

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 1 of 79

NOISE IMPACT ASSESSMENT REPORT

Distillery and Glucose Extension (MONVISO4)

SEDAMYL UK FACILITIES – SELBY

Date	Description	Prepared by	Notes
November 18 th , 2019	Second issue	Franco Bertellino, MIA 	Comments and answers to the planning comments received from the Environmental Health Office. Other minor variations.
September 11 th , 2019	First issue	Franco Bertellino, MIA 	

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 2 of 79

1. FOREWORD	3
2. SITE DESCRIPTION AND BACKGROUND.....	3
2.1. Site Evolution.....	4
2.2. “MONVISO4” Extension description	5
3. ENVIRONMENTAL NOISE SURVEYS.....	6
3.1. Past Environmental Surveys	6
3.2. Environmental Noise Survey.....	7
4. LEGISLATION	8
4.1. BS4142:2014	8
5. NOISE IMPACT ASSESSMENT.....	9
5.1. Assessment Methodology	9
5.2. New Noise Sources.....	9
5.3. Specific Sound Levels.....	13
5.4. Noise Impact Assessment of the proposed extension.....	16
5.5. Discussion	17
6. NOISE ABATEMENT MEASURES.....	17
7. CONCLUSIONS.....	17
ANNEX 1 – NOISE SENSITIVE RECEIVERS.....	18
ANNEX 2 – GENERAL PLAN VIEW AND PROPOSED EXTENSION.....	22
ANNEX 3 – EXISTING NOISE SOURCES MEASUREMENTS.....	30
ANNEX 4 – HEAVY TRAFFIC MOVEMENTS.....	32
ANNEX 5 – INPUT DATA USED FOR THE NOISE MAPPING MODEL.....	33
ANNEX 6 – BS4142:2014 Assessment.....	35
ANNEX 7 – IOA MEMBERSHIP FRANCO BERTELLINO.....	37
ANNEX 8 – PLANNING COMMENTS	38
ANNEX 9 – NOISE SOURCES AND GEOMETRY USED IN THE PREDICTING MODEL	43

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 3 of 79

1. FOREWORD

MICROBEL s.a. has been commissioned by SEDAMYL UK to undertake this noise impact assessment of the foreseen extension "MONVISO 4" of the existing plant in Selby.

The purpose of this report is to evaluate prevailing noise at the nearest sensitive receptors, compare these against predicted noise level emissions associated with the foreseen extension project, determine the likely noise impact and suggest mitigation measures if required.

The impact of noise from the proposed plant on the closest noise sensitive premises has been modeled using a predicting noise mapping software using detailed drawings and specifications provided by the design team.

The noise impact of the proposed plant extension has been assessed against the measured background noise levels in accordance with British Standard 4142:2014, '*Method for Rating industrial noise affecting mixed residential and industrial areas*'

*dr. Franco Bertellino, Senior Associate of MICROBEL, has conducted this Environmental Acoustic Impact study and is a Member of the Institute of Acoustics (MIOA) – see annex 7.

2. SITE DESCRIPTION AND BACKGROUND

Sedamyl UK Ltd. – Denison Rd., YO8 8AN UK - North Yorkshire - Selby within part of the former Tate and Lyle site on Denison Road, YO8 8AN, Selby, North Yorkshire.

The site and surrounding area is generally flat. The site is bordered by Denison Road to the south and the River Ouse to the north.

The plant operates 24 hours per day although HGV movements will only take place between 08.00-18.00hrs weekdays and Saturdays. All HGV movements to and from the site are via the A63 Selby Bypass.

The main production areas of the current plant are: Wheat intake and storage, dry mill, wet mill, gluten dryer, starch dryer, fermentation, distillery, boilers and gas turbines, water treatment and water waste treatment.

The main raw material for production is wheat. The existing plant produces grain alcohol, wheat gluten, starch, bran and bottom stills for use in high quality foodstuffs, alcoholic drinks and animal feed. A basic flow chart of the current process is shown below.

	Technical Report SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 4 of 79
---	---	--------------



Figure 2.1 - Flow chart of the current SEDAMYL UK industrial process

2.1. Site Evolution

In order to describe the evolution of the plant since its beginning, in the following table an overview of the extensions is provided.

Table 1 – SEDAMYL UK past extension projects

Configuration	Year	Plant configuration
Initial configuration plant	2012	plant as 2012 + centrax + BOILER 7
Extension 1	2013	plant as 2012 + STARCH DRYER + centrax + BOILER 7
Extension 2	2015	plant as 2012 + STARCH DRYER + centrax + BOILER 9
Extension 3	2015	plant as 2012 + STARCH DRYER + Gas Turbine "SOLAR" (GT2) + BOILER 9
Extension 4	2016	plant as 2012 + STARCH DRYER + Gas Turbine "SOLAR" + BOILER 9 + Glucose syrup
Extension 5	2017	plant as 2012 + STARCH DRYER + GT "SOLAR"+ BOILER 9 + Glucose syrup + GT3 + Boiler10

	Technical Report SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 5 of 79
--	---	--------------

2.2. "MONVISO4" Extension description

Sedamyl UK Ltd is planning to increase the capacity of the plant in the next years, the scope of the project is the construction of a second distillery for grain alcohol production and a glucose syrups line with the capability to produce all sugar spectra. A basic flow chart of the future process is shown below.

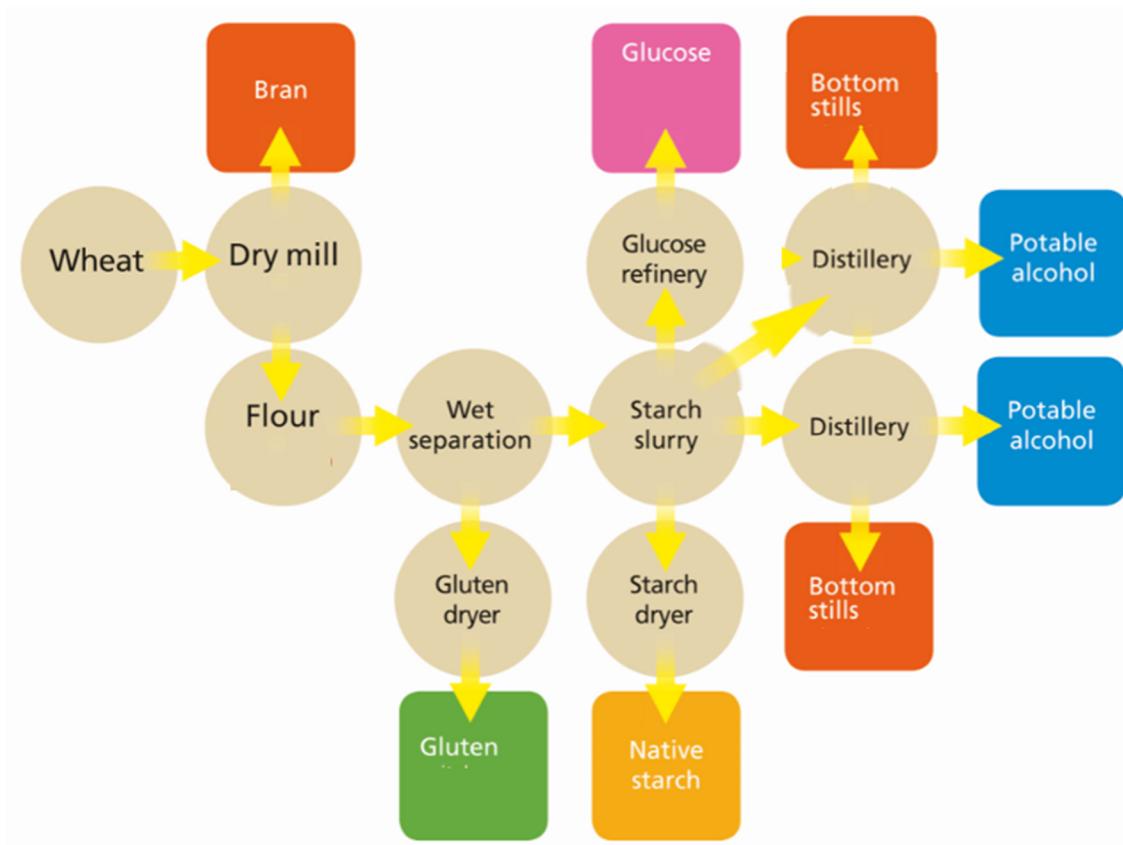


Figure 3.2 - Flow chart of the proposed SEDAMYL UK industrial process

The new main production areas, scope of the project, are:

- Second wheat intake canopy and three wheat storage silos,
- Second dry mill,
- Second gluten dryer,
- Existing wet mill building extension,
- Second fermentation,
- Second distillery,
- Two new cooling towers,
- New glucose plant
- Glucose tank farm and loading
- Two new bran silos and a second bran loading canopy

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 6 of 79

- Two new bottom still tanks
- One tank on waste water treatment plant
- Carbon dioxide recovery plant.

The roads of the plant will be developed according the layout of the production areas.

The new plants will continue the regeneration of the former Tate and Lyle site by Sedamyl UK and will consolidate the high-quality long-term employment created in the Selby area by the recent development of the Agri-Processing Plant, which was brought into full production in Spring 2012. The construction of the new plant will provide additional local employment in the accounting, engineering, building and logistic sectors.

The former Citric Acid fermentation units are still in place, and although there is at present no planned use for this equipment, the Applicant's intention is to keep these units in place for potential future use.

3. ENVIRONMENTAL NOISE SURVEYS

3.1. Past Environmental Surveys

In the below table all the acoustic surveys carried out since SEDAMYL UK operation began in 2012 (and before, for background measurements).

Table 2 – Past Environmental Survey carried out over past years

Issue date	Issued by	Type of Report	Applied Standard	Scope	Notes
06_2003	White Young Green Environmental	Noise Impact Assessment	BS4142:1997	IPPC application	Noise Impact Assessment of the former Tate & Lyle Citric Acid plant
02_2010	Hepworth Acoustics	Noise Assessment for proposed Agri-processing plant	BS4142:1997		First Acoustic Impact Assessment of the proposed SEDAMYL UK plant. The impact assessment includes a background noise survey before SEDAMYL UK plant was operated
10_2012	MICROBEL Associates	Noise Assessment	BS4142:1997	Required by IPPC Permit	The report was carried out to fulfill the requirements of the Environmental Permit by the Environment Agency within application EPR/KP3030TZ/V002. The report included a Noise Action Plan for the implementation of noise abatement measures

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 7 of 79

10_2013	MICROBEL Associates	Noise Assessment	BS4142:1997		In accordance with the requirements of Environmental Permit n. KP3030TZ and CAR n. RDR-121206-KP3030TZ that stated and required: "...the operator has therefore prioritized the noise control activities with the intention of assessing any improvements related to specific abatement actions. The site is not currently receiving related complaints so this step wise approach is agreed. The Operators shall therefore undertake a further noise assessment as prescribed by Improvements Condition 3 and submit a follow-up report by 01/12/2013".
02_2013	MICROBEL Associates	Environmental Impact Assessment		Wet Mill and Starch Dryer Extension	SEDAMYL UK Plant Extension n.1
04_2015	MICROBEL Associates	Environmental Impact Assessment		Gas Turbine "SOLAR" + Boiler9 Extension	SEDAMYL UK Plant Extension n.2
01_2016	MICROBEL Associates	Environmental Impact Assessment		Glucose Syrup Extension	SEDAMYL UK Plant Extension n.3
01_2016	MICROBEL Associates	Noise Assessment	BS4142:2014		The purpose is to assess actual noise levels at local sensitive receptors against those estimated in application EPR//KP3030TZ/V004. A report shall be submitted summarising the outcomes of the assessment plus any recommendations for improvements...
10_2016	MICROBEL Associates	Noise Assessment	BS4142:2014		The report is issued accordingly to the requirements of the Improvement Condition 10 included in the Variation 5 of the original Environmental Permit (EPR//KP3030TZ/V005).
12_2017	MICROBEL Associates	Environmental Impact Assessment		Gas Turbine GT03 + Boiler10 + Gas compressor Extension	SEDAMYL UK Plant Extension n.5
11_2019	MICROBEL Associates	Noise Assessment	BS4142:2014		The report is issued accordingly to the requirements of the Improvement Condition 12 included in the Variation 007 of the original Environmental Permit (EPR//KP3030TZ/V007).

3.2. Environmental Noise Survey

A BS4142 noise assessment was carried out on November 2019 at the completion of extension (variation of Permit EPR//KP3030TZ/V007). Please refer to that BS4142 assessment for further information. The conclusions of the assessment are shown in the following table.

Selby Council Limits assessment*	BS4142:2014 assessment
Receiver R3 (Cherry Tree Farm cottage)	The receiver is no longer inhabited. Therefore no assessment is needed. The assessment reveals a significant adverse impact. Yet, the receiver is no longer inhabited and it was agreed that no assessment is needed.
Receiver R1 (59, Denison Road)	Assessment indicates no excess over Selby Council limits. No complaints arose so far from the receiver. The assessment against BS4142:2014 criteria indicates there is no likelihood of adverse impact (excess of rating < 5 dB) due to SEDAMYL UK plant

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 8 of 79

Ambient Noise Levels at receiver R1 (Denison Rd.59)

Noise Emission Stage	Year	Description	Ambient/Background Noise at receiver R2 L_{Aeq}/L_{90} , dBA	Ambient/Background Noise at receiver R2 L_{Aeq}/L_{90} , dBA
Extension EPR/KP3030TZ/V007	2019	MICROBEL Ass.	Sedamyl Uk plant in operation – submission of BS4142:2014 assessment at the completion of EPR/KP3030TZ/V007 variation of the original environmental permit	Day-time Ambient L_{Aeq} : 49 dBA Background L_{A90} : 46 dBA Night-time Ambient L_{Aeq} : 43 dBA Background L_{A90} : 41 dBA

Please see Annex 6 for details.

4. LEGISLATION

4.1. BS4142:2014

BS 4142:2014 “Rating industrial noise affecting mixed residential and industrial areas” provides a method of rating and assessing industrial and commercial sound. It is a widely used standard by local authorities and consultants to rate noise from fixed installations. The standard advocates the use of $L_{Aeq,T}$.

When used to assess industrial noise, the rating level is determined by correcting, when appropriate, the specific noise level measured and the L_{A90} background level is subtracted from it. Then, depending on this difference the impact is characterized:

- The greater this difference, the greater the magnitude of the impact
- A difference of about 10dB or more is likely to be an indication of a significant adverse impact, depending on the context
- A difference of around 5dB is likely to be an indication of an adverse impact, depending on the context
- The lower the rating level is relative to the background sound level, the less likely it is that the specific sound source will have an adverse impact or a significant adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound source having a low impact, depending on the context.

When using the one-third octave method given in BS 4142 within 9.3 Objective methods, a correction of 6dB is to be applied to the specific noise level if a tone is present. In order to decide whether a tone is present or not, an analysis of the third-octave bands is made and the differences that identify a tone between adjacent bands are as follows:

- 15 dB in the low-frequency one-third-octave bands (25 Hz to 125 Hz)
- 8 dB in the middle-frequency one-third-octave bands (160 Hz to 400 Hz)
- 5 dB in the high-frequency one-third-octave bands (500 Hz to 10 000 Hz)

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 9 of 79

5. NOISE IMPACT ASSESSMENT

5.1. Assessment Methodology

Assessment of the specific noise level from the proposed units is estimated based on the information provided by SEDAMYL UK. The significance of the noise impact upon the noise sensitive receptors is assessed using the methodology contained within BS4142:2014. The aim is to reduce the likelihood of an adverse impact upon the noise sensitive receivers.

The overall impact at the property and for the individuals that live or work there can be found in the IEMA Guidelines, that categorize the significance of a range of basic changes, shown in Table 4.

Table 4 – Noise Impact Description

Sound Level Change	Subjective response	Impact Description
0,0	No change	None
0,1 – 2,9	Imperceptible change in loudness	Slight
3,0 – 4,9	Perceptible change in loudness	Moderate
5,0 – 9,9	Up to a doubling or halving of loudness	Substantial
10,0 or more	More than a doubling or halving of loudness	Severe

It should be noted that the use of one decimal place is not a reflection of the accuracy of any assessment undertaken but is merely intended to avoid ambiguities over categorization of boundaries.

The guidelines state that for any assessment, the words used to describe the impact should be determined by the assessor based upon the evidence including averaging the time period used, the time of day, the nature and spectral characteristics of the source and how frequently it occurs.

It is considered that the range of sound level changes given above provide a good indication as to the likely significance of changes on noise levels in this case and have been used to assess the impact of the site emissions.

The assessment of noise impact associated with the operations of the site has been undertaken using noise modelling to predict the noise level at the closest sensitive receptor. IMMI 2019 (by WMS – Germany) noise modeling software is used to predict the noise levels at the receptors.

5.2. New Noise Sources

The proposed extension will include the noise sources shown in the table below.

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 10 of 79

Table 5 – New noise sources for the proposed MONVISO4 extension (see Annex 2)

ID	Noise Source	Description	Operation	Estimated Noise Emission	Description of Noise Source
S1	Glucose Building	<p>Building 26,5m x 36 m x 16,5 m (h)</p> <p>The building will include several machinery such as:</p> <ul style="list-style-type: none"> - Carousel; - Cooking area - Microfiltration - Steam evaporator - Pumps associated to stocking vessels - Exchangers - ISO column vessels - lone exchanger <p>The building will be fully enclosed with an acoustic cladding made of sandwich metal panels. Seven silenced louvres openings will be located at the ground floor of the building. Only natural ventilation will be required, and a rectangular air outlet will be placed at the roof top level.</p>	24h/24h	<p>Lp,1m,inside = 83,2 dBA</p> <p>[SPL at 1 m from internal walls]</p> <p>The estimated value is obtained from averaging the measured values of an existing similar building in the Saluzzo Plant of SEDAMYL.</p> <p>All openings will be silenced with acoustic louvres, 30 cm thick providing the acoustic attenuation given in the following description</p>	<p>Surface Source ISO 9613-2</p> <p>Walls TL: see Table 6</p> <p>Walls openings: see Table 7</p> <p>Rooftop opening for air outlet [10 sqm]</p>
S2	MVR Glucose	The MVR evaporator will be incorporated in the glucose building.	24h/day	Lp,1m = 72,8 dBA	Surface Source ISO 9613-2
S3	Condensate Tank	n. 2 pumps 1450 RPM 11 kW at ground level close to the tanks.	n.1 out of 2 pump operating 24h	See Annex 3	Point source ISO 9613-2
S4	Glucose Storage Tanks	n. 2 pumps 1450 RPM 11 kW at ground level close to the tanks.	n.1 out of 2 pump operating 6h/day	See Annex 3	Point source ISO 9613-2
S5	Glucose Enzimatic Tanks	6 tanks, n.1 pump for each tank, 11 kW 1450 RPM	n.1 out of 6 pump operating 6h/day	See Annex 3	Point source ISO 9613-2
S6	Second Distillery	See attached details	24h/day	See Annex 3	Surface Source ISO 9613-2
S7	Bran Loading plant	TRAMCO bucket elevator	day-time only	See Annex 3	
S8	Concentrated Stillages Tanks	n. 1 pump1 1450 RPM 11 kW at ground level close to the tanks + n.2 stirrers/tank 5,5kW 1450 RPM	n.1 pump and stirrer operating 6h/day	See Annex 3	Point source ISO 9613-2

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 11 of 79

S9	Liquid Stillages Tank	n. 2 pumps 1450 RPM 11 kW at ground level close to the tanks	n.2 out of 2 pumps operating 24h	See Annex 3	Point source ISO 9613-2
S10	Fermenter Tanks	n.5 tanks, each with 2 pumps and 1 stirrer Pump 1 11kw 1450 RPM Pump 2 185 kW 1450 RPM Stirrer 5,5 kW 1450 RPM	n.2 out of 2 pumps operating 24h Stirrer : operating 24h	See Annex 3	Point source ISO 9613-2
S11	Caustic Soda Tank	n. 1 pump 2,2 kW 1450 RPM, low noise	n.1 pump operating 1h/day-time	Estimated 60 dBA at 0,5 m Size 1x0,4x0,4 m	Point source ISO 9613-2
S12	Scrubber	5,5 kW 1450 RPM + exhaust h13 m	operating 24h/day	See Annex 3	Point source ISO 9613-2
S13	Yeast Propagator	Recycle pump (55 kW 1450 RPM) and n.1 pump 11 kW 1450 RPM	n.2 out of 2 pumps operating 24h/day	See Annex 3	Point source ISO 9613-2
S14	n. 2 cooling towers	n.2 cooling towers (fans) and n. 2 pumps 110 kW 1450 RPM	Fans operating 24h; n.1 pump operating 24h/day	See Annex 3 for pumps. Cooling Towers emission from Manufacturer Technical Data	Point source ISO 9613-2
S15	Flour silos	n.2 cochlea (screw conveyor)	n.2 cochlea 24h/day	See Annex 3	
S16	Wet Mill Extension	See annex 2 and 3 for details			Surface Source ISO 9613-2
S17	Gluten Storage/loading	n.2 cochlea (screw conveyor)	n.2 cochlea 2h/day	See Annex 3	
S18	Wheat conditioning	n.2 cochlea (screw conveyor), n. 1 bucket elevator	n.2 cochlea 24h/day n.1 bucket elevator 24/h /day	See Annex 3	
S19	Second Drymill	See annex 2 and 3 for details			Surface Source ISO 9613-2
S20	Gluten Dryer	See annex 2 and 3 for details			Surface Source ISO 9613-2
S21	Wheat unloading	TRAMCO bucket elevator	day-time only		
S22	Wheat Storage tanks				
S23	CO2 Recovery Plant	n.1 pump 1450 RPM 11 kW + Building	24h/day	Lp.int.building = 84 dBA (estimated) Pump: see Annex 3	
S24	Effluent tank	n. 1 pumps 1450 RPM 11 kW at ground level close to the tank	n.1 out of 2 pump operating 24h		
S25	Starch cooking extension	n. 2 pumps 1450 RPM 22 kW at ground level close to the tank	24h/day		

