# Additional information

## Planning Committee

Wednesday, 3 March 2021, 6.00pm

City of Fremantle

# Table of Contents

## PC2102-1 SOUTH STREET, NO. 2/398 (LOT 152) O'CONNOR - ADDITIONS (AQUAPONICS NURSERY) TO EXISTING RESTAURANT/TAVERN (TG DA0409/20)

**Additional information 1**: Site Photos


**Photo 1 –** Development area from subject site


**Photo 2 –** Existing signage on site


**Photo 3 –** Development area shown left of frame

**Photo 4** – On site landscaping to be developed


**Photo 5** – Location of works


**Photo 6** – Development context


**Photo 7 –** Development context

# PC2103-2 KEEL PLACE, NO. 4 (LOT 51), NORTH FREMANTLE - THREE STOREY SINGLE HOUSE AND ANCILLARY DWELLING (TG DA0166/20)

## **Additional Information 1 –** Refused development

Application no: DA0166/20
Enquiries: Tom Geddes
Telephone: 1300 693 736
Email: planning@fremantle.wa.gov.au

City of Fremantle

City of Fremantle
ABN: 74 680 272 485
PO Box 807, Fremantle WA 6959
T 08 9432 9999 F 08 9430 4634
TTY 08 9432 9777
E info@fremantle.wa.gov.au

11 November 2020

Bellagio Homes Pty Ltd
PO Box 1428
BIBRA LAKE WA 6965

Dear Sir / Madam

**Address:** **4 Keel Place NORTH FREMANTLE WA 6159**
**Lot and plan:** **Lot 51 Plan 20296**
**Application:** **Three Storey Single House and Ancillary Dwelling**

The City of Fremantle, in accordance with the requirements of the City of Fremantle Local Planning Scheme No. 4 and the Metropolitan Region Scheme, has decided to ***refuse town planning approval to commence development*** in accordance with the plans and elevations dated **14 September 2020** subject to the conditions and advisory notes on the attached Notice of Determination.

Pursuant to Clause 76 of the Planning and Development (Local Planning Schemes) Regulations 2015, if the applicant and/or owner is aggrieved by the decision of the Council, as a result of a condition of approval or by a determination of refusal, there may be a right to apply for a review of the decision.

This application must be made in accordance with the provisions of Part 14 of the *Planning and Development Act 2005* and be lodged with the State Administrative Tribunal within twenty eight (28) days of the receipt of the decision letter.

The contact details of the State Administrative Tribunal are as follows:

State Administrative Tribunal
565 Hay Street
PERTH WA 6000

Telephone: (08) 9219 3111
Tollfree: 1300 306 017
Website: www.sat.justice.wa.gov.au

A copy of the application for review of the decision must be served on the local authority, which is the City of Fremantle.

Please quote application number DA0166/20 in any future correspondence relating to this application. If you require any further information in relation to this determination, please contact the assessing officer by telephone or by e-mail at planning@fremantle.wa.gov.au.

Yours faithfully

**Julia Kingsbury**
Manager Development Approvals

Enc:
Planning and Development (Local Planning Schemes) Regulations 2015 Schedule 2 Notice of Determination

CC
P S J Ridley, S A S Ridley
C/- Emirates Flight Operations (Fc326)
PO Box 92
DUBAI 9999
UNITED ARAB EMIRATES

City of Fremantle

# PLANNING AND DEVELOPMENT ACT 2005

**City of Fremantle**

**NOTICE OF DETERMINATION ON APPLICATION**

**FOR DEVELOPMENT APPROVAL**

**Location**: **4 Keel Place NORTH FREMANTLE WA 6159** .....

**Lot: Diagram/ Plan**: **Lot 51 Plan 20296**.....

**Vol. No.: 2023 Folio No.: 350** .....

**Application date: 19 May 2020** ..... **Received on: 19 May 2020**.....

**Description of proposed development: Three Storey Single House and Ancillary Dwelling** .....

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The application for development approval is:

**Planning committee acting under delegation 1.1:**

**REFUSE, under the Metropolitan Region Scheme and Local Planning Scheme No. 4, three storey Single house and Ancillary dwelling at No. 4 (Lot 51) Keel Place, North Fremantle, as detailed on plans dated 14 September 2020, for the following reasons:**

1. **The proposal is inconsistent with the requirements of the City of Fremantle Local Planning Scheme No. 4 in respect to building height requirements of Local Planning Area 3, sub area 3.3.1 and does not satisfy the discretionary criteria of clause 4.8.1.**

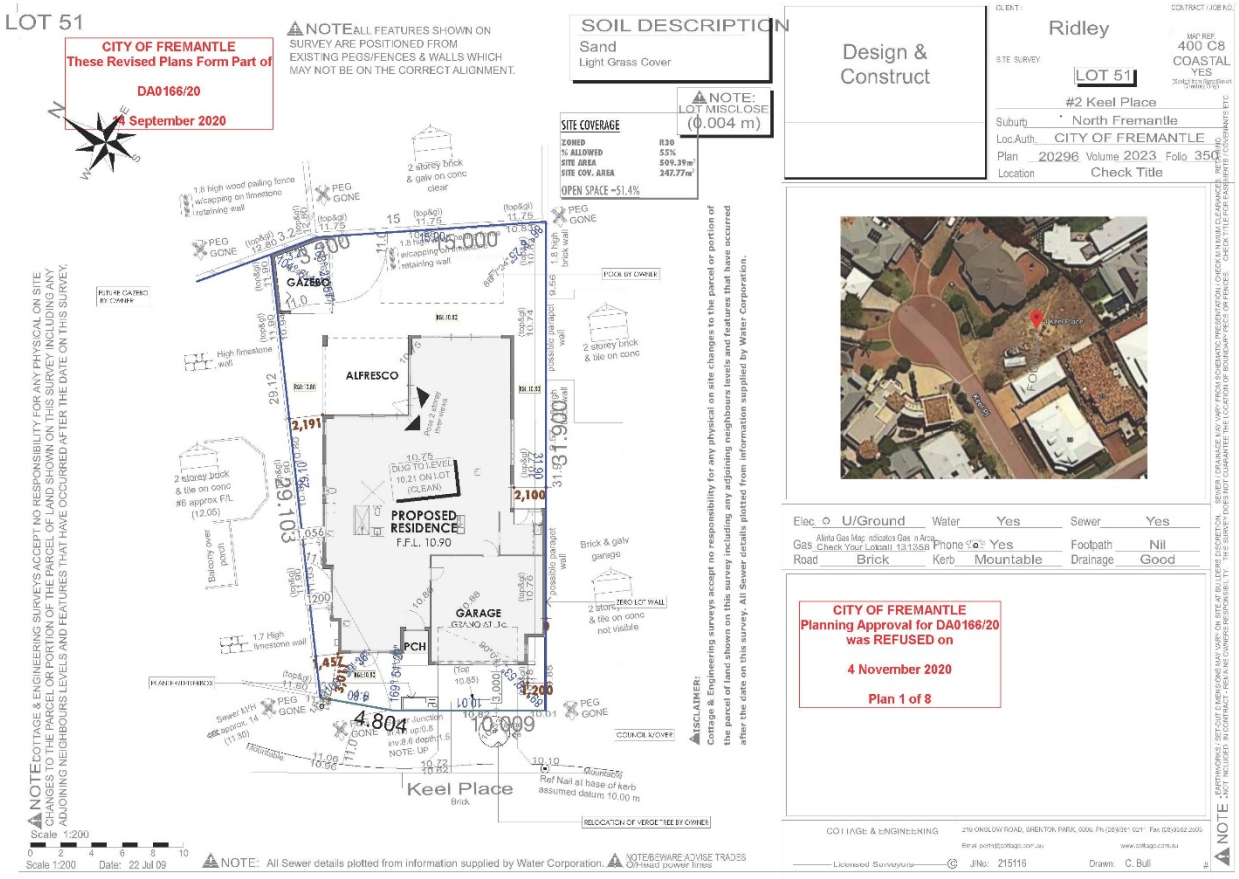
Date of determination……4 November 2020……

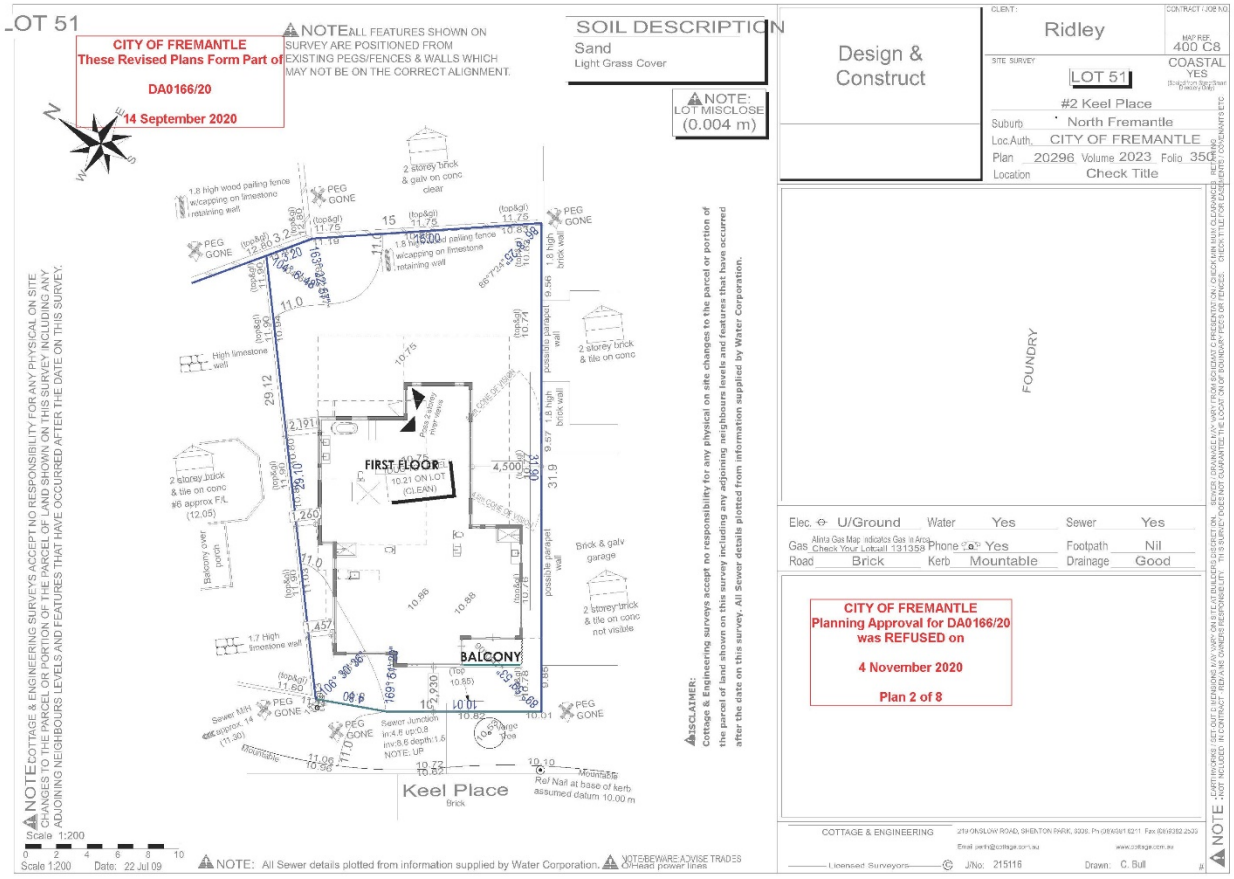
Note 1: If an applicant or owner is aggrieved by this determination there is a right of review by the State Administrative Tribunal in accordance with the Planning and Development Act 2005 Part 14. An application must be made within 28 days of the determination.

Note 2: This planning decision is confined to the authority of the Planning and Development Act 2005 and the City of Fremantle Local Planning Scheme 4. This decision does not remove the obligation of the applicant and/or property owner to ensure that all other required local government approvals are first obtained, all other applicable state and federal legislation is complied with, and any restrictions, easements, or encumbrances are adhered to.

Signed: ..... Dated: 11/11/20 .....

For and on behalf of the City of Fremantle.


LOT 51
CITY OF FREMANTLE
These Revised Plans Form Part of
DA0166/20
14 September 2020
NOTE ALL FEATURES SHOWN ON SURVEY ARE POSITIONED FROM EXISTING PEGS/FENCES & WALLS WHICH MAY NOT BE ON THE CORRECT ALIGNMENT.
SOIL DESCRIPTION
Sand
Light Grass Cover
NOTE: LOT MISCLOSE (0.004 m)
SITE COVERAGE
ZONED R30
% ALLOWED 55%
SITE AREA 509.39m²
SITE COV. AREA 347.77m²
OPEN SPACE =51.4%
ALFRESCO
PROPOSED RESIDENCE
F.F.L. 10.90
GARAGE
GAZEBO
POOL BY OWNER
Keel Place
Design & Construct
Ridley
SITE SURVEY
LOT 51
#2 Keel Place
Suburb North Fremantle
Loc.Auth. CITY OF FREMANTLE
Plan 20296 Volume 2023 Folio 350
Location Check Title
MAP REF. 400 C8
COASTAL YES
Elec. U/Ground Water Yes Sewer Yes
Gas Alinta Gas Map indicates Gas in Area Phone Yes Footpath Nil
Road Brick Kerb Mountable Drainage Good
CITY OF FREMANTLE
Planning Approval for DA0166/20
was REFUSED on
4 November 2020
Plan 1 of 8
DISCLAIMER:
Cottage & Engineering surveys accept no responsibility for any physical on site changes to the parcel or portion of the parcel of land shown on this survey including any adjoining neighbours levels and features that have occurred after the date on this survey. All Sewer details plotted from information supplied by Water Corporation.
NOTE COTTAGE & ENGINEERING SURVEYS ACCEPT NO RESPONSIBILITY FOR ANY PHYSICAL ON SITE CHANGES TO THE PARCEL OR PORTION OF THE PARCEL OF LAND SHOWN ON THIS SURVEY INCLUDING ANY ADJOINING NEIGHBOURS LEVELS AND FEATURES THAT HAVE OCCURRED AFTER THE DATE ON THIS SURVEY.
NOTE: All Sewer details plotted from information supplied by Water Corporation.
COTTAGE & ENGINEERING
Licensed Surveyors
J/No: 215116
Drawn: C. Bull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Sand
Light Grass Cover
NOTE: LOT MISCLOSE (0.004 m)
FIRST FLOOR
BALCONY
FOUNDRY
Keel Place
Design & Construct
Ridley
SITE SURVEY
LOT 51
#2 Keel Place
Suburb North Fremantle
Loc.Auth. CITY OF FREMANTLE
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Plan 2 of 8
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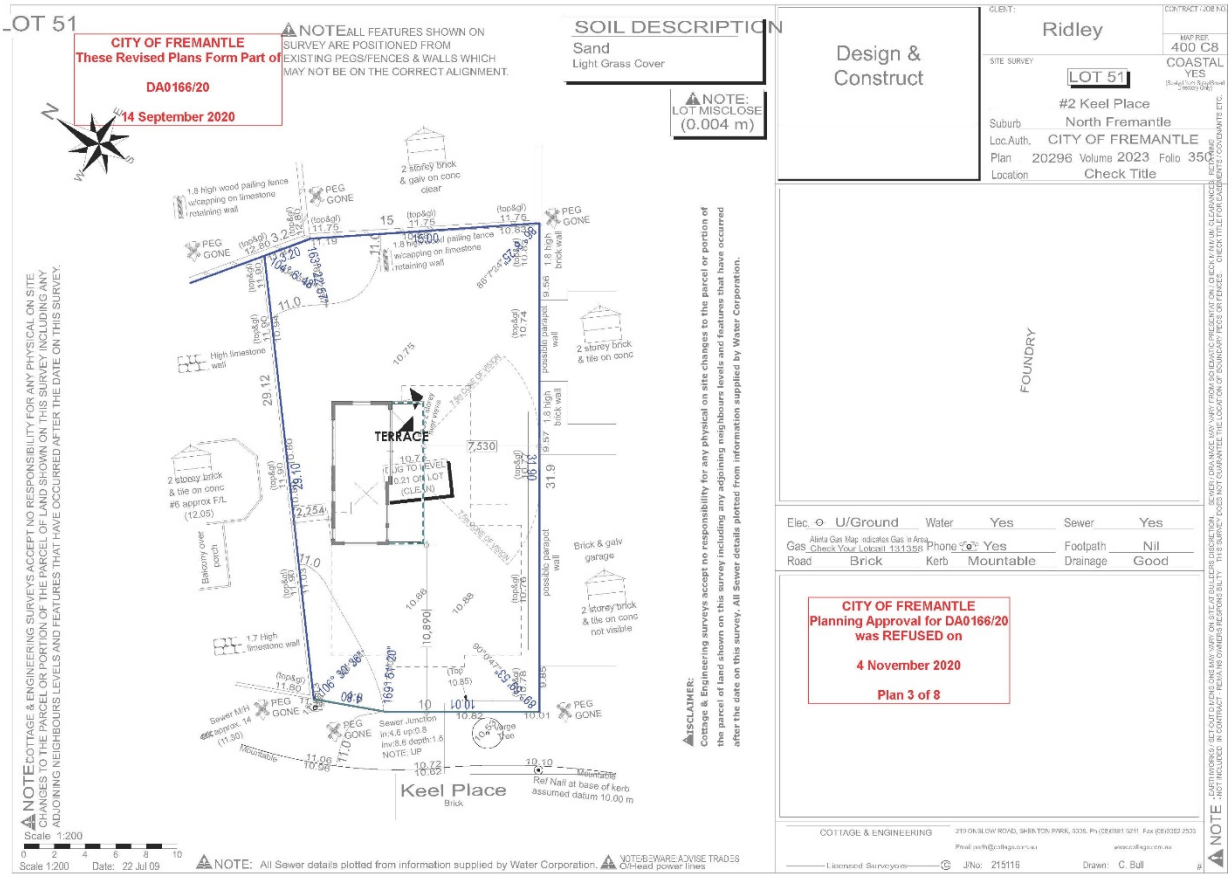
Drawn: C. Bull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Sand
Light Grass Cover
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Design & Construct
CLIENT: Ridley
MAP REF: 400 C8
SITE SURVEY
LOT 51
COASTAL
YES
#2 Keel Place
Suburb North Fremantle
Loc.Auth. CITY OF FREMANTLE
Plan 20296 Volume 2023 Folio 350
Location Check Title
FOUNDRY
TERRACE
Keel Place
Elec. U/Ground Water Yes Sewer Yes
Gas Yes Phone Yes Footpath Nil
Road Brick Kerb Mountable Drainage Good
CITY OF FREMANTLE
Planning Approval for DA0166/20
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4 November 2020
Plan 3 of 8
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Drawn: C. Bull

