

40 Demesne Road, Manchester

## Flood Risk Assessment

**Job Number:** LKC 24 1099

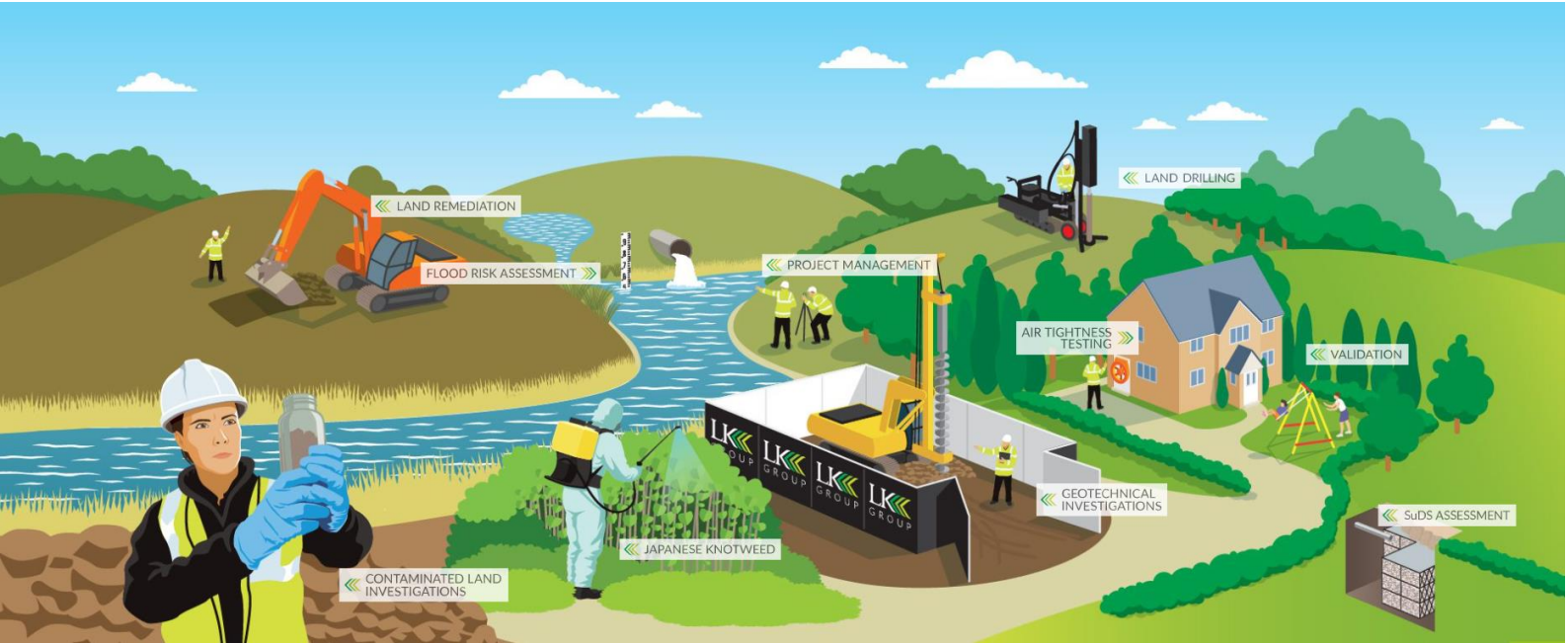
**Date:** December 2024

**Client:** BOS3 Manchester Ltd



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## EXECUTIVE SUMMARY

### Scope and Background

This Flood Risk Assessment (FRA) has been undertaken by LKC to support a planning application for the development of existing dwelling at 40 Demesne Road, Manchester. The development comprises the conversion of the lower ground floor to an apartment.

LKC has prepared this FRA in line with the NPPF and Technical Guidance where appropriate.

In considering the proposals the following key principles have therefore been applied:

- » Identification of flood risks.
- » Protection of users of the new development.
- » No increased flood risk to third parties.

### Consultations

The Environment Agency (EA) has been consulted to inform the preparation of this report. They have provided a more detailed flood map and the onsite/adjacent modelled flood levels for the watercourses within the vicinity of the site, including floodplain level and in channel levels for the Platt Brook located 900 m to the south of the site.

Manchester City Council - Lead Local Flood Authority (LLFA) and Water Company (UU) were also consulted concerning flood risk. Manchester City Council are yet to respond at the time of writing. UU confirmed they have no modelled data and did not provide any other relevant information.

### Flood Risk

The site is in Flood Zone 2 - Low Risk - between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%).

Review of the modelled floodplain nodes data shows that the flooding level within the site boundary is the level of 30.04m AOD for the 1% / 1 in 100 year plus 41% climate change allowance event.

### Mitigation

An assessment of these risks in conjunction with the development proposals have resulted in the following recommendations for the safe development of the site:

- » The proposed lightwells have a waterproof upstand 600 mm above the 1 in 100 year plus 41% allowance for climate change level of 30.04 m AOD, therefore providing freeboard to a level of 30.64 m AOD.
- » In addition to this, any windows to the lower ground floor should be set above 30.64 m AOD and any service openings or penetrations should be above this level or appropriately waterproofed.
- » There is a potential for shallow perched groundwater to impact the basement. It is recommended that appropriate investigations are undertaken to rule this out, and / or appropriate waterproofing or tanking of the basement is considered at the detailed design stage.

## Access

Pedestrian access and egress may be hampered at the site based on Demesne Road and adjacent footpath being impacted by a depth of up to 300 mm. It is recommended that the development is registered with the EA Flood Warning System and that a Flood Management Plan is produced. Vehicular access and egress may be achievable

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## APPENDICES

- Appendix A – Site Location Plan
- Appendix B – Proposed Development Plans
- Appendix C – Topographic Survey
- Appendix D – Environment Agency Data
- Appendix E – Consultation Responses

# 1 Introduction

## 1.1 Background

LKC were commissioned by BOS3 Manchester Ltd to carry out an FRA for 40 Demesne Road, Manchester. The report was undertaken in support of a planning application for the *'change of use of the existing lower ground floor level into 1 no. 2-bed apartment with external alterations to include new windows and lightwells.'*

The report will address the vulnerability to flooding from all possible sources and will also consider the impact of the development on surface water runoff accounting for climate change and the potential to increase flood risk elsewhere. The issues of actual flood risk are discussed in Section 4.

Government policy with respect to development in flood risk areas is contained within the Ministry of Housing Communities and Local Government National Planning Policy Framework<sup>1</sup> and accompanying Planning Practice Guidance (PPG)<sup>2</sup>. The guidance on Climate Change allowance issued by the Environment Agency in June 2022 has also been considered.

LKC has prepared this FRA in line with the NPPF and the PPG where appropriate. The level of detail entered into any flood risk assessment is dependent upon the scale and potential impact of the proposed development, and the vulnerability classification of the proposed land-use.

## 1.2 Site Details

A summary of the general site details is presented in Table 1-1

|                             |                                                                                                                                                                                                                            |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Location</b>             | Site is located south of Demesne Road, located at number 40.<br>Nearest postcode to the site is M16 8HJ.<br>Centred at approximate National Grid Reference 383302E, 394679N.<br>Site location plan included at Appendix A. |
| <b>Area</b>                 | Approximately 390m <sup>2</sup> .                                                                                                                                                                                          |
| <b>Topography</b>           | Site slopes slightly down the north towards Demesne Road. Further details are provided in Section 2.4.                                                                                                                     |
| <b>Current Site Use</b>     | <u>Site</u><br>Site comprises residential dwelling with associated private garden, however, the area of the development comprises a disused lower ground floor.<br><u>Surrounding Area</u><br>Residential Properties.      |
| <b>Proposed Development</b> | The change of use of the existing lower ground floor level into 1 no. 2-bed apartment with external alterations to include new windows and lightwells.<br>The proposed development plans are included at Appendix B.       |

Table 1-1: Summary of site details.

<sup>1</sup> Ministry of Housing Communities and Local Government. "National Planning Policy Framework.". Last updated 20<sup>th</sup> December 2023.

<sup>2</sup> Ministry of Housing Communities and Local Government. "Planning Practice Guidance" <https://www.gov.uk/guidance/flood-risk-and-coastal-change>. Last updated 25<sup>th</sup> August 2022

## 2 Site Setting

### 2.1 Vulnerability

As an initial phase in identifying whether a site is potentially at risk of flooding, LKC has consulted the EA's Flood Zone Mapping website. This mapping is (often) based on coarse scale modelling and provides only an initial indication of the flood risk to a site. The EA Flood Zone maps were developed using a very coarse Digital Elevation Map (DEM) and are superseded by a more detailed analysis of modelled flood levels and topographic survey levels.

The Flood Zones divide the floodplain into three categories of flood risk, and do not take flood defences into account. The PPG (Table 1, Paragraph 78) defines the Flood Zones as:

- » Flood Zone 1 – Very Low Risk, with annual probability of flooding from rivers and the sea of less than 0.1% (1 in 1000).
- » Flood Zone 2 – Low Risk, with annual probability of flooding of 0.1 to 1.0% from rivers and 0.1 to 0.5% from the sea.
- » Flood Zone 3 – Medium to High risk of flooding with an annual probability of flooding of 1.0% or greater from rivers, and 0.5% or greater from the sea.

The Flood Zone Mapping indicates the site as being within Flood Zone 2 and therefore requires a Flood Risk Assessment to support a Planning Application (footnote 59, NPPF).

The proposed development is for a residential use and this is classified within the 'More Vulnerable' category in the PPG (Annex 3, NPPF).

It should be noted that the flood extents based on the Flood Map for Planning do not account for the impacts of climate change. Review of the Environment Agency guidance (Flood Risk Assessment: climate change allowances, last updated 27<sup>th</sup> May 2022)<sup>3</sup>. The site is located within the Irwell Catchment and as such based on its location within Flood Zone 2 and a 'More Vulnerable' development the Central Allowance for the 2080's epoch should be considered, thereby requiring a 41% uplift on the 1% AEP / 1 in 100 year event.

### 2.2 The Sequential and Exception Tests

The NPPF requires that the Sequential Test be applied to development proposals in Flood Zones 2 to determine if there are any 'reasonably available' and suitable alternative sites at lower flood risk. The Sequential Test is outside this scope of works and shall be undertaken by others.

According to the 'National flood risk standing advice for local planning authorities'<sup>4</sup> (last updated 23 August 2024) and 'Preparing a flood risk assessment: standing advice'<sup>5</sup> a development is exempt from the Sequential Test if it is a change of use (except for changed of use to a caravan, camping or chalet site, or to a mobile home or park home

<sup>3</sup> Environment Agency. <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>. Last updated 27<sup>th</sup> May 2022.

<sup>4</sup> Environment Agency. <https://www.gov.uk/guidance/flood-risk-assessment-local-planning-authorities#the-sequential-and-exception-tests>. Last updated 23<sup>rd</sup> August 2024.

<sup>5</sup> Environment Agency. <https://www.gov.uk/guidance/flood-risk-assessment-standing-advice>. Last updated 23<sup>rd</sup> August 2024.

site). The development is a change of use and not to the exceptions listed and is therefore exempt from the Sequential Test.

## 2.3 Environmental Setting

LKC has undertaken a review of public domain information including British Geological Survey data, Environment Agency data, historical mapping and aerial photography to provide a summary of the environmental setting of the site. This is summarised in Table 2-1 below.

| Summary of the Environmental Setting |                                         |             |                                                                                                                                            |
|--------------------------------------|-----------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Geology                              | Superficial                             |             | Glaciofluvial Sheets deposits (Devensian, gravel and sand).                                                                                |
|                                      | Bedrock                                 |             | Wilmslow Sandstone Formation (Sandstone).                                                                                                  |
|                                      | BGS Boreholes                           |             | BH Ref: SJ89SW574, 63m south-east: Firm brown sandy boulder clay to 5.00mbl.                                                               |
|                                      | Defra Soilscape Mapping                 |             | Type 15 – Naturally wet very acid sandy and loamy soils.                                                                                   |
|                                      | Groundwater Flooding Susceptibility     |             | According to the Long Term Flood Map, groundwater flooding is unlikely in this area.                                                       |
| Hydro-geology                        | Aquifer Designation                     | Superficial | Secondary A Aquifer.                                                                                                                       |
|                                      |                                         | Bedrock     | Principal Aquifer.                                                                                                                         |
|                                      | Source Protection Zone (SPZ)            |             | Site not within an SPZ.                                                                                                                    |
| Hydrology                            | All adjacent and internal surface water |             | Historic 'lost river' Dog Kennel Brook located 90-110 m southwest and southeast.<br>Chorlton Platt Gore located approximately 900 m south. |
|                                      | Flooding                                |             | Flood Zone 2.                                                                                                                              |
| Site History                         |                                         |             | Onsite: Residential dwelling.<br>Surrounding area: Bowling green, residential dwellings, Alexandra Park.                                   |

Table 2-1: Summary of the Environmental Setting.

## 2.4 Site and Access Levels

A topographic survey of the site has been undertaken by Malcolm Highs Chartered Land Surveyors (drawing number 61801\_01, dated June 2024) to OS Datum from GNSS positioning is included in Appendix C.

The Survey indicates the following levels around the site:

- » Levels to the north of the site within Demesne Road range between 29.48 m AOD and 29.64 m AOD at the entrance to the site;
- » Within the pavement at the frontage of the site, the levels are between 29.50 m AOD and 29.81 m AOD;
- » Levels within the driveway slope up from the pavement from 29.73 m AOD to 29.96 m AOD at the northeastern corner of the building;
- » There are steps located along the driveway to the front access to the building and level increase from 29.84 m AOD to 30.16 m AOD via the steps. Levels continue to increase to the steps at the front door of the existing building where the level is 30.75 m AOD and the threshold of the existing building is 31.62 m AOD.
- » Levels externally at the front of the building are indicated to be 30.61 m AOD to 30.62 m AOD;
- » Levels externally within the rear garden of the building are between 29.67 m AOD to 29.70 m AOD adjacent to the building.

### 3 Consultation / Additional Information

Information from relevant consultees is summarised in Table 3-1 below.

Relevant correspondence / information from the Environment Agency is provided in Appendix D and from other consultees is provided in Appendix E.

For modelled levels refer to extracted Level table and node location map in Appendix D.

| Source                  | Details                                                                                                              |                                                                                                                                                                                                                                                                                                              |
|-------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EA                      | Flood Zone 2: Low risk, with annual probability of flooding of 0.1 to 1.0% from rivers and 0.1 to 0.5% from the sea. |                                                                                                                                                                                                                                                                                                              |
|                         | Modelled Levels for Platt Brook                                                                                      | Product 4 provides in channel levels from Platt Brook to the south-east of site. Nodes 1 was used for the modelled locations from Platt Brook showing 31.11m AOD from 1% AEP + 41% climate change.                                                                                                           |
|                         | Modelled Levels for 2d grid water level                                                                              | Floodplain node points provided on the modelled 2d grid for defended climate change and modelled fluvial extent using the central allowance for the 2080's. The data shows 30.04m AOD height for 1% AEP / 1 in 100 year + 41% climate change annual chance on all relevant sample points with data provided. |
|                         | Flood Defences                                                                                                       | Whilst the modelling provided by the Environment Agency indicates there are 'defended' model runs, the EA have indicated that there are ' <i>no defences within the vicinity of the site</i> '.<br>It is considered likely that the defence on nearby watercourses, therefore do not benefit the site.       |
|                         | Records of Flooding                                                                                                  | The EA indicate that they hold no record of flooding in these areas. However, this does not mean flooding has not occurred in the past or that it will not flood in the future.                                                                                                                              |
|                         | Records of Flood Warning Service (GIS mapping)                                                                       | The site appears to be located adjacent to the Chorlton and Platt Brooks at Whalley Range and Chorlton-cum-Hardy flood warning area (flood warning code 013FWFGM16) which covers Demesne Road at the front of the site and residential properties to the west, within the vicinity of the site.              |
|                         | Surface Water Flooding (online flood mapping / GIS layers)                                                           | Very low risk within 3.3% & 1.0% AEP to surface water flooding. The 0.1% AEP event shows a potential risk of surface water flooding at a depth of 0.15-0.30m AOD with a small section showing a depth of 0.30-0.60m AOD.                                                                                     |
|                         | Flooding from reservoirs (online flood mapping / GIS layers)                                                         | The Long Term Flood Map indicates that the site is located within an area where there is a risk of reservoir flooding.                                                                                                                                                                                       |
| Manchester City Council | No information has been provided at the time of writing.                                                             |                                                                                                                                                                                                                                                                                                              |
|                         | Possible or known incidents of highway flooding                                                                      | No information has been provided at the time of writing.                                                                                                                                                                                                                                                     |

|                                                       |                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| United Utilities                                      | Details of historic flooding, flood modelling and drainage restrictions / records         | UU indicated that they do not have any modelled flood risk information in the vicinity of the site. UU did not provide any other relevant information.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Strategic Flood Risk Assessment (SFRA) / LFRMS        | Level 1 SFRA <sup>6</sup>                                                                 | No information relating to the site and history of flooding was observed within the Level 1 SFRA.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                       | Level 2 SFRA <sup>7</sup>                                                                 | No information relating to the site and history of flooding was observed within the Level 2 SFRA. According to the SFRA (MapSS_4.5) this site is not located within a Critical Drainage Area (CDA). There is however, a 'lost watercourse' known as Dog Kennel Brook shown in close proximity to the site (approximately 90-110 m southwest and southeast of the site). This watercourse is shown to confluence with Chorlton Platt Gore approximately 900 m south of the site. The SFRA map of Groundwater Flooding (GW_2.1) indicates the site is in an area at risk of groundwater flooding. |
| Preliminary Flood Risk Assessment (PFRA) <sup>8</sup> | No information relating to the site and history of flooding was observed within the PFRA. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

Table 3-1: Summary consultee information.

<sup>6</sup> Strategic Flood Risk Assessment Level 1: Manchester City, Salford City and Trafford Councils; March 2010, Final, JBA Consulting.

<sup>7</sup> Strategic Flood Risk Assessment Level 2: Manchester City, Salford City and Trafford Councils; March 2011, Final, JBA Consulting.

<sup>8</sup> Preliminary Flood Risk Assessment: Manchester City Council; May 2011, JBA Consulting.

## 4 Assessment of Flood Risk

### 4.1 Flood Zones

The detailed flood map provided by the EA indicates that the site is in Flood Zone 2. (see Appendix D).

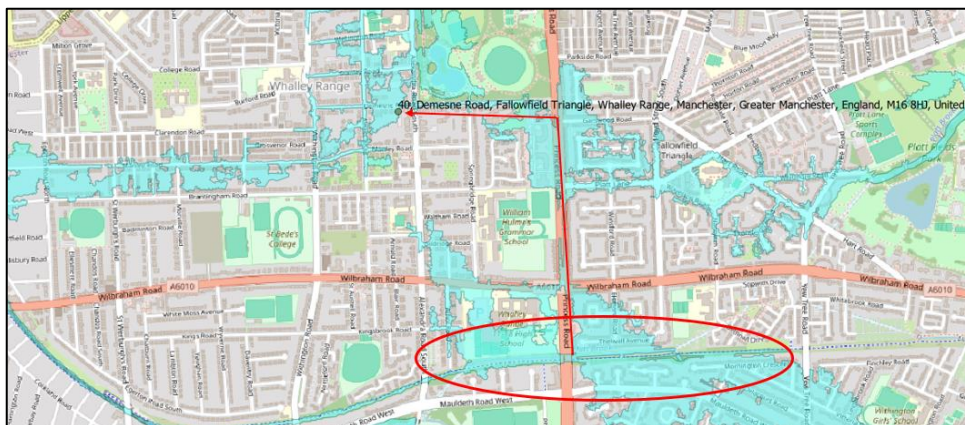


Plate 4.1: Flood Zone 2 mapping showing flooding source (Platt Brook) heading north along Princess Road and west along Demesne Road to the site (Green circle).