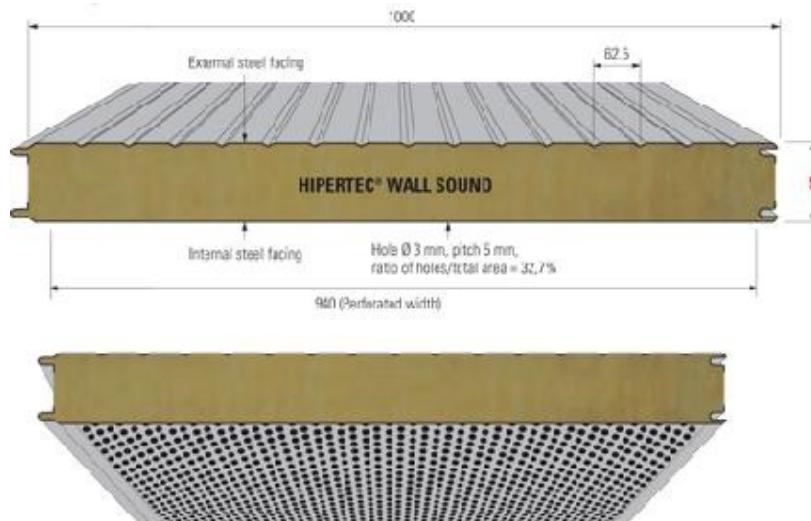
	Technical Report			
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN			Page 12 of 79

S26	Air Treatment Room	n. 1 steam valve – 20 ton/h, pressure drop 14,2 bar. Piping DN250/DN350 enclosed in insulated building.	24h/day	Estimated	Surface Source ISO 9613-2
S27	Heavy Traffic	See Annex 4	Day-time	The calculated sound emission is given by the RLS90 algorythm	Line source RLS 90 Only day-time

Other minor sources are not taken into account.

For the calculation of noise break-out from the facades of buildings we have assumed that the buildings will be steel framed structures covered with lightweight steel cladding panels comprising of an outer metal profile skin, an insulated core and a perforated inner liner to the walls and roof.

Sound reduction data used in the model for the cladding panels has been taken from commercial products available on the market.



Self-supporting panel system, insulated with rockwool for wall and partition applications, with high degree of resistance to fire, sound absorption and sound insulation. Taken from http://www.metecno.com/Product/wall/Traditional/Hipertec_Wall_Sound/Hipertec_Wall_Sound.pdf

Table 6 – Sound Reduction of metal panel cladding

f	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
	dB	dB	dB	dB	dB	dB	dB
TL	15	20	25	30	28	39	40

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 13 of 79

The silenced openings will be equipped with silenced louvres providing the following attenuation.



Silenced louvre 30 cm thick

*Table 7 – Typical attenuation of silenced louvres 30 cm thick**

f	63 Hz	125 Hz	250 Hz	500 Hz	1000	2000	4000
					Hz	Hz	Hz
DIL	1	3	12	19	27	30	27

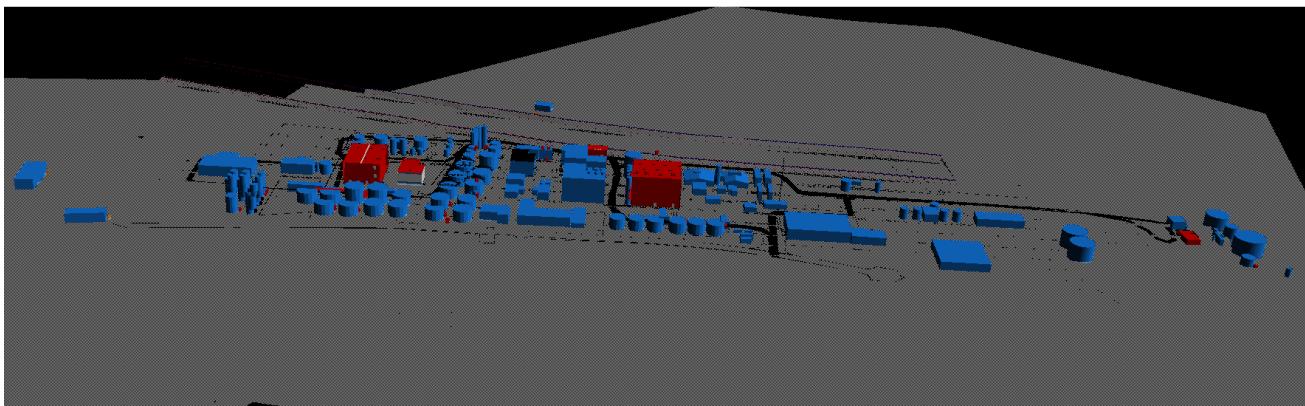
*Taken from http://www.troxaustralia.com/xpool/download/my/technical_documents/shut_off_devices/leaflets/NL.pdf

5.3. Specific Sound Levels

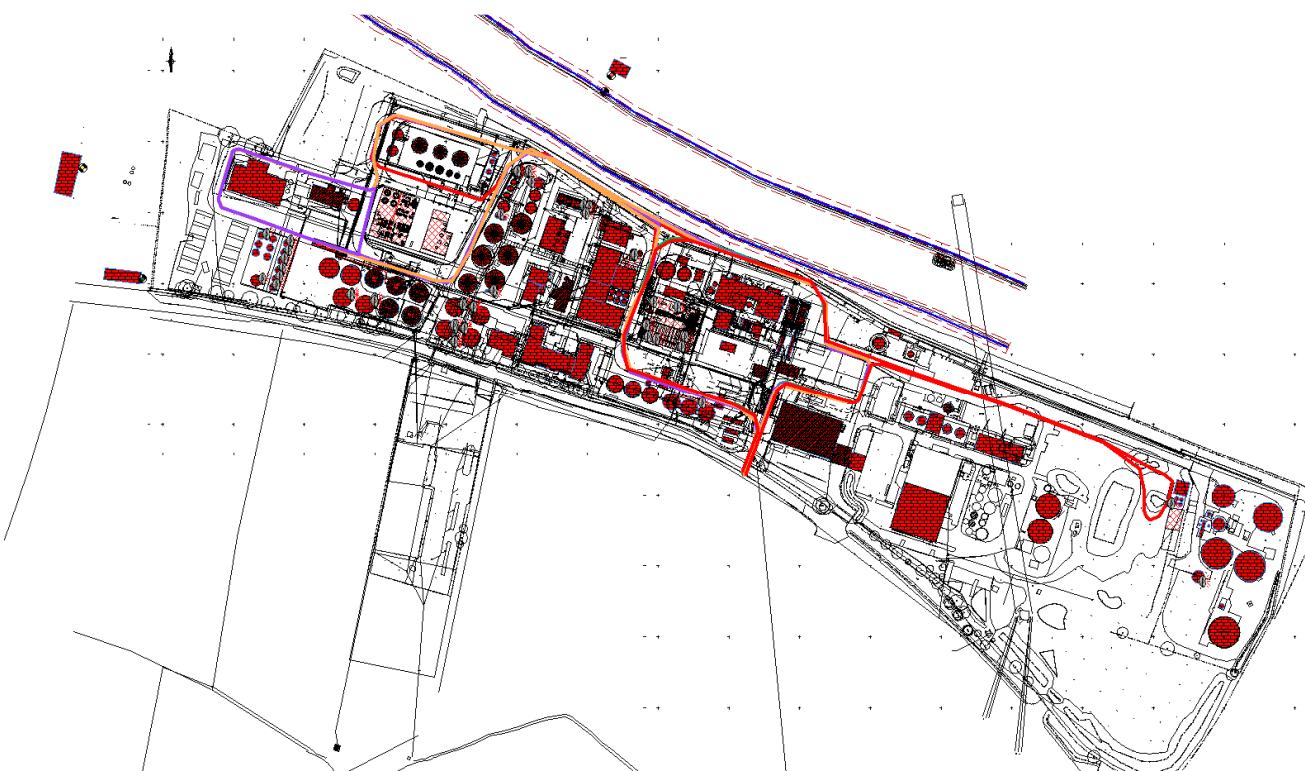
The potential noise impact associated with the operation of the proposed extension of the existing plant has been determined by developing a computerized noise model of the plant.

The noise model has been constructed using IMMI (vers. 2018) noise modelling software, produced by WMS (Germany). The noise model takes into account the noise propagation terms within 'ISO9613-2: Acoustics – Attenuation of sound during propagation outdoors', including distance attenuation, ground absorption and atmospheric absorption.

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 14 of 79

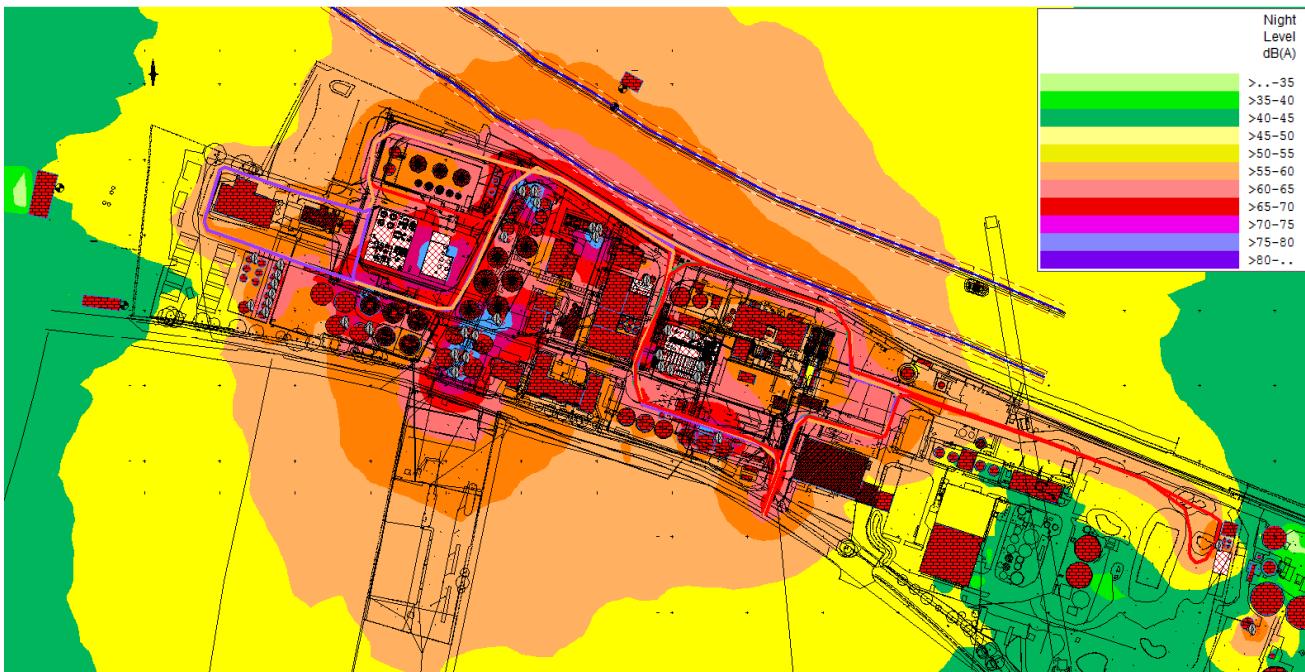


Noise Prediction with IMMI software – 3D view

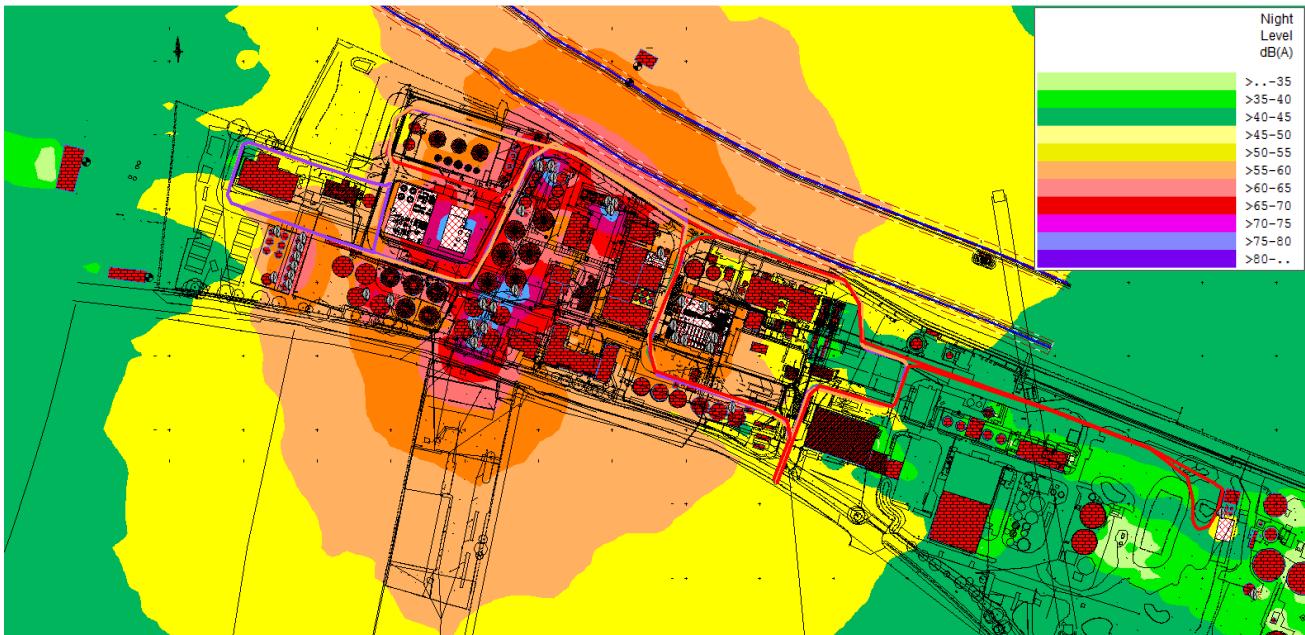


Noise Prediction with IMMI software – 2D view

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 15 of 79



Isophones calculated with the noise prediction IMMI model – day – 4m height



Isophones calculated with the noise prediction IMMI model – night – 4m height

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 16 of 79

The noise model has used the plant layout provided by the design team. The layout shows the location of all buildings and focuses on the new plants introduced by the project extension.

Calculated noise levels from the proposed new plants (not considering previous extensions) at the two residential locations are given below.

	Receiver	Day	Night
		dBA	dBA
IPkt003	R2 - Harold Str.	45.6	43.1
IPkt004	R1 - Denison Rd.	44.1	43.3

5.4. Noise Impact Assessment of the proposed extension

BS 4142:2014 provides a method of rating the likelihood of complaints when introducing an industrial noise source into an existing residential area. This assessment draws a comparison between the industrial noise emissions generated by the site and the existing background sound levels at the existing noise sensitive receptors.

In order to evaluate the acoustic impact of the extension, the current noise level was considered as background noise. In this way, using the BS4142, one can obtain a "relative" evaluation of the impact of the extension alone.

Existing noise levels are shown in Annex 6, that summarize the results of the recent BS4142 noise assessment at receiver R1 (Denison Rd.59).

From that report we can find that the current specific noise immission at receiver R1 is 42/32 dBA (Day/Night). It was considered a 5 dB acoustic feature to take into account of the industrial noise features, and therefore the rating level from SEDAMYL UK would be 47/37 dBA (Day/Night), with a background noise 46/41 dBA (Day/Night) for both receivers R1 and R2,

The impact assessment for the proposed extension would give the following results.

Day-Time Impact for the proposed extension

Receiver	Predicted noise for SEDAMYL UK proposed extension	Existing noise (specific noise from SEDAMYL UK)	Specific noise after the completion of the proposed extension (Sum of columns B+C)	Existing Background noise	Excess of rating over background sound level [dBA]	Result of assessment BS4142.2014
	A	B	C	D	E	
R1 (Denison Rd. 59)	44.1	42.1	46.2 (46)	45,7 (46)	46,2-45.7 = 0.5 dBA	Day-time: Imperceptible change in loudness The impact is slight.

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 17 of 79

Night-Time Impact for the proposed extension

Receiver	Predicted noise for SEDAMYL UK proposed extension	Existing noise (specific noise from SEDAMYL UK)	Specific noise after the completion of the proposed extension (Sum of columns B+C)	Existing Background noise	Excess of rating over background sound level [dBA]	Result of assessment BS4142.2014
A	B	C	D	E	F	G
	dBA	dBA	dBA	dBA	dBA	
R1 (Denison Rd. 59)	43.31	32	43.6 (44)	41	43.6-41 = 2.6 dBA	Imperceptible change in loudness. Slight impact

5.5. Discussion

As a result of noise impact prediction, it can be stated that the new sources introduced with the extension of the proposed MONVISO4 extension won't affect the existing situation since their contribution to the noise level at the nearest residential properties is very low.

6. NOISE ABATEMENT MEASURES

The level of impact when considering the context is expected to be low. The above result can be achieved if the noise emitted by the proposed extension doesn't exceed the declared values of the noise sources as described above. It is advisable a complete monitoring plan of the new sources as soon as they will enter into operation.

7. CONCLUSIONS

An assessment of noise emissions from the new proposed extension has been carried out in order to verify the acoustic impact, with special attention at the receivers to the west side of the site boundary.

The assessment has demonstrated that the difference between the existing noise levels and the levels introduced by the new plants is negligible.

It must be taken into account that prediction is subject to a calculation uncertainty that could be close to 2 dB.

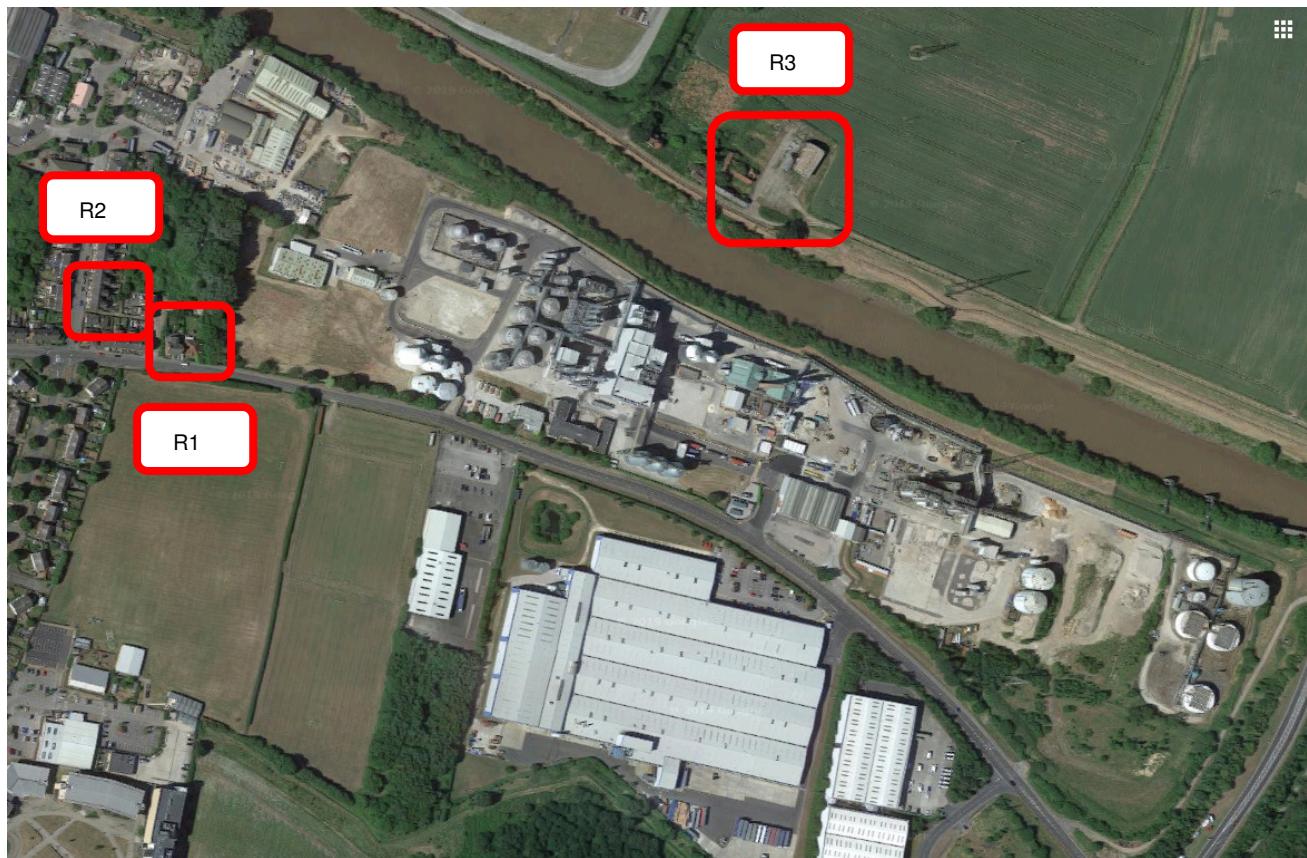
A verification of the noise emissions of the plant will be carried out at the completion of the foreseen plant.



