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ENGINEERING
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Application Details	
Application Type	Development Permit – Material Change of Use
Defined Use	Special Industry (Whisky Distillery) & Hotel
Street Address	25 Finchley St Milton
Client	Lynette Anne Lee, Michael Lee
Local Government Area	Brisbane City Council
Date	November 2019

In support of an application for

**Material Change of Use - Special Industry (Whisky
Distillery) & Hotel -
Noise Impact Assessment**

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Limitations

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Document Status					
Rev No.	Author	Reviewer	Approved for Issue		
			Name	Signature	Date
A	NDW	TCD	TCD		06.11.19

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EXECUTIVE SUMMARY

SITE DETAILS

Local Government Authority:	Brisbane City Council
Address of Site:	25 Finchley St, Milton
Real Property Description:	Lot 13 RP 18886
Area of Site:	522 m ²
GFA:	415 m ²

APPLICATION DETAILS

Type of Application:	Proposed Material Change of Use - MCU
Description of Proposal:	Special Use - Distillery
Purpose of Proposal Under City Plan:	Preparation of a Noise Impact Assessment
Applicant:	Lynette Anne and Michael Lee
Contact Person:	Tyson Dodd
Our Reference:	JT1920

1.0 INTRODUCTION

JT Environmental has been commissioned by Lynette Anne Lee and Michael Lee to prepare a Noise Impact Assessment in support of a Material Change of Use (MCU) for the proposed Distillery at 25 Finchley St, Milton and the operational aspects of the existing use of the site.

This report has been prepared to address the BCC Noise Planning Scheme policy for potential noise emissions from the distillery and any possible impacts to the surrounding residential uses. The intent is to identify the worst-case potential design ground concentrations that are likely to occur at the nearest existing receptor locations identified within this report. These receptor locations have been modelled at the most exposed façade of the dwellings from the expected emissions, with a total of 16 dwellings being modelled.

The purpose of this document is to provide a detailed Noise Impact Assessment using PEN3d Noise in accordance with the Brisbane City Council (BCC) Noise Quality Planning Scheme Policy to determine the impacts from emissions discharged from the Distillery.

The purpose of this document is twofold:

1. To provide a current Noise Impact Investigation of the potential noise impacts on the nearby residential area.
2. To provide direction to ensure that the subject site is operated in a manner that will achieve internal noise levels where appropriate for the locality for sensitive receptors with the proposed extension to the operational hours.

This NIA assesses:

- The current noise emissions onto the receptors to the south of the site; and
- Where required, to recommend noise control measures to ensure compliance with the relevant noise criteria (NIAPS and Australian Standards).

This assessment has been conducted with reference to Australian Standard AS 1055:1997 *Description and Measurement of Environmental Noise* Parts 1, 2 and 3 and in accordance with the Queensland Environmental Protection (Noise) Policy 2008 (EPP Noise), the Environmental Protection Agency (EPA) Noise Measurement Manual (2000) and the Environmental Protection Agency's EcoAccess Guideline "Planning for Noise Control" (EcoAccess).

1.2 LIMITATIONS OF THE NIA (NOISE IMPACT ASSESSMENT)

It is stressed that this NIA does not negate the need for site Owner/s, Managers of the General Industrial area to continue to improve the environmental performance of any pollutant emitting activity.

2.0 SITE DESCRIPTION

2.1 SITE DETAILS

Local Government Authority:	Brisbane City Council
Address of Site:	25 Finchley St, Milton
Area of Site:	522 m ²
GFA:	415 m ²

2.2 APPLICATION DETAILS

Type of Application:	Supporting Documentation for Distillery
Contact Person and Phone:	Tyson Dodd

2.3 AERIAL PHOTOGRAPH

Below illustrates the location of the subject site in Milton and the location of sensitive receptors modelled as Discrete Receptors in the Noise Impact Assessment.



Figure 1: Site and modelled receptors(Source: Google Earth).

2.4 PROPOSED DEVELOPMENT

Distillation of spirit from low alcohol whisky 'wash' via 2 distillation runs in the copper stills is proposed. This process of distilling reduces volume of product from an initial batch size of 1000 litres to a final 'new-make spirit' volume of approx. 100 litres at a 63% ABV which reduces over time. This is then decanted into oak barrels stored in the ATO approved bonded store for ageing on-site for at least 2 years. The estimated quantity of new make spirit produced annually is 10,000 litres. Total storage eventually in the bond store will amount to approximately 50,000 litres at any one time. Barrels will be racked into stacked rows for storage on the basement and ground floors. The site has been registered with the ATO as a legal bond store, and the licence from the ATO to distil alcohol on the site has been approved. Final product will be transported off-site as whisky in bottles (bottling occurring on-site at the Finchley St premises) after payment of excise.