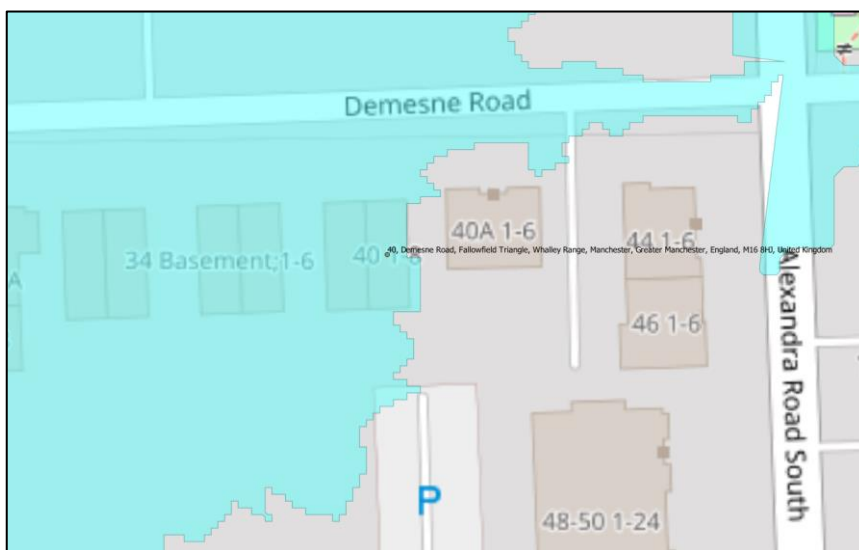


Plate 4.1.1: Flooding extent of Flood Zone 2 at 40 Demesne Road.

A direct comparison was made between the provided EA flood levels at this location and the topographical levels.

Reference to the modelled flood levels provided by the Environment Agency (included at Appendix D) indicated that Node 1, located to the south of the site has a level of 31.11m AOD with 1% AEP + 41% climate change. It is of note that the EA in channel 'design flood levels' are marginally higher than the site. However, it is noted that the flood mapping does not show the area to be impacted directly from out of channel flooding from this source. It can be reasonably concluded on the evidence that the flooding mechanism is a convoluted overland flow path from Platt Brook / Fallowfield Brook / Ley Brook and connectivity to Platt Brook located to the east of the site.

Based on the mapping provided the site is located within Flood Zone 2, and review of the modelled floodplain nodes, data shows that the flooding level within the site boundary is the level of 30.04m AOD for the 1% / 1 in 100 year plus 41% climate change allowance event.

## 4.2 Sources of Flooding

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The risk of flooding from the following flood sources has been considered:

**Fluvial** – The EA has confirmed the study area is within Flood Zone 2. Therefore, the flood risk associated with this source should be considered further in terms of finished floor levels and flood resilience. The flood risk associated with this source is considered **Low to Medium**.

**Tidal** – The study area is remote from the sea and tidally influenced water bodies. Therefore, the flood risk associated with this source is considered **Negligible**.

**Pluvial (Rainfall)** – Although there is a low risk from pluvial flooding, due to the proposed development which include the addition of light wells, further consideration should be given to the potential of flooding from rainfall within the lightwells. Any flooding from this source is likely to be **Low to Medium**. Recommendations for further consideration are given in Section 5 of this report.

**Surface Water (Overland flow)** – Very low risk associated with surface water flooding for the 3.33% AEP / 1 in 30 year and 1% AEP / 1 in 100 year event. However, there is a risk of surface water flooding in the 0.1% AEP within the site boundary with a depth of 0.15 m-0.30 m & a small section of the southern area of site with a depth of 0.30 m to 0.60 m.

Overall, the risk of flooding is considered to be **Low to Medium**. Recommendations for further consideration are given in Section 5 of this report.

**Groundwater** – The BGS has no groundwater records for the study area. The Long Term Flood Mapping indicates that the site is not within an area considered to be at risk of groundwater flooding. However, the SFRA indicates the site is within an area at risk of groundwater flooding.

The site is indicated to be located on Glaciofluvial Sheet deposits, described as sand and gravel. Nearby BGS borehole indicates that the near surface strata encountered comprised of clay.

Based on the presence of the Glaciofluvial Sheet deposits, there is potential for shallow groundwater. Therefore, the risk of groundwater flooding is considered to be **Low to Medium**.

**Sewers** – No information was provided at the time of writing. It is of note that the ground levels on the site are elevated between 400 mm and 500mm above the levels within Demesne Road. Based on review of LiDAR data levels continue to fall along Demesne Road to the west, therefore in the event of sewer flooding it is anticipated that any flows would take a preferential flow path to the west.

The risk of sewer flooding is considered to be **Low**.

**Artificial sources** – According to the EA online maps, the study area is at risk from reservoir flooding. The risk of flooding to the site from reservoir flooding related to the Audenshaw No.1, No.2 and No.3 reservoirs and the Gorton Lower and Gorton Upper Reservoir.

Reservoir flooding is extremely unlikely to happen. All large reservoirs must be inspected and supervised by reservoir panel engineers. The EA are the enforcement authority for the Reservoirs Act 1975 in England. They ensure that reservoirs are inspected regularly and essential safety work is carried out.

Therefore, the likely risk of an incident occurring if the reservoir is adequately maintained and monitored is Low. The pond located to the northeast of the site, within Alexandra Park presents a potential source of flooding. The pond appears to be at a level of 29.0 m AOD according to LiDAR data, and as such high ground in excess of 30.0 m AOD between the pond and the site is likely to break the pathway, therefore the risk of flooding from the pond is likely to be Low.

Overall, the flood risk associated with artificial sources is considered to be **Low**; however, mitigation are recommended during redevelopment would further reduce the risk to the development proposals (see Section 5).

### 4.3 Summary of Flood Risk

| Source of Flooding | Risk Assessment Level |
|--------------------|-----------------------|
| Fluvial            | Low to Medium         |
| Tidal              | Negligible            |
| Pluvial (Rainfall) | Low to Medium         |
| Surface Water      | Low to Medium         |
| Groundwater        | Low to Medium         |
| Sewers             | Low                   |
| Artificial Sources | Low                   |

Table 4-1: Summary of Existing Risk Level.

The site is located within Flood Zone 2 and a Low to Medium risk of flooding from fluvial pluvial / surface water / groundwater sources have been identified for the site. Section 5 sets out mitigation measures to reduce the risk of flooding from these sources.

## 5 Mitigation Measures

### 5.1 Proposed Site Levels and Development Level

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Current EA guidance recommends that the minimum ground floor levels of residential developments are set at a minimum of 600mm above the 1% annual probability (1 in 100 year) flood level including an additional fluvial allowance for climate change. It is generally accepted that vehicle parking can be accommodated within the flood zone with suitable safeguards.

The 'design' flood level for the site should therefore be the 1% annual probability event with allowance for climate change plus an allowance for freeboard.

On the basis of the information provided, the floodplain flood level is 30.04 m AOD. Normal EA recommendation is to set ground floor level for the development at a minimum of 600mm above the 'design' level, or 30.64 m AOD in this case. The proposed development introduces light wells at the front and rear of the property as accesses to the lower ground floor apartment. Levels in and around the building at this point are around 29.90 m AOD at the front of the site and 29.67 m AOD to 29.74 m AOD to the rear of the building. It is of note that levels to the access at the front of the site are raised compared to the site access driveway.

It is therefore considered that the entries to the lower ground floor apartment should be set above the flood level of 30.04 m AOD plus 600 mm freeboard allowance. This could be achieved by a waterproof upstand around the lightwell. It is of note that the overall flood depth is expected to be 300 mm, however, with the additional 600 mm the upstand will be approximately 1 m. Advice should be sought from a structural engineer at the detailed design stage.

The upstand will also provide additional mitigation against other sources of flooding, such as surface water, sewer flooding and in the unlikely event of reservoir flooding.

In addition to this, any windows to the lower ground floor should be set above 30.64 m AOD and any service openings or penetrations should be above this level or appropriately waterproofed.

Based on the upstand around the rear lightwell, there would be a small loss of floodplain and as such storage within the floodplain. The front of the site is already elevated above the flood level and as such there is no loss at this point. Based on the convoluted flow path and significant extent of the floodplain across a widespread area, the overall loss of any storage associated with the development of the light well is considered to be negligible.

### 5.2 Safe Access

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Safe and dry access is not available via Demesne Road, which is set at approximately 29.65 m AOD to the north of the site and the pavement being at 29.60 m AOD to 29.81 m AOD. The proposed access is within the 1 in 100 year plus 41% allowance for climate change event. Therefore, it is recommended that the development is registered with the EA Flood Warning System and a Flood Management Plan is produced for the site.

The overall depth of flooding expected is in the region of 300 mm and as such may be possible for vehicle. The development itself would not be expected to be impacted based on the raised threshold / upstand around the lightwells and as such would be a safe refuge in the event of flooding.

### **5.3 Flood Resistance and Resilience**

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The development proposed may be subject to flooding at more extreme events than those considered. However, the risk appears to be sufficiently low that flood resilience measures need not be included into ground floor construction to aid recovery after any event.

The upstand around the accesses / lightwells to the lower ground floor will be set at 30.64 m AOD and as such are approximately 750 mm above external ground levels adjacent to the front of the site and 900-950mm above existing external levels to the rear of the site.

There is a potential for shallow perched groundwater to impact the basement. It is recommended that appropriate investigations are undertaken to rule this out, and / or appropriate waterproofing or tanking of the basement is considered at the detailed design stage.

### **5.4 Drainage**

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Whilst it is not the remit of this report to produce a drainage strategy for the site, based on the development being change of use of the existing lower ground floor and inclusion of light wells. However, it should be noted that further consideration will be required to allow for drainage from the light wells. A connection to the existing surface water system and consideration of a pump will be required to ensure that surface water collecting within these features can be appropriately drained.

### **5.5 Residual Risk**

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It is impossible to completely guard against flooding since extreme events greater than the design standard event are always possible. Allowing for 600 mm freeboard is expected to provide significant protection to the development from fluvial and other sources of flooding.

## 6 Conclusions

The site is currently an existing lower ground floor of a residential property. The proposed development is to convert the lower ground floor into a lower ground floor apartment with new windows and lightwells.

The site is shown on published mapping to be located within the EA's Flood Zone 2 a Low to Medium risk of flooding from fluvial pluvial / surface water / groundwater sources have been identified for the site

Comparison of topographical data with the EA modelled flood level data indicates that the site would be impacted by a 1% / 1 in 100 year plus 41% allowance for climate change event. The floodplain level at this location for the aforementioned event is 30.04 m AOD.

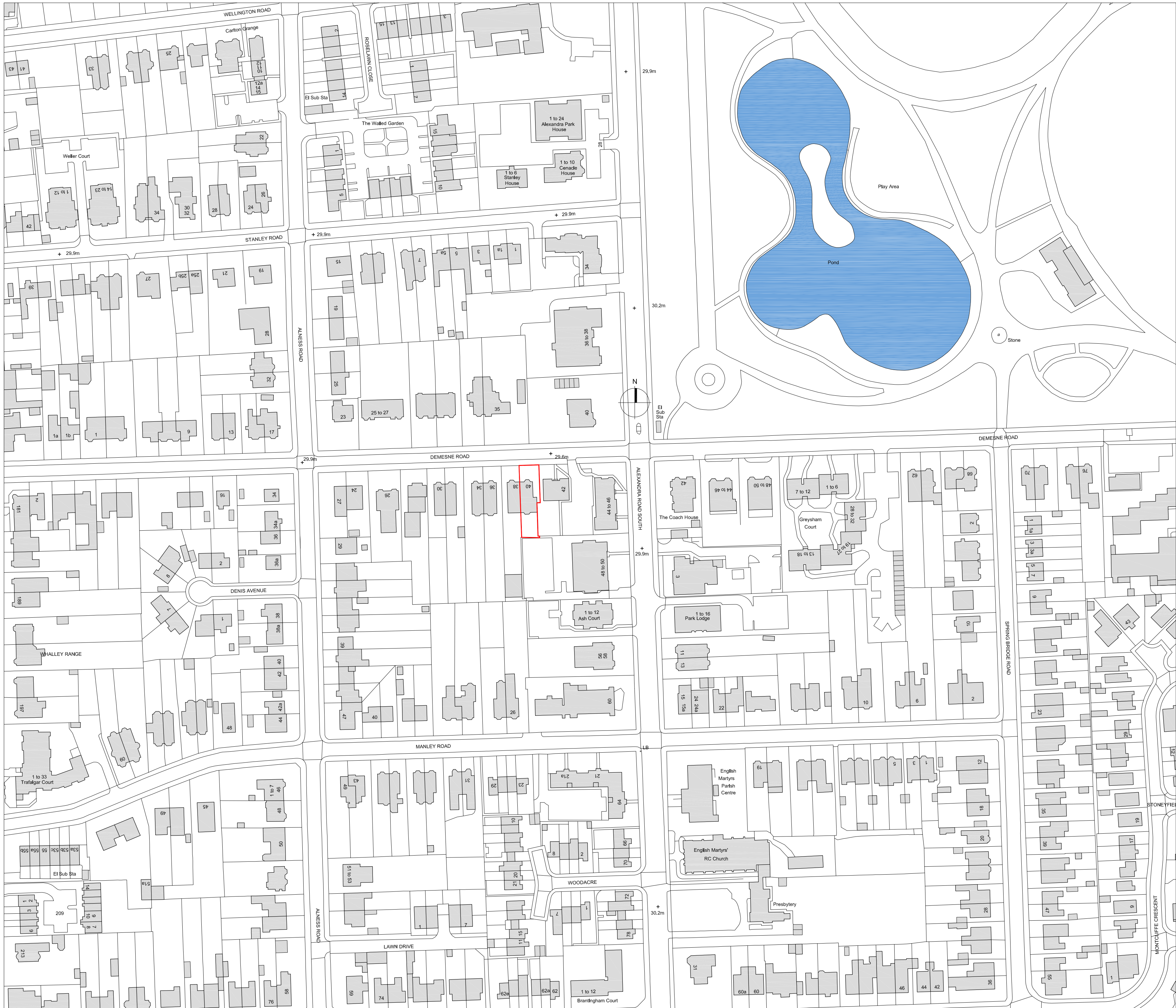
An assessment of these risks in conjunction with the development proposals have resulted in the following recommendations for the safe development of the site:

- » The proposed lightwells have a waterproof upstand of 600 mm above the 1 in 100 year plus 41% allowance for climate change level of 30.04 m AOD, therefore providing freeboard to a level of 30.64 m AOD.
- » In addition to this, any windows to the lower ground floor should be set above 30.64 m AOD and any service openings or penetrations should be above this level or appropriately waterproofed.
- » There is a potential for shallow perched groundwater to impact the basement. It is recommended that appropriate investigations are undertaken to rule this out, and / or appropriate waterproofing or tanking of the basement is considered at the detailed design stage.

Pedestrian access and egress may be hampered at the site based on Demesne Road and adjacent footpath being impacted by a depth of up to 300 mm. It is recommended that the development is registered with the EA Flood Warning System and that a Flood Management Plan is produced. Vehicular access and egress may be achievable

Further details on the proposed mitigation measures are provided in Section 5. All proposed measures should be agreed with the Local Authority prior to commencement of the development.

## **Appendix A – Site Location Plan**



Location Plan 1:1250

Scale Bar 1:1250



Tel : 0161 877 9567 10/F, 1 City Approach, Albert Street,  
e-mail: barrytang@tangassociates.co.uk Eccles,  
Manchester, M30 0BS, UK

Client:  
BOS3 Manchester Limited

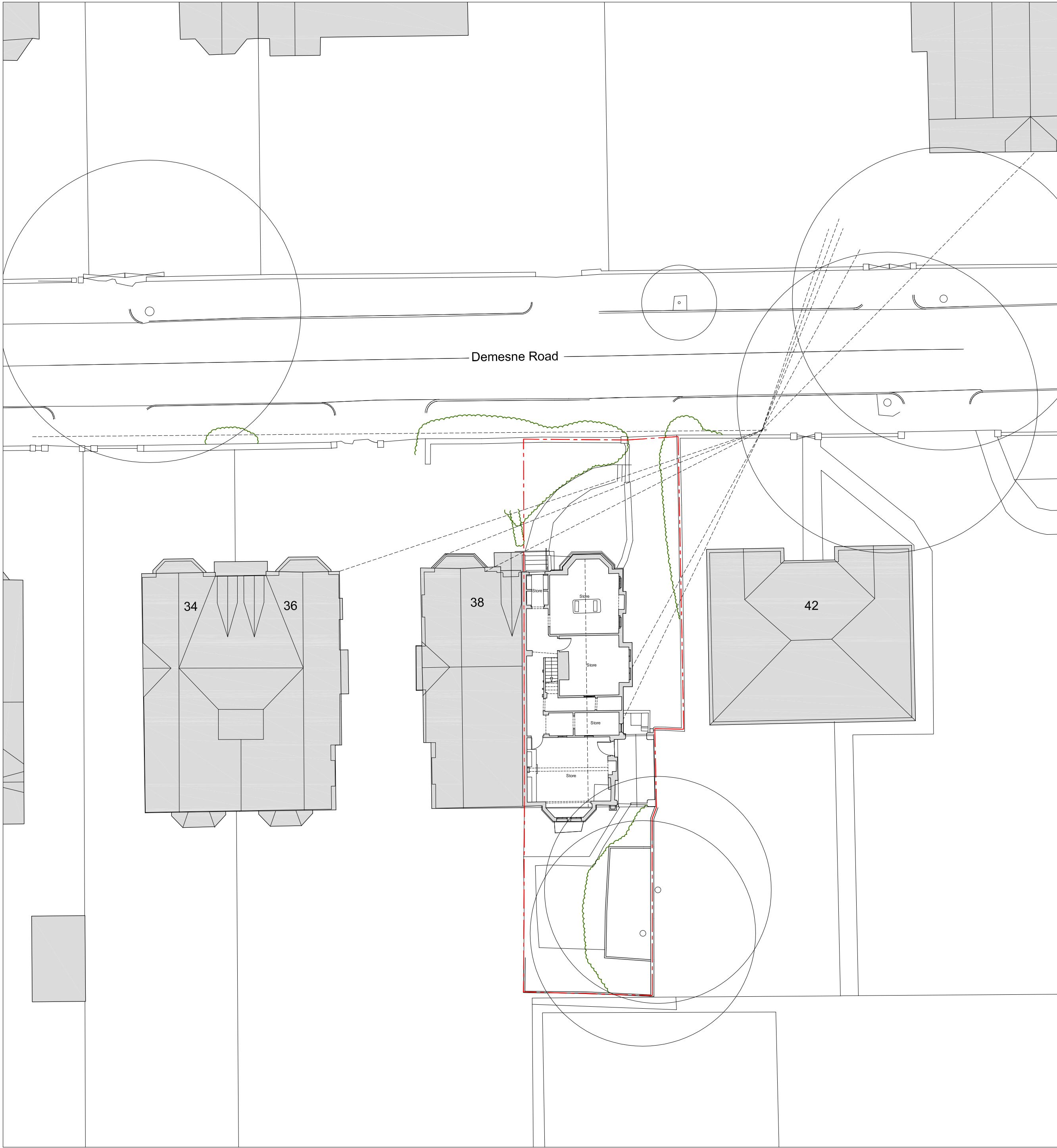
Project:  
40 Demesne Road, Manchester M16 8HJ

