

# Heineken Manchester, Denmark Road Manchester

Planning Compliance Report  
Report 23102.PCR.06

Norder Design Associates Ltd  
Beech Lawn  
Green lane  
Belper  
Derbyshire  
DE56 1BY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                                                                         |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------|--|
| <p align="center"><b>Report 23102.PCR.06</b></p> <p align="center"><b>Revision History</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |                                                                         |  |
| <p align="center"><b>First Issue Date: 03/07/2025</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                         |  |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | D                                                                       |  |
| B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | E                                                                       |  |
| C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | F                                                                       |  |
| <p align="center"><b>Written by:</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  | <p align="center"><b>Checked by:</b></p>                                |  |
| <p align="center"><b>Jamie Murray MIOA</b><br/>Principal Acoustic Consultant</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | <p align="center"><b>Steven Leslie MIOA</b><br/>Consultancy Manager</p> |  |
| <p><b>Disclaimer</b></p> <p>KP Acoustics Ltd. has used reasonable skill and care to complete this technical document, within the terms of its brief and contract with the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the stated scope. This report is confidential to the client and we accept no responsibility to third parties to whom this report, or any part thereof, is made known. KP Acoustics Ltd. accepts no responsibility for data provided by other bodies and no legal liability arising from the use by other persons of data or opinions contained in this report.</p> <p>KP Acoustics Ltd. 2025</p> |  |                                                                         |  |

## Contents

|     |                                            |   |
|-----|--------------------------------------------|---|
| 1.0 | INTRODUCTION .....                         | 1 |
| 2.0 | SITE SURVEYS .....                         | 1 |
| 2.1 | Site Description .....                     | 1 |
| 2.2 | Previous Assessment .....                  | 2 |
| 3.0 | NOISE ASSESSMENT GUIDANCE AND TARGETS..... | 2 |
| 3.1 | Local Authority Guidance.....              | 2 |
| 3.2 | Targets .....                              | 2 |
| 4.0 | PLANT INSTALLATION .....                   | 3 |
| 5.0 | COMMISSIONING MEASUREMENTS .....           | 6 |
| 5.1 | Procedure.....                             | 6 |
| 5.2 | Equipment.....                             | 6 |
| 5.3 | Results.....                               | 6 |
| 6.0 | ASSESSMENT .....                           | 7 |
| 6.1 | Closest Noise Sensitive Receivers .....    | 7 |
| 6.2 | Calculations.....                          | 7 |
| 7.0 | CONCLUSION.....                            | 8 |

## 1.0 INTRODUCTION

KP Acoustics Ltd has been commissioned by Norder Design Associates Ltd, Beech Lawn, Green Lane, Belper, Derbyshire, DE56 1BY to undertake a noise impact assessment of a proposed CO2 extract in the Packaging Building at Heineken, Denmark Road, Manchester. Norder project reference 9193.

This report presents commissioning measurements to demonstrate the plant unit installation complies with the emissions criteria at the closest noise-sensitive receivers. This report follows an earlier report, reference '23102.PCR.01', which assessed the impact of plant more widely across the site.

## 2.0 SITE SURVEYS

### 2.1 Site Description

As shown in Figure 2.1, the site is bounded by Greenheys Lane to the North, Princess Road to the West, Moss Lane to the South and local roads to the East. There are commercial buildings to the west of the site over the road and a mix of commercial, residential and civil buildings in other directions.

