



1rL10151r1

REPORT FOR
OVERSHADOWING ASSESSMENT

AT
LANGDALE MEWS

PREPARED FOR
MARK LAWDSON
GROLAR DEVELOPMENTS LTD

PREPARED BY
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PLANNING AND ENVIRONMENTAL CONSULTANTS

Date
29TH AUGUST 2024

QUALITY ASSURANCE

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EXECUTIVE SUMMARY

The following Overshadowing Assessment has been undertaken and produced by Planning and Environmental Consultants (PEC) Ltd on behalf of Grolar Developments Ltd, in support of the proposed residential development at Langdale Mews, Levenshulme, M19 3NT.

PEC understand the proposals comprise the extension of the existing residential building to provide 4 additional units. Following submission of planning application 139692/FO/2024, the following reason for refusal has been provided by Manchester City Council (MCC).

1) The proposed extension by reason of its siting, scale and mass, coupled with its relationship with neighbouring residential occupiers along Delamere Road, would have an overbearing and over-dominant impact, whilst lead to the overshadowing of these properties and associated rear garden areas. As such, the proposed development would have a harmful impact to residential amenity, contrary to saved policy DC1 of the Unitary Development Plan for the City of Manchester, policies DM1 and SP1 of the Manchester Core Strategy and the National Planning Policy Framework (NPPF).

As such an Overshadowing Assessment is therefore required to quantify lighting levels across the site, consider its suitability for the proposed end-use and assess potential impacts as a result of the development.

The modelling results concluded that Overshadowing impacts on neighbouring properties as a result of the proposed development are predicted to be **not significant**.

Based on the assessment results, impacts on Overshadowing are not considered a constraint to planning consent for the proposed development.

1 INTRODUCTION

1.1 BACKGROUND

Planning and Environmental Consultants (PEC) Ltd have been commissioned by Grolar Developments Ltd, hereafter referred to as “the Client” to undertake an Overshadowing Assessment in support of a proposed residential development, comprising of the extension of the existing residential building to provide 4 additional units, herein after referred to as the “Proposed Development”.

1.2 SITE LOCATION AND CONTEXT

The Proposed Development is located at Langdale Mews, Langdale Avenue, Levenshulme, M19 3NT at approximate National Grid Reference (NGR) 387530, 393940. Reference should be made to Figure 1 within Appendix I for a location plan.

Following submission of planning application 139692/FO/2024, the following reason for refusal has been provided by Manchester City Council (MCC).

The proposed extension by reason of its siting, scale and mass, coupled with its relationship with neighbouring residential occupiers along Delamere Road, would have an overbearing and over-dominant impact, whilst lead to the overshadowing of these properties and associated rear garden areas. As such, the proposed development would have a harmful impact to residential amenity, contrary to saved policy DC1 of the Unitary Development Plan for the City of Manchester, policies DM1 and SP1 of the Manchester Core Strategy and the National Planning Policy Framework (NPPF).

A Overshadowing Assessment has therefore been undertaken to consider changes in existing access to daylight and sunlight at sensitive receptor locations at existing and proposed units. Potential impacts have been assessed in accordance with Building Research Establishment (BRE) Guidance 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice' and BS 8206-2:2008 'Lighting for Buildings, Part 2: Code of Practice for Daylighting'. This is detailed in the following report.

1.3 LIMITATIONS

This report has been produced in accordance with PEC Ltd standard terms of engagement. This report is solely for the use of the Client and those parties with whom a warranty agreement has been executed, or with whom an assignment has been agreed. Should any third party wish to use or rely upon the contents of the report, written approval must be sought from PEC Ltd at which point a charge may be levied against such approval.

2 GUIDANCE, LEGISLATION AND POLICY

2.1 DOCUMENTS CONSULTED

The following legislation, guidance and policy will be considered and adhered to during the preparation of the overshadowing Assessment:

- Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice, BRE, 2022; and,
- BS 8206-2:2008 - Lighting for Buildings, Part 2: Code of Practice for Daylighting, British Standards Institute, 2008.