Drawing Title:  
Location Plan

Scale: 1:1250 @ A1 Date: July 2024

Drawing No: 9861/001 Revision: A

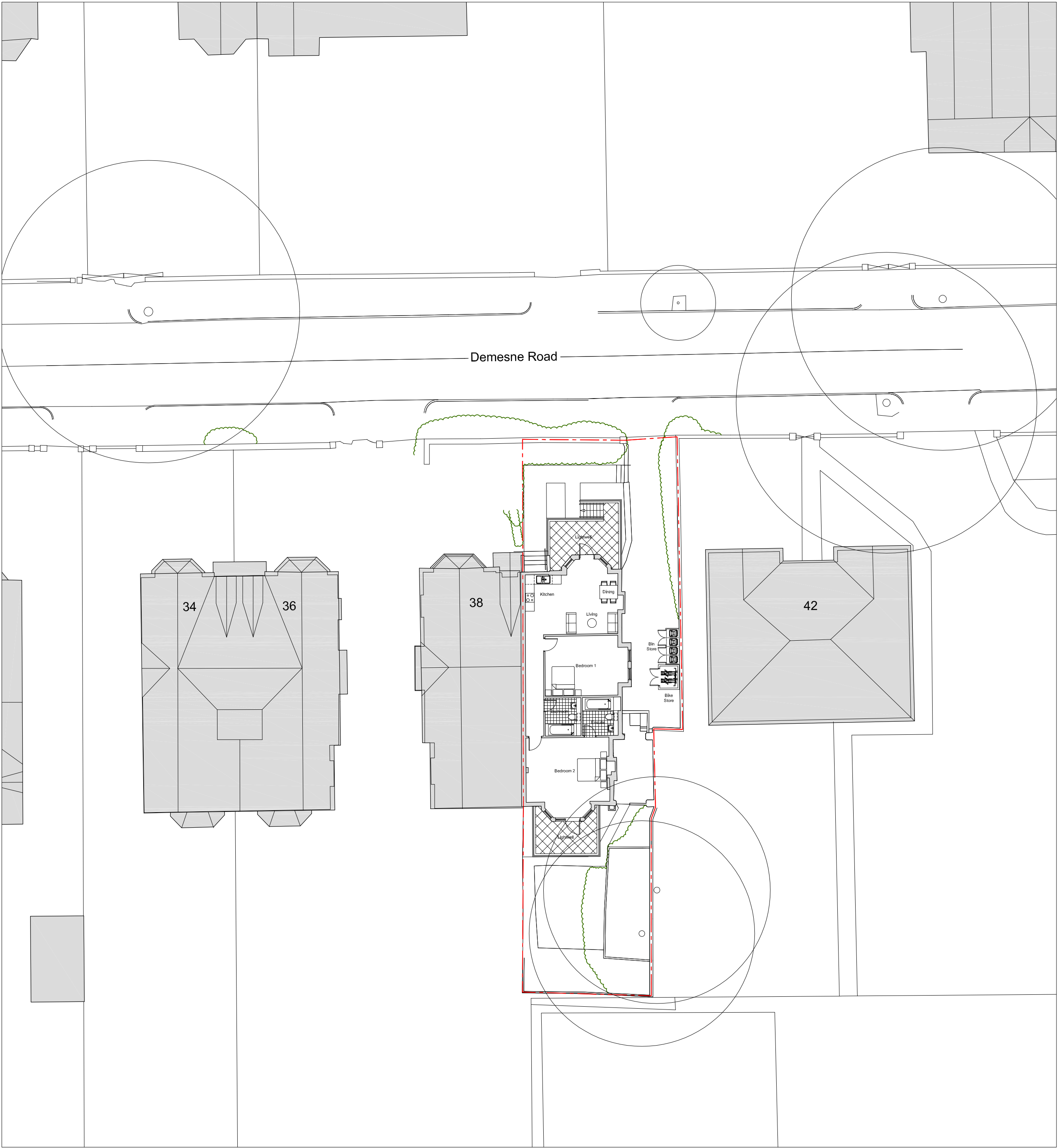
## **Appendix B – Proposed Development Plans**



Existing Site Plan 1:200

Scale Bar 1:200

0 10 20m

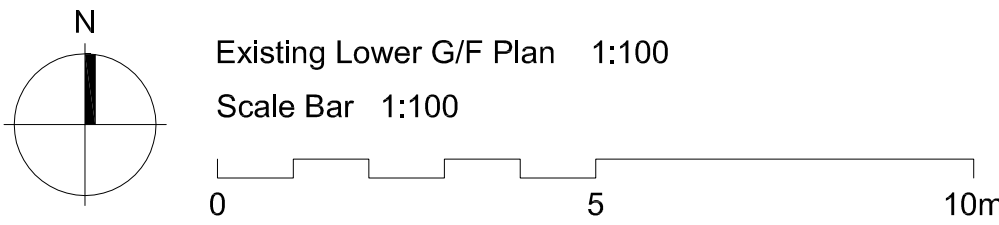
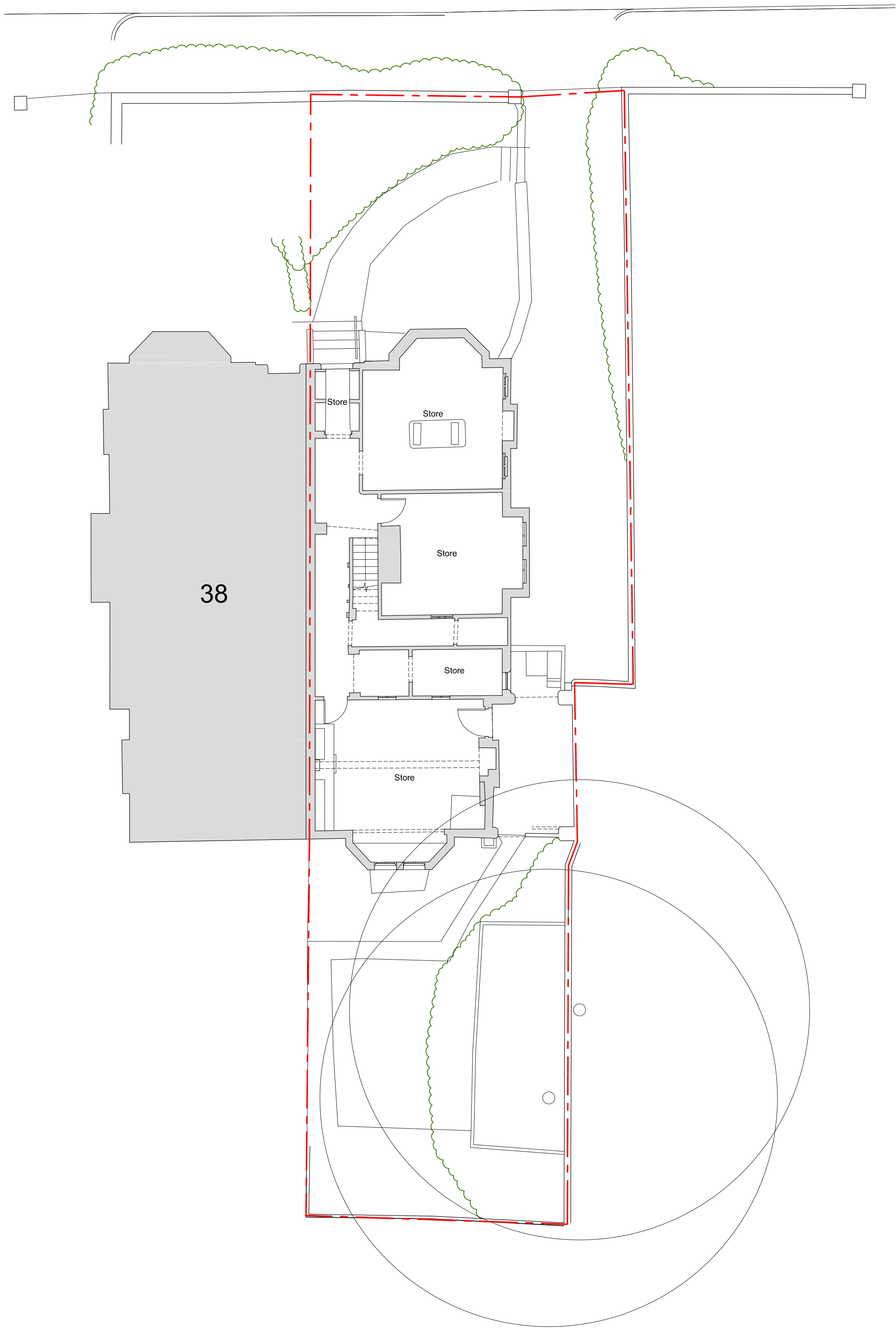


Proposed Site Plan 1:200

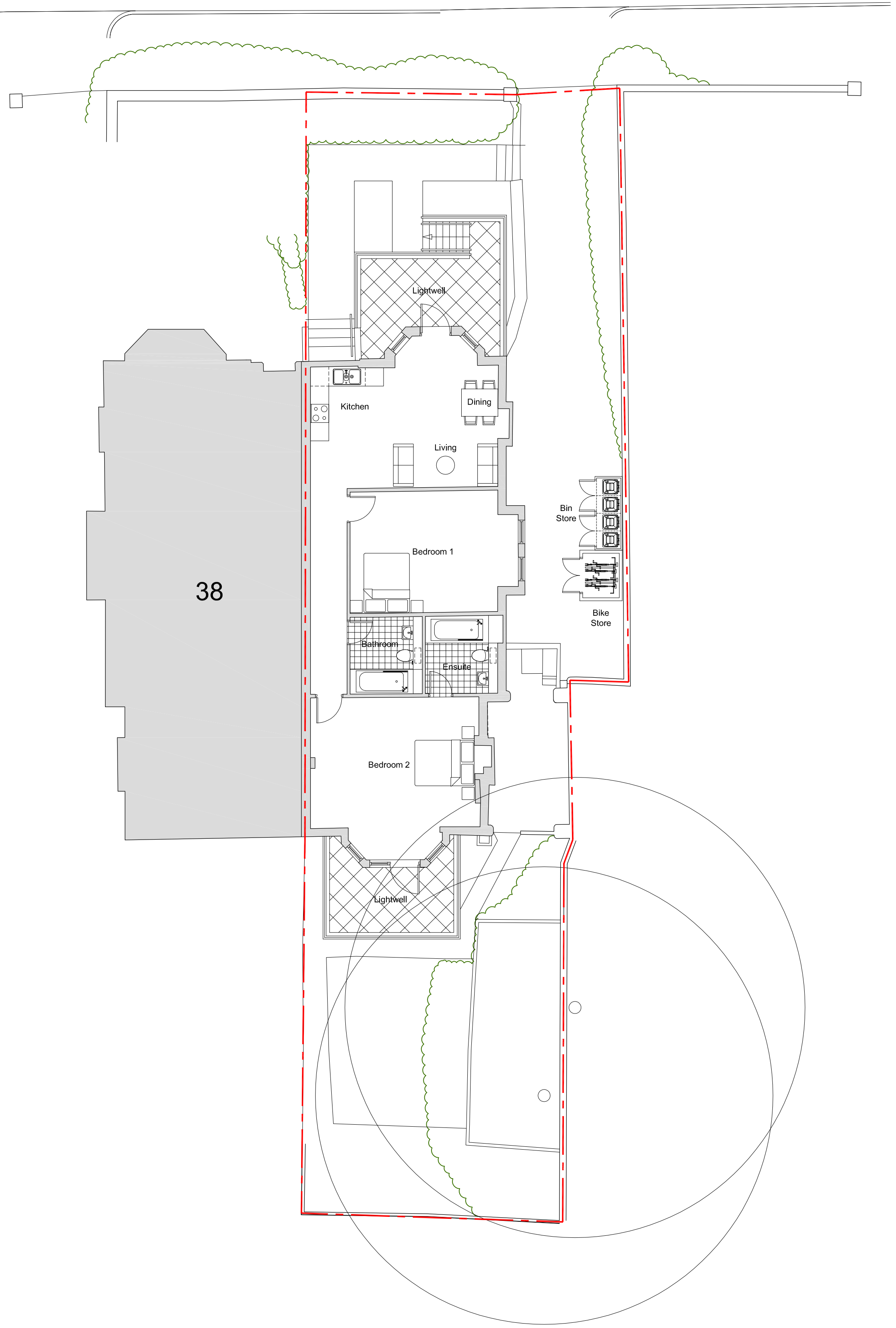
All dimensions are to be checked on site, any discrepancies are to be reported to the Architect before work commences. Do not scale from this drawing.  
This drawing is to be read in conjunction with all relevant consultants and specialists drawings / documents, any discrepancies are to be reported to the Architect before the affected work commences.  
All structural components shown are indicative only. Details / calculations of structural members are to be provided by the Structural Engineer.  
This drawing is copyright.

A First Issue 06/08/2024

Demesne Road



Demesne Road



Proposed Lower G/F Plan 1:100

**T+A** Tang & Associates Ltd  
Chartered Architects

Tel : 0161 877 9587 10/F, 1 City Approach, Albert Street,  
e-mail: barrytang@tangassociates.co.uk Eccles,  
Manchester, M30 0BS, UK

Client:  
BOS3 Manchester Limited

Project:  
40 Demesne Road, Manchester M16 8HJ

Drawing Title:  
Existing & Proposed Lower G/F Plans

Scale: 1:100 @ A1 Date: July 2024

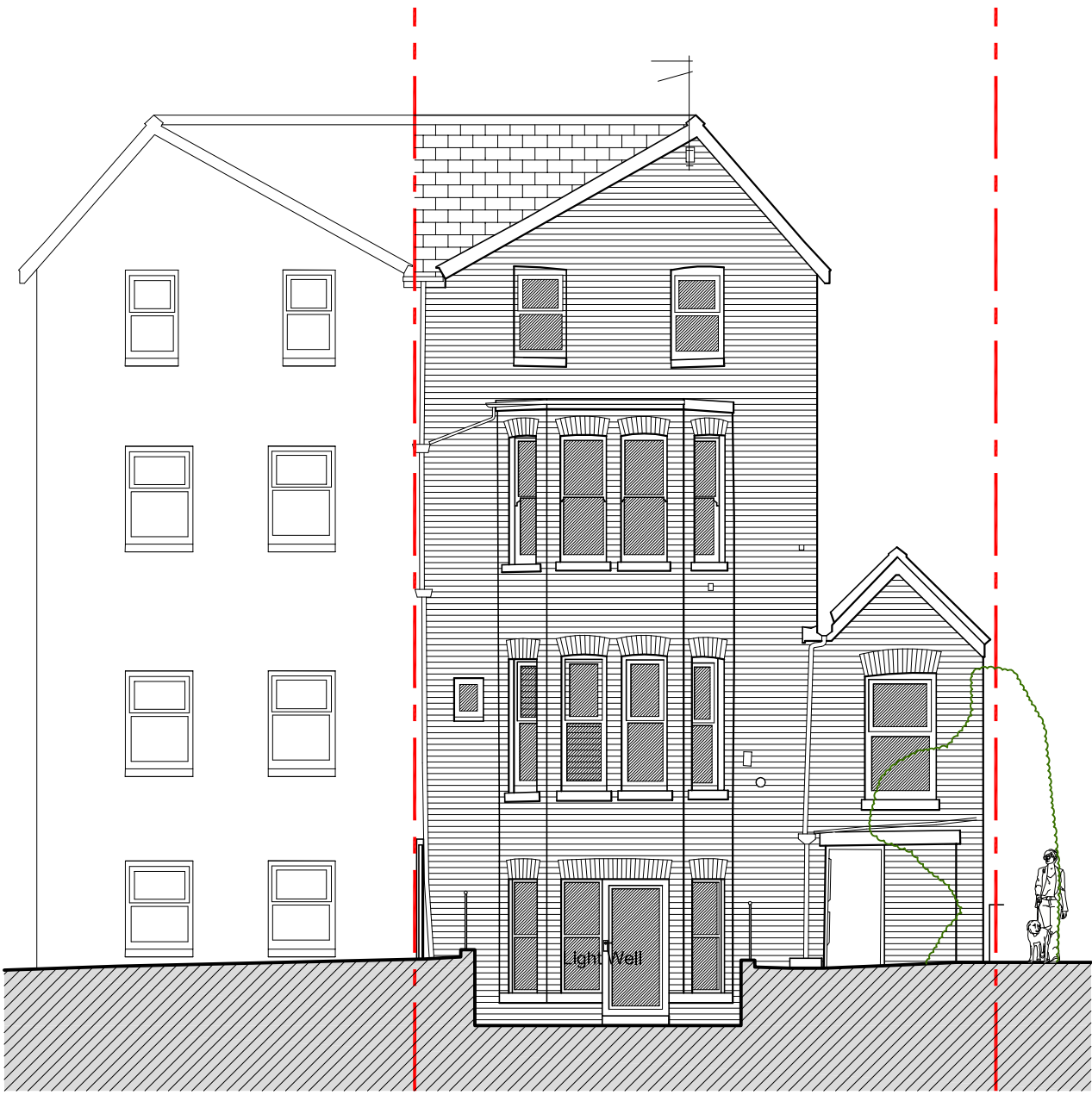
Drawing No: 9861/111 Revision: A



Proposed Demesne Road Elevation 1:100



Proposed East Elevation 1:100

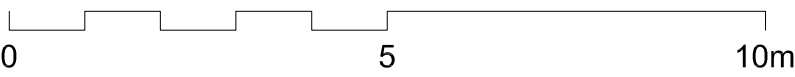


Proposed Rear Elevation 1:100



Existing Demesne Road Elevation 1:100

Scale Bar 1:100



Existing East Elevation 1:100



Existing Rear Elevation 1:100

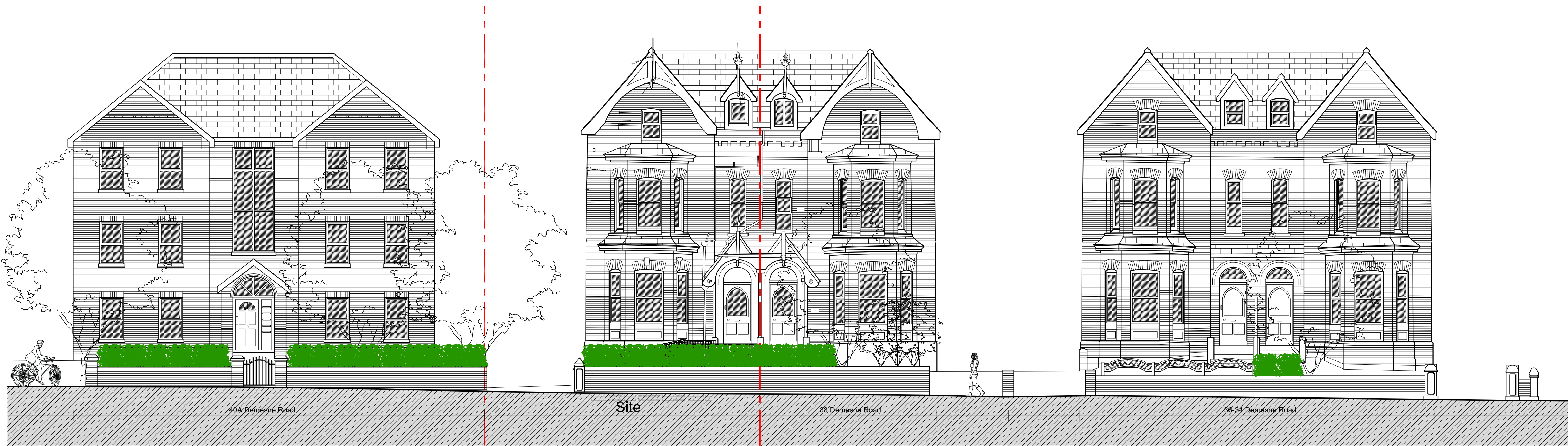
All dimensions are to be checked on site, any discrepancies are to be reported to the Architect before work commences. Do not scale from this drawing.

This drawing is to be read in conjunction with all relevant consultants and specialists drawings / documents, any discrepancies are to be reported to the Architect before the affected work commences.

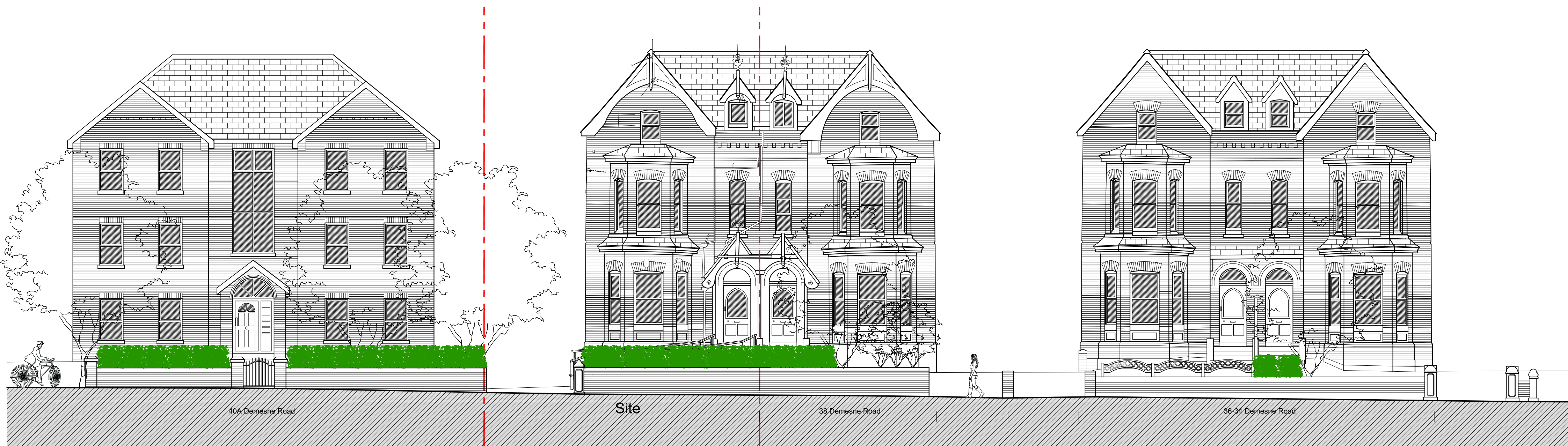
All structural components shown are indicative only. Details / calculations of structural members are to be provided by the Structural Engineer.