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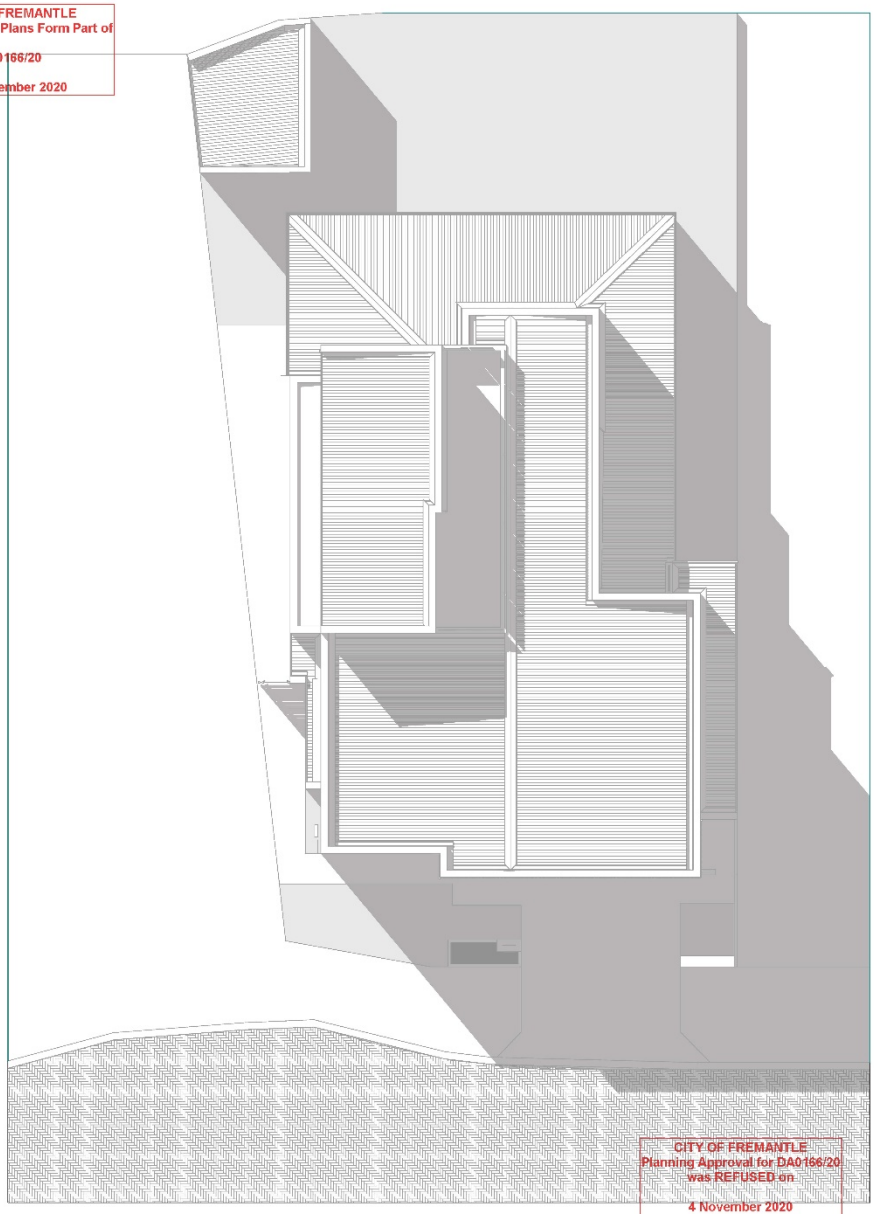

CITY OF FREMANTLE
Planning Approval for DA0166/20
was REFUSED on
4 November 2020
Plan 4 of 8

01 shadow plan 21 june 12PM
1:100

NOTE

Project Partners

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Rev ID | Date | Change Name | Date

DA
SHADOW DIAGRAM

PROJECT NAME :
job description

REVISION NO.

DRAWING NO.
.5

CITY OF FREMANTLE
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DA0166/20

14 September 2020


CITY OF FREMANTLE
Planning Approval for DA0166/20 was REFUSED on

4 November 2020

Plan 5 of 8

GROUND FLOOR PLAN
1:100

| Area | m2 | Perimeter |
|---|---|---|
| PROPOSED RESIDENCE | 170.18 | 70.76 |
| BALCONY | 7.00 | 11.38 |
| FIRST FLOOR | 187.55 | 63.90 |
| GARAGE | 51.26 | 29.52 |
| TERRACE | 56.96 | 30.92 |
| PCH | 3.96 | 8.56 |
| ALFRESCO | 29.12 | 21.60 |
| GAZEBO | 16.76 | 16.42 |
| | 548.81 m² | 253.06 m |

NOTE

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GROUND FLOOR PLAN

job description

.6

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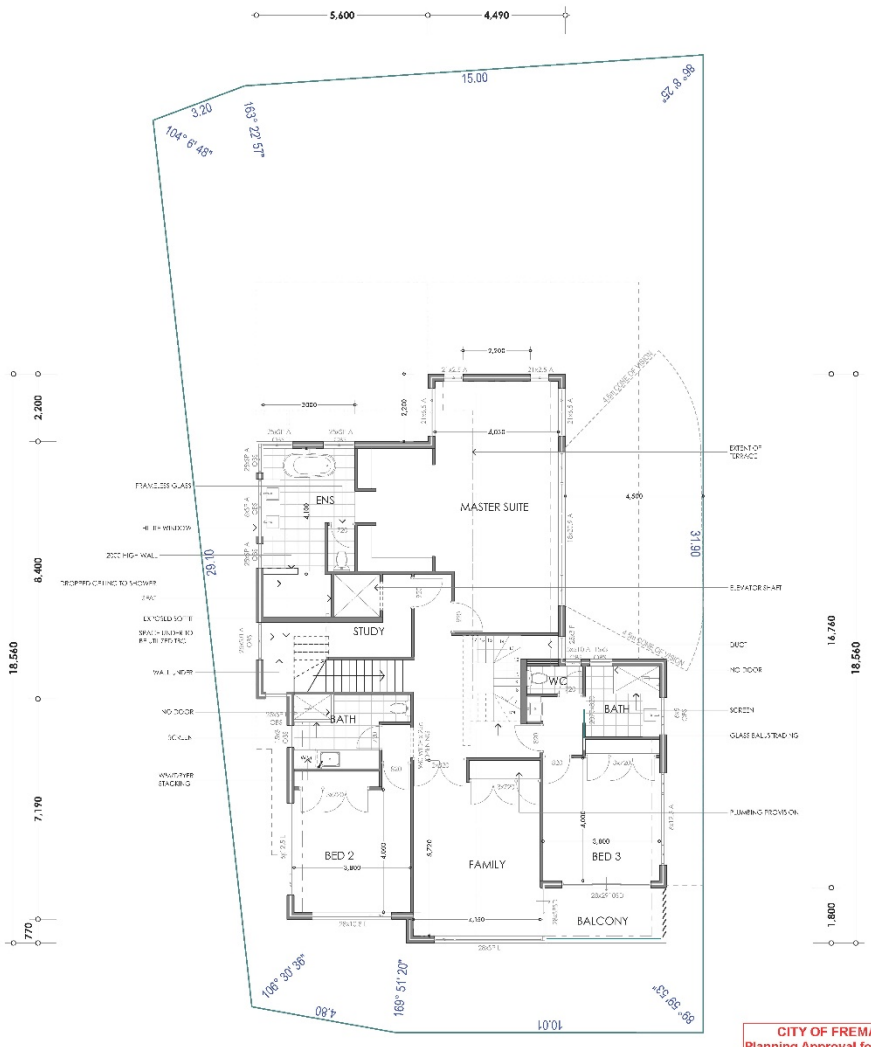
14 September 2020




FIRST FLOOR PLAN
1:100

CITY OF FREMANTLE
Planning Approval for DA0166/20
was REFUSED on

4 November 2020

Plan 6 of 8

NOTE

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Rev'D Chkd Change Name Date

DA
FIRST FLOOR PLAN

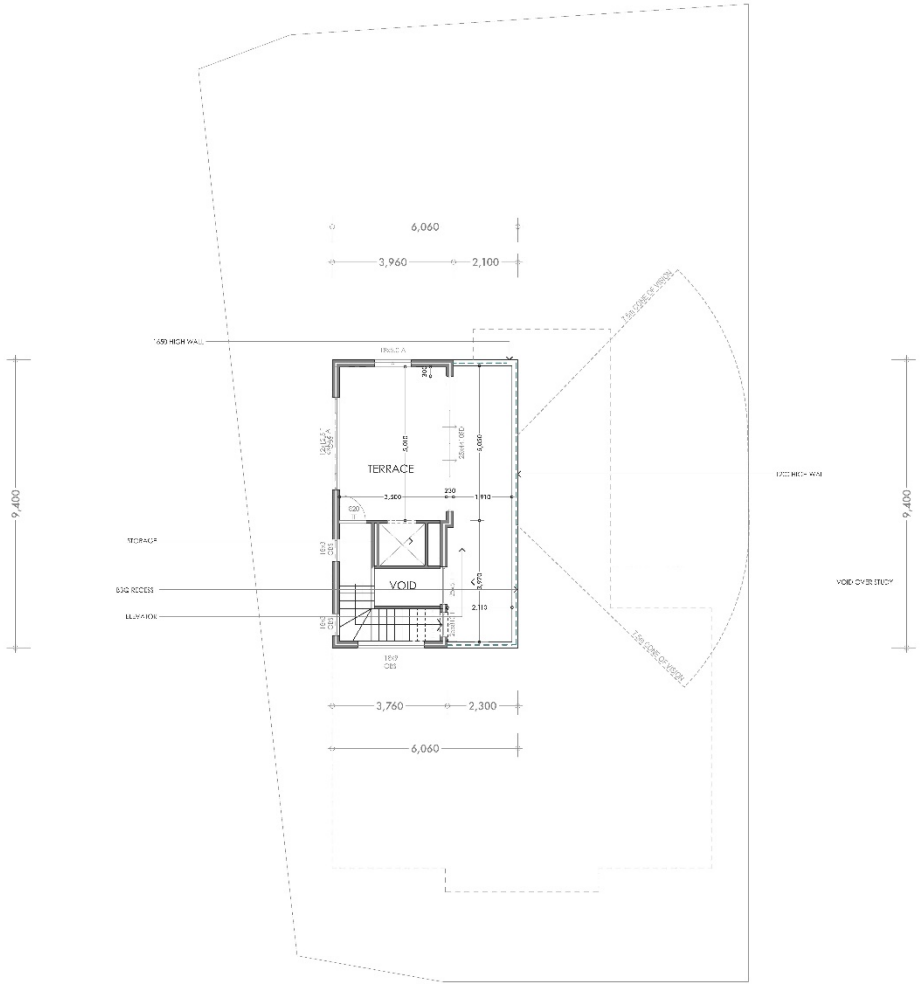
PROJECT NAME :
job description

REVISION NO.
.7

CITY OF FREMANTLE
These Revised Plans Form Part of

DA0166/20

14 September 2020




TERRACE
1:100

CITY OF FREMANTLE
Planning Approval for DA0166/20
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4 November 2020

Plan 7 of 8

NOTE

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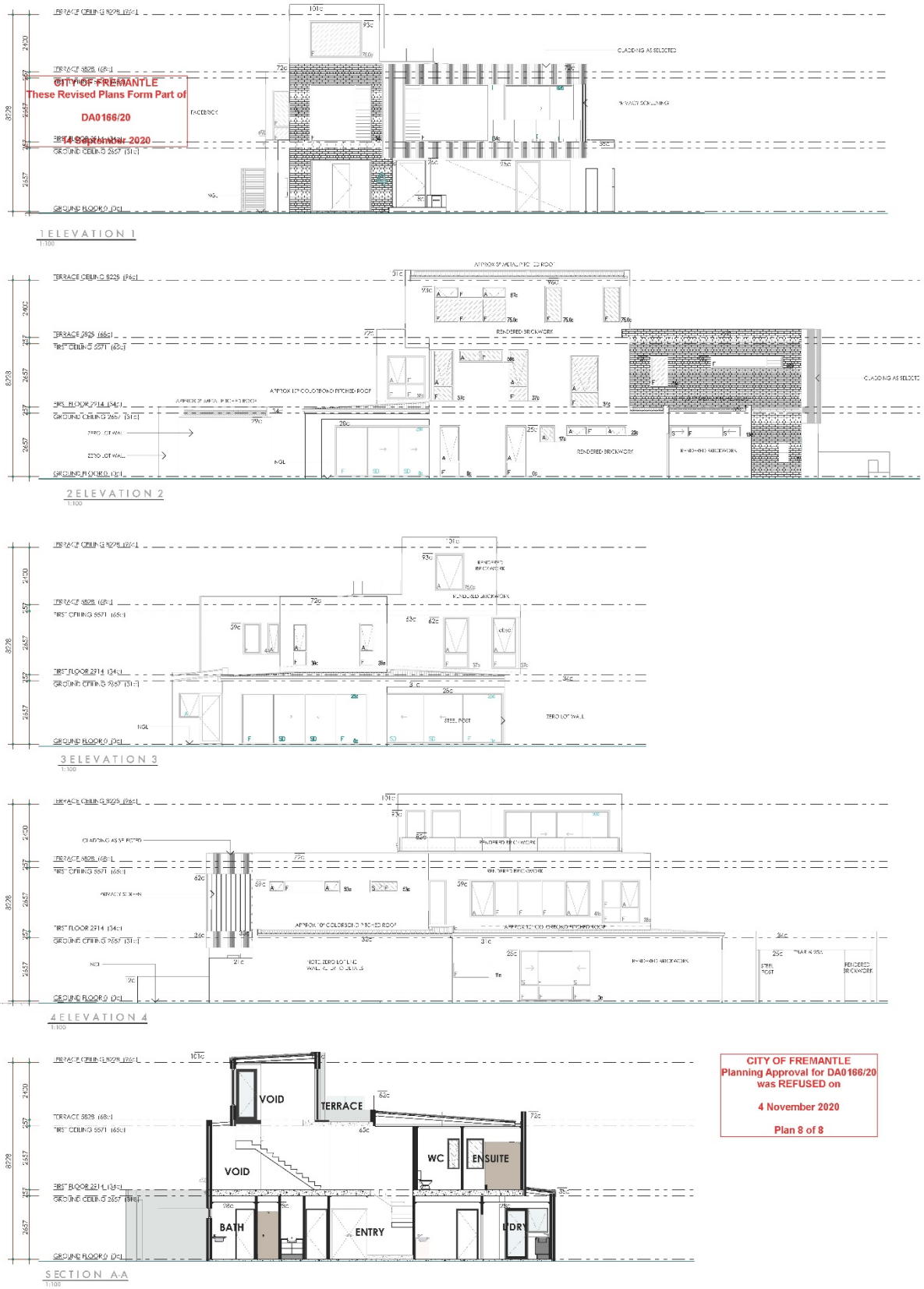
TERRACE

job description

.8


CITY OF FREMANTLE
These Revised Plans Form Part of
DA0166/20
14 September 2020
1 ELEVATION 1
2 ELEVATION 2
3 ELEVATION 3
4 ELEVATION 4
SECTION A-A
VOID
TERRACE
VOID
WC
ENSUITE
BATH
ENTRY
LDRY
CITY OF FREMANTLE
Planning Approval for DA0166/20
was REFUSED on
4 November 2020
Plan 8 of 8
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ELEVATIONS
job description

## **Additional Information 2 –** Original Officers Report

**PC2011 - 2 KEEL PLACE, NO. 4 (LOT 51), NORTH FREMANTLE - THREE STOREY SINGLE HOUSE AND ANCILLARY DWELLING (TG DA0166/20)**

| | |
|---|---|
| **Meeting Date:** | 4 November 2020 |
| **Responsible Officer:** | Manager Development Approvals |
| **Decision Making Authority:** | Committee |
| **Agenda attachments:** | 1. Amended development plans |
| **Additional information:** | 1. Original development plans<br>2. Site photos<br>3. Comparison of development to compliant roof height |

**SUMMARY**

**Approval is sought for a three storey Single house with an internal Ancillary dwelling at 4 Keel Place, North Fremantle.**

**The proposal is referred to the Planning Committee (Committee or PC) due to the nature of some discretions being sought and comments received during the notification period that cannot be addressed through conditions of approval.**

**The application seeks discretionary assessments against the Local Planning Scheme No. 4 (LPS4), Residential Design Codes (R-Codes) and Local Planning Policies. These discretionary assessments include the following:**

- **Building height (external wall)**
- **Visual privacy (north west)**
- **Lot boundary setbacks (north west, south east)**
- **Boundary walls (north west, north east)**

**The application was considered by PC at its meeting on 5 August 2020 and deferred for the applicant to consider making amendments to the proposal to reduce the scale of the development, particularly the height of the building in order to minimise the adverse impacts on the amenity of the adjoining properties and the locality.**

**Amended plans and additional details were provided by the applicant on 14 September 2020 and are detailed below.**

**The amended proposal does not satisfy the discretionary criteria for building height and is therefore recommended for refusal.**

**PROPOSAL**

**Detail**

Approval is sought for a three storey dwelling and ancillary dwelling to an existing vacant site at 4 Keel Place, North Fremantle. The proposed works include:

- Ground floor:
  - Double garage and store.
  - Self contained guest room/ancillary dwelling.
  - Kitchen/dining/living room.
  - Gazebo and pool.
- Upper floor:
  - Three bedrooms.
  - Family Room.
  - Three bathrooms.
  - Study.
  - Balcony.
- Terrace:
  - Terrace room.
  - Balcony.

The applicant submitted amended plans on 26 June 2020 confirming the location of the proposed pool and gazebo. It is noted that the gazebo was relocated to the northern corner of the site.

The applicant submitted further amended plans on 14 September 2020 in response to the concerns raised by PC including the following amendments:

- Extending the garage parapet wall.
- Increasing the setback of the top floor terrace from the northern property by 0.9m.
- The inclusion of additional glazing to the terrace.
- The inclusion of a window in the front elevation of the terrace.
- Amending the terrace balustrade to be glass.
- Window alterations.

The applicant also submitted plans comparing the height of the proposed development. These diagrams are provided as additional information.

Amended development plans are included as attachment 1.