2.2 NATIONAL PLANNING POLICY

2.2.1. NATIONAL PLANNING POLICY FRAMEWORK

The National Planning Policy Framework^[1] (NPPF) was published on March 2012 (updated in December 2023) and sets out the Government's core policies and principles with respect to land use planning, including natural light. The document includes the following considerations which are relevant to this assessment:

"Where there is an existing or anticipated shortage of land for meeting identified housing needs, it is especially important that planning policies and decisions avoid homes being built at low densities, and ensure that developments make optimal use of the potential of each site. In these circumstances:

[...]

Local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)"

The implications of the NPPF have been considered throughout this assessment.

2.2.2. NATIONAL PLANNING POLICY GUIDANCE

The National Planning Practice Guidance¹ (NPPG) web-based resource was launched by the Department for Communities and Local Government 24th July 2018 to support the NPPF and make it more accessible there are no current specific National Planning Policy relating to the potential impacts of development on daylight, sunlight and overshadowing of the external environment. However, the BRE report 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice' is the established national guidance to aid the developer in preventing or minimising the impacts of new structures on the availability of daylight and sunlight in the vicinity of a site. This document has been developed in conjunction with the interior daylight recommendations in BS 8206-2:2008 and has been used throughout this assessment.

2.3 MANCHESTER CITY COUNCIL LOCAL PLANNING POLICY

The MCC Core Strategy was produced in July 2012 and sets out the development framework and planning policies for all developments within the borough until 2027. A review of the Core Strategy indicated the following policies in relation to natural light and overshadowing.

[1] National Planning Policy Framework, Department for Communities and Local Government, 2018.

1 <http://planningguidance.planningportal.gov.uk/>.

“Policy DM 1 – Development Management

All development should have regard to the following specific issues for which more detailed guidance may be given within a supplementary planning document:

- *Effects on amenity, including privacy, light, noise, vibration, air quality, odours, litter, vermin, birds, road safety and traffic generation. This could also include proposals which would be sensitive to existing environmental conditions, such as noise.”*

“Policy SP1 – Special Principles

The key spatial principles which will guide the strategic development of Manchester to 2027 are:

- *The Regional Centre will be the focus for economic and commercial development, retail, leisure and cultural activity, alongside high quality city living.*
- *Beyond these areas, the emphasis is on the creation of neighbourhoods of choice, providing high quality and diverse housing around district centres which meet local needs, all in a distinct environment. The majority of new residential development in these neighbourhoods will be in the Inner Areas, defined by the North Manchester , East Manchester and Central Manchester Regeneration Areas.*
- *The City is covered by regeneration areas including the City Centre. All development should have regard to the character, issues and strategy for each regeneration area as described in the North, East, Central and South Manchester and Wythenshawe Strategic Regeneration Frameworks and the Manchester City Centre Strategic Plan.*

Core Development Principles

Development in all parts of the City should:-

- *Make a positive contribution to neighbourhoods of choice including:-*
- *Creating well designed places that enhance or create character.*
- *making a positive contribution to the health, safety and wellbeing of residents*
- *considering the needs of all members of the community regardless of age, gender, disability, sexuality, religion, culture, ethnicity or income.*
- *protect and enhance the built and natural environment.”*

These policies have been considered within this assessment by assessing predicted levels of natural light at existing receptors in the vicinity of the site with the development in place.

3 METHODOLOGY

BRE recognises that access to sunlight should not just be a consideration inside buildings but has important impacts on the overall appearance of a development. Availability of sunlight should be checked at all open spaces where it will be required. This would normally include:

- Gardens and allotments;
- Parks and playing fields;
- Children's playgrounds;
- Outdoor swimming pools and paddling pools; and
- Sitting out areas, such as between domestic buildings and public squares.

An analysis of the surrounding area was undertaken and any of the above areas identified.

The BRE report² provides the following criteria to assess the availability of sunlight to gardens and amenity areas:

For a garden or amenity area to appear adequately sunlit throughout the year, at least 50% of the area should receive at least 2 hours of sunlight on 21st March. If as a result of the proposed development an existing garden or amenity area does not meet these guidelines and the area which can receive some sun on 21st March is less than 80% of its former value, then the loss of sunlight is likely to be noticeable and will require further investigation.