*Member of the Institute of Acoustics (MIOA); Full Member Institute of Noise Control Engineering – USA; Full Member of the Italian Acoustic Association; Acknowledged as Competent Acoustic Technician by the Italian Government, EI. Engineer Degree- Turin Polytechnic, Member of the Engineers Association of Turin n. 8006Y.

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 18 of 79

ANNEX 1 – NOISE SENSITIVE RECEIVERS



Aerial view of SEDAMYL UK

Receiver	Location	Distance from SEDAMYL plant	Description	Notes
R1	Denison Road, 59	West - 0 m	The residential property is adjacent to SEDAMYL UK property boundary	The receiver is potentially influenced by SEDAMYL UK noise emissions being located at the west boundary property of the site.
R2	Harold Street	West - 0 m	The residential property is adjacent to SEDAMYL UK property boundary	The receiver is potentially influenced by SEDAMYL UK noise emissions being located at the west boundary property of the site.
R3	North of the River Ouse	North - 90 m	Uninhabited 2 storeys house (called "Cherry Tree Farm")	The receiver is currently uninhabited and therefore was not considered for the noise assessment

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 19 of 79



Aerial view of SEDAMYL UK – receivers at Denison Rd. 59 and Harold Street - Selby

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 20 of 79



Receiver R1 on west side of SEDAMYL plant – Denison rd. 59



Receiver R2 on west side of SEDAMYL plant – Harold Street

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 21 of 79



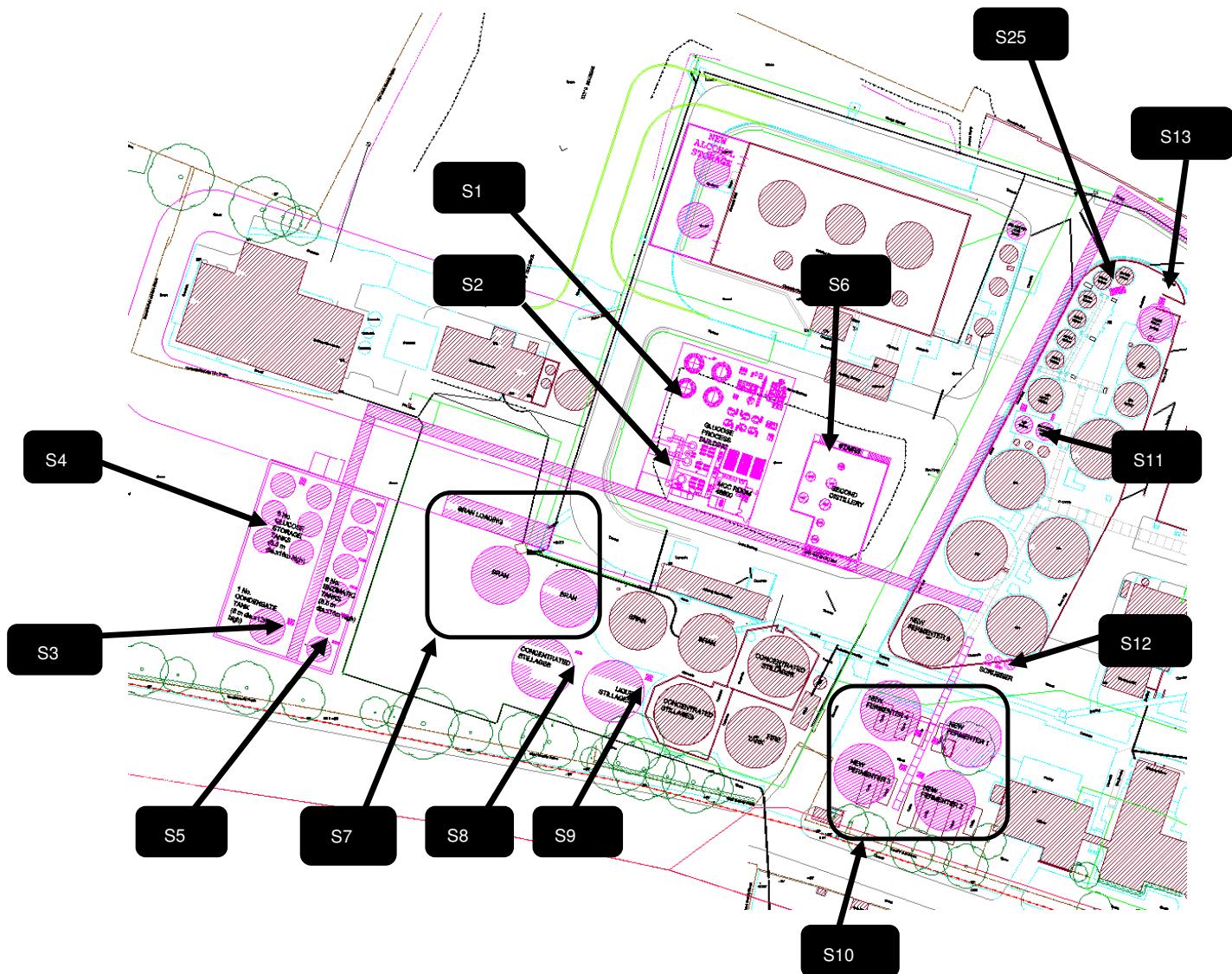
Receiver R3 on north side of SEDAMYL plant – Cherry Tree Farm

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 22 of 79

ANNEX 2 – GENERAL PLAN VIEW AND PROPOSED EXTENSION

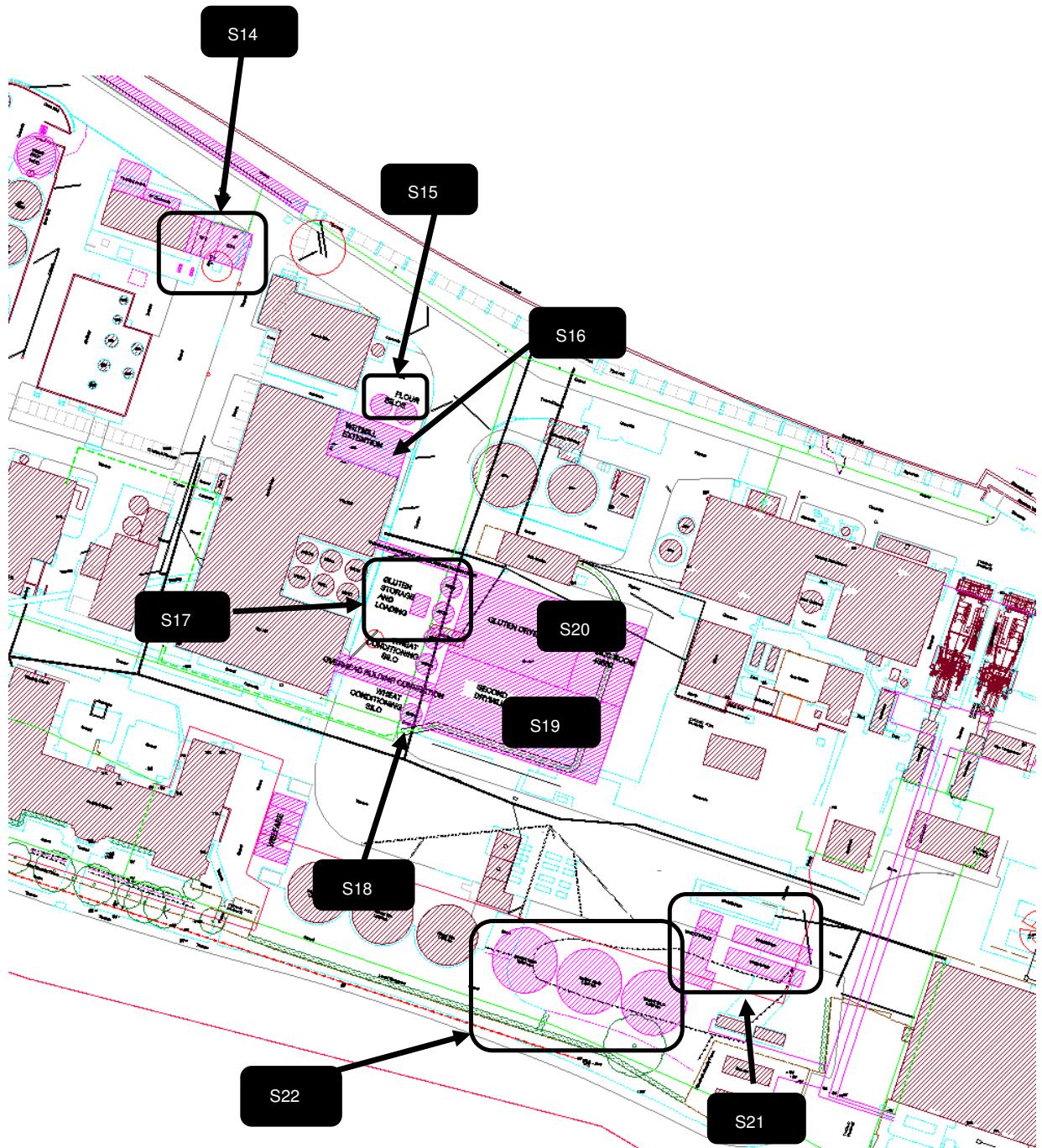


Plan view of the SEDAMYL UK Plant and foreseen new noise sources



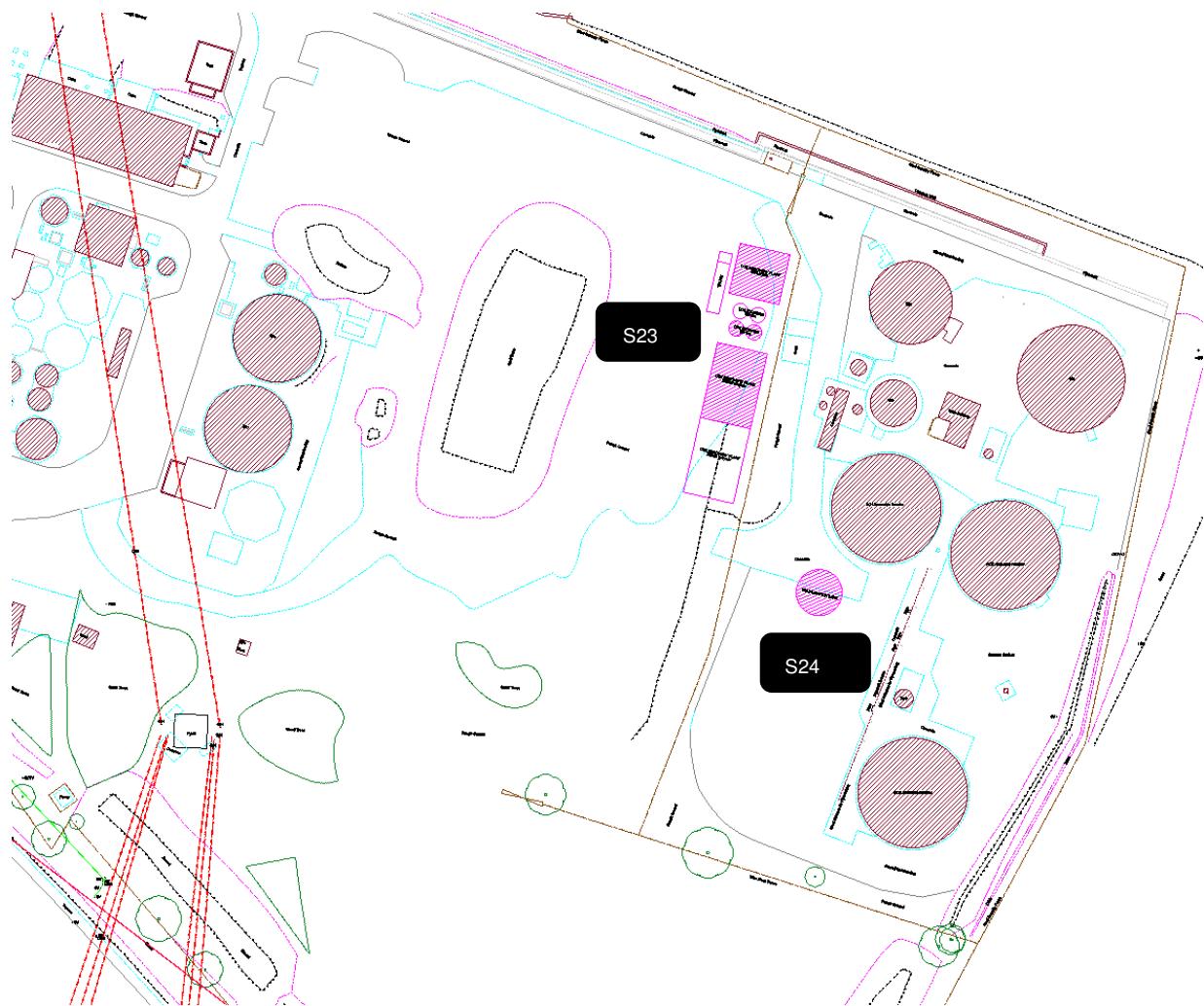
Plan view of the SEDAMYL UK Plant and– details of west plan with location of the foreseen new noise sources

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 24 of 79



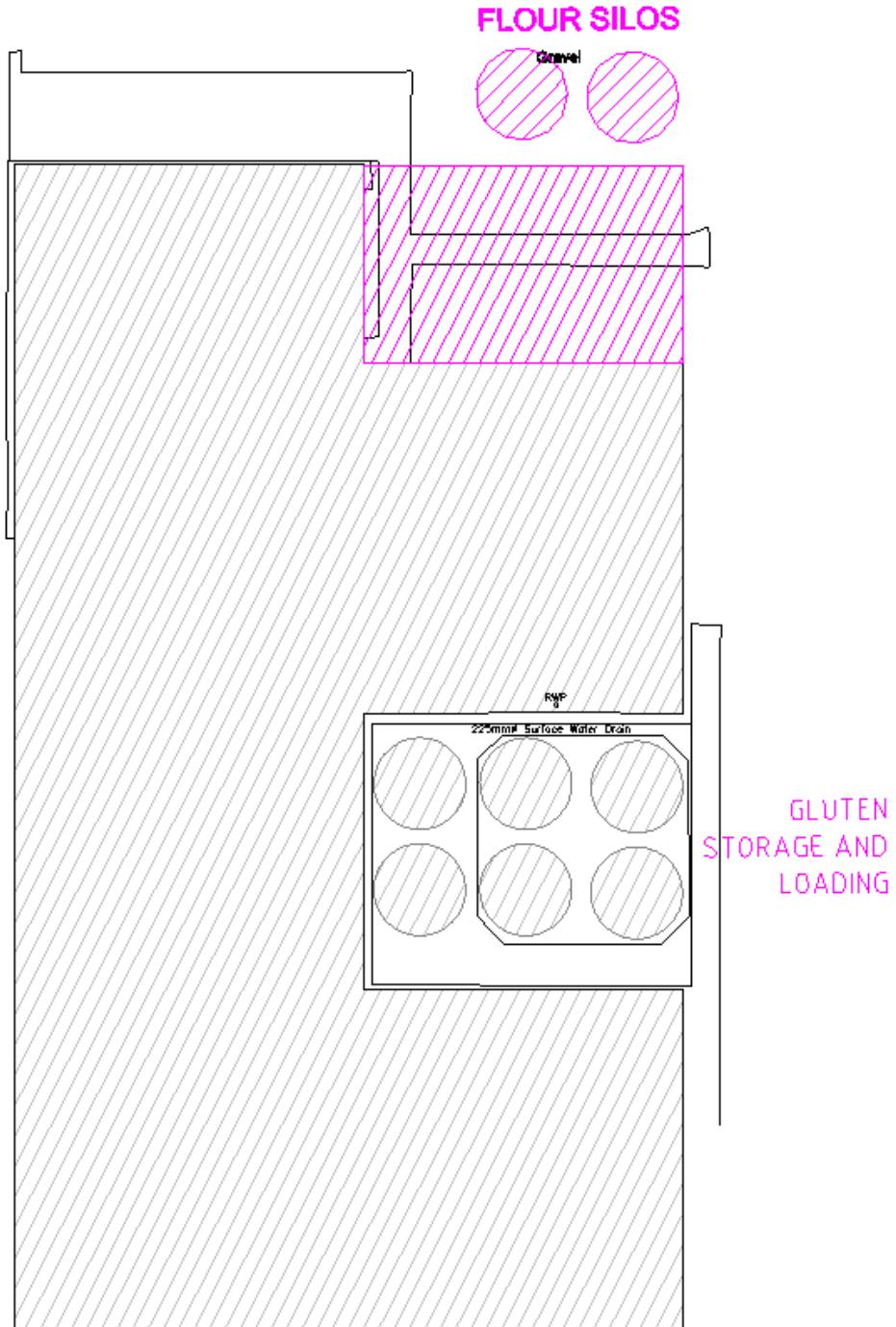
Plan view of the SEDAMYL UK Plant and foreseen new noise sources – details of center plan with location of the foreseen new noise sources

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 25 of 79



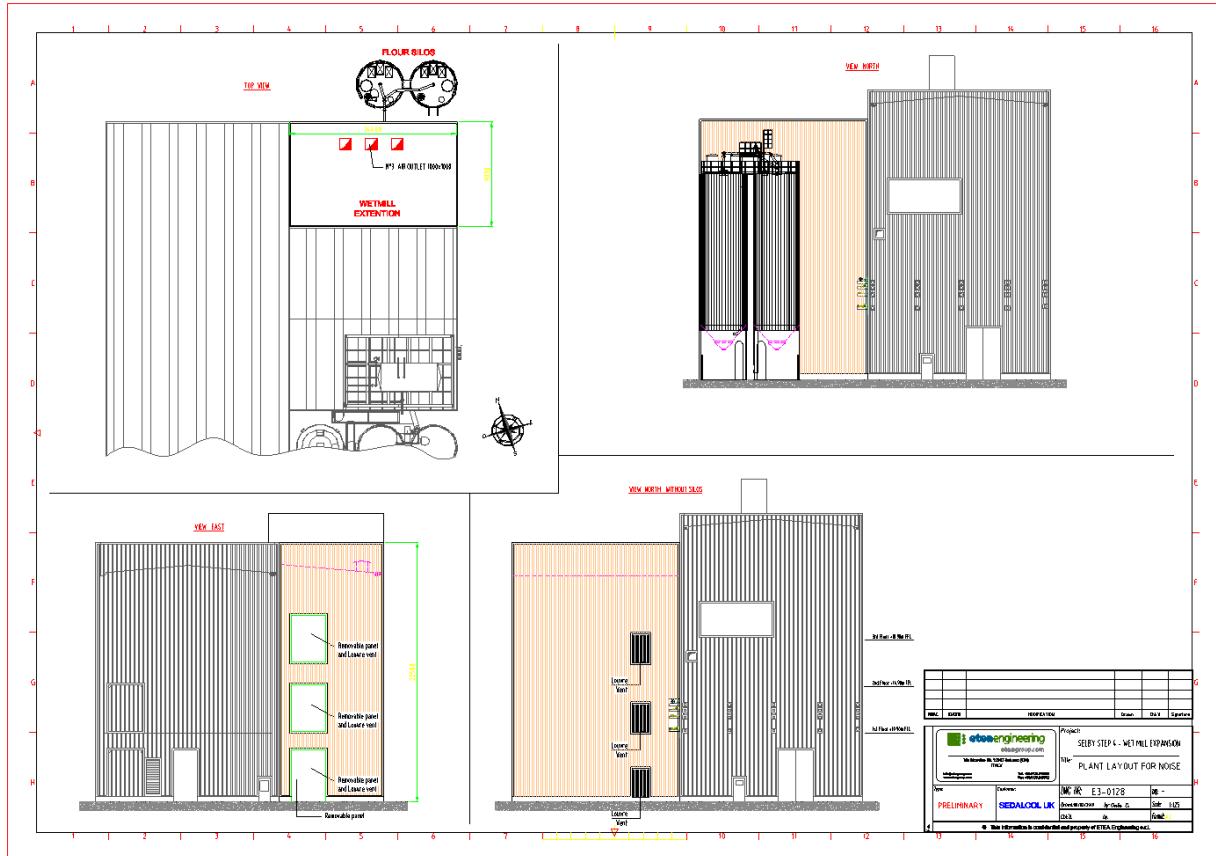
Plan view of the SEDAMYL UK Plant and foreseen new noise sources – details of east plan with location of the foreseen new noise sources