3.0 MEASURED NOISE LEVELS

3.1 MEASURED EXISTING AMBIENT NOISE LEVELS

Existing free-field noise exposure levels were determined and the typical noise levels measured at ML1 as detailed in the attached site plan are presented in Table 2.0. The ambient noise of the area was dominated by rail, road traffic and existing industrial and commercial noises in the local businesses. Summaries of these results are shown in Table 2.0.

Table 1: RBL of existing site

Time Period	RBL
Day (7am - 6pm)	47.3
Evening (6pm - 10pm)	44.85
Night (10pm - 7am)	41.6

Table 2: Measured Ambient Noise Levels ML1 residential

	Day 1 (21/02/2019)		Day 2 (22/02/2019)		Day 3 (23/02/2019)		Day 4 (24/02/2019)	
	Measured	Ascending	Measured	Ascending	Measured	Ascending	Measured	Ascending
7am	52.175	48.025	47.8	45.7	46	45.725	52.175	50.45
8am	52.775	48.4	48.6	46.075	45.725	45.8	52.075	50.625
9am	50.125	48.55	51.1	46.425	47.45	46	50.675	50.675
10am	48.4	48.6	48.6	46.775	47.75	47.45	50.45	51.125
11am	48.025	48.775	50.95	47.8	47.75	47.475	50.625	51.3
12pm	48.55	50.1	48.45	48.425	45.8	47.65	51.3	52.075
1pm	48.6	50.125	46.775	48.45	47.475	47.75	51.125	52.175
2pm	48.775	51.075	46.425	48.6	47.65	47.75	52.9	52.5
3pm	50.1	52.175	45.7	48.6	49.25	48.5	52.5	52.5
4pm	51.075	52.175	46.075	50.95	48.575	48.575	52.5	52.9
5pm	52.175	52.775	48.425	51.1	48.5	49.25	54.05	54.05
ABL	48.4		46.05		45.8		50.625	

	Day 1 (21/02/2019)		Day 2 (22/02/2019)		Day 3 (23/02/2019)		Day 4 (24/02/2019)	
	Measured	Ascending	Measured	Ascending	Measured	Ascending	Measured	Ascending
6pm	46.825	42.15	48.975	45.975	47.05	44.85	49.075	47
7pm	43.55	42.525	46.225	46	46.3	46.225	47.425	47.05
8pm	42.15	43.55	46	46.225	44.85	46.3	47.05	47.425
9pm	42.525	46.825	45.975	48.975	46.225	47.05	47	49.075
ABL	42.15		45.975		44.85		47	

4.0 NOISE CRITERIA AND LIMITS

4.1 BCC SENSITIVE RECEPTOR CRITERIA

Based on the use of the site and the time of day that the noise sources are being emitted from the operation an appropriate assessment methodology can be determined from the Appropriate Noise policy.

As the site is in a Low Impact Industrial Zone, it will be assessed against the Brisbane City plan *Industry Code* Section PO2 so that:

Development complies with the 'Noise (Planning) Criteria' shown in Table 9.3.12.3.E and 'Night-time Noise Criteria' shown in Table 9.3.12.3.G.

The 'Noise (Planning) Criteria' will be used to assess emissions from sources such as mechanical plants i.e. the Distillery.

As the proposed development's operating hours are 24 hrs, seven days a week, noise emissions are likely to occur and have been assessed against all criteria.

Table 3: BCC City Plan Table 9.3.12.3.E—Noise (planning) criteria

Criteria location	Intrusive noise criteria Day, evening and night $L_{Aeq,adj,T}$ are not greater than the RBL plus the value in this column for the relevant criteria location, where T equals: <ul style="list-style-type: none"> day – 11hr evening – 4hr night – 9hr 	Acoustic amenity criteria Day, evening and night $L_{Aeq,adj,T}$ are not greater than the values in this column for the relevant criteria location, where T equals: <ul style="list-style-type: none"> day – 11hr evening – 4hr night – 9hr 		
		Day	Evening	Night
Low density residential zone boundary	3dB(A)	55dB(A)	45dB(A)	40dB(A)
Low-medium density residential zone boundary	3dB(A)	55dB(A)	45dB(A)	40dB(A)
Medium density residential zone boundary	3dB(A)	55dB(A)	50dB(A)	45dB(A)
High density residential zone boundary	3dB(A)	55dB(A)	50dB(A)	50dB(A)
Character residential zone boundary	3dB(A)	50dB(A)	45dB(A)	40dB(A)
Tourist accommodation zone boundary	3dB(A)	55dB(A)	50dB(A)	50dB(A)
At a sensitive use in the Principal centre zone	5dB(A)	60dB(A)	55dB(A)	50dB(A)