A detailed Google SketchUp model of the proposed development and the surrounding buildings was created based on drawings produced and provided by P4BA (the Architect). Potential changes in access to natural light have been defined quantifying Overshadowing levels at sensitive receptors in the following scenarios:

- Do-minimum (DM) (predicted access to sunlight at sensitive amenity areas with existing buildings in place); and
- Do-something (DS) (predicted access to sunlight at sensitive amenity areas should the proposals be completed).

The DM and DS Google SketchUp model as used within the assessment is shown in Figure 2 and 3 within Appendix I.

² Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice, BRE, 2022

4 ASSESSMENT

The following Section details the results of the Overshadowing Assessment. This includes a description of the receptor locations and the manner in which these were treated.

4.1 OVERSHADOWING

Existing receptors which have the potential to be affected by the proposed development were identified through analysis of the site and surrounding area for the purpose of the Overshadowing Assessment. Receptors sensitive to overshadowing include gardens and amenity areas. These have been detailed within figure 4 and Table 1

Table 1: Receptor location

Receptor	Location	NGR	
		X (m)	Y (m)
R1	2 Delamere Road, Manchester, M19 3NQ - rear garden area	387,499	393,956
R2	4 Delamere Road, Manchester, M19 3NQ - rear garden area	387,503	393,959
R3	6 Delamere Road, Manchester, M19 3NQ - rear garden area	387,506	393,961
R4	8 Delamere Road, Manchester, M19 3NQ - rear garden area	387,510	393,963
R5	10 Delamere Road, Manchester, M19 3NQ - rear garden area	387,513	393,967
R6	12 Delamere Road, Manchester, M19 3NQ - rear garden area	387,518	393,967
R7	14 Delamere Road, Manchester, M19 3NQ - rear garden area	387,523	393,968
R8	16 Delamere Road, Manchester, M19 3NQ - rear garden area	387,527	393,970
R9	18 Delamere Road, Manchester, M19 3NQ - rear garden area	387,532	393,970
R10	20 Delamere Road, Manchester, M19 3NQ - rear garden area	387,537	393,971

As indicated within Table 1, 10 amenity areas north of the proposed development have been identified as having potential to be overshadowed as a result of the proposed development.

A sun-path analysis was produced to determine the amount of time across the garden where the amenity areas were not overshadowed on the 21st March for both the DM and DS scenarios. As such, the presented results provide a representation of potential impacts associated with the development as a worst-case scenario as shown in Table 2.

Table 2: Overshadowing Results

Receptor	Percentage of Amenity Area Receiving At Least 2 Hours of Sunlight		Percentage loss	Complies with the BRE Criteria
	DM	DS		
R1	78.37	75.94	3.10	Yes
R2	90.22	90.22	0.00	Yes
R3	91.71	91.71	0.00	Yes
R4	86.98	86.65	0.38	Yes
R5	93.00	93.00	0.00	Yes
R6	77.36	75.68	2.17	Yes
R7	84.87	83.37	1.77	Yes
R8	73.30	73.30	0.00	Yes
R9	66.63	66.63	0.00	Yes
R10	70.25	70.25	0.00	Yes

Reference should be made to Figure 5 within Appendix 2 for a graphical representation of the sun-path analysis. In line with the BRE guidance, the results shown in Table 2 indicate there is limited potential for overshadowing of usable outdoor space and the impact is therefore considered **not significant**.

5 DAYLIGHT AND SUNLIGHT STATEMENT

The BRE Guidance³ outlines a number of different methods to assess the potential for daylight to enter a room, where it is required. These include the "25° rule" and the Vertical Sky Component (VSC) method.

