Biodiversity Net Gain Assessment

Land at Domett Street, Manchester, M9 8DF

Jigsaw Group Homes

Revision A – July 2023

SITE NAME			
Land at Domett Street, Manchester, M9 8DF			
GRID REFERENCE		**DOCUMENT REFERENCE**	
SD8544002916		[LM0117]BNGA[Land at Domett Street]Rev A	
SITE DESIGNATION		**LOCAL AUTHORITY**	
None		Manchester City Council	
	NAME	**QUALIFICATIONS**	**DATE**
PRINCIPAL AUTHOR	Louisa Molloy	Consultant Ecologist; BSc (Hons)	14/07/2023
REVIEWED BY	Elizabeth McBride	Consultant Ecologist; BSc (Hons); MCIEEM	20/07/2023

LM Ecology

387 Walkley Bank Road
Sheffield
S6 5AQ

Tel: 07923 334190

louisa@lm-ecology.co.uk

https://lm-ecology.co.uk

TABLE OF CONTENTS

A SUMMARY 4
B INTRODUCTION 5
C PLANNING POLICY AND LEGISLATION 6
D METHODOLOGY 7
D.1 Desk Study 7
D.2 UK Habitat Survey 7
D.3 DEFRA Metric 4.0 7
E ON-SITE PRE-INTERVENTION HABITATS 9
E.1 Habitats 9
E.2 Strategic Significance 9
E.3 Pre-intervention Biodiversity Value Calculations 9
F ON-SITE POST-INTERVENTION HABITATS 10
F.1 Proposals 10
F.2 Strategic Significance 10
F.3 Post-intervention Biodiversity Value Calculations 11
G BIODIVERSITY NET GAIN ASSESSMENT RESULTS 12
H REFERENCES 13

APPENDIX A

A.1 Pre-Intervention Habitat Plan

A.2 Post Intervention Habitat Plan

A SUMMARY

1 LM Ecology was commissioned by Jigsaw Homes Group in April 2023 to carry out a Biodiversity Net Gain Assessment (BNGA) of a parcel of land at Domett Street, Manchester, M9 8DF.

2 The BNGA was commissioned to support plans to develop the site for housing, which will comprise a block of four flats with associated hard and soft landscaping.

3 The BNGA was carried out using the most recent biodiversity metric - DEFRA Metric 4.0.

4 The purpose of this report is as a supporting document to the DEFRA Metric 4.0 worksheet, and it provides an overview of the pre- and post-development values for the site and how a Biodiversity Net Gain (BNG) can be achieved on-site, if applicable.

5 The proposal plan that this BNGA is based on is as follows:

- Schedules and Site Plan DS-BTP-SP-DR-A-3784_105.4 Revision 4 by BTP Architects dated 29th October 2020.

6 In summary, the baseline (pre-intervention) value of the site is 0.22 habitat units and 0.00 hedgerow units. The proposals will result in a post-intervention value of 0.09 habitat units and 0.00 hedgerow units, which is an overall net loss of -60.81% and 0% respectively.

7 A total of 0.16 habitat units will be needed to off-set this loss and achieve the minimum 10% BNG. However, due to the small size of the site there are no opportunities to achieve this gain on site. As a result, the loss will need to be off-set off-site via an appropriate mechanism.

8 The results are valid for up to two years from the date of publication (July 2023) and only for the landscaping shown on the above plan. Any changes to the site layout and/or landscaping plans will require a recalculation to be carried out.

B INTRODUCTION

9 LM Ecology was commissioned by Jigsaw Homes Group in April 2023 to carry out a Biodiversity Net Gain Assessment (BNGA) of a parcel of land at Domett Street, Manchester, M9 8DF (SD8544002916).