At a sensitive use in the Major centre zone	5dB(A)	60dB(A)	55dB(A)	50dB(A)
At a sensitive use in the District centre zone	5dB(A)	60dB(A)	55dB(A)	50dB(A)
At a sensitive use in the Neighbourhood centre zone	5dB(A)	55dB(A)	50dB(A)	50dB(A)
At a sensitive use in the Specialised centre zone	5dB(A)	55dB(A)	50dB(A)	50dB(A)
Emerging community zone boundary	5dB(A)	55dB(A)	50dB(A)	45dB(A)
Environmental management zone boundary	0dB(A)	40dB(A)	40dB(A)	40dB(A)
Conservation zone boundary	0dB(A)	40dB(A)	40dB(A)	40dB(A)
At a sensitive use in the Mixed use zone	5dB(A)	60dB(A)	55dB(A)	50dB(A)
At a sensitive use in the Rural zone	5dB(A)	55dB(A)	50dB(A)	45dB(A)
At a sensitive use in the Rural residential zone	5dB(A)	50dB(A)	45dB(A)	40dB(A)
At a sensitive use in the Township zone	5dB(A)	55dB(A)	45dB(A)	40dB(A)
Rural residential sensitive use	5dB(A)	50dB(A)	45dB(A)	40dB(A)
Township zone sensitive use	5dB(A)	55dB(A)	45dB(A)	40dB(A)

Note—

- $L_{Aeq,adj,T}$: The adjusted A-weighted equivalent continuous sound pressure level of the development during the time period T, where T is an 11-hour day (7am–6pm), 4-hour evening (6pm–10pm) and 9-hour night (10pm–7am), determined in accordance with the methodology in the [Noise impact assessment planning scheme policy](#).
- RBL: Rating background level determined in accordance with the methodology in the [Noise impact assessment planning scheme policy](#).
- dB(A): A-weighted decibels

The acoustic amenity criteria at the sensitive receivers for 24 hr operation of the distillery is therefore 40 dB.

5.0 ASSESSMENT OF NOISE IMPACT

5.1 ON-SITE OPERATIONS

The closest sensitive receptors to the development are marked on the receiver map below. The noise sources associated with the use are also outlined below. Updated PEN3D2000 modelling has been undertaken to provide for the internal noise sources, amplified music and the intervening structures along the Finchley Street streetscape. Modelling includes the building structures and the point sources at the eastern façade of the building at the entryways.

Table 4: Noise sources used in noise model.

Machine/Activity	Noise Levels, dB(A)
	L _{A10}
Noise from 80 persons in bar	87 @ 1m
Background music	79 @ 1m
Servery/drinks	80 @ 1m
Car/truck door closing	73 @ 1m
Idling delivery Van	67 @ 1m

POINT CALCULATIONS

Pen3D2000 V 1.10.0

Project Code:None

Project Description:None

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File Description:Data file covering area

Tuesday 05 Nov, 2019 at 14:59:05

Environmental Calculations

All point and line sources included. Line source segmentation angle: 10 degrees.

Calculations for specified meteorology.

Noise level results are the logarithmic addition of all the noise sources

Noise level results incorporate the incoherent ground reflection algorithm

Meteorology :

Wind speed 1.0 (m/s) Wind direction 101 Mast height 10.0 (m)

Temperature 25.0 (C) Temperature Gradient 2.0 (C/100m) Humidity 50.0 (%)

Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

Receptor	X Posn	Y Posn	Noise Level
	(m)	(m)	(dB(A))
RS1	500538.8	6962055.6	24.1
RS2	500561.0	6962063.9	23.0
RS03	500580.1	6962068.6	22.0
RS04	500590.5	6962073.5	21.3
RS05	500598.8	6962081.1	20.7
RS06	500526.3	6962047.9	24.9
RS07	500505.6	6962042.3	25.6
RS08	500484.9	6962045.4	25.7
RS09	500469.1	6962046.2	25.7
RS10	500453.5	6962045.4	25.7
RS11	500443.9	6962044.3	25.8
RS12	500426.6	6962045.3	25.6
RS13	500404.9	6961955.5	28.1
RS14	500414.8	6961904.4	28.9



Given the separation from the nearest off-site residential property from the facade alignment of the existing operation, the above modelling of the site **(full modelling per noise source provided in the appendix of this report)** provides an analysis on the internal noise level to achieve the above criterion noise level.