In general, a building will retain the potential for good interior diffuse daylighting provided that on all its main faces: No obstruction, measured in a vertical section perpendicular to the main face, from a point 2m above ground level, subtends an angle of more than 25° to the horizontal. A review of the proposed and neighbouring buildings indicates that the proposed unit does not fall within 25° and as such it is expected that the proposed development will not result in significant impacts to daylight levels

Furthermore, the BRE Guidance³ states that if a reference point in the centre of a window can receive more than one quarter of the annual probable sunlight hours (APSH), including at least 5% of the annual probable sunlight hours during the winter months, then the room should receive enough sunlight. The BRE Guidance³ can be used as a screening tool to determine the potential for a development to impact on sunlight availability. The BRE criteria are likely to be met if:

The window wall faces within 90° of due south and no obstruction, measured in the section perpendicular to the window, subtends an angle of more than 25° to the horizontal. Obstruction within 90° of due north of the reference point need not count here. As above, a review of the proposed and neighbouring buildings indicates that only the proposed unit does not fall within 25° and as such it is expected that the proposed development will not result in significant impacts to sunlight levels

A Daylight and Sunlight assessment was not requested as part of the planning conditions, after review of the Proposed Development and site, in context of the broader location, it is considered that Daylight and Sunlight would not be a constraint to planning.

³ Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice, BRE, 2011.

6 CONCLUSION

PEC Ltd were commissioned by Grolar Developments Ltd to undertake an Overshadowing Assessment in support of a proposed residential development at Langdale Mews, Levenshulme, M19 3NT.

The development has the potential to overshadow neighbouring residential amenity areas. Impacts were therefore assessed in accordance with BRE Guidance 'Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice' and BS 8206-2:2008 'Lighting for Buildings, Part 2: Code of Practice for Daylighting'.

Visualisations of the development and surrounding area were created using the Google SketchUp software package to assess potential impacts at sensitive locations in the vicinity of the site. The assessment results indicated that the relevant overshadowing BRE criteria were achieved at all of the nearby residential amenity areas considered. The impacts of the development are therefore considered to be **not significant**.

Impacts on access to sufficient natural lighting following the implementation of proposed design measures should not be viewed as a constraint to planning consent.

APPENDIX 1 – ABBREVIATIONS

BRE	Building Research Establishment
DM	Do-Minimum
DS	Do-Something
NGR	National Grid Reference

APPENDIX 2 - FIGURES



Legend

 Site Boundary

Title

Figure 1
Site Location

Project

Overshadowing Assessment
Langdale Mews, Langdale Avenue,
Levenshulme, M19 3NT

Project Number

L10151

Contains Ordnance Survey Data
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Plan View