10 The site covers an area of 0.05ha consisting of amenity grassland and an unsurfaced pathway.

11 The assessment was commissioned to support plans to develop the site for housing, which will comprise a block of four flats with associated hard and soft landscaping. Proposed soft landscaping includes the creation of vegetated gardens to the front and rear of the new building and narrow verges of amenity grassland around the car parking to the south of the site. This BNGA is based on the landscaping shown on *Schedules and Site Plan DS-BTP-SP-DR-A-3784_105.4 Revision 4* by BTP Architects dated 29th October 2020.

12 The purpose of this report is to:

- Provide baseline data to classify the type and strategic significance of the habitats prior to development.
- Ensure that the baseline habitat conditions are classified in a robust and consistent manner, so that classification is based on the best data available at the time of the assessment.
- Clearly identify data collection methods and any limitations.
- Calculate the post-development value of the site based on the development proposals.

13 The results are valid for up to two years from the date of publication (July 2023) and only for the landscaping shown on the above plan. Any changes to the site layout and/or landscaping plans will require a recalculation to be carried out.

C PLANNING POLICY AND LEGISLATION

14 The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how they should be applied. Chapter 15 states that developers must identify and pursue opportunities for securing measurable net gains for biodiversity.

15 Under the Environment Act 2021, all planning permissions granted in England (with a few exceptions) will have to deliver at least 10% Biodiversity Net Gain. This will become legally enforceable following a transition period.

D METHODOLOGY

D.1 Desk Study

17 A desk study was carried out in July 2023 as part of the Biodiversity Net Gain Assessment. The following information was reviewed:

- Multi-Agency Geographic Information for the Countryside (MAGIC) online database.
- Greater Manchester Combined Authority (GMCA) MappingGM online database.
- Manchester's Local Development Framework Core Strategy Development Plan Document 2012 to 2027
- GMCA Biodiversity Net Gain Guidance for Greater Manchester February 2021

D.2 UK Habitat Survey

18 The site survey was carried out by Louisa Molloy (Consultant Ecologist, BSc (Hons)) and Elizabeth McBride (Consultant Ecologist, BSc (Hons), MCIEEM) on 22nd June 2023, in accordance with the UK Habitat Classification (UKHab) methodology (Butcher, et al., 2020). The habitats within the boundary of the survey site were broadly mapped with the principal habitat types and, where applicable, the dominant plant species identified within each habitat type.

D.3 DEFRA Metric 4.0

19 The Biodiversity Net Gain Assessment was carried out using the DEFRA Metric 4.0.

20 UK Habitat Survey habitats recorded from the site were input into the DEFRA Metric 4.0 worksheet and the baseline (or pre-intervention) biodiversity unit value of each habitat parcel was calculated.

21 The proposed development habitats were mapped and assigned a UK Habitat Survey type and then input into the DEFRA Metric 4.0 worksheet. The biodiversity unit values for the proposed development (or post-intervention) were then calculated using the same method.

22 The change in biodiversity value is calculated by subtracting the pre-intervention values from the post-intervention values to give final values from which it can be determined if the scheme delivers a biodiversity net gain or loss.

23 Metric calculations were undertaken by Louisa Molloy.

24 The assessment is based on CIEEMs Good Practice Principles (Baker, et al., 2019) and Biodiversity Net Gain Report and Audit Templates (CIEEM, 2021).

25 Post-intervention habitats were mapped from the following proposal plan provided by the client:

- *Schedules and Site Plan DS-BTP-SP-DR-A-3784_105.4 Revision 4* by BTP Architects dated 29th October 2020.

26 The full results of the BNG assessment are provided in the supplied DEFRA Metric 4.0 worksheet. Pre-and post-intervention habitat plans are included in Appendix A as figures A.1 and A.2, respectively.

27 The strategic significance of the habitats was determined via the use of the GMCA MappingGM layer **Greater Manchester Local Nature Recovery Strategy (LNRS) Opportunities, 2021.**

28 Habitat areas and lengths, both pre-and post-intervention, have been measured using QGIS. Whilst every effort has been made to map the habitats as precisely as possible, there may be very minor errors in accuracy.

