chester Street, Inverell (Lot 1 on DP322074, Lot 1 on DP334109, Lot 2 on DP322074, Lots 1 and 2 on DP326225, Lot 3D on DP360441)

ENVIRONMENTAL NOISE IMPACT REPORT

Prepared for

North Coast Petroleum

5 April 2023

crgref: 20177 report rev.5

1.0 INTRODUCTION

This report is in response to a request from North Coast Petroleum for a revised environmental noise impact assessment of proposed service station redevelopment in Inverell.

In undertaking the assessment, background noise measurements were undertaken, with noise modelling produced to assess onsite activity noise impacts at the nearest offsite noise sensitive receivers. Based upon the predicted noise impact levels, recommendations regarding acoustic treatment have been provided.

This report is a revision to a previous assessment dated 15/03/2023 and provides additional information in relation to truck movements to the service station (refer to Appendix C for the 7-day survey sheet for the previous service station operations). We were advised by the Proponent that the visitation rates provided previously were incorrect, and updated numbers have been provided. The updated numbers of modelled truck movements (taken from the survey) during the 15 minute assessment period has resulted in reduced noise impacts to offsite noise sensitive receivers, including those directly to the north across Chester Street. This reduction in predicted noise impacts (including combined L_{eq 15minute} impacts) has allowed in the removal of the previously recommended acoustic barrier fronting Chester Street.

2.0 DESCRIPTION OF THE DEVELOPMENT

The redevelopment of the site is a result of the Gwydir Highway, Bundarra Road, Chester Street roundabout which impacted the ability of the existing service station to continue operations in the current form, due to access and land acquisition issues.

The proposal is to expand the existing service station site, which will include redeveloping 4 residential lots. The site is described as Lot 1 on DP322074, Lot 1 on DP334109, Lot 2 on DP322074, Lots 1 and 2 on DP326225, Lot 3D on DP360441). The topography of the site and surrounding land is generally flat. For site location refer to Figures 1 and 2 in Appendix A.

The proposal is to redevelop / upgrade the existing service station, partly in response to resumptions for upgrading of the intersection of Glen Innes Road and Chester Street. The redevelopment will include (for development plans refer to Appendix B):

- A service station shop of 282m² GFA;
- A display area of 94m² GFA; and
- A rural supply shop / shed of 432m² GFA, which is expected to stock packaged livestock food, bird seed, dog food, unpackaged hay, etc.

A total of 14 petrol pumps, comprising 12 petrol pumps for light vehicles, and 2 petrol pumps for heavy vehicles.

Operating hours as follows (retail activities and the service station will maintain the same hours of operation as the current arrangements):

- Monday to Friday: from 4.30am to 8pm.
- Saturday and Sunday: from 6am to 8pm.

Onsite activity noise emissions (i.e. vehicle activity, deliveries, waste collection, and mechanical plant) have the potential to impact upon the offsite noise sensitive receivers and has been assessed in accordance with the NSW "*Noise Policy for Industry*" to ensure an acceptable level of acoustical amenity can be achieved.

The nearest noise sensitive receivers to the development include detached dwellings to the immediate northeast, across Chester Lane to the east, and to the north across Chester Street.

The Sapphire City Motor Inn is located to the southeast, across Chester Lane. It is noted that the motel rooms are air-conditioned, with the entry doors facing away from the subject site, therefore, for motel rooms we have assessed at indoor areas.

For the northern receivers across Chester Street, given the location of the two onsite driveway crossovers at the proposed development (limiting the application of treatments such as acoustic barriers along the northwest boundary) we have assessed impacts inside the dwellings with windows open and outside at the northern private open spaces (rear yards).

Increased road traffic noise from additional traffic associated with the proposed development impacting the existing residential dwellings has been assessed in accordance with the "*NSW Road Noise Policy*".

3.0 AMBIENT NOISE SURVEY

3.1 Instrumentation

The following equipment was used to record ambient noise levels at the subject site locale.

- Rion NC 73 Calibrator; and
- Rion NL 21 Environmental Noise Logger.

All instrumentation used in this assessment hold current calibration certificate from a certified NATA calibration laboratory.

3.2 Unattended Background Noise Monitoring Methodology

A logger was located at the north-eastern boundary of the dwelling at 99 Lawrence Street, with the location chosen to reflect ambient acoustical conditions at dwellings located away from the effect of road traffic noise on the Gwydir Highway. The microphone was in a free-field location, approximately 1.2m above ground. Refer to Figure 2 in Appendix A for the logger location. The logger was set to record noise statistics in 15 minute blocks continually between Friday 20/11 - Friday 27/11/2020.

All measurements were conducted generally in accordance with Australian Standard AS 1055 *"Acoustics-Description and measurement of environmental noise"*. The operation of the sound level logging equipment was field calibrated before and after the measurement session with no significant drift from the reference signal recorded.

Daily weather observations were obtained from the Bureau of Meteorology Inverell weather station. Weather conditions during the assessed monitoring period were fine; with a temperature range between approximately 13 and 34°C and relative humidity between 18 and 62%.

3.3 Unattended Background Noise Monitoring Results

Table 1 presents the measured noise levels at the logger location. Graphical presentation of the measured levels is in Appendix C. Rating Background Levels (RBLs) were calculated using the method provided in Appendix B of the "*NSW Industrial Noise Policy*".

	Measured Level L _{A90} dB(A)			
Background Noise	Morning (4:30am to 7am)	Daytime (7am to 6pm)	Evening (6pm to 10pm)	Night-time (10pm to 7am)
Friday 20/11	-	-	40	-
Saturday 21/11	36	35	48	36
Sunday 22/11	35	37	35	36
Monday 23/11	43	43	30	36
Tuesday 24/11	37	37	51	35
Wednesday 25/11	38	39	43	39
Thursday 26/11	37	38	38	34
Friday 27/11	38	-	-	-
RBLs	37	44	41	39

Table 1: Measured ambient noise levels at the logger location.

The background noise data was affected by residential activity, and insect noise, therefore, the RBLs have been corrected to the following:

	Morning	Daytime	Evening	Night-time
	(4:30am to 7am)	(7am to 6pm)	(6pm to 10pm)	(10pm to 7am)
RBLs	37	37	35	34

4.0 NOISE ASSESSMENT CRITERION

4.1 Onsite Operation Activity Noise

Noise associated with the commercial premises is regulated by the NSW *"Noise Policy for Industry"*. The assessment procedure has the following components to determine the project noise trigger levels:

• Intrusiveness Noise Level (LAeq, 15 min): the limit criteria for this assessment is as follows:

 $L_{Aeq, 15 \text{ min}} \leq \text{rating background level}^1 + 5 \text{ dB}; \text{ and}$

• Amenity Noise Level (L_{Aeq}, period): this is achieved by ensuring that the proposed development complies with the noise limit criteria set in Table 2.2 of the Policy. From the zonings of surrounding landuses, the area is classified as Urban - Residential as defined in Table 2.3 of the Policy, and therefore the following limits apply:

Receiver	Noise amenity area	Time of day	L _{Aeq} , dB(A)
(see Table 2.3 to determine which residential re category applies)		ntial receiver	Recommended amenity noise level
Residential	Rural	Day	50
		Evening	45
		Night	40
	Suburban	Day	55
		Evening	45
		Night	40
	Urban	Day	60
		Evening	50
		Night	45

Table 2.2: Amenity noise levels.

Table 2: Amenity Criterion Prescribed in the NSW "Noise Policy for Industry".

Given that the service station is an existing use and no other similar industries are present or likely to be introduced in the area the amenity noise levels are adopted as the project amenity noise levels rather than the amenity noise level minus (-) 5 dB (refer to Page 11 of the Noise Policy for Industry).

By considering the Background Levels (refer to Table 1 of Sections 3) and the above criterion, we recommend the following project noise trigger levels:

Domined	Project Noise Trigger Levels Leq, 15min dB(A)		
renou	Intrusiveness Noise Level	Project Amenity Noise Level	
Daytime	42 (RBL 37 + 5)	63 (60 + 3*)	
Evening	40 (RBL 35 + 5)	53 (50 + 3*)	
Night-time	39 (RBL 34 + 5)	48 (45 + 3*)	
Morning shoulder	42 (RBL 37 + 5)	N/A	

*The policy assumes that the LAeq, 15min will be taken to be equal to the LAeq, period + 3 decibels (dB).

 Table 3: Determined Project Noise Trigger Levels.

It is noted that the NSW "*Noise Policy for Industry*" allows for the shoulder period (i.e. 4:30am to 7am) to be assessed against the measured $L_{A90 (Shoulder Period)} + 5$ dB if it is considered unreasonable to assess operations against the night-time project noise trigger levels given that existing background noise from 4:30am to 7am remain similar to the daytime period.

¹ The rating background level is the overall single figure background level representing each assessment period (day/evening/night over the whole monitoring period.

In relation to the motel rooms to the southeast across Chester Lane, and the dwellings to the northwest across Chester Lane, we have adopted an internal noise criterion of 35 dB(A) L_{eq} , which is the noise criterion for bedrooms from the State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP).

As noted in Section 2, in relation to the motel rooms to the southeast across Chester Lane, the rooms were sighted as having air-conditioning, and have the entry doors to the rooms facing away from the subject site. Therefore, for the motel rooms we have assumed windows and doors closed. For the dwellings to the northwest across Chester Street we have assumed windows and doors open.

The updated L_{eq} calculations in this report focus on impacts in the rear yards of the dwellings across Chester Street (receiver R4 in this report). A reduction of 3 dB should be applied to L_{eq} levels to reflect the reduction in angle of view to the subject site afforded by the dwelling building structures.

Further to the above, given the proposal is for operation in the night period, consideration of sleep disturbance is also required. The Noise Policy for Industry states the following with respect to assessment of sleep disturbance:

Where the subject development/premises night-time noise levels at a residential location exceed:

- $L_{Aeq,15min} 40 dB(A)$ or the prevailing RBL plus 5 dB, whichever is the greater, and/or
- L_{AFmax} 52 dB(A) or the prevailing RBL plus 15 dB, whichever is the greater,

A detailed maximum noise level event assessment should be undertaken.

Based upon the night-time RBL of 34 dB(A) set in this assessment, the following assessment levels apply:

- LAeq,15min 40 dB(A),
- L_{AFmax} 52 dB(A).

4.2 Road Traffic Noise

The New South Wales Environment, Climate Change and Water's document "*NSW Road Noise Policy*" states the following in respect to developments causing additional traffic on the surrounding road network (i.e. development generated traffic on Chester Street):

Road	Type of project/land use	Assessment c	riteria – dB(A)
category		Day (7 a.m.–10 p.m.)	Night (10 p.m.–7 a.m.)
Freeway/ arterial/ sub-arterial	 Existing residences affected by noise from new freeway/arterial/sub-arterial road corridors 	L _{Aeq, (15 hour)} 55 (external)	L _{Aeq, (9 hour)} 50 (external)
roads	 Existing residences affected by noise from redevelopment of existing freeway/arterial/sub- arterial roads 	L _{Aeq, (15 hour)} 60 (external)	L _{Aeq, (9 hour)} 55 (external)
	 Existing residences affected by additional traffic on existing freeways/arterial/sub-arterial roads generated by land use developments 		
Local roads	4. Existing residences affected by noise from new local road corridors	L _{Aeq, (1 hour)} 55 (external)	L _{Aeq, (1 hour)} 50 (external)
	 Existing residences affected by noise from redevelopment of existing local roads 		
	 Existing residences affected by additional traffic on existing local roads generated by land use developments 		

It is noted that the traffic consultants for the project (Ason Group) have defined Chester Street as a Local Road.

5.0 PREDICTED NOISE IMPACTS

5.1 Onsite Operational Activity Noise

All noise source levels used in the assessment have been collected from similar previous investigations. All noise levels have been corrected for impulsiveness or tonality as per Australian Standard AS 1055 "Acoustics-Description and measurement of environmental noise".

Measured L_{Aeq} levels have been converted to $L_{Aeq 15min}$ levels by estimating a likely worst-case number of events / duration for which each activity occurs during any 15-minute period (refer to Appendix C for calculations).

Traffic generation rates have been obtained from the Ason Group Traffic Impact Assessment dated 22/10/2021 as presented below. Truck movements have been obtained from the 7-day survey completed at the previous onsite service station in November 2021 (refer to Appendix C). The hourly rates have been converted to 15-minute rates for the purposes of the L_{eq} 15 minute assessment period.

TABLE 7 FUTURE 'PROJECT CASE' SITE TRIP GENERATION - YEAR 2032			
Trip Generation	AM Peak (08:15 – 09:15)	PM Peak (15:30 – 16:30)	Saturday (11:00 – 12:00)
Inbound	54	80	85
Outbound	45	80	76
Total	99	160	161

Noise levels associated with mechanical plant are purely illustrative and should be reviewed upon determination of types of plant. Additional acoustic assessment/s should be undertaken once plant selections are finalised, and testing conducted prior to Commencement of Use and be conditioned within the Development Approval.

The following activities and associated noise source levels are typical of a service station facility and have been assessed within this report:

Activity / Noise Source	Distance (m)	L _{eq Event} SPL dB(A)	L _{max} SPL dB(A)
Fluctuating Noise Source			
Car / truck door closures	1m	80**	76
Car bypass	1m	72	72
Tyre pressure beeper	1m	75	78
Small / medium truck bypass	1m	78	88
Large truck bypass	1m	87	90
Patrons at outdoor dining / seating	1m	75	N/A
Truck airbrakes	1m	97**	92
Electric forklift inside shed	1m	72	75
Goods delivery	1m	82*	87
Waste collection	1m	102**	N/A
Continuous Noise Source			
A/C unit (rooftop)	3m	62	N/A
Refrigeration compressor (rooftop)	3m	64	N/A
Kitchen exhaust unit (rooftop)	3m	57	N/A
Air compressor (inside near roller door)	2m	65	N/A

* Denotes + 5 dB(A) correction due to tonality as per AS1055 - 1997 : ** Denotes + 5 dB(A) correction due to impulsiveness as per AS1055 - 1997

Table 4: Typical noise source levels associated with the proposed facility.

Based upon the location of the proposed onsite activities in relation to nearest offsite noise sensitive properties, we predict the following noise impact levels as presented in Table 5 (L_{eq} impacts) and Table 6 (L_{max} impacts).

The predicted levels include a no acoustical treatment scenario, and an acoustical treatment scenario with the recommended treatments detailed in Section 6 incorporated into the development. For point source calculations (with acoustical treatments) refer to Appendix C.

It is noted that combined impacts do not include waste collection or deliveries impacts, as these are typically of short duration and infrequent occurrence.

As noted in Section 2, the motel rooms of Sapphire City Motor Inn are air-conditioned, with the entry doors facing away from the subject site, therefore, for motel rooms we have assessed at indoor areas. For the northern receivers across Chester Street, given the location of the two onsite driveway crossovers at the proposed development (limiting the application of treatments such as acoustic barriers along the northwest boundary) we have assessed impacts inside the dwellings with windows open and outside at the northern private open spaces (rear yards).

Daytime Noise source	Predicted External Noise Impact, SPL L _{eq 15min} dB(A)	
R1: Dwellings to the northeast	No Acoustical Treatments	Acoustical Treatments
Nearest car door closures	33	22
Bowser car door closures	37	26
Bowser truck door closures	29	17
Car bypass in	42	29
Car bypass out	31	18
Tyre pressure beeper	25	< 15
Small / medium truck bypass	39	26
Large truck bypass	41	29
Patrons at outdoor dining / seating	27	27
Truck airbrakes	41	29
Electric forklift inside shed	38	38
Goods delivery at MRV loading bay	41	41
Waste collection	63	63
A/C units with acoustical treatments	37	25
Refrigeration compressor with acoustical treatments	39	27
Restaurant kitchen exhaust unit with acoustical treatments	31	16
Electric air compressor inside building	< 15	< 15
Combined impacts	49	40
R2: Dwellings to the east	No Acoustical Treatments	Acoustical Treatments
Nearest car door closures	26	16
Bowser car door closures	35	25
Bowser truck door closures	27	17
Car bypass in	33	22
Car bypass out	30	18
Tyre pressure beeper	< 15	< 15
Small / medium truck bypass	32	22
Large truck bypass	35	25
Patrons at outdoor dining / seating	27	27
Truck airbrakes	40	30
Electric forklift inside shed	33	33
Goods delivery at MRV loading bay	51	42
Waste collection	67	67
A/C units with acoustical treatments	38	26
Refrigeration compressor with acoustical treatments	40	28
Restaurant kitchen exhaust unit with acoustical treatments	31	16
Electric air compressor inside building	22	22
Combined impacts	46	38
Daytime Criterion	42	

Table 5: Predicted L_{eq} onsite activity noise impacts at the noise sensitive properties.

Given that waste collection activities exceed the daytime criterion, we recommend that such activities be limited to the hours between 7am and 6pm.

Daytime Noise source	Predicted Internal Noise Impact, SPL L _{eq 15min} dB(A Windows Closed	
R3: Motel to the southeast (inside with windows closed)	No Acoustical Treatments	Acoustical Treatments
Nearest car door closures	< 15	< 15
Bowser car door closures	25	< 15
Bowser truck door closures	17	< 15
Car bypass in	23	< 15
Car bypass out	23	< 15
Tyre pressure beeper	< 15	< 15
Small / medium truck bypass	22	< 15
Large truck bypass	24	< 15
Patrons at outdoor dining / seating	34	24
Truck airbrakes	29	18
Electric forklift inside shed	19	19
Goods delivery at MRV loading bay	45	35
Waste collection	58	58
A/C units with acoustical treatments	33	21
Refrigeration compressor with acoustical treatments	36	24
Restaurant kitchen exhaust unit with acoustical treatments	29	< 15
Electric air compressor inside building	17	17
Combined impacts	41	30
Internal Bedroom Criterion	35	

Daytime Noise source	Predicted Internal Noise Impact, SPL L _{eq 15min} dB(A Windows Open	
R4: Dwellings to the north (inside with windows open)	No Acoustical Treatments	Acoustical Treatments
Nearest car door closures	20	20
Bowser car door closures	31	31
Bowser truck door closures	23	23
Car bypass in	29	29
Car bypass out	27	27
Tyre pressure beeper	22	22
Small / medium truck bypass	28	28
Large truck bypass	30	30
Patrons at outdoor dining / seating	32	32
Truck airbrakes	35	35
Electric forklift inside shed	27	27
Goods delivery at MRV loading bay	32	32
Waste collection	53	53
A/C units with acoustical treatments	29	17
Refrigeration compressor with acoustical treatments	31	19
Restaurant kitchen exhaust unit with acoustical treatments	24	< 15
Electric air compressor inside building	< 15	< 15
Combined impacts	41	40
Daytime (Living Areas) Criterion	40	

Daytime Noise source	Predicted External Noise I	Predicted External Noise Impact, SPL L _{eq 15min} dB(A)		
R4: Dwellings to the north – rear private open space	No Acoustical Treatments	Acoustical Treatments		
Nearest car door closures	19	19		
Bowser car door closures	30	30		
Bowser truck door closures	21	21		
Car bypass in	27	27		
Car bypass out	26	26		
Tyre pressure beeper	21	21		
Small / medium truck bypass	26	26		
Large truck bypass	29	29		
Patrons at outdoor dining / seating	32	32		
Truck airbrakes	34	34		
Electric forklift inside shed	26	26		
Goods delivery at MRV loading bay	39	39		
Waste collection	52	52		
A/C units with acoustical treatments	29	17		
Refrigeration compressor with acoustical treatments	31	19		
Restaurant kitchen exhaust unit with acoustical treatments	24	< 15		
Electric air compressor inside building	<15	< 15		
Combined impacts	40	39		
Daytime Criterion	4	2		

Table 5 (Cont.): Predicted L_{eq} onsite activity noise impacts at the noise sensitive properties.

Evening Noise source	Predicted External Noise Impact, SPL $L_{eq \ 15min} \ dB(A)$		
R1: Dwellings to the northeast	No Acoustical Treatments	Acoustical Treatments	
Nearest car door closures	33	22	
Bowser car door closures	36	24	
Bowser truck door closures	24	< 15	
Car bypass in	41	28	
Car bypass out	30	17	
Tyre pressure beeper	25	< 15	
Small / medium truck bypass	34	22	
Large truck bypass	41	29	
Patrons at outdoor dining / seating	27	27	
Truck airbrakes	40	27	
Electric forklift inside shed	36	36	
Goods delivery at MRV loading bay	41	41	
A/C units with acoustical treatments	37	25	
Refrigeration compressor with acoustical treatments	39	27	
Restaurant kitchen exhaust unit with acoustical treatments	31	16	
Electric air compressor inside building	< 15	< 15	
Combined impacts	48	39	
R2: Dwellings to the east	No Acoustical Treatments	Acoustical Treatments	
Nearest car door closures	26	16	
Bowser car door closures	34	24	
Bowser truck door closures	22	< 15	
Car bypass in	32	21	
Car bypass out	28	17	
Tyre pressure beeper	< 15	< 15	
Small / medium truck bypass	28	18	
Large truck bypass	35	25	
Patrons at outdoor dining / seating	27	27	
Truck airbrakes	38	28	
Electric forklift inside shed	31	31	
Goods delivery at MRV loading bay	51	42	
A/C units with acoustical treatments	38	26	
Refrigeration compressor with acoustical treatments	40	28	
Restaurant kitchen exhaust unit with acoustical treatments	31	16	
Electric air compressor inside building			
Electric an compressor made building	22	22	
Combined impacts	22 46	22 37	

Evening Noise source	Predicted Internal Noise Impact, SPL L _{eq 15min} dB(A Windows Closed	
R3: Motel to the southeast (inside with windows closed)	No Acoustical Treatments	Acoustical Treatments
Nearest car door closures	< 15	< 15
Bowser car door closures	24	< 15
Bowser truck door closures	< 15	< 15
Car bypass in	22	< 15
Car bypass out	22	< 15
Tyre pressure beeper	< 15	< 15
Small / medium truck bypass	17	< 15
Large truck bypass	24	< 15
Patrons at outdoor dining / seating	34	24
Truck airbrakes	28	16
Electric forklift inside shed	17	17
Goods delivery at MRV loading bay	45	35
A/C units with acoustical treatments	33	21
Refrigeration compressor with acoustical treatments	36	24
Restaurant kitchen exhaust unit with acoustical treatments	29	< 15
Electric air compressor inside building	17 17	
Combined impacts	40 29	
Internal Bedroom Criterion	35	

Table 5 (Cont.): Predicted L_{eq} onsite activity noise impacts at the noise sensitive properties.