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 26 of 79

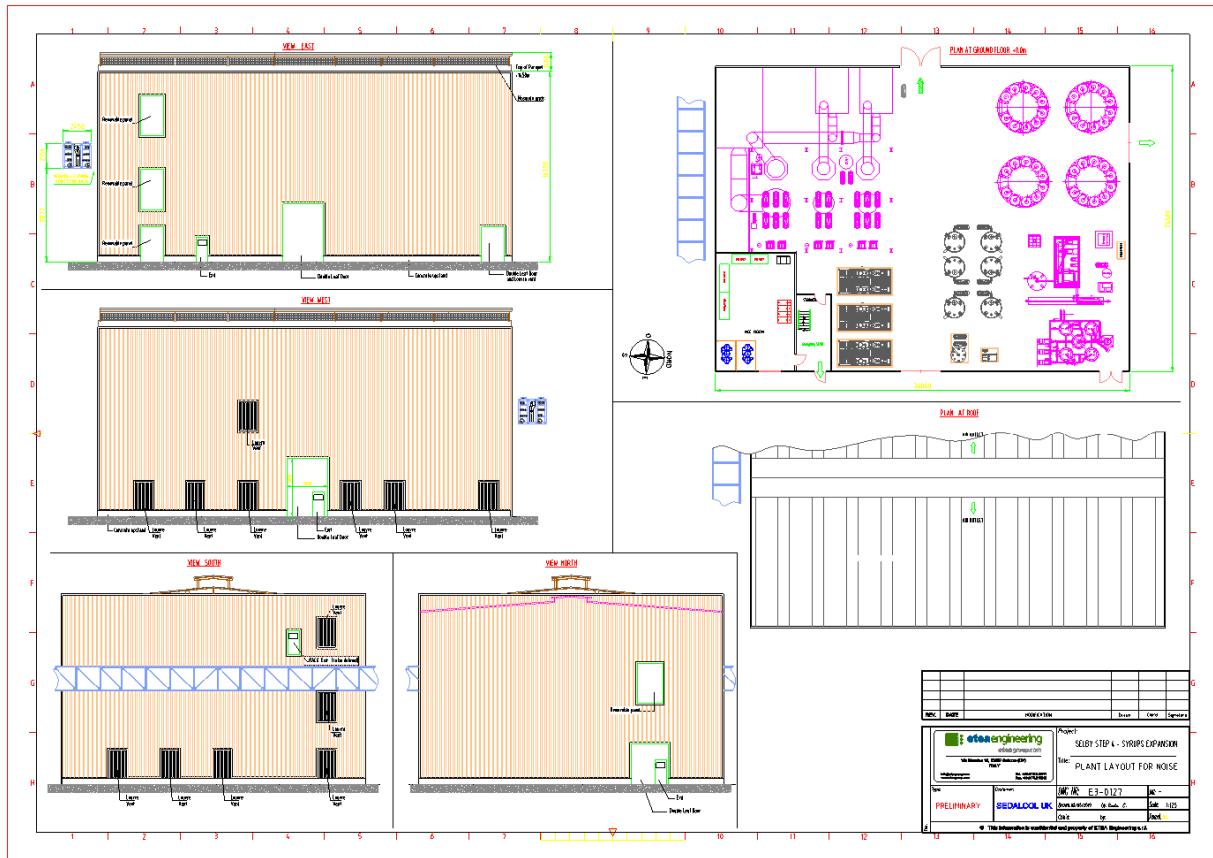


Wet Mill Extension (S16)

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 27 of 79

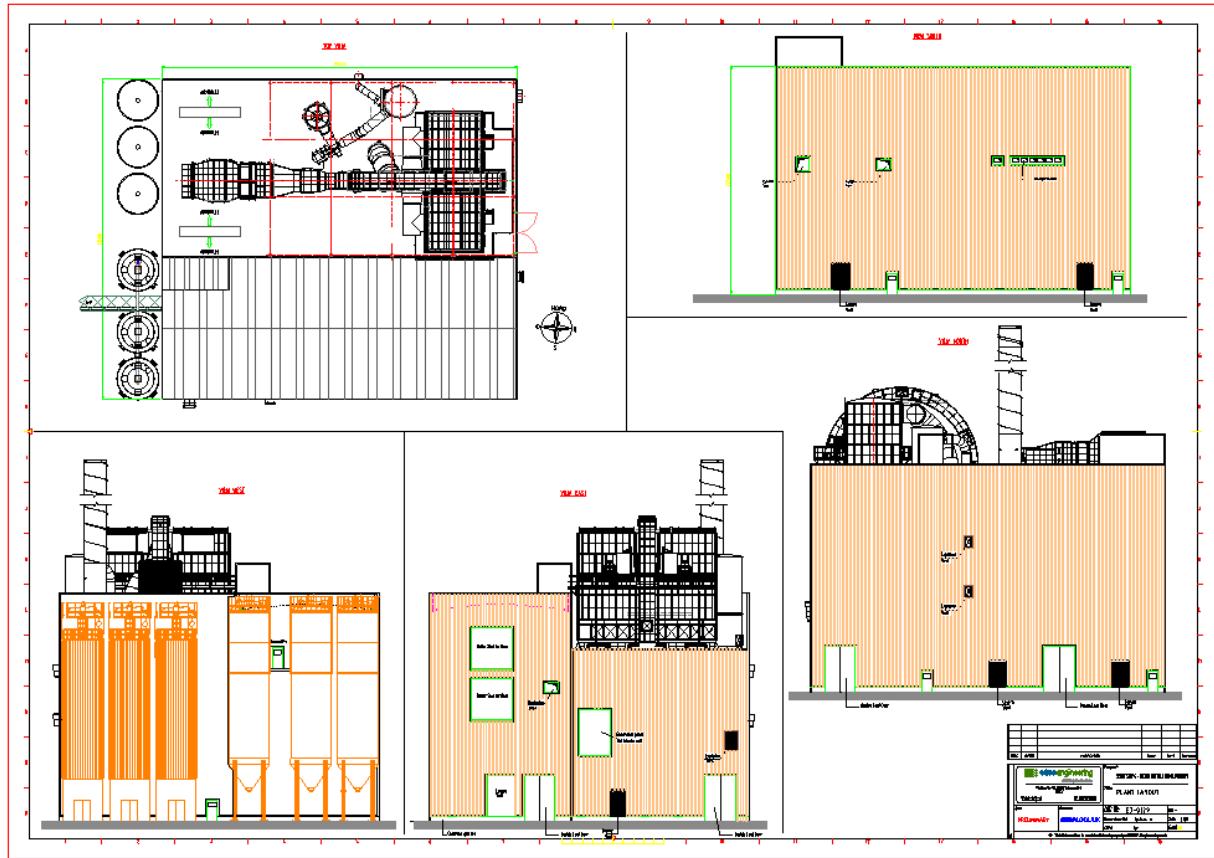


Wet Mill Extension (S16) – details of the new building



Glucose process building (S1, S2) – details of the new building

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 29 of 79



Second Main building (S19, S20) – details of the new building

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 30 of 79

ANNEX 3 – EXISTING NOISE SOURCES MEASUREMENTS

ID	Noise Source	Noise Source description	LAeq	LZeq	LA95
01	Stirrer - at 1m	1x1x1 m,	78,2	82,6	75,3
02	Pump 11 kW, 1500 RPM at 0,5 m	1,3x 0,5 x 0,7 m	72,5	83,4	70,3
03	n.2 pumps fermenter recycle	3 x 3 x 0,6 at 0,5 m	80,6	89,1	79,6
04	Scrubber - cladding on 3 sides	1 x 1 x 1	89,9	92,2	89,3
05	Scrubber - pumps - 1,1 kW 1450 RPM + 1,5 kW 1450 RPM		81	87,6	80,1
06	Starch cooking - n. 2 pumps (every tank has 2 pumps 18,5 kW 1450 ROM)	2 x 1,5 x 0,7 at 0,5 m	86,6	89,4	85,6
07	Stirrer 5,5 kW	0,7x0,7x1 /Suspended at 2 m off ground	76,3	80,8	75,2
08	n. 2 pumps Yeast Propagator at 0,5 m	1,8 x 1,8 x 0,7	86	90	83,6
09	n. 2 pumps (only 1 working) 160 kW 1950 RPM cooling towers, at 0,5 m		89,1	90,6	87,6
10	Bucket elevator TRAMCO, at 1 m	5x1x1,2 m	78,1	87,2	75,5
11	Bucket elevator TRAMCO, at 10 m		66,6	78,8	64,6
40	Existing distillery , h = 1,5 m		79,1	84,4	78
41	Existing distillery , h = 1,5 m (influenced by cooling towers pumps)		79,3	85,6	77,1
42	Existing distillery , h = 1,5 m		77,9	84,7	75,7
43	Existing distillery , h = 1,5 m		75	84,1	72,9
44	Existing distillery , h = 1,5 m		75,7	82,8	72,6
45	Existing distillery , h = 6,5 m		76	82	72,9
46	Existing distillery , h = 6,5 m		77,1	83,8	75,8
47	Existing distillery , h = 6,5 m		77,9	83,5	72,8
48	Existing distillery , h = 6,5 m		74,2	81,1	72,9
49	Existing distillery , h = 9 m		76,2	82,8	72,4
50	Existing distillery , h = 9 m		73,6	83,2	70,4
51	Gluten Dryer plant - Ground Floor		87,4	92,5	83,8
52	Wet Mill - Ground Floor		85	91,7	82,6
53	Dry Mill - Ground Floor		86,6	112,8	83,8
54	Bucket Elevator -		75,8	95,9	74,5
55	Bucket Elevator - off 1 m	Size: 1 x 1 x 1 , at 2,5 m off ground. Noise from metal envelope of the elevator	84,4	99	83,2
56	Dry-Mill - air inlet with silencer	1x1 m	81,6	100,5	79,3
57	Cochlea	1 x 1 x 1 (1,5 m off ground)	70,7	87,9	69,9
58	Cochlea		77	96,5	75,2
59	Cochlea		75,7	96,1	74,5
60	Wet Mill - Upper floor		90,1	97,3	88,6

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 31 of 79

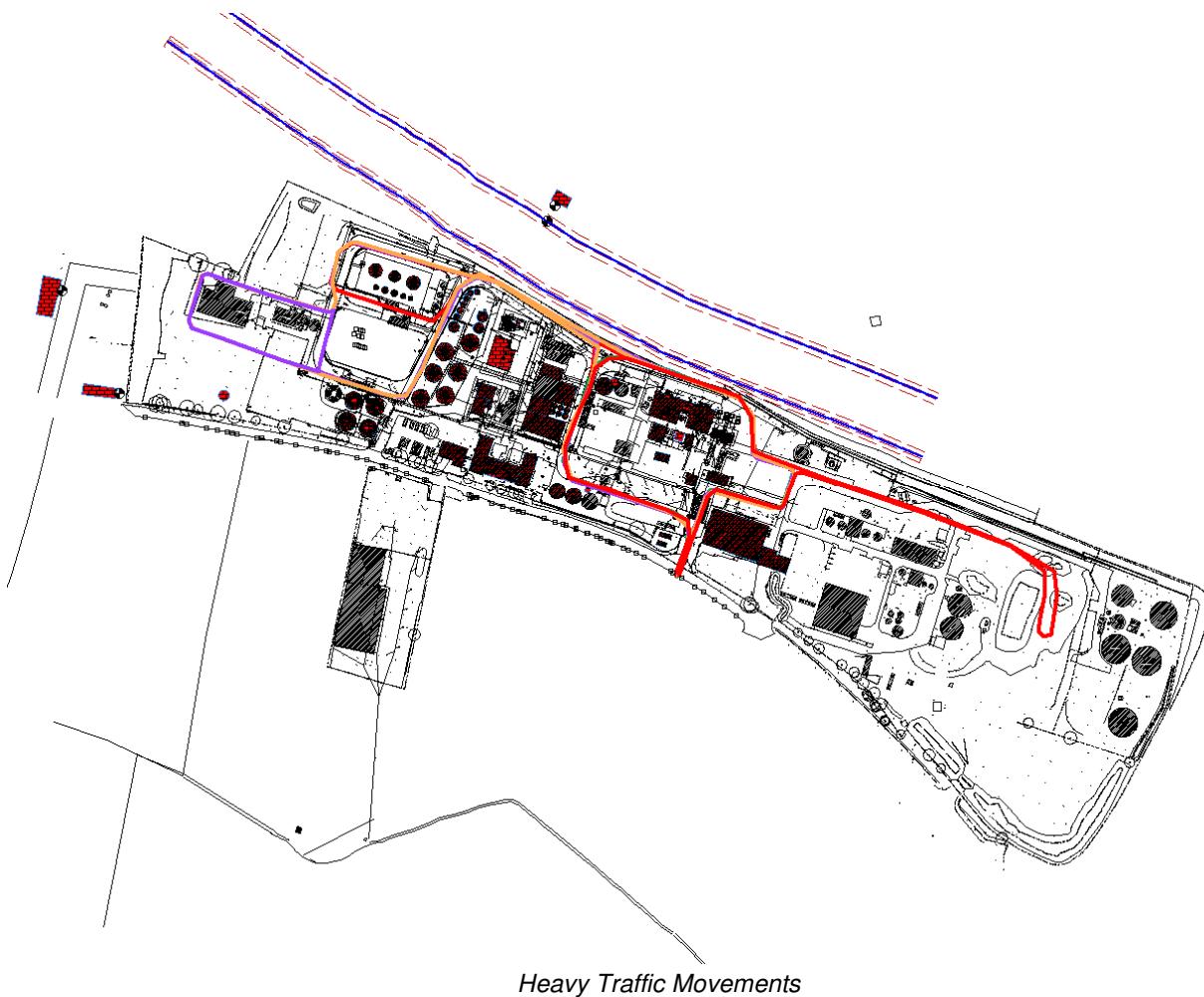
61	Wet Mill - Upper floor		89,3	97,9	87,1
62	Dry Mill - Upper floor		86,7	105,8	83,4
63	Gluten Dryer - chimney exhaust	diam. 1 m, measurement at 50 cm from chimney top, at 90° from axis	78,2	91,7	77,6
64	Dry-Mill - chimney exhaust	diam . 0.55 m	97,5	107,2	82,4
65	Dry-Mill - chimney exhaust	diam. 0,8 m	91,1	107,3	77,8
66	Dry-Mill - chimney exhaust	diam. 0.6 m	85,5	105,4	71,5
67	Dry-Mill - chimney exhaust	diam. 0.4 m	88,1	102,4	73,1

	Technical Report											
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN											Page 32 of 79

ANNEX 4 – HEAVY TRAFFIC MOVEMENTS

The heavy traffic has been calculated on the base of data given by client. The below data summarize the total heavy traffic for SEDAMYL UK after the foreseen extension.

	Wheat	Precleaning waste	precleaning screenings	Bran	Stillages	alcohol	CO2 liquid	Gluten	Glucose	Starch	total	Mov/h (10h)	Mov/h (approx)
HTM 01	55	1	2					4		7	69	6,9	7
HTM 02						9					9	0,9	1
HTM 03-1				14	25						39	3,9	4
HTM 03-2				7							7	0,7	1
HTM 04								6			6	0,6	1
HTM 05							3				3	0,3	1



	Technical Report			
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN			Page 33 of 79

ANNEX 5 – INPUT DATA USED FOR THE NOISE MAPPING MODEL

ID	Description	Type	q.ty	Operation cycle	Noise emission	Notes
					dBA	
S1	Glucose Bldg.	Area Source	1	24h/day	Lp,inside = 83,2 dBA	Vent Louvres: 19 dB att.
S2	MVR Glucose	Area Source	1	24h/day	Lp,inside = 75 dBA	Considered negligible
S3	Condensate Tank Pump	Point Source	1	24h/day	LwA = 83,2 dBA	
S4	Glucose Storage Tank Pumps	Point Source	1	6h/day	LwA = 83,2 dBA	
S5	Glucose Enzymatic Tank Pumps	Point Source	6	6h/day	LwA = 83,2 dBA	
S6	Second Distillery	Area Source	1	24h/day	Lp = 75 - 79 dBA a 1 m	Derived from measures 38-48
S7	TRAMCO bucket elevator	Line Source	1	day-time	Lp 1 m = 78,1 dBA	Derived from measures 10-11
S8-1	Concentrated Stillages Tank Pump	Point Source	1	6h/day	LwA = 83,2 dBA	
S8-2	Concentrated Stillages Tank Stirrer	Point Source	2	6h/day	LwA = 93,4 dBA	
S9	Liquid Stillages Tank Pumps	Point Source	2	24h/day	LwA = 83,2 dBA	
S10-1	Fermenter Tanks Pumps	Point Source	5	24h/day	LwA = 83,2 dBA	
S10-2	Fermenter Tanks Pumps	Point Source	5	24h/day	LwA = 99,4 dBA	
S10-3	Fermenter Tanks Stirrer	Point Source	5	24h/day	LwA = 93,4 dBA	
S11	Caustic Soda Tank Pump	Point Source	1	1/h day-time	LwA = 61,9 dBA	
S12-1	Scrubber pump	Point Source	1	24h/day	LwA = 94,2 dBA	
S12-2	Scrubber enclosure	Point Source (directivity)	1	24h/day	LwA = 101,7 dBA	
S12-3	Scrubber exhaust (h 13 m)	Point Source (directivity)	1	24h/day	LwA = 95 dBA	Estimated
S13	Yeast Propagator pumps	Point Source	1	24h/day	LwA = 98,9 dBA	
S14-1	Cooling towers pumps	Point Source	1	24h/day	LwA = 101,8 dBA	
S14-2	Cooling towers - body	Point Source	2	24h/day	LwA = 101 dBA	Derived from Technical Data Sheet provided by client
S15	Flour Silos Cochlea	Point Source	2	24h/day	LwA = 88,8 dBA	
S16	Wet Mill extension	Area Source	1	24h/day	Lp inside= 90 dBA	Derived from measures 58,59
S16-1	Wet Mill extension - roof openings	Area Source	1	24h/day	Lp inside= 90 dBA	
S17	Gluten Storage loading cochlea	Point Source	2	day-time	LwA = 88,8 dBA	
S18-1	Wheat Conditioning Cochlea	Point Source	2	day-time	LwA = 88,8 dBA	
S18-2	Wheat Conditioning Elevator	Line Source	1	day-time	Lp 1 m = 78,1 dBA	Derived from measures 10-11
S19-1	Second Dry-Mill - Bldg.	Area Source	1	24h/day	Lp,inside = 87 dBA	Derived from measure 51 - 60

	Technical Report				
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN				Page 34 of 79

S19-2	Second Dry-Mill - Chimney exhaust 1 0,55 cm diam. 10.000 mc/h	Point Source	1	24h/day	LwA = 90,4 dBA	Derived from measure 64
S19-3	Second Dry-Mill - Chimney exhaust 2 0,88cm diam. 22000 mc/h	Point Source	1	24h/day	LwA = 88,1 dBA	Derived from measure 65
S19-4	Second Dry-Mill - Chimney exhaust 3 1,12 cm diam. 45000 mc/h	Point Source	1	24h/day	LwA = 88,0 dBA	Estimated
S19-5	Second Dry-Mill - Chimney exhaust 4 1,12 cm diam. 35000 mc/h	Point Source	1	24h/day	LwA = 88,1 dBA	Estimated
S20	Gluten Dryer	Area Source	1	24h/day	Lp,inside = 87 dBA	Derived from measure 49
S21	Wheat Unloading	Line Source	1	day-time	Lp 1 m = 78,1 dBA	Derived from measures 10-11
S22	Wheat Storage Tank Pump	Point Source	1	day-time	LwA = 83,2 dBA	
S23-1	CO2 recovery plant pump	Point Source	1	24h/day	LwA = 83,2 dBA	
S23-2	CO2 recovery plant building	Area Source	1	24h/day	Lp,inside = 84 dBA	
S24	Effluent Tank Pump	Point Source	1	24h/day	LwA = 83,2 dBA	
S25-1	Starch Cooking Pump	Point Source	1	24h/day	LwA = 99,4 dBA	Derived from measures 006
S25-2	Starch Cooking stirrer	Point Source	2	24h/day	LwA = 87,3 dBA	Derived from measures 007
S26	Air Treatment Room	Area Source	1	24h/day	Lp inside= 85 dBA	Estimated
S27	Additional Heavy Traffic	Line Source /RLS90	See table Annex 3	day-time	See model input details (annex 4 and 5)	

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 35 of 79

ANNEX 6 – BS4142:2014 Assessment

The data used for the BS4142 assessment are taken from the last assessment carried out on November 2019. Please refer to that report for details.