6.0 CONCLUSION

For the proposed development, compliance with the PNL for the residential receptors is achieved with no further acoustic barriers besides the existing walls of the distillery. As noted by the monitoring the current ambient noise levels are in the range of 40-47 dB RBL.

Time Period	RBL Adopted
Day (7am - 6pm)	47.3
Evening (6pm - 10pm)	44.85
Night (10pm - 7am)	41.6

Table 2: summary of RBL's

Receptor	Noise Level (dB(A))
RS1	24.1
RS2	23.0
RS03	22.0
RS04	21.3
RS05	20.7
RS06	24.9
RS07	25.6
RS08	25.7
RS09	25.7
RS10	25.7
RS11	25.8
RS12	25.6
RS13	28.1
RS14	28.9

Table 3: noise levels at sensitive receptors

This has demonstrated that the resultant levels at this closest receptor will be below the current background noise levels monitored at ML1. It is on this basis there seems to be no identified reason for the operation to not be approved. The impact on the sensitive receptors will be minimal.

7.0 RECOMMENDATIONS

1. The proposed use complies with the noise criterial from the planning scheme policy.
2. Active Management of Noise in the car park from 10pm from the operations;

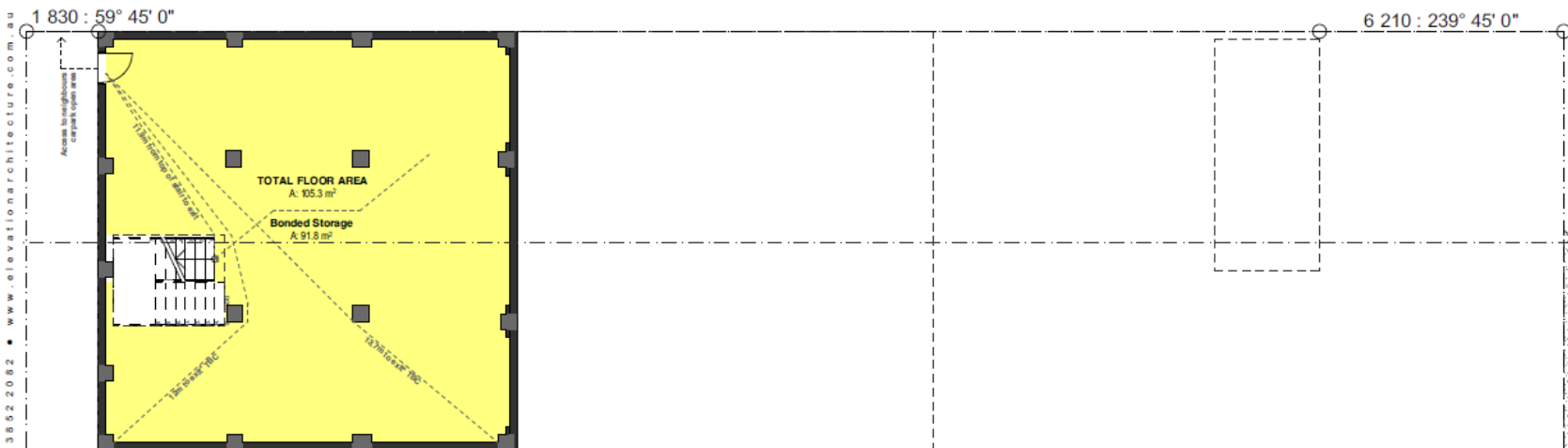
8.0 APPENDIX

9.1 APPENDIX A – SITE PLAN

Carparks required ()	????
Carparks provided	

GFA	
Existing Office Space	133.2 m ²
Bar Space	64 m ²
Standing Bar (1.5m from service)	11.4 m ²
Distillery	13.5 m ²
Amenities	29.8 m ²
Storage	30.4 m ²
Bonded Storage	136.1 m ²

TOTAL	521.6 m²
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Mike Lee

scale: **1:100@A3**

date:



1074-01 21/03/19

DEVELOPMENT INFO

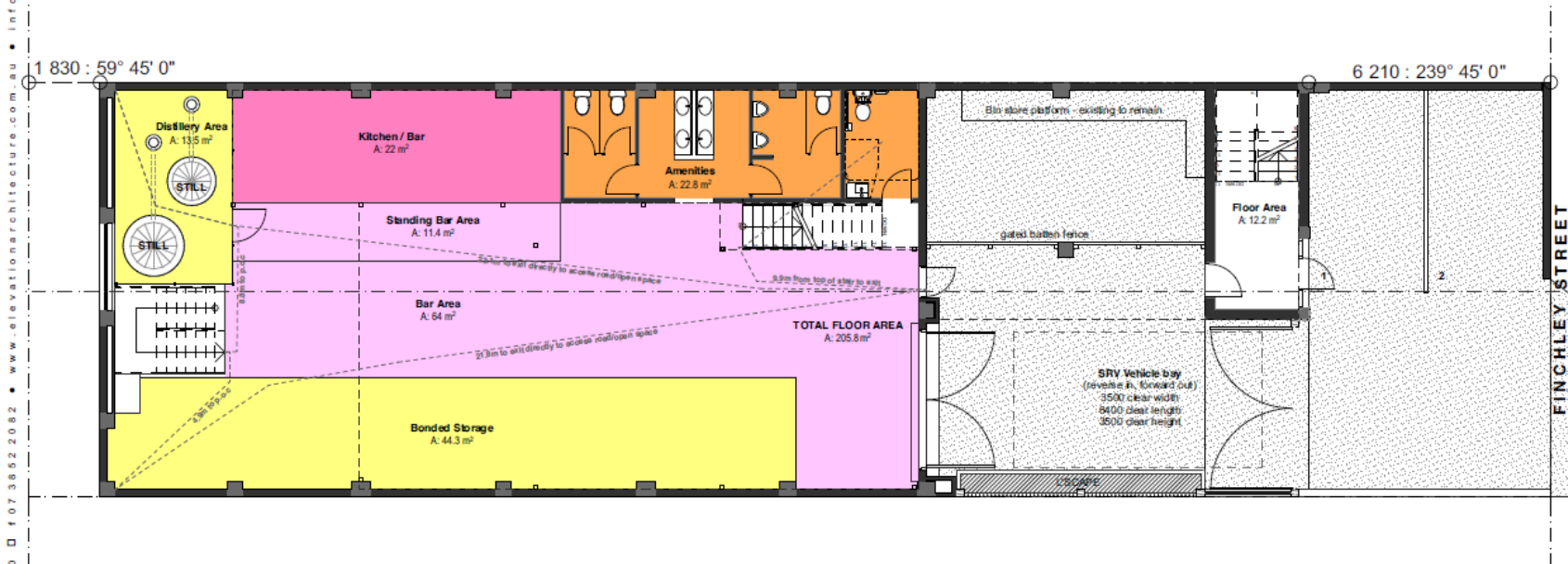
Carparks required ()
Carparks provided

????

GFA

Existing Office Space	133.2 m ²
Bar Space	64 m ²
Standing Bar (1.5m from service)	11.4 m ²
Distillery	13.5 m ²
Amenities	29.8 m ²
Storage	30.4 m ²
Bonded Storage	136.1 m ²

TOTAL 521.6 m²



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P1 Date: 1/10/19-01 Finchley Street Whisky Distillery 5.1 Sketch Design 5.1.2 ArchCAD 11 074-01 SD Master_21.plt

Finchley Street Whisky Distillery
25 Finchley Street Milton 4064
Mike Lee

Proposed Ground Floor Plan

scale: 1:100 @ A3

date:



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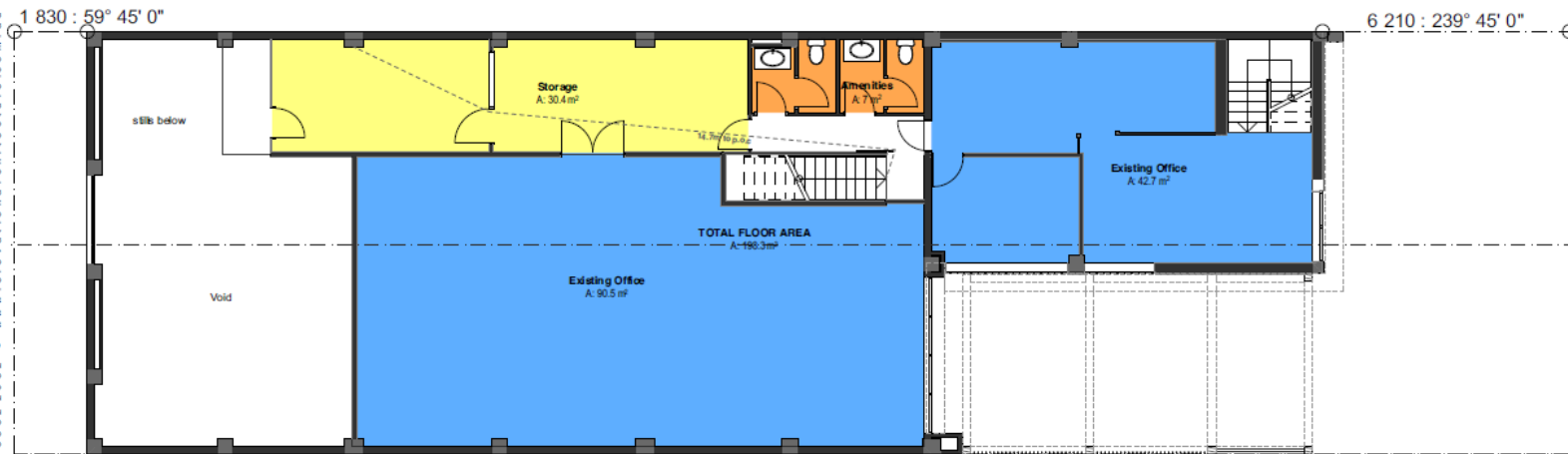
DEVELOPMENT INFO