Legend

-  Site Boundary
-  Surrounding Units
-  Existing Unit

Title

Figure 2

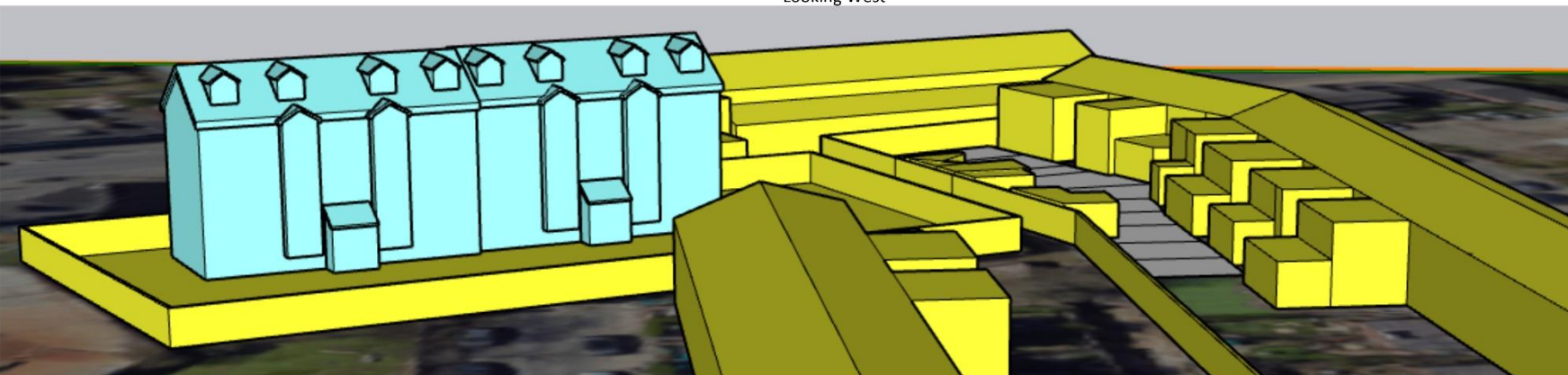
Existing Site Layout
Google Sketchup

Project

Overshadowing Assessment
Langdale Mews, Langdale Avenue,
Levenshulmem, M19 3NT

Project Number

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Looking West

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Plan View

Looking West

Legend

-  Site Boundary
-  Surrounding Units
-  Existing Unit
-  Proposed Unit

Title

Figure 3

Proposed Site Layout
Google Sketchup

Project

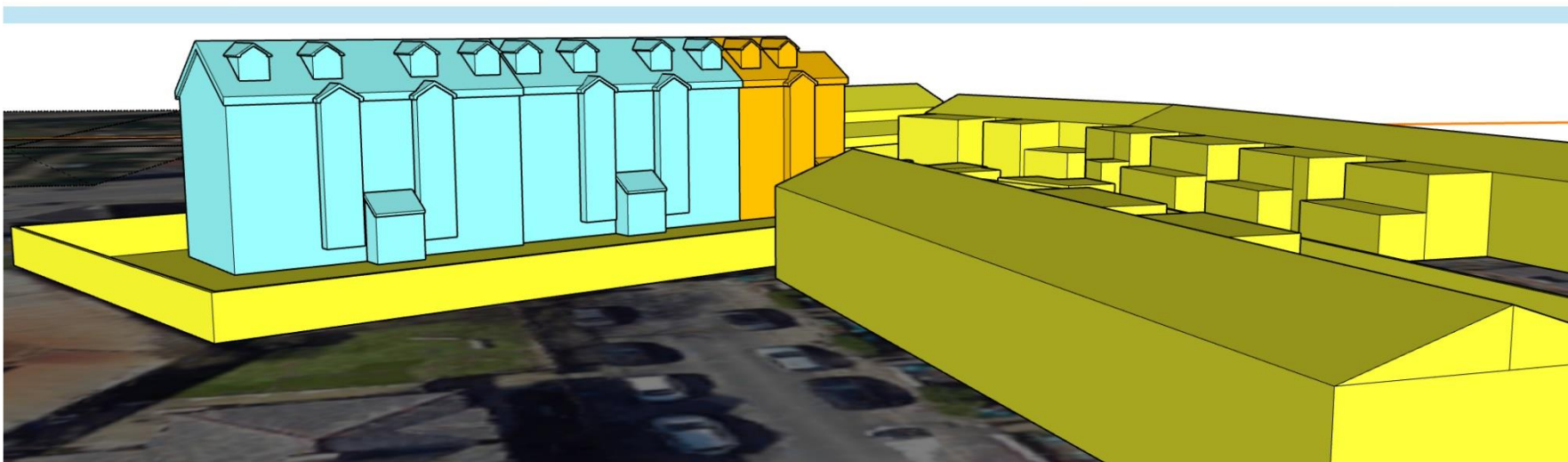
Overshadowing Assessment
Langdale Mews, Langdale Avenue,
Levenshulmem, M19 3NT

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Legend

Title

Figure 4
Sensitive Receptor Locations
Google Sketchup

Project

Overshadowing Assessment
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Project Number