Day-time Assessment at receiver R1

Results	Indicator	Level	Level*	Relevant clause BS4142:2014	Commentary
		dBA	dBA		
Measured ambient sound level	LAeq (LA ₉₀)	48,7 (45,2)	49,0 (45,0)	7.1, 7.3.1	Measured in the backyard of Denison Rd. 59 residential receptor – centre of the garden, 2 m off ground
Residual sound level	LAeq, 1h	48,1 (45,7)	48,0 (46,0)		Measured in the backyard of a house in Harold Str., screened by 2 rows of houses with respect to Denison Rd. 59 receptor
Background sound level	LA ₉₀ , 1h	45,7	46,0		
Assessment made during	Day-time				
Duration	1h				
Specific sound level	LAeq	42,1	42	7.3.4, 7.3.5	
Acoustic feature correction	None	5	5	9.2	
Rating level	LAeq		47	9.2	
Background sound level	LA ₉₀ , 1h		46		
Excess of rating over background sound level			+1	11	
Assessment indicates there is no likelihood of adverse impact (< 5 dB)				11	
Uncertainty of the assessment				10	The measurement duration was made during a 20' time period. The ambient level is due to industrial noise, whereas the background noise was measured at a different location, in order to be screened by the direct noise coming from the industrial premises. Since the noise levels of ambient and residual are quite similar (differ only by 0,3 dB), it is likely that an uncertainty of up to 2 dB might be estimated.

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 36 of 79

Night-time Assessment at receiver R1

Results	Indicator	Level	Level*	Relevant clause BS4142:2014	Commentary
		dBA	dBA		
Measured ambient sound level	LAeq (LA ₉₀)	43,3 (41,4)	43,0 (41,0)	7.1, 7.3.1	Measured in the backyard of Denison Rd. 59 residential receptor – centre of the garden, 2 m off ground
Residual sound level	LAeq, 15min	43,0 (40,8)	43,0 (41,0)		Measured in the backyard of a house in Harold Str., screened by 2 rows of houses with respect to Denison Rd. 59 receptor
Background sound level	LA ₉₀ , 15min	40,8	41,0		
Assessment made during	Night-time				
Duration	20'				
Specific sound level	LAeq	31,5	32	7.3.4, 7.3.5	
Acoustic feature correction	None	5	5	9.2	
Rating level	LAeq		37	9.2	
Background sound level	LA ₉₀ , 15min		41		
Excess of rating over background sound level			-4	11	
Assessment indicates there is no likelihood of adverse impact (< 5 dB)				11	
Uncertainty of the assessment				10	The measurement duration was made during a 20' time period. The ambient level is due to industrial noise, whereas the background noise was measured at a different location, in order to be screened by the direct noise coming from the industrial premises. Since the noise levels of ambient and residual are quite similar (differ only by 0,3 dB), it is likely that an uncertainty of up to 2 dB might be estimated.

*rounded up level according to clause 8.6 [rounding is to be done on the basis that a value of 0.5 is rounded up]

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 37 of 79

ANNEX 7 – IOA MEMBERSHIP FRANCO BERTELLINO



Certificate of Membership

This is to certify that

Franco Bertellino

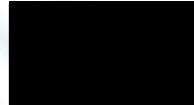
has been elected as a

Member

*of the
Institute of Acoustics*

*Given under the seal of the Institute
in accordance with the
Articles of Association and By-Laws*

President



Institute Secretary



Valid Until **31-12-2019**

Membership Number **50090**



The certificate remains the property of the Institute and shall be returned to the Institute on demand.
Membership of the Institute is subject to annual renewal.

The Institute of Acoustics Limited, 3rd Floor, St Peter's House, 45-49 Victoria Street, St Albans, Hertfordshire AL1 3WZ

Tel: +44 (0)1727 848195 Fax: +44 (0)1727 850553 email: ico@ioa.org.uk www.ioa.org.uk

Limited by Guarantee and Registered in England, No. 1157249 Registered Charity No. 267026

	Technical Report SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 38 of 79
---	---	---------------

ANNEX 8 – PLANNING COMMENTS

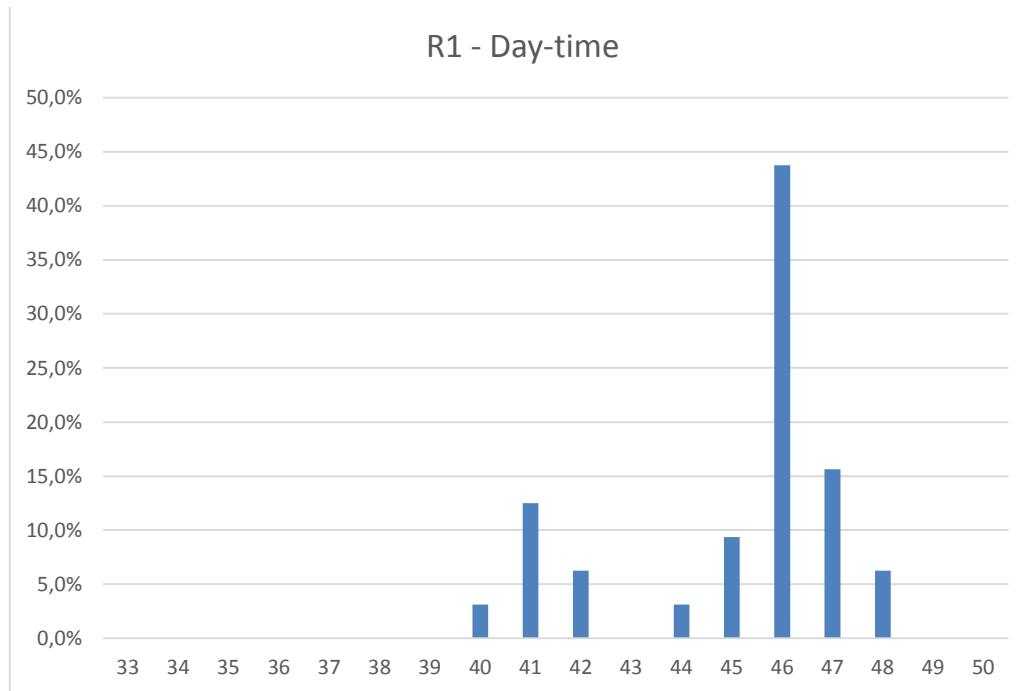
Comments were received from the Lead Officer of Environmental Health on September 19th, 2019. Below the requested replies.

Comment n.1

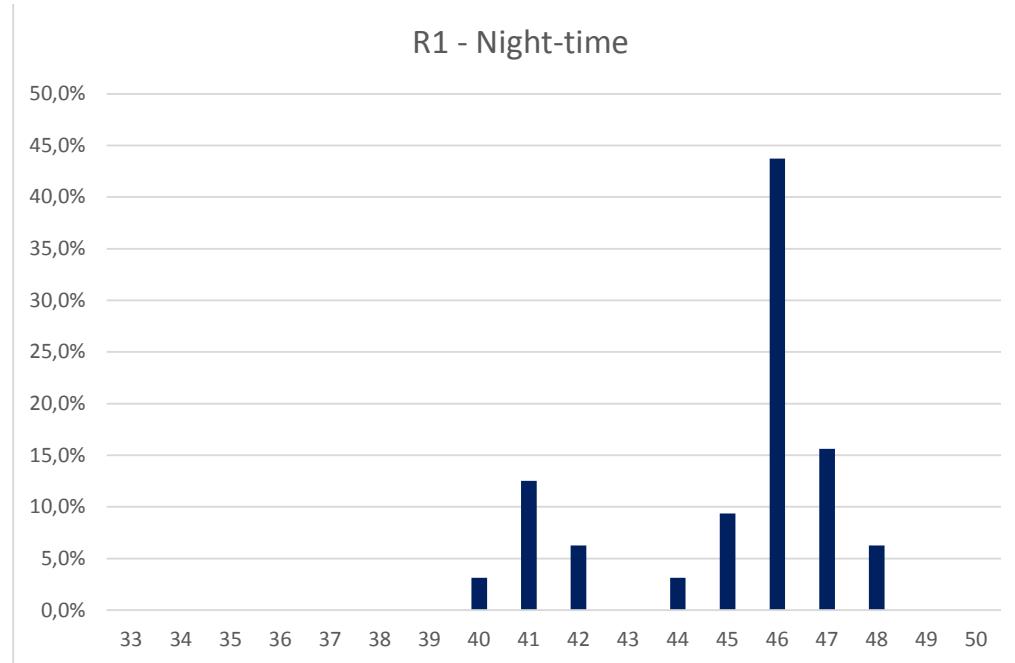
In accordance with BS4142 the representative background sound level should be derived through statistical analysis of the $dB_{LA90,1hr}$ and $dB_{LA90,15min}$ for daytime and night time hours respectively. By contrast the assessments set out in Annex 6 quotes the $dB_{LA90,16hrs}$ and $dB_{LA90,8hrs}$. The report should be amended accordingly in order to understand the fluctuating background levels throughout the monitoring period and determine which levels are considered representative.

Reply n. 1

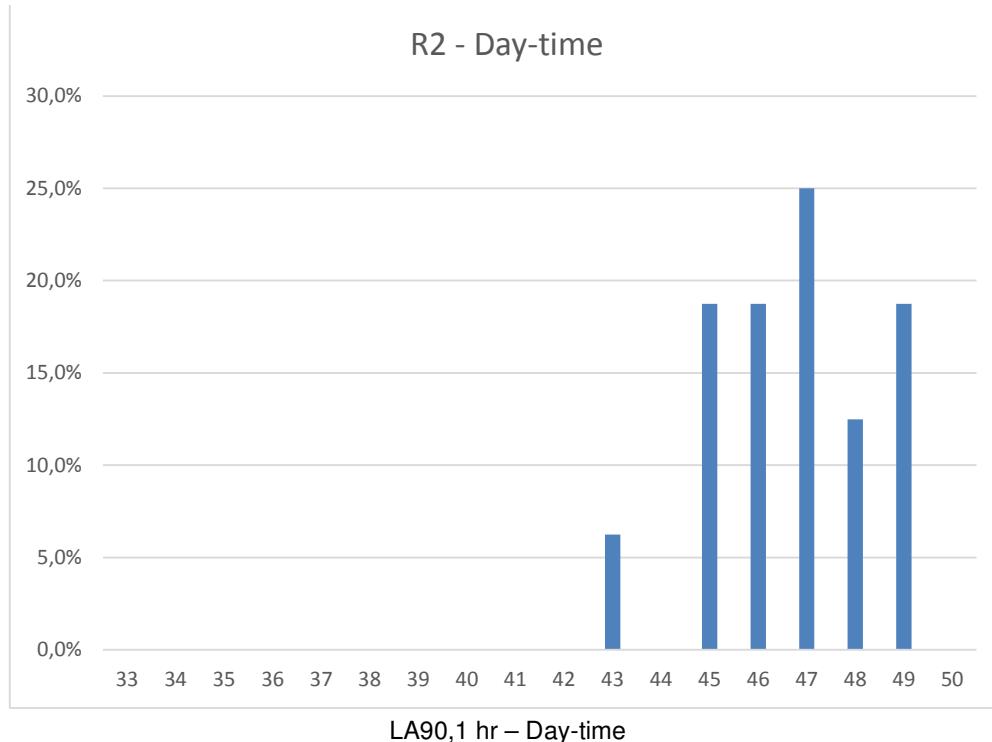
Below a table of the L_{A901hr} and $L_{A9015min}$ for the receiver R1 and R2 measured on September 3rd – 4th, 2019.



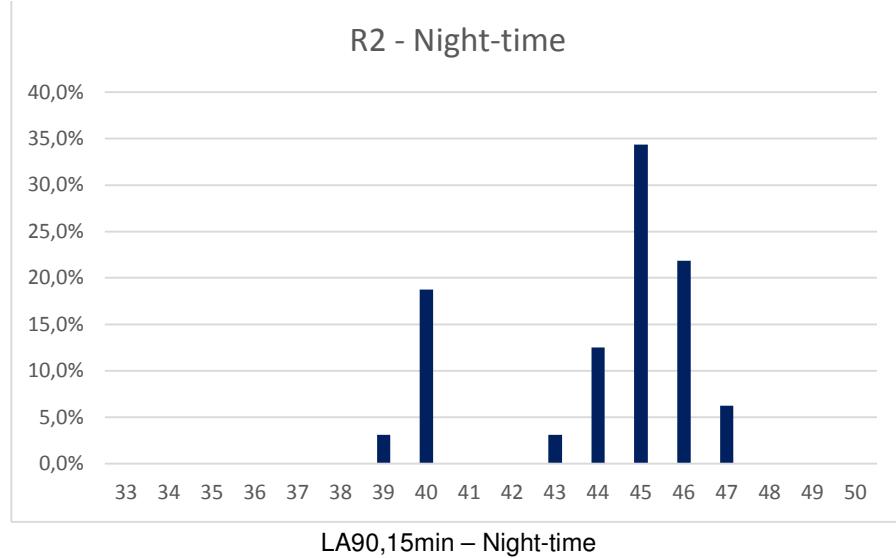
	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 39 of 79



Receiver R2 – Harold Str.



	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 40 of 79



The statistical analysis as required by BS4142:2014 yields the following most likely values for the background noise:

Receiver	Day-time	Night-time	Notes
	Background Noise L90,1hr	Background Noise L90,15min	
R1	dBA	dBA	
R1	44/45/50	45	Day-time values have the same probability. It seems reasonable to take the 45 dBA
R2	47	45	

Now, if we compare this results with the BS4142 assessment in Annex 6, we can see that the background noise used for the assessment were equal or lower than those resulting from the statistical approach, that means that the results of the assessment should be considered conservative values.

Receiver	Day-time	Day-time	Night-time	Night-time
	Background Noise L90,1hr (statistical approach)	Background Noise L90,1hr (conservative approach used for the assessment)	Background Noise L90,15min (statistical approach)	Background Noise L90,15min (conservative approach used for the assessment)
R1	dBA	dBA	dBA	
R1	45	45	45	42
R2	47	44	45	41

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 41 of 79

Comment n.2

The input data used for the noise mapping model does not specify the height of associated noise sources in order to understand whether or not noise impact is to be considered under free field conditions. In particular, using the data provided, noise levels associated with two proposed cooling towers could potentially generate a noise level of 45dB(A) free field at the predicted 330m distance to R1 and are expected to operate 24/7 (2xfans@101dB[A] & 1xpump@102dB[A]). Clarification should be sought in this regard whilst considering the representative background levels, particularly during night time hours.

Reply n. 2

It is true that the proposed cooling towers, along with the pump, do have a relevant sound emission level. Yet, it must be taken into account that we are not in a free field, since there are many obstacles that screen the propagation.

The model was developed taking into account all the existing and future buildings and tanks, that help screening the emission.

In order to give additional informations on the sources, a new annex 9, including a description of the noise sources (including their height) is given.

Comment n.3

There is no character correction for tonality, impulsivity or intermittency, understood to be on the basis that no tonal elements were found during monitoring of existing noise sources. However, some existing noise sources appear to be quieter than the proposed, for example the existing cooling tower pump is noted 89dB[A] compared with 102[A]_{LW} proposed. Further justification should be provided in this regard using methodology set out within BS4142 Annex C. Alternatively, once the representative background levels are agreed, it may be considered appropriate to agree a rating level criteria at noise sensitive receptors to account for character correction.

Reply n. 3

The existing cooling tower pump is noted 89 dBA SPL at 0,5 m, that means a sound power emission L_{WA} = 102,6 dBA. In fact,

$$L_{WA} = SPL + 10\log(S) = 89 + 13,6 = 102,6 \text{ dBA}$$

Since we have a pump size of approx. 1,5x1x1,5(h), the envelope surface at 0,5 m is 23 m², and therefore 10log(S) = 13,6 dB.

Thus, this means that we estimated the cooling tower pump emission the same as the existing one.

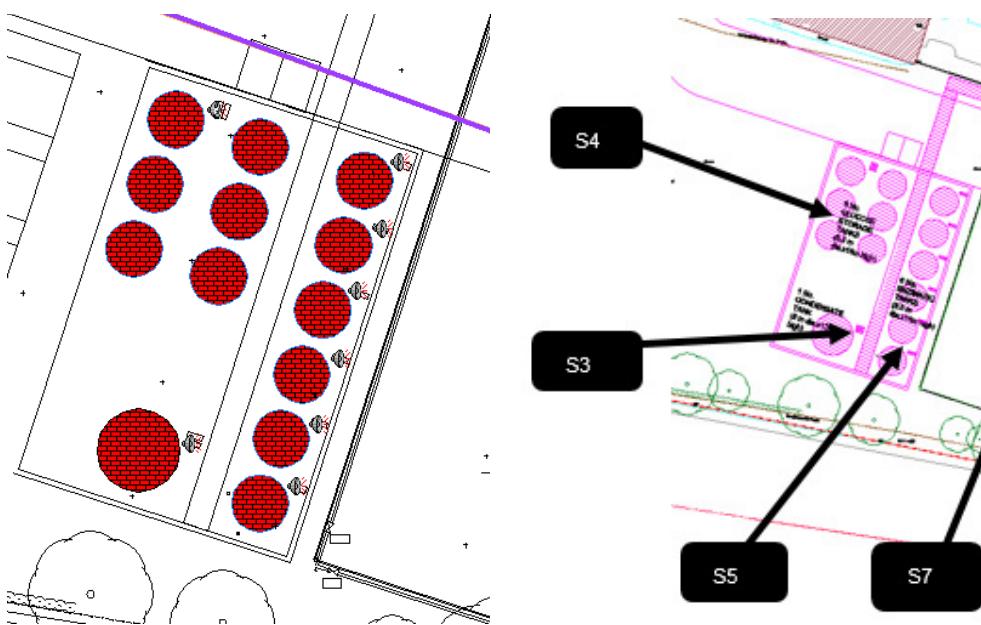
	Technical Report SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 42 of 79
--	---	---------------

Comment n.4

There are eight pumps proposed roughly 80m from R1, each of which generate a sound power level of 83dB(A). My understanding from the information provided suggests that only three pumps could be operating at any one time during daytime hours and one during night time hours. Could the applicant please confirm that my understanding is correct.

Reply n. 4

Below an image of the situation proposed, that confirms there are 8 pumps located close to the tanks at a distance in the range 85 – 95 m from receiver R1. These sources are identified as S3 (1 pump), S4 (1 pump) and S5 (5 pumps).



The working time of the pumps is described below

ID	Description	Type	q.ty	Operation cycle	Noise emission Lw, dBA	Notes
S3	Condensate Tank Pump	Point Source	1	24h/day	83,2	1 pump always working (day-time & night-time)
S4	Glucose Storage Tank Pumps	Point Source	1	6h/day	83,2	1 pump working 6h on 24 hours (it may happen that 1 pump works on day-time & on night-time, therefore it was examined the worst case, assuming 1 pump always working)
S5	Glucose Enzymatic Tank Pumps	Point Source	6	6h/day	83,2	Each pump works 6h on 24 hours. It may happen that more than 1 pump is working at the same time. We estimated the worst case, with 6 pumps working.