Carparks required () ????

GFA

Existing Office Space	133.2 m ²
Bar Space	64 m ²
Standing Bar (1.5m from service)	114 m ²
Distillery	13.5 m ²
Amenities	29.8 m ²
Storage	30.4 m ²
Bonded Storage	136.1 m ²

TOTAL **521.6 m²**



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Finchley Street Whisky Distillery
25 Finchley Street Milton 4064
Mike Lee

Proposed First Floor Plan

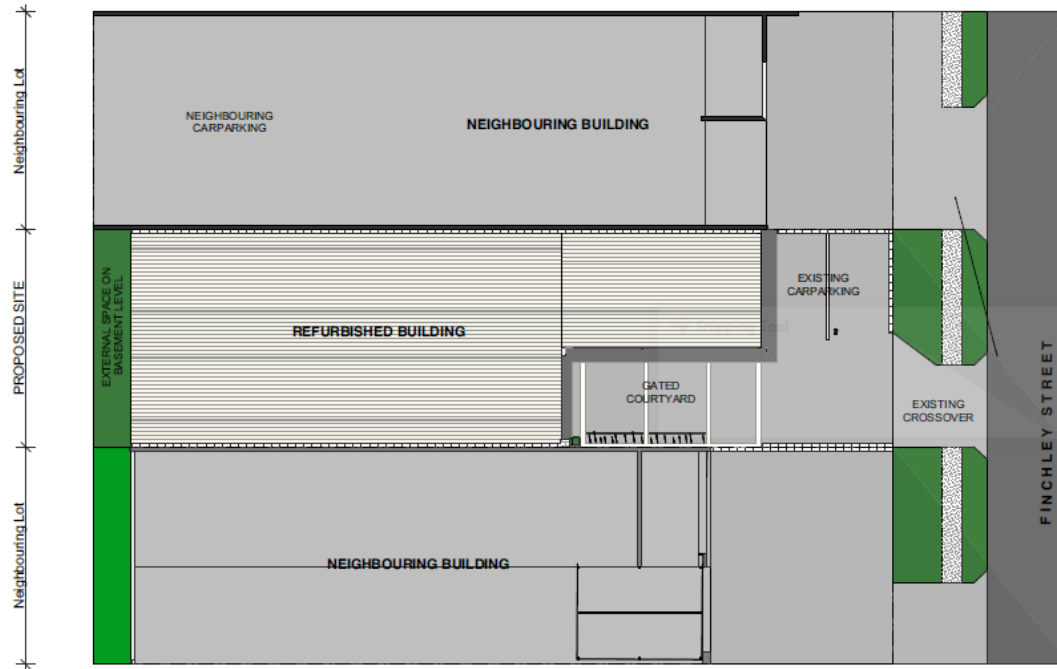
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date:



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1074-01 26/03/19

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SITE INFORMATION

Real Property Description: Lot 13 RP18886

Local Authority: Brisbane City Council
Site Classification: Low Impact Industry

Site Area: 415 m²
Building Area: 521.6 m²

DEVELOPMENT INFO

Carparks required () ???
Carparks provided

GFA

Existing Office Space	133.2 m ²
Bar Space	64 m ²
Standing Bar (1.5m from service)	11.4 m ²
Distillery	13.5 m ²
Amenities	29.8 m ²
Storage	30.4 m ²
Bonded Storage	136.1 m ²

TOTAL 521.6 m²



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Finchley Street Whisky Distillery
25 Finchley Street Milton 4064
Mike Lee