Evening Noise source	Predicted Internal Noise Impact, SPL L _{eq 15min} dB(A) Windows Open		
R4: Dwellings to the north (inside with windows open)	4: Dwellings to the north (inside with windows open) No Acoustical Treatments Acoustical		
Nearest car door closures	20	20	
Bowser car door closures	30	30	
Bowser truck door closures	18	18	
Car bypass in	28	28	
Car bypass out	26	26	
Tyre pressure beeper	22	22	
Small / medium truck bypass	23	23	
Large truck bypass	30	30	
Patrons at outdoor dining / seating	32	32	
Truck airbrakes	33	33	
Electric forklift inside shed	25	25	
Goods delivery at MRV loading bay	32	32	
A/C units with acoustical treatments	29	17	
Refrigeration compressor with acoustical treatments	31	19	
Restaurant kitchen exhaust unit with acoustical treatments 24		< 15	
Electric air compressor inside building	< 15	< 15	
Combined impacts	40	39	
Evening (Living Areas) Criterion	40)	

Evening Noise source	Predicted External Noise Impact, SPL Leq 15min dB(
R4: Dwellings to the north –rear private open space	No Acoustical Treatments Acoustical Treatm		
Nearest car door closures	19	19	
Bowser car door closures	28	28	
Bowser truck door closures	17	17	
Car bypass in	26	26	
Car bypass out	25	25	
Tyre pressure beeper	21	21	
Small / medium truck bypass	22	22	
Large truck bypass	29	29	
Patrons at outdoor dining / seating	32	32	
Truck airbrakes	32	32	
Electric forklift inside shed	28	28	
Goods delivery at MRV loading bay	39	39	
A/C units with acoustical treatments	29	17	
Refrigeration compressor with acoustical treatments	31	19	
Restaurant kitchen exhaust unit with acoustical treatments	24	< 15	
Electric air compressor inside building	<15	<15	
Combined impacts	39	38	
Evening Criterion	40		

 Table 5 (Cont.): Predicted L_{eq} onsite activity noise impacts at the surrounding noise sensitive properties.

Morning Noise source	Predicted External Noise Impact, SPL L _{eq 15min} dB(A)		
R1: Dwellings to the northeast	No Acoustical Treatments Acoustical Treatment		
Nearest car door closures	30	18	
Bowser car door closures	34	23	
Bowser truck door closures	24	< 15	
Car bypass in	39	26	
Car bypass out	28	15	
Tyre pressure beeper	22	< 15	
Large truck bypass	41	29	
Truck airbrakes	37	24	
Electric forklift inside shed	36	36	
A/C units with acoustical treatments	34	22	
Refrigeration compressor with acoustical treatments	39	27	
Restaurant kitchen exhaust unit with acoustical treatments	31	16	
Electric air compressor inside building	< 15	< 15	
Combined impacts	47	38	
R2: Dwellings to the east	No Acoustical Treatments	Acoustical Treatments	
Nearest car door closures	23	< 15	
Bowser car door closures	32	22	
Bowser truck door closures	22	< 15	
Car bypass in	30	19	
Car bypass out	27	15	
Tyre pressure beeper	< 15	< 15	
Large truck bypass	35	25	
Truck airbrakes	35	25	
Electric forklift inside shed	31	31	
A/C units with acoustical treatments	36	24	
Refrigeration compressor with acoustical treatments	40	28	
Restaurant kitchen exhaust unit with acoustical treatments	31	16	
Electric air compressor inside building	22	22	
Combined impacts	44 35		
Morning Criterion	40		

Morning Noise source	Predicted Internal Noise Impact, SPL L _{eq 15min} dB(A Windows Closed		
R3: Motel to the southeast (inside with windows closed)	No Acoustical Treatments	Acoustical Treatments	
Nearest car door closures	< 15	< 15	
Bowser car door closures	22	< 15	
Bowser truck door closures	< 15	< 15	
Car bypass in	20	< 15	
Car bypass out	20	< 15	
Tyre pressure beeper	< 15	< 15	
Large truck bypass	24	< 15	
Truck airbrakes	24	17	
Electric forklift inside shed	17	17	
A/C units with acoustical treatments	31	19	
Refrigeration compressor with acoustical treatments	36	24	
Restaurant kitchen exhaust unit with acoustical treatments	29	< 15	
Electric air compressor inside building	17	17	
Combined impacts	38 27		
Internal Bedroom Criterion	35		

 Table 5 (Cont.): Predicted L_{eq} onsite activity noise impacts at the surrounding noise sensitive properties.

Morning Noise source	Predicted Internal Noise Impact, SPL L _{eq 15min} dB(A) Windows Open		
R4: Dwellings to the north (inside with windows open)	No Acoustical Treatments	Acoustical Treatments	
Nearest car door closures	17	17	
Bowser car door closures	28	28	
Bowser truck door closures	18	18	
Car bypass in	26	26	
Car bypass out	24	24	
Tyre pressure beeper	19	19	
Large truck bypass	30	30	
Truck airbrakes	24	24	
Electric forklift inside shed	25	25	
A/C units with acoustical treatments	26	< 15	
Refrigeration compressor with acoustical treatments	31	19	
Restaurant kitchen exhaust unit with acoustical treatments	24	< 15	
Electric air compressor inside building	< 15	< 15	
Combined impacts	37 35		
Morning (Bedroom) Criterion	35		

Morning Noise source	Predicted External Noise Impact, SPL L _{eq 15min} dB(A)		
R4: Dwellings to the north – rear private open space	No Acoustical Treatments	Acoustical Treatments	
Nearest car door closures	16	16	
Bowser car door closures	27	27	
Bowser truck door closures	17	17	
Car bypass in	24	24	
Car bypass out	23	23	
Tyre pressure beeper	18	18	
Large truck bypass	29	29	
Truck airbrakes	24	24	
Electric forklift inside shed	25	25	
A/C units with acoustical treatments	26	< 15	
Refrigeration compressor with acoustical treatments	31	19	
Restaurant kitchen exhaust unit with acoustical treatments	24	< 15	
Electric air compressor inside building	<15	<15	
Combined impacts	36	34	
Morning Criterion	40		

Table 5 (Cont.): Predicted L_{eq} onsite activity noise impacts at the surrounding noise sensitive
properties.

Morning Noise source	Predicted External Noise Impact, SPL L _{max} dB(A)		
R1: Dwellings to the northeast	No Acoustical Treatments	Acoustical Treatments	
Nearest car door closures	47	36	
Bowser car door closures	43	31	
Bowser truck door closures	43	31	
Car bypass in	46	33	
Car bypass out	35	22	
Tyre pressure beeper	39	28	
Small / medium truck bypass	59	47	
Large truck bypass	61	49	
Truck airbrakes	59	46	
Electric forklift inside shed	38	38	
Goods delivery at MRV loading bay	43	43	
R2: Dwellings to the east	No Acoustical Treatments	Acoustical Treatments	
Nearest car door closures	41	30	
Bowser car door closures	41	30	
Bowser truck door closures	41	30	
Car bypass in	37	26	
Car bypass out	33	22	
Tyre pressure beeper	26	26	
Small / medium truck bypass	53	43	
Large truck bypass	55	45	
Truck airbrakes	57	47	
Electric forklift inside shed	33	33	
Goods delivery at MRV loading bay	54	44	
R3: Motel to the southeast	No Acoustical Treatments	Acoustical Treatments	
Nearest car door closures	45	33	
Bowser car door closures	48	36	
Bowser truck door closures	48	36	
Car bypass in	44	31	
Car bypass out	44	31	
Tyre pressure beeper	32 32		
Small / medium truck bypass	60	47	
Large truck bypass	62	49	
Truck airbrakes	64	52	
Electric fordelife in eldected	37 37		
Electric forkint inside sned	37	37	
Goods delivery at MRV loading bay	37 65	<u> </u>	
Goods delivery at MRV loading bay R4: Dwellings to the north	37 65 No Acoustical Treatments	37 55 Acoustical Treatments	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures	37 65 No Acoustical Treatments 42	37 55 Acoustical Treatments 42	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser car door closures	37 65 No Acoustical Treatments 42 44	37 55 Acoustical Treatments 42 44	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser car door closures Bowser truck door closures	37 65 No Acoustical Treatments 42 44 44	37 55 Acoustical Treatments 42 44 44	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser car door closures Bowser truck door closures Car bypass in	37 65 No Acoustical Treatments 42 44 44 40	37 55 Acoustical Treatments 42 44 44 44 40	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser car door closures Bowser truck door closures Car bypass in Car bypass out	37 65 No Acoustical Treatments 42 44 44 40 52	37 55 Acoustical Treatments 42 44 44 40 52	
Electric forkint inside shed Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser car door closures Bowser truck door closures Car bypass in Car bypass out Tyre pressure beeper	37 65 No Acoustical Treatments 42 44 44 40 52 44	37 55 Acoustical Treatments 42 44 44 40 52 44	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser car door closures Bowser truck door closures Car bypass in Car bypass out Tyre pressure beeper Small / medium truck bypass	37 65 No Acoustical Treatments 42 44 44 40 52 44 40 52 44 56	37 55 Acoustical Treatments 42 44 44 40 52 44 56	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser truck door closures Car bypass in Car bypass out Tyre pressure beeper Small / medium truck bypass Large truck bypass	37 65 No Acoustical Treatments 42 44 44 40 52 44 40 52 44 56 58	37 55 Acoustical Treatments 42 44 44 40 52 44 52 44 56 58	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser truck door closures Car bypass in Car bypass out Tyre pressure beeper Small / medium truck bypass Large truck bypass Truck airbrakes	37 65 No Acoustical Treatments 42 44 44 40 52 44 56 58 60	37 55 Acoustical Treatments 42 44 44 40 52 44 56 58 60	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser car door closures Car bypass in Car bypass in Car bypass out Tyre pressure beeper Small / medium truck bypass Large truck bypass Truck airbrakes Electric forklift inside shed	37 65 No Acoustical Treatments 42 44 40 52 44 56 58 60 35	37 55 Acoustical Treatments 42 44 40 52 44 56 58 60 35	
Goods delivery at MRV loading bay R4: Dwellings to the north Nearest car door closures Bowser car door closures Bowser truck door closures Car bypass in Car bypass out Tyre pressure beeper Small / medium truck bypass Large truck bypass Truck airbrakes Electric forklift inside shed Goods delivery at MRV loading bay	37 65 No Acoustical Treatments 42 44 44 40 52 44 40 52 44 40 52 52 44 60 35 49	37 55 Acoustical Treatments 42 44 44 40 52 44 56 58 60 35 49	

Table 6: Predicted L_{max} onsite activity noise impacts at the surrounding noise sensitive properties.

Given that truck bypasses and airbrakes exceed the morning L_{max} criterion, we have recommended that waste collection and delivery activities at the MRV loading area be limited to the daytime period between 7am and 6pm.



5.2 Road Traffic Noise Increases from Development Generated Traffic

Existing year 2017 daily traffic data for Chester Street and Glen Innes Road were obtained from the Planning report for the subject site dated September 2021 (Section 4.6.1), with the data originally sourced from intersection management investigation report prepared for Council in 2017. Year 2023 and 2032 predicted volumes assume a 2.5% annual growth rate as cited in the intersection management investigation report. Peak hour volumes are assumed to be equal to 10% of the daily volumes.

Glen Innes Road East (excluding the proposed service station)

2017 Traffic Data: 5,800 vehicles per day (580 peak hour). 2023 Traffic Data: 6.726 vehicles per day (673 peak hour). 2032 Traffic Data: 8,400 vehicles per day (840 peak hour).

Glen Innes Road West (excluding the proposed service station)

2017 Traffic Data: 8,600 vehicles per day (860 peak hour).2023 Traffic Data: 9,973 vehicles per day (997 peak hour).2032 Traffic Data: 12,455 vehicles per day (1,246 peak hour).

Chester Street (excluding the proposed service station)

2017 Traffic Data: 1,600 vehicles per day (160 peak hour). 2023 Traffic Data: 1,856 vehicles per day (186 peak hour). 2032 Traffic Data: 2,317 vehicles per day (232 peak hour).

Peak hour rates from the proposed service station of 160 vehicles (80 inbound / 80 outbound) are provided in the Traffic Impact Assessment for the development completed by Ason Group dated 22/10/2021. For the modelling scenario including the development generated traffic, these volumes have been added to the peak hour traffic volumes presented above.

Road traffic noise modelling was conducted using PEN3D, which is based upon the "*CoRTN*" (Control of Road Traffic Noise) method produced by the UK Department of Transport 1988. It is noted that PEN3D calculates the $L_{10 \ 18hr}$ from the daily traffic volumes, with the following adjustments applied to the $L_{10 \ 18hr}$ to determine the $L_{eq \ 1hr}$ levels, which are based upon measured road traffic data for similar road configurations / volumes:

Daytime $L_{eq \ 1hr}$ equal to the $L_{10 \ 18hr}$ Night-time $L_{eq \ 1hr}$ equal to the $L_{10 \ 18hr}$ minus 2 dB.

Based upon the predicted traffic volumes presented on the previous page, we provide the following traffic noise increase predictions at existing offsite dwellings along Chester Street as detailed in Table 8 over the page.

Given the proximity of Glen Innes Road, road traffic noise impacts at the dwellings include two scenarios of road traffic noise from both Chester Street (individually) and with the addition of Glenn Innes Road traffic noise, which would be more representative of the experienced noise conditions.

Year 2023

Fristing Druglling Dessiver Leastion	Predicted Traffic Noise: Façade Corrected dB(A) at 17m		
Existing Dwening Receiver Location	Leq 1hr Daytime	Leq 1hr Night-time	
Existing Scenario without Development			
R1: Dwellings to the northeast	58 [59]	56 [57]	
R2: Dwellings to the east	46 [57]	44 [55]	
R3: Motel to the southeast	49 [66]	47 [64]	
R4: Dwellings to the north	57 [60]	55 [58]	
Completion of Development			
R1: Dwellings to the northeast	59 [60]	57 [58]	
R2: Dwellings to the east	48 [58]	46 [56]	
R3: Motel to the southeast	52 [67]	50 [65]	
R4: Dwellings to the north	60 [61]	58 [59]	
Criterion	55	50	

[Adjusted to include traffic from Glenn Innes Road]

Year 2032

Evicting Dwelling Passivon Location	Predicted Traffic Noise: Façade Corrected dB(A) at 17m	
Existing Dwening Receiver Location	Leq 1hr Daytime	Leq 1hr Night-time
Existing Scenario without Development		
R1: Dwellings to the northeast	59 [61]	57 [59]
R2: Dwellings to the east	47 [58]	45 [56]
R3: Motel to the southeast	50 [67]	48 [65]
R4: Dwellings to the north	58 [61]	56 [59]
Completion of Development		
R1: Dwellings to the northeast	60 [61]	58 [59]
R2: Dwellings to the east	48 [59]	46 [57]
R3: Motel to the southeast	52 [68]	50 [66]
R4: Dwellings to the north	60 [62]	58 [60]
Criterion	55	50

[Adjusted to include traffic from Glenn Innes Road]

 Table 8: Predicted road traffic noise impacts from development generated traffic.

It is noted that based upon the above predictions, both the daytime and night-time criterion are exceeded under the current road traffic volumes without the inclusion of the site generated traffic.

The additional traffic noise associated with the proposed development is predicted to result in a 2.4 dB (year 2033) to 2.6 dB (year 2023) increase in traffic noise impacts at the nearest dwellings along Chester Street if we consider traffic on Chester Street only. If we also include traffic noise from Glen Innes Road (more representative of the experienced noise conditions), road traffic noise increase are predicted to be 1.7 dB (year 2033) to 2 dB (year 2023).

For guidance, it is noted that the average person cannot generally detect a 3 dB variation in sound pressure level, with a 5 dB variation deemed a noticeable difference, and a 10 dB variation a perceived doubling / halving of sound pressure.

6.0 RECOMMENDED ACOUSTIC TREATMENTS

Based upon the adopted noise source levels, the following acoustic treatments and management principles are recommended to mitigate onsite activity noise emissions:

- Hours of operation be maintained in accordance with current arrangements, being as follows:
 - Monday to Friday: from 4.30am to 8pm.
 - Saturday and Sunday: from 6am to 8pm.
- Deliveries at the MRV loading area be limited to the daytime period between 7am and 6pm.
- Waste collection be limited to the daytime period between 7am and 6pm.
- Onsite forklifts (i.e. inside the shed) should be electric type only, not diesel.
- Construction of the acoustic barriers as detailed in Sketch No. 1 of Appendix A. Typical materials include earth berms, 19mm lapped timber fence (40% overlap), 9mm FC sheet, toughened glass, Perspex, masonry, or a combination of the above (a minimum surface mass of 11kg/m² is required).
- The service station type pressure alarm should be a visual type not audible, or set to a noise level less than 60 dB(A) at 1m.
- Driveway and car parking areas be finished with surface coatings which prevent tyre squeal (an uncoated or unpolished concrete or bitumen surface is acceptable)
- Drainage grating over trafficable areas be well secured to prevent rattling.
- Mechanical plant be designed and installed to comply with the noise criterion presented in Section 4. As final plant selection has not been completed, additional acoustic assessment/s should be undertaken once plant selections are finalised. Such assessments should be undertaken prior to Building Approval; and be conditioned within the Development Approval.
 - To minimise noise impacts, plant should be located as far as possible from the nearest offsite receivers (i.e. the dwellings and motel to the northeast, east and southeast).
 - Based upon the preliminary noise modelling, onsite mechanical plant will likely require acoustical screens / enclosures for refrigeration compressors and air-conditioning condensers, with kitchen and toilet exhausts likely requiring acoustic attenuators / silencers.

7.0 DISCUSSION and CONCLUSIONS

This report is a revision to a previous assessment dated 15/03/2023 and provides additional information in relation to truck movements to the service station (refer to Appendix C for the 7-day survey sheet for the previous service station operations). We were advised by the Proponent that the visitation rates provided previously were incorrect, and updated numbers have been provided. The updated numbers of modelled truck movements (taken from the survey) during the 15 minute assessment period has resulted in reduced noise impacts to offsite noise sensitive receivers, including those directly to the north across Chester Street. This reduction in predicted noise impacts (including combined $L_{eq \ 15minute}$ impacts) has allowed in the removal of the previously recommended acoustic barrier fronting Chester Street.

Onsite activity noise emissions (i.e. vehicle activity, deliveries, waste collection, and mechanical plant) have the potential to impact upon the offsite noise sensitive receivers and has been assessed in accordance with the NSW *"Noise Policy for Industry"* to ensure an acceptable level of acoustical amenity can be achieved. The nearest noise sensitive receivers to the development include detached dwellings to the immediate northeast, across Chester Lane to the east, and to the north across Chester Street. The Sapphire City Motor Inn is located to the southeast, across Chester Lane. It is noted that the motel rooms are air-conditioned, with the entry doors facing away from the subject site, therefore, for motel rooms we have assessed at indoor areas.

For the northern receivers across Chester Street (R4), given the location of the two onsite driveway crossovers at the proposed development limiting the application of treatments such as acoustic barriers along the Chester Street northwest boundary we have assessed impacts inside the dwellings with windows open and outside at the northern private open spaces (backyards).

Based upon the visitation rates provided by the Proponent, and the recommended acoustic treatments and management controls, predicted onsite activity noise impacts at the nearest receivers are at or below the relevant noise criterion (i.e. deliveries at the MRV loading area between 7am and 6pm), except for waste collection. Night-time L_{max} levels are predicted at or below the criterion except for truck bypasses and airbrakes at the northern dwellings across Chester Street. To minimise noise annoyance, we have recommended that waste collection and delivery activities at the MRV loading area be limited to the daytime period between 7am and 6pm.

We have also provided an indication of potential noise impacts and likely acoustical treatment requirements for onsite mechanical plant; although the levels are merely a guide as no plant selections have yet been completed. For this reason, additional more detailed assessment/s should be conducted upon determination of plant. Such assessments should be undertaken prior to Building Approval; and be conditioned within the Development Approval.

Increased road traffic noise on the public road network from additional traffic associated with the proposed development impacting the existing residential dwellings has been assessed in accordance with the "*NSW Road Noise Policy*". It is noted that both the existing daytime and night-time noise impacts (without the development generated traffic) are predicted above the external criterion of 55 dB(A) $L_{eq \ lhr}$ and night-time 50 dB(A) $L_{eq \ lhr}$.

The additional traffic noise associated with the proposed development is predicted to result in a 2.4 dB (year 2033) to 2.6 dB (year 2023) increase in traffic noise impacts at the nearest dwellings along Chester Street if we consider traffic on Chester Street only. If we also include traffic noise from Glen Innes Road (more representative of the experienced noise conditions at the receivers), road traffic noise increase is predicted to be 1.7 dB (year 2033) to 2 dB (year 2023). For guidance, it is noted that the average person cannot generally detect a 3 dB variation in sound pressure level, with a 5 dB variation deemed a noticeable difference, and a 10 dB variation a perceived doubling / halving of sound pressure. The predicted 2 to 3 dB increase is therefore unlikely to result in a detectable difference in the $L_{eq \ 1hr}$ levels.