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 43 of 79

ANNEX 9 – NOISE SOURCES AND GEOMETRY USED IN THE PREDICTING MODEL

Emission variant	
T1	Day
T2	Night

Point source / BNPM (5)				Extension 2019
EZQa001	Label	S4	Action radius/m	99999,00
Group	Extension 2019	Lw (Day) /dB(A)		83,20
Number of nodes	1	Lw (Night) /dB(A)		83,20
Length/ m	---	Source type		Industry
Length/ m (2D)	---			
Area /m ²	---			
EZQa002	Label	S5	Action radius/m	99999,00
Group	Extension 2019	Lw (Day) /dB(A)		83,20
Number of nodes	1	Lw (Night) /dB(A)		83,20
Length/ m	---	Source type		Industry
Length/ m (2D)	---			
Area /m ²	---			
EZQa003	Label	S5-2	Action radius/m	99999,00
Group	Extension 2019	Lw (Day) /dB(A)		83,20
Number of nodes	1	Lw (Night) /dB(A)		83,20
Length/ m	---	Source type		Industry
Length/ m (2D)	---			
Area /m ²	---			
EZQa004	Label	S5-3	Action radius/m	99999,00
Group	Extension 2019	Lw (Day) /dB(A)		83,20
Number of nodes	1	Lw (Night) /dB(A)		83,20
Length/ m	---	Source type		Industry
Length/ m (2D)	---			
Area /m ²	---			
EZQa005	Label	S5-4	Action radius/m	99999,00
Group	Extension 2019	Lw (Day) /dB(A)		83,20
Number of nodes	1	Lw (Night) /dB(A)		83,20
Length/ m	---	Source type		Industry
Length/ m (2D)	---			
Area /m ²	---			

Road / RLS-90 (7)								Extension 2019
STRb013	Label	HTM 01	Action radius/m					99999,00
	Group	Extension 2019	Mult. refl.: Drefl /dB					0,00
	Number of nodes	31	Max gradient % (z-coord.)					0,00
	Length/ m	581,79	d(SS)/m (emission line)					0,00
	Length/ m (2D)	581,79	Road surface					Smooth mastic asphalt
	Area /m ²	---						
	Emiss. variant	DStrO	M in vehic/ h	p /%	v (car) /km/h	v (lorry) /km/h	Lm,25 /dB(A)	Lm,E /dB(A)
	Day	0,00	7,00	100,00	30,00	30,00	55,39	50,00
	Night	0,00	0,00	0,00	50,00	50,00	-99,00	-99,00
STRb014	Label	HTM 02	Action radius/m					99999,00
	Group	Extension 2019	Mult. refl.: Drefl /dB					0,00
	Number of nodes	36	Max gradient % (z-coord.)					0,00
	Length/ m	1073,85	d(SS)/m (emission line)					0,00
	Length/ m (2D)	1073,85	Road surface					Smooth mastic asphalt
	Area /m ²	---						
	Emiss. variant	DStrO	M in vehic/ h	p /%	v (car) /km/h	v (lorry) /km/h	Lm,25 /dB(A)	Lm,E /dB(A)
	Day	0,00	1,00	100,00	30,00	30,00	46,94	41,55
	Night	0,00	0,00	0,00	50,00	50,00	-99,00	-99,00

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 44 of 79

STRb016	Label	HTM 03-1		Action radius/m		99999,00	
	Group	Extension 2019		Mult. refl.: Drefl /dB		0,00	
	Number of nodes	41		Max gradient % (z-coord.)		0,00	
	Length/ m	1189,39		d(SS)/m (emission line)		0,00	
	Length/ m (2D)	1189,39		Road surface		Smooth mastic asphalt	
	Area /m ²	---					
	Emiss. variant	DStrO	M in vehic/ h	p /%	v (car) /km/h	v (lorry) /km/h	Lm,25 /dB(A)
	Day	0,00	100,00	4,00	30,00	30,00	58,53
	Night	0,00	0,00	0,00	50,00	50,00	-99,00
STRb017	Label	HTM 04		Action radius/m		99999,00	
	Group	Extension 2019		Mult. refl.: Drefl /dB		0,00	
	Number of nodes	45		Max gradient % (z-coord.)		0,00	
	Length/ m	1391,08		d(SS)/m (emission line)		0,00	
	Length/ m (2D)	1391,08		Road surface		Smooth mastic asphalt	
	Area /m ²	---					
	Emiss. variant	DStrO	M in vehic/ h	p /%	v (car) /km/h	v (lorry) /km/h	Lm,25 /dB(A)
	Day	0,00	1,00	100,00	30,00	30,00	46,94
	Night	0,00	0,00	0,00	50,00	50,00	-99,00
STRb018	Label	HTM 03-2		Action radius/m		99999,00	
	Group	Extension 2019		Mult. refl.: Drefl /dB		0,00	
	Number of nodes	11		Max gradient % (z-coord.)		0,00	
	Length/ m	249,52		d(SS)/m (emission line)		0,00	
	Length/ m (2D)	249,52		Road surface		Smooth mastic asphalt	
	Area /m ²	---					
	Emiss. variant	DStrO	M in vehic/ h	p /%	v (car) /km/h	v (lorry) /km/h	Lm,25 /dB(A)
	Day	0,00	1,00	100,00	30,00	30,00	46,94
	Night	0,00	0,00	0,00	50,00	50,00	-99,00
STRb019	Label	HTM 05		Action radius/m		99999,00	
	Group	Extension 2019		Mult. refl.: Drefl /dB		0,00	
	Number of nodes	41		Max gradient % (z-coord.)		0,00	
	Length/ m	1081,34		d(SS)/m (emission line)		0,00	
	Length/ m (2D)	1081,34		Road surface		Smooth mastic asphalt	
	Area /m ²	---					
	Emiss. variant	DStrO	M in vehic/ h	p /%	v (car) /km/h	v (lorry) /km/h	Lm,25 /dB(A)
	Day	0,00	1,00	100,00	30,00	30,00	46,94
	Night	0,00	0,00	0,00	50,00	50,00	-99,00

Point source /ISO 96 (46)							
EZQi051	Label	S23-1					
	Group	Gruppo 0					
	Number of nodes	1					
	Length/ m	---					
	Length/ m (2D)	Emission is					
	Area /m ²	Sound power level (Lw)					
		Emi.					
		Emission					
		Sound insul.					
		Correction					
		Lw					
		dB(A)					
		dB					
		dB(A)					
		Day					
		83,20					
		-					
		83,20					
		Night					
		-99,00					
		-					
		-99,00					
EZQi052	Label	S24					
	Group	Gruppo 0					
	Number of nodes	1					
	Length/ m	---					
	Length/ m (2D)	Emission is					
	Area /m ²	Sound power level (Lw)					
		Emi.					
		Emission					
		Sound insul.					
		Correction					
		Lw					
		dB(A)					
		dB					
		dB(A)					
		Day					
		83,20					
		-					
		83,20					
		Night					
		-99,00					
		-					
		-99,00					
EZQi053	Label	S3					
	Group	Extension 2019					
	Number of nodes	1					
	Length/ m	---					
	Length/ m (2D)	Emission is					
	Area /m ²	Sound power level (Lw)					
		Emi.					
		Emission					
		Sound insul.					
		Correction					
		Lw					
		dB(A)					
		dB					
		dB(A)					
		Day					
		83,20					
		-					
		83,20					
		Night					
		-99,00					
		-					
		-99,00					

	Technical Report					
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN					Page 45 of 79

	Length/ m (2D)	---	Emi. variant	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi054	Label	S5-5	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi. variant	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi055	Label	S5-6	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi. variant	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi056	Label	S9-1	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi. variant	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi057	Label	S9-2	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi. variant	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi058	Label	S8-1	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi. variant	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi059	Label	S8-2	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi. variant	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	93,40	-	-	93,40	
			Night	93,40	-	-	93,40	
EZQi060	Label	S8-2-2	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi. variant	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	93,40	-	-	93,40	

	Technical Report					
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN					Page 46 of 79

EZQi061	Label	S10-1	Night	93,40	-	-	93,40	
	Group	Extension 2019	D0					99999,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi062	Label	S10-2	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	99,40	-	-	99,40	
			Night	99,40	-	-	99,40	
EZQi063	Label	S10-3	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	93,40	-	-	93,40	
			Night	93,40	-	-	93,40	
EZQi067	Label	S10-1*	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi068	Label	S10-2*	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	99,40	-	-	99,40	
			Night	99,40	-	-	99,40	
EZQi069	Label	S10-3*	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	93,40	-	-	93,40	
			Night	93,40	-	-	93,40	
EZQi070	Label	S10-1*	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is					Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi071	Label	S10-2*	Action radius/m					99999,00
	Group	Extension 2019	D0					0,00

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 47 of 79

	Number of nodes	1	High building/high noise source					No
	Length/ m	---	Emission is			Sound power level (Lw)		
	Length/ m (2D)	---	Emi. various	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	99,40	-	-	99,40	
			Night	99,40	-	-	99,40	
EZQi072	Label	S10-3*	Action radius/m			99999,00		
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					
	Length/ m	---	Emission is			Sound power level (Lw)		
	Length/ m (2D)	---	Emi. various	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	93,40	-	-	93,40	
			Night	93,40	-	-	93,40	
EZQi073	Label	S10-1**	Action radius/m			99999,00		
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					
	Length/ m	---	Emission is			Sound power level (Lw)		
	Length/ m (2D)	---	Emi. various	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi074	Label	S10-2**	Action radius/m			99999,00		
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					
	Length/ m	---	Emission is			Sound power level (Lw)		
	Length/ m (2D)	---	Emi. various	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	99,40	-	-	99,40	
			Night	99,40	-	-	99,40	
EZQi075	Label	S10-3**	Action radius/m			99999,00		
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					
	Length/ m	---	Emission is			Sound power level (Lw)		
	Length/ m (2D)	---	Emi. various	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	93,40	-	-	93,40	
			Night	93,40	-	-	93,40	
EZQi076	Label	S10-1**	Action radius/m			99999,00		
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					
	Length/ m	---	Emission is			Sound power level (Lw)		
	Length/ m (2D)	---	Emi. various	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	83,20	-	-	83,20	
			Night	83,20	-	-	83,20	
EZQi077	Label	S10-2**	Action radius/m			99999,00		
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					
	Length/ m	---	Emission is			Sound power level (Lw)		
	Length/ m (2D)	---	Emi. various	Emission	Sound insul.	Correction	Lw	
	Area /m ²	---		dB(A)	dB	dB	dB(A)	
			Day	99,40	-	-	99,40	
			Night	99,40	-	-	99,40	
EZQi078	Label	S10-3**	Action radius/m			99999,00		
	Group	Extension 2019	D0					0,00
	Number of nodes	1	High building/high noise source					
	Length/ m	---	Emission is			Sound power level (Lw)		
	Length/ m (2D)	---	Emi. various	Emission	Sound insul.	Correction	Lw	

	Technical Report					
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN					Page 48 of 79

	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	93,40	-	-	93,40
			Night	93,40	-	-	93,40
EZQi080	Label	S11	Action radius/m			99999,00	
	Group	Gruppo 0	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	61,90	-	-	61,90
			Night	-99,00	-	-	-99,00
EZQi081	Label	S12-1	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	94,20	-	-	94,20
			Night	94,20	-	-	94,20
EZQi082	Label	S12-2	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	101,70	-	-	101,70
			Night	101,70	-	-	101,70
EZQi083	Label	S12-3	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	95,00	-	-	95,00
			Night	95,00	-	-	95,00
EZQi084	Label	S13	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	98,90	-	-	98,90
			Night	98,90	-	-	98,90
EZQi085	Label	S14-2-1	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	101,00	-	-	101,00
			Night	101,00	-	-	101,00
EZQi086	Label	S14-2-2	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	101,00	-	-	101,00
			Night	101,00	-	-	101,00

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 49 of 79

EZQi087	Label	S14-1	Action radius/m				99999,00
	Group	Gruppo 0	D0				0,00
	Number of nodes	1	High building/high noise source				No
	Length/ m	---	Emission is				Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	101,80	-	-	101,80
			Night	101,80	-	-	101,80
EZQi088	Label	S22	Action radius/m				99999,00
	Group	Extension 2019	D0				0,00
	Number of nodes	1	High building/high noise source				No
	Length/ m	---	Emission is				Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	83,20	-	-	83,20
			Night	-99,00	-	-	-99,00
EZQi089	Label	S25-1	Action radius/m				99999,00
	Group	Extension 2019	D0				0,00
	Number of nodes	1	High building/high noise source				No
	Length/ m	---	Emission is				Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	99,40	-	-	99,40
			Night	99,40	-	-	99,40
EZQi090	Label	S25-1	Action radius/m				99999,00
	Group	Extension 2019	D0				0,00
	Number of nodes	1	High building/high noise source				No
	Length/ m	---	Emission is				Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	99,40	-	-	99,40
			Night	99,40	-	-	99,40
EZQi091	Label	S25-2	Action radius/m				99999,00
	Group	Extension 2019	D0				0,00
	Number of nodes	1	High building/high noise source				No
	Length/ m	---	Emission is				Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	87,30	-	-	87,30
			Night	-99,00	-	-	-99,00
EZQi092	Label	S25-2	Action radius/m				99999,00
	Group	Extension 2019	D0				0,00
	Number of nodes	1	High building/high noise source				No
	Length/ m	---	Emission is				Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	87,30	-	-	87,30
			Night	-99,00	-	-	-99,00
EZQi093	Label	Chimney 1 Dry-Mill 0,55 cm diam.	Action radius/m				99999,00
	Group	Extension 2019	D0				0,00
	Number of nodes	1	High building/high noise source				No
	Length/ m	---	Emission is				Sound power level (Lw)
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---		dB(A)	dB	dB	dB(A)
			Day	90,40	-	-	90,40
			Night	90,40	-	-	90,40
EZQi094	Label	Dry Mill Chimney 2 0,88 cm diam.	Action radius/m				99999,00
	Group	Extension 2019	D0				0,00
	Number of nodes	1	High building/high noise source				No

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 50 of 79

	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---			dB(A)	dB	dB(A)
			Day	88,10	-	-	88,10
			Night	88,10	-	-	88,10
EZQi095	Label	Gluten Dryer chimney	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---			dB(A)	dB	dB(A)
			Day	78,00	-	-	78,00
			Night	78,00	-	-	78,00
EZQi096	Label	Dry Mill Chimney 3 1,12 m diam.	Action radius/m			99999,00	
	Group	Gruppo 0	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---			dB(A)	dB	dB(A)
			Day	88,00	-	-	88,00
			Night	88,00	-	-	88,00
EZQi097	Label	Dry Mill Chimney 4 1,12 m diam.	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---			dB(A)	dB	dB(A)
			Day	85,00	-	-	85,00
			Night	85,00	-	-	85,00
EZQi098	Label	Sound source18-1 Cochlea	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---			dB(A)	dB	dB(A)
			Day	88,80	-	-	88,80
			Night	-99,00	-	-	-99,00
EZQi099	Label	S17 Cochlea	Action radius/m			99999,00	
	Group	Gruppo 0	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---			dB(A)	dB	dB(A)
			Day	88,80	-	-	88,80
			Night	-99,00	-	-	-99,00
EZQi100	Label	S15 Cochlea	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	1	High building/high noise source			No	
	Length/ m	---	Emission is			Sound power level (Lw)	
	Length/ m (2D)	---	Emi.	Emission	Sound insul.	Correction	Lw
	Area /m ²	---			dB(A)	dB	dB(A)
			Day	88,80	-	-	88,80
			Night	-99,00	-	-	-99,00

Line source/ISO 9613 (4)				Extension 2019
LiQi001	Label	S7 - Bucket Elevator	Action radius/m	99999,00
	Group	Extension 2019	D0	0,00
	Number of nodes	6	High building/high noise source	No
	Length/ m	45,18	Emission is	Sound pressure level (Lp)

	Technical Report							
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 51 of 79	

	Length/ m (2D)	45,18	Emi. various	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	---		dB(A)	dB	dB	dB(A)	dB(A)
			Day	78,10	-	-	100,67	84,12
			Night	-99,00	-	-	-99,00	
				equivalent width /m				4,00
LIQi002	Label	S18-2	Action radius/m					
	Group	Extension 2019	D0					
	Number of nodes	2	High building/high noise source					
	Length/ m	22,00	Emission is					
	Length/ m (2D)	0,00	Emi. various	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	---		dB(A)	dB	dB	dB(A)	dB(A)
			Day	78,10	-	-	97,54	84,12
			Night	-99,00	-	-	-99,00	
				equivalent width /m				4,00
LIQi003	Label	S18-2	Action radius/m					
	Group	Extension 2019	D0					
	Number of nodes	2	High building/high noise source					
	Length/ m	22,00	Emission is					
	Length/ m (2D)	0,02	Emi. various	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	---		dB(A)	dB	dB	dB(A)	dB(A)
			Day	78,10	-	-	97,54	84,12
			Night	-99,00	-	-	-99,00	
				equivalent width /m				4,00
LIQi004	Label	Wheat unloading S21	Action radius/m					
	Group	Extension 2019	D0					
	Number of nodes	5	High building/high noise source					
	Length/ m	32,38	Emission is					
	Length/ m (2D)	32,38	Emi. various	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	---		dB(A)	dB	dB	dB(A)	dB(A)
			Day	78,10	-	-	99,22	84,12
			Night	-99,00	-	-	-99,00	
				equivalent width /m				4,00

	Area source/ISO 9613 (68)									
FLQi0295	Label	S23-2/WAND1	Action radius/m							
	Group	Extension 2019	D0							
	Number of nodes	5	High building/high noise source							
	Length/ m	38,00	Emission is							
	Length/ m (2D)	30,00	Emi. various	Emission	Sound insul.	Correction	Lw	Lw'		
	Area /m ²	60,00		dB(A)	dB	dB	dB(A)	dB(A)		
			Day	85,00	35,00	-	64,78	47,00		
			Night	85,00	35,00	-	64,78	47,00		
				C(difus) /dB			EN 12354-4; B.1-2: -3,0			
FLQi0296	Label	S23-2/WAND2	Action radius/m							
	Group	Extension 2019	D0							
	Number of nodes	5	High building/high noise source							
	Length/ m	28,00	Emission is							
	Length/ m (2D)	20,00	Emi. various	Emission	Sound insul.	Correction	Lw	Lw'		
	Area /m ²	40,00		dB(A)	dB	dB	dB(A)	dB(A)		
			Day	85,00	35,00	-	63,02	47,00		
			Night	85,00	35,00	-	63,02	47,00		
				C(difus) /dB			EN 12354-4; B.1-2: -3,0			
FLQi0297	Label	S23-2/WAND3	Action radius/m							
	Group	Extension 2019	D0							
	Number of nodes	5	High building/high noise source							
	Length/ m	38,00	Emission is							
	Length/ m (2D)	30,00	Emi. various	Emission	Sound insul.	Correction	Lw	Lw'		
	Area /m ²	60,00		dB(A)	dB	dB	dB(A)	dB(A)		
			Day	85,00	35,00	-	64,78	47,00		

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 52 of 79

			Night	85,00	35,00	-	64,78	47,00
			C(diffus) /dB					
FLQi0298	Label	S23-2/WAND4	Action radius/m				EN 12354-4; B.1-2: -3,0	
	Group	Extension 2019	D0				99999,00	
	Number of nodes	5	High building/high noise source				No	
	Length/ m	28,00	Emission is				Indoor level (Lp)	
	Length/ m (2D)	20,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	40,00		dB(A)	dB	dB	dB(A)	dB(A)
			Day	85,00	35,00	-	63,02	47,00
			Night	85,00	35,00	-	63,02	47,00
			C(diffus) /dB				EN 12354-4; B.1-2: -3,0	
FLQi0299	Label	S23-2/DACH	Action radius/m				99999,00	
	Group	Extension 2019	D0				0,00	
	Number of nodes	5	High building/high noise source				No	
	Length/ m	50,00	Emission is				Indoor level (Lp)	
	Length/ m (2D)	50,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	150,00		dB(A)	dB	dB	dB(A)	dB(A)
			Day	85,00	35,00	-	68,76	47,00
			Night	85,00	35,00	-	68,76	47,00
			C(diffus) /dB				EN 12354-4; B.1-4: -3,0	
FLQi0300	Label	HLIN/WAND1	Action radius/m				99999,00	
	Group	Extension 2019	D0				0,00	
	Number of nodes	5	High building/high noise source				No	
	Length/ m	28,40	Emission is				Indoor level (Lp)	
	Length/ m (2D)	12,40	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	49,58		dB(A)	dB	dB	dB(A)	dB(A)
			Day	85,00	35,00	-	63,95	47,00
			Night	85,00	35,00	-	63,95	47,00
			C(diffus) /dB				EN 12354-4; B.1-2: -3,0	
FLQi0301	Label	HLIN/WAND2	Action radius/m				99999,00	
	Group	Extension 2019	D0				0,00	
	Number of nodes	5	High building/high noise source				No	
	Length/ m	40,78	Emission is				Indoor level (Lp)	
	Length/ m (2D)	24,78	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	99,14		dB(A)	dB	dB	dB(A)	dB(A)
			Day	85,00	35,00	-	66,96	47,00
			Night	85,00	35,00	-	66,96	47,00
			C(diffus) /dB				EN 12354-4; B.1-2: -3,0	
FLQi0302	Label	HLIN/WAND3	Action radius/m				99999,00	
	Group	Extension 2019	D0				0,00	
	Number of nodes	5	High building/high noise source				No	
	Length/ m	27,87	Emission is				Indoor level (Lp)	
	Length/ m (2D)	11,87	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	47,48		dB(A)	dB	dB	dB(A)	dB(A)
			Day	85,00	35,00	-	63,76	47,00
			Night	85,00	35,00	-	63,76	47,00
			C(diffus) /dB				EN 12354-4; B.1-2: -3,0	
FLQi0303	Label	HLIN/WAND4	Action radius/m				99999,00	
	Group	Extension 2019	D0				0,00	
	Number of nodes	5	High building/high noise source				No	
	Length/ m	40,62	Emission is				Indoor level (Lp)	
	Length/ m (2D)	24,62	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	98,49		dB(A)	dB	dB	dB(A)	dB(A)
			Day	85,00	35,00	-	66,93	47,00
			Night	85,00	35,00	-	66,93	47,00
			C(diffus) /dB				EN 12354-4; B.1-2: -3,0	
FLQi0304	Label	HLIN/DACH	Action radius/m				99999,00	
	Group	Extension 2019	D0				0,00	
	Number of nodes	5	High building/high noise source				No	