E ON-SITE PRE-INTERVENTION HABITATS

E.1 Habitats

E.1.1 Modified grassland

30 Modified grassland in the form of closely and regularly mown species poor amenity grassland is the main site habitat covering an area of 0.048ha.

31 The grassland passed 5 of the 7 condition criteria, including essential criterion A, and has been assessed as being in moderate condition.

32 This habitat has a value of 0.22 habitat units.

E.1.2 Artificial unvegetated; unsealed surface

33 This habitat is formed by a hardcore surfaced pathway running across the site with an area of 0.0041ha.

34 A condition assessment is not applicable to this habitat type.

35 This habitat has a value of 0.00 habitat units.

E.2 Strategic Significance

36 The site has been identified in a local strategy as an opportunity for tree planting. Therefore, 'Formally identified in local strategy' has been assigned.

E.3 Pre-intervention Biodiversity Value Calculations

37 Based on the data input into the DEFRA Metric 4.0 worksheet, the pre-intervention habitats have a total value of:

- 0.22 habitat units; and
- 0.00 hedgerow units.

F ON-SITE POST-INTERVENTION HABITATS

F.1 Proposals

38 The proposals will involve construction of a block of four flats with associated hard and soft landscaping. Proposed soft landscaping includes the creation of vegetated gardens to the front and rear of the new building and narrow verges of amenity grassland around the car parking to the south of the site.

F.1.1 Retained Habitats

39 None of the pre-intervention habitats will be retained.

F.1.2 Habitat Creation

40 The proposals will result in the creation of:

- 0.004ha of modified grassland in moderate condition with a value of 0.02 habitat units
- 0.0163ha of vegetated garden. A condition assessment does not apply to this habitat type. The habitat will have a value of 0.07 habitat units.
- 0.0159ha of developed land; sealed surface. A condition assessment does not apply to this habitat type and the habitat has a value of 0.00 habitat units.

41 No long-term management of the newly created habitats is proposed due to the landscaping forming the private garden of the new development and the modified grassland likely being regularly mown by the local council or maintenance company. However, a standard planning condition, worded as follows, can ensure that any planting within the proposed development is successful:

- If within a period of five years from the date of planting of any tree/hedge/shrub that tree/hedge/shrub, or any replacement, is removed, uprooted or destroyed or dies, or becomes, in the opinion of the Local Planning Authority seriously damaged or defective, another tree/hedge/shrub of the same species and size as that originally planted shall be planted in the same location as soon as reasonably possible and no later than the first available planting season, unless otherwise agreed in writing by the Local Planning Authority.

F.1.3 Habitat Enhancement

42 Habitat enhancement is not applicable to this site.

F.2 Strategic Significance

43 The site has been identified in a local strategy the strategic significance as an opportunity for tree planting. Therefore, ‘Formally identified in local strategy’ has been assigned.

F.3 Post-intervention Biodiversity Value Calculations

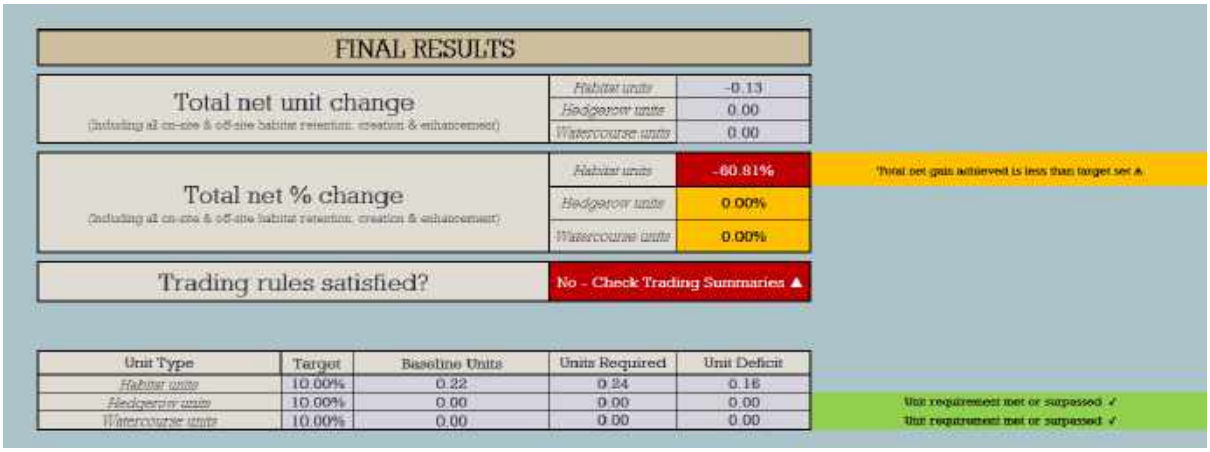
44 Based on the data inputted into the DEFRA Metric 4.0 worksheet, the post-intervention habitats have a total value of:

- 0.09 habitat units; and
- 0.00 hedgerow units.

G BIODIVERSITY NET GAIN ASSESSMENT RESULTS

45 Completion of the BNGA using the DEFRA Metric 4.0 shows that the proposals will result in a net loss of -0.13 habitat units (-60.81%) and no net change in hedgerow units.

Figure 1 Screen grab of DEFRA Metric 4.0 final results for Land at Domett Street



46 The landscaping required to achieve this result is shown on the following plan:

- *Schedules and Site Plan DS-BTP-SP-DR-A-3784_105.4 Revision 4* by BTP Architects dated 29th October 2020.

47 The implementation of this landscaping can be secured by a standard planning condition.

48 Due to the small size of the site, the extent of the housing proposed, and the limitation on counting trees in the post-intervention calculations, there is no scope to achieve a minimum 10% biodiversity net gain on-site. Therefore, the calculated losses will need to be off-set off-site via an appropriate mechanism.

H REFERENCES

Baker, J., Hoskin, R. & Butterworth, T., 2019. *Biodiversity net gain. Good practive principles for development. A practical guide.,* London: Ciria.

Butcher, B. et al., 2020. *The UK Habitat Classification User Manual Version 1.1.* [Online] Available at: https://ukhab.org/
[Accessed 24 April 2023].