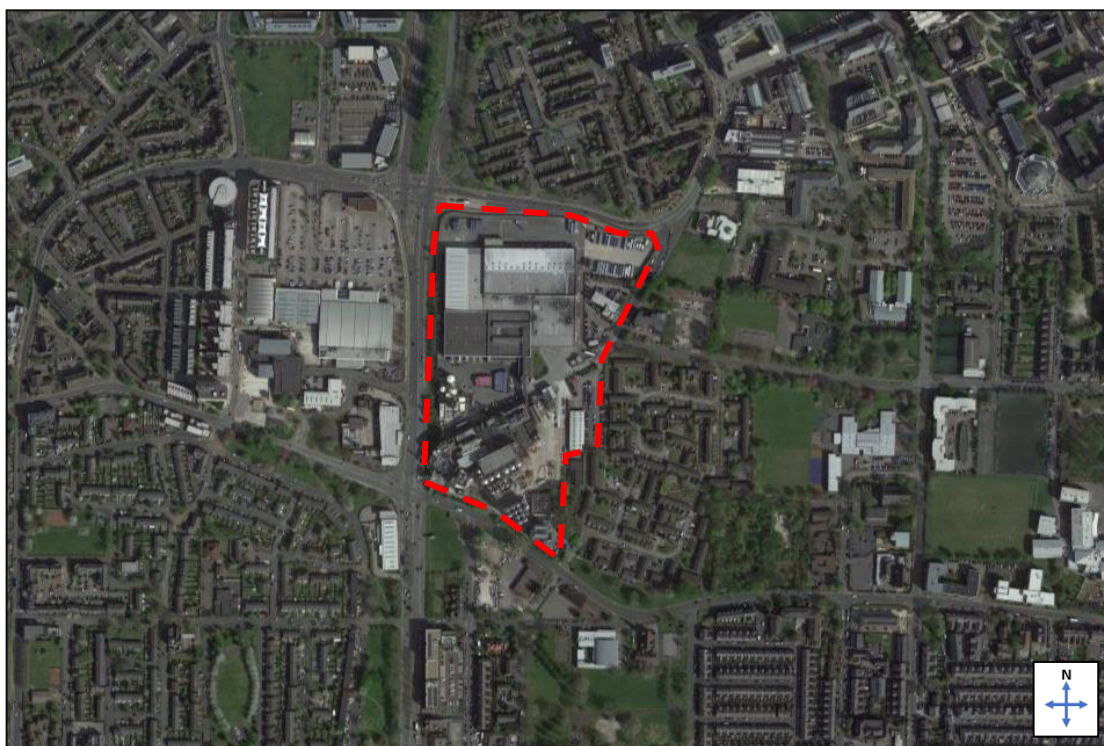


Figure 2.1 Site Location Map (Image Source: Google Maps)

## 2.2 Previous Assessment

A full study of the noise environment was carried out and detailed in KP Acoustics report with reference 23102.PCR.01, dated 23/12/2021.

In the above study, the noise impact of the site was found to be acceptable after the implementation of noise mitigation measures recommended to bring down the noise levels of some elements, which had been complained about or were otherwise found to require mitigation.

## 3.0 NOISE ASSESSMENT GUIDANCE AND TARGETS

### 3.1 Local Authority Guidance

The guidance provided in the Manchester City Council Planning & Noise Technical Guidance 2015 for noise emissions of new plant in this instance is as follows:

*“The noise assessment should be based on BS 4142: 2014 and any application for fixed plant, equipment or machinery must demonstrate that: ‘Externally mounted ancillary plant, equipment and servicing shall be selected and/or acoustically treated in accordance with a scheme designed so as to achieve a rating level of 5dB ( $L_{Aeq}$ ) below the typical background ( $L_{A90}$ ) level at the nearest noise sensitive location’.”*

### 3.2 Targets

The targets for noise level external to receivers 1-5 were set in report reference ‘23102.PCR.01’, and are listed below in Table 3.1.

| Receiver | Criterion, dB(A), Day 07:00-23:00<br>(Upper Limit) | Criterion, dB(A), Night 23:00-07:00<br>(Upper Limit) |
|----------|----------------------------------------------------|------------------------------------------------------|
| 1        | 57                                                 | 50                                                   |
| 2        | 57                                                 | 50                                                   |
| 3        | 57                                                 | 41                                                   |
| 4        | 55                                                 | 44                                                   |
| 5        | 58                                                 | 46                                                   |

**Table 3.1 Criteria at nearest noise sensitive locations**

The location of receivers are explained in detail in report reference ‘23102.PCR.01’, but in summary they are:

- R1 - Quinney Crescent to the southwest of the site

- R2 - Barnhill Street to the south of the site
- R3 - Charles Halle Road to the east of the site
- R4 - Greenheys Lane to the north of the site
- R5 - Westwood Street to the southeast of the site

#### 4.0 PLANT INSTALLATION

It is understood that the plant installation is comprised of the following units:

- 2 No. Elta Fans, Fan Code BIFCN063N2-A12/13 – 7.5kW Extraction Fan (40Hz/80%)
- In-line ductwork attenuators

The installation location for the proposed plant is at roof level, near the east façade of the packaging building, as shown in Figure 4.1 below. The fans are mounted inside the building and terminate at roof level externally, through two new stacks exiting the roof of the packaging building, as shown in Figure 4.2 below. They replace two existing fans, which terminated at the east façade.