Overall, the proposed development will generally be within acceptable levels of the adopted criterion, subject to the acoustic treatments recommended in Section 6 being integrated into the design, construction, and operation of the service station development.

Report Reviewed By:

JAY CARTER BSc Director

Report Compiled by:

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Matthew Lopez BEng Consultant



APPENDIX A

Subject Site, Offsite Receivers, Noise Monitoring Location, and Acoustic Treatment Sketch

CRGACOUSTICS



Figure No. 1: Subject Site Location (Google Maps).



Figure No. 2: Subject Site, Logger Location and Surrounding Environs (NSW Six Maps).



Sketch No. 1: Service Station Layout and Recommended Acoustic Treatments (Not to Scale).

ACOUSTIC TREATMENT LEGEND

Recommended 2.2m high acoustic barrier constructed above the finished (i.e. adjacent hardstand) or existing ground level, whichever is higher.

Recommended 3.5m high acoustic barrier constructed above the finished (i.e. adjacent hardstand) or existing ground level, whichever is higher.

Barriers are to be free of gaps and holes, including between the base of the barrier and the ground. Typical materials include earth berms, 19mm lapped timber fence (40% overlap), 9mm FC sheet, toughened glass, Perspex, masonry, or a combination of the above (a minimum surface mass of 11kg/m^2 is required).



APPENDIX B

Development Plans













APPENDIX C

Measurement Results and Model Calculations / Predictions

















Ture	Saxle rigid truck Length: 12.5 metres	Arge Rigid	Semi Eendtr: 19.0 mittres	19 m B Double 19 metre B-double Combination (General Access Vehicle) Length 180 metres 00 00 00 00 00 00 00 00 00 00 00 00 00	Delivery Type of Vehicle e.g. (Fuel 26M)
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6-7			1		GAAIN
7-8	1.1				
8-9		1			PRODUCE
9-			1		
10					
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11					
11-					
12					
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1			54.		
1-2					:
2-3					
3-4					
4-5			1		Produc
5-6	1				
6-7				l	GRAIN
7-8		15	*		

	3 exte rigid bruck Length: 12.5 metres	4 axle rigid truck Length: 12 5 metres	Semi- Semi-trailer Length: IBO metres	19 metre B-double Combination (General Access Vehicle) Length 19.0 metros	Delivery Type of Vehicle e.g. (Fuel 26M)
5-6			*		
6-7			1		GRAIN
7-8	1.				
8-9					
9-					
10		8			
10-	t		3	1	fuel
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11-			1.		
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1			~		
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2-3		E			
3-4					
4-5					
5-6		-	7		
6-7					
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Date 13/1/21 Day WEDNESDAY

	3 exte rigid truck Length: 12.5 metres	4 axle rigid truck Length: 12.5 metres	Semi Ength: 19.0 metres	19 metre B-double Combination (General Access Vehicle) Length 19.0 metres	Delivery Type of Vehicle e.g. (Fuel 26M)
5-6			(GRAIN
6-7			18		
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7-8		-	те - С		

Date/4/1 / 2021 Day THURSDAY

	3 axie rigid truck Length: 12.5 metres 000 to 00 16 F2	4 axia rigid truck Length: 12.5 metres	Semi- Semi-trailer Length: ISO metres	19 metre 8-double Combination (General Access Vehicle) Langth 19.0 metres	Delivery Type of Vehicle e.g. (Fuel 26M)
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7-8	2		3		

Date/571 / 2021 Day FRIDAY

	3 axie rigid truck Length: 12.5 metres	A axie rigid truck Length: 12 5 metres	Semi Semi-trailer Length: 19.0 metres	00=0	19 metre 8-double Combination (General Access Vehicle) Length 19.0 metres	Delivery Type of Vehicle e.g. (Fuel 26M)
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Date 16/ 1 2021 Day SATURDAY

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7-8					
8-9	1				
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2-3					
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4-5			1		
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6-7					
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Date/7/ 12021 Day Survey

	3 exte rigid truck Length: 12.5 metres	A adda rigid truck Length: 12.5 metres	Semi Eengin: ISD metres	19 metre Boulle Combination (General Access Vehicle) Length 19.0 metres	Delivery Type of Vehicle e.g. (Fuel 26M)
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7-8		c	3		



		i .	_			1
DAY HME Leg ONSITE SERVICE STATION AC	TIVITIES I	MPACTING:	+			
			1			
R1: Dwellings to the northeast				R2: Dwellings to the east		
Nearest car door closures	80	dB(A) @ 1m	#	Nearest car door closures	80	dB(A) @ 1m
Single event duration	1.5	seconds	-	Single event duration	1.5	seconds
Worst case duration in 15 minutes	0.125	minutes	-	Worst case duration in 15 minutes	0.125	minutes
15 minute Leg	59.2	dB(A) @ 1m		15 minute Leq	59.2	dB(A) @ 1m
Distance to receiver	27	m		Distance to receiver	58	m
Acoustic barrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-28.6	dB(A)		Distance attenuation	-35.3	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	22	dB(A)	#	Impact at Façade	16	dB(A)
			+			
Car door closure at bowser	80	dB(A) @ 1m	#	Car door closure at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	40	events		Number of events in 15 minutes	40	events
Worst case duration in 15 minutes	1	minutes	_	Worst case duration in 15 minutes	1	minutes
15 minute Leq	68.2	dB(A) @ 1m	_	15 minute Leq	68.2	dB(A) @ 1m
Distance to receiver	47	m JD(A)	-	Distance to receiver	58	m dD(A)
Distance attenuation	-11.57	dB(A)	-	Distance attenuation	-10.38	dB(A)
Facade reflection	2.5	dB(A)		Facade reflection	2.5	dB(A)
Impact at Façade	26	dB(A)	#	Impact at Façade	25	dB(A)
Truck door closures at bowser	80	dB(A) @ 1m	#	Truck door closures at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds	_	Single event duration	1.5	seconds
Number of events in 15 minutes	0.15	events	-	Number of events in 15 minutes	0.15	events
15 minute Lea	60.0	dB(A) @ 1m	-	15 minute Lea	60.0	dB(A) @ 1m
Distance to receiver	47	m		Distance to receiver	58	m
Acoustic barrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.3	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	17	dB(A)	#	Impact at Façade	17	dB(A)
			-			
Car bypass IN	72	dB(A) @ 1m	#	Car bypass IN	72	dB(A) @ 1m
Single event duration	11	seconds	T.	Single event duration	11	seconds
Number of events in 15 minutes	20	events		Number of events in 15 minutes	20	events
Worst case duration in 15 minutes	3.667	minutes		Worst case duration in 15 minutes	3.667	minutes
15 minute Leq	65.9	dB(A) @ 1m	_	15 minute Leq	65.9	dB(A) @ 1m
Distance to receiver	20	m	_	Distance to receiver	57	m
Acoustic barrier screening	-13.31	dB(A)	-	Acoustic barrier screening	-11.18	dB(A)
Eacade reflection	-20.0	dB(A)	-	Eacade reflection	-55.1	dB(A)
Impact at Facade	2.0	dB(A)	#	Impact at Facade	2.5	dB(A)
Car bypass OUT	72	dB(A) @ 1m	#	Car bypass OUT	72	dB(A) @ 1m
Single event duration	11	seconds	_	Single event duration	11	seconds
Number of events in 15 minutes	20	events	-	Number of events in 15 minutes	20	events
15 minute Lea	5.007	dB(A) @ 1m	-	15 minute Lea	65.9	dB(A) @ 1m
Distance to receiver	70	m		Distance to receiver	87	m
Acoustic barrier screening	-13.31	dB(A)		Acoustic barrier screening	-11.18	dB(A)
Distance attenuation	-36.9	dB(A)		Distance attenuation	-38.8	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	18	dB(A)	#	Impact at Façade	18	dB(A)
			+			
Tyre pressure beeper	75	dB(A) @ 1m	#	Tyre pressure beeper	75	dB(A) @ 1m
Single event duration	3	seconds	1.	Single event duration	3	seconds
Number of events in 15 minutes	12	events		Number of events in 15 minutes	12	events
Worst case duration in 15 minutes	0.6	minutes		Worst case duration in 15 minutes	0.6	minutes
15 minute Leq	61.0	dB(A) @ 1m		15 minute Leq	61.0	dB(A) @ 1m
Distance to receiver	87	m m(A)		Distance to receiver	105	m ID(4)
Acoustic barrier screening	-11.57	dB(A)	-	Distance attenuation	-12	dB(A)
Eacade reflection	-38.8	dB(A)	+	Eacade reflection	-40.4	dB(A)
Impact at Facade	13	dB(A)	#	Impact at Facade	2.5	dB(A)
· · · ·			-			• • •



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DAYIME	TIVITIES 1	MPACTINC	-			
		in ac mut.	-		_	
R1: Dwellings to the northeast				R2: Dwellings to the east		
Small / medium truck bypass	78	dB(A) @ 1m	#	Small / medium truck bypass	78	dB(A) @ 1m
Single event duration	15	seconds		Single event duration	15	seconds
Number of events in 15 minutes	3	events	_	Number of events in 15 minutes	3	events
worst case duration in 15 minutes	65.0	dP(A) @ 1m	_	worst case duration in 15 minutes	65.0	dP(A) @ 1m
Distance to receiver	28	m	_	Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-28.9	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	26	dB(A)	#	Impact at Façade	22	dB(A)
Large truck bypass	85	dB(A) @ 1m	#	Large truck bypass	85	dB(A) @ 1m
Single event duration	15	seconds		Single event duration	15	seconds
Number of events in 15 minutes	0.25	minutos	_	Number of events in 15 minutes	0.25	minutos
15 minute Lea	67.2	dB(A) @ 1m	_	15 minute Lea	67.2	dB(A) @ 1m
Distance to receiver	28	m		Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-28.9	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	29	dB(A)	#	Impact at Façade	25	dB(A)
Patrons outdoor dining	75	dB(A) @ 1m	#	Patrons outdoor dining	75	dB(A) @ 1m
Single event duration	900	seconds	_	Single event duration	900	seconds
Worst case duration in 15 minutes	15	minutes	_	Number of events in 15 minutes	15	minutes
15 minute Lea	75.0	dB(A) @ 1m		15 minute Lea	75.0	dB(A) @ 1m
Distance to receiver	85	m		Distance to receiver	85	m
Onsite building screening	-12	dB(A)		Onsite building screening	-12	dB(A)
Distance attenuation	-38.6	dB(A)		Distance attenuation	-38.6	dB(A)
Façade reflection	2.5	dB(A)	_	Façade reflection	2.5	dB(A)
Impact at Façade	27	dB(A)	#	Impact at Façade	27	dB(A)
			_			
Tanali aiskaaliaa	07	dD(A) @ 1m	#	Tavalt aiskaaltaa	07	dB(A) @ 1m
Single event duration		uB(A) @ Thi seconds		Single event duration		uB(A) @ Thi seconds
Number of events in 15 minutes	3	events		Number of events in 15 minutes	3	events
Worst case duration in 15 minutes	0.05	minutes		Worst case duration in 15 minutes	0.05	minutes
15 minute Leq	72.2	dB(A) @ 1m		15 minute Leq	72.2	dB(A) @ 1m
Distance to receiver	47	m		Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	29	dB(A)	#	Impact at Façade	30	110 (4)
			- "			dB(A)
			n			dB(A)
Electric forklift inside	72	dB(A) @ 1m	#	Elactric forklift inside	72	dB(A) @ 1m
Electric forklift inside Single event duration	72	dB(A) @ 1m seconds	#	Electric forklift inside	72	dB(A) dB(A) @ 1m seconds
Electric forklift inside Single event duration Number of events in 15 minutes	72 900	dB(A) @ 1m seconds events	#	Electric forklift inside Single event duration Number of events in 15 minutes	72 900	dB(A) @ 1m seconds events
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 900 1 15	dB(A) @ 1m seconds events minutes	#	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 900 1 15	dB(A) @ 1m seconds events minutes
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq	72 900 1 15 72.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m	#	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq	72 900 1 15 72.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	72 900 1 15 72.0 22	dB(A) @ 1m seconds events minutes dB(A) @ 1m m	#	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	72 900 1 15 72.0 30	dB(A) @ 1m seconds events minutes dB(A) @ 1m m
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation	72 900 1 15 72.0 22 -10	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A)	#	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation	72 900 1 15 72.0 30 -12	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A)
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation	72 900 1 15 72.0 22 -10 -26.8	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A)	#	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation	72 900 1 15 72.0 30 -12 -29.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A)
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection	72 900 1 15 72.0 22 -10 -26.8 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)	#	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection	72 900 1 15 72.0 30 -12 -29.5 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade	72 900 1 15 72.0 22 -10 -26.8 2.5 38	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	# 	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade	72 900 1 15 72.0 30 -12 -29.5 2.5 33	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade	72 900 1 15 72.0 22 -10 -26.8 2.5 38	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	#	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade	72 900 1 15 72.0 30 -12 -29.5 2.5 33	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery	72 900 1 155 72.0 22 -10 -26.8 2.5 38 2.5 38	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m	# # # # #	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery	72 900 1 15 72.0 300 -12 -29.5 2.5 333	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A)
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration	72 900 1 15 72.0 -10 -26.8 2.5 38 82 900	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) m dB(A) @ 1m seconds	# # # #	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration	72 900 1 15 72.0 300 -12 -29.5 2.5 333	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes	72 900 1 15 72.0 -10 -26.8 2.5 38 82 920 900 10	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) exconds		Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes	72 900 1 15 72.0 300 -12 -29.5 2.5 333 82 9000 1	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m dB(A) @ 1m seconds events
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 900 1 15 72.0 -10 -26.8 2.5 38 82 900 1 15	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) events events minutes		Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 900 1 15 72.0 300 -29.5 2.5 333 82 9000 15	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) events events minutes
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 900 1 15 72.0 -10 -26.8 2.5 38 82 900 1 15 82 900 1 5 82.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m		Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 900 1 15 72.0 30 -12 -29.5 2.5 333 9000 11 15 15 82 9000 1 15 82.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	72 9000 1 15 72.0 22 -10 -26.8 2.5 38 2.5 38 9000 1 1 5 82.0 9000 38	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m	# # # #	Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	72 900 1 15 72.0 30 -29.5 2.5 33 -29.5 -29.	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) minutes dB(A) @ 1m m
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Onsite building screening	72 900 1 15 72.0 22 -10 -26.8 2.5 38 2.5 38 900 1 1 5 82.0 900 38 2 -12	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A)		Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	72 900 1 15 72.0 30 -29.5 2.5 33 -29.5 33 -29.5 33 -29.5 33 -29.5 33 -29.5 33 -29.5 33 -29.5 33 -29.5 33 -29.93	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) minutes dB(A) @ 1m m dB(A) @ 1m
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Onsite building screening Distance attenuation	72 900 1 5 72.0 22 -10 -26.8 2.5 3.8 2.5 3.8 900 1 1 5 82.0 900 1 1 5 82.0 3.8 8 2 900 1 1 5 82.0 900 1 22 -25 3.8 900 -26.8 1 900 -26.8 1 900 -26.8 9000 -26.8 900 -26.8 9000 -27.9 90000 -27.9 9000 -27.9 90000 -27.9 90000 -27.9 90000 -27.9 90000 -27.9 90000 -27.9 90000 -27.9 90000 -27.9 90000 -27.9 90000 -27.9 90000 -27.9 900000 -27.9 900000000000000000000000000000000000	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m		Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation	72 900 1 15 72.0 30 -12 -29.5 33 -29.5 33 -29.5 33 -29.5 33 -29.5 33 -29.5 33 -29.5 33 -29.6 900 1 15 82.0 900 1 15 82.0 900 1 15 82.0 -9.93 -33.1	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m dB(A) dB(A) dB(A) dB(A) dB(A) m seconds events minutes dB(A) @ 1m m dB(A) dB(A)
Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Onsite building screening Distance attenuation Façade reflection	72 900 1 15 72.0 22 -10 -26.8 2.5 38 82 900 1 15 820 900 1 15 82.0 38 -12 -31.6 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A)		Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection	72 900 1 15 72.0 30 -12 -29.5 2.5 33 82 900 1 155 82 900 1 155 -9.93 -33.1 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m dB(A) dB(A) dB(A) dB(A) m dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A)



DAVITME						1
DA 1 HIVE Leg ONSITE SERVICE STATION AC	TIVITIES	MPACTING				
INTO THE SERVICES INTON AU		an ac mus:	-			
R1: Dwellings to the northeast				R2: Dwellings to the east		
Waste collection	102	dB(A) @ 1m	#	Waste collection	102	dB(A) @ 1m
Single event duration	180	seconds		Single event duration	180	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	3	minutes		Worst case duration in 15 minutes	3	minutes
15 minute Leq	95.0	dB(A) @ 1m		15 minute Leq	95.0	dB(A) @ 1m
Distance to receiver	30	m	_	Distance to receiver	35	m
Onsite building screening	-5	dB(A)	_	Ground absorption correction	0	dB(A)
Distance attenuation	-29.5	dB(A)	_	Distance attenuation	-30.9	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	63	dB(A)	#	Impact at Façade	67	dB(A)
			_			
A/C plant	62	$d\mathbf{B}(\mathbf{A}) \otimes \mathbf{3m}$	#	A/C plant	62	$d\mathbf{B}(\mathbf{A}) \otimes 3\mathbf{m}$
Single event duration	420	seconds	- "	Single event duration	420	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	420	events
Worst case duration in 15 minutes	14	minutes		Worst case duration in 15 minutes	14	minutes
15 minute Leg	61.7	dB(A) @ 3m		15 minute Leg	61.7	dB(A) @ 3m
Distance to receiver	70	m		Distance to receiver	60	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-27.4	dB(A)		Distance attenuation	-26.0	dB(A)
Facade reflection	2.5	dB(A)		Facade reflection	2.5	dB(A)
Impact at Façade	25	dB(A)	#	Impact at Façade	26	dB(A)
Refrigeration plant	64	dB(A) @ 3m	#	Refrigeration plant	64	dB(A) @ 3m
Single event duration	900	seconds	_	Single event duration	900	seconds
Number of events in 15 minutes	1	events	_	Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes	_	Worst case duration in 15 minutes	15	minutes
15 minute Leq	64.0	dB(A) @ 3m	_	15 minute Leq	64.0	dB(A) @ 3m
Distance to receiver	70	m	_	Distance to receiver	60	m
Acoustical screening	-12	dB(A)	_	Acoustical screening	-12	dB(A)
Distance attenuation	-27.4	dB(A)	_	Distance attenuation	-26.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	27	dB(A)	#	Impact at Façade	28	dB(A)
			-			
Kitchen exhaust unit	57	dB(A) @ 3m	#	Kitchen exhaust unit	57	dB(A) @ 3m
Single event duration	900	seconds		Single event duration	900	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Leq	57.0	dB(A) @ 3m		15 minute Leq	57.0	dB(A) @ 3m
Distance to receiver	80	m		Distance to receiver	80	m
Acoustic attenuator	-15	dB(A)		Acoustic attenuator	-15	dB(A)
Distance attenuation	-28.5	dB(A)		Distance attenuation	-28.5	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	16	dB(A)	#	Impact at Façade	16	dB(A)
			_		_	
Air comprosor	65	dB(A) @ 2m	#	Air compressor	65	dD(A) @ 2
Single event duration	180	dB(A) @ 2111	- "	Single event duration	180	ub(A) @ 2111
Number of events in 15 minutes	180	events		Number of events in 15 minutes	180	events
Worst case duration in 15 minutes	6	minutes		Worst case duration in 15 minutes	6	minutes
15 minute Lea	61.0	dB(A) @ 2m	+	15 minute Lea	61.0	dB(A) @ 2m
Distance to receiver	355	m	+	Distance to receiver	60	m
Inside to outside attenuation		dB(A)		Inside to outside attenuation	_12	dB(A)
Distance attenuation	-45.0	dB(A)		Distance attenuation	-29.5	dB(A)
Facade reflection	-45.0	dB(A)		Eacade reflection	29.5	dB(A)
Impact at Facade	2.3	dB(A)	5	Impact at Facade	2.3	dB(A)
T						
Combined external impact	40	dB(A)		Combined external impact	38	dB(A)