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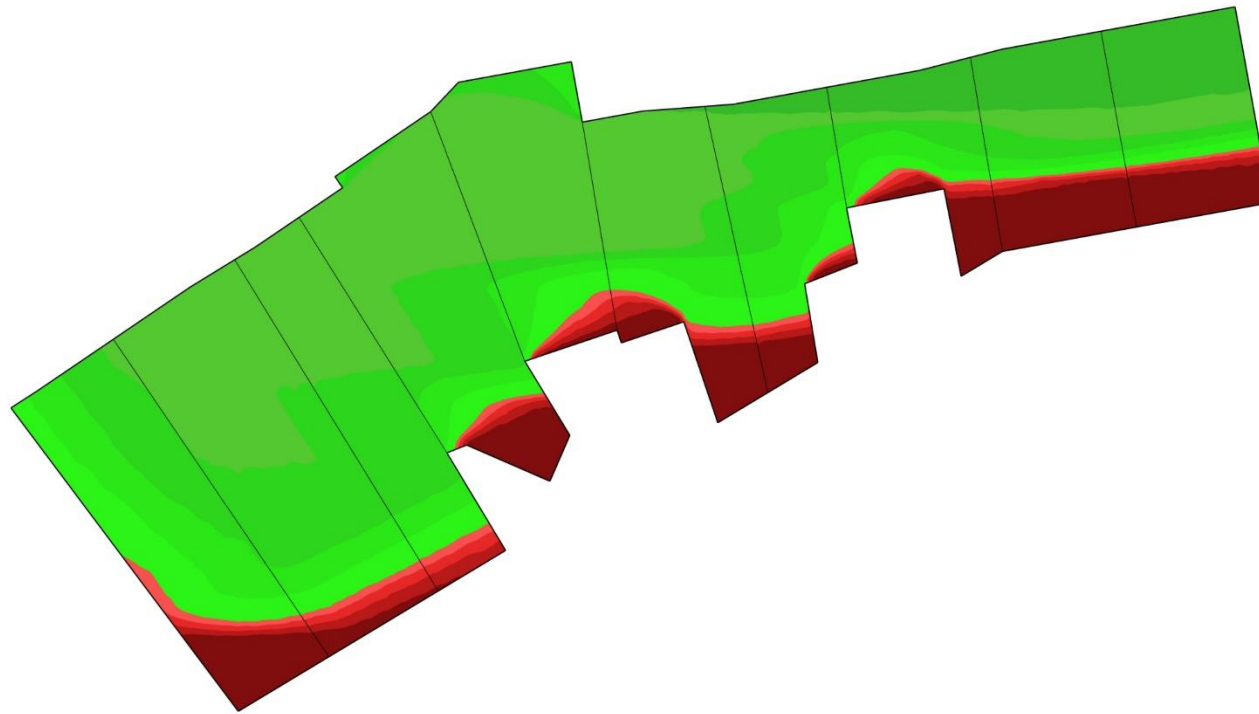
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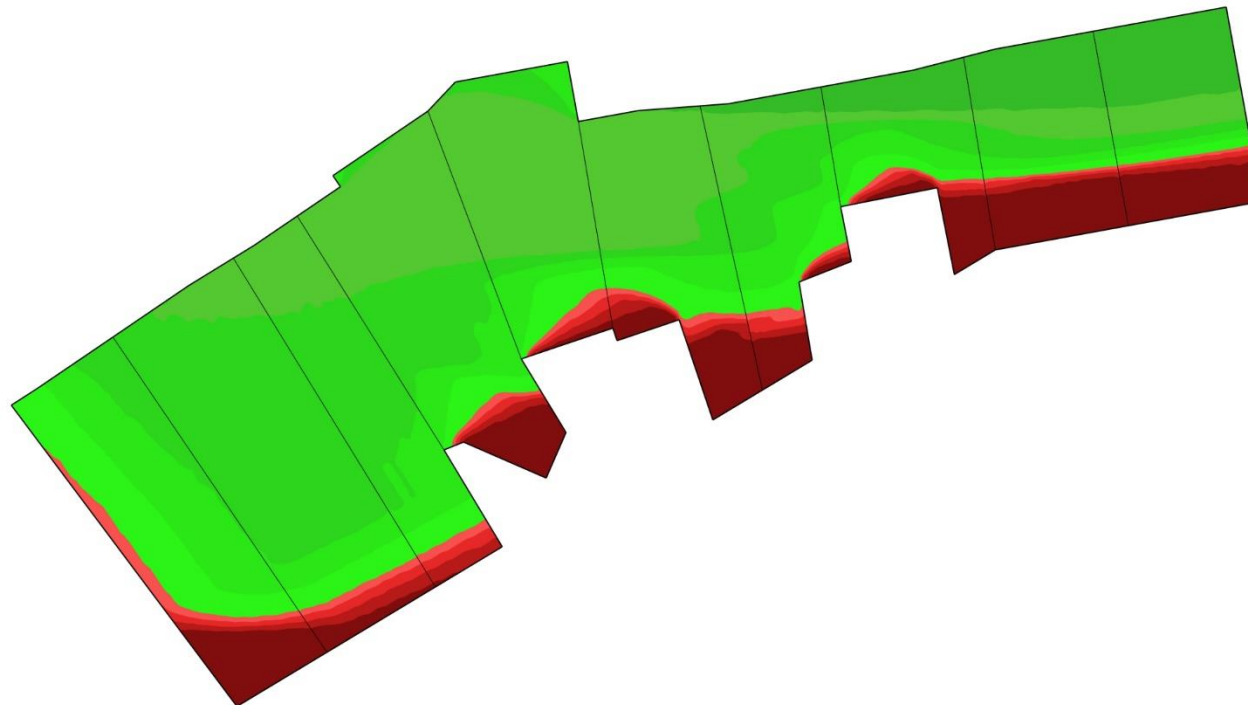