**Site/application information**

| | |
|---|---|
| Date received: | 19 May 2020 |
| Owner name: | P Ridley and S Ridley |
| Submitted by: | Bellagio Homes |
| Scheme: | Residential R25 |
| Heritage listing: | North Fremantle Heritage Area |
| Existing land use: | Vacant Site |
| Use class: | Single house |
| Use permissibility: | P |


## CONSULTATION

### External referrals
Nil required.

### Community
The application was advertised in accordance with Schedule 2, clause 64 of the Planning and Development (Local Planning Schemes) Regulations 2015, as the proposal included elements which varied deemed-to-comply criteria of the R-Codes. The advertising period concluded on 8 June 2020, and two (2) submissions were received. The following issues were raised (summarised):

- The proposed building height, and its contribution to the overall scale of the building is considered to adversely impact the outlook from adjoining residences.
- The height of the building does not address the building height requirements applicable to the site and would set a precedent in the locality for larger buildings to be constructed.
- The reduced setbacks contribute to overall building scale and adversely affect the vistas between buildings and the general amenity of adjoining residences.
- There is overlooking from the operable study window.

In response to the above, the following comments are provided by officers:

- The applicant submitted additional plans clarifying the location of the proposed gazebo and pool.
- Were approval of the proposal considered, it would be a recommended condition of approval that the window resulting in the visual privacy discretion be appropriately fixed to limit overlooking towards the adjoining property.

Following the submission of the amended plans relocating the gazebo to the northern corner of the site, further consultation with affected neighbours was undertaken as the amendment had introduced boundary walls to the north west and north east property boundaries. This advertising period concluded on 17 July 2020 and one (1) submission was received which reiterated concerns with regard to building height but did not object to the location of the proposed gazebo.

The matters raised in the submissions are addressed in the officer comment below.

In accordance with Council Policy LPP1.3, the amended plans were not required to be re-advertised.

**OFFICER COMMENT**

**Statutory and policy assessment**
The original proposal has been assessed against the relevant provisions of LPS4, the R-Codes and relevant Council local planning policies. Where a proposal does not meet the Deemed-to-comply requirements of the R-Codes, an assessment is made against the relevant Design principles of the R-Codes. Not meeting the Deemed-to-comply requirements cannot be used as a reason for refusal. In this application the areas outlined below do not meet the Scheme, Deemed-to-comply or policy provisions and need to be assessed under the Design principles:

- Building height (external wall)
- Visual privacy (north west)
- Lot boundary setbacks (north west, south east)
- Boundary walls (north west, north east)

The above matters are discussed below.

**Background**
The subject site is located on the Keel Place cul-de-sac head. The site has a land area of approximately 509m² and is currently vacant. The site is zoned Residential and has a density coding of R25. The site is not individually heritage listed but is located within the North Fremantle Heritage Area.

The site is generally flat and is identified as being bushfire prone in accordance with DFES mapping. As the proposal is exempt from compliance with the requirements of State Planning Policy 3.7, which relates to development on bushfire prone land, the development response to potential bushfire risk is to be addressed through the building permit process.

A search of the property file has revealed no relevant history for the site, however it is noted that the site was established in the 1990s as a part of the overall development of the Rocky Bay estate and has been left vacant.

The original application was referred to the PC at their meeting on 5 August 2020, where they resolved to:

> *Refer the application to the Administration with the advice that the Planning Committee is not prepared to grant planning approval to the application for the construction of two storey Single house at No. 4 (Lot 51) Keel Place, North Fremantle based on the current submitted plans, and invite the applicant, prior to the next appropriate Planning Committee meeting, to consider amending the proposal to reduce the scale of the development, particularly the height of the building in order to minimise the adverse impacts on the amenity of the adjoining properties and the locality.*

On the 14 September the applicant submitted amended plans in response to the PC's resolution. These plans are the subject of this updated report.

**Building Height (External Wall)**

| Element | Requirement | Proposed | Extent of Variation |
|---|---|---|---|
| Wall height – LPS4 sub area 3.3.1 | 7m | 8.6m | 1.6m |

It is noted that the amended plans do not alter the originally proposed height of the dwelling however they do make a number of amendments in response to concerns raised by PC which are as follows:

- Increasing the setback of the top floor terrace from the northern property by 0.9m.
- The inclusion of additional glazing to the terrace.
- The inclusion of a window in the front elevation of the terrace.
- Amending the terrace balustrade to be glass.

In accordance with clause 4.8.1 of LPS4, the City is able to consider variation to height requirements in cases where a site is adjoining or adjacent to a building which depicts a height greater than the specified heights. In this case, the properties in the immediate area generally comply with the LPS4 height requirement, with the exception of 3 Keel Place, which exhibits a tower element which was approved with the dwelling in 1997 to a wall height of approximately 8.2 metres. Accordingly, the City is able to consider a variation to the maximum height requirement if all of the following criteria are considered to have been satisfied:

| LPS4 - 4.8.1.1 | Officer Comment |
|---|---|
| a) The variation would not be detrimental to the amenity of adjoining properties or the locality generally. | The height of the building is considered to be detrimental to the amenity of adjoining properties for the following reasons:<br>• The height of the building may limit views of significance for properties to the north and west of the subject site.<br>• The overall height of the building is considered to contribute to a bulky appearance for the subject dwelling as viewed from adjoining properties. In accordance with the Rocky Bay Estate design guidelines (LPP N9), generally two storey development is expected to |

| | |
|---|---|
| | be developed. |
| b) degree to which the proposed height of external walls effectively graduates the scale between buildings of varying heights within the locality. | Based on a review of the properties in the immediate area of the subject site, only one building exceeds the relevant building height requirements, being the tower element to the dwelling at 3 Keel Place.<br><br>It is considered that the height proposed dwelling will not contribute to the graduation of the scale of the dwelling at 3 Keel Place for the following reasons:<br>• The proposed upper floor terrace is higher than the height of the 3 Keel Place tower element.<br>• The 3 Keel Place tower element is a minor element which is located to the centre of this lot. The proposed terrace forms a much larger element.<br>• The two properties are separated by the Keel Place road reserve.<br><br>The dwelling to the rear at 33 Foundry Court is noted, however this dwelling has a floor which comprises a loft with dormer windows only. |
| c) conservation of the cultural heritage values of buildings on-site and adjoining. | No adjoining sites are individually identified on the City's heritage list. |
| d) any other relevant matter outlined in Council's local planning policies. | Local Planning Policy N9 contains criteria relevant to the assessment of building height. A further assessment against these criteria is carried out below. |

In accordance with LPS4 4.8.1 (d), consideration is to be given to clauses of relevant local planning policies relating to building height:

| **Local Planning Policy Design Guideline N9 Rocky Bay Estate (Former State Engineering Works Site)** | **Officer Comment** |
|---|---|
| 7.3b – "…Council will have consideration to river views and vistas between buildings and the roofscapes that affect those vistas…" | Generally it is considered that this element can be satisfied due to the additional storey being located at the centre of the subject lot, rather than impacting views across the rear setback area of the subject site. |
| 7.3d – The development plan outlines a 7.0m wall height or 10m roof height limit and therefore a two storey limit will be generally applied to the design of houses.<br><br>Development of residences more than two | See discussion above with respect to building height. The topography of the site is generally flat, with no site characteristics resulting in a need to exceed the height requirements applicable to the site. |

| | |
|---|---|
| storeys is not generally supported unless particular site characteristics or the individual design indicate that this form of development can be constructed in a manner that will have no unacceptable impact upon the amenity of the locality and adjoining properties, and within the indicated height limits. | Generally the proposed additional floor is considered to have an undue impact upon the amenity of the locality for the reasons outlined above. |
| 7.5c/d – In assessing the impact of development the Council will pay particular attention to whether the proposed development is sympathetic to the streetscape and the scale and character of the locality and the amenity of the locality. | Generally it is considered that the character of the immediately adjoining dwellings is two storey, with the exception of the minor tower element to 3 Keel Place. |

Based on the above assessment, the discretionary criteria of Local Planning Scheme No. 4 are not considered to be satisfied with respect to the height of the building. Accordingly, the application is recommended for refusal. The amendments made by the applicant to increase the setback of the upper floor from the northern boundary to 2.2m are noted, however the reasons for recommending the refusal of the development above remain relevant. The remaining amendments to include additional glazing to the upper floor terrace and amend the terrace balustrade to be glass are noted, however they do not contribute to the statutory assessment of the proposal with respect to building height in accordance with Local Planning Scheme No. 4.

The additional information submitted by the applicant showing the potential to develop a 10m high compliant pitched roof form is noted, however these plans demonstrate that the proposal sits outside the potential building envelope afforded by a 10m roof.

**Visual Privacy**

| Element | Requirement | Proposed | Extent of Variation |
|---|---|---|---|
| Study | 4.5m | 1.5m | 3m |

*Note: while the study window is obscured, it is marked as operable, making the window subject assessment against the visual privacy requirements of the R-Codes.*

The study window is considered to meet the Design principles of the R-Codes in the following ways:

- The window is generally obscured, and this window is marked as an awning window. Accordingly, views would generally be limited towards the neighbouring ground floor and front yard area.
- This view would also be oblique as any view would generally be available around the window when open. Should the proposal be supported, a condition limiting the operability of the window would be recommended to ensure that the neighbours' privacy can be appropriately maintained.

**Lot boundary setbacks**

| Element | Requirement | Proposed | Extent of Variation |
|---|---|---|---|
| Upper floor (north west) | 2.8m | 1.3m | 1.5m |

| | | | |
|---|---|---|---|
| Upper floor (south east) | 4.7m | 4.5m | 0.2m |

The north west boundary setback to the upper floor is considered to meet the Design principles of the R-Codes in the following ways:

- The reduced setback is due to the inclusion of a major opening to this wall (for the proposed study) – if this element were not included, the development would satisfy the deemed-to-comply criteria of the R-Codes.
- The majority of the wall is set back further than the minimum setback noted above as the boundary angles away from the line of the proposed wall.
- Openings in this wall are generally designed to protect mutual privacy, being obscured, highlight windows or onto non-habitable rooms.

The upper floor setback to the south east side boundary is considered to address the design principles of the R-Codes for the following reasons:

- With respect to visual privacy, the wall of the building is set off the side boundary in accordance with the visual privacy cone of vision setback applicable to bedrooms (4.5m).
- Due to lot orientation, the building and this wall will generally cast shade over the subject site and side setback area.
- The development includes varied setbacks along this side between upper and ground floors. This variation in setbacks and the inclusion of openings is considered to appropriately ameliorate building bulk.

The setback of the terrace element was amended to comply by the applicant in their amended plans dated 14 September 2020. Based on the above assessment, were the terrace element removed from consideration, this element of the proposal would be considered worthy of approval.

**Boundary walls**

| Element | Requirement | Proposed | Extent of Variation |
|---|---|---|---|
| Gazebo (north west) | 1m | Nil | 1m |
| Gazebo (north east) | 1m | Nil | 1m |
| Garage/Store/Laundry (South East) | 1m | Nil | 1m |

The boundary walls to the rear northern site corner are considered to satisfy the relevant design principles of the R-Codes and Local Planning Policy 2.4 for the following reasons:

- The location of the gazebo more effectively utilises the previously proposed 1m setback space between the originally proposed location.
- The walls are both single storey, limited in dimension along each respective boundary, and do not appear to adjoin the primary outdoor living area for each adjoining sites, thereby effectively reducing the proposed bulk of the walls. Based on site retaining walls, it appears that the adjoining lots are set higher than the subject site, reducing the perceived height of the boundary walls.
- The gazebo is proposed to be constructed at the existing ground level and generally faces towards the subject site, reducing potential privacy impacts.

- With respect to shade impacts, the walls will cast winter shade over the subject site rather than adjoining properties.
- The walls will not be readily visible from the streetscape and boundary walls of this nature can be found in the subject area.

The boundary wall (as amended) to the south east boundary is considered worthy of support for the following reasons:

- The wall adjoins the neighbouring garage boundary wall and is therefore considered to be of little to no impact with respect to privacy, shade cast, and building bulk.
- While the wall is slightly higher than this existing boundary wall element, it is considered that the colocation of boundary walls provides for improved development outcomes with respect to the appearance of development in the locality and streetscape.
- Boundary walls of this nature are common in the immediate locality.

Based on the above assessment, it is considered that were the terrace element removed from the proposal, the boundary walls could be considered for approval.

**Driveway**

| Element | Requirement | Proposed | Extent of Variation |
|---|---|---|---|
| Width | 4.5m (max) | 5.2m | 0.7m |
| Location | Avoid Street Tree | Removal of Street Tree | Removal of Street Tree |

In accordance with LPP2.9 the maximum permitted width of any proposed driveway, where it meets the property boundary is 4.5m. The prevailing characteristic of crossovers to the adjoining properties in the cul-de-sac head is a single width crossover meeting a driveway that widens towards the garages of the properties. Should the proposal be supported, a condition should be imposed to reduce the maximum width of the driveway (where it meets the property boundary) to 4.5m. The driveway is permitted to widen in width as it tapers back towards the garage.

LPP2.9 also requires the location of crossovers to avoid the removal of street trees. The City's Parks and Landscaping officer has advised that the existing Agonis tree is semi mature, however it is not in the healthiest of conditions due to its location on limestone. As such the tree could be removed subject to a replacement tree being provided to the City's requirements and at the cost of the owner/applicant. Should the proposal be supported, a condition should be imposed requiring separate approval for the removal of the street tree.

**CONCLUSION**

As discussed in the officer comment section above, the proposal as submitted does not satisfy the building height requirements of Local Planning Scheme No. 4 sub area 3.3.1 and it is likewise not considered to address the discretionary criteria of scheme clause 4.8.1. Accordingly, the proposal is recommended for refusal. The amendments to the proposal undertaken by the applicant in response to the concerns raised by PC at their meeting on 5 August 2020 are noted, however the requirements of Local Planning Scheme No. 4 in relation to building height are such that the development is unable to be recommended for approval.

It is noted that the remaining discretionary elements discussed above may be worthy of support if the height of the building were reduced to comply with the height requirements applicable to the site.

**STRATEGIC IMPLICATIONS**
Nil

**FINANCIAL IMPLICATIONS**

Nil

**LEGAL IMPLICATIONS**

Nil

**COMMITTEE DECISION ITEM PC2011 - 2**
**(Officer's recommendation)**

**Moved: Cr Bryn Jones Seconded: Mayor, Brad Pettitt**

**Planning committee acting under delegation 1.1:**

**REFUSE, under the Metropolitan Region Scheme and Local Planning Scheme No. 4, three storey Single house and Ancillary dwelling at No. 4 (Lot 51) Keel Place, North Fremantle, as detailed on plans dated 14 September 2020, for the following reasons:**

1. **The proposal is inconsistent with the requirements of the City of Fremantle Local Planning Scheme No. 4 in respect to building height requirements of Local Planning Area 3, sub area 3.3.1 and does not satisfy the discretionary criteria of clause 4.8.1.**

**Carried: 6/1**
**For**
**Mayor Brad Pettitt, Cr Bryn Jones, Cr Geoff Graham, Cr Su Groome, Cr Adin Lang, Cr Frank Mofflin**

**Against**
**Cr Andrew Sullivan,**

## **Additional Information 3 –** Site Photos


**Photo 1:** Subject site as viewed from Keel Place

**Photo 2:** Subject site as viewed from Keel Place

**Photo 3:** Entrance to Keel Place

**Photo 4:** Entrance to Keel Place

**Photo 5:** Existing streetscape of Keel Place


**Photo 6:** Existing streetscape of Keel Place

**Photo7:** Existing streetscape of Keel Place

## **Additional Information 4 –** Applicant report

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10 February 2021

Planning Services
City of Fremantle
Fremantle Oval
70 Parry Street
FREMANTLE WA 6160

Dear Sir/Madam,

**NO. 4 KEEL PLACE, NORTH FREMANTLE**
**PROPOSED SINGLE HOUSE – SECTION 31 RECONSIDERATION PLANNING JUSTIFICATION**

Urbanista Town Planning has been engaged by the applicants for the subject development application relating to No. 4 Keel Place, North Fremantle (**'site'**), to review the proposed building height of the development within the context of the local planning framework. The Council at it is Planning Committee Meeting held on 4 November 2020 resolved to refuse the single house for the following reason:

1. *The proposal is inconsistent with the requirements of the City of Fremantle Local Planning Scheme No. 4 in respect to building height requirements of Local Planning Area 3, sub area 3.3.1 and does not satisfy the discretionary criteria of clause 4.8.1.*

The proposed single house is primarily a two-storey dwelling with a third storey terrace area. This letter addresses the requirements of the planning framework, demonstrating that the building height proposed is capable of approval, and that the correct and preferable decision is to support the building height as proposed.

Modifications have been made to the proposed single house because of a State Administrative Tribunal (**'SAT'**) mediation. The amendments are as follows:

- Reduction of height by 0.7 metres to the north-west elevation (0.9 metres based on the seriously entertained R-Codes amendments wall height calculations).
- Concealed roof form to the third floor has been converted to a skillion roof form.
- Improvements to the materiality, with differentiation in materiality to the third-floor darkened timber look cladding. Modifications to the front elevation materiality.

231 Bulwer Street, Perth WA 6000
| admin@urbanistaplanning.com.au | www.urbanistaplanning.com.au |

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- Reduction of the internal terrace area from 17.5sqm to 14.4sqm (-3.1sqm).
- Reduction in the width (north-east to south-west) from 9.4 metres to 8.3 metres (- 1.1 metres).
- Increase in the second-floor wall height from 5.9 metres to 6.6 metres (+0.7 metres) to reduce the third level wall height.

## LOCAL PLANNING FRAMEWORK

The site is located within the City of Fremantle ('**City**') and is subject to the City's Local Planning Scheme 4 ('**LPS4**' or '**Scheme**'). Under LPS4 the site is zoned 'Residential' R25 and subject to the following:

| Planning Control | Reference |
|---|---|
| • Local Planning Area 3 – North Fremantle (LPA3) | LPS4 |
| • D.G.N9 – Rocky Bay Estate | North Fremantle Design Guidelines |

The subject site is 509sqm and is currently vacant. The site itself is flat, however, the topography of Keel Place and surrounding streets varies with increasing heights to the north-west.