This drawing is copyright.

A First Issue 20/08/2024

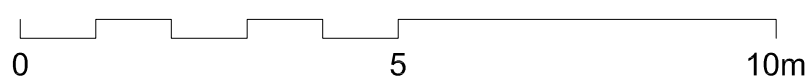


Proposed Demesne Road Street-scene 1:100



Existing Demesne Road Street-scene 1:100

Scale Bar 1:100



**T+A** Tang & Associates Ltd  
Chartered Architects

Tel : 0161 877 9587 10/F, 1 City Approach, Albert Street,  
Eccles, Manchester, M30 0BS, UK

Client:

BOS3 Manchester Limited

Project:

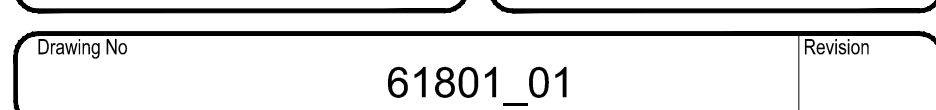
40 Demesne Road, Manchester M16 8HJ

Drawing Title:  
Existing & Proposed Demesne Road  
Street-scenes

Scale: 1:100 @ A1 Date: August 2024

Drawing No: 9861/122 Revision: A

## **Appendix C – Topographic Survey**



## **Appendix D – Environment Agency Data**

## Matt Bell

---

**From:** GMMC Info Requests <InfoRequests.GMMC@environment-agency.gov.uk>  
**Sent:** 24 October 2024 13:01  
**To:** Sam Shaw  
**Subject:** GMMC380865LB Response attached from the Environment Agency  
**Attachments:** Latest flood risk information near Chorlton Platt Gore.pdf; GMMC380865LB Auto.pdf

Dear Sam,

Thank you for your enquiry which was received on 17/10/2024.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004.

I enclose your requested information for 40 Demesne Road, Fallowfield Triangle, Whalley Range

We hold no record of flooding in this area. However, this does not mean flooding has not occurred in the past or that it will not flood in future.

We recommend that you also contact United Utilities and Manchester Council who may hold additional information (the former especially in relation to sewer flooding).

There are no flood defences in the vicinity of the site.

Manchester Council is responsible for issues relating to surface water and hold information on surface water flooding.

Please be aware you can check your risk of flooding on our external website <https://flood-warning-information.service.gov.uk/long-term-flood-risk/>

Here are some useful links below:

<https://www.gov.uk/guidance/flood-risk-assessment-local-planning-authorities>

<https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>

Please refer to the [Open Government Licence](#) which explains the permitted use of this information.

Please get in touch if you have any further queries or contact us within two months if you'd like us to review the information we have sent.

Kind regards,

Lauren Blackley

Customer and Engagement Officer

**Greater Manchester, Merseyside and Cheshire**

**Email:** [Inforequests.gmmc@environment-agency.gov.uk](mailto:Inforequests.gmmc@environment-agency.gov.uk)

Office address: Richard Fairclough House, Knutsford Road, Latchford, Warrington, WA4 1HT

---

**From:** GMMC Info Requests

**Sent:** 17 October 2024 13:23

To: Sam Shaw <[s.shaw@thelkgroup.com](mailto:s.shaw@thelkgroup.com)>

Subject: GMMC380865LB Response from the Environment Agency

Dear Sam,

Thank you for your email on .

**Your new reference number is: GMMC380865LB**

The Freedom of Information Act and Environmental Information Regulations state that a public authority must respond to requests for information within 20 working days however we always aim to provide an answer as soon as we can.

For further information on what you can expect from us and our full service commitment to you then please visit our website:

<http://www.environment-agency.gov.uk/aboutus/149626.aspx>

### **Environmental Incident**

If your email was to report an environmental incident i.e. pollution, fish in distress, dumping of hazardous waste etc then please call our **freephone 24 hour Incident Hotline** on **0800 80 70 60**.

For more details about incident reporting please see our website: <https://www.gov.uk/report-an-environmental-incident>

If you need to contact me in the meantime, please do not hesitate to do so using the details below and quoting reference number GMMC380865LB

Yours sincerely,

Lauren Blackley - Customer and Engagement Officer

**Greater Manchester, Merseyside and Cheshire**

Direct email: [InfoRequests.GMMC@environment-agency.gov.uk](mailto:InfoRequests.GMMC@environment-agency.gov.uk)

Office address: Richard Fairclough House, Knutsford Road, Latchford, Warrington, WA4 1HT

---

**From:** Sam Shaw <[s.shaw@thelkgroup.com](mailto:s.shaw@thelkgroup.com)>

**Sent:** 17 October 2024 12:53

**To:** GMMC Info Requests <[InfoRequests.GMMC@environment-agency.gov.uk](mailto:InfoRequests.GMMC@environment-agency.gov.uk)>

**Subject:** GMMC380865LB 14.11 Request for Information - 40 Demesne Road, Fallowfield Triangle, Whalley Range, Greater Manchester, M16 8HJ (FRA 24 1099)

To whom it may concern,

LK Consult Ltd. has been commissioned to undertake a Flood Risk Assessment (FRA), for a site located at 40 Demesne Road, Fallowfield Triangle, Whalley Range, centered at approximate National Grid Reference 383257, 394669.

The area of interest appears to be within Flood Zone 2.

The site location is attached to this email.

To complete the FRA, we would be grateful if you could supply us with the following, if available, for the vicinity of the site:

- The modelled 1% and 0.1% annual probability fluvial flood level, the 1% annual probability plus climate change flood level and any lower order flood levels, in particular the modelled 5% fluvial flood level if relevant for functional floodplain, (with confirmation of the reference datum used for the levels – i.e. Local OSBM or OSGPS) if available.
- Details of any flood defences in the immediate area, including their extent, crest levels (and datum), assumed level of standard, construction, and maintenance regime, as well as any other structures which may influence the local hydraulics.
- Proposed defence levels and timescale for implementation.
- Results of any breach analyses for defences in the area which may be relevant.
- Records of any historic flood events and potential sources of flooding from rivers, land drainage, groundwater, foul and surface water sewers on site and in the area.
- Any restrictions to infiltration and discharge to the watercourse.
- A copy of your detailed flood zone map and the modelled flood extent plans for the area.

If you have any queries, please do not hesitate to get in touch.

We are, of course, happy to pay your reasonable charge for this service. Please let me know by return what information is available, what the charge will be, and we will pay the relevant fees by debit card as soon as possible.

Any advice or recommendations you may have regarding the potential discharges from the development of this site would also be appreciated.

We will be in contact with all other relevant authorities to get a more complete understanding of the issues in the area.

Regards,

Sam Shaw

Information in this message may be confidential and may be legally privileged. If you have received this message by mistake, please notify the sender immediately, delete it and do not copy it to anyone else. We have checked this email and its attachments for viruses. But you should still check any attachment before opening it. We may have to make this message and any reply to it public if asked to under the Freedom of Information Act, Data Protection Act or for litigation. Email messages and attachments sent to or from any Environment Agency address may also be accessed by someone other than the sender or recipient, for business purposes.

# Flood risk assessment data

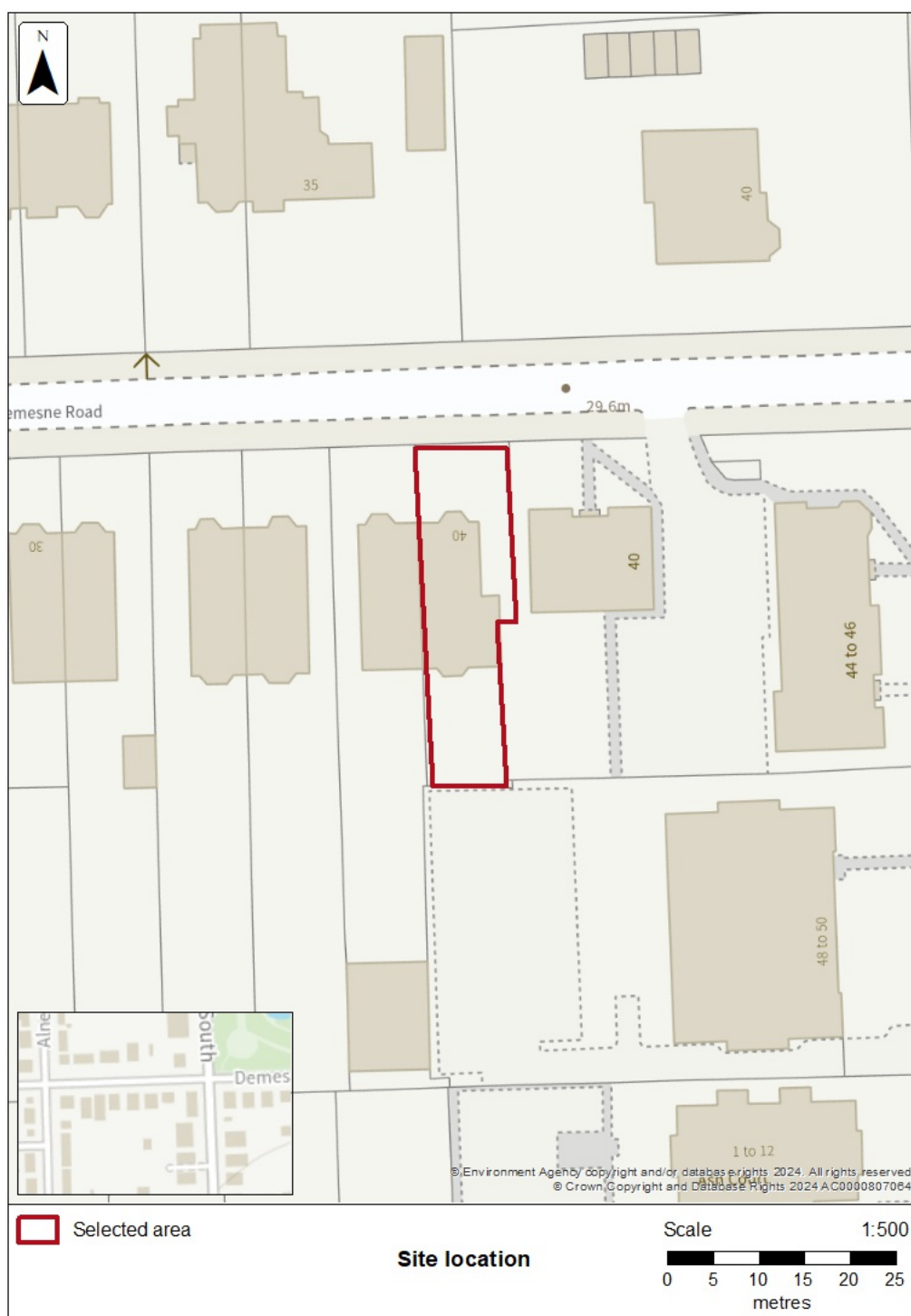
**Location of site:** 383302 / 394673 (shown as easting and northing coordinates)

**Document created on:** 23 October 2024

**This information was previously known as a product 4.**

**Customer reference number:** W3R4X6FTP2EE

Map showing the location that flood risk assessment data has been requested for.



## How to use this information

You can use this information as part of a flood risk assessment for a planning application. To do this, you should include it in the appendix of your flood risk assessment.

**We recommend that you work with a flood risk consultant to get your flood risk assessment.**

## Included in this document

In this document you'll find:

- how to find information about surface water and other sources of flooding
- information on the models used
- definitions for the terminology used throughout
- flood map for planning (rivers and the sea)
- flood defences and attributes
- information to help you assess if there is a reduced flood risk from rivers and the sea because of defences
- modelled data
- climate change modelled data
- information about strategic flood risk assessments
- information about this data
- information about flood risk activity permits
- help and advice

## Information that's unavailable

This document **does not** contain:

- past floods

We do not have past flooding data for this location.

Please note that:

- flooding may have occurred that we do not have records for
- flooding can come from a range of different sources
- we can only supply flood risk data relating to flooding from rivers or the sea

You can contact your Lead Local Flood Authority or Internal Drainage Board to see if they have other relevant local flood information. Please note that some areas do not have an Internal Drainage Board.

## Surface water and other sources of flooding

Use the [long term flood risk service](#) to find out about the risk of flooding from:

- surface water
- ordinary watercourses
- reservoirs

Or you can contact your Lead Local Flood Authority for further information.

Your Lead Local Flood Authority is Manchester District.

For information about sewer flooding, contact the relevant water company for the area.

## About the models used

Model name: Chorlton Platt Gore Model 2024

Scenario(s): Defended fluvial, defences removed fluvial, defended climate change fluvial, defences removed climate change fluvial

Date: 15 April 2024

These models contain the most relevant data for your area of interest.

## Terminology used

### Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occurring in any one year, is described as 1% AEP.

### Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

## **Flood map for planning (rivers and the sea)**

Your selected location is in flood zone 2.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

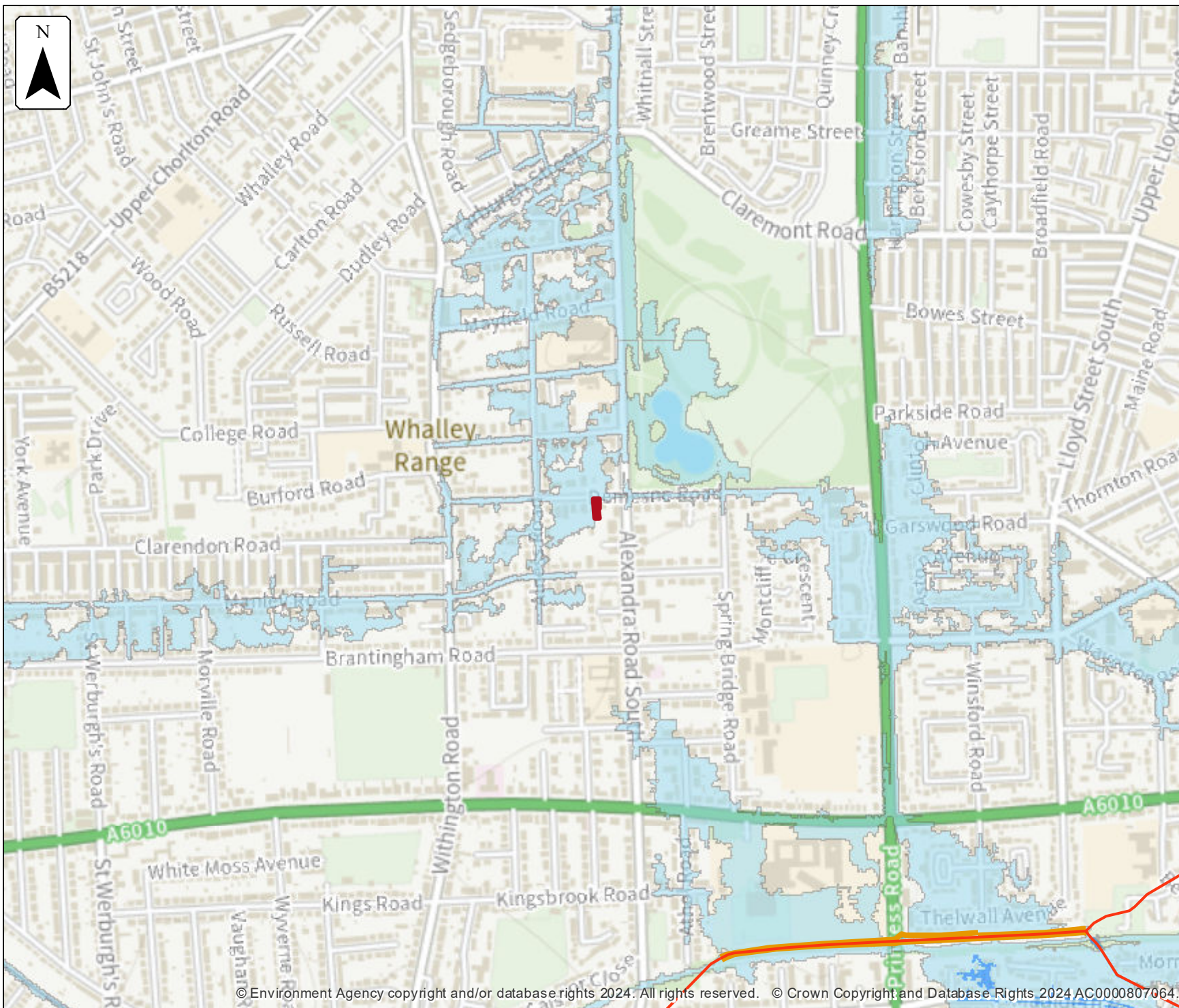
- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change

The flood zones are not currently being updated. The last update was in November 2023.

The flood zone shown on page 5 of this report should not be considered for planning purposes. Instead, consider the additional 'latest flood risk information' map provided. Note however that all source data is included in the models below with the latest flood risk information.



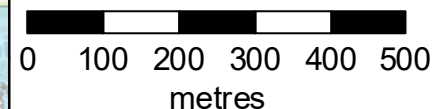
## Flood map for planning

Location (easting/northing)  
**383302/394673**

Scale  
**1:10,000**

Created  
**23 Oct 2024**

-  Selected area
-  Main river
-  Flood defence
-  Flood zone 3
-  Flood zone 2



## **Flood defences and attributes**

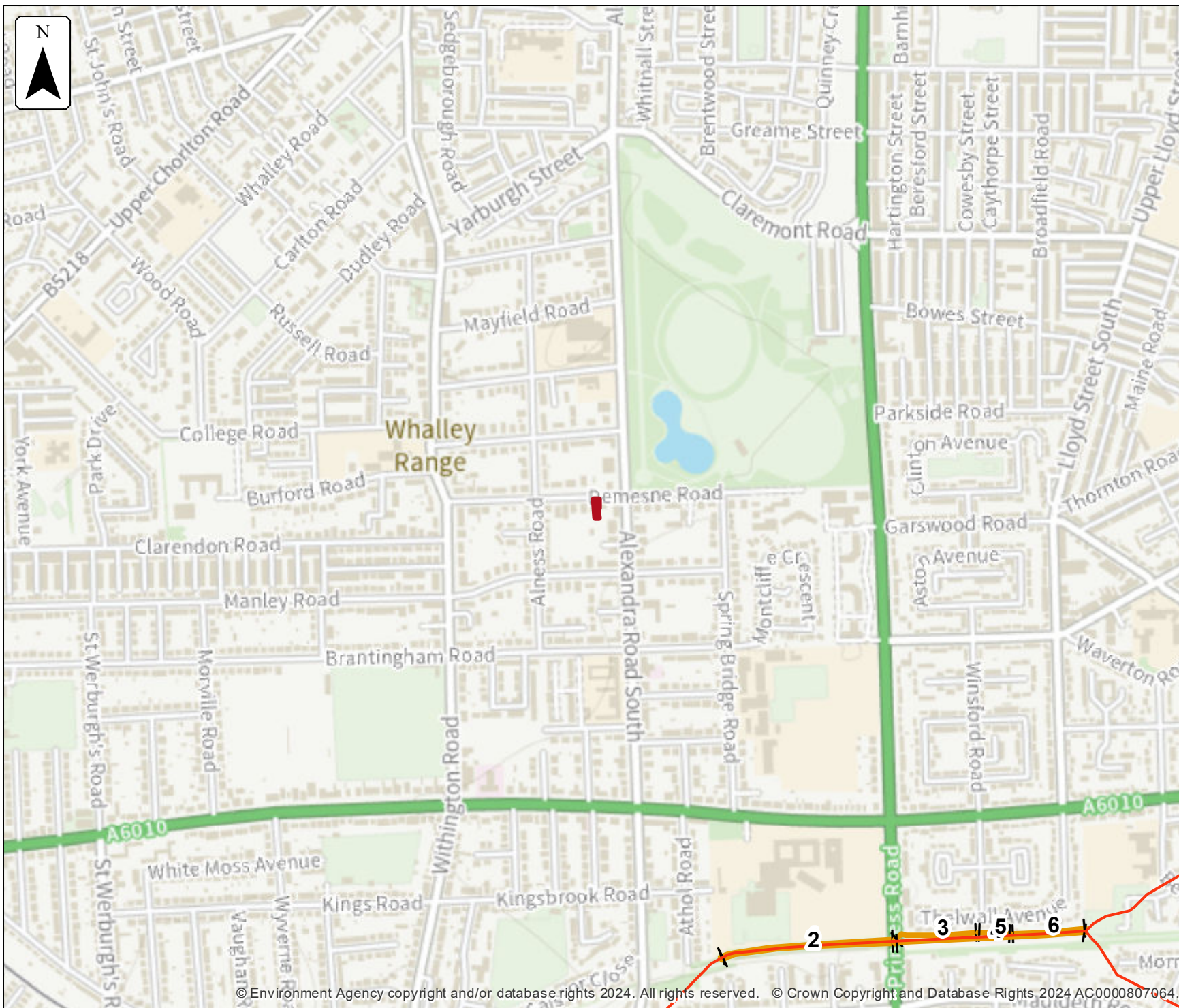
The flood defences map shows the location of the flood defences present.