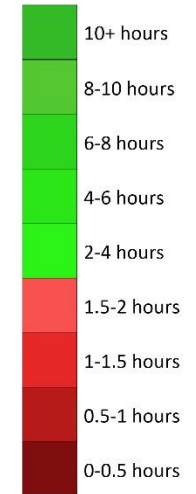
DM



DS



Legend



Title

Figure 5

Overshadowing Analysis
21st March

Project

Overshadowing Assessment
Langdale Mews, Langdale Avenue,
Levenshulme, M19 3NT

Project Number

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APPENDIX 3 – ASSESSORS CV

Lewis Ellison Technical Director MOcean, MIEEnvSc, MIAQM
KEY EXPERIENCE Lewis is a Technical Director with specialist experience in the air quality sectors. His key capabilities include: • Production of Air Quality Assessments to the Department for Environment, Food and Rural Affairs (DEFRA), Environment Agency and Environmental Protection UK (EPUK) methodologies for clients from the residential, retail and commercial sectors. • Detailed dispersion modelling of road vehicle emissions using ADMS-Roads. Studies have included impact assessment of pollutant concentrations at various floor levels and assessment of suitability of development sites for proposed end-use. • Assessment of dust impacts from construction sites to the Institute of Air Quality Management (IAQM) methodology. • Assessment of Odour Impact from commercial and industrial processes in line with Environment Agency (EA) and IAQM methodologies and guidance • Quantification of Ecological Impacts associated with Nitrogen and Acid Deposition from industrial processes • Production of air quality mitigation strategies for developments throughout the UK.
SELECT PROJECTS SUMMARY Permit Application Support • Elliot Hire Salford • Elliot Hire Wakefield • Elliot Hire Scunthorpe ES Chapters • Lyle Park West, Newham – residential development in close proximity to an active industrial estate. • Deansgate, Manchester – residential multistorey development in the centre of Manchester. • Land West of Stevenage – 1350 residential unit development with the potential to negatively impact local air quality Air Quality • Goulton Street Hull – Outline planning permission for 7 industrial units within Hull • Empire Cinema, Birmingham – Diffusion tube survey and air quality assessment for an assisted living accommodation • Tirrell's Lane, Tenbury Wells – residential assessment in the village of Tenbury Wells. Odour Assessments • Gowanbank, Forfar – Odour survey to support a residential development in close proximity to Gowanbank recycling centre • Squires Close, Pocklington – Odour risk assessment in support of a residential in close proximity to a sewage treatment works • Hawthorn Fields, Rufforth - Odour risk assessment in support of a residential in close proximity to a waste water treatment works Dust Assessment • Liverpool Docks – Construction dust monitoring survey • Lyle Park West – Dust impact assessment from adjacent concrete batching plant • High Street, Burton – Construction dust risk assessment London Experience • Gurnell Leisure Centre – mixed use development including residential, sports and commercial land use • Springfield Village Wandsworth – residential development and extension to the existing hospital building • Evelyn House, Greenwich – residential apartment block Monitoring & Surveying Experience • Liverpool Waters – Frisbee Dust gauge monitoring • Gownbank, Forfar – Field odour survey “sniff test” • Empire Cinema Birmingham – Diffusion tube survey
QUALIFICATIONS • Masters of Geological Oceanography • Odour Acuity Certified Master of Science