Local Planning Area 3 – North Fremantle

In accordance with the City's LPA3 the subject site falls within sub-clause 3.3.1 Rocky Bay which states "*despite the general development controls specified above, the maximum building height shall be 10*

*metres (external wall height or ridge height) to any development to Lot 217 Mathieson Avenue,* ***and a maximum building height of 7 metres external wall height/10 metres to roof ridge as measured from ground level to the remainder of sub area****".*

Design Guidelines 9 – Rocky Bay Estate (formerly State Engineering Works Site)
The specific applicable clauses with respect to height of this policy are as follows:

*"7.3b ..Council will have consideration to river views and vistas between buildings and the roofscapes that affect those vistas…"*

*"7.3 (d) Scale*

*The development outlines a 7.3 metre wall height or 10.0 metre roof height limit and therefore a two-storey limit will be generally applied to the design of houses.*

*Development of residences of more than two storeys is not generally supported unless particular site characteristics or the individual design indicate that this form of development can be constructed in a manner that will have no unacceptable impact upon the amenity of the locality and adjoining properties, a within the indicated height limits".*

Local Planning Scheme No. 4
Clause 4.8.1 of LPS No. permits variations to specified building heights contained within the Scheme subject to the following:

*"4.8.1.1 Where sites contain or are adjacent to buildings that depict a height greater than that specified in the general or specific requirements in Schedule 7, Council may vary the maximum height requirements subject to being satisfied in relation to all of the following:*

*(a) The variation would not be detrimental to the amenity of adjoining properties or the locality generally,*
*(b) Degree to which the proposed height of external walls effectively graduates and scale between buildings of varying heights within the locality,*
*(c) Conservation of the cultural heritage values of buildings on-site and adjoining; and*
*(d) Any other relevant matter outlined in Council's local planning policies."*

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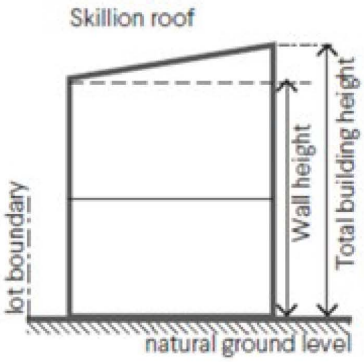
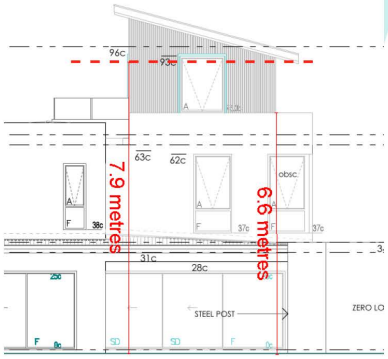
## DISCRETION TO APPROVE BUILDING HEIGHT PROPOSED

The State Government has released the finalised R-Codes amendments, which are to be given due regard and significant weight as their gazettal is imminent within June 2021. The R-Codes (as amended) have re-classified how building height and wall height is calculated. It now clarifies that a skillion roof, has a ridge height not dissimilar to a pitched roof, see exert below. Accordingly, the proposed ridge height is 9.3 metres, which is as below the 10 metres applicable under the Scheme.




In addition to the above, the R-Codes (as amended) also redefines wall height calculations which are now considered under the eaves to the immediate natural ground level. Accordingly, the correct wall height is 7.9 metres as opposed to 8.1 metres. Notwithstanding, this has resulted in a decrease of 0.7 metres or more from the initial refusal. The second storey wall heights have not been optimised to 7 metres rather a modest 6.6 metres as illustrated below.




In light of the above, the primary discretion being sought is for the wall heights detailed within the Scheme provisions.

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| LPS4 – 4.8.1.1 | |
|---|---|
| **REQUIREMENT** | **RESPONSE** |
| a) The variation would not be detrimental to the amenity of adjoining properties or the locality generally. | • The proposed additional storey is consistent with the context of the area as demonstrated on the attached context plan. A number of properties along Foundry Court and Keel Place either have third storey lofts with terraces, straight third storeys with outdoor terraces, or second floor balconies facing the street and adjoining properties.<br>• As demonstrated on the attached outdoor living area plan, the proposed terrace is sufficiently setback from adjoining outdoor living areas whereby any potential noise impacts would be minimised. These impacts are further reduced, as the subject site is positioned higher on the topography (some 1-2 metres).<br>• With respect to views, the adjoining property to the north west (No. 6 Keel Place) does not currently have any windows with direct views to the south-east. The balcony on the second floor will still maintain a view outlook due to the positioning of the third storey.<br>• Further, with respect to views, the subject site has the capabilities of having a ridge height of 10 metres for the entire width and length of the site (with the exception of setbacks), this building envelope would severely limit any views No. 6 Keel Place currently enjoy. The proposed third storey is strategically positioned to minimise impacts on this adjoining property.<br>• The proposed third storey will have no impact on the streetscape. In fact, it is not visible from a pedestrian level as demonstrated in the below streetscape perspective.<br>• Further the dwelling sits within the streetscape neatly and provides a consistent transition to each of the dwellings based on the natural topography of the land.<br>  |

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| LPS4 – 4.8.1.1 | |
|---|---|
| **REQUIREMENT** | **RESPONSE** |
| *b) Degree to which the proposed height of external walls effectively graduates the scale between buildings of varying heights within the locality.* | • The roof form has been modified to a skillion roof. This has resulted in the wall height facing No. 6 Keel Place (high on the topography) to be reduced. Resulting in a 'stepping' down of the buildings in line with the topography. This is also demonstrated above in the streetscape perspective.<br><br>• The proposed third storey element, is minor in scale, it has been reduced in length and size to minimise any offsite impacts. In fact, it is a far better solution than a completely pitched roof which would be higher and bulkier than the remaining dwellings on Keel Place. |
| • *Conservation of the cultural heritage values of buildings on-site and adjoining.* | • No adjoining properties are listed on the City's heritage list. |
| • *Any other relevant matter outlined in Council's local planning policies.* | • Refer to the below. |

| DG N7 | |
|---|---|
| **REQUIREMENT** | **RESPONSE** |
| 7.3b – *"…Council will have consideration to river views and vistas between buildings and the roofscapes that affect those vistas…"* | • The proposed third storey has been positioned (centrally located) to not impact upon the enjoyment of views by adjoining properties.<br><br>• Further, the proposed development could enjoy a ridge line for a majority of the site at 10 metres, where as this proposal is far more considered to minimise offsite impacts. |
| 7.3d – The development plan outlines a 7.0m wall height or 10m roof height limit and therefore a two storey limit will be generally applied to the design of houses.<br><br>Development of residences more than two storeys is not | • The proposed development is simply seeking a minor discretion to the wall height by 0.9m – 1.1m for a length of 8.3 metres, which only represents 27% of the length of the boundary. It is also primarily facing a portion of No. 6 Keel Street which has no major openings, rather a blank façade.<br><br>• The proposed dwelling has considered its neighbours by centrally locating the small third floor by not impacting upon their properties as detailed above. |

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| DG N7 | |
|---|---|
| **REQUIREMENT** | **RESPONSE** |
| generally supported unless particular site characteristics or the individual design indicate that this form of development can be constructed in a manner that will have no unacceptable impact upon the amenity of the locality and adjoining properties, and within the indicated height limits. | • The proposal has included an amended material palette to be more representational of the locality, whilst still maintaining a contemporary vibe. The 'boxy' third floor addition has been softened with a skillion roof, referential of the pitched rooves in the locality and a dark timber style cladding to reduce its bulk. Further the second floor wall has increased in height to reduce the visibility of the third floor wall to No. 6 Keel Place.<br><br>The streetscape elevation has also been modified to remove the face brick work element, whilst consistent with some dwellings along Keel Place, it has been replaced with a soften limestone look cladding to be more referential to the coastal palette that is consistent within this locality.<br><br>• The proposed amendments inclusive of the reduction of floor area, reduced wall height, roof form, materiality and additional information supports that this design solution does not unduly impact upon the amenity of the streetscape.<br><br>  <br>Original<br><br>  <br>Proposed |

| DG N7 | |
|---|---|
| **REQUIREMENT** | **RESPONSE** |
| |  <br>Original<br>  <br>Proposed |
| 7.5c/d – In assessing the impact of development the Council will pay particular attention to whether the proposed development is sympathetic to the streetscape and the scale and character of the locality and the amenity of the locality. | • As demonstrated above the proposed dwelling and the discretion being sought will not undermine the streetscape. Rather it will be relatively unseen from a pedestrian scale as demonstrated in the series of renders attached. |

## CONCLUSION

Based on the information presented in this submission, it has been demonstrated that not only is the building height variation capable of approval, it is also the correct and preferable decision as the development represents an example of design excellence which has appropriately considered and

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addressed its local context, positively contributes to the area and not resulting in any detrimental impacts to adjacent properties or the general locality.

Accordingly, Urbanista Town Planning respectfully requests that the Council support the proposed development. Should you have any question in relation to the details provided in this submission, please contact the undersigned on 6444 9171 or bianca@urbanistaplanning.com.au.

Yours sincerely,

Bianca Sandri | **Director**

CONTEXT PLAN


1

SEPERATION DISTANCES OPEN TERRACE


2

## PC2103-3 CADD STREET, NO. 7B (LOT 250) BEACONSFIELD – TWO STOREY SINGLE HOUSE (JL DA0488/20)

**Additional Information 1 -** Site Photos

**Photo 1:** Site from Cadd Street

**Photo 2:** Adjoining Southern Site


**Photo 3:** Adjoining Northern Site

**PC2103-4 ESSEX STREET NO. 19 (LOT 8) FREMANTLE - CHANGE OF USE FROM OFFICE TO EDUCATION ESTABLISHMENT, SIGNAGE AND INTERNAL FIT OUT (JCL DA0525/20)**

**Additional Information 1 –** Site photos


**Photo 1:** Subject site as viewed from Essex Street


**Photo 2:** Northern portion of subject site and No. 21 Essex St and Fremantle Technical College to left side of image.


**Photo 3:** Nos. 15-17 Essex Street.

## PC2103-5 SOUTH TERRACE, NO. 41 (LOT 2090) FREMANTLE – PARTIAL CHANGE OF USE TO HOTEL AND ADDITIONS AND ALTERATIONS TO EXISTING BUILDING (TG DA0410/20)

**Additional Information 1 -** Site Photos

**Photo 1** – Site from Norfolk Lane

**Photo 2 –** Site from entry on Norfolk Street


**Photo 3 –** Norfolk Street existing entry

**Photo 4 –** Norfolk Street frontage

**Photo 5 –** Site from intersection of South Terrace and Norfolk Street

**Photo 6 –** Existing buildings from Norfolk Lane

**Photo 7 –** Existing building not included in this application

**Photo 8 –** Existing entry onto South Terrace

**Photo 9 –** Entry onto South terrace

**Photo 10** – Existing bike racks

## **Additional Information 2** - DPLH Heritage Recommendation

Department of **Planning, Lands and Heritage**

GOVERNMENT OF WESTERN AUSTRALIA

Your ref: DA0410/20
Our ref: P1007/47819
Enquiries: Louise Ryan (08) 6552 4118

Chief Executive Officer
City of Fremantle
planning@fremantle.wa.gov.au

Attention: Tom Geddes

Dear Sir

**FREMANTLE TECHNICAL COLLEGE ANNEXE**

Under the provisions of Section 73 of the *Heritage Act 2018*, the proposal as described below has been referred to the Heritage Council for its advice.

| | |
|---|---|
| Place Number | P1007 |
| Place Name | Fremantle Technical College Annexe |
| Street Address | 41 South Terrace, Fremantle |
| Referral date | 8 October 2020 |
| Proposal Description | Alterations for Pop Up Food and Beverage Venue |

We received the following information:

- Drawings prepared by Design Theory dated 30 September 2020
  - A0400 RevB Location Plan
  - A0500 RevE Site Plan
  - A1000 RevF Proposed Plan
  - A9001 RevC External Elevations
  - Architectural Renders – Norfolk Street Entrances
- Heritage Impact Statement – Stephen Carrick Architect dated 1 October 2020

The proposal has been considered in the context of the identified cultural significance of *Fremantle Technical College Annexe* and the following advice is given:

**Findings**

- *Fremantle Technical College Annexe* has significance for its long use as an education facility in Fremantle from the time of its establishment in 1877 up until 2001. The former Infants and Girls School (1877/1878) is a rare intact example of a small school based on the 'hall and gallery' design constructed during the Victorian period.
- The referral is for alterations to adapt the place for use as a temporary event space including dining, café and bar areas. The proposal also utilises a large outdoor space, enclosed by an original limestone boundary wall.

Postal address: Locked Bag 2506 Perth WA 6001 Street address: 140 William Street Perth WA 6000
Tel: (08) 6551 8002 info@dplh.wa.gov.au www.dplh.wa.gov.au
ABN 68 565 723 484
wa.gov.au

- It is understood that an alfresco dining area is also proposed on the South Terrace frontage. This is not shown in the current application.
- Generally, the proposal is asssessed as providing a positive outcome for the building and it is considered that the development will not have a negative impact on the heritage values of the place.

**Advice**
The proposal, in accordance with the plans submitted, is supported subject to the following conditions:

1. Detailed drawings are to be provided, to the satisfaction of the Director, Heritage Development, Department of Planning Lands and Heritage. The drawings are to detail the following items:
   - The two proposed new door openings, along with works to any existing openings where door or window furniture may be being introduced or replaced.
   - The proposed canopies and/or covered walkways.
   - The proposed secure store along the southern limestone boundary wall.
   - The integration of the former metallurgy classroom chimney and bench into the proposed café fitout.
   - The proposed food prep/store areas at the end of each wing.
   - Information about any proposed repairs and finishes to the timber floors and plaster walls.
   - The proposed alfresco area on South Terrace, including any proposed shade or shelter structures.
2. The new opening in the limestone wall along Norfolk Street is not supported and is to be deleted from the proposal. Opportunities for a secondary entrance/exit could be investigated near the east corner of the Infants and Girls School where a recent curved limestone fence with timber picket infill and gate has been constructed.
3. Any entrance statement at the existing entrance to the site from Norfolk Street is to be freestanding

Please be reminded that you are required under r.42(3) of the *Heritage Regulations 2019* to provide us with a copy of your determination within 10 days after making the decision.

Should you have any queries regarding this advice please contact Louise Ryan at louise.ryan@dplh.wa.gov.au or on 6552 4118.

Yours faithfully

Adelyn Siew
Director Heritage Development

12 November 2020

cc: Evan Reeves, Design Theory - evan@designtheory.com.au

**Additional information 3** – Applicant acoustic report

# 41 South Terrace Fremantle

## Acoustic Report & Noise Management Plan

**Prepared for:** Gosatti Holdings Pty Ltd

**Date:** 24 November 2020

**Prepared by:** Imran Khan

**Ref:** 301250036

**Stantec Australia Pty Ltd**
Ground Floor, 226 Adelaide Terrace, Perth WA 6000
Tel: +61 8 6222 7000 Web: www.stantec.com

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Stantec

# Revision

| Revision | Date | Comment | Prepared By | Approved By |
|---|---|---|---|---|
| 001 | 29/10/2020 | Issue for Information | BEM | IK |
| 002 | 30/10/2020 | Updated, Issued for Information | BEM | IK |
| 003 | 02/11/2020 | Updated, Issued for Information | BEM | IK |
| 004 | 10/11/2020 | Issued for Use | IK | IK |
| 005 | 24/11/2020 | Updated, Issued for Use | IK | IK |
| | | | | |

# Contents

# Executive Summary

Stantec was commissioned by Gosatti Holdings Pty Ltd to undertake an acoustic assessment for the proposed development at 41 South Terrace, Fremantle WA.

The Development Application proposes to utilise the existing heritage building and site for a range of temporary uses including cafe, provedore, bar, restaurant and outdoor event spaces. The venue will potentially trade day and night 7 days a week throughout summer months. The venue will accommodate up to 700 patrons for major events, with typical patronage of up to 300 persons.

Noise impact from the operation of the development has been assessed to criteria in accordance with *"WA Environmental Protection (Noise) Regulations 1997"* (EPNR).

Attended and unattended noise monitoring was undertaken in order to establish an understanding of the existing acoustic environment and assess the impact of the proposal on the existing acoustic amenity of the area.

Noise modelling was used to assess patron noise emissions from the proposal and recommendations have been made based on predicted results. A 3D noise model was developed using the software package SoundPLAN 8.2 to predict the noise impact of patron activity on the nearest sensitive receivers located on South Terrace, Norfolk Rd and Essex St.

Noise management measures have been provided for other noise sources associated with the development. The noise sources considered are:

- Patron activity;
- Music;
- Mechanical services equipment (including those related to food trucks);
- Outdoor cinema screenings;
- Car parking;
- Loading bays;
- Cutlery and dinnerware; and
- Waste collection and rubbish disposal.

In addition to the assessment, a noise management plan has been provided to address the noise impacts of the proposed noise sources associated with the development. Gosatti Holdings Pty Ltd note that they have not received any noise complaints in years of operating similar venues, being the Norfolk Hotel (adjacent to the proposed site), nor the Cottesloe Hotel.

The venue must comply with any relevant liquor licensing conditions. The Extended Trading Permit for the venue is currently in development.

Based on the assessment detailed in this report, the noise emissions from the proposed development are generally compliant to the EPNR at the nearest noise sensitive receivers under a typical operating scenario in the day and evening time and will not have an impact on the existing acoustic amenity of the area.

In determining the impact on the acoustic amenity of the area, the existing acoustic environment must be considered. Venue contributions to the existing noise levels in the area must be managed using the provided Noise Management Plan such that they are not significant. Additional noise management measures have been provided for non-typical operating scenarios (e.g. large events and outdoor cinema screenings).

# 1. Introduction

Stantec were commissioned by Gosatti Holdings Pty Ltd to undertake an acoustic assessment for the proposed development at 41 South Terrace, Fremantle WA.

The Infant and Girls School building and surrounding open spaces are part of the former Fremantle Technical College Annexe site. The development concept is to activate the former Infant and Girls building and surrounding open spaces with a new licensed 'pop-up' Food and Beverage (F&B) and event venue that will potentially trade day and night 7 days a week throughout summer months. The venue will accommodate up to 700 patrons for major events, with typical patronage of up to 300 persons.

The design proposes to utilise the building for a range of temporary uses including cafe, provedore, bar, restaurant and outdoor event spaces.

This report has been prepared as part of supporting documentation pertaining to the Development Application for the project. The regulations and policies that apply to the project are listed below:

- *"WA Environmental Protection (Noise) Regulations 1997"* (EPNR); and
- Extended Trading Permit for the development which would be shared with the Norfolk Hotel, currently in development.

## 1.1 Site Description

The site is directly adjacent to the Norfolk Hotel, directly opposite the Fremantle Markets and Scots Church, diagonally opposite the New Synagogue building and with frontage to Norfolk Street, Essex Street and Norfolk Lane.

The project location and surrounds are indicated in Figure 1. The project site is largely surrounded by commercial developments including bars, a nightclub and Food and Beverage (F&B) establishments.