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 53 of 79

	Length/ m	36,84	Emission is			Indoor level (Lp)	
	Length/ m (2D)	36,84	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	74,92			dB(A)	dB	dB dB(A) dB(A)
			Day	85,00	35,00	-	65,75 47,00
			Night	85,00	35,00	-	65,75 47,00
			C(diffus) /dB			EN 12354-4; B.1-2: -3,0	
FLQi0330	Label	HLIN/WAND1	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	5	High building/high noise source			No	
	Length/ m	43,93	Emission is			SPL per unit area (Lw/m ²)	
	Length/ m (2D)	23,93	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	119,65			dB(A)	dB	dB dB(A) dB(A)
			Day	0,00	-	-	12,08 0,00
			Night	0,00	-	-	12,08 0,00
FLQi0330 /1	Label	Opening 1	Action radius/m			99999,00	
Opening	Group	Extension 2019	D0			0,00	
(FLQi1000)	Number of nodes	5	High building/high noise source			No	
	Length/ m	31,00	Emission is			SPL per unit area (Lw/m ²)	
	Length/ m (2D)	23,00	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	46,00			dB(A)	dB	dB dB(A) dB(A)
			Day	79,10	-	-	95,73 79,10
			Night	79,10	-	-	95,73 79,10
FLQi0330 /2	Label	Opening 2	Action radius/m			99999,00	
Opening	Group	Extension 2019	D0			0,00	
(FLQi1001)	Number of nodes	5	High building/high noise source			No	
	Length/ m	33,00	Emission is			SPL per unit area (Lw/m ²)	
	Length/ m (2D)	23,00	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	57,50			dB(A)	dB	dB dB(A) dB(A)
			Day	77,10	-	-	94,70 77,10
			Night	77,10	-	-	94,70 77,10
FLQi0331	Label	HLIN/WAND2	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	5	High building/high noise source			No	
	Length/ m	32,80	Emission is			SPL per unit area (Lw/m ²)	
	Length/ m (2D)	12,80	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	63,99			dB(A)	dB	dB dB(A) dB(A)
			Day	79,10	-	-	97,16 79,10
			Night	79,10	-	-	97,16 79,10
FLQi0332	Label	HLIN/WAND3	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	5	High building/high noise source			No	
	Length/ m	30,98	Emission is			SPL per unit area (Lw/m ²)	
	Length/ m (2D)	10,98	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	54,88			dB(A)	dB	dB dB(A) dB(A)
			Day	-99,00	-	-	-99,00
			Night	-99,00	-	-	-99,00
FLQi0332 /1	Label	Opening 1	Action radius/m			99999,00	
Opening	Group	Extension 2019	D0			0,00	
(FLQi1002)	Number of nodes	5	High building/high noise source			No	
	Length/ m	19,00	Emission is			SPL per unit area (Lw/m ²)	
	Length/ m (2D)	10,00	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	22,50			dB(A)	dB	dB dB(A) dB(A)
			Day	77,90	-	-	91,42 77,90
			Night	77,90	-	-	91,42 77,90
FLQi0333	Label	HLIN/WAND4	Action radius/m			99999,00	
	Group	Extension 2019	D0			0,00	
	Number of nodes	5	High building/high noise source			No	
	Length/ m	52,64	Emission is			SPL per unit area (Lw/m ²)	
	Length/ m (2D)	32,64	Emi.	Emission	Sound insul.	Correction	Lw Lw"

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 54 of 79

	Area /m ²	163,20		dB(A)	dB	dB	dB(A)	dB(A)
			Day	-99,00	-	-	-99,00	
			Night	-99,00	-	-	-99,00	
FLQi0333 /1	Label	Opening 1	Action radius/m				99999,00	
Opening	Group	Extension 2019	D0				0,00	
(FLQi1003)	Number of nodes	5	High building/high noise source				No	
	Length/ m	41,00	Emission is				SPL per unit area (Lw/m ²)	
	Length/ m (2D)	32,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	72,00			dB(A)	dB	dB(A)	dB(A)
			Day	75,00	-	-	93,57	75,00
			Night	75,00	-	-	93,57	75,00
FLQi0333 /2	Label	Opening 2	Action radius/m				99999,00	
Opening	Group	Extension 2019	D0				0,00	
(FLQi1004)	Number of nodes	5	High building/high noise source				No	
	Length/ m	41,00	Emission is				SPL per unit area (Lw/m ²)	
	Length/ m (2D)	32,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	72,00			dB(A)	dB	dB(A)	dB(A)
			Day	74,20	-	-	92,77	74,20
			Night	74,20	-	-	92,77	74,20
FLQi0334	Label	HLIN/WAND5	Action radius/m				99999,00	
	Group	Extension 2019	D0				0,00	
	Number of nodes	5	High building/high noise source				No	
	Length/ m	55,42	Emission is				SPL per unit area (Lw/m ²)	
	Length/ m (2D)	35,42	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	177,11			dB(A)	dB	dB(A)	dB(A)
			Day	-99,00	-	-	-99,00	
			Night	-99,00	-	-	-99,00	
FLQi0334 /1	Label	Opening 1	Action radius/m				99999,00	
Opening	Group	Extension 2019	D0				0,00	
(FLQi1005)	Number of nodes	5	High building/high noise source				No	
	Length/ m	44,00	Emission is				SPL per unit area (Lw/m ²)	
	Length/ m (2D)	35,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	78,75			dB(A)	dB	dB(A)	dB(A)
			Day	75,70	-	-	94,66	75,70
			Night	75,70	-	-	94,66	75,70
FLQi0334 /2	Label	Opening 2	Action radius/m				99999,00	
Opening	Group	Extension 2019	D0				0,00	
(FLQi1006)	Number of nodes	5	High building/high noise source				No	
	Length/ m	44,00	Emission is				SPL per unit area (Lw/m ²)	
	Length/ m (2D)	35,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	78,75			dB(A)	dB	dB(A)	dB(A)
			Day	74,20	-	-	93,16	74,20
			Night	74,20	-	-	93,16	74,20
FLQi0335	Label	HLIN/WAND6	Action radius/m				99999,00	
	Group	Extension 2019	D0				0,00	
	Number of nodes	5	High building/high noise source				No	
	Length/ m	65,17	Emission is				SPL per unit area (Lw/m ²)	
	Length/ m (2D)	45,17	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	225,85			dB(A)	dB	dB(A)	dB(A)
			Day	-99,00	-	-	-99,00	
			Night	-99,00	-	-	-99,00	
FLQi0335 /1	Label	Opening 1	Action radius/m				99999,00	
Opening	Group	Extension 2019	D0				0,00	
(FLQi1007)	Number of nodes	5	High building/high noise source				No	
	Length/ m	52,00	Emission is				SPL per unit area (Lw/m ²)	
	Length/ m (2D)	44,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	88,00			dB(A)	dB	dB(A)	dB(A)
			Day	79,10	-	-	98,54	79,10
			Night	79,10	-	-	98,54	79,10

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 55 of 79

FLQi0335 /2	Label	Opening 2	Action radius/m				99999,00
Opening	Group	Extension 2019	D0				0,00
(FLQi1008)	Number of nodes	5	High building/high noise source				No
	Length/ m	55,00	Emission is				SPL per unit area (Lw/m ²)
	Length/ m (2D)	44,00	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	121,00		dB(A)	dB	dB	dB(A) dB(A)
			Day	76,00	-	-	96,83 76,00
			Night	76,00	-	-	96,83 76,00
FLQi0336	Label	HLIN/DACH	Action radius/m				99999,00
	Group	Extension 2019	D0				0,00
	Number of nodes	7	High building/high noise source				No
	Length/ m	80,47	Emission is				SPL per unit area (Lw/m ²)
	Length/ m (2D)	80,47	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	363,23		dB(A)	dB	dB	dB(A) dB(A)
			Day	76,20	-	-	101,80 76,20
			Night	76,20	-	-	101,80 76,20
FLQi0549	Label	HLIN/WAND1	Action radius/m				99999,00
	Group	Extension 2019	D0				0,00
	Number of nodes	5	High building/high noise source				No
	Length/ m	86,12	Emission is				Indoor level (Lp)
	Length/ m (2D)	53,12	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	438,28		dB(A)	dB	dB	dB(A) dB(A)
			Day	83,20	30,00	-	79,25 53,20
			Night	83,20	30,00	-	79,25 53,20
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0
FLQi0549 /1	Label	Louvre (1)	Action radius/m				99999,00
Opening	Group	Extension 2019	D0				0,00
(FLQi1009)	Number of nodes	5	High building/high noise source				No
	Length/ m	10,00	Emission is				Indoor level (Lp)
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	6,00		dB(A)	dB	dB	dB(A) dB(A)
			Day	83,20	19,00	-	71,98 64,20
			Night	83,20	19,00	-	71,98 64,20
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0
FLQi0549 /2	Label	Louvre (2)	Action radius/m				99999,00
Opening	Group	Extension 2019	D0				0,00
(FLQi1010)	Number of nodes	5	High building/high noise source				No
	Length/ m	10,00	Emission is				Indoor level (Lp)
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	6,00		dB(A)	dB	dB	dB(A) dB(A)
			Day	83,20	19,00	-	71,98 64,20
			Night	83,20	19,00	-	71,98 64,20
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0
FLQi0549 /3	Label	Louvre (3)	Action radius/m				99999,00
Opening	Group	Extension 2019	D0				0,00
(FLQi1011)	Number of nodes	5	High building/high noise source				No
	Length/ m	10,00	Emission is				Indoor level (Lp)
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	6,00		dB(A)	dB	dB	dB(A) dB(A)
			Day	83,20	19,00	-	71,98 64,20
			Night	83,20	19,00	-	71,98 64,20
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0
FLQi0549 /4	Label	Opening 4	Action radius/m				99999,00
Opening	Group	Extension 2019	D0				0,00
(FLQi1012)	Number of nodes	5	High building/high noise source				No
	Length/ m	10,00	Emission is				Indoor level (Lp)
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw Lw"
	Area /m ²	6,00		dB(A)	dB	dB	dB(A) dB(A)
			Day	83,20	19,00	-	71,98 64,20

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 56 of 79

			Night	83,20	19,00	-	71,98	64,20
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0549 /5	Label	Opening 5	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1013)	Number of nodes	5	High building/high noise source					
	Length/ m	10,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	6,00				dB(A)	dB	dB(A)
			Day	83,20	19,00	-	71,98	64,20
			Night	83,20	19,00	-	71,98	64,20
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0549 /6	Label	Opening 6	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1014)	Number of nodes	5	High building/high noise source					
	Length/ m	10,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	6,00				dB(A)	dB	dB(A)
			Day	83,20	19,00	-	71,98	64,20
			Night	83,20	19,00	-	71,98	64,20
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0550	Label	HLIN/WAND2	Action radius/m					
	Group	Extension 2019	D0					
	Number of nodes	5	High building/high noise source					
	Length/ m	104,74	Emission is					
	Length/ m (2D)	71,74	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	591,82				dB(A)	dB	dB(A)
			Day	-99,00	-	-	-99,00	
			Night	-99,00	-	-	-99,00	
FLQi0551	Label	HLIN/WAND3	Action radius/m					
	Group	Extension 2019	D0					
	Number of nodes	5	High building/high noise source					
	Length/ m	85,94	Emission is					
	Length/ m (2D)	52,94	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	436,77				dB(A)	dB	dB(A)
			Day	-99,00	-	-	-99,00	
			Night	-99,00	-	-	-99,00	
FLQi0552	Label	HLIN/WAND4	Action radius/m					
	Group	Extension 2019	D0					
	Number of nodes	5	High building/high noise source					
	Length/ m	104,64	Emission is					
	Length/ m (2D)	71,64	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	591,05				dB(A)	dB	dB(A)
			Day	83,20	30,00	-	80,60	53,20
			Night	83,20	30,00	-	80,60	53,20
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0552 /1	Label	Opening 1	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1015)	Number of nodes	5	High building/high noise source					
	Length/ m	10,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	6,00				dB(A)	dB	dB(A)
			Day	83,20	19,00	-	71,98	64,20
			Night	83,20	19,00	-	71,98	64,20
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0552 /2	Label	Opening 2	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1016)	Number of nodes	5	High building/high noise source					
	Length/ m	10,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 57 of 79

	Area /m ²	6,00		dB(A)	dB	dB	dB(A)	dB(A)			
			Day	83,20	19,00	-	71,98	64,20			
			Night	83,20	19,00	-	71,98	64,20			
			C(difus) /dB			EN 12354-4; B.1-5: 0,0					
FLQi0552 /3	Label	Opening 3	Action radius/m								
Opening	Group	Extension 2019	D0								
(FLQi1017)	Number of nodes	5	High building/high noise source								
	Length/ m	10,00	Emission is								
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"			
	Area /m ²	6,00		dB(A)	dB	dB	dB(A)	dB(A)			
			Day	83,20	19,00	-	71,98	64,20			
			Night	83,20	19,00	-	71,98	64,20			
			C(difus) /dB			EN 12354-4; B.1-5: 0,0					
FLQi0552 /4	Label	Opening 4 (1)	Action radius/m								
Opening	Group	Extension 2019	D0								
(FLQi1018)	Number of nodes	5	High building/high noise source								
	Length/ m	10,00	Emission is								
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"			
	Area /m ²	6,00		dB(A)	dB	dB	dB(A)	dB(A)			
			Day	83,20	19,00	-	71,98	64,20			
			Night	83,20	19,00	-	71,98	64,20			
			C(difus) /dB			EN 12354-4; B.1-5: 0,0					
FLQi0552 /5	Label	Opening 4 (2)	Action radius/m								
Opening	Group	Extension 2019	D0								
(FLQi1019)	Number of nodes	5	High building/high noise source								
	Length/ m	10,00	Emission is								
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"			
	Area /m ²	6,00		dB(A)	dB	dB	dB(A)	dB(A)			
			Day	83,20	19,00	-	71,98	64,20			
			Night	83,20	19,00	-	71,98	64,20			
			C(difus) /dB			EN 12354-4; B.1-5: 0,0					
FLQi0552 /6	Label	Opening 4	Action radius/m								
Opening	Group	Extension 2019	D0								
(FLQi1020)	Number of nodes	5	High building/high noise source								
	Length/ m	10,00	Emission is								
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"			
	Area /m ²	6,00		dB(A)	dB	dB	dB(A)	dB(A)			
			Day	83,20	19,00	-	71,98	64,20			
			Night	83,20	19,00	-	71,98	64,20			
			C(difus) /dB			EN 12354-4; B.1-5: 0,0					
FLQi0552 /7	Label	Opening 7	Action radius/m								
Opening	Group	Extension 2019	D0								
(FLQi1021)	Number of nodes	5	High building/high noise source								
	Length/ m	10,00	Emission is								
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"			
	Area /m ²	6,00		dB(A)	dB	dB	dB(A)	dB(A)			
			Day	83,20	19,00	-	71,98	64,20			
			Night	83,20	19,00	-	71,98	64,20			
			C(difus) /dB			EN 12354-4; B.1-5: 0,0					
FLQi0553	Label	HLIN/DACH	Action radius/m								
	Group	Extension 2019	D0								
	Number of nodes	5	High building/high noise source								
	Length/ m	124,72	Emission is								
	Length/ m (2D)	124,72	Emi.	Emission	Sound insul.	Correction	Lw	Lw"			
	Area /m ²	950,48		dB(A)	dB	dB	dB(A)	dB(A)			
			Day	83,20	30,00	-	82,82	53,20			
			Night	83,20	30,00	-	82,82	53,20			
			C(difus) /dB			EN 12354-4; B.1-5: 0,0					
FLQi0553 /1	Label	Roof opening	Action radius/m								

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 58 of 79

Opening	Group	Extension 2019	D0					0,00
(FLQi1022)	Number of nodes	5	High building/high noise source				No	
	Length/ m	72,00	Emission is				Indoor level (Lp)	
	Length/ m (2D)	72,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	35,00		dB(A)	dB	dB	dB(A)	dB(A)
			Day	83,20	-	-	98,64	83,20
			Night	83,20	-	-	98,64	83,20
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0	
FLQi0752	Label	Dry-Mill/WAND1	Action radius/m				99999,00	
	Group	Extension 2019	D0					0,00
	Number of nodes	5	High building/high noise source				No	
	Length/ m	114,51	Emission is				Indoor level (Lp)	
	Length/ m (2D)	69,51	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	781,95		dB(A)	dB	dB	dB(A)	dB(A)
			Day	87,00	30,00	-	85,86	57,00
			Night	87,00	30,00	-	85,86	57,00
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0	
FLQi0752 /1	Label	Opening 1 (1)	Action radius/m				99999,00	
Opening	Group	Extension 2019	D0					0,00
(FLQi1023)	Number of nodes	5	High building/high noise source				No	
	Length/ m	10,00	Emission is				Indoor level (Lp)	
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	6,00		dB(A)	dB	dB	dB(A)	dB(A)
			Day	87,00	19,00	-	75,78	68,00
			Night	87,00	19,00	-	75,78	68,00
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0	
FLQi0752 /2	Label	Opening 1	Action radius/m				99999,00	
Opening	Group	Extension 2019	D0					0,00
(FLQi1024)	Number of nodes	5	High building/high noise source				No	
	Length/ m	10,00	Emission is				Indoor level (Lp)	
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	6,00		dB(A)	dB	dB	dB(A)	dB(A)
			Day	87,00	19,00	-	75,78	68,00
			Night	87,00	19,00	-	75,78	68,00
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0	
FLQi0753	Label	Dry-Mill/WAND2	Action radius/m				99999,00	
	Group	Extension 2019	D0					0,00
	Number of nodes	5	High building/high noise source				No	
	Length/ m	72,53	Emission is				Indoor level (Lp)	
	Length/ m (2D)	27,53	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	309,76		dB(A)	dB	dB	dB(A)	dB(A)
			Day	87,00	30,00	-	81,83	57,00
			Night	87,00	30,00	-	81,83	57,00
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0	
FLQi0753 /1	Label	Opening 1	Action radius/m				99999,00	
Opening	Group	Extension 2019	D0					0,00
(FLQi1025)	Number of nodes	5	High building/high noise source				No	
	Length/ m	10,00	Emission is				Indoor level (Lp)	
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	6,00		dB(A)	dB	dB	dB(A)	dB(A)
			Day	87,00	19,00	-	75,78	68,00
			Night	87,00	19,00	-	75,78	68,00
			C(diffus) /dB				EN 12354-4; B.1-5: 0,0	
FLQi0755	Label	Dry-Mill/WAND4	Action radius/m				99999,00	
	Group	Extension 2019	D0					0,00
	Number of nodes	5	High building/high noise source				No	
	Length/ m	73,24	Emission is				Indoor level (Lp)	
	Length/ m (2D)	28,24	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m ²	317,74		dB(A)	dB	dB	dB(A)	dB(A)