DAYTIME Leq ONSTIE SERVICE STATION AC	TIVITIES I	MPACTING:				
R3: Motel to the south				R4. Dwellings to the northwest		
Nearest car door closures	80	dB(A) @ 1m	#	Nearest car door closures	80	dB(A) @ 1m
Single event duration	1.5	seconds	1	Single event duration	1.5	seconds
Number of events in 15 minutes	5	events		Number of events in 15 minutes	5	events
Worst case duration in 15 minutes	0.125	minutes		Worst case duration in 15 minutes	0.125	minutes
15 minute Leq	59.2	dB(A) @ 1m		15 minute Leq	59.2	dB(A) @ 1m
Distance to receiver	35	m		Distance to receiver	52	m
Acoustic barrier screening	-12.17	dB(A)	_	Acoustic barrier screening	0	dB(A)
Distance attenuation	-30.9	dB(A)	_	Distance attenuation	-34.3	dB(A)
Façade reflection	2.5	dB(A)	#	Impact at Facada	2.5	dB(A)
Impact at Paçade	19	dB(A)		Impact at Façade	20	dB(A)
impact malae with winds up closed		ub(11)	-	Impact mode with winds us open		ub(ii)
Car door closure at bowser	80	dB(A) @ 1m	#	Car door closure at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	40	events		Number of events in 15 minutes	40	events
Worst case duration in 15 minutes	1	minutes		Worst case duration in 15 minutes	1	minutes
15 minute Leq	68.2	dB(A) @ 1m	_	15 minute Leq	68.2	dB(A) @ 1m
Distance to receiver	25	m ID(A)	+	Distance to receiver	40	m m(A)
Acoustic barrier screening	-12.17	dB(A)	+	Acoustic barrier screening	0	dB(A)
Excade reflection	-28.0	dB(A)	+	Encode reflection	-32.0	dB(A)
Impact at Facade	2.5	dB(A)	#	I açade Terrection Impact at Facade	2.5	dB(A)
Impact at rayaut	13	dB(A)	#	Impact at raçaue	39	dB(A)
impact mside with windows closed	15	uD(A)	-	impact mside with windows open	51	uD(A)
Truck door closures at bowser	80	dB(A) @ 1m	#	Truck door closures at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	6	events		Number of events in 15 minutes	6	events
Worst case duration in 15 minutes	0.15	minutes		Worst case duration in 15 minutes	0.15	minutes
15 minute Leq	60.0	dB(A) @ 1m		15 minute Leq	60.0	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.17	dB(A)	_	Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)	_	Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	22	dB(A)	#	Impact at Façade	30	dB(A)
Impact inside with windows closed	5	dB(A)	-	Impact inside with windows open	23	dB(A)
Car bypass IN	72	dB(A) @ 1m	#	Car bypass IN	72	dB(A) @ 1m
Single event duration	11	seconds		Single event duration	11	seconds
Number of events in 15 minutes	20	events		Number of events in 15 minutes	20	events
Worst case duration in 15 minutes	3.667	minutes		Worst case duration in 15 minutes	3.667	minutes
15 minute Leq	65.9	dB(A) @ 1m		15 minute Leq	65.9	dB(A) @ 1m
Distance to receiver	25	m	_	Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)	_	Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)	_	Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)	#	Façade reflection	2.5	dB(A)
Impact at Façade	28	dB(A)	#	Impact at Façade	36	dB(A)
impact mside with windows closed	10	uD(A)	_	impact mside with windows open	2)	uD(A)
Car bypass OUT	72	dB(A) @ 1m	#	Car bypass OUT	72	dB(A) @ 1m
Single event duration	11	seconds		Single event duration	11	seconds
Number of events in 15 minutes	20	events		Number of events in 15 minutes	20	events
Worst case duration in 15 minutes	3.667	minutes		Worst case duration in 15 minutes	3.667	minutes
15 minute Leq	65.9	dB(A) @ 1m		15 minute Leq	65.9	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	50	m
Onsite building screening	-12.65	dB(A)	_	Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)	_	Distance attenuation	-34.0	dB(A)
Façade reflection	2.5	dB(A)	ш	Façade reflection	2.5	dB(A)
Impact at Façade	28	dB(A)	#	Impact at Façade	34	dB(A)
Impact inside with windows closed	10	dB(A)	_	Impact inside with windows open	21	dB(A)
Tyre pressure beeper	75	dB(A) @ 1m	#	Tyre pressure beeper	75	dB(A) @ 1m
Single event duration	3	seconds	1	Single event duration	3	seconds
Number of events in 15 minutes	12	events		Number of events in 15 minutes	12	events
Worst case duration in 15 minutes	0.6	minutes		Worst case duration in 15 minutes	0.6	minutes
15 minute Leq	61.0	dB(A) @ 1m		15 minute Leq	61.0	dB(A) @ 1m
Distance to receiver	49	m	1	Distance to receiver	52	m
Onsite building screening	-12	dB(A)		Onsite building screening	0	dB(A)
Distance attenuation	-33.8	dB(A)		Distance attenuation	-34.3	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	18	dB(A)	#	Impact at Façade	29	dB(A)
Impact inside with windows closed	0	dB(A)		Impact inside with windows open	22	dB(A)



DAYTIME						
Leq ONSITE SERVICE STATION AC	TIVITIES I	MPAC'IING:				
R3: Motel to the south				R4: Dwellings to the northwest		
Small / medium truck bypass	78	dB(A) @ 1m	#	Small / medium truck bypass	78	dB(A) @ 1m
Single event duration	15	seconds	_	Single event duration	15	seconds
Number of events in 15 minutes	3	events	_	Number of events in 15 minutes	3	events
Worst case duration in 15 minutes	0.75	minutes	_	Worst case duration in 15 minutes	0.75	minutes
15 minute Leq	65.0	dB(A) @ 1m	_	15 minute Leq	65.0	dB(A) @ 1m
Distance to receiver	25	m	_	Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)	_	Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)	_	Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)	#	Façade reflection	2.5	dB(A)
Impact at Façade	27	dB(A)	- "	Impact at Façade	33	dB(A)
impact inside with windows closed	9	dD(A)	-	Impact mside with windows open	20	db(A)
I arge truck bypass	85	dB(A) @ 1m	#	Large truck bypass	85	dB(A) @ 1m
Single event duration	15	seconds	"	Single event duration	15	seconds
Number of events in 15 minutes	13	events		Number of events in 15 minutes	15	events
Worst case duration in 15 minutes	0.25	minutes		Worst case duration in 15 minutes	0.25	minutes
15 minute Lea	67.2	dB(A) @ 1m		15 minute Lea	67.2	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)		Acoustic barrier screening	-0	dB(A)
Distance attenuation	-28.0	dB(A)	1	Distance attenuation	-32.0	dB(A)
Facade reflection	20.0	dB(A)	1	Facade reflection	2.5	dB(A)
Impact at Facade	2.5	dB(A)	#	Impact at Facade	38	dB(A)
Impact inside with windows closed	12	dB(A)	1"	Impact inside with windows open	30	dB(A)
impact mone with windows closed	12	a	╋	Impact mode with windows open	50	an(11)
Patrons outdoor diping	75	dB(A) @ 1m	#	Patrons outdoor dining	75	dB(A) @ 1m
Single event duration	900	seconds	-	Single event duration	900	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Leg	75.0	dB(A) @ 1m		15 minute Leg	75.0	dB(A) @ 1m
Distance to receiver	19	m		Distance to receiver	80	m
Acoustic barrier screening	-10	dB(A)		Onsite building screening	0	dB(A)
Distance attenuation	-25.6	dB(A)		Distance attenuation	-38.1	dB(A)
Eacade reflection	2.5	dB(A)		Facade reflection	2.5	dB(A)
Impact at Facade	42	dB(A)	#	Impact at Facade	39	dB(A)
Impact inside with windows closed	24	dB(A)		Impact inside with windows open	32	dB(A)
A				· · · · · ·		
Truck airbrakes	97	dB(A) @ 1m	#	Truck airbrakes	97	dB(A) @ 1m
Single event duration	1	seconds		Single event duration	1	seconds
Number of events in 15 minutes	3	events		Number of events in 15 minutes	3	events
Worst case duration in 15 minutes	0.05	minutes		Worst case duration in 15 minutes	0.05	minutes
15 minute Leq	72.2	dB(A) @ 1m		15 minute Leq	72.2	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-11.66	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	35	dB(A)	#	Impact at Façade	43	dB(A)
Impact inside with windows closed	18	dB(A)		Impact inside with windows open	35	dB(A)
Electric forklift inside	72	dB(A) @ 1m	#	Electric forklift inside	72	dB(A) @ 1m
Single event duration	900	seconds		Single event duration	900	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Leq	72.0	dB(A) @ 1m		15 minute Leq	72.0	dB(A) @ 1m
Distance to receiver	20	m		Distance to receiver	57	m
Inside to outside attenuation	-12	dB(A)		Inside to outside attenuation	-5	dB(A)
Distance attenuation	-26.0	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	36	dB(A)	#	Impact at Façade	34	dB(A)
Impact inside with windows closed	19	dB(A)	1	Impact inside with windows open	27	dB(A)
			1#	Goods delivery	75	dB(A) @ 1m
Goods delivery	82	dB(A) @ 1m	- "	Goods derivery	15	
Goods delivery Single event duration	82 900	dB(A) @ 1m seconds	1	Single event duration	900	seconds
Goods delivery Single event duration Number of events in 15 minutes	82 900 1	dB(A) @ 1m seconds events		Single event duration Number of events in 15 minutes	900	seconds events
Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	82 900 1 15	dB(A) @ 1m seconds events minutes		Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	900 1 15	seconds events minutes
Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq	82 900 1 15 82.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m		Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq	900 1 15 75.0	seconds events minutes dB(A) @ 1m
Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	82 900 1 15 82.0 12	dB(A) @ 1m seconds events minutes dB(A) @ 1m m		Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	900 1 15 75.0 75	seconds events minutes dB(A) @ 1m m
Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	82 900 1 15 82.0 12 -10	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A)		Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	900 1 15 75.0 75 0	seconds events minutes dB(A) @ 1m m dB(A)
Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation	82 900 1 15 82.0 12 -10 -21.6	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A)		Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation	900 1 15 75.0 75 0 -37.5	seconds events minutes dB(A) @ 1m m dB(A) dB(A)
Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection	82 900 1 15 82.0 12 -10 -21.6 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)		Single event duration Single event duration Wurber of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection	900 1 15 75.0 75 0 -37.5 2.5	seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)
Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	82 900 1 15 82.0 12 -10 -21.6 2.5 53	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	#	Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	900 1 15 75.0 75 0 -37.5 2.5 40	seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)



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DAYTIME			_			
Leq ONSITE SERVICE STATION ACTI	VITIES I	MPACTING:	-			
R3: Motel to the south				R4: Dwellings to the northwest		
Waste collection	102	dB(A) @ 1m	#	Waste collection	102	dB(A) @ 1m
Single event duration	180	seconds		Single event duration	180	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	3	minutes	_	Worst case duration in 15 minutes	3	minutes
15 minute Leq	95.0	dB(A) @ 1m		15 minute Leq	95.0	dB(A) @ 1m
Distance to receiver	12	m		Distance to receiver	75	m
Ground absorption correction	0	dB(A)		Ground absorption correction	0	dB(A)
Distance attenuation	-21.6	dB(A)		Distance attenuation	-37.5	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	76	dB(A)	#	Impact at Façade	60	dB(A)
Impact inside with windows closed	58	dB(A)		Impact inside with windows open	53	dB(A)
A/C plant	62	dB(A) @ 3m	#	A/C plant	62	dB(A) @ 3m
Single event duration	420	seconds		Single event duration	420	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	14	minutes		Worst case duration in 15 minutes	14	minutes
15 minute Leq	61.7	dB(A) @ 3m		15 minute Leq	61.7	dB(A) @ 3m
Distance to receiver	14	m		Distance to receiver	75	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-13.4	dB(A)		Distance attenuation	-28.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Facade	39	dB(A)	#	Impact at Facade	24	dB(A)
Impact inside with windows closed	21	dB(A)		Impact inside with windows open	17	dB(A)
*						
Refrigeration plant	64	dB(A) @ 3m	#	Refrigeration plant	64	dB(A) @ 3m
Single event duration	900	seconds		Single event duration	900	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Lea	64.0	dB(A) @ 3m		15 minute Lea	64.0	dB(A) @ 3m
Distance to receiver	14	m		Distance to receiver	75	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-13.4	dB(A)	_	Distance attenuation	-28.0	dB(A)
Eacade reflection	2.5	dB(A)		Eacade reflection	25	dB(A)
Impact at Facade	41	dB(A)	#	Impact at Facade	2.5	dB(A)
Impact inside with windows closed	24	dB(A)	m	Impact at l'açade	10	dB(A)
impact mside with windows closed	24	dD(A)	_	impact mside with windows open	17	dD(A)
Kitchen exhaust unit	57	dB(A) @ 3m	#	Kitchen exhaust unit	57	dB(A) @ 3m
Single event duration	900	seconds	m	Single event duration	900	seconds
Number of events in 15 minutes	1	avants		Number of events in 15 minutes	500	ovente
Worst case duration in 15 minutes	15	minutos		Worst case duration in 15 minutes	15	minutos
15 minute Lea	57.0	dB(A) @ 3m		15 minute Lea	57.0	dB(A) @ 3m
Distance to receiver	14	m		Distance to receiver	75	m
Acoustic attenuator	-15	dB(A)	1	Acoustic attenuator	-15	dB(A)
Distance attenuation	-13	dB(A)	_	Distance attenuation	-15	dB(A)
Escade reflection	-13.4	dD(A)	_	Escade reflection	-28.0	dD(A)
Façade reflection	2.3	dD(A)	#	Façade reflection	2.3	dD(A)
Impact at Façade	31	dB(A)	#	Impact at Façade	17	dB(A)
Impact inside with windows closed	14	dB(A)	_	Impact inside with windows open	9	dB(A)
		ID(A) G 2	4			ID(A) @ 2
Air compressor	65	dB(A) @ 2m	#	Air compressor	65	dB(A) @ 2m
Single event duration	180	seconds	_	Single event duration	180	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	6	minutes	_	Worst case duration in 15 minutes	6	minutes
15 minute Leq	61.0	dB(A) @ 2m		15 minute Leq	61.0	dB(A) @ 2m
Distance to receiver	14	m		Distance to receiver	75	m
Inside to outside attenuation	-12	dB(A)		Inside to outside attenuation	-12	dB(A)
Distance attenuation	-16.9	dB(A)		Distance attenuation	-31.5	dB(A)
Façade reflection	2.5	dB(A)	1	Façade reflection	2.5	dB(A)
Impact at Façade	35	dB(A)	#	Impact at Façade	20	dB(A)
Impact inside with windows closed	17	dB(A)		Impact inside with windows open	13	dB(A)
Combined external impact	47	dB(A)		Combined external impact	48	dB(A)
Impact inside with windows closed	30	dB(A)		Impact inside with windows open	40	dB(A)



DAYTIME Leg ONSITE SERVICE STATION ACTIVITIES IMPACTING:			DAYTIME Leg ONSTIE SERVICE STATION ACTIVITIES IMPACTING:				
Nearest car door closures	80	dB(A) @ 1m	Small / medium truck bypass	78	dB(A) @ 1m		
Single event duration	1.5	seconds	Single event duration	15	seconds		
Number of events in 15 minutes	5	events	Number of events in 15 minutes	3	events		
Worst case duration in 15 minutes	0.125	minutes	Worst case duration in 15 minutes	0.75	minutes		
15 minute Leq	59.2	dB(A) @ 1m	15 minute Leq	65.0	dB(A) @ 1m		
Distance to receiver	72	m	Distance to receiver	60	m		
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-3	dB(A)		
Distance attenuation	-37.1	dB(A)	Distance attenuation	-35.6	dB(A)		
Façade reflection	10	dB(A)	Façade reflection	0	dB(A)		
Impact at rear northern yard	19	dB(A)	Impact at rear northern yard	20	dB(A)		
Car door closure at bowser	80	dB(A) @ 1m	Large truck bypass	85	dB(A) @ 1m		
Single event duration	1.5	seconds	Single event duration	15	seconds		
Number of events in 15 minutes	40	events	Number of events in 15 minutes	1	events		
Worst case duration in 15 minutes	1	minutes	Worst case duration in 15 minutes	0.25	minutes		
15 minute Leq	68.2	dB(A) @ 1m	15 minute Leg	67.2	dB(A) @ 1m		
Distance to receiver	60	m	Distance to receiver	60	m		
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-3	dB(A)		
Distance attenuation	-35.6	dB(A)	Distance attenuation	-35.6	dB(A)		
Façade reflection	0	dB(A)	Facade reflection	0	dB(A)		
Impact at rear northern yard	30	dB(A)	Impact at rear northern yard	29	dB(A)		
Truck door closures at bowser	80	dB(A) @ 1m	Patrons outdoor dining	75	dB(A) @ 1m		
Single event duration	1.5	seconds	Single event duration	900	uB(A) @ Thi		
Number of events in 15 minutes	6	events	Number of events in 15 minutes	1	events		
Worst case duration in 15 minutes	0.15	minutes	Worst case duration in 15 minutes	15	minutes		
15 minute Lea	60.0	dB(A) @ 1m	15 minute Lea	75.0	dB(A) @ 1m		
Distance to receiver	60	m	Distance to receiver	100	m		
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-3	dB(A)		
Distance attenuation	-35.6	dB(A)	Distance attenuation	-40.0	dB(A)		
Eacade reflection	0	dB(A)	Eacade reflection	40.0	dB(A)		
Impact at rear northern yard	21	dB(A)	Impact at rear northern yard	32	dB(A)		
T							
Car bypass IN	72	dB(A) @ 1m	Truck airbrakes	97	dB(A) @ 1m		
Single event duration	11	seconds	Single event duration	1	seconds		
Number of events in 15 minutes	20	events	Number of events in 15 minutes	3	events		
Worst case duration in 15 minutes	3.667	minutes	Worst case duration in 15 minutes	0.05	minutes		
15 minute Leq	65.9	dB(A) @ 1m	15 minute Leg	72.2	dB(A) @ 1m		
Distance to receiver	60	m	Distance to receiver	60	m		
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-3	dB(A)		
Distance attenuation	-35.6	dB(A)	Distance attenuation	-35.6	dB(A)		
Façade reflection	0	dB(A)	Façade reflection	0	dB(A)		
Impact at rear northern yard	27	dB(A)	Impact at rear northern yard	34	dB(A)		
Car bypass OUT	72	dB(A) @ 1m	Electric forklift inside	72	dB(A) @ 1m		
Single event duration	11	seconds	Single event duration	900	seconds		
Number of events in 15 minutes	20	events	Number of events in 15 minutes	1	events		
Worst case duration in 15 minutes	3.667	minutes	Worst case duration in 15 minutes	15	minutes		
15 minute Leq	65.9	dB(A) @ 1m	15 minute Leq	72.0	dB(A) @ 1m		
Distance to receiver	70	m	Distance to receiver	77	m		
Reduction in angle of view / house screen	-3	dB(A)	Inside to outside attenuation	-5	dB(A)		
Distance attenuation	-36.9	dB(A)	Distance attenuation	-37.7	dB(A)		
Façade reflection	0	dB(A)	Reduction in angle of view / house screen	-3	dB(A)		
Impact at rear northern yard	26	dB(A)	Impact at rear northern yard	26	dB(A)		
Tyre pressure beeper	75	dB(A) @ 1m	Goods delivery	82	dB(A) @ 1m		
Single event duration	3	seconds	Single event duration	900	seconds		
Number of events in 15 minutes	12	events	Number of events in 15 minutes	1	events		
Worst case duration in 15 minutes	0.6	minutes	Worst case duration in 15 minutes	15	minutes		
15 minute Leq	61.0	dB(A) @ 1m	15 minute Leq	82.0	dB(A) @ 1m		
Distance to receiver	72	m	Distance to receiver	95	m		
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-3	dB(A)		
Distance attenuation	-37.1	dB(A)	Distance attenuation	-39.6	dB(A)		
Façade reflection	0	dB(A)	Façade reflection	0	dB(A)		
Impact at rear northern yard	21	dB(A)	Impact at rear northern yard	39	$d\mathbf{B}(\mathbf{A})$		

DAYTIME		
Leq ONSITE SERVICE STATION ACTIV	VITIES I	MPACTING:
R4: Dwellings to the northwest - north	ern (re	ar) yards
Waste collection	102	dB(A) @ 1m
Single event duration	180	seconds
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	3	minutes
15 minute Leq	95.0	dB(A) @ 1m
Distance to receiver	95	m
Reduction in angle of view / house screen	-3	dB(A)
Encode reflection	-39.0	dB(A)
Impact at rear northern yard	52	dB(A)
impact at tear northern yard	52	uD(A)
A/C plant	62	dB(A) @ 3m
Single event duration	420	seconds
Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	14	minutes
15 minute Leq	61.7	dB(A) @ 3m
Distance to receiver	95	m
Acoustical screening	-12	dB(A)
Distance attenuation	-30.0	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern yard	17	dB(A)
Refrigeration plant	64	dB(A) @ 3m
Single event duration	900	seconds
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes
15 minute Leq	64.0	dB(A) @ 3m
Distance to receiver	95	m
Acoustical screening	-12	dB(A)
Distance attenuation	-30.0	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern yard	19	dB(A)
Kitchen exhaust unit	57	dB(A) @ 3m
Single event duration	900	uB(A) @ 5111
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes
15 minute Leg	57.0	dB(A) @ 3m
Distance to receiver	95	m
Acoustic attenuator	-15	dB(A)
Distance attenuation	-30.0	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern yard	9	dB(A)
Air compressor	65	dB(A) @ 2m
Single event duration	180	seconds
Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	6	minutes
15 minute Leq	61.0	dB(A) @ 2m
Distance to receiver	95	m
Inside to outside attenuation	-12	dB(A)
Distance attenuation	-33.5	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern yard	12	dB(A)
Combined external impact at rear yard	39	dB(A)