*Source: Nearmaps / Google Maps*

**Figure 1: Project Location**

## 1.2 Study Inputs

Acoustic assessment and preparation of this report has been based on the received documentation provided in Table 1.

**Table 1: Received Documentation**

| Date | Detail | Prepared By | Format |
|---|---|---|---|
| 22/10/2020 | Development Application Cover Letter<br>*41 South Terrace DA Cover Letter* | Design Theory | PDF |
| 22/10/2020 | Development Application Concept Drawings<br>*201001_41 South Tce DA Dwgs* | Design Theory | PDF |
| 09/11/2020 | Heritage Impact Statement, Fremantle Technical College Annex (Fmr) | Stephen Carrick Architects | PDF |

# 2. Acoustic Issues

## 2.1 Environmental Noise Emissions

Environmental noise impacts resulting from the noise emissions from the project are addressed through the Environmental Protection Act 1986, with the regulatory requirements detailed in the Environmental Protection (Noise) Regulations 1997 (EPNR).

The EPNR establishes the maximum permissible noise emission levels (assigned levels) to be received at all adjacent noise-sensitive premises during specific periods of the day as a result of the cumulative noise emissions from all sources proposed for the project site. Compliance to relevant noise limits outlined in the EPNR is compulsory.

The EPNR states noise emissions from any premises are considered not to *significantly contribute to* the noise at a receiver if the noise emissions are 5 dB or below the assigned levels.

In brief, the assigned levels are determined by considering of the amount of commercial and industrial zones, as well as main transport corridors and sporting venues surrounding the noise sensitive premises. In addition, the Environmental Protection (Noise) Regulations 1997 identify the following in Schedule 3, clause 2A:

"If the land within either of the circles is categorised on the land use map as land in respect of which mixed uses are permitted, the use of that land that results in the highest influencing factor is to be used in the determination of the influencing factor."

The Local Planning Scheme 4 (LPS4) and Metropolitan Regional Scheme (MRS) were accessed via the City of Fremantle online mapping system and were used in the determination of the influencing factor.

The nearest noise sensitive receivers in the vicinity of the project have been identified as:

- Scots Presbeterian Church (90 South Tce) – place of worship;
- Norfolk Hotel (47 South Tce) – hotel bedrooms on first floor;
- Residence at 28 Norfolk St (corner of Norfolk Ln);
- Residences at 7 Norfolk St; and
- Port Mill Bed & Breakfast (17 Essex St).

Receiver locations are shown in Figure 2.

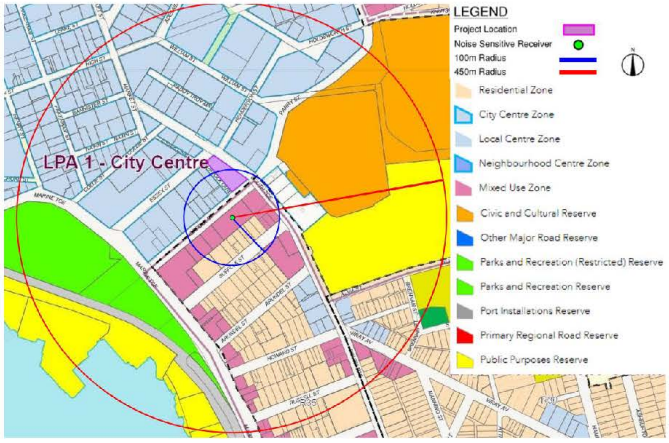
### 2.1.1 Influencing Factor

The influencing factor for the premises identified above is 4 – 6 dB, as summarised in Table 3. This results from identifying major roads, commercial areas, industrial areas and sporting fields surrounding the premises.

**Table 3: Influencing factor (IF) noise sensitive receiver**

| Noise Sensitive Premises | Commercial Zones | Industrial Zones | Transport Corridors / Sporting Venues | Influencing Factor |
|---|---|---|---|---|
| 90 South Tce Fremantle | 45 % within 100m radius<br>37 % within 450m radius | 0 % within 100m radius<br>0 % within 450m radius | Marine Tce (secondary road) in outer circle / Fremantle Oval within inner circle | 6 dB |
| 47 South Tce Fremantle | 41 % within 100m radius<br>33 % within 450m radius | 0 % within 100m radius<br>0 % within 450m radius | Marine Tce (secondary road) in outer circle / Fremantle Oval within inner circle | 6 dB |
| 28 Norfolk St Fremantle | 60 % within 100m radius<br>33 % within 450m radius | 0 % within 100m radius<br>0 % within 450m radius | Marine Tce (secondary road) in outer circle | 5 dB |
| 7 Norfolk St Fremantle | 51 % within 100m radius<br>27 % within 450m radius | 0 % within 100m radius<br>0 % within 450m radius | Marine Tce (secondary road) in outer circle | 4 dB |
| 17 Essex St Fremantle | 63 % within 100m radius<br>41 % within 450m radius | 0 % within 100m radius<br>0 % within 450m radius | Marine Tce (secondary road) in outer circle | 5 dB |

Figure 3 indicates the land use zones surrounding 7 Norfolk St.




*Source: City Fremantle online mapping system*

**Figure 3: Zoning map of areas surrounding receiver at 7 Norfolk St**

### 2.1.2 Assigned Levels

Table 4 summarises the assigned levels at the nearest noise sensitive premises. It is required that all noise emissions from the development are below the assigned level criteria for all defined periods of the day and at the lot boundary of the receiver or 15m from any associated building.

**Table 4: Assigned levels**

| Type of premises receiving noise | Time of day | Assigned Level (dB) | | |
|---|---|---|---|---|
| | | $L_{A10}$ | $L_{A1}$ | $L_{Amax}$ |
| Noise sensitive premises: Highly sensitive area | 0700 to 1900 hours Monday to Saturday | 45 + IF | 55 + IF | 65 + IF |
| | 0900 to 1900 hours Sunday & public holidays | 40 + IF | 50 + IF | 65 + IF |
| | 1900 to 2200 hours all days | 40 + IF | 50 + IF | 55 + IF |
| | 2200 hours on any day to 0700 hours Monday to Saturday, and 0900 hours Sunday & public holidays | 35 + IF | 45 + IF | 55 + IF |
| Noise sensitive premises: any area other than highly sensitive areas | All Hours | 60 | 75 | 80 |
| Commercial premises | All Hours | 60 | 75 | 80 |
| Industrial and utility premises | All Hours | 65 | 80 | 90 |

### 2.1.3 Noise Character Adjustments

Regulation 7 states that the noise character must be "free" of annoying characteristics, namely —

- Tonality, e.g. whining, droning;
- Modulation, e.g. like a siren; and
- Impulsiveness, e.g. banging, thumping.

Regulation 9 (1) establishes the methodology for determining noise characteristics. If these characteristics cannot be reasonably and practicably removed, a series of adjustments to the measured levels are required, indicated in Table 5 .

**Table 5: Noise character adjustment**

| Adjustment where noise emission is not music these adjustments are cumulative to a maximum of 15 dB | | | Adjustment where noise emission is music | |
|---|---|---|---|---|
| Where tonality is present | Where modulation is present | Where impulsiveness is present | Where impulsiveness is not present | Where impulsiveness is present |
| + 5 dB | + 5 dB | + 10 dB | + 10 dB | + 15 dB |

### 2.1.4 Noise Emissions from Mechanical Services

Typically, projects of this type involve noise emissions from mechanical services such as air conditioning units, refrigeration condensers and mechanical plant. At this stage no information or data has been given regarding mechanical equipment selection.

It is important that noise emissions from the site do not present any form of tonality, modulation or impulsiveness (as defined by the EPNR).

Given that data from mechanical plant manufacturers is generally limited to broadband data or in 1/1 octave band value, it is not possible to objectively determine tonality, as it is described in the EPNR. 1/3 octave band data is required yet is typically unavailable.

Therefore, a -5 dB penalty shall be conservatively assigned to the noise criteria when assessing noise emissions from mechanical equipment.

# 3. Noise Monitoring

In order to understand the existing acoustic environment, attended and unattended noise measurements were undertaken at the nearest noise sensitive receivers.

Attended measurements were made during the 'evening' and 'night-time' periods of Friday 20th November 2020 at the nearest sensitive receivers to the proposed development. Continuous unattended noise measurements and audio were recorded between the 20th – 23rd November 2020 in room 5 of the Norfolk Hotel (also a sensitive receiver), having an upper floor window facing Norfolk St, with the window open.

The intent of the noise monitoring was to determine the existing levels of noise in the area during the day, evening and night-time periods, including music and patron noise emissions from venues surrounding the proposed development and their impact on the nearest noise sensitive receivers to this proposal.

## 3.1 Environmental Noise Measurements

### 3.1.1 Test Methodology

Attended and unattended measurements were performed using instrumentation equivalent to an integrating sound level meter equipped with one octave and one-third octave band filter, and an omni-directional condenser microphone. All instrumentation meets Type 1 specifications as per ANSI S1.4 and ANSI S1.43.

The Sound Level Meters were calibrated by an authorised NATA (National Association of Testing Authorities) laboratory less than 2 years ago and successfully passed all AS 1259 and AS/NZS 4476 standards and specifications.

The time constant for the RMS detectors was set to a slow response (1000 ms) for environmental noise measurements. The Sound Level Meters were field calibrated before and after measurement sessions using a Type 1 acoustic calibrator. The calibrator was also calibrated less than 2 years ago and is in compliance with AS IEC 60942-2004. Equipment details are provided in Table 6.

**Table 6: Equipment and calibration details**

| Model | Serial Number | NATA Calibration Due Date |
|---|---|---|
| Brüel & Kjær 2250 - Sound Level Meter | 3002096 | 22/10/2022 |
| Brüel & Kjær 2250 - Sound Level Meter | 3010733 | 20/08/2021 |
| Brüel & Kjær 4231 - Calibrator | 3005155 | 17/10/2021 |

### 3.1.2 Attended Measurement Locations

Attended measurements were made on Friday 20th November 2020 at the following locations, which are shown in Figure 4:

- Residence at 28 Norfolk St (corner of Norfolk Ln);
- Residence at 7 Norfolk St;
- Norfolk Hotel;
- The Old Synagogue;
- Scots Presbyterian Church; and
- Port Mill B&B.

Attended measurements were made as close as possible to the boundary of the site in question, with the Sound Level Meter at least 1.4m above the ground and located at least 1m from the façade of any existing building or fence line. Measurements were at 15 minutes in duration, excluding the Port Mill B&B measurements which were 5 minutes in duration as the residences closer to the project site would be more affected by noise emissions from the development.


**Figure 4: Attended Noise Monitoring Locations**

## 3.2 Results and Discussion

### 3.2.1 Attended Noise Measurements

Attended noise measurements were conducted during both 'evening' and 'night-time' periods as defined by the EPNR. The results of the noise measurements are shown in Table 7 below. Statistical noise level parameters are presented, as well as the surveyor's observations of instantaneous music & patron noise or traffic noise levels when those sources were clearly dominating. Spectral noise data for each measurement is presented in Appendix C.

**Table 7: Summary of Attended Measurement Results**

| Receiver | EPNR Time Period | Date & Start Time | $L_{min}$ | $L_{90}$ | $L_{eq}$ | $L_{10}$ | $L_1$ | Observed Music & Patrons SPL - dBA | Observed Traffic Events SPL - dBA |
|---|---|---|---|---|---|---|---|---|---|
| 28 Norfolk St | Evening | 20/11/2020 20:18 | 56 | 58 | 65 | 64 | 75 | 57 - 60 | 63 - 65 |
| | Night | 20/11/2020 22:16 | 59 | 60 | 64 | 65 | 72 | 60 - 62 | ~ 65 |
| 7 Norfolk St | Evening | 20/11/2020 20:35 | 56 | 57 | 61 | 64 | 68 | 58 - 60 | 65 - 68 |
| | Night | 20/11/2020 22:32 | 59 | 60 | 63 | 65 | 70 | 59 - 60 | ~ 65 |

| Receiver | EPNR Time Period | Date & Start Time | $L_{min}$ | $L_{90}$ | $L_{eq}$ | $L_{10}$ | $L_1$ | Observed Music & Patrons SPL - dBA | Observed Traffic Events SPL - dBA |
|---|---|---|---|---|---|---|---|---|---|
| Scots Church | Evening | 20/11/2020 20:55 | 65 | 65 | 69 | 70 | 77 | 65 - 67 | ~ 70 |
| | Night | 20/11/2020 22:50 | 63 | 64 | 68 | 70 | 76 | 65 - 67 | ~ 67 |
| Old Synagogue | Evening | 20/11/2020 21:13 | 70 | 71 | 75 | 77 | 83 | 72 - 74 | ~ 75 |
| | Night | 20/11/2020 23:07 | 66 | 68 | 72 | 74 | 78 | 70 - 72 | ~ 70 |
| Norfolk Hotel | Evening | 20/11/2020 21:33 | 65 | 66 | 70 | 72 | 77 | 66 - 68 | ~ 70 |
| | Night | 20/11/2020 23:25 | 60 | 62 | 68 | 71 | 76 | 62 - 65 | ~ 70 |
| Port Mill B&B | Evening | 20/11/2020 21:53 | 51 | 51 | 56 | 60 | 65 | 51 - 52 | ~ 60 |
| | Night | 20/11/2020 23:43 | 48 | 48 | 54 | 57 | 65 | 48 - 50 | ~ 60 |

The following observations were made during the attended measurements:

- The dominating noise source at all receivers was observed to be traffic, with continuous music and patron noise from nearby venues clearly audible;
- Constant streams of traffic were noted through the intersection of South Terrace and Norfolk St, with Norfolk St traffic decreasing more noticeably during the 'night-time' period. Loud motorcycles (generating 80 – 90 dBA while passing) were excluded where possible, however it is noted that there are 7 motorcycle bays on Norfolk St directly outside the Norfolk Hotel, as well as several more at the western end of Norfolk Lane, so motorcycle traffic is to be expected;
- The Norfolk Hotel, Tonic & Ginger (at the Old Synagogue) and Arbor (just north of the Old Synagogue) had speakers in outdoor areas causing music to become dominant at the boundaries. Music noise from multiple venues was audible at all receivers except Port Mill B&B;
- People talking and shouting in the streets while moving between venues were present throughout the measurements and unable to be excluded;
- While noise levels at Port Mill B&B were generally lower than at the other receivers, music noise from Metropolis Fremantle was clearly audible as well as patron noise from Whisper Wine Bar, neighbouring the premises; and
- Rustling foliage was audible infrequently, however was not significant.

The most relevant statistical noise levels to continuous venue emissions are the $L_{10}$ and $L_1$ assigned levels. $L_{max}$ assigned levels are strongly influenced by local transient events such as cars passing or people shouting.

From the attended noise measurements conducted, the following has been demonstrated for the premises visited:

- Existing $L_{10}$ noise levels are 15 – 30 dB above the EPNR assigned levels (Table 3 & Table 4);
- Existing $L_1$ noise levels are 10 – 25 dB above the EPNR assigned levels; and
- Existing $L_{90}$ noise levels (the level exceeded 90% of the time, generally considered to be representative of the 'background' noise level), were 6 – 23 dB above the EPNR $L_{10}$ assigned levels.

Note that the levels presented here are prior to any adjustment for music noise emissions (per the EPNR), which would increase the levels by 10 – 15 dB when being assessed against the Regulations due to their 'intrusive characteristics'.

### 3.2.2 Unattended Noise Measurements

The objective of noise logging was to identify daily noise trends and typical noise impacts affecting the proposed development site. A summary of the measured noise levels at the Norfolk Hotel room 5 (upper floor facing Norfolk St, window open) has been summarised in 8. FIG charts relevant statistical noise level parameters against time for the measurement period.

An adjustment of +10 dB has been made to the results for a measurement made indoors with windows open, in accordance with EPNR Regulation 19 clause 4, reproduced below:

- *Where a measurement is made inside a building —*

  a. *External windows and doors must be shut and the measurement must be adjusted by adding 15 dB; or*

  b. *External windows and doors must be open and the measurement must be adjusted by adding 10 dB.*

Average wind speeds of less than 5 m/s and no rainfall were recorded at Swanbourne weather station (9 km from the project site) during the measurement period, as reported by the Bureau of Meteorology.

**Table 8: Summary of Unattended Measurement Results**

| Day & Date | Measured Noise Levels, dB(A) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Day | | | | Evening | | | | Night | | | |
| | $L_{eq}$ | $L_{90}$ | $L_{10}$ | $L_1$ | $L_{eq}$ | $L_{90}$ | $L_{10}$ | $L_1$ | $L_{eq}$ | $L_{90}$ | $L_{10}$ | $L_1$ |
| Friday, 20th November 2020 | - | - | - | - | 71 | 62 | 73 | 83 | 62 | 55 | 64 | 71 |
| Saturday, 21st November 2020 | 66 | 56 | 68 | 76 | 65 | 60 | 68 | 74 | 63 | 54 | 65 | 73 |
| Sunday, 22nd November 2020 | 69 | 57 | 69 | 78 | 62 | 57 | 64 | 71 | 58 | 48 | 61 | 69 |

The data from unattended noise logging provided in 8 indicates that at the Norfolk Hotel room receiver:

- Existing $L_{10}$ noise levels are 20 – 30 dB above the EPNR assigned levels (Table 3 & Table 4);
- Existing $L_1$ noise levels are 17 – 29 dB above the EPNR assigned levels; and
- Existing $L_{90}$ noise levels (the level exceeded 90% of the time, generally considered to be representative of the 'background' noise level), were 9 – 18 dB above the EPNR $L_{10}$ assigned levels.