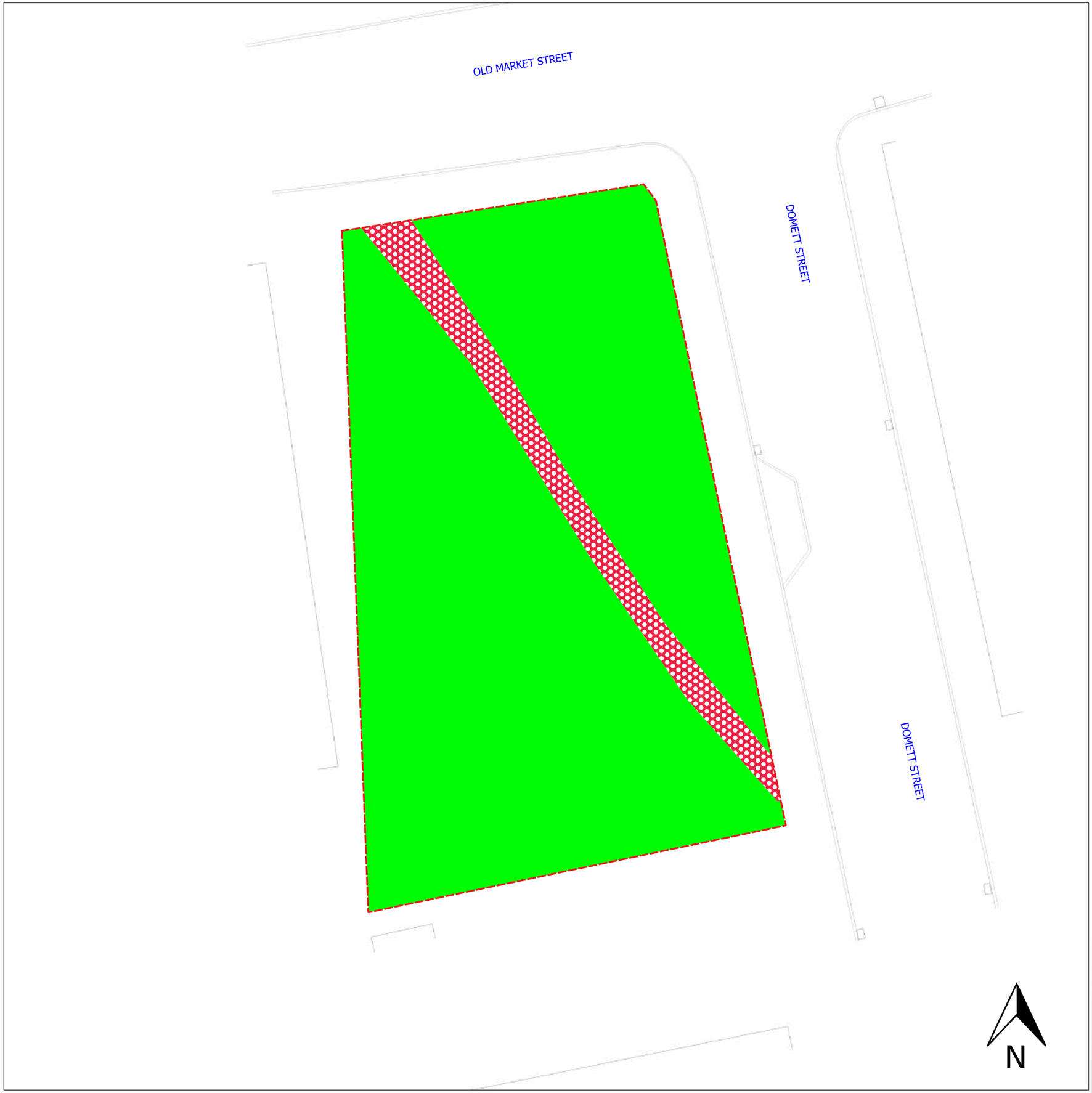
CIEEM, 2021. *Biodiversity Net Gain Report and Audit Templates,* Winchester, UK: Chartered Institute of Ecology and Environmental Management.

Footprint Ecology and WSP, 2021. *GMCA Biodiversity Net Gain Guidance for Greater Manchester February 2021,* Manchester: GMCA.

Manchester City Council, 2012. *Manchester's Local Development Framework Strategy Core Strategy Development Plan Document Adopted 11th July 2012,* Manchester: Manchester City Council.

Natural England, 2023. *The Biodiversity Metric 4.0 User Guide,* s.l.: Natural England.