The noise emission levels as provided by the manufacturer for the units are shown in Table 5.1.

| Unit                                                              | Descriptor | Octave Frequency Band (Hz) |     |     |     |    |    |    |    | Overall (dBA) |
|-------------------------------------------------------------------|------------|----------------------------|-----|-----|-----|----|----|----|----|---------------|
|                                                                   |            | 63                         | 125 | 250 | 500 | 1k | 2k | 4k | 8k |               |
| Elta Fans, Fan Code BIFCN063N2-A12/13 – 7.5kW (Outlet) (40Hz/80%) | SWL (dBA)  | 94                         | 96  | 91  | 99  | 95 | 94 | 85 | 76 | 100           |

**Table 5.1 Plant units noise emission levels as provided by the manufacturer**

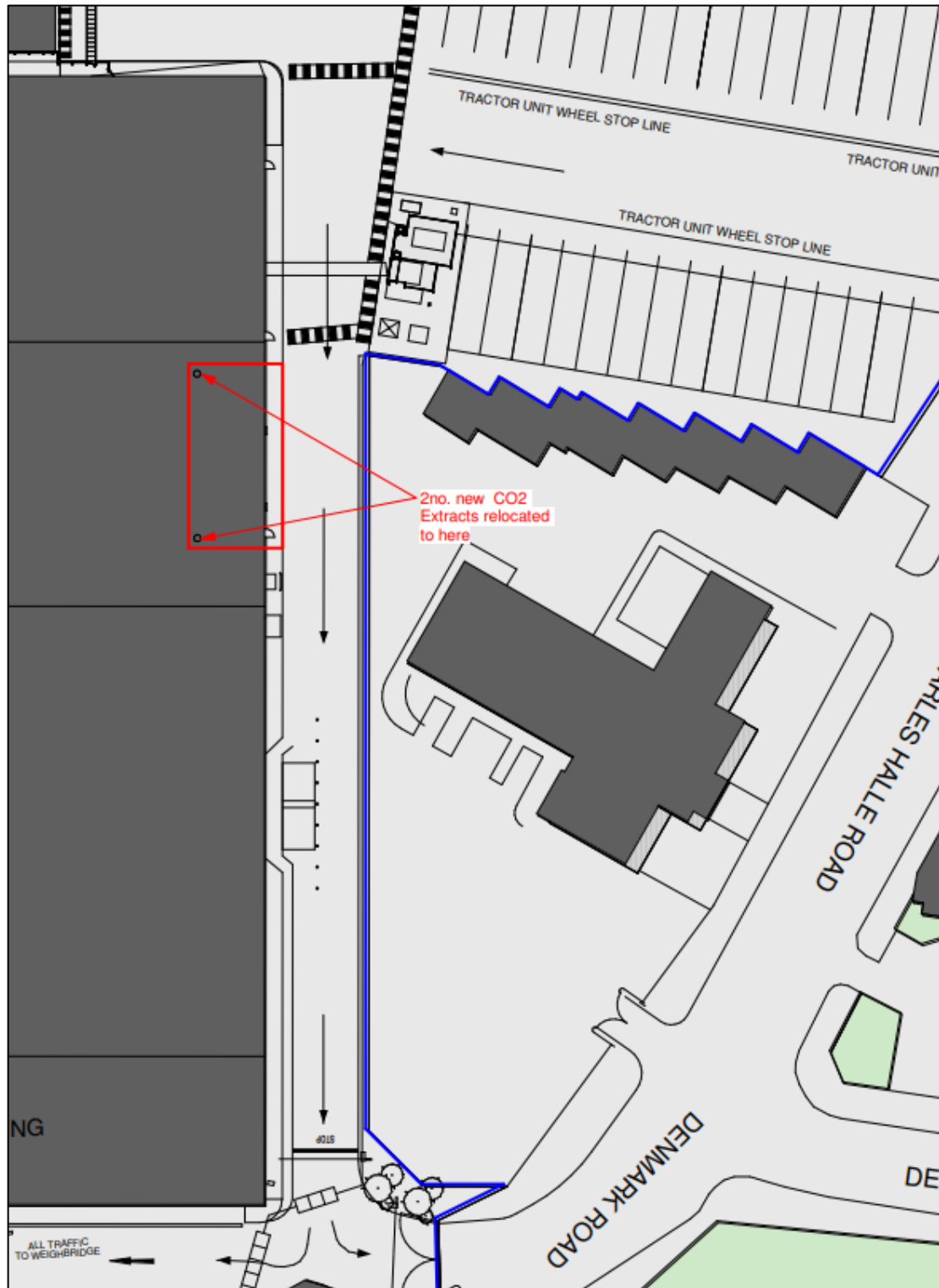


Figure 4.1 Proposed plant location (red) (Source: Norder)