The flood defences data table shows the type of defences, their condition and the standard of protection. It shows the height above sea level of the top of the flood defence (crest level). The height is in mAOD which is the metres above the mean sea level at Newlyn, Cornwall.

It's important to remember that flood defence data may not be updated on a regular basis. The information here is based on the best available data.

Use this information:

- to help you assess if there is a reduced flood risk for this location because of defences
- with any information in the modelled data section to find out the impact of defences on flood risk



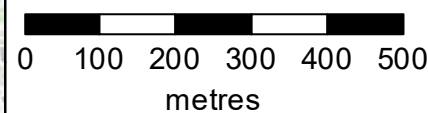
### Flood defences

Location (easting/northing)  
**383302/394673**

Scale  
**1:10,000**

Created  
**23 Oct 2024**

- Selected area
- Main river
- Flood defence



## Flood defences data

| Label | Asset ID | Asset Type | Standard of protection (years) | Current condition | Downstream actual crest level (mAOD) | Upstream actual crest level (mAOD) | Effective crest level (mAOD) |
|-------|----------|------------|--------------------------------|-------------------|--------------------------------------|------------------------------------|------------------------------|
| 1     | 120082   | Embankment | 100                            |                   | 30.25                                | 31.38                              |                              |
| 2     | 32515    | Embankment | 100                            |                   | 30.29                                | 31.52                              |                              |
| 3     | 32518    | Wall       | 100                            |                   | 31.48                                | 31.84                              |                              |
| 4     | 60038    | Embankment | 100                            |                   | 31.39                                | 32.25                              |                              |
| 5     | 59788    | Embankment | 100                            |                   | 31.81                                | 32.82                              |                              |
| 6     | 122064   | Wall       | 100                            |                   | 31.84                                | 31.90                              |                              |

Any blank cells show where a particular value has not been recorded for an asset.

## Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios
- modelled node point map(s) showing the points used to get the data to model the scenarios and table(s) providing details of the flood risk for different return periods
- map(s) showing the approximate water levels for the return period with the largest flood extent for a scenario and table(s) of sample points providing details of the flood risk for different return periods

## Climate change

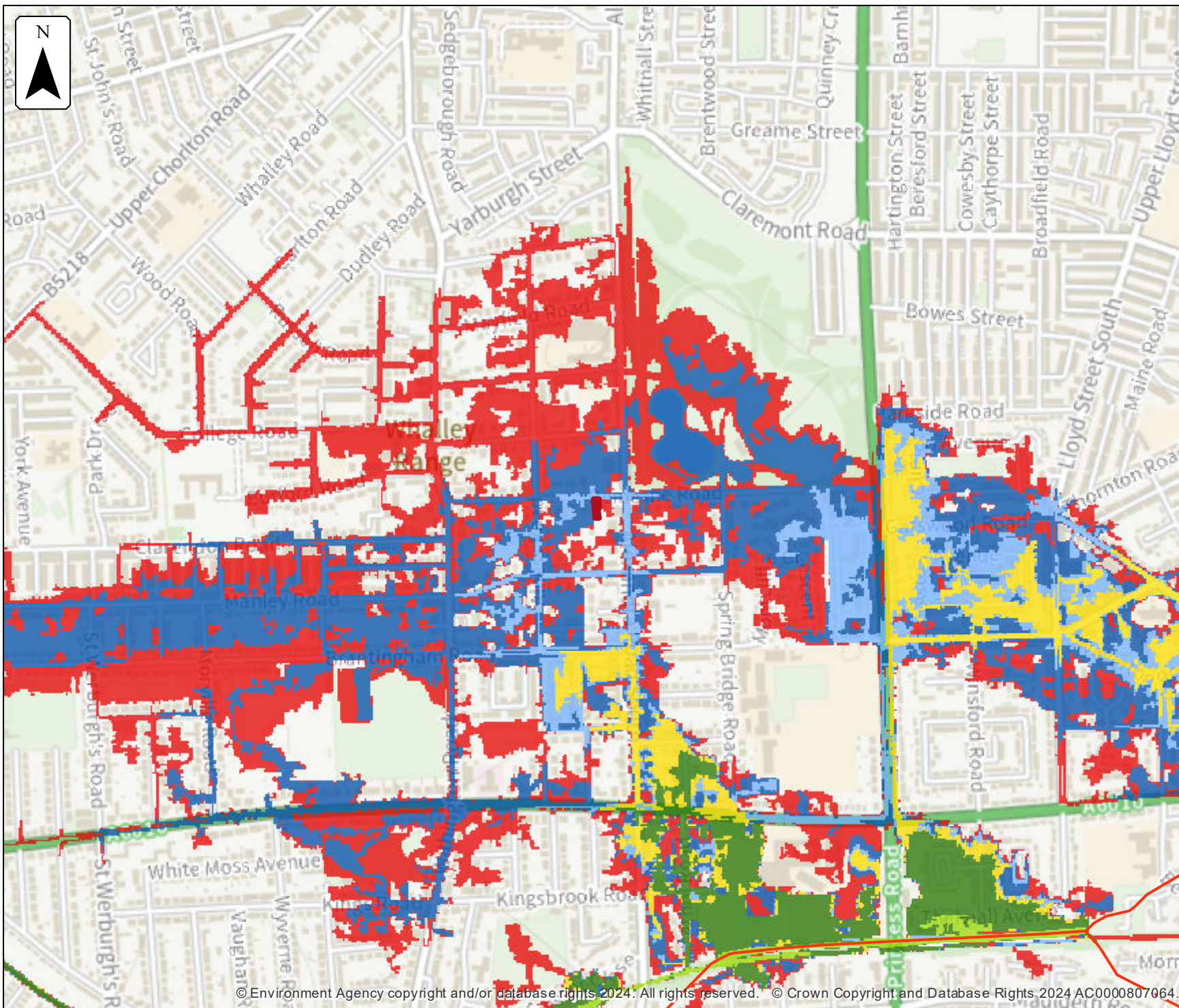
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

## Modelled scenarios

The following scenarios are included:

- Defended modelled fluvial: risk of flooding from rivers where there are flood defences
- Defences removed modelled fluvial: risk of flooding from rivers where flood defences have been removed
- No defences exist modelled fluvial: risk of flooding from rivers where there are no flood defences
- Defended climate change modelled fluvial: risk of flooding from rivers where there are flood defences, including estimated impact of climate change
- Defences removed climate change modelled fluvial: risk of flooding from rivers where flood defences have been removed, including estimated impact of climate change
- No defences exist climate change modelled fluvial: risk of flooding from rivers where there are no flood defences, including estimated impact of climate change



# Defended modelled fluvial extent

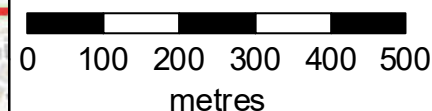
Location (easting/northing)  
**383302/394673**

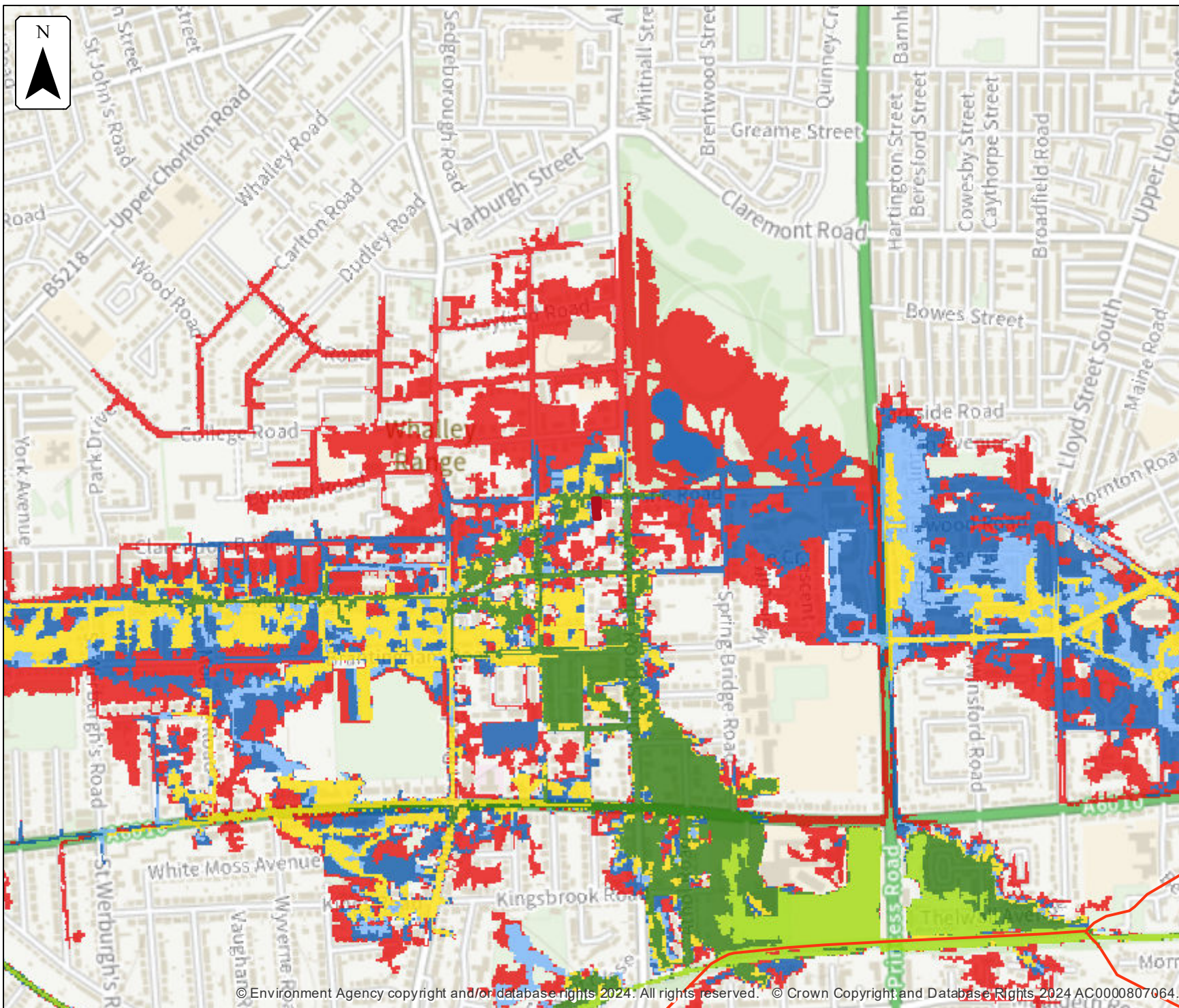
Scale Created  
**1:10,000 23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

- Selected area
- Main river
- Modelled flood extent
  - 5% AEP
  - 2% AEP
  - 1.33% AEP
  - 1% AEP
  - 0.5% AEP
  - 0.1% AEP

Flood extents may not be  
visible where they overlap  
other return periods





## Defences removed modelled fluvial extent

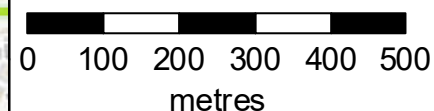
Location (easting/northing)  
**383302/394673**

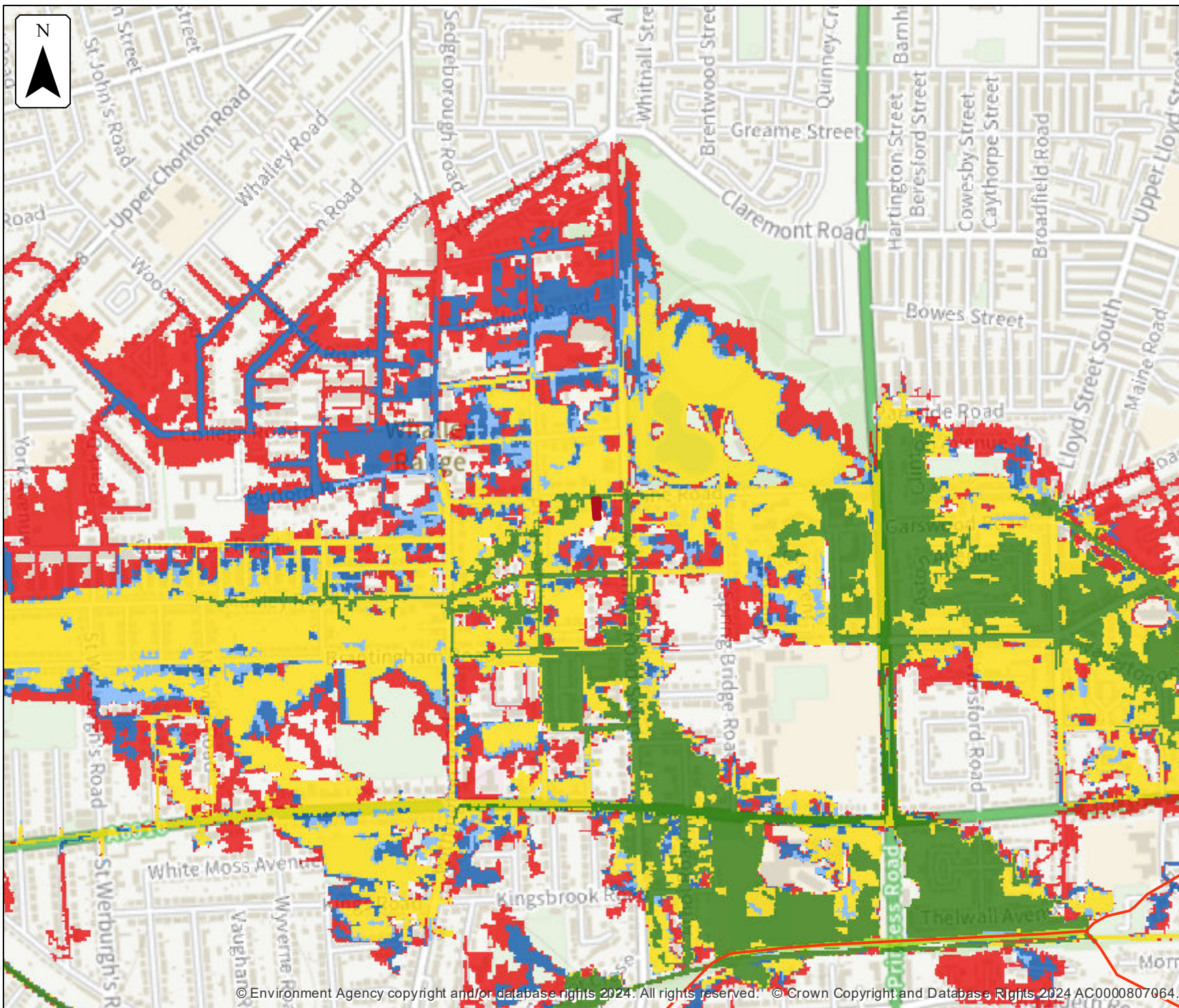
Scale Created  
**1:10,000 23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

-  Selected area
-  Main river
- Modelled flood extent**
-  5% AEP
-  2% AEP
-  1.33% AEP
-  1% AEP
-  0.5% AEP
-  0.1% AEP

Flood extents may not be  
visible where they overlap  
other return periods





## Defended climate change modelled fluvial extent

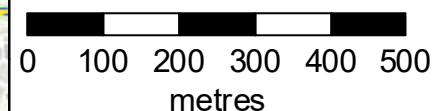
Location (easting/northing)  
**383302/394673**

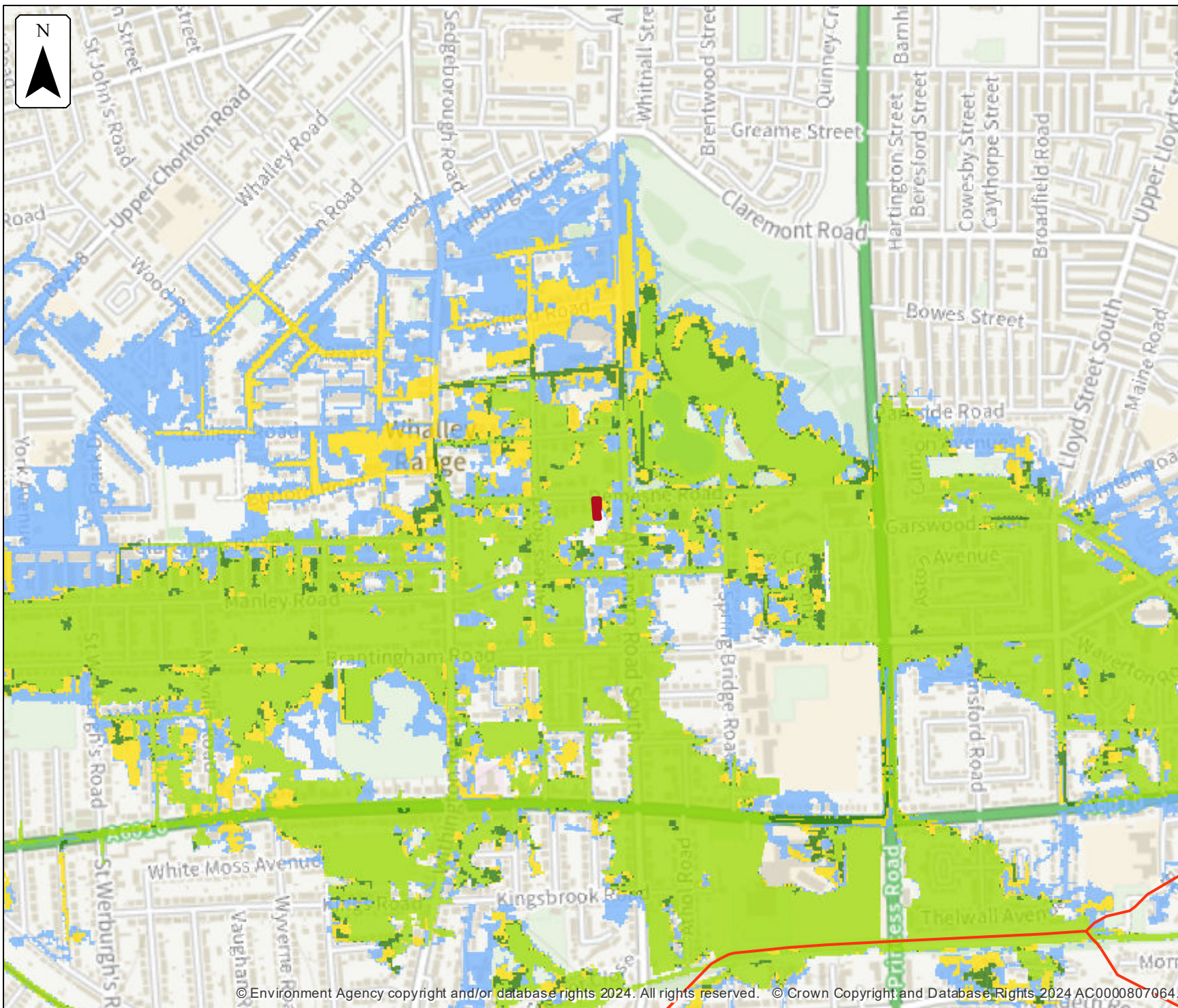
Scale Created  
**1:10,000 23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

-  Selected area
-  Main river
- Modelled flood extent
  -  50.0% AEP (+53%)
  -  5.0% AEP (+53%)
  -  1.0% AEP (+41%)
  -  1.0% AEP (+53%)
  -  1.0% AEP (+85%)
  -  0.1% AEP (+53%)

Flood extents may not be  
visible where they overlap  
other return periods





## Defences removed climate change modelled fluvial extent

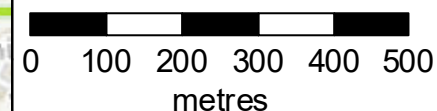
Location (easting/northing)  
**383302/394673**