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 59 of 79

			Day	87,00	30,00	-	82,02	57,00
			Night	87,00	30,00	-	82,02	57,00
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0756	Label	Dry-Mill/DACH	Action radius/m					
	Group	Extension 2019	D0					
	Number of nodes	5	High building/high noise source					
	Length/ m	97,58	Emission is					
	Length/ m (2D)	97,58	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	485,87			dB(A)	dB	dB(A)	dB(A)
			Day	87,00	30,00	-	83,87	57,00
			Night	87,00	30,00	-	83,87	57,00
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0758	Label	Gluten Dryer/WAND2	Action radius/m					
	Group	Extension 2019	D0					
	Number of nodes	5	High building/high noise source					
	Length/ m	78,62	Emission is					
	Length/ m (2D)	33,62	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	378,20			dB(A)	dB	dB(A)	dB(A)
			Day	87,00	30,00	-	82,71	57,00
			Night	87,00	30,00	-	82,71	57,00
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0758 /1	Label	Opening 1	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1026)	Number of nodes	5	High building/high noise source					
	Length/ m	10,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	6,00			dB(A)	dB	dB(A)	dB(A)
			Day	87,00	19,00	-	75,78	68,00
			Night	87,00	19,00	-	75,78	68,00
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0759	Label	Gluten Dryer/WAND3	Action radius/m					
	Group	Extension 2019	D0					
	Number of nodes	5	High building/high noise source					
	Length/ m	114,75	Emission is					
	Length/ m (2D)	69,75	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	784,69			dB(A)	dB	dB(A)	dB(A)
			Day	87,00	30,00	-	85,88	57,00
			Night	87,00	30,00	-	85,88	57,00
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0759 /1	Label	Opening 1 (1)	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1027)	Number of nodes	5	High building/high noise source					
	Length/ m	10,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	6,00			dB(A)	dB	dB(A)	dB(A)
			Day	87,00	19,00	-	75,78	68,00
			Night	87,00	19,00	-	75,78	68,00
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0759 /2	Label	Opening 1	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1028)	Number of nodes	5	High building/high noise source					
	Length/ m	10,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw"
	Area /m ²	6,00			dB(A)	dB	dB(A)	dB(A)
			Day	87,00	19,00	-	75,78	68,00
			Night	87,00	19,00	-	75,78	68,00
			C(diffus) /dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0760	Label	Gluten Dryer/WAND4	Action radius/m					
	Group	Extension 2019	D0					

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 60 of 79

	Number of nodes	5	High building/high noise source					No		
	Length/ m	79,41	Emission is			Indoor level (Lp)				
	Length/ m (2D)	34,41	Emi. variant	Emission	Sound insul.	Correction	Lw	Lw"		
	Area /m ²	387,12			dB(A)	dB	dB(A)	dB(A)		
			Day	87,00	30,00	-	82,88	57,00		
			Night	87,00	30,00	-	82,88	57,00		
			C(diffus) /dB			EN 12354-4; B.1-5: 0,0				
FLQi0761	Label	Gluten Dryer/DACH	Action radius/m			99999,00				
	Group	Extension 2019	D0				0,00			
	Number of nodes	5	High building/high noise source							
	Length/ m	103,71	Emission is			Indoor level (Lp)				
	Length/ m (2D)	103,71	Emi. variant	Emission	Sound insul.	Correction	Lw	Lw"		
	Area /m ²	592,60			dB(A)	dB	dB(A)	dB(A)		
			Day	87,00	30,00	-	84,73	57,00		
			Night	87,00	30,00	-	84,73	57,00		
			C(diffus) /dB			EN 12354-4; B.1-5: 0,0				
FLQi0971	Label	Wet Mill/WAND2	Action radius/m			99999,00				
	Group	Extension 2019	D0				0,00			
	Number of nodes	5	High building/high noise source							
	Length/ m	73,84	Emission is			Indoor level (Lp)				
	Length/ m (2D)	28,84	Emi. variant	Emission	Sound insul.	Correction	Lw	Lw"		
	Area /m ²	324,40			dB(A)	dB	dB(A)	dB(A)		
			Day	85,00	30,00	-	79,86	55,00		
			Night	85,00	30,00	-	79,86	55,00		
			C(diffus) /dB			EN 12354-4; B.1-5: 0,0				
FLQi0971 /1	Label	Opening 1 (1)	Action radius/m			99999,00				
Opening	Group	Extension 2019	D0				0,00			
(FLQi1029)	Number of nodes	5	High building/high noise source							
	Length/ m	10,00	Emission is			Indoor level (Lp)				
	Length/ m (2D)	4,00	Emi. variant	Emission	Sound insul.	Correction	Lw	Lw"		
	Area /m ²	6,00			dB(A)	dB	dB(A)	dB(A)		
			Day	85,00	19,00	-	73,78	66,00		
			Night	85,00	19,00	-	73,78	66,00		
			C(diffus) /dB			EN 12354-4; B.1-5: 0,0				
FLQi0971 /2	Label	Opening 1 (2)	Action radius/m			99999,00				
Opening	Group	Extension 2019	D0				0,00			
(FLQi1030)	Number of nodes	5	High building/high noise source							
	Length/ m	10,00	Emission is			Indoor level (Lp)				
	Length/ m (2D)	4,00	Emi. variant	Emission	Sound insul.	Correction	Lw	Lw"		
	Area /m ²	6,00			dB(A)	dB	dB(A)	dB(A)		
			Day	85,00	19,00	-	73,78	66,00		
			Night	85,00	19,00	-	73,78	66,00		
			C(diffus) /dB			EN 12354-4; B.1-5: 0,0				
FLQi0971 /3	Label	Opening 1 (3)	Action radius/m			99999,00				
Opening	Group	Extension 2019	D0				0,00			
(FLQi1031)	Number of nodes	5	High building/high noise source							
	Length/ m	10,00	Emission is			Indoor level (Lp)				
	Length/ m (2D)	4,00	Emi. variant	Emission	Sound insul.	Correction	Lw	Lw"		
	Area /m ²	6,00			dB(A)	dB	dB(A)	dB(A)		
			Day	85,00	19,00	-	73,78	66,00		
			Night	85,00	19,00	-	73,78	66,00		
			C(diffus) /dB			EN 12354-4; B.1-5: 0,0				
FLQi0972	Label	Wet Mill/WAND3	Action radius/m			99999,00				
	Group	Extension 2019	D0				0,00			
	Number of nodes	5	High building/high noise source							
	Length/ m	62,64	Emission is			Indoor level (Lp)				
	Length/ m (2D)	17,64	Emi. variant	Emission	Sound insul.	Correction	Lw	Lw"		
	Area /m ²	198,45			dB(A)	dB	dB(A)	dB(A)		
			Day	90,10	30,00	-	83,08	60,10		

	Technical Report						
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN						Page 61 of 79

			Night	90,10	30,00	-	83,08	60,10
			C(difus)/dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0974	Label	Wet Mill/DACH	Action radius/m					
	Group	Extension 2019	D0					
		No						
	Number of nodes	5	High building/high noise source					
	Length/ m	46,53	Emission is					
	Length/ m (2D)	46,53	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	127,61						
			Day	90,10	30,00	-	81,06	60,10
			Night	90,10	30,00	-	81,06	60,10
			C(difus)/dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0974 /1	Label	Opening 1 (1)	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1032)		No						
	Number of nodes	5	High building/high noise source					
	Length/ m	4,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	1,00						
			Day	90,10	-	-	90,10	90,10
			Night	90,10	-	-	90,10	90,10
			C(difus)/dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0974 /2	Label	Opening 1	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1033)		No						
	Number of nodes	5	High building/high noise source					
	Length/ m	4,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	1,00						
			Day	90,10	-	-	90,10	90,10
			Night	90,10	-	-	90,10	90,10
			C(difus)/dB					
			EN 12354-4; B.1-5: 0,0					
FLQi0974 /3	Label	Opening 1	Action radius/m					
Opening	Group	Extension 2019	D0					
(FLQi1034)		No						
	Number of nodes	5	High building/high noise source					
	Length/ m	4,00	Emission is					
	Length/ m (2D)	4,00	Emi.	Emission	Sound insul.	Correction	Lw	Lw'
	Area /m²	1,00						
			Day	90,10	-	-	90,10	90,10
			Night	90,10	-	-	90,10	90,10
			C(difus)/dB					
			EN 12354-4; B.1-5: 0,0					

Gradients and gradient correction DStg for roads										
Element	Name	Section	s /m	ds /m	Gradient %	Gradient %	Dstg /dB	Dstg /dB	Dstg /dB	Hint
			m	m	coord.	for calc.	Day	Night		
STRb013	HTM 01	1	0,00	66,21	0,00	0,00	0,00	0,00		Max.
		2	66,21	3,88	0,00	0,00	0,00	0,00		
		3	70,09	4,44	0,00	0,00	0,00	0,00		
		4	74,53	9,71	0,00	0,00	0,00	0,00		
		5	84,24	14,30	0,00	0,00	0,00	0,00		
		6	98,54	20,27	0,00	0,00	0,00	0,00		
		7	118,81	3,74	0,00	0,00	0,00	0,00		
		8	122,55	4,62	0,00	0,00	0,00	0,00		
		9	127,18	7,19	0,00	0,00	0,00	0,00		
		10	134,36	22,74	0,00	0,00	0,00	0,00		
		11	157,10	5,44	0,00	0,00	0,00	0,00		
		12	162,54	24,10	0,00	0,00	0,00	0,00		
		13	186,63	3,74	0,00	0,00	0,00	0,00		
		14	190,38	31,40	0,00	0,00	0,00	0,00		
		15	221,78	13,85	0,00	0,00	0,00	0,00		
		16	235,63	23,97	0,00	0,00	0,00	0,00		
		17	259,60	30,84	0,00	0,00	0,00	0,00		

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 62 of 79

		18	290,44	34,02	0,00	0,00	0,00		
		19	324,46	17,01	0,00	0,00	0,00		
		20	341,46	11,92	0,00	0,00	0,00		
		21	353,38	54,81	0,00	0,00	0,00		
		22	408,19	21,52	0,00	0,00	0,00		
		23	429,72	14,75	0,00	0,00	0,00		
		24	444,47	36,36	0,00	0,00	0,00		
		25	480,83	19,64	0,00	0,00	0,00		
		26	500,47	25,14	0,00	0,00	0,00		
		27	525,61	10,09	0,00	0,00	0,00		
		28	535,70	8,94	0,00	0,00	0,00		
		29	544,64	11,55	0,00	0,00	0,00		
		30	556,19	25,60	0,00	0,00	0,00		
STRb014	HTM 02	1	0,00	65,83	0,00	0,00	0,00		Max.
		2	65,83	7,11	0,00	0,00	0,00		
		3	72,94	47,00	0,00	0,00	0,00		
		4	119,93	5,96	0,00	0,00	0,00		
		5	125,89	27,93	0,00	0,00	0,00		
		6	153,83	4,82	0,00	0,00	0,00		
		7	158,64	25,39	0,00	0,00	0,00		
		8	184,03	4,21	0,00	0,00	0,00		
		9	188,25	31,18	0,00	0,00	0,00		
		10	219,43	14,49	0,00	0,00	0,00		
		11	233,92	96,27	0,00	0,00	0,00		
		12	330,18	55,40	0,00	0,00	0,00		
		13	385,59	58,97	0,00	0,00	0,00		
		14	444,55	11,86	0,00	0,00	0,00		
		15	456,42	17,15	0,00	0,00	0,00		
		16	473,56	17,84	0,00	0,00	0,00		
		17	491,40	14,06	0,00	0,00	0,00		
		18	505,47	74,73	0,00	0,00	0,00		
		19	580,20	8,51	0,00	0,00	0,00		
		20	588,70	25,48	0,00	0,00	0,00		
		21	614,19	11,93	0,00	0,00	0,00		
		22	626,12	43,88	0,00	0,00	0,00		
		23	670,00	49,62	0,00	0,00	0,00		
		24	719,63	15,65	0,00	0,00	0,00		
		25	735,27	92,70	0,00	0,00	0,00		
		26	827,98	29,98	0,00	0,00	0,00		
		27	857,96	51,63	0,00	0,00	0,00		
		28	909,59	11,09	0,00	0,00	0,00		
		29	920,67	15,87	0,00	0,00	0,00		
		30	936,54	29,44	0,00	0,00	0,00		
		31	965,99	51,46	0,00	0,00	0,00		
		32	1017,44	13,81	0,00	0,00	0,00		
		33	1031,26	10,66	0,00	0,00	0,00		
		34	1041,91	20,67	0,00	0,00	0,00		
		35	1062,59	11,26	0,00	0,00	0,00		
STRb016	HTM 03-1	1	0,00	64,30	0,00	0,00	0,00		Max.
		2	64,30	7,98	0,00	0,00	0,00		
		3	72,28	47,12	0,00	0,00	0,00		
		4	119,40	6,82	0,00	0,00	0,00		
		5	126,22	28,43	0,00	0,00	0,00		
		6	154,65	4,50	0,00	0,00	0,00		
		7	159,14	24,99	0,00	0,00	0,00		
		8	184,13	5,91	0,00	0,00	0,00		
		9	190,05	28,75	0,00	0,00	0,00		
		10	218,79	15,80	0,00	0,00	0,00		
		11	234,59	72,63	0,00	0,00	0,00		

	Technical Report							
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN							Page 63 of 79

		12	307,22	61,49	0,00	0,00	0,00	
		13	368,72	69,66	0,00	0,00	0,00	
		14	438,38	16,53	0,00	0,00	0,00	
		15	454,91	17,57	0,00	0,00	0,00	
		16	472,48	55,16	0,00	0,00	0,00	
		17	527,64	31,79	0,00	0,00	0,00	
		18	559,44	8,90	0,00	0,00	0,00	
		19	568,34	15,99	0,00	0,00	0,00	
		20	584,33	34,39	0,00	0,00	0,00	
		21	618,73	15,05	0,00	0,00	0,00	
		22	633,78	4,70	0,00	0,00	0,00	
		23	638,48	52,35	0,00	0,00	0,00	
		24	690,83	13,06	0,00	0,00	0,00	
		25	703,89	22,96	0,00	0,00	0,00	
		26	726,85	12,98	0,00	0,00	0,00	
		27	739,83	95,65	0,00	0,00	0,00	
		28	835,49	19,91	0,00	0,00	0,00	
		29	855,39	57,65	0,00	0,00	0,00	
		30	913,04	31,20	0,00	0,00	0,00	
		31	944,24	28,97	0,00	0,00	0,00	
		32	973,21	32,05	0,00	0,00	0,00	
		33	1005,26	28,09	0,00	0,00	0,00	
		34	1033,36	9,46	0,00	0,00	0,00	
		35	1042,82	12,42	0,00	0,00	0,00	
		36	1055,24	15,87	0,00	0,00	0,00	
		37	1071,12	68,61	0,00	0,00	0,00	
		38	1139,73	11,85	0,00	0,00	0,00	
		39	1151,58	12,03	0,00	0,00	0,00	
		40	1163,61	25,78	0,00	0,00	0,00	
STRb017	HTM 04	1	0,00	63,80	0,00	0,00	0,00	Max.
		2	63,80	6,69	0,00	0,00	0,00	
		3	70,50	46,68	0,00	0,00	0,00	
		4	117,18	7,86	0,00	0,00	0,00	
		5	125,04	27,47	0,00	0,00	0,00	
		6	152,50	5,38	0,00	0,00	0,00	
		7	157,88	28,27	0,00	0,00	0,00	
		8	186,16	2,61	0,00	0,00	0,00	
		9	188,77	27,17	0,00	0,00	0,00	
		10	215,94	16,96	0,00	0,00	0,00	
		11	232,90	17,38	0,00	0,00	0,00	
		12	250,28	68,16	0,00	0,00	0,00	
		13	318,44	61,75	0,00	0,00	0,00	
		14	380,19	57,91	0,00	0,00	0,00	
		15	438,10	34,37	0,00	0,00	0,00	
		16	472,47	76,41	0,00	0,00	0,00	
		17	548,88	5,33	0,00	0,00	0,00	
		18	554,22	13,19	0,00	0,00	0,00	
		19	567,41	23,88	0,00	0,00	0,00	
		20	591,29	14,96	0,00	0,00	0,00	
		21	606,26	9,35	0,00	0,00	0,00	
		22	615,61	62,69	0,00	0,00	0,00	
		23	678,30	35,30	0,00	0,00	0,00	
		24	713,60	5,17	0,00	0,00	0,00	
		25	718,76	35,21	0,00	0,00	0,00	
		26	753,98	6,68	0,00	0,00	0,00	
		27	760,66	107,14	0,00	0,00	0,00	
		28	867,80	54,23	0,00	0,00	0,00	
		29	922,04	9,41	0,00	0,00	0,00	
		30	931,45	25,10	0,00	0,00	0,00	

	Technical Report							
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN							Page 64 of 79

		31	956,55	36,99	0,00	0,00	0,00	
		32	993,53	29,24	0,00	0,00	0,00	
		33	1022,77	20,30	0,00	0,00	0,00	
		34	1043,07	22,70	0,00	0,00	0,00	
		35	1065,77	55,69	0,00	0,00	0,00	
		36	1121,46	27,98	0,00	0,00	0,00	
		37	1149,44	34,24	0,00	0,00	0,00	
		38	1183,68	27,58	0,00	0,00	0,00	
		39	1211,26	20,99	0,00	0,00	0,00	
		40	1232,24	22,18	0,00	0,00	0,00	
		41	1254,43	31,09	0,00	0,00	0,00	
		42	1285,52	51,77	0,00	0,00	0,00	
		43	1337,28	17,41	0,00	0,00	0,00	
		44	1354,69	36,39	0,00	0,00	0,00	
STRb018	HTM 03-2	1	0,00	31,25	0,00	0,00	0,00	Max.
		2	31,25	47,55	0,00	0,00	0,00	
		3	78,79	24,06	0,00	0,00	0,00	
		4	102,85	6,45	0,00	0,00	0,00	
		5	109,30	35,54	0,00	0,00	0,00	
		6	144,84	3,98	0,00	0,00	0,00	
		7	148,83	53,90	0,00	0,00	0,00	
		8	202,72	31,67	0,00	0,00	0,00	
		9	234,39	11,86	0,00	0,00	0,00	
		10	246,25	3,28	0,00	0,00	0,00	
STRb019	HTM 05	1	0,00	57,37	0,00	0,00	0,00	Max.
		2	57,37	6,79	0,00	0,00	0,00	
		3	64,17	8,17	0,00	0,00	0,00	
		4	72,33	50,13	0,00	0,00	0,00	
		5	122,46	3,77	0,00	0,00	0,00	
		6	126,23	26,61	0,00	0,00	0,00	
		7	152,84	7,84	0,00	0,00	0,00	
		8	160,68	93,74	0,00	0,00	0,00	
		9	254,42	71,65	0,00	0,00	0,00	
		10	326,07	31,78	0,00	0,00	0,00	
		11	357,85	17,36	0,00	0,00	0,00	
		12	375,22	12,10	0,00	0,00	0,00	
		13	387,31	4,22	0,00	0,00	0,00	
		14	391,53	4,19	0,00	0,00	0,00	
		15	395,72	7,05	0,00	0,00	0,00	
		16	402,77	12,66	0,00	0,00	0,00	
		17	415,43	13,96	0,00	0,00	0,00	
		18	429,38	7,44	0,00	0,00	0,00	
		19	436,82	9,57	0,00	0,00	0,00	
		20	446,39	40,85	0,00	0,00	0,00	
		21	487,24	66,70	0,00	0,00	0,00	
		22	553,93	79,69	0,00	0,00	0,00	
		23	633,62	48,64	0,00	0,00	0,00	
		24	682,27	12,24	0,00	0,00	0,00	
		25	694,51	26,18	0,00	0,00	0,00	
		26	720,68	18,28	0,00	0,00	0,00	
		27	738,97	35,87	0,00	0,00	0,00	
		28	774,84	53,07	0,00	0,00	0,00	
		29	827,91	14,64	0,00	0,00	0,00	
		30	842,55	12,47	0,00	0,00	0,00	
		31	855,02	19,02	0,00	0,00	0,00	
		32	874,04	14,97	0,00	0,00	0,00	
		33	889,01	29,31	0,00	0,00	0,00	
		34	918,31	12,55	0,00	0,00	0,00	
		35	930,87	12,42	0,00	0,00	0,00	

	Technical Report	
	SEDAMYL UK Ltd Denison Road, Selby, North - Yorkshire, Y08 8AN	Page 65 of 79

		36	943,29	32,74	0,00	0,00	0,00		
		37	976,03	45,13	0,00	0,00	0,00		
		38	1021,16	18,24	0,00	0,00	0,00		
		39	1039,40	11,17	0,00	0,00	0,00		
		40	1050,57	30,77	0,00	0,00	0,00		
STRb020	Trucks movements from Parking	1	0,00	107,61	0,00	0,00	0,00		Max.
		2	107,61	34,28	0,00	0,00	0,00		
		3	141,89	11,97	0,00	0,00	0,00		
		4	153,86	36,63	0,00	0,00	0,00		
		5	190,49	59,83	0,00	0,00	0,00		
		6	250,32	40,34	0,00	0,00	0,00		
		7	290,66	34,81	0,00	0,00	0,00		
		8	325,47	12,95	0,00	0,00	0,00		

*1): The gradient for the calculation has been entered directly.