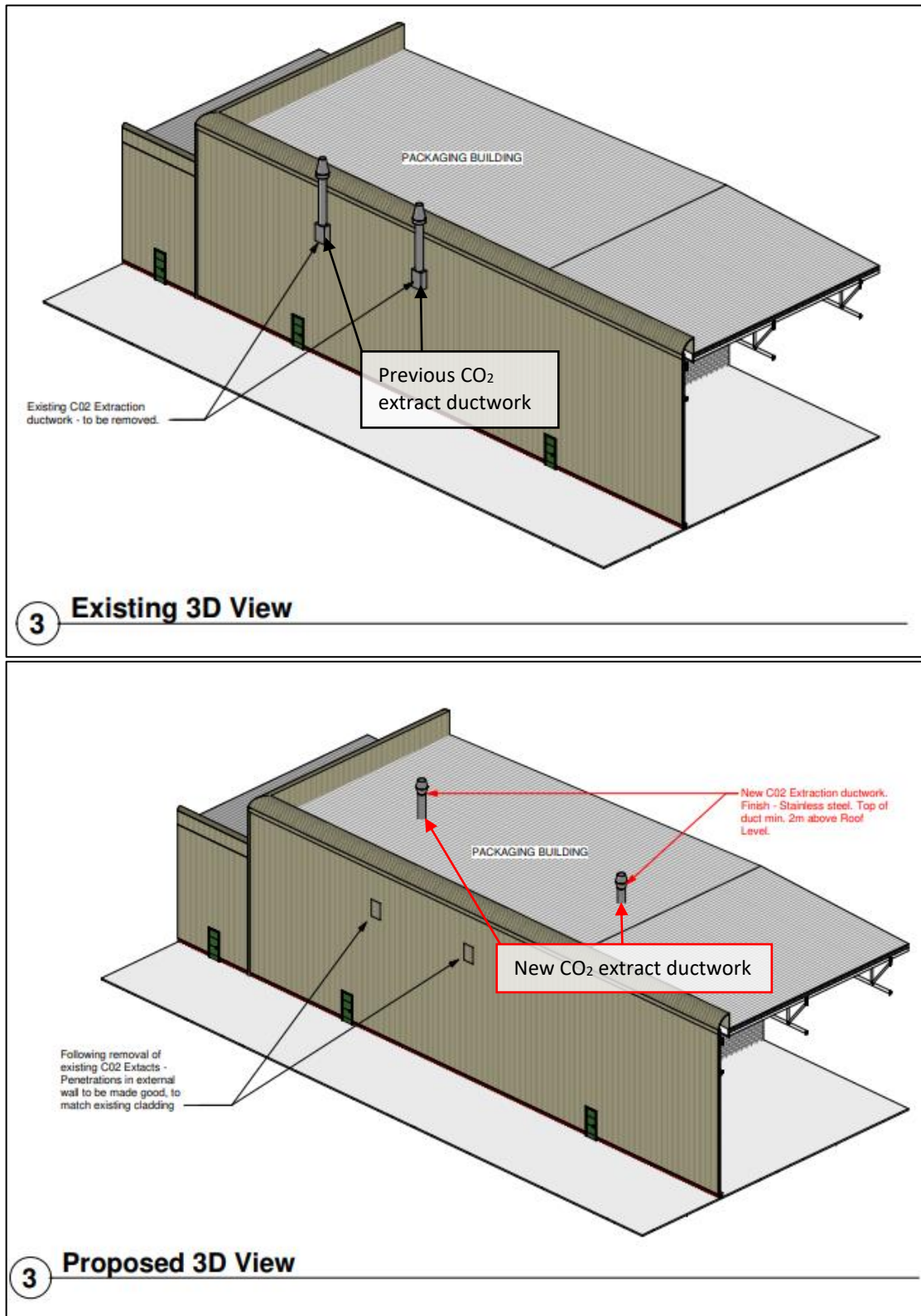


Figure 4.2 Existing view and proposed Plant Locations (Source: Norder)

## 5.0 COMMISSIONING MEASUREMENTS

### 5.1 Procedure

The site was attended on 25 April 2025 to undertake commissioning measurements. Source noise measurements were undertaken at a distance of 1.5 m from the each specific plant item in free-field conditions.