Proposed Site Plan

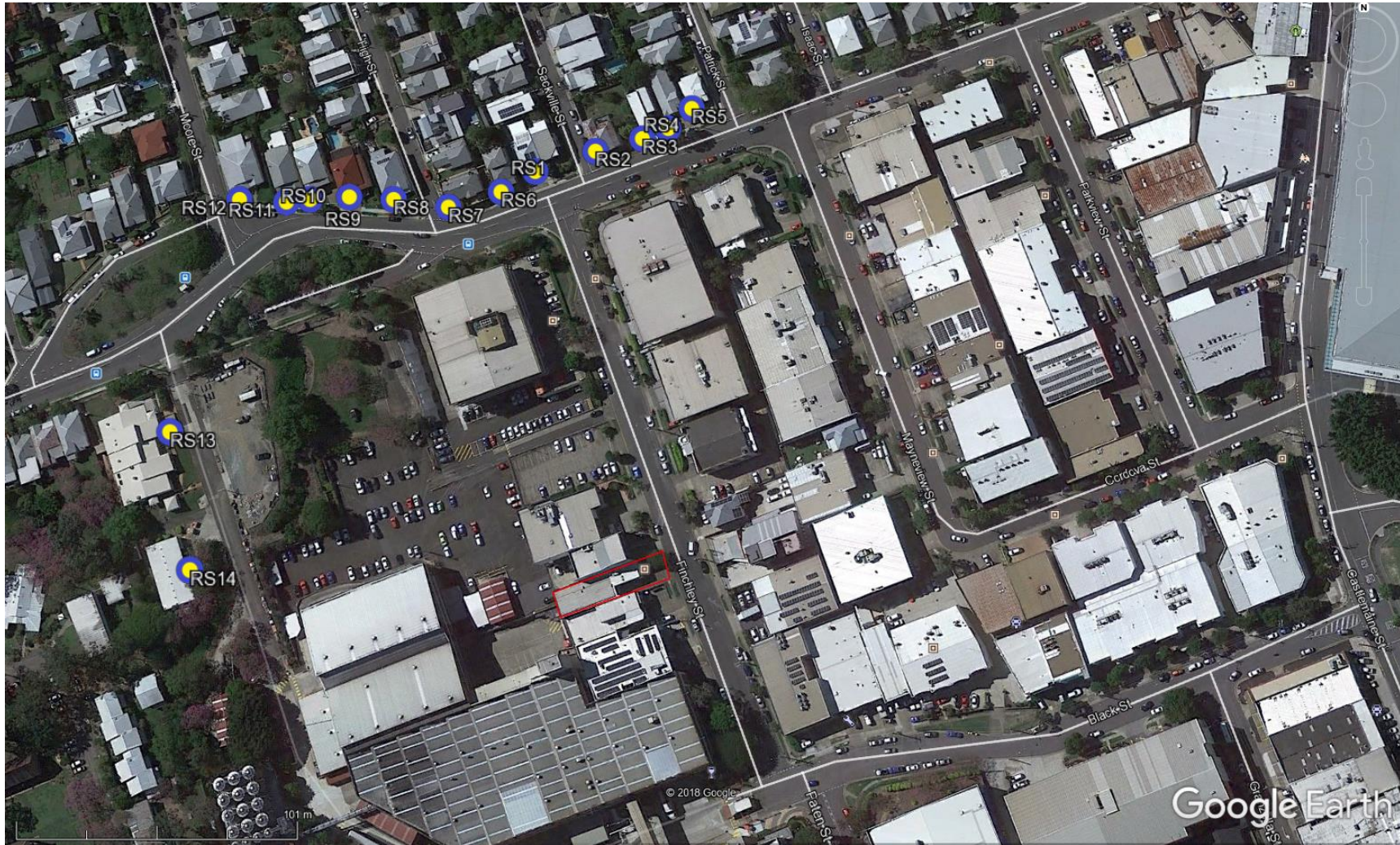
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1074-01 21/03/19

APPENDIX B – MODELLED RECEPTORS



APPENDIX C – AMBIENT NOISE MODELLING.



APPENDIX D – RESULTANT NOISE MODELLING.

POINT CALCULATIONS

Pen3D2000 V 1.10.0

Project Code:None

Project Description:None

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File Description:Data file covering area

Tuesday 05 Nov, 2019 at 15:06:06

Environmental Calculations

All point and line sources included. Line source segmentation angle: 10 degrees. Calculations for specified meteorology.