EVENING						
Leg ONSITE SERVICE STATION ACT	IIVITIES I	MPACTING:	1			
			1			
R1: Dwellings to the northeast				R2: Dwellings to the east		
Nearest car door closures	80	dB(A) @ 1m	#	Nearest car door closures	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	5	events		Number of events in 15 minutes	5	events
Worst case duration in 15 minutes	0.125	minutes		Worst case duration in 15 minutes	0.125	minutes
15 minute Leq	59.2	dB(A) @ 1m		15 minute Leq	59.2	dB(A) @ 1m
Distance to receiver	27	m		Distance to receiver	58	m
Acoustic barrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-28.6	dB(A)	\vdash	Distance attenuation	-35.3	dB(A)
Façade reflection	2.5	dB(A)	#	Façade reflection	2.5	dB(A)
Impact at Façade	22	dB(A)	#	Impact at Façade	10	dB(A)
			⊢		-	
Car door closure at bowser	80	dB(A) @ 1m	#	Car door closure at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds	ľ.	Single event duration	1.5	seconds
Number of events in 15 minutes	30	events		Number of events in 15 minutes	30	events
Worst case duration in 15 minutes	0.75	minutes		Worst case duration in 15 minutes	0.75	minutes
15 minute Lea	67.0	dB(A) @ 1m		15 minute Leg	67.0	dB(A) @ 1m
Distance to receiver	47	m	1	Distance to receiver	58	m
Acoustic barrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.3	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	24	dB(A)	#	Impact at Façade	24	dB(A)
Truck door closures at bowser	80	dB(A) @ 1m	#	Truck door closures at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	0.05	minutes		Worst case duration in 15 minutes	0.05	minutes
15 minute Leq	55.2	dB(A) @ 1m		15 minute Leq	55.2	dB(A) @ 1m
Distance to receiver	47	m		Distance to receiver	58	m
Acoustic barrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.3	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	13	dB(A)	#	Impact at Façade	12	dB(A)
Impact at Façade	13	dB(A)	#	Impact at Façade	12	dB(A)
Impact at Façade	13	dB(A)	#	Impact at Façade	12	dB(A)
Impact at Façade	13 72	dB(A) dB(A) @ 1m	#	Impact at Façade	12 72	dB(A) dB(A) @ 1m
Impact at Façade Car bypass IN Single event duration	13 72 11	dB(A) dB(A) @ 1m seconds	#	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes	12 72 11	dB(A) dB(A) @ 1m seconds
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes	13 72 11 15 275	dB(A) @ 1m seconds events	#	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes	12 72 11 15	dB(A) @ 1m seconds events
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	13 72 11 15 2.75	dB(A) @ 1m seconds events minutes dB(A) @ 1m	#	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minutes	12 72 11 15 2.75 64.6	dB(A) @ 1m seconds events minutes dB(A) @ 1m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	13 72 11 15 2.75 64.6 20	dB(A) @ 1m seconds events minutes dB(A) @ 1m m	#	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	12 72 11 15 2.75 64.6 57	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	13 72 11 15 2.75 64.6 20 -13 31	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A)	#	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Accustic barrier screening	12 72 11 15 2.75 64.6 57 -11 18	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation	13 72 111 15 2.75 64.6 20 -13.31 -26.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A)	#	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation	12 72 11 15 2.75 64.6 57 -11.18 -35 1	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Facade reflection	13 72 111 15 2.75 64.6 20 -13.31 -26.0 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)	#	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Eacade reflection	12 72 11 15 2.75 64.6 57 -11.18 -35.1 2.5	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Facade	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	#	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Facade	12 72 11 15 2.75 64.6 57 -11.18 -35.1 2.5 21	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 2.8	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	# # 	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	12 72 11 15 2.75 64.6 57 -11.18 -35.1 2.5 21	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 2.8	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	# # 	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	12 72 11 15 2.75 64.6 57 -11.18 -35.1 2.5 21	dB(A) dB(A) @ 1m seconds events dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Usors case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 2.8 28 72	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A)	# # # # # # # # # # # # # # # # # # # #	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT	12 72 11 15 2.75 64.6 57 -11.18 -35.1 2.5 21 -11.18 72	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28 72 11	dB(A) @ 1m seconds events minutes dB(A) @ 1m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)	# #	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration	12 72 11 55 2.75 64.6 57 -11.18 -35.1 2.5 2.1 21 72 72 11	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28 72 11 15	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) events	# #	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Usors case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes	12 72 11 15 2.75 64.6 57 -11.18 -35.1 2.5 21 72 11 15	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) events
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Usrat case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28 72 11 15 2.5 28 72 11 15 2.75	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) events minutes	# #	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	12 72 11 15 2.75 64.6 57 -11.18 -35.1 21 72 11 15 2.5 21 72 11 15 2.75	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) events minutes
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes US Worst case duration in 15 minutes 15 minute Leq	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28 72 111 15 2.75 64.6	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) events minutes dB(A) @ 1m	# # 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes US worst case duration in 15 minutes 15 minute Leq	12 72 111 15 2.75 64.6 57 -11.18 -35.1 21 72 11 55 2.75 64.6	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m seconds events minutes dB(A) @ 1m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes I5 minute Leq Distance to receiver	13 72 111 15 2.75 64.6 20 -13.31 -26.0 2.5 2.6 2.72 111 15 2.75 64.6 72 11 15 2.75 64.6 70	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m seconds events minutes dB(A) @ 1m m	# # * * *	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	12 72 111 15 2.75 64.6 57 -11.18 -35.1 21 72 11 15 2.75 64.6 87	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m seconds events minutes dB(A) @ 1m m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	13 72 111 15 2.75 64.6 20 -13.31 -26.0 2.5 2.8 72 11 15 2.75 64.6 72 11 15 2.75 64.6 70 -13.31	dB(A) @ 1m seconds events dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) m seconds events minutes dB(A) @ 1m m dB(A) @ 1m	# # 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance at reneation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes UVorst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 11 15 2.75 64.6 87 -11.18	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m seconds events minutes dB(A) @ 1m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes User Car bypass OUT Single event duration Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes User Car bypass durt Single event duration Number of events in 15 minutes User Car bypass durt Single event further the second sec	13 72 111 155 2.75 64.6 20 -13.31 -26.0 2.5 28 72 111 15 2.75 64.6 70 -13.31 -36.9	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m	# # * * *	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance to receiner	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 2.5 2.1 11 15 2.75 64.6 87 72 111 11 5 2.75 64.6 87 72	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m seconds events minutes dB(A) @ 1m seconds events minutes dB(A) @ 1m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Car bypass OUT Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28 72 11 15 2.75 64.6 70 -13.31 -36.9 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m	# # * * * * *	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance at receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 72 71 72 71 72 64.6 77 71 75 64.6 77 71 71 738 -38.8 2.5	dB(A) dB(A) @ 1m seconds events dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) (dB(A) @ 1m seconds events minutes dB(A) @ 1m m m dB(A) dB(A) @ 1m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Façade reflection Façade reflection Impact at Façade	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 2.8 72 11 15 2.75 64.6 70 -13.31 -36.9 2.5 17	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) events minutes dB(A) @ 1m m m dB(A) @ 1m m seconds events minutes dB(A) @ 1m	# # # # # # # # # # # #	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance at tenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Façade reflection Single event duration Single event duration Single event duration Number of events in 15 minutes User the second seco	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 72 11 15 2.75 64.6 72 11 15 2.75 64.6 87 -11.18 -38.8 2.5 17	dB(A) @ 1m dB(A) @ 1m seconds events dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) (dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance attenuation Façade reflection Façade reflection Façade reflection Impact at Façade	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28 72 11 15 2.60 -13.31 -36.9 2.5 17	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) @ 1m	<pre># # # # # # # # # # # # # # # # # # #</pre>	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Ustance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 72 71 72 71 15 2.75 64.6 87 -11.18 -38.8 2.5 17	dB(A) @ 1m seconds events dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance attenuation Façade reflection Impact at Façade	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28 72 11 15 2.75 64.6 70 -13.31 -36.9 2.5 17	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) @ 1m	<pre># # # # # # # # # # # # # # # # # # #</pre>	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Uorst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 72 111 15 2.75 64.6 87 -11.18 -38.8 2.5 17	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Inpact at Façade Tyre pressure beeper	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28 72 11 15 2.75 64.6 70 -13.31 -36.9 2.5 17 75	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB	<pre># # # # # # # # # # # # # # # # # # #</pre>	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 12 72 11 55 21 72 111 15 2.75 64.6 87 -11.18 -38.8 2.5 17 75	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 28 72 11 15 2.75 64.6 70 -13.31 -36.9 2.5 75 3	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB	<pre># # # # # # # # # # # # # # # # # # #</pre>	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation in 5 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration	12 72 111 15 2.75 64.6 57 -11.18 -35.1 21 72 11 15 2.75 64.6 87 -11.18 -38.8 2.5 64.6 87 -11.18 -38.8 2.5 71 75 3	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m m dB(A) @ 1m m dB(A) @ 1m seconds events minutes dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m seconds events minutes dB(A) @ 1m seconds events minutes dB(A) @ 1m seconds events minutes dB(A) @ 1m seconds events minutes dB(A) @ 1m m m dB(A) @ 1m seconds events minutes dB(A) @ 1m m m dB(A) @ 1m m m dB(A) @ 1m m m dB(A) @ 1m m m dB(A) @ 1m m m dB(A) @ 1m m m dB(A) @ 1m m m dB(A) @ 1m m m dB(A) @ 1m m m dB(A) @ 1m m m m dB(A) @ 1m m m m dB(A) @ 1m m m m m dB(A) @ 1m m m m m m dB(A) @ 1m m m m m m m m m m m m m m
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Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Number of events in 15 minutes	13 72 111 15 2.75 64.6 20 -13.31 -26.0 2.5 2.8 72 11 15 2.75 64.6 70 -13.31 -36.9 2.5 17 75 3 12 0.6 6.6	dB(A) @ 1m seconds events dB(A) @ 1m m dB(A) @ 1m m dB(A) dB	# # <td< td=""><td>Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance at receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes</td><td>12 72 111 15 2.75 64.6 57 -11.18 -35.1 21 11 15 2.15 64.6 87 -11.18 -38.8 2.5 64.6 87 -11.18 -38.8 2.5 17 75 3 12 0.6</td><td>dB(A) @ 1m dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) dB(A</td></td<>	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance at receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes	12 72 111 15 2.75 64.6 57 -11.18 -35.1 21 11 15 2.15 64.6 87 -11.18 -38.8 2.5 64.6 87 -11.18 -38.8 2.5 17 75 3 12 0.6	dB(A) @ 1m dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) dB(A
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes User Car bypass OUT Single event duration Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes User Car bypass OUT Single event duration Single event durati Single event duration Single event duration Single event dura	13 72 111 155 2.75 64.6 20 -13.31 -26.0 2.5 2.8 72 111 15 2.75 64.6 70 111 15 2.75 64.6 700 -13.31 -36.9 2.5 17 75 3 12 0.6 61.0 61.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A)	<pre># # # # # # # # # # # # # # #</pre>	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance at reneation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes UVorst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.5 2.1 11 15 2.75 64.6 87 -11.18 -38.8 2.55 64.6 87 -11.18 -38.8 2.5 3 12 0.6 61.0 61.0	dB(A) @ 1m dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes User Car bypass OUT Single event duration Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes User Car bypass OUT Single event duration Number of events in 15 minutes User Car bypass C	13 72 111 15 2.75 64.6 20 -13.31 -26.0 2.5 2.8 72 111 15 2.75 64.6 70 11 15 2.75 64.6 700 -13.31 -36.9 2.5 17 75 3 12 0.6 61.0 87 11.2	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) d	# # <td< td=""><td>Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes UVorst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes UVORST Case duration Single event durati</td><td>12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 11 15 2.72 111 15 2.75 64.6 772 111 15 2.75 64.6 87 -11.18 -38.8 2.5 17 75 3 12 0.6 61.0 10.6 61.0</td><td>dB(A) @ 1m dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB</td></td<>	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes UVorst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes UVORST Case duration Single event durati	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 11 15 2.72 111 15 2.75 64.6 772 111 15 2.75 64.6 87 -11.18 -38.8 2.5 17 75 3 12 0.6 61.0 10.6 61.0	dB(A) @ 1m dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB
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Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes Usorst case duration in 15 minutes I5 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Usorst case duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Usorst case duration in 15 minutes Usorst case duration Façade reflection Impact at Façade Sumple vent duration Single event for events Single event duration Single event for events Si	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 2.8 72 11 15 2.75 64.6 70 -13.31 -36.9 2.5 17 75 33 12 0.6 61.0 87 -11.57 -38.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) @ 1m m m dB(A) @ 1m m dB(A) dB	# # <td< td=""><td>Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Uorst case duration in 15 minutes Distance attenuation Façade reflection Impact at Façade Single event duration Number of events in 15 minutes Uorst case duration in 15 minutes Distance attenuation Façade reflection Impact at Façade Single event duration Number of events in 15 minutes Distance attenuation Experiments Distance attenuation Single event duration Number of events in 15 minutes Distance attenuation Single event faction Number of events in 15 minutes Distance attenuation Single event faction Number of events in 15 minutes Distance attenuation Single event faction Number of events in 15 minutes Distance attenuation Single event faction S</td><td>12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 11 15 2.72 111 15 2.75 64.6 72 111 15 2.75 64.6 87 -11.18 -38.8 2.5 17 75 3 12 0.6 61.0 105 -12 -0.4</td><td>dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A)</td></td<>	Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Uorst case duration in 15 minutes Distance attenuation Façade reflection Impact at Façade Single event duration Number of events in 15 minutes Uorst case duration in 15 minutes Distance attenuation Façade reflection Impact at Façade Single event duration Number of events in 15 minutes Distance attenuation Experiments Distance attenuation Single event duration Number of events in 15 minutes Distance attenuation Single event faction Number of events in 15 minutes Distance attenuation Single event faction Number of events in 15 minutes Distance attenuation Single event faction Number of events in 15 minutes Distance attenuation Single event faction S	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 11 15 2.72 111 15 2.75 64.6 72 111 15 2.75 64.6 87 -11.18 -38.8 2.5 17 75 3 12 0.6 61.0 105 -12 -0.4	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A)
Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes User at the event of the	13 72 11 15 2.75 64.6 20 -13.31 -26.0 2.5 2.8 72 11 15 2.75 64.6 70 -13.31 -36.9 2.5 17 75 3 12 0.6 61.0 87 -11.57 -38.8 2.5 12 0.6 61.0 87 -11.57 -38.8 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A		Impact at Façade Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance at receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Uorst case duration in 15 minutes Uorst case duration in 15 minutes Uorst case duration in 5 minutes I5 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Uorst case duration Single event duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Uorst case duration in 15 minutes I5 minute Leq Distance to receiver Onsite building screening Distance attenuation Façade reflection Impact at Façade	12 72 111 15 2.75 64.6 57 -11.18 -35.1 2.1 72 111 15 2.72 111 15 2.75 64.6 87 -11.18 -38.8 2.5 17 75 33 12 0.6 61.0 105 -12 -40.4 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A)

EVENING						
Leq ONSITE SERVICE STATION AC	TIVITIES I	MPACTING:				
R1: Dwellings to the northeast	70	ID(A) G 1		R2: Dwellings to the east	70	ID(4) @ 1
Small / medium truck bypass	/8	dB(A) @ 1m	#	Small / medium truck bypass	/8	dB(A) @ 1m
Number of events in 15 minutes	13	events		Number of events in 15 minutes	15	events
Worst case duration in 15 minutes	0.25	minutes	1	Worst case duration in 15 minutes	0.25	minutes
15 minute Leq	60.2	dB(A) @ 1m		15 minute Leq	60.2	dB(A) @ 1m
Distance to receiver	28	m		Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-28.9	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	22	dB(A)	#	Impact at Façade	18	dB(A)
			_			
T	0.5	JD(A) @ 1	#	T and the later and	0.5	JD(A) @ 1
Large truck bypass	83	dB(A) @ Im	#	Large truck bypass	85	dB(A) @ Im
Number of events in 15 minutes	13	avants	_	Number of events in 15 minutes	13	seconds
Worst case duration in 15 minutes	0.25	minutes	_	Worst case duration in 15 minutes	0.25	minutes
15 minute Leq	67.2	dB(A) @ 1m		15 minute Leq	67.2	dB(A) @ 1m
Distance to receiver	28	m		Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-28.9	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	29	dB(A)	#	Impact at Façade	25	dB(A)
Patrons outdoor dining	75	dB(A) @ 1m	#	Patrons outdoor dining	75	dB(A) @ 1m
Single event duration	900	seconds	_	Single event duration	900	seconds
Number of events in 15 minutes	1	events	_	Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes	_	Worst case duration in 15 minutes	15	minutes
15 minute Leq	75.0	dB(A) @ 1m	_	15 minute Leq	75.0	dB(A) @ 1m
Distance to receiver	85	m JD(A)	_	Distance to receiver	85	m JD(A)
Distance attenuation	-12	dB(A)	_	Distance attenuation	-12	dB(A)
Eacade reflection	-38.0	dB(A)		Eacade reflection	-38.0	dB(A)
r uşude remeetion	2.0	ub(11)	_	r uçude remeetron	2.0	ub()
Impact at Facade	27	dB(A)	#	Impact at Facade	27	dB(A)
Impact at Façade	27	dB(A)	#	Impact at Façade	27	dB(A)
Impact at Façade	27	dB(A)	#	Impact at Façade	27	dB(A)
Impact at Façade Truck airbrakes	97	dB(A) dB(A) @ 1m	#	Impact at Façade Truck airbrakes	97	dB(A) dB(A) @ 1m
Impact at Façade Truck airbrakes Single event duration	27 97 1	dB(A) dB(A) @ 1m seconds	#	Impact at Façade Truck airbrakes Single event duration	<u> </u>	dB(A) dB(A) @ 1m seconds
Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes	27 97 1 2	dB(A) dB(A) @ 1m seconds events	#	Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes	97 1 2	dB(A) @ 1m seconds events
Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	97 97 1 2 0.033	dB(A) @ 1m seconds events minutes	#	Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	97 97 1 2 0.033	dB(A) @ 1m seconds events minutes
Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Difference for the second sec	97 97 1 2 0.033 70.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m	#	Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Difference intervention	97 97 1 2 0.033 70.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m
Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver A countin burging concenting	27 97 1 2 0.033 70.5 47	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A)	#	Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Accurate A	97 97 1 2 0.033 70.5 57	dB(A) @ 1m seconds events minutes dB(A) @ 1m m
Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance to receiven	97 97 1 2 0.033 70.5 47 -12.27 33.4	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A)	#	Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance to number of	97 97 1 2 0.033 70.5 57 -9.93 25 1	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A)
Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Escade reflection	27 97 1 2 0.033 70.5 47 -12.27 -33.4 2 5	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)	#	Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Escade raflection	97 97 1 2 0.033 70.5 57 -9.93 -35.1 2 5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)
Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Facade	27 97 1 2 0.033 70.5 47 -12.27 -33.4 2.5 27	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	#	Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Facade	27 97 1 2 0.033 70.5 57 -9.93 -35.1 2.5 28	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)
Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	27 97 1 2 0.033 70.5 47 -12.27 -33.4 2.5 27	dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	#	Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	27 97 1 2 0.033 70.5 57 -9.93 -35.1 2.5 28	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A)
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Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Electric forklift inside	27 97 1 2 0.033 70.5 47 -12.27 -33.4 2.5 27 27 72	dB(A) @ 1m dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m	# #	Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Electric forklift inside	27 97 1 2 0.033 70.5 57 -9.93 -35.1 2.5 2.8 2 8 	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)
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Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Worst case duration Distance to receiver Inside to outside attenuation Distance attenuation Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Ustance to receiver Onsite building screening Distance to receiver Onsite building screening Distance attenuation	27 97 1 2 0.033 70.5 47 -12.27 -33.4 2.5 27 600 1 00 70.2 22 -100 -26.8 2.5 36 900 1 15 82.0 388 -12 -31.6 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A)		Impact at Façade Truck airbrakes Single event duration Number of events in 15 minutes Worst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Electric forklift inside Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Userst case duration in 15 minutes Worst case duration Façade reflection Impact at Façade Goods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Coods delivery Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Coods delivery Single event duration Single event duration Number of events in 15 minutes Single event duration Single corectiver Acoustic barrier screening Distance attenuation Façade reflection Façade reflection	27 97 1 2 0.033 70.5 57 -9.93 -35.1 2.5 28 72 600 1 00 70.2 30 -12 29.5 2.5 31 82 9000 1 15 82.0 45 -9.93 -33.1 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m dB(A)

EVENING						
Leg ONSITE SERVICE STATION AC	TIVITIES 1	MPACTING:	-			
R1: Dwellings to the northeast	_		-	R2: Dwellings to the east		
A/C plant	62	dB(A) @ 3m	#	A/C plant	62	dB(A) @ 3m
Single event duration	420	seconds		Single event duration	420	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	14	minutes		Worst case duration in 15 minutes	14	minutes
15 minute Leg	61.7	dB(A) @ 3m		15 minute Leg	61.7	dB(A) @ 3m
Distance to receiver	70	m		Distance to receiver	60	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-27.4	dB(A)		Distance attenuation	-26.0	dB(A)
Facade reflection	2.5	dB(A)		Facade reflection	2.5	dB(A)
Impact at Facade	25	dB(A)	#	Impact at Facade	26	dB(A)
ž						
Refrigeration plant	64	dB(A) @ 3m	#	Refrigeration plant	64	dB(A) @ 3m
Single event duration	900	seconds		Single event duration	900	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Leq	64.0	dB(A) @ 3m		15 minute Leq	64.0	dB(A) @ 3m
Distance to receiver	70	m		Distance to receiver	60	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-27.4	dB(A)		Distance attenuation	-26.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	27	dB(A)	#	Impact at Façade	28	dB(A)
Kitchen exhaust unit	57	dB(A) @ 3m	#	Kitchen exhaust unit	57	dB(A) @ 3m
Single event duration	900	seconds		Single event duration	900	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Leq	57.0	dB(A) @ 3m		15 minute Leq	57.0	dB(A) @ 3m
Distance to receiver	80	m		Distance to receiver	80	m
Acoustic attenuator	-15	dB(A)		Acoustic attenuator	-15	dB(A)
Distance attenuation	-28.5	dB(A)		Distance attenuation	-28.5	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	16	dB(A)	#	Impact at Façade	16	dB(A)
Air compressor	65	dB(A) @ 2m	#	Air compressor	65	dB(A) @ 2m
Single event duration	180	seconds		Single event duration	180	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	6	minutes		Worst case duration in 15 minutes	6	minutes
15 minute Leq	61.0	dB(A) @ 2m		15 minute Leq	61.0	dB(A) @ 2m
Distance to receiver	355	m		Distance to receiver	60	m
Inside to outside attenuation	-12	dB(A)		Inside to outside attenuation	-12	dB(A)
Distance attenuation	-45.0	dB(A)		Distance attenuation	-29.5	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	7	dB(A)	5	Impact at Façade	22	dB(A)
Combined external impact	39	dB(A)		Combined external impact	37	dB(A)