APPENDIX A



Legend

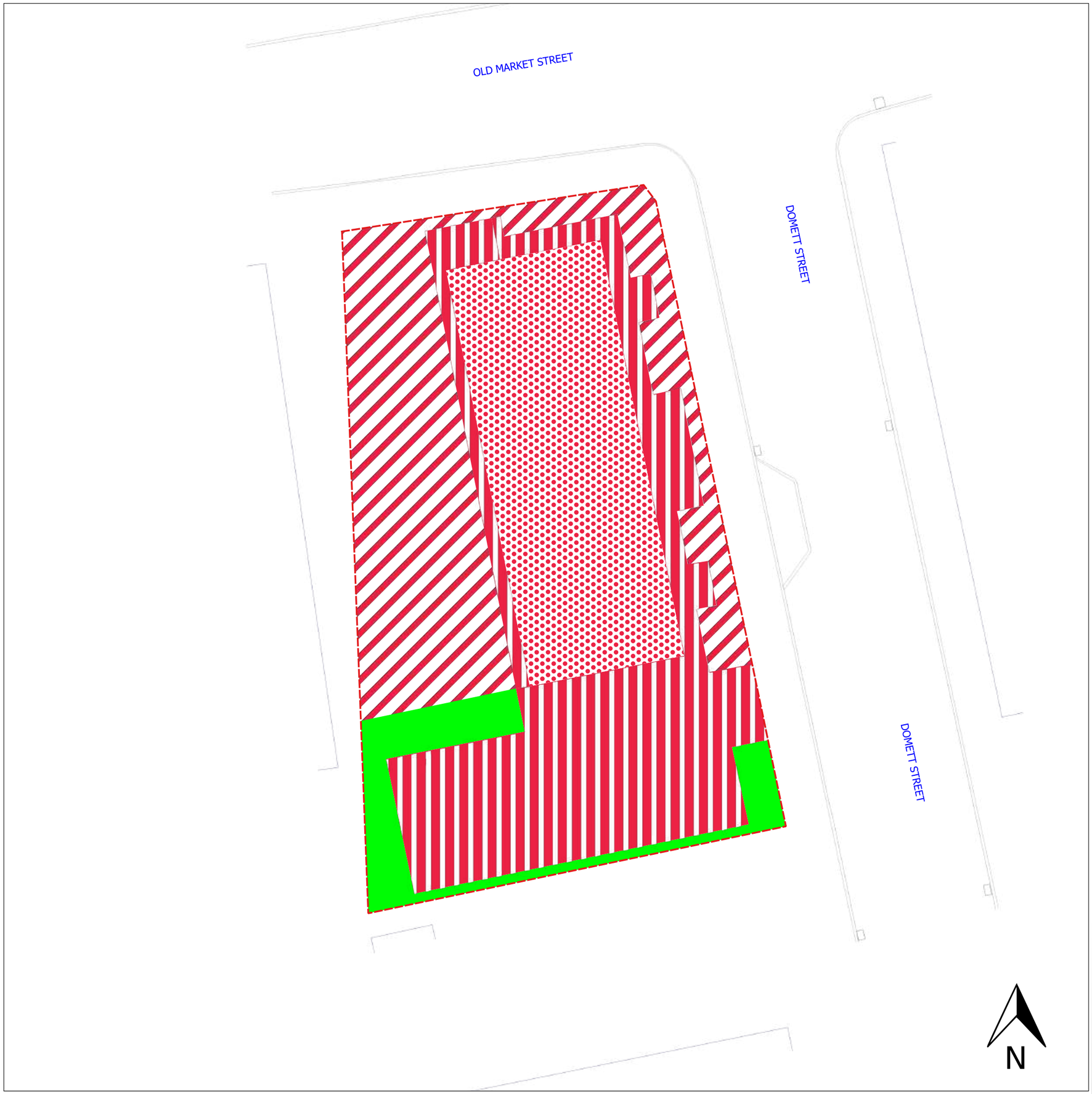
- Survey boundary
- Modified grassland
- Artificial unvegetated; unsealed surface

Project	Land at Domett Street, Manchester, M9 8DF
Title	A.1 Pre-intervention Habitat Plan
Client	Jigsaw Homes Group
Date	July 2023
Ref	[LM0117]A.1[REV A]PRE[DS]

0 5 10 m

Indicative only.
Do not scale from plan.

lm ecology
E: louisa@lm-ecology.co.uk
T: 07923 334190
W: https://lm-ecology.co.uk



Legend

- Survey boundary
- Modified grassland
- Vegetated gardens
- Developed land; sealed surface
- Developed land; sealed surface - buildings

Project	Land at Domett Street, Manchester, M9 8DF
Title	A.2 Post-intervention Habitat Plan
Client	Jigsaw Homes Group
Date	July 2023
Ref	[LM0117]A.2[REV A]POST[DS]

0 5 10 m

Indicative only.
Do not scale from plan.

lm ecology
E: louisa@lm-ecology.co.uk
T: 07923 334190
W: https://lm-ecology.co.uk