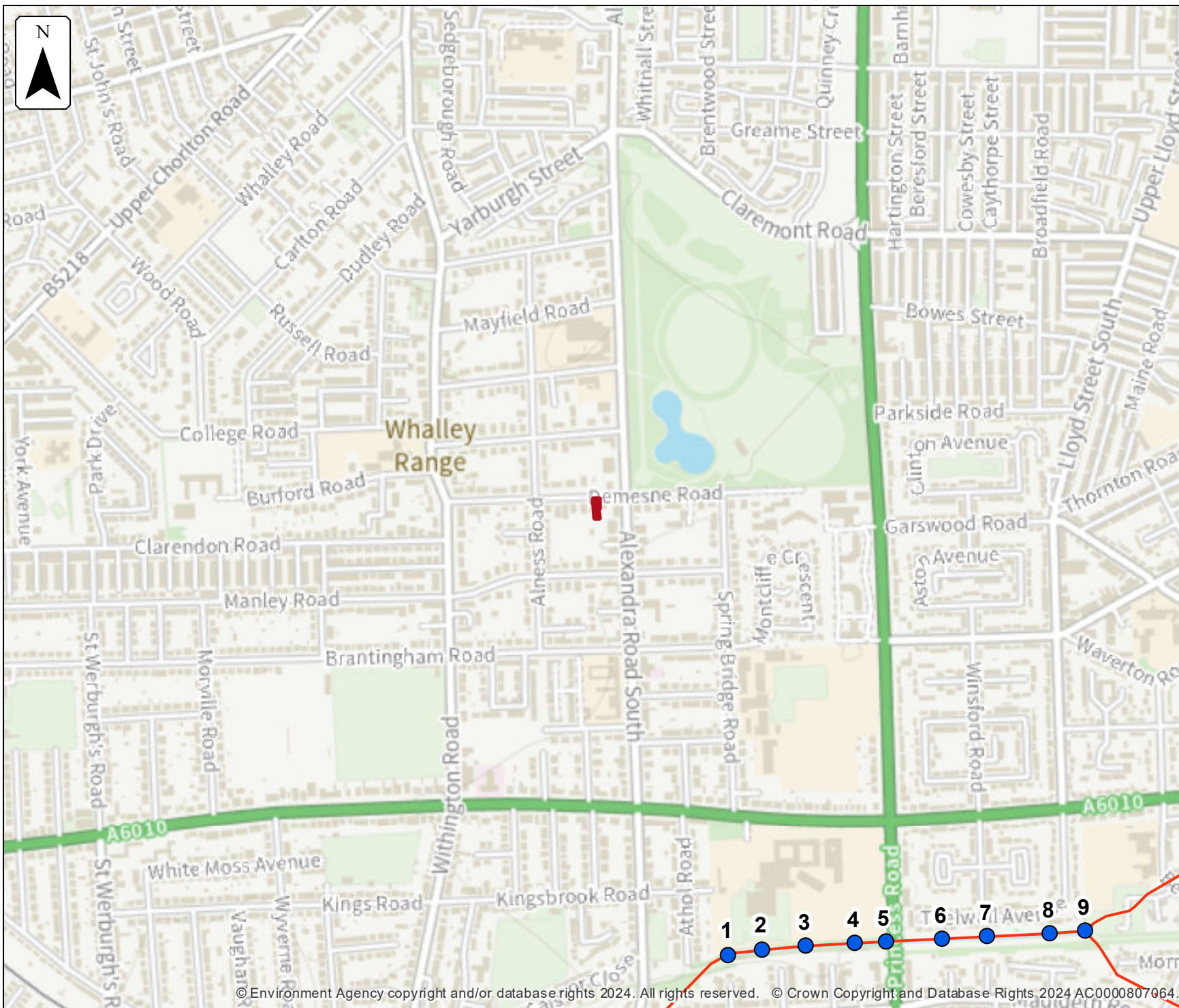
Scale Created  
**1:10,000 23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

-  Selected area
-  Main river
- Modelled flood extent
  -  1.0% AEP (+41%)
  -  1.0% AEP (+53%)
  -  1.0% AEP (+85%)
  -  0.1% AEP (+53%)

Flood extents may not be  
visible where they overlap  
other return periods





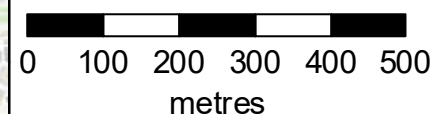
## Defended modelled fluvial node locations

Location (easting/northing)  
**383302/394673**

Scale Created  
**1:10,000 23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

-  Selected area
-  Modelled location
-  Main river



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# Modelled node locations data

## Defended

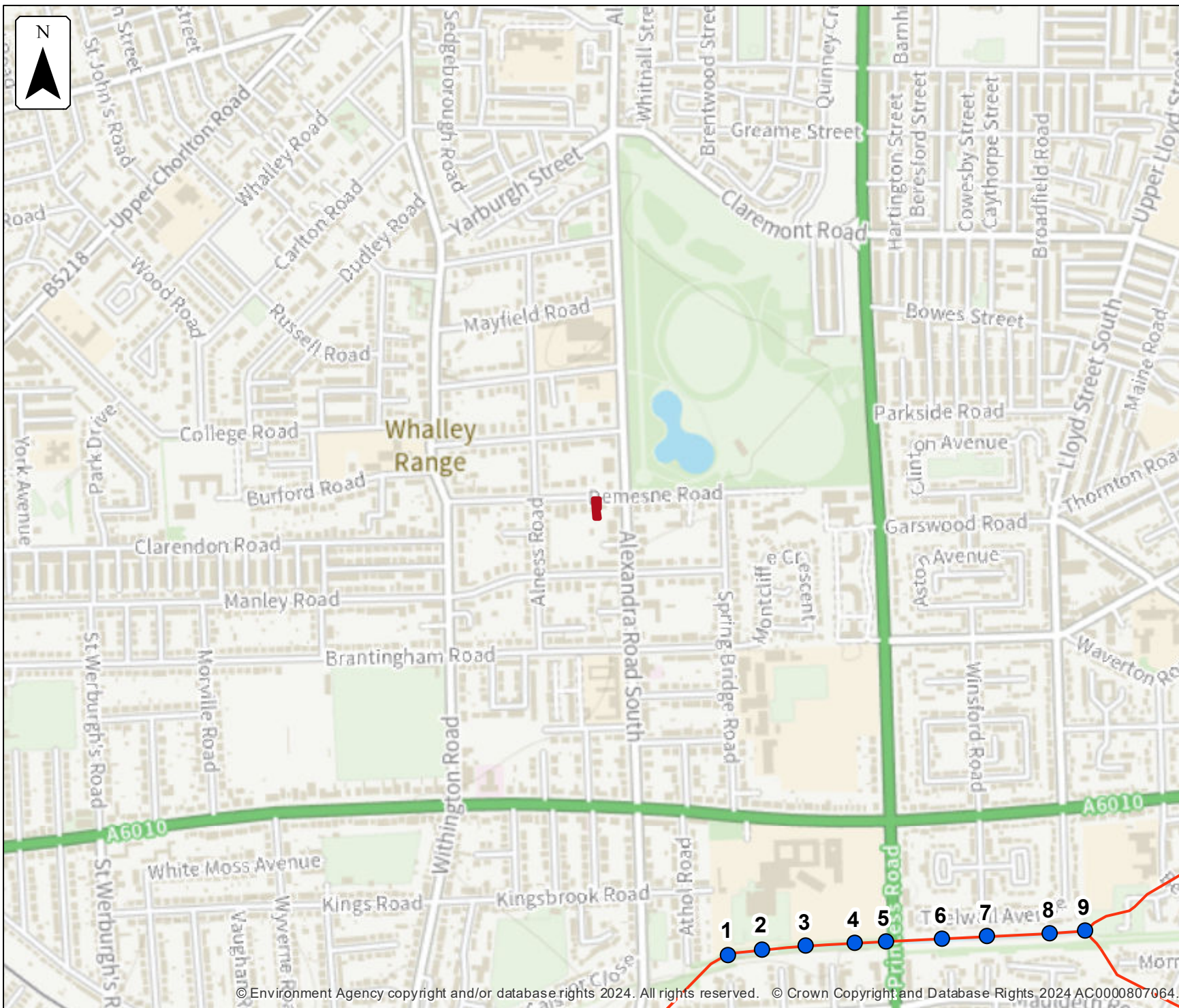
| Label | Modelled location ID | Easting | Northing | 50% AEP | 20% AEP | 10% AEP | 5% AEP | 3.33% AEP | 2% AEP | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-------|----------------------|---------|----------|---------|---------|---------|--------|-----------|--------|-----------|--------|----------|----------|
|       |                      |         |          | Level   | Level   | Level   | Level  | Level     | Level  | Level     | Level  | Level    | Level    |
| 1     | 1600827              | 383559  | 393805   | 28.08   | 28.89   | 29.81   | 30.72  | 30.96     | 31.02  | 31.04     | 31.06  | 31.08    | 31.16    |
| 2     | 1600824              | 383625  | 393816   | 28.94   | 29.32   | 29.81   | 30.72  | 30.95     | 31.01  | 31.04     | 31.05  | 31.07    | 31.14    |
| 3     | 1600949              | 383710  | 393823   | 29.92   | 30.15   | 30.35   | 30.87  | 31.08     | 31.13  | 31.15     | 31.16  | 31.18    | 31.20    |
| 4     | 1600822              | 383806  | 393828   | 30.48   | 30.73   | 30.89   | 31.14  | 31.29     | 31.33  | 31.34     | 31.35  | 31.37    | 31.41    |
| 5     | 1600988              | 383864  | 393831   | 30.66   | 30.93   | 31.10   | 31.31  | 31.44     | 31.47  | 31.48     | 31.49  | 31.52    | 31.59    |
| 6     | 1600854              | 383973  | 393836   | 30.88   | 31.15   | 31.32   | 31.52  | 31.63     | 31.67  | 31.68     | 31.69  | 31.74    | 31.84    |
| 7     | 1600859              | 384062  | 393840   | 31.16   | 31.42   | 31.58   | 31.76  | 31.83     | 31.86  | 31.87     | 31.87  | 31.93    | 32.0     |
| 8     | 1600941              | 384184  | 393847   | 31.44   | 31.71   | 31.87   | 32.04  | 32.10     | 32.13  | 32.14     | 32.15  | 32.17    | 32.23    |
| 9     | 1600837              | 384252  | 393852   | 31.59   | 31.85   | 32.01   | 32.17  | 32.23     | 32.27  | 32.28     | 32.29  | 32.32    | 32.37    |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Level values are shown in mAOD, and flow values are shown in cubic metres per second.  
Any blank cells show where a particular scenario has not been modelled for this location.  
If no level or flow data is available for a scenario, no table will be shown.

## Defended

| Label | Modelled location ID | Easting | Northing | 50% AEP | 20% AEP | 10% AEP | 5% AEP | 3.33% AEP | 2% AEP | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-------|----------------------|---------|----------|---------|---------|---------|--------|-----------|--------|-----------|--------|----------|----------|
|       |                      |         |          | Flow    | Flow    | Flow    | Flow   | Flow      | Flow   | Flow      | Flow   | Flow     | Flow     |
| 1     | 1600827              | 383559  | 393805   | 12.19   | 16.80   | 19.77   | 22.67  | 23.43     | 23.61  | 23.65     | 23.73  | 23.74    | 23.83    |
| 2     | 1600824              | 383625  | 393816   | 12.19   | 16.85   | 19.86   | 22.95  | 23.89     | 24.32  | 24.35     | 24.45  | 24.56    | 24.58    |
| 3     | 1600949              | 383710  | 393823   | 12.19   | 16.86   | 19.91   | 23.16  | 24.04     | 24.43  | 24.62     | 24.74  | 25.06    | 27.30    |
| 4     | 1600822              | 383806  | 393828   | 12.19   | 16.87   | 19.94   | 23.26  | 24.20     | 24.59  | 24.83     | 25.01  | 26.18    | 28.85    |
| 5     | 1600988              | 383864  | 393831   | 12.20   | 16.87   | 19.95   | 23.31  | 24.26     | 24.71  | 24.94     | 25.19  | 25.95    | 27.96    |
| 6     | 1600854              | 383973  | 393836   | 12.20   | 16.87   | 19.96   | 23.34  | 24.32     | 24.77  | 25.13     | 25.28  | 25.76    | 27.07    |
| 7     | 1600859              | 384062  | 393840   | 12.20   | 16.88   | 19.97   | 23.39  | 24.71     | 25.74  | 26.12     | 26.52  | 27.30    | 29.20    |
| 8     | 1600941              | 384184  | 393847   | 12.20   | 16.88   | 19.97   | 23.40  | 25.01     | 26.56  | 27.13     | 27.72  | 28.92    | 31.79    |
| 9     | 1600837              | 384252  | 393852   | 11.95   | 16.52   | 19.53   | 22.89  | 24.47     | 26.10  | 26.75     | 27.38  | 28.65    | 31.88    |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Level values are shown in mAOD, and flow values are shown in cubic metres per second.  
Any blank cells show where a particular scenario has not been modelled for this location.  
If no level or flow data is available for a scenario, no table will be shown.



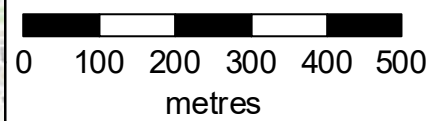
## Defences removed modelled fluvial node locations

Location (easting/northing)  
**383302/394673**

Scale      Created  
**1:10,000      23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

-  Selected area
-  Modelled location
-  Main river



# Modelled node locations data

## Defences removed

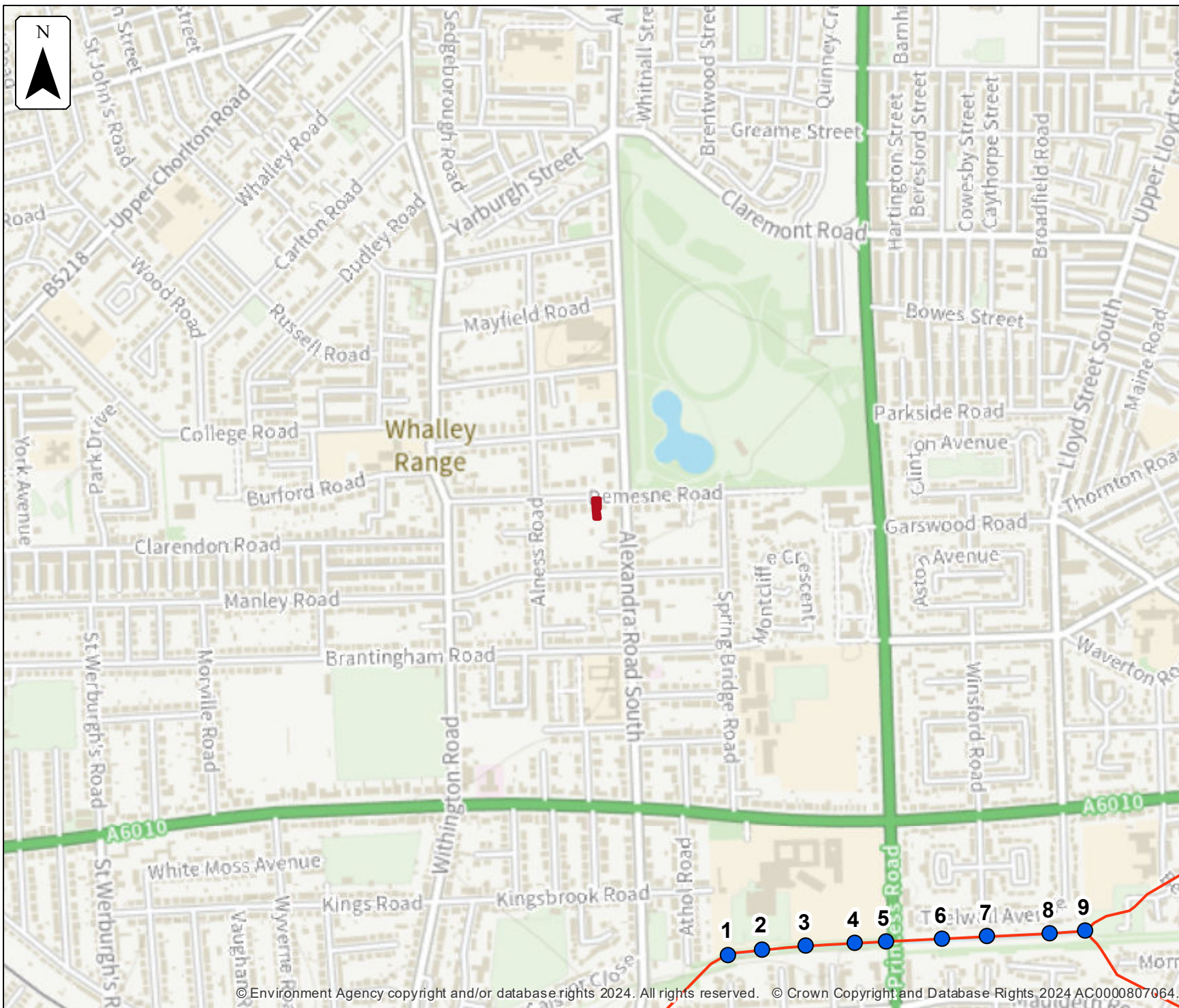
| Label | Modelled location ID | Easting | Northing | 50% AEP | 20% AEP | 10% AEP | 5% AEP | 3.33% AEP | 2% AEP | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-------|----------------------|---------|----------|---------|---------|---------|--------|-----------|--------|-----------|--------|----------|----------|
|       |                      |         |          | Level   | Level   | Level   | Level  | Level     | Level  | Level     | Level  | Level    | Level    |
| 1     | 1600827              | 383559  | 393805   | 28.08   | 28.89   | 29.81   | 30.57  | 30.77     | 30.88  | 30.93     | 30.95  | 31.0     | 31.11    |
| 2     | 1600824              | 383625  | 393816   | 28.93   | 29.32   | 29.82   | 30.57  | 30.78     | 30.90  | 30.96     | 30.95  | 31.03    | 31.12    |
| 3     | 1600949              | 383710  | 393823   | 29.92   | 30.15   | 30.34   | 30.76  | 30.94     | 31.02  | 31.06     | 31.05  | 31.11    | 31.18    |
| 4     | 1600822              | 383806  | 393828   | 30.47   | 30.73   | 30.89   | 31.05  | 31.09     | 31.13  | 31.15     | 31.16  | 31.18    | 31.23    |
| 5     | 1600988              | 383864  | 393831   | 30.66   | 30.93   | 31.09   | 31.20  | 31.23     | 31.25  | 31.27     | 31.29  | 31.30    | 31.35    |
| 6     | 1600854              | 383973  | 393836   | 30.88   | 31.16   | 31.34   | 31.47  | 31.51     | 31.54  | 31.59     | 31.63  | 31.68    | 31.80    |
| 7     | 1600859              | 384062  | 393840   | 31.15   | 31.39   | 31.52   | 31.63  | 31.66     | 31.69  | 31.71     | 31.73  | 31.76    | 31.85    |
| 8     | 1600941              | 384184  | 393847   | 31.44   | 31.71   | 31.85   | 32.0   | 32.06     | 32.11  | 32.14     | 32.15  | 32.17    | 32.22    |
| 9     | 1600837              | 384252  | 393852   | 31.59   | 31.80   | 31.93   | 32.05  | 32.11     | 32.15  | 32.17     | 32.19  | 32.21    | 32.28    |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Level values are shown in mAOD, and flow values are shown in cubic metres per second.  
Any blank cells show where a particular scenario has not been modelled for this location.  
If no level or flow data is available for a scenario, no table will be shown.