EVENING						
Leg ONSITE SERVICE STATION ACT	IIVITIES I	MPACTING:				
R3: Motel to the south				R4: Dwellings to the northwest		
Nearest car door closures	80	dB(A) @ 1m	#	Nearest car door closures	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	5	events		Number of events in 15 minutes	5	events
Worst case duration in 15 minutes	0.125	minutes	_	Worst case duration in 15 minutes	0.125	minutes
15 minute Leq	59.2	dB(A) @ 1m		15 minute Leq	59.2	dB(A) @ 1m
Distance to receiver	35	m JD(A)	_	Distance to receiver	52	m ID(A)
Distance attenuation	-12.17	dB(A)	-	Distance attenuation	24.2	dB(A)
Eacade reflection	-30.9	dB(A)		Eacade reflection	-34.3	dB(A)
Impact at Eacade	19	dB(A)	#	Impact at Facade	2.3	dB(A)
Impact inside with windows closed	1	dB(A)	- ["]	Impact inside with windows open	20	dB(A)
Impact molec with windows closed			1	Implet mode with windows open	20	
Car door closure at bowser	80	dB(A) @ 1m	#	Car door closure at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	30	events		Number of events in 15 minutes	30	events
Worst case duration in 15 minutes	0.75	minutes		Worst case duration in 15 minutes	0.75	minutes
15 minute Leq	67.0	dB(A) @ 1m		15 minute Leq	67.0	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.17	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	29	dB(A)	#	Impact at Façade	37	dB(A)
Impact inside with windows closed	12	dB(A)		Impact inside with windows open	30	dB(A)
Truck door closures at bowser	80	dB(A) @ 1m	#	Truck door closures at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds	_	Single event duration	1.5	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	0.05	minutes	_	Worst case duration in 15 minutes	0.05	minutes
15 minute Leq	55.2	dB(A) @ 1m	_	15 minute Leq	55.2	dB(A) @ 1m
Acoustic barrier screening	12.17		-	A coustic barriar screening	40	
Distance attenuation	-12.17	dB(A)		Distance attenuation	-32.0	dB(A)
Eacade reflection	-20.0	dB(A)		Facade reflection	2.5	dB(A)
Impact at Facade	18	dB(A)	#	Impact at Facade	2.5	dB(A)
Impact inside with windows closed	0	dB(A)	-	Impact inside with windows open	18	dB(A)
Car bypass IN	72	dB(A) @ 1m	#	Car bypass IN	72	dB(A) @ 1m
Single event duration	11	seconds		Single event duration	11	seconds
Number of events in 15 minutes	15	events		Number of events in 15 minutes	15	events
Worst case duration in 15 minutes	2.75	minutes		Worst case duration in 15 minutes	2.75	minutes
15 minute Leq	64.6	dB(A) @ 1m		15 minute Leq	64.6	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	27	dB(A)	#	Impact at Façade	35	dB(A)
Impact inside with windows closed	9	dB(A)	_	Impact inside with windows open	28	dB(A)
Car bypass OUT	72	dB(A) @ 1m	#	Car bypass OUT	72	dB(A) @ 1m
Single event duration	11	seconds	+	Single event duration	11	seconds
Number of events in 15 minutes	2.75	events	_	Number of events in 15 minutes	15	events
15 minute Lea	2.15	dB(A) @ 1	+	15 minute Leg	2.15	dB(A) @ 1
Distance to receiver	04.0	db(A) @ IIII	-	Distance to receiver	50	db(A) @ III
Onsite building sereening	12.65		_	A coustic barriar screening	30	
Distance attenuation	-12.03	dB(A)		Distance attenuation	-34.0	dB(A)
Eacade reflection	20.0	dB(A)	_	Facade reflection	2.5	dB(A)
Impact at Facade	2.5	dB(A)	#	Impact at Facade	33	dB(A)
Impact inside with windows closed	9	dB(A)	-	Impact inside with windows open	26	dB(A)
			1	, mido io open		
Tyre pressure beeper	75	dB(A) @ 1m	#	Tyre pressure beeper	75	dB(A) @ 1m
Single event duration	3	seconds	1	Single event duration	3	seconds
Number of events in 15 minutes	12	events		Number of events in 15 minutes	12	events
Worst case duration in 15 minutes	0.6	minutes		Worst case duration in 15 minutes	0.6	minutes
15 minute Leq	61.0	dB(A) @ 1m		15 minute Leq	61.0	dB(A) @ 1m
Distance to receiver	49	m	1	Distance to receiver	52	m
Onsite building screening	-12	dB(A)		Onsite building screening	0	dB(A)
Distance attenuation	-33.8	dB(A)		Distance attenuation	-34.3	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	18	dB(A)	#	Impact at Façade	29	dB(A)
Impact inside with windows closed	0	dB(A)		Impact inside with windows open	22	dB(A)

EVENING Leg ONSTIE SERVICE STATION ACTI	VITIES I	MPACTING				
In the second se		m AC III.				
R3: Motel to the south				R4: Dwellings to the northwest		
Small / medium truck bypass	78	dB(A) @ 1m	#	Small / medium truck bypass	78	dB(A) @ 1m
Single event duration	15	seconds		Single event duration	15	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.25	minutes		Worst case duration in 15 minutes	0.25	minutes
15 minute Leq	60.2	dB(A) @ 1m		15 minute Leq	60.2	dB(A) @ 1m
Distance to receiver	12 65	m dB(A)		Distance to receiver	40	m dB(A)
Distance attenuation	-12.03	dB(A)	-	Distance attenuation	-32.0	dB(A)
Facade reflection	2.5	dB(A)		Facade reflection	-32.0	dB(A)
Impact at Facade	2.3	dB(A)	#	Impact at Facade	31	dB(A)
Impact inside with windows closed	5	dB(A)		Impact inside with windows open	23	dB(A)
*						
Large truck bypass	85	dB(A) @ 1m	#	Large truck bypass	85	dB(A) @ 1m
Single event duration	15	seconds		Single event duration	15	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.25	minutes		Worst case duration in 15 minutes	0.25	minutes
15 minute Leq	67.2	dB(A) @ 1m		15 minute Leq	67.2	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	29	dB(A)	Ħ	Impact at Façade	38	dB(A)
Impact inside with windows closed	12	dB(A)		Impact inside with windows open	30	dB(A)
Patrons outdoor dining	75	$d\mathbf{P}(\mathbf{A}) \otimes 1\mathbf{m}$	#	Patrons outdoor dining	75	dP(A) @ 1m
Single event duration	900	uB(A) @ Thi	π	Single event duration	900	uB(A) @ Thi
Number of events in 15 minutes	900	events		Number of events in 15 minutes	900	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Leg	75.0	dB(A) @ 1m		15 minute Leg	75.0	dB(A) @ 1m
Distance to receiver	19	m		Distance to receiver	80	m
Ground absorption correction	-10	dB(A)		Onsite building screening	0	dB(A)
Distance attenuation	-25.6	dB(A)		Distance attenuation	-38.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	42	dB(A)	#	Impact at Façade	39	dB(A)
Impact inside with windows closed	24	dB(A)		Impact inside with windows open	32	dB(A)
Truck airbrakes	97	dB(A) @ 1m	#	Truck airbrakes	97	dB(A) @ 1m
Single event duration	1	seconds		Single event duration	1	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	0.033	minutes	_	Worst case duration in 15 minutes	0.033	minutes
15 minute Leq	70.5	dB(A) @ 1m		15 minute Leq	70.5	dB(A) @ 1m
Distance to receiver	25	m ID(A)		Distance to receiver	40	m JD(A)
Distance attenuation	-11.00	dB(A)	_	Distance attenuation	22.0	dB(A)
Encode reflection	-28.0	dB(A)	-	Eacode reflection	-32.0	dB(A)
Impact at Facade	33	dB(A)	#	Impact at Facade	41	dB(A)
Impact inside with windows closed	16	dB(A)	T	Impact as raçade	33	dB(A)
impuer mode with windo to crosed	10			Impact mode with windo to open		
Electric forklift inside	72	dB(A) @ 1m	#	Electric forklift inside	72	dB(A) @ 1m
Single event duration	600	seconds	1	Single event duration	600	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	10	minutes		Worst case duration in 15 minutes	10	minutes
15 minute Leq	70.2	dB(A) @ 1m		15 minute Leq	70.2	dB(A) @ 1m
Distance to receiver	20	m		Distance to receiver	57	m
Inside to outside attenuation	-12	dB(A)		Inside to outside attenuation	-5	dB(A)
Distance attenuation	-26.0	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	35	dB(A)	#	Impact at Façade	33	dB(A)
Impact inside with windows closed	17	dB(A)		Impact inside with windows open	25	dB(A)
Coo de dell'essente		JD(A) @ 1	#	Coot de la lineare	75	JD(A) @ 1
Single quant duration	82	dB(A) @ Im	#	Single quant duration	/3	dB(A) @ Im
Number of events in 15 minutes	900	avants		Number of events in 15 minutes	900	avants
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Lea	82.0	dB(A) @ 1m		15 minute Lea	75.0	dB(A) @ 1m
Distance to receiver	12.0	m		Distance to receiver	75	m
Acoustic barrier screening	-10	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-21.6	dB(A)	Ĺ	Distance attenuation	-37.5	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	53	dB(A)	#	Impact at Façade	40	dB(A)
Impact inside with windows closed	35	dB(A)		Impact inside with windows open	32	dB(A)

EVENING						
Leg ONSITE SERVICE STATION AC	TIVITIES I	MPACTING:	+			
			-			
R3: Motel to the south				R4: Dwellings to the northwest		
A/C plant	62	dB(A) @ 3m	#	A/C plant	62	dB(A) @ 3m
Single event duration	420	seconds		Single event duration	420	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	14	minutes		Worst case duration in 15 minutes	14	minutes
15 minute Leq	61.7	dB(A) @ 3m		15 minute Leq	61.7	dB(A) @ 3m
Distance to receiver	14	m		Distance to receiver	75	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-13.4	dB(A)		Distance attenuation	-28.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	39	dB(A)	#	Impact at Façade	24	dB(A)
Impact inside with windows closed	21	dB(A)		Impact inside with windows open	17	dB(A)
Refrigeration plant	64	dB(A) @ 3m	#	Refrigeration plant	64	dB(A) @ 3m
Single event duration	900	seconds		Single event duration	900	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Leq	64.0	dB(A) @ 3m		15 minute Leq	64.0	dB(A) @ 3m
Distance to receiver	14	m		Distance to receiver	75	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-13.4	dB(A)		Distance attenuation	-28.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Facade	41	dB(A)	#	Impact at Facade	27	dB(A)
Impact inside with windows closed	24	dB(A)		Impact inside with windows open	19	dB(A)
Kitchen exhaust unit	57	dB(A) @ 3m	#	Kitchen exhaust unit	57	dB(A) @ 3m
Single event duration	900	seconds		Single event duration	900	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Leq	57.0	dB(A) @ 3m		15 minute Leq	57.0	dB(A) @ 3m
Distance to receiver	14	m		Distance to receiver	75	m
Acoustic attenuator	-15	dB(A)		Acoustic attenuator	-15	dB(A)
Distance attenuation	-13.4	dB(A)		Distance attenuation	-28.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	31	dB(A)	#	Impact at Façade	17	dB(A)
Impact inside with windows closed	14	dB(A)		Impact inside with windows open	9	dB(A)
Air compressor	65	dB(A) @ 2m	#	Air compressor	65	dB(A) @ 2m
Single event duration	180	seconds		Single event duration	180	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	6	minutes		Worst case duration in 15 minutes	6	minutes
15 minute Leq	61.0	dB(A) @ 2m		15 minute Leq	61.0	dB(A) @ 2m
Distance to receiver	14	m		Distance to receiver	75	m
Inside to outside attenuation	-12	dB(A)		Inside to outside attenuation	-12	dB(A)
Distance attenuation	-16.9	dB(A)		Distance attenuation	-31.5	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	35	dB(A)	#	Impact at Façade	20	dB(A)
Impact inside with windows closed	17	dB(A)		Impact inside with windows open	13	dB(A)
Combined external impact	47	dB(A)		Combined external impact	46	dB(A)
Impact inside with windows closed	29	dB(A)		Impact inside with windows open	39	dB(A)



		1			
EVENING Leg ONSTIE SERVICE STATION ACT	VITIES	IMPACTINC	EVENING Leg ONSITE SERVICE STATION ACT	VITIES	МРАСТИ
Leq UNSTIE SERVICES IA HON AC II	VIIIES	IMPACIING:	Leq ONSITE SERVICES IA HON ACT		
R4: Dwellings to the northwest - north	iern (re	ar) yards	R4: Dwellings to the northwest - north	hern (re	ar) yards
Nearest car door closures	80	dB(A) @ 1m	Small / medium truck bypass	78	dB(A) @
Single event duration	1.5	seconds	Single event duration	15	seconds
Number of events in 15 minutes	5	events	Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.125	dB(A) @ 1m	Worst case duration in 15 minutes	60.25	dP(A) @
Distance to receiver	39.2	ub(A) @ IIII	Distance to receiver	60	ub(A) @
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view/house screen	-3	dB(A)
Distance attenuation	-37.1	dB(A)	Distance attenuation	-35.6	dB(A)
Façade reflection	0	dB(A)	Façade reflection	0	dB(A)
Impact at rear northern yard	19	dB(A)	Impact at rear northern yard	22	dB(A)
Car door closure at bowser	80	dB(A) @ 1m	Large truck hypass	85	dB(A) @
Single event duration	1.5	seconds	Single event duration	15	seconds
Number of events in 15 minutes	30	events	Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.75	minutes	Worst case duration in 15 minutes	0.25	minutes
5 minute Leq	67.0	dB(A) @ 1m	15 minute Leq	67.2	dB(A) @
Distance to receiver	60	m	Distance to receiver	60	m
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-35.6	dB(A)	Distance attenuation	-35.6	dB(A)
Façade reflection	0	dB(A)	Façade reflection	0	dB(A)
mpact at rear northern yard	28	dB(A)	Impact at rear northern yard	29	dB(A)
Fruck door closures at bowser	80	dB(A) @ 1m	Patrons outdoor dining	75	dB(A) @
Single event duration	1.5	seconds	Single event duration	900	seconds
Number of events in 15 minutes	2	events	Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.05	minutes	Worst case duration in 15 minutes	15	minutes
15 minute Leq	55.2	dB(A) @ 1m	15 minute Leq	75.0	dB(A) @
Distance to receiver	60	m	Distance to receiver	100	m
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-35.6	dB(A)	Distance attenuation	-40.0	dB(A)
Façade reflection	0	dB(A)	Façade reflection	0	dB(A)
Impact at rear northern yard	17	dB(A)	Impact at rear northern yard	32	dB(A)
Car bypass IN	72	dB(A) @ 1m	Truck airbrakes	97	dB(A) @
Single event duration	11	seconds	Single event duration	1	seconds
Number of events in 15 minutes	15	events	Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	2.75	minutes	Worst case duration in 15 minutes	0.033	minutes
5 minute Leq	64.6	dB(A) @ 1m	15 minute Leq	70.5	dB(A) @
Distance to receiver	60	m	Distance to receiver	60	m
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-35.6	dB(A)	Distance attenuation	-35.6	dB(A)
Façade reflection	0	dB(A)	Façade reflection	0	dB(A)
impact at rear northern yard	26	dB(A)	Impact at rear northern yard	32	dB(A)
Car bypass OUT	72	dB(A) @ 1m	Electric forklift inside	72	dB(A) @
single event duration	11	seconds	Single event duration	600	seconds
Number of events in 15 minutes	15	events	Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	2.75	minutes	Worst case duration in 15 minutes	10	minutes
15 minute Leq	64.6	dB(A) @ 1m	15 minute Leq	70.2	dB(A) @
Distance to receiver	70	m	Distance to receiver	77	m
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-5	dB(A)
Distance attenuation	-36.9	dB(A)	Distance attenuation	-37.7	dB(A)
Façade reflection	0	dB(A)	Façade reflection	0	dB(A)
mpact at rear northern yard	25	dB(A)	Impact at rear northern yard	28	dB(A)
yre pressure beeper	75	dB(A) @ 1m	Goods delivery	82	dB(A) @
Single event duration	3	seconds	Single event duration	900	seconds
Number of events in 15 minutes	12	events	Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.6	minutes	Worst case duration in 15 minutes	15	minutes
15 minute Leq	61.0	dB(A) @ 1m	15 minute Leq	82.0	dB(A) @
Distance to receiver	72	m	Distance to receiver	95	m
Reduction in angle of view / house screen	-3	dB(A)	Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-37.1	dB(A)	Distance attenuation	-39.6	dB(A)
Façade reflection	0	dB(A)	Façade reflection	0	dB(A)
Impact at rear northern yard	21	dB(A)	Impact at rear northern yard	39	dB(A)

EVENING		
Leq ONSITE SERVICE STATION ACT	VITIES I	MPACTING:
R4: Dwellings to the northwest - north	ern (rea	ar) yards
A/C plant	62	dB(A) @ 3m
Single event duration	420	seconds
Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	14	minutes
15 minute Leq	61.7	dB(A) @ 3m
Distance to receiver	95	m
Acoustical screening	-12	dB(A)
Distance attenuation	-30.0	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern yard	17	dB(A)
Refrigeration plant	64	dB(A) @ 3m
Single event duration	900	seconds
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes
15 minute Leg	64.0	dB(A) @ 3m
Distance to receiver	95	m
Acoustical screening	-12	dB(A)
Distance attenuation	-30.0	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern yard	19	dB(A)
impact at real northern yard	17	
Kitchen exhaust unit	57	dB(A) @ 3m
Single event duration	900	seconds
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes
15 minute Lea	57.0	dB(A) @ 3m
Distance to receiver	95	m
Acoustic attenuator	-15	dB(A)
Distance attenuation	-30.0	dB(A)
Beduction in angle of view / house screen	-30.0	dB(A)
Impact at rear northern yard	- 5	dB(A)
impact at real northern yard		ub(n)
Air compressor	65	dB(A) @ 2m
Single event duration	180	seconds
Number of events in 15 minutes	200	events
Worst case duration in 15 minutes	6	minutes
15 minute Lea	61.0	dB(A) @ 2m
Distance to receiver	95	m
Inside to outside attenuation	-12	 dB(A)
Distance attenuation	-12	$dB(\Lambda)$
Distance attenuation	-55.5	dD(A)
Impact at roor porthern yord	-3	dP(A)
impaci ai iear northern yard	12	uD(A)
Combined automal in a state state and	20	dD(A)
Comomed external impact at rear yard	58	UD(A)