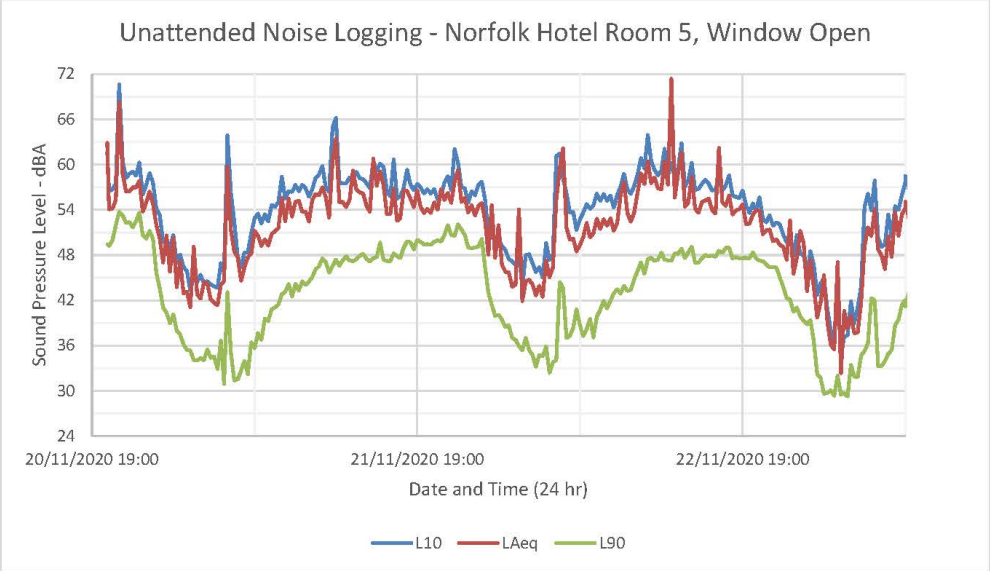



**Figure 5: Unattended Noise Monitoring Statistical Level Chart**

### 3.2.3 Comparison to EPNR Assigned Levels

Noise monitoring has shown that the 'background' levels in the existing acoustic environment exceed the assigned levels of the EPNR by at least 6 dB, due to music and patron noise from the existing nearby venues along with noise from a constant traffic flow.

Table 9 compares the measured background noise levels to the assigned levels. Measured levels have been adjusted by +10 dB, the minimum adjustment required where noise emissions are music (EPNR Regulation 9) for assessment against the assigned levels.

**Table 9: EPNR Assigned Levels versus Background Levels Adjusted for Music Noise**

| Receiver | EPNR Time Period | Assigned Level $L_{10}$ dB(A) | Adjusted Background Noise $L_{90}$ dB(A) | Comparison to EPNR |
|---|---|---|---|---|
| 28 Norfolk St | Evening | 45 | 68 | + 23 dB |
| | Night | 40 | 70 | + 30 dB |
| 7 Norfolk St | Evening | 44 | 67 | + 23 dB |
| | Night | 39 | 70 | + 31 dB |
| Scots Church | Evening | 46 | 75 | + 29 dB |
| | Night | 41 | 74 | + 33 dB |
| Old Synagogue | Evening | 46 | 81 | + 35 dB |
| | Night | 41 | 78 | + 37 dB |
| Norfolk Hotel | Evening | 46 | 76 | + 30 dB |
| | Night | 41 | 72 | + 31 dB |
| Port Mill B&B | Evening | 45 | 61 | + 16 dB |
| | Night | 40 | 58 | + 18 dB |

Given the existing acoustic environment, assessment of the emissions of the proposed development against the EPNR would be extremely difficult and overly onerous.

Instead, the venue should be designed not to have a significant impact on the existing acoustic amenity of the area.

As a point of reference, similar vibrant town centre entertainment areas in Northbridge are currently undergoing a review of acceptable music sound emissions.

The draft Western Australian Planning Commission (WAPC) Position Statement Special Entertainment Precincts was released for public consultation from 22 November 2019 until 14 February 2020. The Statement refers to the ongoing development of the City of Perth's proposed Northbridge Special Entertainment Precinct, which sets expected external amplified music sound levels for different areas of Northbridge. The Statement proposes noise limits for low frequencies at the venue boundaries, rather than strict compliance to EPNR at nearby receivers, as this may not be practicable given the use of the area.

While these proposed regulatory amendments have not yet been put into practice, they are used as a point of reference for venue noise emissions in this report. The ongoing regulatory amendments demonstrate a change in thinking, giving consideration to the existing acoustic environment and impact on the amenity of receivers rather than enforcing strict compliance to the assigned levels, which may stifle an otherwise vibrant entertainment precinct.

# 4. Noise Modelling

Noise emissions from the proposed development will be primarily due to:

- Patron activity;
- Mechanical equipment;
- Noises from cutlery and dinnerware; and
- Waste collection and rubbish disposal.

Music will be at a 'conversational level' only as stated in the Development Application and must not be audible at nearby receivers.

The proposed use of the outdoor area for movie screening would introduce additional noise sources, i.e. amplified soundtrack/music, which would need to be controlled to ensure compliance to the EPNR.

## 4.1 Noise Model Scenarios

### 4.1.1 Operating Hours

Trading hours of the proposed development have been provided in the Development Application. The operating hours are summarised in Table 10. These hours represent the peak use periods of the venue which are expected to occur in the summer months.

**Table 10 : Operating Hours**

| Days Operating | Operating Hours |
|---|---|
| Monday to Sunday | 07:00 AM – 12:00 AM (Midnight) |

## 4.2 Noise Model Inputs

Noise emissions from the outdoor area were calculated using 3D noise modelling software (SoundPLAN 8.2).

ISO 9613-2:1998 industry noise propagation standard has been used for the noise model predictions. The noise model has taken into account noise source levels, distance from sources to receivers and screening effects due to the existing buildings, walls and proposed outdoor bars and food trucks.

**Receivers**

All noise receivers were located at 1.4 m above ground or each floor level and 1 m away from the receiving façade. Reflected noise from the building façade is included in the received noise levels.

**Topography**

Considering the proximity of the receivers and minimal change in terrain elevation, ground topography was considered flat as a worst case. A ground absorption coefficient of 0.6 was used to suit suburban conditions, which is in between a soft ground condition (1) and reflective ground condition (0).

**Patron Noise Levels**

Patron activity in the outdoor area is expected to have a significantly greater noise impact on the nearest noise sensitive receivers than patron noise from within the building. Expected noise levels in the outdoor area generated by patrons have been determined based on:

- Technical research paper "Prediction of Noise from Small to Medium Sized Crowds", (Hayne et al., Nov 2011, *Proceedings of Acoustics*, Conference Gold Coast Australia, pp. 133-140); and

- Consensus reached by Members of the Australian Acoustical Society (Western Australian Division) in the technical meeting (Mar 2016) on the topic of "Crowd Noise Sound Power Level for Alfresco Areas / Beer Gardens."

Considering that the data contained in the study done by Hayne et. Al has been viewed by many acoustic professionals as an over-prediction of sound power levels, the following equation has been used in order to predict a more reasonable overall noise level for 'N' number of patrons:

- $L_{A10}$ Sound Power Level = 15 log N + 61 dB(A)

This includes corrections of -3 dB for random orientation of individual sources and -3 dB based on the consensus reached by the Australian Acoustical Society (logarithmic average of 5 consultant's crowd noise Sound Power Levels excluding the highest and lowest values).

It is noted that the development has multiple proposed uses and operating scenarios. Noise modelling was undertaken for a typical operating scenario and patronage:

- Maximum of 300 patrons:
  - Up to 180 patrons within the building; and
  - Up to 120 patrons in the outdoor area.

The predicted Sound Power Levels of patrons in the outdoor area are summarised in Table 11.

**Table 11: Patron Noise Levels**

| Noise Source | Sound Power Level, $L_{A10}$ dB(A) | 1/1 Octave Band Sound Power Level (dB) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 250 Hz | 500 Hz | 1 kHz | 2 kHz | 4 kHz | 8 kHz |
| Crowd of 120 patrons in the outdoor area | **91** | 76 | 78 | 81 | 84 | 85 | 85 |

*Note: Cumulative Sound Power Level of two groups of 60 patrons, one group standing and one seated.*

Patrons were assumed to be evenly distributed around the outdoor area bounded by the bars, food trucks and stage, with half standing and half seated. Patrons were represented by area noise sources at heights of 0.8m (seated) and 1.5m (standing).

**Music and Patron Noise within the Building**

It is expected that patron noise from within the building will be adequately attenuated by the external façades, with the contribution to received noise emissions being insignificant compared to the noise from patrons in the outdoor area.

The windows and doors to the external façade are heritage elements which are to be predominantly retained from the existing building (noting an exception of one door to the west wing. The walls are of masonry construction (limestone blocks and uncoursed limestone rubble), with standard glass assumed for the windows. Typically, windows and doors provide a flanking path or weak point for noise emissions from within the building.

If improved acoustic performance of the façade is desired, the following may be implemented:

- Doors may be fitted with acoustic perimeter and drop seals; and
- Windows may be treated with an internal layer of 10.38mm laminated glass to form a double-glazed system.

Any amplifier / PA system used must be calibrated in level such that noise emissions from the building do not become dominant at the site boundary. This is to be determined by site measurements. Administrative measures to ensure all doors and windows remain closed during night-time hours or at other times as required shall be implemented.

Given these considerations and the prescribed managements measures (Section 4.4), this noise source has not been included in the model.

**Outdoor Music Noise**

Music is expected to be present in the outdoor area. Music will be at a 'conversational level' only as stated in the Development Application and must not be audible at nearby receivers.

It has therefore not been considered in the noise model.

**Mechanical Services Noise**

Mechanical services noise must comply with the EPNR criteria at all receivers and at all times of the day. At this stage, mechanical plant information is not available. Refer to Section 4.4 for noise management measures required.

Assuming that mechanical plant will be selected/attenuated such that compliance with the EPNR will be achieved, it has not been considered in the noise model.

Treatment to mechanical services vents may be required such that noise emanating from within the building is adequately attenuated.

**Noise Barriers**

The existing limestone walls surrounding the outdoor area have been included in the noise model. Additional screening has not been proposed as part of the development.

## 4.3 Noise Model Results

### 4.3.1 Patron Noise

The noise emissions from patrons have been modelled to predict the impact on the nearest sensitive receivers.

The predicted noise levels are summarised in Table 12, Table 13 and Table 14 with noise contours provided in Appendix B.

**Table 12: Predicted outdoor area patron noise levels, "Daytime"**

| Nearest Sensitive Receiver | Time-Period | Predicted Noise Level dB(A) | EPNR Criteria $L_{A10}$ dB(A) | EPNR $L_{A10}$ Comparison | Measured $L_{90}$ dB(A) | Acoustic Amenity Impact |
|---|---|---|---|---|---|---|
| Church 90 South Tce | 0700 – 1900 hours Monday to Saturday | 46 | 51 | Complies | — | **Insignificant** |
| Norfolk Hotel 47 South Tce | | 48 | 51 | Complies | 56 | **Insignificant** |
| Residence 7 Norfolk St | | 44 | 49 | Complies | — | **Insignificant** |
| Residence 28 Norfolk St | | 44 | 45 | Complies | — | **Insignificant** |
| Port Mill B&B 17 Essex St | | 39 | 50 | Complies | — | **Insignificant** |

**Table 13: Predicted outdoor area patron noise levels, "Evening" (includes daytime Sunday and Public Holidays)**

| Nearest Sensitive Receiver | Time-Period | Predicted Noise Level dB(A) | EPNR Criteria $L_{A10}$ dB(A) | EPNR $L_{A10}$ Comparison | Measured $L_{90}$ dB(A) | Acoustic Amenity Impact |
|---|---|---|---|---|---|---|
| Church 90 South Tce | 0900 – 1900 hours Sunday & Public Holidays | 46 | 46 | Complies | 65 | **Insignificant** |
| Norfolk Hotel 47 South Tce | | 48 | 46 | +2 dB | 66 | **Insignificant** [1] |

| | | | | | | |
|---|---|---|---|---|---|---|
| Residence 7 Norfolk St | 1900 – 2200 hours all days | 44 | 44 | Complies | 57 | **Insignificant** |
| Residence 28 Norfolk St | | 44 | 45 | Complies | 58 | **Insignificant** |
| Port Mill B&B 17 Essex St | | 39 | 45 | Complies | 51 | **Insignificant** |

*Note 1: Predicted noise levels are more than 10 dB below the measured background level, hence the contribution from the proposed development would not be significant.*

**Table 14: Predicted outdoor area patron noise levels, "Night"**

| Nearest Sensitive Receiver | Time-Period | Predicted Noise Level dB(A) | EPNR Criteria $L_{A10}$ dB(A) | EPNR $L_{A10}$ Comparison | Measured $L_{90}$ dB(A) | Acoustic Amenity Impact |
|---|---|---|---|---|---|---|
| Church 90 South Tce | 2200 hours on any day to 0700 hours Monday to Saturday and 0900 hours Sunday and Public Holidays | 46 | 41 | +5 dB | 64 | **Insignificant** [1] |
| Norfolk Hotel 47 South Tce | | 48 | 41 | +7 dB | 62 | **Insignificant** [1] |
| Residence 7 Norfolk St | | 44 | 39 | +5 dB | 60 | **Insignificant** [1] |
| Residence 28 Norfolk St | | 44 | 40 | +4 dB | 60 | **Insignificant** [1] |
| Port Mill B&B 17 Essex St | | 39 | 40 | Complies | 48 | **Insignificant** |

*Note 1: Predicted noise levels are more than 10 dB below the measured background level, hence the contribution from the proposed development would not be significant.*

In determining the impact on the acoustic amenity of the area, the existing acoustic environment must be considered. "Night-time" noise levels are predicted to exceed the assigned levels of the EPNR in this operating scenario, however, during night-time hours, especially on Friday through Sunday, elevated patron and music noise levels from the many surrounding bars/ entertainment venues (refer Figure 1) have been measured to be significantly above the assigned levels of the EPNR. Predicted noise levels are more than 10 dB below the existing background noise levels measured through attended monitoring.

It is assumed that Scots Presbyterian Church is closed during "night-time" hours and therefore would tolerate noise levels above the assigned levels of the EPNR.

Noise management measures provided in Section 5 must be put in place to ensure venue contributions to received noise levels are not significant. Alternative operating scenarios such as large events must have additional management measures in place to preserve the existing acoustic amenity of the area.

## 4.4 Acoustic Amenity Impact

The impact on the acoustic amenity of the area will be determined by the change in existing noise levels, if any, due to the proposed development. As the project site is surrounded by bars (Norfolk Hotel, The Old Synagogue, Tonic & Ginger, Arbor, Sail and Anchor), a nightclub (Metropolis Fremantle), and Food and Beverage tenancies (Hungry Jacks, Istanbul Restaurant), background noise levels are higher than the assigned levels of the EPNR.

Based on noise monitoring and predicted noise emissions, the project is not expected to have any impact on the existing acoustic amenity of the community. Noise management measures to ensure the ongoing maintenance of the existing level of acoustic amenity in the area are provided in Section 5.

# 5. Noise Management Plan

The key objective of the Noise Management Plan (NMP) is to actively engage with affected properties to address the amenity impacts of noise emissions from the development, to the greatest practical extent possible.

Achieving this objective should minimise the number of complaints received, which reduces the likelihood of ongoing issues and compliance investigations.

The purpose of the NMP is to:

- Identify noise emission sources from this venue;
- Establish appropriate noise management measures to reduce amenity impacts as far as practicable;
- Target compliance with the Environmental Protection (Noise) Regulations 1997; and
- To engage with nearby noise sensitive premises on managing noise impacts.

The approach is to provide for ongoing dialogue, communication and mitigations with potentially affected residents, in the context of the intended use of the development.

## 5.1 Patrons and Music

It is critical that any music from the venue be level calibrated such that music noise is inaudible at all nearby receivers.

Any amplifier / PA system used should have known output sound levels indicated on the controls to assist in ensuring the amplified sound is kept within acceptable limits at nearby receivers. The limits should be set based on field measurements at nearby sensitive premises.

It is recommended that any amplifier / PA system incorporate a frequency equalizer that is set to control low frequency sound (bass).

The following indicative patron numbers have been predicted to generally comply with the EPNR during the day and evening time, with negligible impact to acoustic amenity at all times:

- For typical operations (including Sundays and Public Holidays);
  - 120 persons in the outdoor area
  - 180 persons inside the building; and
  - Patron numbers and amplified music noise emanating from the building to be set not to increase noise levels at the nearest receivers. Amplifier / PA system to be calibrated by field measurements, limited so as not to exceed these set levels and tamper proof.

Note, external doors and windows to the building must remain closed during night-time periods.

Given the movement of patrons between indoor and outdoor areas, in addition to varying operating scenarios, noise emissions from the venue should be managed, ensuring that they do not become a dominant source of noise at the site boundaries at any time.

In addition, the following administrative controls are recommended:

- Any music should cease by 11.30 pm at the latest, or as defined by venue licensing conditions, allowing half an hour for patrons to leave the venue by midnight; and
- The venue amplifier / PA system should be locked away, accessible by management only.

Venue staff are to monitor dispersal of patrons and manage any noise issues arising during or following events.

## 5.2 Mechanical Plant and Food Trucks

The design should ensure that mechanical plant selected for the development is the quietest possible, is located away from noise sensitive premises and shielded and/or attenuated as required to meet the assigned levels of the EPNR.

The development is expected to use the following typical plant:

- Refrigeration condensers;
- Kitchen extract fans;
- Condenser units; and
- Plant associated with food trucks.

Food trucks are not permitted to idle on the premises and should draw mains power from the site. Noise emissions from refrigerators, fans etc. associated with food trucks should comply with the EPNR.

If there is a complaint or concern of a defect with the equipment, noise measurements should be undertaken near to the equipment and at the resident's property, ensuring measurements are representative of the source of the complaint. Audio recording may be used.

The make and model of the equipment should be recorded, with photographs taken of the piece of equipment in question, along with notes on any observed defects or high noise emitting components.

If the complaint is ongoing, a suitably qualified mechanical or acoustic consultant may be required to attend site to assess equipment defects as part of the complaint investigation process.

## 5.3 Large Events and Non-typical Operating Scenarios

The proposed design of the site may accommodate up to 700 patrons during large events and non-typical operating scenarios such as being used as an outdoor cinema. These events are still required not to have an impact on acoustic amenity.

For any PA/amplifier system used, external noise measurements at resident's premises should be undertaken by qualified acoustic consultants to ensure soundtrack/music is not significantly contributing to the existing noise levels in the area. Active noise monitoring may be required for the duration of such events.

As part of the complaint management process, the City of Fremantle may wish to undertake their own noise measurements.

Speakers used for the PA system should be mounted at ground level and face away from Norfolk St in order to minimise noise propagation to the nearest residential/hotel receivers.

Where possible, movie screenings should cease by 10pm. For events occurring past 10pm on any night, the venue should consider the option of "silent" screenings, whereby the patrons are provided with headsets, eliminating the need for any speaker systems.

## 5.4 Car Parking

The Development Application cover letter states that there will be no dedicated public car parking bays provided on site. Patrons are encouraged to use the existing available parking facilities within 500m of the site and consider public transport options.

With several existing multi-storey car parking facilities located 150 – 200m from the site, the impact on the residents/premises directly adjacent the site is expected to be minimal.

## 5.5 Loading Bays

At present the loading areas have not been indicated. Loading bay usage should be limited to daytime hours Monday to Saturday where possible.