Noise level results are the logarithmic addition of all the noise sources

Noise level results incorporate the incoherent ground reflection algorithm

Meteorology :

Wind speed 1.0 (m/s) Wind direction 101 Mast height 10.0 (m)

Temperature 25.0 (C) Temperature Gradient 2.0 (C/100m) Humidity 50.0 (%)

Surface Roughness of terrain 0.023000000 (m) Zero plane offset 0.080000000 (m)

Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS1	500538.8	6962055.6	1.5		24.1
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	4.1	
Background music	500560.6	6961897.5	1.5	-2.7	
Servery	500554.2	6961894.3	1.5	-3.0	
Door Slam	500536.7	6961907.0	1.5	23.7	
Idling Van	500540.2	6961896.2	1.5	13.2	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS2	500561.0	6962063.9	1.5		23.0
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	3.2	
Background music	500560.6	6961897.5	1.5	-3.7	
Servery	500554.2	6961894.3	1.5	-4.1	
Door Slam	500536.7	6961907.0	1.5	22.5	
Idling Van	500540.2	6961896.2	1.5	12.1	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS03	500580.1	6962068.6	1.5		22.0
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	2.5	
Background music	500560.6	6961897.5	1.5	-4.6	
Servery	500554.2	6961894.3	1.5	-4.9	
Door Slam	500536.7	6961907.0	1.5	21.5	
Idling Van	500540.2	6961896.2	1.5	11.1	

Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS04	500590.5	6962073.5	1.5		21.3
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	1.9	
Background music	500560.6	6961897.5	1.5	-5.2	
Servery	500554.2	6961894.3	1.5	-5.5	
Door Slam	500536.7	6961907.0	1.5	20.9	
Idling Van	500540.2	6961896.2	1.5	10.5	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS05	500598.8	6962081.1	1.5		20.7
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	1.3	
Background music	500560.6	6961897.5	1.5	-5.8	
Servery	500554.2	6961894.3	1.5	-6.2	
Door Slam	500536.7	6961907.0	1.5	20.3	
Idling Van	500540.2	6961896.2	1.5	9.8	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS06	500526.3	6962047.9	1.5		24.9
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	4.7	
Background music	500560.6	6961897.5	1.5	-2.1	
Servery	500554.2	6961894.3	1.5	-2.3	
Door Slam	500536.7	6961907.0	1.5	24.5	
Idling Van	500540.2	6961896.2	1.5	13.9	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS07	500505.6	6962042.3	1.5		25.6
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	5.1	
Background music	500560.6	6961897.5	1.5	-1.5	
Servery	500554.2	6961894.3	1.5	-1.7	
Door Slam	500536.7	6961907.0	1.5	25.2	
Idling Van	500540.2	6961896.2	1.5	14.6	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS08	500484.9	6962045.4	1.5		25.7
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	5.0	
Background music	500560.6	6961897.5	1.5	-1.5	
Servery	500554.2	6961894.3	1.5	-1.7	
Door Slam	500536.7	6961907.0	1.5	25.2	
Idling Van	500540.2	6961896.2	1.5	14.7	

Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS09	500469.1	6962046.2	1.5		25.7
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	4.9	
Background music	500560.6	6961897.5	1.5	-1.5	
Servery	500554.2	6961894.3	1.5	-1.6	
Door Slam	500536.7	6961907.0	1.5	25.3	
Idling Van	500540.2	6961896.2	1.5	14.7	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS10	500453.5	6962045.4	1.5		25.7
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	4.9	
Background music	500560.6	6961897.5	1.5	-1.4	
Servery	500554.2	6961894.3	1.5	-1.5	
Door Slam	500536.7	6961907.0	1.5	25.3	
Idling Van	500540.2	6961896.2	1.5	14.8	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS11	500443.9	6962044.3	1.5		25.8
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	4.8	
Background music	500560.6	6961897.5	1.5	-1.4	
Servery	500554.2	6961894.3	1.5	-1.5	
Door Slam	500536.7	6961907.0	1.5	25.3	
Idling Van	500540.2	6961896.2	1.5	14.9	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS12	500426.6	6962045.3	1.5		25.6
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	4.6	
Background music	500560.6	6961897.5	1.5	-1.5	
Servery	500554.2	6961894.3	1.5	-1.5	
Door Slam	500536.7	6961907.0	1.5	25.2	
Idling Van	500540.2	6961896.2	1.5	14.8	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS13	500404.9	6961955.5	1.5		28.1
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	6.5	
Background music	500560.6	6961897.5	1.5	0.7	
Servery	500554.2	6961894.3	1.5	0.7	
Door Slam	500536.7	6961907.0	1.5	27.6	

Idling Van	500540.2	6961896.2	1.5	17.3	
Receptor	X Posn	Y Posn	Height		Noise Level
	(m)	(m)	(m)		(dB(A))
RS14	500414.8	6961904.4	1.5		28.9
Source	X Posn	Y Posn	Height	Noise Level	
	(m)	(m)	(m)	(dB(A))	
80 patrons	500570.5	6961901.1	1.5	7.2	
Background music	500560.6	6961897.5	1.5	1.5	
Servery	500554.2	6961894.3	1.5	1.5	
Door Slam	500536.7	6961907.0	1.5	28.4	
Idling Van	500540.2	6961896.2	1.5	18.3	