## Defences removed

| Label | Modelled location ID | Easting | Northing | 50% AEP | 20% AEP | 10% AEP | 5% AEP | 3.33% AEP | 2% AEP | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-------|----------------------|---------|----------|---------|---------|---------|--------|-----------|--------|-----------|--------|----------|----------|
|       |                      |         |          | Flow    | Flow    | Flow    | Flow   | Flow      | Flow   | Flow      | Flow   | Flow     | Flow     |
| 1     | 1600827              | 383559  | 393805   | 12.16   | 16.78   | 19.62   | 21.55  | 21.97     | 22.14  | 22.21     | 26.95  | 22.26    | 22.23    |
| 2     | 1600824              | 383625  | 393816   | 12.15   | 16.83   | 19.70   | 21.73  | 22.38     | 22.65  | 22.75     | 24.74  | 22.82    | 22.77    |
| 3     | 1600949              | 383710  | 393823   | 12.15   | 16.84   | 19.74   | 21.87  | 22.34     | 22.55  | 22.64     | 22.71  | 22.80    | 22.95    |
| 4     | 1600822              | 383806  | 393828   | 12.15   | 16.85   | 19.77   | 21.25  | 21.73     | 22.21  | 22.41     | 24.76  | 23.62    | 25.31    |
| 5     | 1600988              | 383864  | 393831   | 12.16   | 16.84   | 19.75   | 22.37  | 23.55     | 24.38  | 25.22     | 26.04  | 27.14    | 29.47    |
| 6     | 1600854              | 383973  | 393836   | 12.16   | 16.17   | 18.16   | 20.44  | 21.55     | 22.43  | 23.09     | 23.50  | 23.61    | 24.54    |
| 7     | 1600859              | 384062  | 393840   | 12.16   | 16.87   | 19.85   | 23.30  | 25.02     | 26.45  | 27.23     | 27.83  | 28.21    | 29.49    |
| 8     | 1600941              | 384184  | 393847   | 12.17   | 15.38   | 17.52   | 19.99  | 21.20     | 22.48  | 23.52     | 24.17  | 24.98    | 27.99    |
| 9     | 1600837              | 384252  | 393852   | 11.95   | 16.52   | 19.52   | 22.88  | 24.52     | 26.21  | 27.56     | 28.24  | 29.25    | 32.09    |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Level values are shown in mAOD, and flow values are shown in cubic metres per second.  
Any blank cells show where a particular scenario has not been modelled for this location.  
If no level or flow data is available for a scenario, no table will be shown.



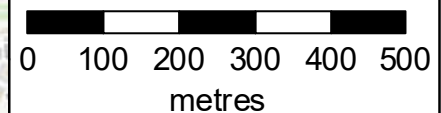
## Defended climate change modelled fluvial node locations

Location (easting/northing)  
**383302/394673**

Scale      Created  
**1:10,000      23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

-  Selected area
-  Modelled location
-  Main river



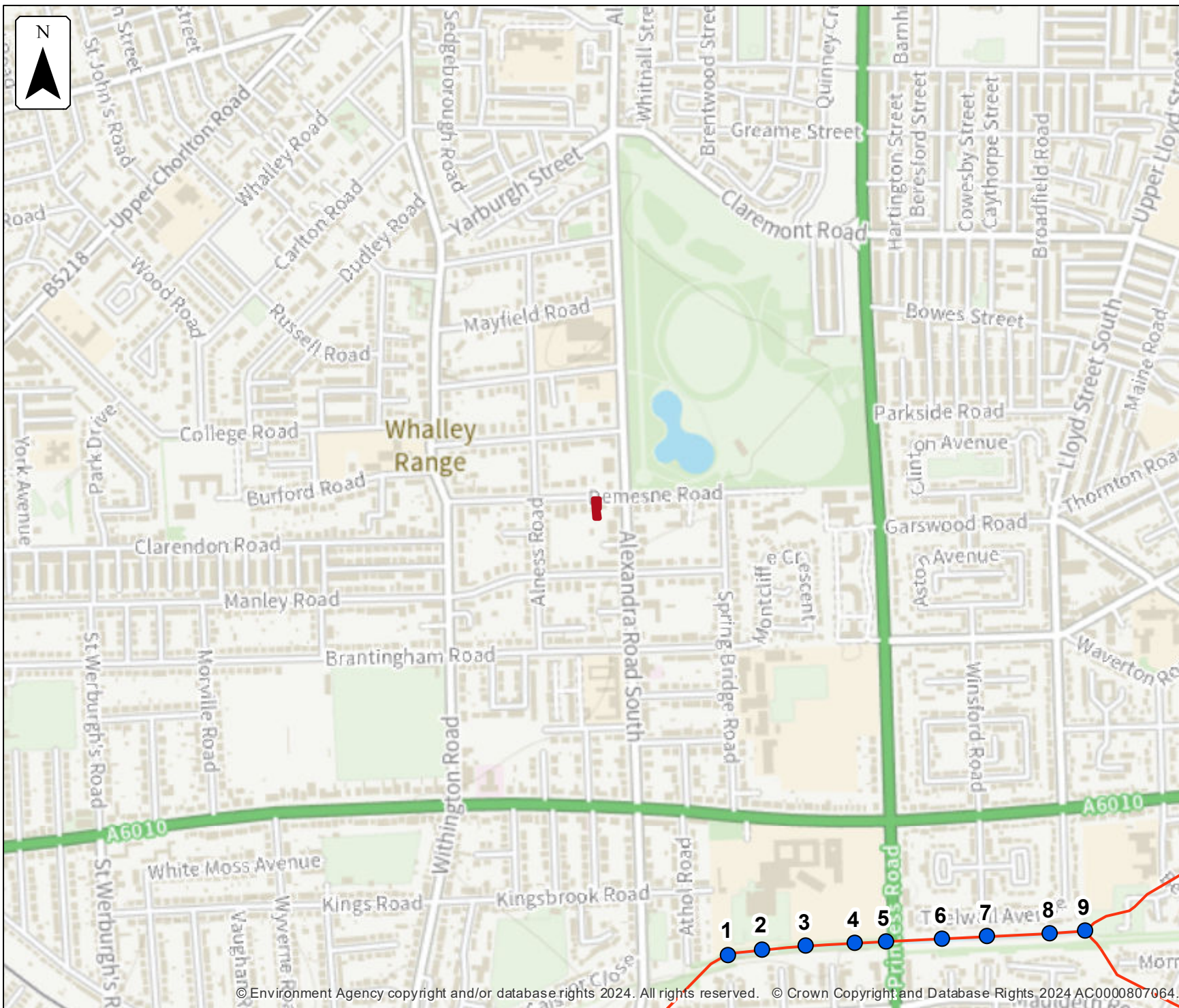
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# Modelled node locations data

## Defended climate change

| Label | Modelled location ID | Easting | Northing | 50% AEP (+53%) | 5% AEP (+53%) | 1% AEP (+41%) | 1% AEP (+53%) | 1% AEP (+85%) | 0.1% AEP (+53%) | 50% AEP (+53%) | 5% AEP (+53%) | 1% AEP (+41%) | 1% AEP (+53%) | 1% AEP (+85%) | 0.1% AEP (+53%) |
|-------|----------------------|---------|----------|----------------|---------------|---------------|---------------|---------------|-----------------|----------------|---------------|---------------|---------------|---------------|-----------------|
|       |                      |         |          | Level          | Level         | Level         | Level         | Level         | Level           | Flow           | Flow          | Flow          | Flow          | Flow          | Flow            |
| 1     | 1600827              | 383559  | 393805   | 29.10          | 31.06         | 31.11         | 31.12         | 31.15         | 31.24           | 17.39          | 23.66         | 23.75         | 23.75         | 23.72         | 23.67           |
| 2     | 1600824              | 383625  | 393816   | 29.43          | 31.05         | 31.10         | 31.11         | 31.13         | 31.21           | 17.45          | 24.42         | 24.61         | 24.62         | 24.57         | 24.66           |
| 3     | 1600949              | 383710  | 393823   | 30.19          | 31.16         | 31.19         | 31.19         | 31.19         | 31.23           | 17.47          | 24.68         | 26.23         | 26.64         | 27.51         | 28.96           |
| 4     | 1600822              | 383806  | 393828   | 30.76          | 31.35         | 31.39         | 31.39         | 31.41         | 31.45           | 17.48          | 25.03         | 27.36         | 27.87         | 29.09         | 31.36           |
| 5     | 1600988              | 383864  | 393831   | 30.97          | 31.49         | 31.55         | 31.56         | 31.60         | 31.66           | 17.48          | 25.20         | 26.89         | 27.28         | 28.13         | 29.92           |
| 6     | 1600854              | 383973  | 393836   | 31.18          | 31.69         | 31.78         | 31.80         | 31.85         | 31.95           | 17.48          | 25.30         | 26.35         | 26.62         | 27.17         | 28.0            |
| 7     | 1600859              | 384062  | 393840   | 31.45          | 31.87         | 31.96         | 31.97         | 32.01         | 32.06           | 17.48          | 26.55         | 28.14         | 28.51         | 29.35         | 30.71           |
| 8     | 1600941              | 384184  | 393847   | 31.74          | 32.16         | 32.20         | 32.21         | 32.23         | 32.28           | 17.49          | 27.77         | 30.07         | 30.64         | 32.03         | 34.97           |
| 9     | 1600837              | 384252  | 393852   | 31.89          | 32.30         | 32.34         | 32.35         | 32.37         | 32.41           | 17.11          | 27.41         | 29.89         | 30.54         | 32.19         | 35.98           |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Level values are shown in mAOD, and flow values are shown in cubic metres per second.  
Any blank cells show where a particular scenario has not been modelled for this location.  
If no level or flow data is available for a scenario, no table will be shown.



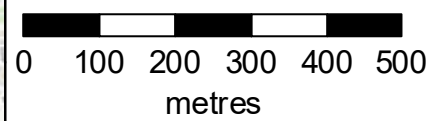
# Defences removed climate change modelled fluvial node locations

Location (easting/northing)  
**383302/394673**

Scale      Created  
**1:10,000      23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

- Selected area
- Modelled location
- Main river



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# Modelled node locations data

## Defences removed climate change

| Label | Modelled location ID | Easting | Northing | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 1% AEP<br>(+85%) | 0.1% AEP<br>(+53%) | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 1% AEP<br>(+85%) | 0.1% AEP<br>(+53%) |
|-------|----------------------|---------|----------|------------------|------------------|------------------|--------------------|------------------|------------------|------------------|--------------------|
|       |                      |         |          | Level            | Level            | Level            | Level              | Flow             | Flow             | Flow             | Flow               |
| 1     | 1600827              | 383559  | 393805   | 31.04            | 31.05            | 31.10            | 31.18              | 22.23            | 22.22            | 22.21            | 22.12              |
| 2     | 1600824              | 383625  | 393816   | 31.06            | 31.08            | 31.12            | 31.19              | 22.84            | 22.83            | 22.75            | 22.73              |
| 3     | 1600949              | 383710  | 393823   | 31.14            | 31.15            | 31.18            | 31.24              | 22.85            | 22.86            | 22.90            | 22.91              |
| 4     | 1600822              | 383806  | 393828   | 31.20            | 31.21            | 31.23            | 31.28              | 24.25            | 24.54            | 25.66            | 27.40              |
| 5     | 1600988              | 383864  | 393831   | 31.32            | 31.33            | 31.35            | 31.40              | 28.04            | 28.42            | 29.83            | 31.89              |
| 6     | 1600854              | 383973  | 393836   | 31.73            | 31.75            | 31.81            | 31.90              | 23.97            | 23.85            | 24.26            | 25.13              |
| 7     | 1600859              | 384062  | 393840   | 31.80            | 31.81            | 31.86            | 31.93              | 28.72            | 29.02            | 29.56            | 30.61              |
| 8     | 1600941              | 384184  | 393847   | 32.20            | 32.20            | 32.23            | 32.26              | 26.14            | 26.34            | 28.26            | 31.83              |
| 9     | 1600837              | 384252  | 393852   | 32.25            | 32.25            | 32.29            | 32.33              | 30.12            | 30.82            | 32.46            | 36.21              |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Level values are shown in mAOD, and flow values are shown in cubic metres per second.  
Any blank cells show where a particular scenario has not been modelled for this location.  
If no level or flow data is available for a scenario, no table will be shown.



## Defended modelled fluvial extent and height

Location (easting/northing)  
**383302/394673**

Scale Created  
**1:500 23 Oct 2024**

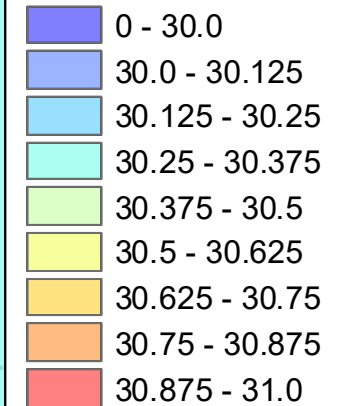
Model name  
**Chorlton Platt Gore  
Model 2024**

 Selected area

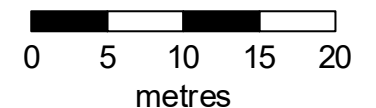
 Main river

Modelled 2D grid

*Water level in mAOD*



This map shows the  
0.1% AEP height data



## Sample point data

### Defended

| Label | Easting | Northing | 50% AEP | 20% AEP | 10% AEP | 5% AEP | 3.33% AEP | 2% AEP | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-------|---------|----------|---------|---------|---------|--------|-----------|--------|-----------|--------|----------|----------|
|       |         |          | Depth   | Depth   | Depth   | Depth  | Depth     | Depth  | Depth     | Depth  | Depth    | Depth    |
| 1     | 383297  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 2     | 383304  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 3     | 383311  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 4     | 383290  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.25     | 0.49     |
| 5     | 383297  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.19     | 0.42     |
| 6     | 383304  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 7     | 383311  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 8     | 383290  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.29     | 0.52     |
| 9     | 383297  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.25     | 0.48     |
| 10    | 383304  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 11    | 383311  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 12    | 383290  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.28     | 0.52     |
| 13    | 383297  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.27     | 0.51     |
| 14    | 383304  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.19     | 0.39     |
| 15    | 383311  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 16    | 383290  | 394675   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.30     | 0.53     |

| Label                       | Easting | Northing | 50% AEP             | 20% AEP             | 10% AEP             | 5% AEP              | 3.33% AEP           | 2% AEP              | 1.33% AEP           | 1% AEP              | 0.5% AEP | 0.1% AEP |
|-----------------------------|---------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------|----------|
|                             |         |          | Depth               | Depth               | Depth               | Depth               | Depth               | Depth               | Depth               | Depth               | Depth    | Depth    |
| 17                          | 383297  | 394675   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.17     | 0.40     |
| 18                          | 383304  | 394675   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData   | 0.20     |
| 19                          | 383311  | 394675   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData   | 0.05     |
| 20                          | 383290  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.23     | 0.46     |
| 21                          | 383297  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.12     | 0.35     |
| 22                          | 383304  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.02     | 0.24     |
| 23                          | 383311  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData   | 0.07     |
| 24                          | 383290  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.30     | 0.53     |
| 25                          | 383297  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.27     | 0.50     |
| 26                          | 383304  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.13     | 0.35     |
| 27                          | 383311  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData   | 0.06     |
| 28                          | 383290  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.01                | 0.44     | 0.68     |
| 29                          | 383297  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.00                | 0.37     | 0.60     |
| 30                          | 383304  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.00                | 0.34     | 0.57     |
| 31                          | 383311  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.00                | 0.28     | 0.51     |
| Max value in selected area: |         |          | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | 0.33     | 0.56     |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Height values are shown in mAOD, and depth values are shown in metres.  
Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.  
If no height or depth data is available for a scenario, no table will be shown.  
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

## Defended

| Label | Easting | Northing | 50% AEP | 20% AEP | 10% AEP | 5% AEP | 3.33% AEP | 2% AEP | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-------|---------|----------|---------|---------|---------|--------|-----------|--------|-----------|--------|----------|----------|
|       |         |          | Height  | Height  | Height  | Height | Height    | Height | Height    | Height | Height   | Height   |
| 1     | 383297  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 2     | 383304  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 3     | 383311  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 4     | 383290  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.95    | 30.18    |
| 5     | 383297  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.95    | 30.18    |
| 6     | 383304  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 7     | 383311  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 8     | 383290  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.95    | 30.18    |
| 9     | 383297  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.95    | 30.18    |
| 10    | 383304  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 11    | 383311  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 12    | 383290  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.95    | 30.18    |
| 13    | 383297  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.95    | 30.18    |
| 14    | 383304  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.95    | 30.18    |
| 15    | 383311  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 16    | 383290  | 394675   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.95    | 30.18    |
| 17    | 383297  | 394675   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.95    | 30.18    |
| 18    | 383304  | 394675   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | 30.18    |

| Label                       | Easting | Northing | 50% AEP             | 20% AEP             | 10% AEP             | 5% AEP              | 3.33% AEP           | 2% AEP              | 1.33% AEP           | 1% AEP              | 0.5% AEP | 0.1% AEP |
|-----------------------------|---------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------|----------|
|                             |         |          | Height              | Height              | Height              | Height              | Height              | Height              | Height              | Height              | Height   | Height   |
| 19                          | 383311  | 394675   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData   | 30.18    |
| 20                          | 383290  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.95    | 30.18    |
| 21                          | 383297  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.95    | 30.18    |
| 22                          | 383304  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.95    | 30.18    |
| 23                          | 383311  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData   | 30.18    |
| 24                          | 383290  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.95    | 30.18    |
| 25                          | 383297  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.95    | 30.18    |
| 26                          | 383304  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.95    | 30.18    |
| 27                          | 383311  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData   | 30.18    |
| 28                          | 383290  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.52               | 29.95    | 30.18    |
| 29                          | 383297  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.57               | 29.95    | 30.18    |
| 30                          | 383304  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.61               | 29.95    | 30.18    |
| 31                          | 383311  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.67               | 29.95    | 30.18    |
| Max value in selected area: |         |          | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | 29.95    | 30.18    |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.

Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

If no height or depth data is available for a scenario, no table will be shown.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



## Defences removed modelled fluvial extent and height

Location (easting/northing)  
**383302/394673**

Scale Created  
**1:500 23 Oct 2024**

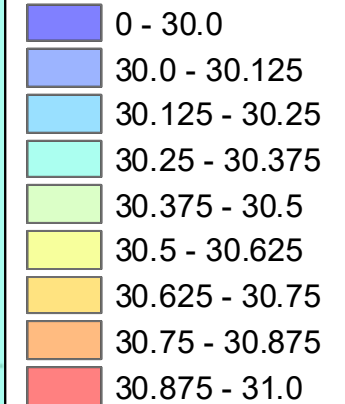
Model name  
**Chorlton Platt Gore  
Model 2024**

 Selected area

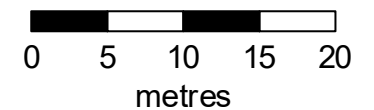
 Main river

Modelled 2D grid

*Water level in mAOD*



This map shows the  
0.1% AEP height data



## Sample point data

### Defences removed

| Label | Easting | Northing | 50% AEP | 20% AEP | 10% AEP | 5% AEP | 3.33% AEP | 2% AEP | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-------|---------|----------|---------|---------|---------|--------|-----------|--------|-----------|--------|----------|----------|
|       |         |          | Depth   | Depth   | Depth   | Depth  | Depth     | Depth  | Depth     | Depth  | Depth    | Depth    |
| 1     | 383297  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 2     | 383304  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 3     | 383311  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 4     | 383290  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.24     | 0.48     |
| 5     | 383297  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.17     | 0.41     |
| 6     | 383304  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 7     | 383311  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 8     | 383290  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | 0.03   | 0.27     | 0.51     |
| 9     | 383297  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 0.23     | 0.47     |
| 10    | 383304  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 11    | 383311  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 12    | 383290  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | 0.02   | 0.27     | 0.51     |
| 13    | 383297  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | 0.01   | 0.26     | 0.49     |
| 14    | 383304  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | 0.38     |
| 15    | 383311  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 16    | 383290  | 394675   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | 0.04   | 0.28     | 0.52     |

| Label                       | Easting | Northing | 50% AEP             | 20% AEP             | 10% AEP             | 5% AEP              | 3.33% AEP           | 2% AEP              | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-----------------------------|---------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------|--------|----------|----------|
|                             |         |          | Depth               | Depth               | Depth               | Depth               | Depth               | Depth               | Depth     | Depth  | Depth    | Depth    |
| 17                          | 383297  | 394675   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | 0.15     | 0.39     |
| 18                          | 383304  | 394675   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | NoData   | 0.20     |
| 19                          | 383311  | 394675   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | NoData   | 0.04     |
| 20                          | 383290  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | 0.21     | 0.45     |
| 21                          | 383297  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | 0.10     | 0.34     |
| 22                          | 383304  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | 0.01     | 0.23     |
| 23                          | 383311  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | NoData   | 0.06     |
| 24                          | 383290  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.02      | 0.04   | 0.28     | 0.52     |
| 25                          | 383297  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 0.00      | 0.01   | 0.25     | 0.49     |
| 26                          | 383304  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | 0.11     | 0.34     |
| 27                          | 383311  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | NoData   | 0.05     |
| 28                          | 383290  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | 0.02                | 0.15      | 0.18   | 0.43     | 0.67     |
| 29                          | 383297  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | 0.00                | 0.07      | 0.10   | 0.35     | 0.59     |
| 30                          | 383304  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | 0.01                | 0.05      | 0.07   | 0.32     | 0.56     |
| 31                          | 383311  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | 0.01                | 0.02      | 0.03   | 0.26     | 0.50     |
| Max value in selected area: |         |          | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | 0.05      | 0.07   | 0.31     | 0.55     |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Height values are shown in mAOD, and depth values are shown in metres.  
Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.  
If no height or depth data is available for a scenario, no table will be shown.  
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