## 5.6 Waste Collection

### 5.6.1 Refuse and Recycling Collection

The follow administrative measures are recommended:

- Where possible, in communication with the City of Fremantle, endeavor to have waste and recycling collected after 7 am, as this is the 'daytime' period of the EPNR and may be less of a disruption to local residents;
- An effort should be made to avoid the waste collection and recycling trucks being on site at the same time;
- If a truck is waiting in the carpark for bin access, the engine should be switched off;
- Glass recycling trucks should not crush the bottles on premises but rather at a less noise sensitive location.

### 5.6.2 Emptying of Bins

The emptying of bins, especially when filled with glass bottles, can be an occupational peak noise hazard to the operator, as well as significant source of environmental noise.

The follow administrative measures are recommended:

- Venue staff should take care to reduce the drop height of glass onto glass when filling bins; and
- The handling of bins full of glass bottles should occur during daytime hours where possible to minimise disruption to the community.

## 5.7 Cutlery and Dinnerware

Cutlery and dinnerware selection for the outdoor area should be of the sort that will not contribute significantly to the $L_{Amax}$ and $L_{A1}$ noise levels received at the site boundary.

## 5.8 Engagement of Residents

The approach of the NMP is to provide for ongoing communication with potentially affected residents/premises.

Consequently, it is proposed that in addition to the complaint management procedure, there will be:

- Active notification of nearby residences about major events;
- Annual discussion with neighbours about events to promote understanding and engagement; and
- Other meetings as required or requested by neighbouring residences and/or the City of Fremantle.

## 5.9 Complaint Management

Where possible, the neighbouring residences should be encouraged to report any complaints directly to the venue staff in the first instance. The venue is to publicly display a contact telephone number which will manned during operating hours, including during events.

Any complaints received will be recorded in a logbook, stating:

- The time and date of complaint;
- The address of the complainant;

- Source of complaint (e.g. music or patron noise);
- If a verbal response was given to the resident, notes on the conversation and the resident's satisfaction or dissatisfaction with the response;
- A record of any staff visits to the property to discuss the complaint and the outcome of the discussion; and
- If further complaint or a noise assessment / mitigation measures were undertaken, records are to be updated with these details.

In the first instance the management are to check that the requirements of the NMP are being adhered to, and if practical make changes as soon as possible if the complaint relates to activities which are ongoing.

Once assessed, the venue management shall provide a response to the complainant.

If the matter is unable to resolved directly between the venue and the complainant or is ongoing, it should be referred to the City of Fremantle. The City will determine if further investigation is required.

## 5.10 Review

The NMP is to be reviewed annually and updated as required.

More frequent reviews will be triggered for example in the event of non-compliance, ongoing complaints, or as reasonably required in writing by the City of Fremantle in the event of ongoing complaints.

Such reviews will consider whether additional advice from an independent, suitably qualified acoustic consultant is required to undertake detailed noise monitoring and modelling, and to identify any additional noise mitigation strategies.

It may be also be appropriate to request a peer review of noise assessments conducted to determine if there are any further practical management measures that can be implemented.

# 6. Conclusion

Stantec were commissioned by Gosatti Holdings Pty Ltd to undertake an acoustic assessment for the proposed development at 41 South Terrace, Fremantle WA.

An assessment has been carried out to determine the noise impact of the establishment on the nearest noise sensitive receivers. Patron noise from the proposed development was assessed for compliance to the EPNR criteria and for impact to the acoustic amenity of the area. Noise management measures have been provided for noise sources associated with the proposed development.

A 3D noise model was developed using the software package SoundPLAN 8.2, with noise emissions assessed for a typical operating scenario in the day and evening time periods. Noise emissions from patrons have been assessed to generally comply with the EPNR criteria and not have a significant impact on acoustic amenity. Noise contribution from the venue to existing noise levels in the area shall be assessed by measurement and controlled using the provided management measures.

Attended and unattended noise monitoring was undertaken in order to establish the existing acoustic environment and assess the impact to acoustic amenity.

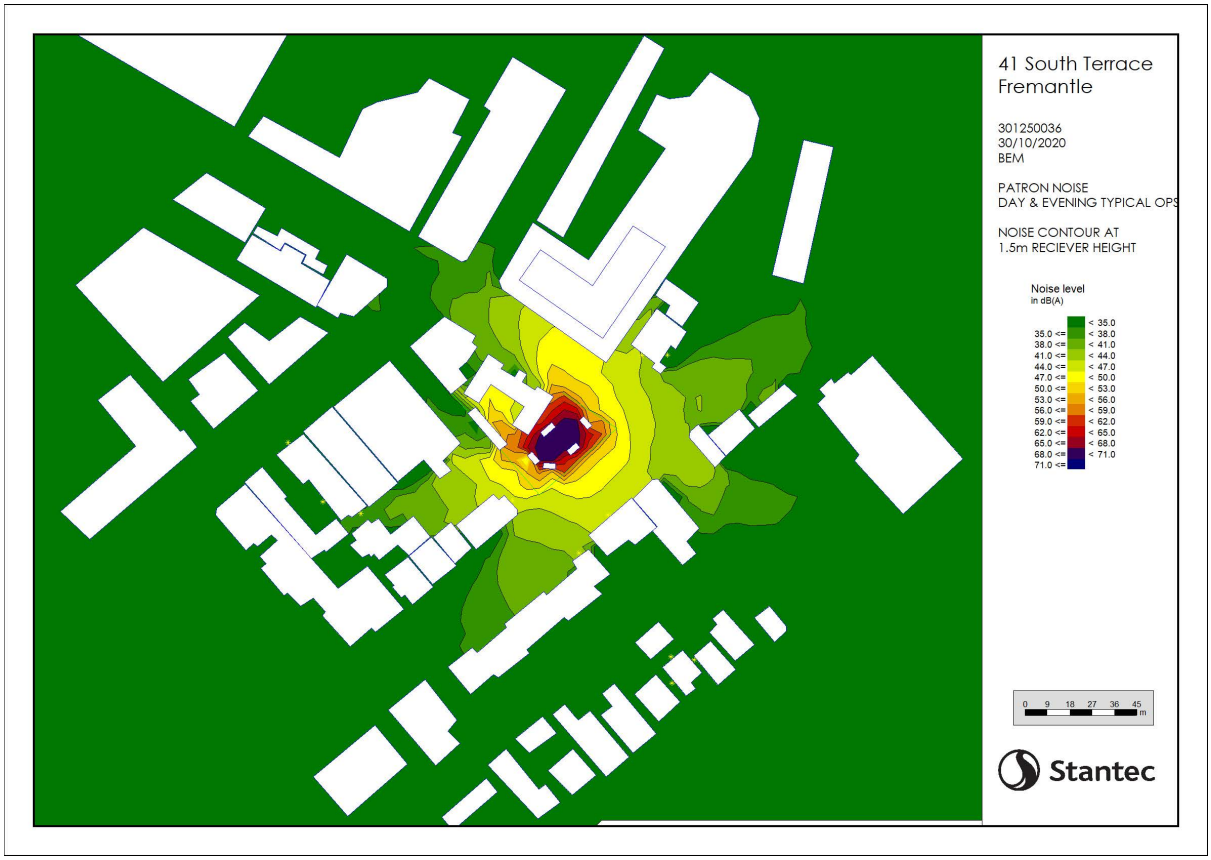
Noise management measures have been provided and are particularly relevant for “night-time” and non-typical operating scenarios (e.g. large events). Based on the assessment detailed in this report and noise management measures recommended, the venue is expected to comply with the EPNR in a typical operating scenario. The venue operator must ensure that noise emissions from the proposed development do not increase noise levels at the nearest noise sensitive receivers.

# Appendix A Glossary of Acoustic Terms

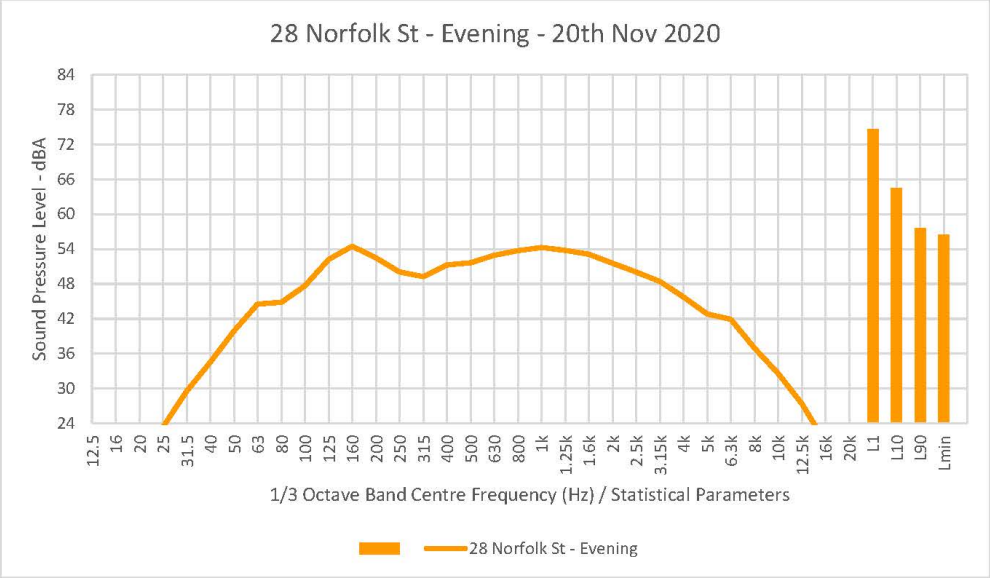
| NOISE | |
|---|---|
| Acceptable Noise Level: | The acceptable LAeq noise level from industrial sources, recommended by the EPA (Table 2.1, INP). Note that this noise level refers to all industrial sources at the receiver location, and not only noise due to a specific project under consideration. |
| Adverse Weather: | Weather conditions that affect noise (wind and temperature inversions) that occur at a particular site for a significant period of time. The previous conditions are for wind occurring more than 30% of the time in any assessment period in any season and/or for temperature inversions occurring more than 30% of the nights in winter). |
| Acoustic Barrier: | Solid walls or partitions, solid fences, earth mounds, earth berms, buildings, etc. used to reduce noise. |
| Ambient Noise: | The all-encompassing noise associated within a given environment at a given time, usually composed of sound from all sources near and far. |
| Assessment Period: | The period in a day over which assessments are made. |
| Assessment Location | The position at which noise measurements are undertaken or estimated. |
| Background Noise: | Background noise is the term used to describe the underlying level of noise present in the ambient noise, measured in the absence of the noise under investigation, when extraneous noise is removed. It is described as the average of the minimum noise levels measured on a sound level meter and is measured statistically as the A-weighted noise level exceeded for ninety percent of a sample period. This is represented as the L90 noise level. |
| Decibel [dB]: | The units of sound pressure level. |
| dB(A): | A-weighted decibels. Noise measured using the A filter. |
| Extraneous Noise: | Noise resulting from activities that are not typical of the area. Atypical activities include construction, and traffic generated by holidays period and by special events such as concert or sporting events. Normal daily traffic is not considered to be extraneous. |
| Free Field: | An environment in which there are no acoustic reflective surfaces. Free field noise measurements are carried out outdoors at least 3.5m from any acoustic reflecting structures other than the ground |
| Frequency: | Frequency is synonymous to pitch. Frequency or pitch can be measured on a scale in units of Hertz (Hz). |
| Impulsive Noise: | Noise having a high peak of short duration or a sequence of such peaks. A sequence of impulses in rapid succession is termed repetitive impulsive noise. |
| Intermittent Noise: | Level that drops to the background noise level several times during the period of observation. |
| LAmax | The maximum A-weighted sound pressure level measured over a period. |
| LAmin | The minimum A-weighted sound pressure level measured over a period. |
| LA1 | The A-weighted sound pressure level that is exceeded for 1% of the time for which the sound is measured. |
| LA10 | The A-weighted sound pressure level that is exceeded for 10% of the time for which the sound is measured. |
| LA90 | The A-weighted level of noise exceeded for 90% of the time. The bottom 10% of the sample is the L90 noise level expressed in units of dB(A). |
| LAeq | The A-weighted "equivalent noise level" is the summation of noise events and integrated over a selected period of time. |

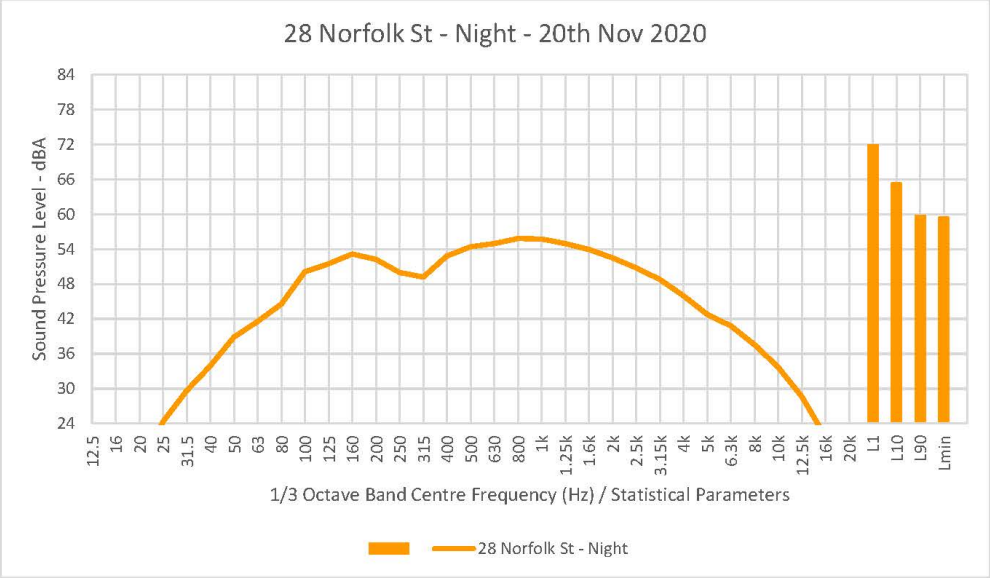
| | |
|---|---|
| LAeqT | The constant A-weighted sound which has the same energy as the fluctuating sound of the traffic, averaged over time T. |
| Reflection: | Sound wave changed in direction of propagation due to a solid object met on its path. |
| R-w: | The Sound Insulation Rating R-w is a measure of the noise reduction performance of the partition. |
| SEL: | Sound Exposure Level is the constant sound level which, if maintained for a period of 1 second would have the same acoustic energy as the measured noise event. SEL noise measurements are useful as they can be converted to obtain Leq sound levels over any period of time and can be used for predicting noise at various locations. |
| Sound Absorption: | The ability of a material to absorb sound energy through its conversion into thermal energy. |
| Sound Level Meter: | An instrument consisting of a microphone, amplifier and indicating device, having a declared performance and designed to measure sound pressure levels. |
| Sound Pressure Level: | The level of noise, usually expressed in decibels, as measured by a standard sound level meter with a microphone. |
| Sound Power Level: | Ten times the logarithm to the base 10 of the ratio of the sound power of the source to the reference sound power. |
| Tonal noise: | Containing a prominent frequency and characterised by a definite pitch. |

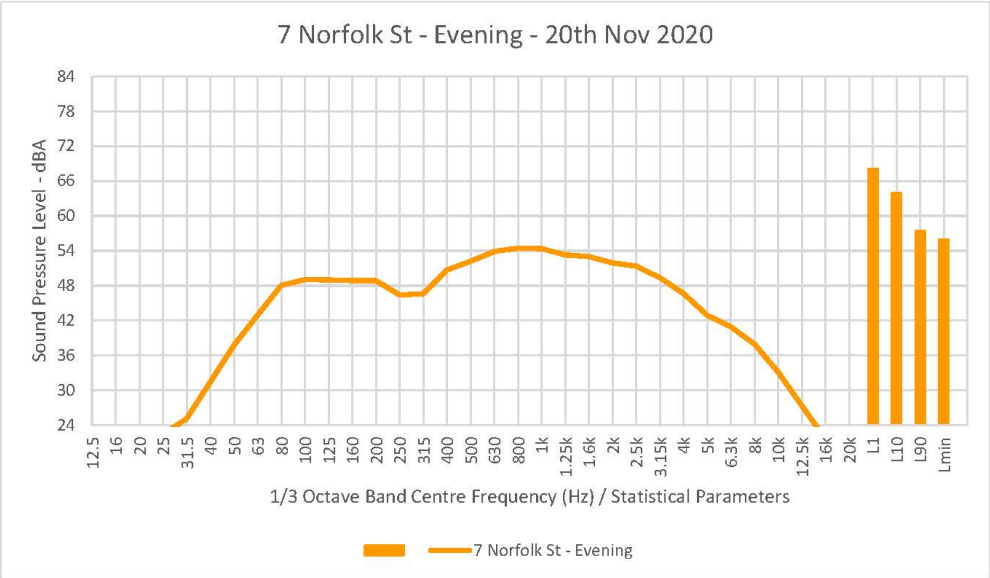
# Appendix B Noise Contours


41 South Terrace
Fremantle
301250036
30/10/2020
BEM
PATRON NOISE
DAY & EVENING TYPICAL OPS
NOISE CONTOUR AT
1.5m RECIEVER HEIGHT
Noise level
in dB(A)
35.0 <= < 35.0
38.0 <= < 38.0
41.0 <= < 41.0
44.0 <= < 44.0
47.0 <= < 47.0
50.0 <= < 50.0
53.0 <= < 53.0
56.0 <= < 56.0
59.0 <= < 59.0
62.0 <= < 62.0
65.0 <= < 65.0
68.0 <= < 68.0
71.0 <= < 71.0
0 9 18 27 36 45 m
Stantec