NIGHT						
Leg ONSITE SERVICE STATION AC	TIVITIES I	MPACTING:	1			
R1: Dwellings to the northeast				R2: Dwellings to the east		
Nearest car door closures	80	dB(A) @ 1m	#	Nearest car door closures	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	2.5	events	-	Number of events in 15 minutes	2.5	events minutos
15 minute Lea	56.2	dB(A) @ 1m		15 minute Lea	56.2	dB(A) @ 1m
Distance to receiver	27	m		Distance to receiver	58	m
Acoustic barrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-28.6	dB(A)		Distance attenuation	-35.3	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	18	dB(A)	#	Impact at Façade	13	dB(A)
Car door closure at bowser	80	dB(A) @ 1m	#	Car door closure at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	20	events		Number of events in 15 minutes	20	events
Worst case duration in 15 minutes	0.5	minutes	-	Worst case duration in 15 minutes	0.5	minutes
15 minute Leq	65.2	dB(A) @ 1m	-	15 minute Leq	65.2	dB(A) @ 1m
Acoustic barrier screening	11.57	m dP(A)		Acoustic barrier coreconing	10.58	
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.3	dB(A)
Facade reflection	2.5	dB(A)		Facade reflection	2.5	dB(A)
Impact at Facade	23	dB(A)	#	Impact at Facade	22	dB(A)
impuet at raçade	25		["]	impuor ur i uçude		
			1			
Truck door closures at bowser	80	dB(A) @ 1m	#	Truck door closures at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	0.05	minutes		Worst case duration in 15 minutes	0.05	minutes
15 minute Leq	55.2	dB(A) @ 1m		15 minute Leq	55.2	dB(A) @ 1m
Distance to receiver	47	m		Distance to receiver	58	m
Acoustic barrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.3	dB(A)
Façade reflection	2.5	dB(A)	ш	Façade reflection	2.5	dB(A)
Impact at Facade	13	dB(A)	Ŧ	Impact at Façade	12	dB(A)
1 3						
					_	
Car bypase IN	72	dB(A) @ 1m	#	Car hypass IN	72	dB(A) @ 1m
Car bypass IN	72	dB(A) @ 1m seconds	#	Car bypass IN Single event duration	72	dB(A) @ 1m seconds
Car bypass IN Single event duration Number of events in 15 minutes	72 11 10	dB(A) @ 1m seconds events	#	Car bypass IN Single event duration Number of events in 15 minutes	72 11 10	dB(A) @ 1m seconds events
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 11 10 1.833	dB(A) @ 1m seconds events minutes	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 11 10 1.833	dB(A) @ 1m seconds events minutes
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq	72 111 10 1.833 62.9	dB(A) @ 1m seconds events minutes dB(A) @ 1m	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq	72 11 10 1.833 62.9	dB(A) @ 1m seconds events minutes dB(A) @ 1m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	72 11 10 1.833 62.9 20	dB(A) @ 1m seconds events minutes dB(A) @ 1m m	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	72 11 10 1.833 62.9 57	dB(A) @ 1m seconds events minutes dB(A) @ 1m m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	72 111 10 1.833 62.9 20 -13.31	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A)	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	72 11 10 1.833 62.9 57 -11.18	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A)
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation	72 11 10 1.833 62.9 20 -13.31 -26.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A)	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation	72 111 10 1.833 62.9 57 -11.18 -35.1	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A)
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection	72 111 100 1.833 62.9 200 -13.31 -26.0 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection	72 11 10 1.833 62.9 57 -11.18 -35.1 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A)
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 57 -11.18 -35.1 2.5 19	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 57 -11.18 -35.1 2.5 19	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 200 -13.31 -26.0 2.5 26	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A)	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 57 -11.18 -35.1 2.5 19	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A)
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 200 -13.31 -26.0 2.5 26 72 72 72 72 72 72 72	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) e 1m	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 57 -11.18 -35.1 2.5 19 19 	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of avorts in 15 minutes	72 11 10 1.833 62.9 200 -13.31 -26.0 2.5 26 72 11 100 1.833 62.9 200 -13.31 -26.0 2.5 26 72 11 10	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) exconds	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration	72 11 10 1.833 62.9 57 -11.18 -35.1 2.5 19 19 72 72	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26 72 11 10 1282	dB(A) @ 1m seconds events dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m seconds events minutee	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m seconds events minutes
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 11 100 1.833 62.9 20 -13.31 -26.0 2.5 26 72 11 10 1.833 62.9	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m	# # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 111 10 1.833 62.9 57 -11.18 -35.1 2.5 19 	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26 72 11 10 1.833 62.9 70 700	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m	#	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 - 	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 2.6 2.5 2.6 72 11 10 1.833 62.9 70 -13.31	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m m	# # # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening	72 111 10 1.833 62.9 57 -11.18 -35.1 2.5 19 72 11 10 1.833 62.9 877 -11.18	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation	72 111 100 1.833 62.9 20 -13.31 -26.0 2.5 26 72 72 111 100 1.833 62.9 70 -13.31 -36.9	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m	# # # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 11 11 100 1.833 62.9 87 -11.18 -38.8	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection	72 11 10 1.833 62.9 20 -13.31 -26.0 26 72 11 10 1.833 62.9 70 -13.31 -36.9 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m m	# # # # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 111 100 1.833 62.9 87 -11.18 -38.8 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes I5 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26 72 11 100 1.833 62.9 70 -13.31 -36.9 2.5 15	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)	# # # # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 111 100 1.833 62.9 87 -11.18 -38.8 -38.8 2.5 15	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m seconds events minutes dB(A) @ 1m seconds events minutes dB(A) @ 1m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26 72 11 100 1.833 62.9 70 -13.31 -36.9 2.5 15	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) minutes dB(A) @ 1m m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A)	# # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 111 100 1.833 62.9 87 -11.18 -38.8 -38.8 2.5 15	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) @ 1m seconds events minutes dB(A) @ 1m
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Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Façade reflection Façade reflection Façade reflection Façade reflection Impact at Façade Tyre pressure beeper	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26 72 11 10 1.833 62.9 70 -13.31 -36.9 70 -13.31 -36.9 15 15 75	dB(A) @ 1m seconds events minutes dB(A) @ 1m dB(A)		Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper	72 111 10 1.833 62.9 57 -11.18 -35.1 2.5 19 72 11 100 1.833 62.9 87 -11.18 -38.8 2.5 15 75	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) g 1m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration	72 11 100 1.833 62.9 200 -13.31 -26.0 2.5 26 72 11 100 1.833 62.9 2.5 26 72 11 10 1.833 62.9 70 -13.31 -36.9 2.5 15 75 3	dB(A) @ 1m seconds events dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)	# # # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 11 10 1.833 62.9 72 11 10 1.833 62.9 87 -11.18 -38.8 2.5 15 75 3	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m
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Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 11 100 1.833 62.9 20 -13.31 -26.0 2.5 2.6 72 111 10 1.833 62.9 70 1.833 62.9 70 700 -13.31 -36.9 2.5 15 75 3 6 0.3	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)	<pre>## ## ## ## ## ## ## ## ## ## ## ## ##</pre>	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 11 10 1.833 62.9 72 11 10 1.833 62.9 -11.18 -38.8 2.5 15 75 3 6 0.3	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A)
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26 72 11 10 1.833 62.9 72 11 10 1.833 62.9 70 70 1.331 -36.9 2.5 15 75 3 6 0.3 58.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB	# # # # # # # # # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration 15 minutes	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 111 10 1.833 62.9 71.1.18 -38.8 2.5 15 75 3 6 0.3 58.0	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) dB(A) m
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Worst case duration in 15 minutes Worst case duration in 15 minutes	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26 72 11 10 1.833 62.9 72 11 10 1.833 62.9 70 70 70 70 70 75 36 0.3 58.0 87	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB	# # # # # # # # # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration Number of events in 15 minutes Worst case duration Number of events in 15 minutes 15 minute Leq Distance to receiver Single event duration Number of events in 15 minutes Worst case duration in 15 minutes	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 111 0.1833 62.9 877 -11.18 -38.8 2.5 15 75 3 6 0.3 58.0 105	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Worst case duration in 15 minutes Single event duration	72 11 10 1.833 62.9 20 -13.31 -26.0 2.5 26 72 11 100 1.833 62.9 70 -13.31 -36.9 70 -13.31 -36.9 75 3 6 0.3 58.0 87 -11.57	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A) @ 1m m dB(A)	# # # # # # # # # # # # # #	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Vorst case duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Vorst case duration in 15 minutes	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 11 0.01 1.833 62.9 72 11 10 1.833 62.9 87 -11.18 -38.8 2.55 15 75 3 6 0.3 58.0 105 -12	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes I5 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Single event duration Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes 15 minute Leq Distance attenuation Number of events in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance to receiver Acoustic barrier screening Distance attenuation	72 11 10 1.833 62.9 20 -13.31 -26.0 72 11 10 1.833 62.9 72 11 10 1.833 62.9 70 -13.31 -36.9 75 3 6 0.3 58.0 87 -11.57 -38.8 27	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A) @ 1m m dB(A)		Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration in 15 minutes 15 minutes	72 111 100 1.833 62.9 57 -11.18 -35.1 2.5 19 72 11 10 1.833 62.9 877 -11.18 -38.8 2.55 15 75 3 6 0.3 58.0 105 -12 -40.4	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A)
Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Façade reflection Distance attenuation Façade reflection Distance attenuation Façade reflection	72 11 10 1.833 62.9 20 -13.31 -26.0 20 11 10 2.5 26 72 11 10 1.833 62.9 70 -13.31 -36.9 2.5 15 3 66 0.3 58.0 87 -11.57 -38.8 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB	# # <t< td=""><td>Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Distance attenuation Façade reflection Impact at Façade Distance attenuation Number of events in 15 minutes Worst case duration in 15 minutes</td><td>72 111 10 1.833 62.9 57 -11.18 -35.1 2.5 11 10 1.833 62.9 72 111 100 1.833 62.9 87 -11.18 -38.8 2.5 15 75 3 6 0.3 58.0 105 -12 -40.4 2.5</td><td>dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A) @ 1m m dB(A)</td></t<>	Car bypass IN Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance to receiver Acoustic barrier screening Distance attenuation Façade reflection Impact at Façade Car bypass OUT Single event duration Number of events in 15 minutes Worst case duration in 15 minutes 15 minute Leq Distance attenuation Façade reflection Impact at Façade Tyre pressure beeper Single event duration Number of events in 15 minutes Tyre pressure beeper Single event duration Number of events in 15 minutes Worst case duration in 15 minutes Distance attenuation Façade reflection Impact at Façade Distance attenuation Number of events in 15 minutes Worst case duration in 15 minutes	72 111 10 1.833 62.9 57 -11.18 -35.1 2.5 11 10 1.833 62.9 72 111 100 1.833 62.9 87 -11.18 -38.8 2.5 15 75 3 6 0.3 58.0 105 -12 -40.4 2.5	dB(A) @ 1m seconds events minutes dB(A) @ 1m m dB(A) dB(A) dB(A) dB(A) dB(A) @ 1m m dB(A) @ 1m m dB(A)

NIGHT						
Leq ONSITE SERVICE STATION AC	TIVITIES	MPACTING:				
R1: Dwellings to the northeast				R2: Dwellings to the east		
Large truck bypass	85	dB(A) @ 1m	#	Large truck bypass	85	dB(A) @ 1m
Single event duration	15	seconds		Single event duration	15	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.25	minutes		Worst case duration in 15 minutes	0.25	minutes
15 minute Leq	67.2	dB(A) @ 1m		15 minute Leq	67.2	dB(A) @ 1m
Distance to receiver	28	m		Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-28.9	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	29	dB(A)	#	Impact at Façade	25	dB(A)
Truck airbrakes	97	dB(A) @ 1m	#	Truck airbrakes	97	dB(A) @ 1m
Single event duration	1	seconds		Single event duration	1	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.017	minutes		Worst case duration in 15 minutes	0.017	minutes
15 minute Leq	67.5	dB(A) @ 1m		15 minute Leq	67.5	dB(A) @ 1m
Distance to receiver	47	m		Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	24	dB(A)	#	Impact at Façade	25	dB(A)
Electric forklift inside	72	dB(A) @ 1m	#	Electric forklift inside	72	dB(A) @ 1m
Single event duration	600	seconds		Single event duration	600	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	10	minutes		Worst case duration in 15 minutes	10	minutes
15 minute Leq	70.2	dB(A) @ 1m		15 minute Leq	70.2	dB(A) @ 1m
Distance to receiver	22	m		Distance to receiver	30	m
Inside to outside attenuation	-10	dB(A)		Inside to outside attenuation	-12	dB(A)
Distance attenuation	-26.8	dB(A)		Distance attenuation	-29.5	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	36	dB(A)	#	Impact at Façade	31	dB(A)

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Leq UNSTIE SERVICE STATION AC.	IIVIIIES I	MPAC IING:	+			
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RI: Dwellings to the northeast	(2)	TR (1) G B		R2: Dwellings to the east	(2)	B (1) G A
A/C plant	62	dB(A) @ 3m	#	A/C plant	62	dB(A) @ 3m
Single event duration	240	seconds	-	Single event duration	240	seconds
Number of events in 15 minutes	2	events	-	Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	8	minutes	-	Worst case duration in 15 minutes	8	minutes
15 minute Leq	59.3	dB(A) @ 3m	-	15 minute Leq	59.3	dB(A) @ 3m
Distance to receiver	70	m		Distance to receiver	60	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-27.4	dB(A)		Distance attenuation	-26.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	22	dB(A)	#	Impact at Façade	24	dB(A)
					_	
Refrigeration plant	64	dB(A) @ 3m	#	Refrigeration plant	64	dB(A) @ 3m
Single event duration	900	seconds	_	Single event duration	900	seconds
Number of events in 15 minutes	1	events	_	Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes	_	Worst case duration in 15 minutes	15	minutes
15 minute Leq	64.0	dB(A) @ 3m	_	15 minute Leq	64.0	dB(A) @ 3m
Distance to receiver	70	m		Distance to receiver	60	m
Acoustical screening	-12	dB(A)	_	Acoustical screening	-12	dB(A)
Distance attenuation	-27.4	dB(A)		Distance attenuation	-26.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	27	dB(A)	#	Impact at Façade	28	dB(A)
	_		_			
Kitchen exhaust unit	57	dB(A) @ 3m	#	Kitchen exhaust unit	57	dB(A) @ 3m
Single event duration	900	seconds		Single event duration	900	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes		Worst case duration in 15 minutes	15	minutes
15 minute Leq	57.0	dB(A) @ 3m		15 minute Leq	57.0	dB(A) @ 3m
Distance to receiver	80	m		Distance to receiver	80	m
Acoustic attenuator	-15	dB(A)		Acoustic attenuator	-15	dB(A)
Distance attenuation	-28.5	dB(A)		Distance attenuation	-28.5	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	16	dB(A)	#	Impact at Façade	16	dB(A)
Air compressor	65	dB(A) @ 2m	#	Air compressor	65	dB(A) @ 2m
Single event duration	180	seconds	_	Single event duration	180	seconds
Number of events in 15 minutes	2	events	_	Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	6	minutes	_	Worst case duration in 15 minutes	6	minutes
15 minute Leq	61.0	dB(A) @ 2m	_	15 minute Leq	61.0	dB(A) @ 2m
Distance to receiver	355	m		Distance to receiver	60	m
Inside to outside attenuation	-12	dB(A)		Inside to outside attenuation	-12	dB(A)
Distance attenuation	-45.0	dB(A)		Distance attenuation	-29.5	dB(A)
Façade reflection	2.5	dB(A)	_	Façade reflection	2.5	dB(A)
Impact at Façade	7	dB(A)	5	Impact at Façade	22	dB(A)
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Combined external impact	38	dB(A)		Combined external impact	35	dB(A)

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Leq UNSITE SERVICES IA HON ACT	IVIIIES	MPACIING:	-			
R3: Motel to the south			-	R4: Dwellings to the northwest		
Nearest car door closures	80	dB(A) @ 1m	#	Nearest car door closures	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	2.5	events		Number of events in 15 minutes	2.5	events
Worst case duration in 15 minutes	0.063	minutes		Worst case duration in 15 minutes	0.063	minutes
15 minute Leq	56.2	dB(A) @ 1m		15 minute Leq	56.2	dB(A) @ 1m
Distance to receiver	35	m		Distance to receiver	52	m
Acoustic barrier screening	-12.17	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-30.9	dB(A)		Distance attenuation	-34.3	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	16	dB(A)	#	Impact at Façade	24	dB(A)
Impact inside with windows closed	-2	dB(A)	_	Impact inside with windows open	17	dB(A)
		ID(4) 0 1				ID(4) @ 1
Car door closure at bowser	80	dB(A) @ 1m	#	Car door closure at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds	_	Single event duration	1.5	seconds
Number of events in 15 minutes	20	events		Number of events in 15 minutes	20	events
15 minute Lee	65.2	dB(A) @ 1m	-	15 minute Lea	65.2	dB(A) @ 1m
Distance to receiver	25	ub(A) @ IIII m	-	Distance to receiver	40	db(A) @ IIII
Acoustic barrier screening	-12.17	dB(A)	_	A coustic barrier screening	40	dB(A)
Distance attenuation	-12.17	dB(A)		Distance attenuation	-32.0	dB(A)
Eacade reflection	-20.0	dB(A)		Eacade reflection	- 52.0	dB(A)
Impact at Facade	2.5	dB(A)	#	Impact at Facade	36	dB(A)
Impact inside with windows closed	10	dB(A)	"	Impact inside with windows open	28	dB(A)
Truck door closures at bowser	80	dB(A) @ 1m	#	Truck door closures at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds		Single event duration	1.5	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	0.05	minutes		Worst case duration in 15 minutes	0.05	minutes
15 minute Leq	55.2	dB(A) @ 1m		15 minute Leq	55.2	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.17	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	18	dB(A)	#	Impact at Façade	26	dB(A)
Impact inside with windows closed	0	dB(A)		Impact inside with windows open	18	dB(A)
Car bypass IN	72	dB(A) @ 1m	#	Car bypass IN	72	dB(A) @ 1m
Single event duration	11	seconds		Single event duration	11	seconds
Number of events in 15 minutes	10	events		Number of events in 15 minutes	10	events
Worst case duration in 15 minutes	1.833	minutes		Worst case duration in 15 minutes	1.833	minutes
15 minute Leq	62.9	dB(A) @ 1m		15 minute Leq	62.9	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)	_	Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)	#	Façade reflection	2.5	dB(A)
Impact at Façade	23	dB(A)	#	Impact at Façade	33	dB(A)
Impact mside with windows closed	/	ub(A)	_	Impact inside with windows open	20	dB(A)
Car bypass OUT	72	dB(A) @ 1m	#	Car bypass OUT	72	dB(A) @ 1m
Single event duration	11	seconds	1	Single event duration	11	seconds
Number of events in 15 minutes	10	events		Number of events in 15 minutes	10	events
Worst case duration in 15 minutes	1.833	minutes		Worst case duration in 15 minutes	1.833	minutes
15 minute Leq	62.9	dB(A) @ 1m		15 minute Leq	62.9	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	50	m
Acoustic barrier screening	-12.65	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-34.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	25	dB(A)	#	Impact at Façade	31	dB(A)
Impact inside with windows closed	7	dB(A)		Impact inside with windows open	24	dB(A)
Tyre pressure beeper	75	dB(A) @ 1m	#	Tyre pressure beeper	75	dB(A) @ 1m
Single event duration	3	seconds	1	Single event duration	3	seconds
Number of events in 15 minutes	6	events		Number of events in 15 minutes	6	events
Worst case duration in 15 minutes	0.3	minutes	1	Worst case duration in 15 minutes	0.3	minutes
15 minute Leq	58.0	dB(A) @ 1m	1	15 minute Leq	58.0	dB(A) @ 1m
Distance to receiver	49	m		Distance to receiver	52	m
Acoustic barrier screening	-12	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-33.8	dB(A)		Distance attenuation	-34.3	dB(A)
Façade reflection	2.5	dB(A)	,,	Façade reflection	2.5	dB(A)
Impact at Façade	15	dB(A)	#	Impact at Façade	26	dB(A)
impact inside with windows closed	-3	uB(A)		impact inside with windows open	19	uB(A)

NIGHT						
Leg ONSITE SERVICE STATION ACT	VITIES I	MPACTING:				
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R3: Motel to the south				R4: Dwellings to the northwest		
Large truck bypass	85	dB(A) @ 1m	#	Large truck bypass	85	dB(A) @ 1m
Single event duration	15	seconds		Single event duration	15	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.25	minutes		Worst case duration in 15 minutes	0.25	minutes
15 minute Leq	67.2	dB(A) @ 1m		15 minute Leq	67.2	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-32.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	29	dB(A)	#	Impact at Façade	38	dB(A)
Impact inside with windows closed	12	dB(A)		Impact inside with windows open	30	dB(A)
Truck airbrakes	97	dB(A) @ 1m	#	Truck airbrakes	97	dB(A) @ 1m
Single event duration	1	seconds		Single event duration	1	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.017	minutes		Worst case duration in 15 minutes	0.017	minutes
15 minute Leq	67.5	dB(A) @ 1m		15 minute Leq	67.5	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	80	m
Acoustic barrier screening	-11.66	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-38.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	30	dB(A)	#	Impact at Façade	32	dB(A)
Impact inside with windows closed	13	dB(A)		Impact inside with windows open	24	dB(A)
Electric forklift inside	72	dB(A) @ 1m	#	Electric forklift inside	72	dB(A) @ 1m
Single event duration	600	seconds		Single event duration	600	seconds
Number of events in 15 minutes	1	events		Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	10	minutes		Worst case duration in 15 minutes	10	minutes
15 minute Leq	70.2	dB(A) @ 1m		15 minute Leq	70.2	dB(A) @ 1m
Distance to receiver	20	m		Distance to receiver	57	m
Inside to outside attenuation	-12	dB(A)		Inside to outside attenuation	-5	dB(A)
Distance attenuation	-26.0	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	35	dB(A)	#	Impact at Façade	33	dB(A)
Impact inside with windows closed	17	dB(A)		Impact inside with windows open	25	dB(A)