Weather conditions were generally dry with light winds and therefore suitable for the measurement of noise.

### 5.2 Equipment

The equipment calibration was verified before and after use and no abnormalities were observed. The equipment used is described below.

| Measurement Instrumentation                                | Manufacturer and Type                                                                                              | Serial Number |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------|
| SLM4<br>Precision integrating sound level meter & analyser | NTi Audio, XL2-TA<br>Calibration No: TCRT24/ 1627<br>Calibration Dates: 20/07/2023<br>Calibration Due: 19/07/2025  | A2A-09207-E0  |
| CAL3 – KP North<br>Calibrator 3                            | Larson Davies CAL200<br>Calibration No: UCRT24/2065<br>Calibration Date: 07/08/2024<br>Calibration Due: 06/08/2025 | 8932          |

**Table 5.1 Measurement instrumentation**

### 5.3 Results

The measured source noise level data is provided below.

| Source                                              | Sound Pressure Level (dB) at Octave Band Centre Frequency (Hz) |     |     |     |    |    |    |    | dBA |
|-----------------------------------------------------|----------------------------------------------------------------|-----|-----|-----|----|----|----|----|-----|
|                                                     | 63                                                             | 125 | 250 | 500 | 1k | 2k | 4k | 8k |     |
| CO <sub>2</sub> Extract 1 (1.5m)                    | 64                                                             | 69  | 62  | 61  | 57 | 56 | 53 | 46 | 64  |
| CO <sub>2</sub> Extract 2 (1.5m)                    | 66                                                             | 71  | 62  | 64  | 58 | 57 | 53 | 46 | 65  |
| Cumulative level<br>(CO <sub>2</sub> Extract 1 + 2) | 68                                                             | 73  | 65  | 66  | 61 | 59 | 56 | 49 | 68  |

**Table 5.2 Measured source noise level data**

## 6.0 ASSESSMENT

### 6.1 Closest Noise Sensitive Receivers

The closest noise sensitive receiver to the proposed installation locations are:

- **R3** - Charles Halle Road to the east of the site (approximately **90 m**)
- **R4** - Greenheys Lane to the north of the site (approximately **100 m**)

### 6.2 Calculations

Taking all acoustic corrections into consideration and based on the source noise measurements undertaken in Section 5.0, the noise level contribution expected at the closest receiver from the proposed plant would be as shown in Table 6.1.

The calculated noise level at each receptor has been assessed against the night-time criteria for each individual receptor to facilitate a worst-case assessment.

The subjective impression on site was that the source noise was constant and free of acoustic features such as tonality or impulsivity. It should also be noted that the measured noise levels also do not indicate tonality when assessed objectively in accordance with the guidance of BS 4142:2014. Whilst the need for character corrections should be assessed based on the noise level at the receivers, this is a positive indication that no corrections are required.

| Description                          | Receiver                    |                             |
|--------------------------------------|-----------------------------|-----------------------------|
|                                      | R3                          | R4                          |
| Measured source noise level at 1.5 m | 68 dB L <sub>Aeq</sub>      | 68 dB L <sub>Aeq</sub>      |
| Distance correction                  | -36 dB (90 m)               | -36 dB (100 m)              |
| Predicted Rating Level at receiver   | 32 dB L <sub>Ar,15min</sub> | 32 dB L <sub>Ar,15min</sub> |
| Criteria (23:00 – 07:00)             | 41 dB L <sub>Ar,15min</sub> | 44 dB L <sub>Ar,15min</sub> |

**Table 6.1 Predicted noise level and criterion at nearest noise sensitive location (night-time)**

As shown above, the above indicates compliance with the requirements of the Local Authority. Further to the above, the predicted noise level is significantly below the criteria (approx. 9-12 below during the quietest periods) such that there should be effectively no contribution to 'background noise creep' at the nearest receptors.

## 7.0 CONCLUSION

Using measured source noise data of the installed plant unit installation, noise levels have been predicted at the nearby noise sensitive receivers for compliance with local planning requirements.

The assessment has shown that noise emissions from the plant unit installation comfortably meet the requirements of Manchester City Council.