# Appendix C Attended Noise Measurement Results




7 Norfolk St - Evening - 20th Nov 2020
Sound Pressure Level - dBA
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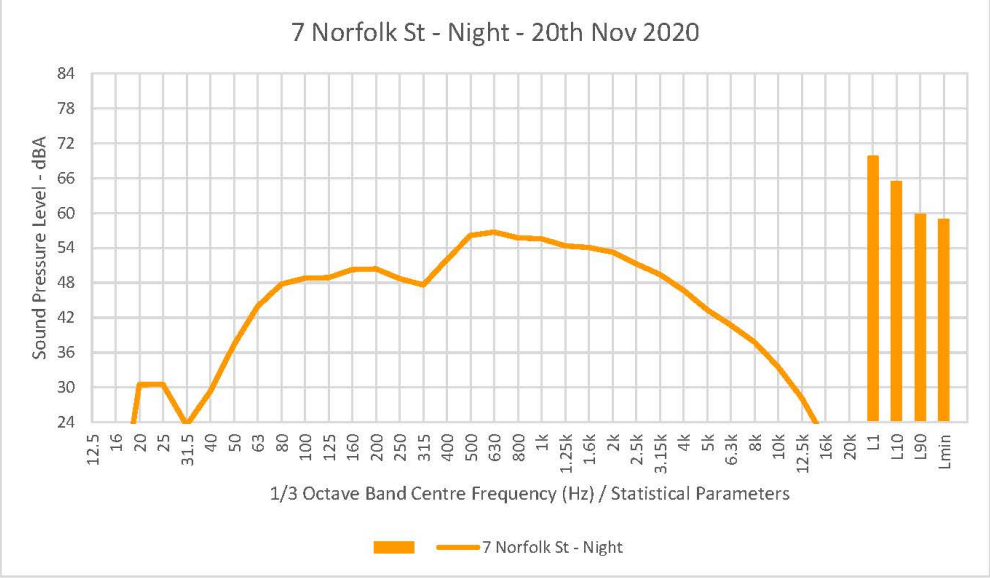
12.5 16 20 25 31.5 40 50 63 80 100 125 160 200 250 315 400 500 630 800 1k 1.25k 1.6k 2k 2.5k 3.15k 4k 5k 6.3k 8k 10k 12.5k 16k 20k L1 L10 L90 Lmin
1/3 Octave Band Centre Frequency (Hz) / Statistical Parameters
7 Norfolk St - Evening


7 Norfolk St - Night - 20th Nov 2020
Sound Pressure Level - dBA
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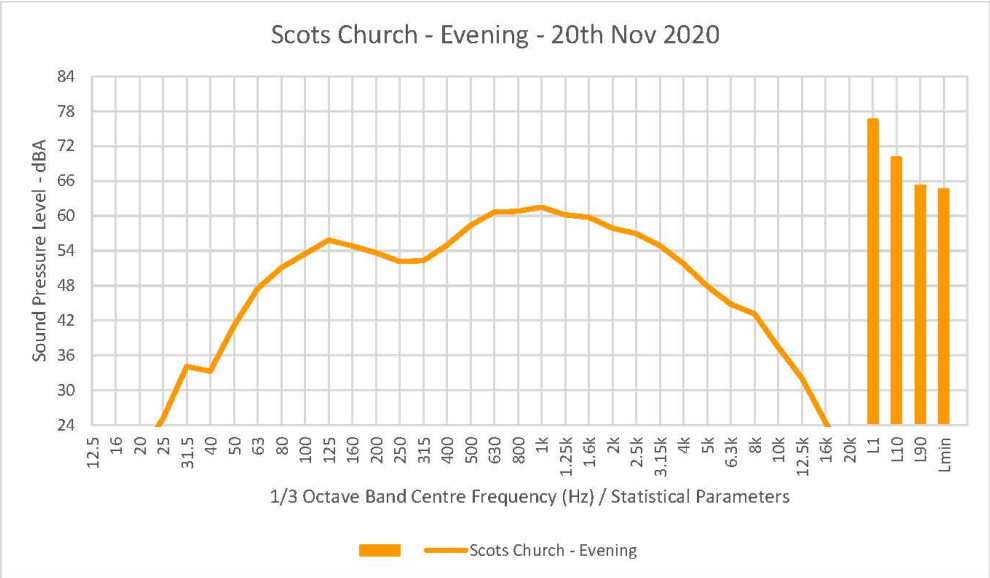
12.5 16 20 25 31.5 40 50 63 80 100 125 160 200 250 315 400 500 630 800 1k 1.25k 1.6k 2k 2.5k 3.15k 4k 5k 6.3k 8k 10k 12.5k 16k 20k L1 L10 L90 Lmin
1/3 Octave Band Centre Frequency (Hz) / Statistical Parameters
7 Norfolk St - Night


Scots Church - Evening - 20th Nov 2020
Sound Pressure Level - dBA
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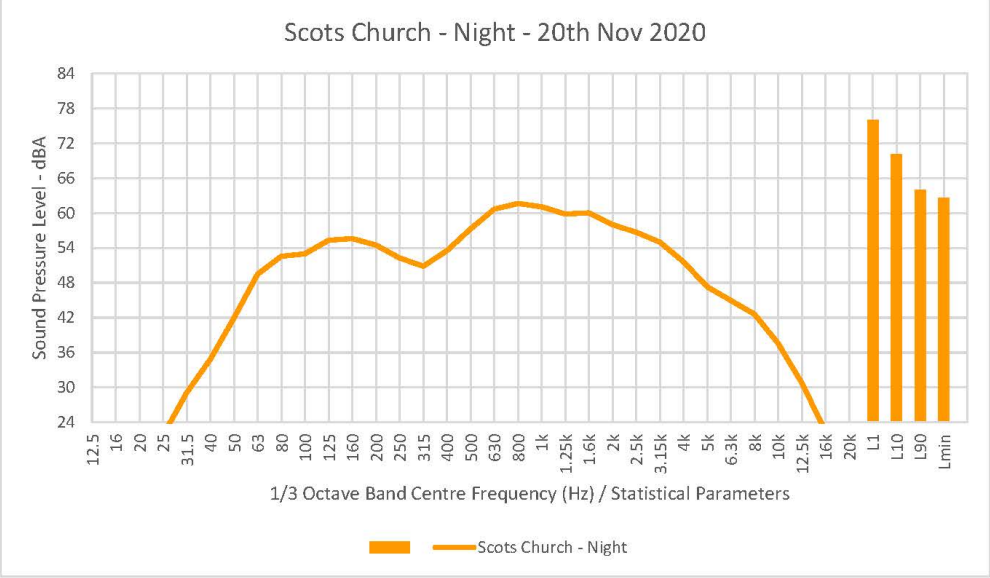
1/3 Octave Band Centre Frequency (Hz) / Statistical Parameters
Scots Church - Evening


Scots Church - Night - 20th Nov 2020
Sound Pressure Level - dBA
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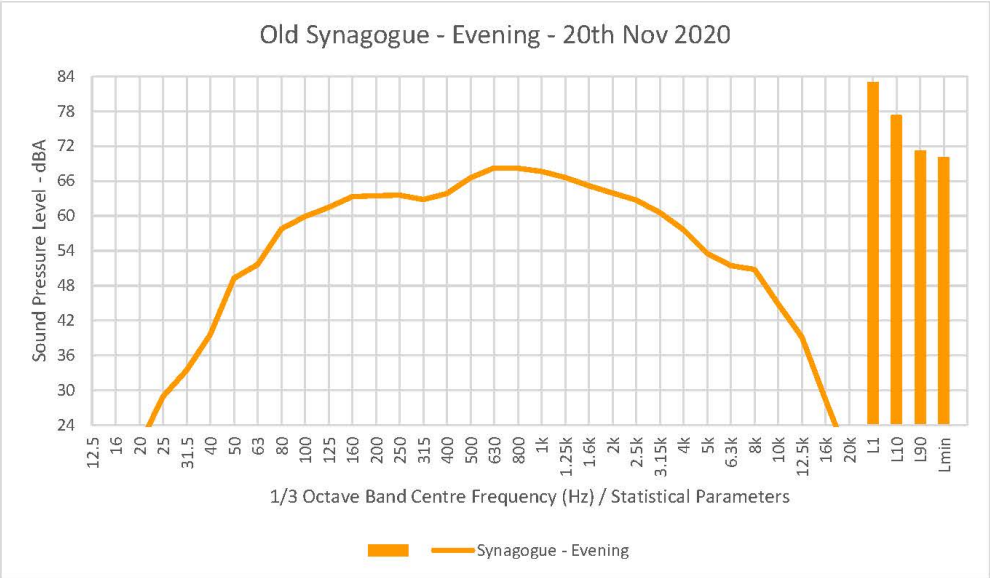
1/3 Octave Band Centre Frequency (Hz) / Statistical Parameters
Scots Church - Night


Old Synagogue - Evening - 20th Nov 2020
Sound Pressure Level - dBA
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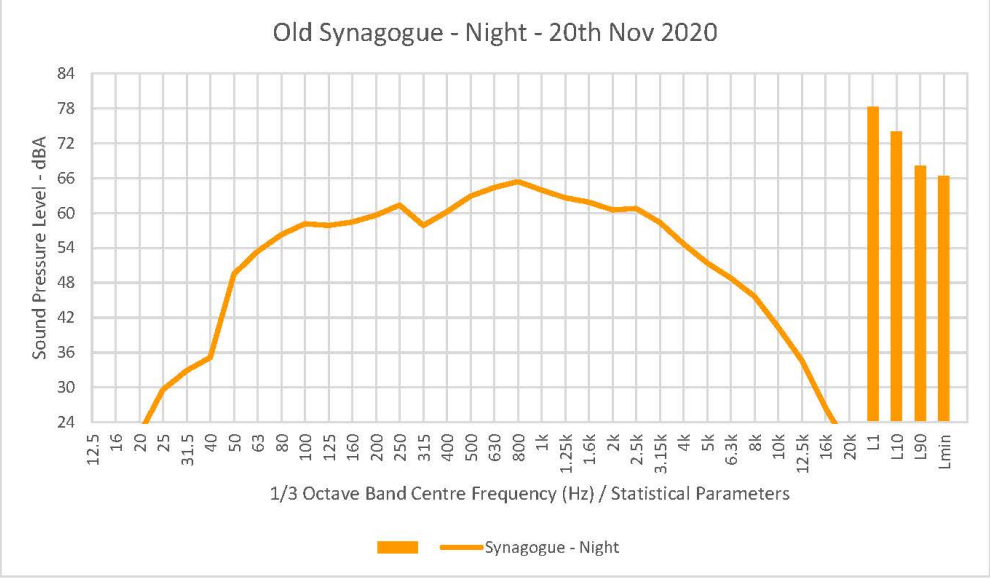
1/3 Octave Band Centre Frequency (Hz) / Statistical Parameters
Synagogue - Evening


Old Synagogue - Night - 20th Nov 2020
Sound Pressure Level - dBA
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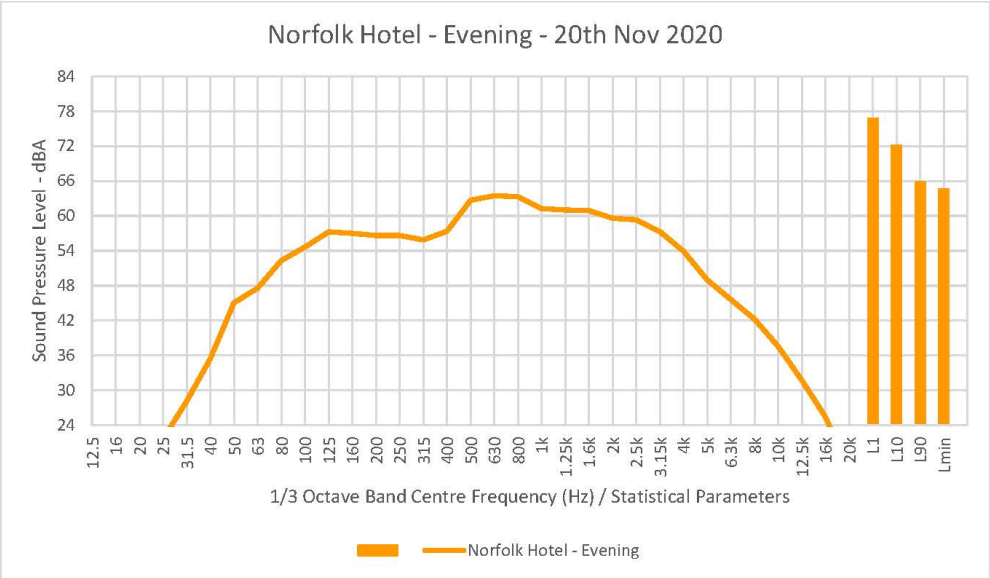
1/3 Octave Band Centre Frequency (Hz) / Statistical Parameters
Synagogue - Night


Norfolk Hotel - Evening - 20th Nov 2020
Sound Pressure Level - dBA
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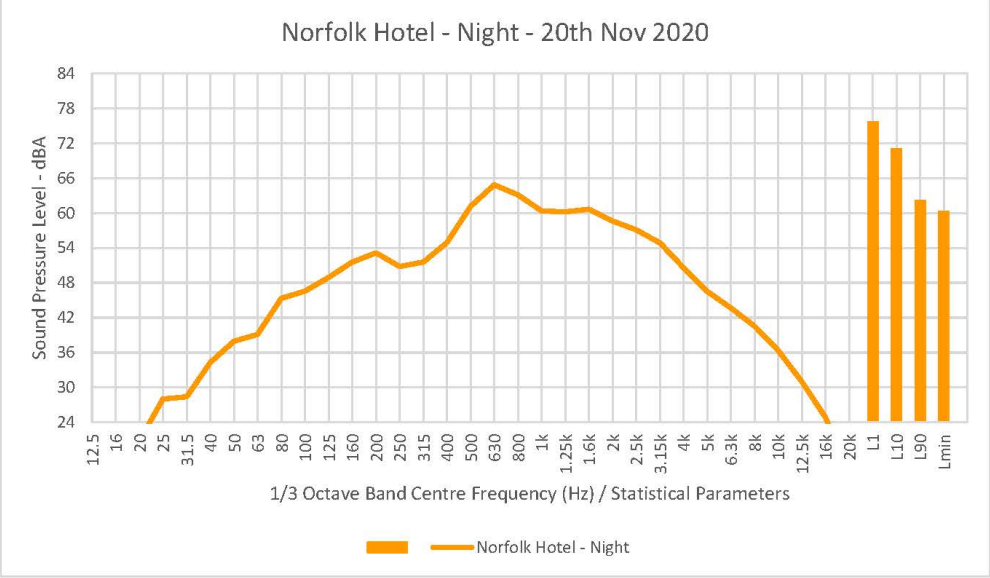
Norfolk Hotel - Evening


Norfolk Hotel - Night - 20th Nov 2020
Sound Pressure Level - dBA
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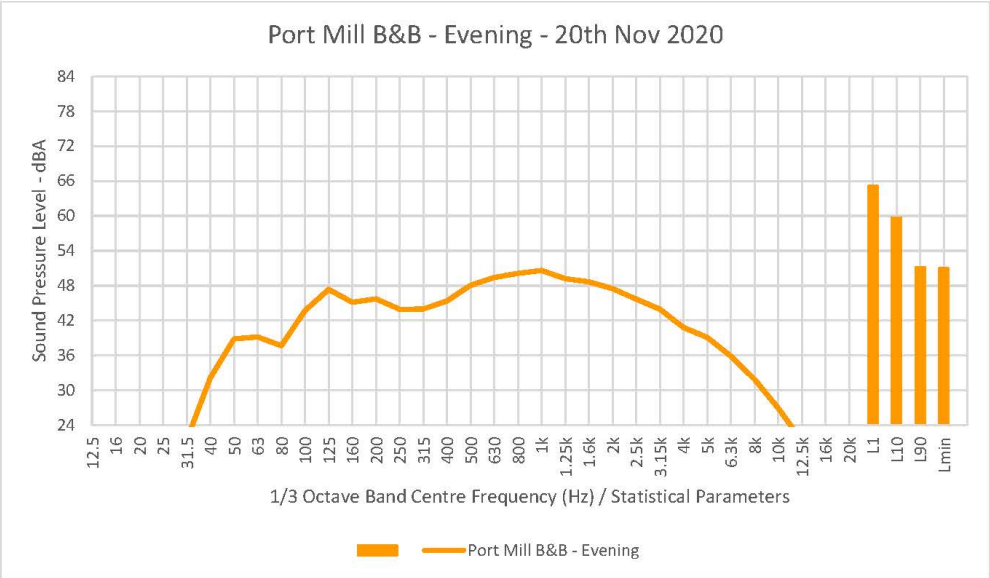
1/3 Octave Band Centre Frequency (Hz) / Statistical Parameters
Norfolk Hotel - Night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Sound Pressure Level - dBA
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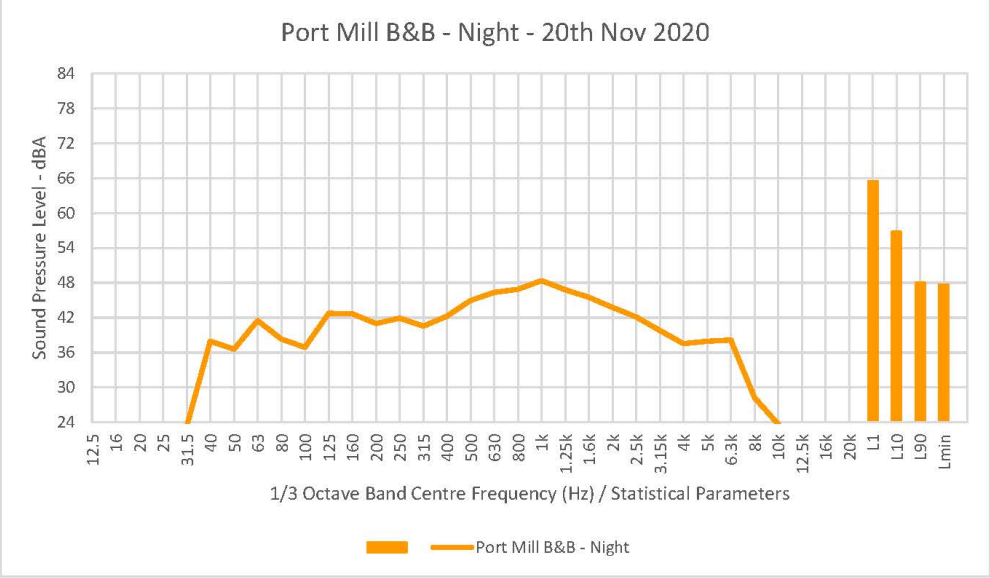
12.5 16 20 25 31.5 40 50 63 80 100 125 160 200 250 315 400 500 630 800 1k 1.25k 1.6k 2k 2.5k 3.15k 4k 5k 6.3k 8k 10k 12.5k 16k 20k L1 L10 L90 Lmin
1/3 Octave Band Centre Frequency (Hz) / Statistical Parameters
Port Mill B&B - Evening


Port Mill B&B - Night - 20th Nov 2020
Sound Pressure Level - dBA
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12.5 16 20 25 31.5 40 50 63 80 100 125 160 200 250 315 400 500 630 800 1k 1.25k 1.6k 2k 2.5k 3.15k 4k 5k 6.3k 8k 10k 12.5k 16k 20k L1 L10 L90 Lmin
1/3 Octave Band Centre Frequency (Hz) / Statistical Parameters
Port Mill B&B - Night

Design with
community in mind

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Tel +61 8 6222 7000

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Stantec