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Leg ONSITE SERVICE STATION AC	TIVITIES I	MPACTING:				
R3: Motel to the south				R4: Dwellings to the northwest		
A/C plant	62	dB(A) @ 3m	#	A/C plant	62	dB(A) @ 3m
Single event duration	240	seconds		Single event duration	240	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	8	minutes		Worst case duration in 15 minutes	8	minutes
15 minute Leq	59.3	dB(A) @ 3m		15 minute Leq	59.3	dB(A) @ 3m
Distance to receiver	14	m		Distance to receiver	75	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-13.4	dB(A)		Distance attenuation	-28.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	36	dB(A)	#	Impact at Façade	22	dB(A)
Impact inside with windows closed	19	dB(A)		Impact inside with windows open	14	dB(A)
			_			
Refrigeration plant	64	dB(A) @ 3m	#	Refrigeration plant	64	dB(A) @ 3m
Single event duration	900	seconds		Single event duration	900	seconds
Number of events in 15 minutes	1	events	_	Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes	_	Worst case duration in 15 minutes	15	minutes
15 minute Leq	64.0	dB(A) @ 3m		15 minute Leq	64.0	dB(A) @ 3m
Distance to receiver	14	m		Distance to receiver	75	m
Acoustical screening	-12	dB(A)		Acoustical screening	-12	dB(A)
Distance attenuation	-13.4	dB(A)		Distance attenuation	-28.0	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	41	dB(A)	#	Impact at Façade	27	dB(A)
Impact inside with windows closed	24	dB(A)		Impact inside with windows open	19	dB(A)
IZ is all any series and source is	57	JD(A) @ 2	#	17 is all and and and is	57	JD(A) @ 2
Kitchen exhaust unit	57	dB(A) @ 3m	#	Kitchen exhaust unit	57	dB(A) @ 3m
Single event duration	900	seconds	-	Single event duration	900	seconds
Number of events in 15 minutes	15	events	-	Number of events in 15 minutes	15	events
worst case duration in 15 minutes	57.0	dB(A) @ 2m	_	worst case duration in 15 minutes	57.0	dB(A) @ 2m
Distance to receiver	37.0		-	Distance to receiver	37.0	
A source to receiver	14				15	
Distance attenuation	-13.4	dB(A)		Distance attenuation	-13	dB(A)
Eagada raflaction	-13.4	dB(A)		Encode reflection	-28.0	dB(A)
Impact at Eacada	2.5	dB(A)	#	Impact at Eacoda	17	dB(A)
Impact at Paçade	14	dB(A)	"	Impact at Paçade	17	dB(A)
Impact mside with windows closed	14	ub(A)	_	Impact inside with windows open	, ,	ub(A)
Air compressor	65	dB(A) @ 2m	#	Air compressor	65	dB(A) @ 2m
Single event duration	180	seconds		Single event duration	180	seconds
Number of events in 15 minutes	2	events		Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	6	minutes		Worst case duration in 15 minutes	6	minutes
15 minute Leq	61.0	dB(A) @ 2m		15 minute Leq	61.0	dB(A) @ 2m
Distance to receiver	14	m		Distance to receiver	75	m
Inside to outside attenuation	-12	dB(A)		Inside to outside attenuation	-12	dB(A)
Distance attenuation	-16.9	dB(A)		Distance attenuation	-31.5	dB(A)
Façade reflection	2.5	dB(A)		Façade reflection	2.5	dB(A)
Impact at Façade	35	dB(A)	#	Impact at Façade	20	dB(A)
Impact inside with windows closed	17	dB(A)		Impact inside with windows open	13	dB(A)
		/				/
Combined external impact	44	dB(A)	Ť	Combined external impact	43	dB(A)
Impact inside with windows closed	27	dB(A)		Impact inside with windows open	35	dB(A)
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NIGHT Leq ONSITE SERVICE STATION ACTI	VITIES I	MPACTING:
R4: Dwellings to the northwest - north	ern (re	ar) yards
Nearest car door closures	80	dB(A) @ 1m
Single event duration	1.5	seconds
Number of events in 15 minutes	2.5	events
Worst case duration in 15 minutes	0.063	minutes
Distance to receiver	50.2 72	dB(A) @ Im
Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-37.1	dB(A)
Facade reflection	0	dB(A)
Impact at rear northern yard	16	dB(A)
· ·		
Car door closure at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds
Number of events in 15 minutes	20	events
Worst case duration in 15 minutes	0.5	minutes
15 minute Leq	65.2	dB(A) @ 1m
Distance to receiver	60	m
Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-35.6	dB(A)
Façade reflection	0	dB(A)
Impact at rear northern yard	27	dB(A)
Truck door closures at bowser	80	dB(A) @ 1m
Single event duration	1.5	seconds
Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	0.05	minutes
15 minute Leq	55.2	dB(A) @ 1m
Distance to receiver	60	m m(A)
Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-35.6	dB(A)
Façade reflection	17	dB(A)
Impact at lear northern yard	17	uD(A)
Con hyperson IN	72	dD(A) @ 1m
Car bypass IN	11	dB(A) @ Im
Number of events in 15 minutes	10	events
Worst case duration in 15 minutes	1.833	minutes
15 minute Leq	62.9	dB(A) @ 1m
Distance to receiver	60	m
Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-35.6	dB(A)
Façade reflection	0	dB(A)
Impact at rear northern yard	24	dB(A)
Car bypass OUT	72	dB(A) @ 1m
Single event duration	11	seconds
Number of events in 15 minutes	10	events
worst case duration in 15 minutes	1.833	minutes
Distance to reactiver	02.9	ub(A) @ 1m
Reduction in angle of view / house server	70	dB(A)
Distance attenuation	-36.0	dB(A)
Facade reflection	-50.9	dB(A)
Impact at rear northern yard	23	dB(A)
Tyre pressure beeper	75	dB(A) @ 1m
Single event duration	3	seconds
Number of events in 15 minutes	6	events
Worst case duration in 15 minutes	0.3	minutes
15 minute Leq	58.0	dB(A) @ 1m
Distance to receiver	72	m
Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation		
Distance attenuation	-37.1	dB(A)
Façade reflection	-37.1 0	dB(A) dB(A)

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Leq ONSITE SERVICE STATION ACTIV	VITIES 1	MPACTING:
R4: Dwellings to the northwest - north	ern (rea	ar) yards
Large truck bypass	85	dB(A) @ 1m
Single event duration	15	seconds
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.25	minutes
15 minute Leq	67.2	dB(A) @ 1m
Distance to receiver	60	m
Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-35.6	dB(A)
Façade reflection	0	dB(A)
Impact at rear northern yard	29	dB(A)
Truck airbrakes	97	dB(A) @ 1m
Single event duration	1	seconds
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	0.017	minutes
15 minute Leq	67.5	dB(A) @ 1m
Distance to receiver	100	m
Reduction in angle of view / house screen	-3	dB(A)
Distance attenuation	-40.0	dB(A)
Façade reflection	0	dB(A)
Impact at rear northern yard	24	dB(A)
Electric forklift inside	72	dB(A) @ 1m
Single event duration	600	seconds
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	10	minutes
15 minute Leq	70.2	dB(A) @ 1m
Distance to receiver	77	m
Inside to outside attenuation	-5	dB(A)
Distance attenuation	-37.7	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
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Leg ONSITE SERVICE STATION ACT	VITIES 1	MPACTING
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R4: Dwellings to the northwest - north	ern (re	ar) yards
A/C plant	62	dB(A) @ 3m
Single event duration	240	seconds
Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	8	minutes
15 minute Leq	59.3	dB(A) @ 3m
Distance to receiver	95	m
Acoustical screening	-12	dB(A)
Distance attenuation	-30.0	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern yard	14	dB(A)
Refrigeration plant	64	dB(A) @ 3m
Single event duration	900	seconds
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes
15 minute Leq	64.0	dB(A) @ 3m
Distance to receiver	95	m
Acoustical screening	-12	dB(A)
Distance attenuation	-30.0	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern yard	19	dB(A)
Kitchen exhaust unit	57	dB(A) @ 3m
Single event duration	900	seconds
Number of events in 15 minutes	1	events
Worst case duration in 15 minutes	15	minutes
15 minute Leq	57.0	dB(A) @ 3m
Distance to receiver	95	m
Acoustic attenuator	-15	dB(A)
Distance attenuation	-30.0	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern yard	9	dB(A)
Air compressor	65	dB(A) @ 2m
Single event duration	180	seconds
Number of events in 15 minutes	2	events
Worst case duration in 15 minutes	6	minutes
15 minute Leq	61.0	dB(A) @ 2m
Distance to receiver	95	m
Inside to outside attenuation	-12	dB(A)
Distance attenuation	-33.5	dB(A)
Reduction in angle of view / house screen	-3	dB(A)
Impact at rear northern vard	12	dB(A)
1 ····		
Combined external impact at rear yard	34	dB(A)
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NIGHT			Г			
Lmax ONSITE SERVICE STATION AC	TIVITIES	MPACTING:	F			
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R1: Dwellings to the northeast				R2: Dwellings to the east		
Nearest car door closures	76	dB(A) @ 1m	#	Nearest car door closures	76	dB(A) @ 1m
Distance to receiver	27	m		Distance to receiver	58	m
Acoustic barrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-28.6	dB(A)		Distance attenuation	-35.3	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact outside	36	dB(A)	#	Impact at Façade	30	dB(A)
			1			
Car door closure at bowser	76	dB(A) @ 1m	#	Car door closure at bowser	76	dB(A) @ 1m
Distance to receiver	47	m		Distance to receiver	58	m
Acoustic barrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.3	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact outside	31	dB(A)	#	Impact at Façade	30	dB(A)
			-			
Truck door closures at bouser	76	$d\mathbf{B}(\mathbf{A}) \otimes \mathbf{Im}$	#	Truck door closures at bouser	76	$dB(A) \otimes 1m$
Distance to receiver	47	m	"	Distance to receiver	58	m
Acoustic harrier screening	-11.57	dB(A)		Acoustic barrier screening	-10.58	dB(A)
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.3	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact outside	31	dB(A)	#	Impact at Façade	30	dB(A)
			-			
Car bynass IN	70	dB(A) @ 1m	#	Car bypass IN	70	dB(A) @ 1m
Distance to receiver	20	m	1 [#]	Distance to receiver	57	m
Acoustic barrier screening	-13.31	dB(A)	1	Acoustic barrier screening	-11.18	dB(A)
Distance attenuation	-26.0	dB(A)		Distance attenuation	-35.1	dB(A)
Facade reflection	0	dB(A)		Facade reflection	0	dB(A)
Impact outside	33	dB(A)	#	Impact at Façade	26	dB(A)
•						
Car bypass OUT	72	dB(A) @ 1m	#	Car bypass OUT	72	dB(A) @ 1m
Distance to receiver	/0	m m(A)	-	Distance to receiver	8/	m m(A)
Distance attenuation	-13.31	dB(A)	-	Distance attenuation	-11.18	dB(A)
Encode reflection	-30.9	dB(A)	-	Encode reflection	-36.6	dB(A)
Impact outside	22	dB(A)	#	Impact at Facade	22	dB(A)
Inpact outside	22	dD(II)	"	Impact at I açade	22	ub(N)
Tyre pressure beeper	78	dB(A) @ 1m	#	Tyre pressure beeper	78	dB(A) @ 1m
Distance to receiver	87	m		Distance to receiver	105	m
Acoustic barrier screening	-11.57	dB(A)		Onsite building screening	-12	dB(A)
Distance attenuation	-38.8	dB(A)		Distance attenuation	-40.4	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact outside	28	dB(A)	#	Impact at Façade	26	dB(A)
			1			
Small / medium truck bypass	88	dB(A) @ 1m	#	Small / medium truck bypass	88	dB(A) @ 1m
Distance to receiver	28	m		Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-28.9	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact outside	47	dB(A)	#	Impact at Façade	43	dB(A)
			-			
Large truck bypass	90	dB(A) @ 1m	#	Large truck bypass	90	dB(A) @ 1m
Distance to receiver	28	m		Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-28.9	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact outside	49	dB(A)	#	Impact at Façade	45	dB(A)
			-			
Truck airbrakes	92	dB(A) @ 1m	#	Truck airbrakes	92	dB(A) @ 1m
Distance to receiver	47	m	1	Distance to receiver	57	m
Acoustic barrier screening	-12.27	dB(A)		Acoustic barrier screening	-9.93	dB(A)
Distance attenuation	-33.4	dB(A)		Distance attenuation	-35.1	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact outside	46	dB(A)	#	Impact at Façade	47	dB(A)
			-			
Electric forklift inside	75	$d\mathbf{B}(\mathbf{A}) \otimes \mathbf{Im}$	#	Electric forklift inside	75	dB(A) @ 1m
Distance to receiver	22	m	1"	Distance to receiver	30	m
Inside to outside attenuation	-10	dB(A)		Inside to outside attenuation	-12	dB(A)
Distance attenuation	-26.8	dB(A)	1	Distance attenuation	-29.5	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact outside	38	dB(A)	#	Impact at Façade	33	dB(A)
Constantino en		10(A) C 1		Cook dellaran		JD(A) C 1
Goods delivery	87	dB(A) @ 1m	#	Goods delivery	87	dB(A) @ 1m
Onsite building screening	58	dB(A)	-	Acoustic barrier screening	45	dB(A)
Distance attenuation	-12	dB(A)	1	Distance attenuation	-9.95	dB(A)
Facade reflection	-51.0 A	dB(A)	F	Facade reflection	0	dB(A)
Impact outside	43	dB(A)	#	Impact at Facade	44	dB(A)
		/	1 ""	· · · · · · · · · · · · · · · · · · ·	+	

NIGHT						
Lmax ONSITE SERVICE STATION AC	TIVITIES	5 IMPACTING:	-			
R3: Motel to the south				R4: Dwellings to the north		
Nearest car door closures	76	dB(A) @ 1m	#	Nearest car door closures	76	dB(A) @ 1m
Distance to receiver	35	m		Distance to receiver	52	m
Acoustic barrier screening	-12.17	dB(A)		Acoustic barrier screening Distance attenuation	-34.3	dB(A)
Façade reflection	-50.9	dB(A)		Façade reflection	-54.5	dB(A)
Impact at Façade	33	dB(A)	#	Impact at Façade	42	dB(A)
Impact inside with windows closed	15	dB(A)				
~						
Car door closure at bowser	76	dB(A) @ 1m	#	Car door closure at bowser	/6	dB(A) @ 1m
Acoustic barrier screening	-12.17	dB(A)		Acoustic barrier screening	40	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-32.0	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact at Façade	36	dB(A)	#	Impact at Façade	44	dB(A)
Impact inside with windows closed	18	dB(A)	_			
Truck door closures at bowser	76	dB(A) @ 1m	#	Truck door closures at bowser	76	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.17	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-32.0	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact at Façade	36	dB(A)	#	Impact at Façade	44	dB(A)
Impact hiside with windows closed	10	ub(A)				
Car bypass IN	72	dB(A) @ 1m	#	Car bypass IN	72	dB(A) @ 1m
Distance to receiver	25	m	1	Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)	ŀ	Distance attenuation	-32.0	dB(A)
Impact at Facade	31	dB(A)	#	Impact at Facade	40	dB(A)
Impact inside with windows closed	14	dB(A)		ant at a dime		
Car bypass OUT	72	dB(A) @ 1m	#	Car bypass OUT	72	dB(A) @ 1m
Distance to receiver	25	m ID(A)	-	Distance to receiver	10	m m(A)
Acoustic barrier screening	-12.65	dB(A) dB(A)		Acoustic barrier screening	-20.0	dB(A)
Facade reflection	-20.0	dB(A)		Facade reflection	-20.0	dB(A)
Impact at Façade	31	dB(A)	#	Impact at Façade	52	dB(A)
Impact inside with windows closed	14	dB(A)				
	70	m(1) 0 1			70	m (1) 0 1
1 yre pressure beeper Distance to receiver	/8	dB(A) @ 1m	#	1 yre pressure beeper Distance to receiver	/8 52	dB(A) @ Im
Onsite building screening	-12	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-33.8	dB(A)		Distance attenuation	-34.3	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact at Façade	32	dB(A)	#	Impact at Façade	44	dB(A)
Impact inside with windows closed	15	dB(A)				
Small / medium truck bypass	88	dB(A) @ 1m	#	Small / medium truck bypass	88	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A)		Distance attenuation	-32.0	dB(A)
Façade reflection	0	dB(A)	#	Façade reflection	0	dB(A)
Impact at Façade	30	dB(A)	#	Impact at raçade	50	ub(A)
Impact mode with windows closed	50	ub(11)				
Large truck bypass	90	dB(A) @ 1m	#	Large truck bypass	90	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-12.65	dB(A)		Acoustic barrier screening	0	dB(A)
Distance attenuation	-28.0	dB(A) dB(A)		Distance attenuation Eacade reflection	-32.0	dB(A)
Impact at Facade	49	dB(A)	#	Impact at Facade	58	dB(A)
Impact inside with windows closed	32	dB(A)	ĺ			
Truck airbrakes	92	dB(A) @ 1m	#	Truck airbrakes	92	dB(A) @ 1m
Distance to receiver	25	m		Distance to receiver	40	m
Acoustic barrier screening	-11.66	dB(A) dB(A)		Acoustic barrier screening	-32.0	dB(A)
Facade reflection	-20.0	dB(A)		Facade reflection	-52.0	dB(A)
Impact at Façade	52	dB(A)	#	Impact at Façade	60	dB(A)
Impact inside with windows closed	35	dB(A)				
		m(1) 0 1				m(1) 0 1
Electric forklift inside	/5	dB(A) @ 1m	#	Electric forklift inside	/5 57	dB(A) @ 1m
Inside to outside attenuation	-12	dB(A)		Inside to outside attenuation	-5	dB(A)
Distance attenuation	-26.0	dB(A)	Ĺ	Distance attenuation	-35.1	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact at Façade	37	dB(A)	#	Impact at Façade	35	dB(A)
Impact inside with windows closed	19	dB(A)				
Goods delivery	27	dB(A) @ 1	#	Goods delivery	07	dB(A) @ 1
Distance to receiver	12	m	#	Distance to receiver	75	m
Acoustic barrier screening	-10	dB(A)	Ĺ	Acoustic barrier screening	0	dB(A)
Distance attenuation	-21.6	dB(A)		Distance attenuation	-37.5	dB(A)
Façade reflection	0	dB(A)		Façade reflection	0	dB(A)
Impact at Façade	20	dB(A)	#	Impact at Façade	49	dB(A)

JUST CHESTER STREET TRAFFIC POINT CALCULATIONS Pen3D2000 V 1.10.0 Project Code:20177a Project Description:Noise assessment of Servo File:\\Crgnas\2020\20177 Service Station Inverell\20177a_existing chester.PEN

Wednesday 08 Feb, 2023 at 10:06:48 CoRTN Calculations

All road segments included. Segmentation angle: 1 degrees. Road elevations apply.

Receptor	X Posn	Y Posn	Height	L10(18hour)
-	(m)	(m)	(m)	(dB(A))
R4 N12	318184.7	6704210.7	1.8	56.3
R4 N14	318200.2	6704223.1	1.8	56.9
R4 N16	318220	6704238.4	1.8	56.8
R1	318265.5	6704225.9	1.8	58.0
R2	318307.3	6704179.7	1.8	46.4
R3	318247.3	6704139.4	1.8	49.4

File:\\Crgnas\2020\20177 Service Station Inverell\20177a_ existing with deve chester.PEN

Wednesday 08 Feb, 2023 at 10:08:54 CoRTN Calculations

All road segments included. Segmentation angle: 1 degrees. Road elevations apply.

Receptor	X Posn	Y Posn	Height	L10(18hour)
	(m)	(m)	(m)	(dB(A))
R4 N12	318184.7	6704210.7	1.8	58.9
R4 N14	318200.2	6704223.1	1.8	59.5
R4 N16	318220	6704238.4	1.8	59.1
R1	318265.5	6704225.9	1.8	58.9
R2	318307.3	6704179.7	1.8	47.7
R3	318247.3	6704139.4	1.8	51.8

File:\\Crgnas\2020\20177 Service Station Inverell\20177a_YEAR 2032 chester.PEN

Wednesday 08 Feb, 2023 at 10:10:40 CoRTN Calculations

All road segments included. Segmentation angle: 1 degrees. Road elevations apply.

Receptor	X Posn (m)	Y Posn (m)	Height (m)	L10(18hour) (dB(A))
R4 N12	318184.7	6704210.7	1.8	57.1
R4 N14	318200.2	6704223.1	1.8	57.8
R4 N16	318220	6704238.4	1.8	57.9
R1	318265.5	6704225.9	1.8	59.1
R2	318307.3	6704179.7	1.8	47.3
R3	318247.3	6704139.4	1.8	50.2

File:\\Crgnas\2020\20177 Service Station Inverell\20177a_YEAR 2032 with deve chester.PEN

Wednesday 08 Feb, 2023 at 10:12:11 CoRTN Calculations

All road segments included. Segmentation angle: 1degrees. Road elevations apply.

Receptor	X Posn	Y Posn	Height	L10(18hour)
-	(m)	(m)	(m)	(dB(A))
R4 N12	318184.7	6704210.7	1.8	59.5
R4 N14	318200.2	6704223.1	1.8	60.1
R4 N16	318220	6704238.4	1.8	59.7
R1	318265.5	6704225.9	1.8	59.8
R2	318307.3	6704179.7	1.8	48.4
R3	318247.3	6704139.4	1.8	52.4

CHESTER STREET AND GLEN INNES ROAD TRAFFIC POINT CALCULATIONS Pen3D2000 V 1.10.0 Project Code:20177a Project Description:Noise assessment of Servo File:\\Crgnas\2020\20177 Service Station Inverell\20177a_existing.PEN

Wednesday 08 Feb, 2023 at 10:15:27 CoRTN Calculations

All road segments included. Segmentation angle: 1 degrees. Road elevations apply.

Receptor	X Posn	Y Posn	Height	L10(18hour)
	(m)	(m)	(m)	(dB(A))
R4 N12	318184.7	6704210.7	1.8	59.7
R4 N14	318200.2	6704223.1	1.8	59.3
R4 N16	318220	6704238.4	1.8	58.7
R1	318265.5	6704225.9	1.8	59.4
R2	318307.3	6704179.7	1.8	57.0
R3	318247.3	6704139.4	1.8	66.2

File:\\Crgnas\2020\20177 Service Station Inverell\20177a_existing with deve.PEN

Wednesday 08 Feb, 2023 at 10:16:37 CoRTN Calculations

All road segments included. Segmentation angle: 1degrees. Road elevations apply.

Receptor	X Posn	Y Posn	Height	L10(18hour)
	(m)	(m)	(m)	(dB(A))
R4 N12	318184.7	6704210.7	1.8	61.4
R4 N14	318200.2	6704223.1	1.8	61.3
R4 N16	318220	6704238.4	1.8	60.5
R1	318265.5	6704225.9	1.8	60.3
R2	318307.3	6704179.7	1.8	57.9
R3	318247.3	6704139.4	1.8	67.2

File:\\Crgnas\2020\20177 Service Station Inverell\20177a_YEAR 2032.PEN

Wednesday 08 Feb, 2023 at 10:18:42 CoRTN Calculations

All road segments included. Segmentation angle: 1degrees. Road elevations apply.

Receptor	X Posn (m)	Y Posn (m)	Height (m)	L10(18hour) (dB(A))
R4 N12	318184.7	6704210.7	1.8	60.6
R4 N14	318200.2	6704223.1	1.8	60.3
R4 N16	318220	6704238.4	1.8	59.8
R1	318265.5	6704225.9	1.8	60.5
R2	318307.3	6704179.7	1.8	58.0
R3	318247.3	6704139.4	1.8	67.2

File:\\Crgnas\2020\20177 Service Station Inverell\20177a_YEAR 2032 with deve.PEN

Wednesday 08 Feb, 2023 at 10:19:53 CoRTN Calculations

All road segments included. Segmentation angle: 1degrees. Road elevations apply.

Receptor	X Posn	Y Posn	Height	L10(18hour)
-	(m)	(m)	(m)	(dB(A))
R4 N12	318184.7	6704210.7	1.8	62.1
R4 N14	318200.2	6704223.1	1.8	62.0
R4 N16	318220	6704238.4	1.8	61.2
R1	318265.5	6704225.9	1.8	61.2
R2	318307.3	6704179.7	1.8	58.7
R3	318247.3	6704139.4	1.8	68.0