## Defences removed

| Label | Easting | Northing | 50% AEP | 20% AEP | 10% AEP | 5% AEP | 3.33% AEP | 2% AEP | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-------|---------|----------|---------|---------|---------|--------|-----------|--------|-----------|--------|----------|----------|
|       |         |          | Height  | Height  | Height  | Height | Height    | Height | Height    | Height | Height   | Height   |
| 1     | 383297  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 2     | 383304  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 3     | 383311  | 394647   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 4     | 383290  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.93    | 30.17    |
| 5     | 383297  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.93    | 30.17    |
| 6     | 383304  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 7     | 383311  | 394654   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 8     | 383290  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | 29.68  | 29.93    | 30.17    |
| 9     | 383297  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.93    | 30.17    |
| 10    | 383304  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 11    | 383311  | 394661   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 12    | 383290  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | 29.68  | 29.93    | 30.17    |
| 13    | 383297  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | 29.68  | 29.93    | 30.17    |
| 14    | 383304  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | 30.17    |
| 15    | 383311  | 394668   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | NoData   |
| 16    | 383290  | 394675   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | 29.68  | 29.93    | 30.17    |
| 17    | 383297  | 394675   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | 29.93    | 30.17    |
| 18    | 383304  | 394675   | NoData  | NoData  | NoData  | NoData | NoData    | NoData | NoData    | NoData | NoData   | 30.17    |

| Label                       | Easting | Northing | 50% AEP             | 20% AEP             | 10% AEP             | 5% AEP              | 3.33% AEP           | 2% AEP              | 1.33% AEP | 1% AEP | 0.5% AEP | 0.1% AEP |
|-----------------------------|---------|----------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------|--------|----------|----------|
|                             |         |          | Height              | Height              | Height              | Height              | Height              | Height              | Height    | Height | Height   | Height   |
| 19                          | 383311  | 394675   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | NoData   | 30.17    |
| 20                          | 383290  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | 29.93    | 30.17    |
| 21                          | 383297  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | 29.93    | 30.17    |
| 22                          | 383304  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | 29.93    | 30.17    |
| 23                          | 383311  | 394682   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | NoData   | 30.17    |
| 24                          | 383290  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.66     | 29.68  | 29.93    | 30.17    |
| 25                          | 383297  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | 29.66     | 29.68  | 29.93    | 30.17    |
| 26                          | 383304  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | 29.93    | 30.17    |
| 27                          | 383311  | 394689   | NoData              | NoData              | NoData              | NoData              | NoData              | NoData              | NoData    | NoData | NoData   | 30.17    |
| 28                          | 383290  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | 29.53               | 29.66     | 29.68  | 29.93    | 30.17    |
| 29                          | 383297  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | 29.58               | 29.66     | 29.68  | 29.93    | 30.17    |
| 30                          | 383304  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | 29.62               | 29.66     | 29.68  | 29.93    | 30.17    |
| 31                          | 383311  | 394696   | NoData              | NoData              | NoData              | NoData              | NoData              | 29.67               | 29.69     | 29.70  | 29.93    | 30.17    |
| Max value in selected area: |         |          | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | Could not determine | 29.66     | 29.68  | 29.93    | 30.17    |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.

Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

If no height or depth data is available for a scenario, no table will be shown.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



**Defended  
climate change  
modelled fluvial  
extent and height**

Location (easting/northing)  
**383302/394673**

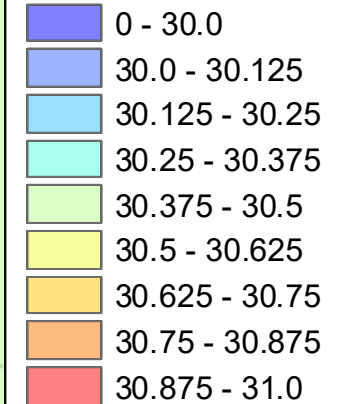
Scale Created  
**1:500 23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

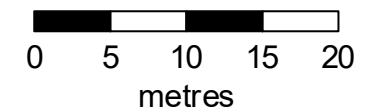
 Selected area

 Main river

Modelled 2D grid  
*Water level in mAOD*



This map shows the  
0.1% AEP +53% height data



## Sample point data

### Defended climate change

| Label | Easting | Northing | 50% AEP<br>(+53%) | 5% AEP<br>(+53%) | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 0.1% AEP<br>(+53%) | 50% AEP<br>(+53%) | 5% AEP<br>(+53%) | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 0.1% AEP<br>(+53%) |
|-------|---------|----------|-------------------|------------------|------------------|------------------|--------------------|-------------------|------------------|------------------|------------------|--------------------|
|       |         |          | Depth             | Depth            | Depth            | Depth            | Depth              | Height            | Height           | Height           | Height           | Height             |
| 1     | 383297  | 394647   | NoData            | NoData           | NoData           | NoData           | NoData             | NoData            | NoData           | NoData           | NoData           | NoData             |
| 2     | 383304  | 394647   | NoData            | NoData           | NoData           | NoData           | NoData             | NoData            | NoData           | NoData           | NoData           | NoData             |
| 3     | 383311  | 394647   | NoData            | NoData           | NoData           | NoData           | NoData             | NoData            | NoData           | NoData           | NoData           | NoData             |
| 4     | 383290  | 394654   | NoData            | NoData           | 0.35             | 0.38             | 0.64               | NoData            | NoData           | 30.04            | 30.07            | 30.33              |
| 5     | 383297  | 394654   | NoData            | NoData           | 0.29             | 0.32             | 0.58               | NoData            | NoData           | 30.04            | 30.07            | 30.33              |
| 6     | 383304  | 394654   | NoData            | NoData           | NoData           | NoData           | NoData             | NoData            | NoData           | NoData           | NoData           | NoData             |
| 7     | 383311  | 394654   | NoData            | NoData           | NoData           | NoData           | NoData             | NoData            | NoData           | NoData           | NoData           | NoData             |
| 8     | 383290  | 394661   | NoData            | NoData           | 0.38             | 0.41             | 0.67               | NoData            | NoData           | 30.04            | 30.07            | 30.33              |
| 9     | 383297  | 394661   | NoData            | NoData           | 0.35             | 0.38             | 0.64               | NoData            | NoData           | 30.04            | 30.07            | 30.33              |
| 10    | 383304  | 394661   | NoData            | NoData           | NoData           | NoData           | NoData             | NoData            | NoData           | NoData           | NoData           | NoData             |
| 11    | 383311  | 394661   | NoData            | NoData           | NoData           | NoData           | NoData             | NoData            | NoData           | NoData           | NoData           | NoData             |
| 12    | 383290  | 394668   | NoData            | NoData           | 0.38             | 0.41             | 0.67               | NoData            | NoData           | 30.04            | 30.07            | 30.33              |
| 13    | 383297  | 394668   | NoData            | NoData           | 0.37             | 0.40             | 0.66               | NoData            | NoData           | 30.04            | 30.07            | 30.33              |
| 14    | 383304  | 394668   | NoData            | NoData           | 0.27             | 0.30             | 0.53               | NoData            | NoData           | 30.04            | 30.07            | 30.34              |
| 15    | 383311  | 394668   | NoData            | NoData           | NoData           | NoData           | 0.01               | NoData            | NoData           | NoData           | NoData           | 30.34              |
| 16    | 383290  | 394675   | NoData            | NoData           | 0.39             | 0.42             | 0.69               | NoData            | NoData           | 30.04            | 30.07            | 30.34              |

| Label                       | Easting | Northing | 50% AEP<br>(+53%)   | 5% AEP<br>(+53%)    | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 0.1% AEP<br>(+53%) | 50% AEP<br>(+53%)   | 5% AEP<br>(+53%)    | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 0.1% AEP<br>(+53%) |
|-----------------------------|---------|----------|---------------------|---------------------|------------------|------------------|--------------------|---------------------|---------------------|------------------|------------------|--------------------|
|                             |         |          | Depth               | Depth               | Depth            | Depth            | Depth              | Height              | Height              | Height           | Height           | Height             |
| 17                          | 383297  | 394675   | NoData              | NoData              | 0.26             | 0.29             | 0.56               | NoData              | NoData              | 30.04            | 30.07            | 30.34              |
| 18                          | 383304  | 394675   | NoData              | NoData              | NoData           | 0.10             | 0.37               | NoData              | NoData              | NoData           | 30.08            | 30.34              |
| 19                          | 383311  | 394675   | NoData              | NoData              | NoData           | NoData           | 0.21               | NoData              | NoData              | NoData           | NoData           | 30.34              |
| 20                          | 383290  | 394682   | NoData              | NoData              | 0.32             | 0.36             | 0.62               | NoData              | NoData              | 30.04            | 30.08            | 30.34              |
| 21                          | 383297  | 394682   | NoData              | NoData              | 0.21             | 0.24             | 0.51               | NoData              | NoData              | 30.04            | 30.08            | 30.34              |
| 22                          | 383304  | 394682   | NoData              | NoData              | 0.10             | 0.14             | 0.40               | NoData              | NoData              | 30.04            | 30.08            | 30.34              |
| 23                          | 383311  | 394682   | NoData              | NoData              | NoData           | NoData           | 0.23               | NoData              | NoData              | NoData           | NoData           | 30.34              |
| 24                          | 383290  | 394689   | NoData              | NoData              | 0.39             | 0.43             | 0.69               | NoData              | NoData              | 30.04            | 30.08            | 30.34              |
| 25                          | 383297  | 394689   | NoData              | NoData              | 0.36             | 0.39             | 0.66               | NoData              | NoData              | 30.04            | 30.08            | 30.34              |
| 26                          | 383304  | 394689   | NoData              | NoData              | 0.21             | 0.24             | 0.51               | NoData              | NoData              | 30.04            | 30.08            | 30.34              |
| 27                          | 383311  | 394689   | NoData              | NoData              | 0.01             | 0.02             | 0.21               | NoData              | NoData              | 30.04            | 30.08            | 30.34              |
| 28                          | 383290  | 394696   | NoData              | 0.02                | 0.54             | 0.57             | 0.84               | NoData              | 29.52               | 30.04            | 30.08            | 30.34              |
| 29                          | 383297  | 394696   | NoData              | 0.00                | 0.46             | 0.49             | 0.76               | NoData              | 29.58               | 30.04            | 30.08            | 30.34              |
| 30                          | 383304  | 394696   | NoData              | 0.00                | 0.43             | 0.46             | 0.73               | NoData              | 29.62               | 30.04            | 30.08            | 30.34              |
| 31                          | 383311  | 394696   | NoData              | 0.00                | 0.37             | 0.41             | 0.68               | NoData              | 29.67               | 30.04            | 30.08            | 30.35              |
| Max value in selected area: |         |          | Could not determine | Could not determine | 0.42             | 0.46             | 0.72               | Could not determine | Could not determine | 30.04            | 30.08            | 30.34              |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Height values are shown in mAOD, and depth values are shown in metres.

Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.

If no height or depth data is available for a scenario, no table will be shown.

'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.



**Defences removed  
climate change  
modelled fluvial  
extent and height**

Location (easting/northing)  
**383302/394673**

Scale Created  
**1:500 23 Oct 2024**

Model name  
**Chorlton Platt Gore  
Model 2024**

 Selected area

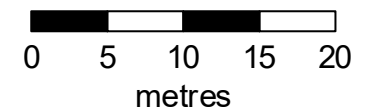
 Main river

Modelled 2D grid

*Water level in mAOD*

-  0 - 30.0
-  30.0 - 30.125
-  30.125 - 30.25
-  30.25 - 30.375
-  30.375 - 30.5
-  30.5 - 30.625
-  30.625 - 30.75
-  30.75 - 30.875
-  30.875 - 31.0

This map shows the  
0.1% AEP +53% height data



## Sample point data

### Defences removed climate change

| Label | Easting | Northing | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 1% AEP<br>(+85%) | 0.1% AEP<br>(+53%) | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 1% AEP<br>(+85%) | 0.1% AEP<br>(+53%) |
|-------|---------|----------|------------------|------------------|------------------|--------------------|------------------|------------------|------------------|--------------------|
|       |         |          | Depth            | Depth            | Depth            | Depth              | Height           | Height           | Height           | Height             |
| 1     | 383297  | 394647   | NoData           | NoData           | NoData           | NoData             | NoData           | NoData           | NoData           | NoData             |
| 2     | 383304  | 394647   | NoData           | NoData           | NoData           | NoData             | NoData           | NoData           | NoData           | NoData             |
| 3     | 383311  | 394647   | NoData           | NoData           | NoData           | NoData             | NoData           | NoData           | NoData           | NoData             |
| 4     | 383290  | 394654   | 0.34             | 0.37             | 0.46             | 0.64               | 30.04            | 30.06            | 30.16            | 30.33              |
| 5     | 383297  | 394654   | 0.28             | 0.31             | 0.40             | 0.58               | 30.04            | 30.06            | 30.16            | 30.33              |
| 6     | 383304  | 394654   | NoData           | NoData           | NoData           | NoData             | NoData           | NoData           | NoData           | NoData             |
| 7     | 383311  | 394654   | NoData           | NoData           | NoData           | NoData             | NoData           | NoData           | NoData           | NoData             |
| 8     | 383290  | 394661   | 0.38             | 0.40             | 0.50             | 0.67               | 30.04            | 30.06            | 30.16            | 30.33              |
| 9     | 383297  | 394661   | 0.34             | 0.37             | 0.46             | 0.64               | 30.04            | 30.06            | 30.16            | 30.33              |
| 10    | 383304  | 394661   | NoData           | NoData           | NoData           | NoData             | NoData           | NoData           | NoData           | NoData             |
| 11    | 383311  | 394661   | NoData           | NoData           | NoData           | NoData             | NoData           | NoData           | NoData           | NoData             |
| 12    | 383290  | 394668   | 0.37             | 0.40             | 0.49             | 0.67               | 30.04            | 30.06            | 30.16            | 30.33              |
| 13    | 383297  | 394668   | 0.36             | 0.39             | 0.48             | 0.66               | 30.04            | 30.06            | 30.16            | 30.33              |
| 14    | 383304  | 394668   | 0.27             | 0.29             | 0.37             | 0.52               | 30.04            | 30.06            | 30.16            | 30.33              |
| 15    | 383311  | 394668   | NoData           | NoData           | NoData           | 0.01               | NoData           | NoData           | NoData           | 30.34              |
| 16    | 383290  | 394675   | 0.39             | 0.41             | 0.51             | 0.68               | 30.04            | 30.06            | 30.16            | 30.33              |

| Label                       | Easting | Northing | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 1% AEP<br>(+85%) | 0.1% AEP<br>(+53%) | 1% AEP<br>(+41%) | 1% AEP<br>(+53%) | 1% AEP<br>(+85%) | 0.1% AEP<br>(+53%) |
|-----------------------------|---------|----------|------------------|------------------|------------------|--------------------|------------------|------------------|------------------|--------------------|
|                             |         |          | Depth            | Depth            | Depth            | Depth              | Height           | Height           | Height           | Height             |
| 17                          | 383297  | 394675   | 0.26             | 0.28             | 0.38             | 0.55               | 30.04            | 30.06            | 30.16            | 30.33              |
| 18                          | 383304  | 394675   | NoData           | 0.09             | 0.18             | 0.36               | NoData           | 30.06            | 30.16            | 30.34              |
| 19                          | 383311  | 394675   | NoData           | NoData           | 0.03             | 0.21               | NoData           | NoData           | 30.16            | 30.34              |
| 20                          | 383290  | 394682   | 0.32             | 0.34             | 0.44             | 0.62               | 30.04            | 30.06            | 30.16            | 30.34              |
| 21                          | 383297  | 394682   | 0.20             | 0.23             | 0.33             | 0.51               | 30.04            | 30.06            | 30.16            | 30.34              |
| 22                          | 383304  | 394682   | 0.10             | 0.12             | 0.22             | 0.40               | 30.04            | 30.06            | 30.16            | 30.34              |
| 23                          | 383311  | 394682   | NoData           | NoData           | 0.05             | 0.23               | NoData           | NoData           | 30.16            | 30.34              |
| 24                          | 383290  | 394689   | 0.39             | 0.41             | 0.51             | 0.69               | 30.04            | 30.06            | 30.16            | 30.34              |
| 25                          | 383297  | 394689   | 0.35             | 0.38             | 0.48             | 0.66               | 30.04            | 30.06            | 30.16            | 30.34              |
| 26                          | 383304  | 394689   | 0.21             | 0.23             | 0.33             | 0.51               | 30.04            | 30.06            | 30.16            | 30.34              |
| 27                          | 383311  | 394689   | 0.00             | 0.01             | 0.05             | 0.21               | 30.04            | 30.06            | 30.16            | 30.34              |
| 28                          | 383290  | 394696   | 0.53             | 0.56             | 0.65             | 0.84               | 30.04            | 30.06            | 30.16            | 30.34              |
| 29                          | 383297  | 394696   | 0.45             | 0.48             | 0.58             | 0.76               | 30.04            | 30.06            | 30.16            | 30.34              |
| 30                          | 383304  | 394696   | 0.42             | 0.45             | 0.55             | 0.73               | 30.04            | 30.06            | 30.16            | 30.34              |
| 31                          | 383311  | 394696   | 0.37             | 0.39             | 0.49             | 0.67               | 30.04            | 30.06            | 30.16            | 30.34              |
| Max value in selected area: |         |          | 0.42             | 0.44             | 0.54             | 0.72               | 30.04            | 30.06            | 30.16            | 30.34              |

Data in this table comes from the Chorlton Platt Gore Model 2024 model.  
Height values are shown in mAOD, and depth values are shown in metres.  
Any blank cells show where a particular scenario has not been modelled for this location.

Cells which contain text 'NoData' for a scenario show that return period has been modelled but there is no flood risk for that return period for that location.  
If no height or depth data is available for a scenario, no table will be shown.  
'Max value in selected area' is the deepest depth or highest height at any location within your drawn boundary.

## Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

Your Lead Local Flood Authority is Manchester District.

## About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

## Flood risk activity permits

Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

[Find out more about flood risk activity permits](#)

## Help and advice

Contact the Greater Manchester Merseyside and Cheshire Environment Agency team at [inforequests.gmmc@environment-agency.gov.uk](mailto:inforequests.gmmc@environment-agency.gov.uk) for:

- [more information about getting a product 5, 6, 7 or 8](#)
- general help and advice about the site you're requesting data for

## **Appendix E – Consultation Responses**

**Matt Bell**

---

**From:** wastewaterdeveloperservices@uuplc.co.uk  
**Sent:** 23 October 2024 14:30  
**To:** Sam Shaw  
**Subject:** RE: Our ref 06498720 - Request for Information - 40 Demesne Road, Manchester, M16 8HJ (FRA 24 1099)

Good Afternoon,

Thank you for your sewer capacity email, please see below:

**UU REF 06498720 – Sewer Capacity Check – 40 Demesne Road, Manchester**

I can confirm that we do not have modelled flood risk within the vicinity of the proposed development.

Please note that United Utilities Water Limited (Uuw) can only record and check flooding events which are reported to us and we have to comply with our Regulators instructions on the qualification of flooding events.

Our response does not include:

- any sewer flooding events caused by blockages or collapses which are the result of third party actions, natural events or other actions over which Uuw has no control and not a facet of sewer capacity; or
- any historical sewer flooding events that have been resolved as a result of investment in our infrastructure.

As with all development sites, we recommend you liaise with our water and wastewater engineers by contacting our Developer Services team so the details of your development proposal can be considered further. Details can be found at the following link.

<https://www.unitedutilities.com/services/builders-developers/>

Should you require any further information please do not hesitate to contact me.

Regards

Anthony



**Anthony Laithwaite**  
Ww Engineer  
Developer Services & Metering  
Customer Services

**T:** 01925 429090  
unitedutilities.com

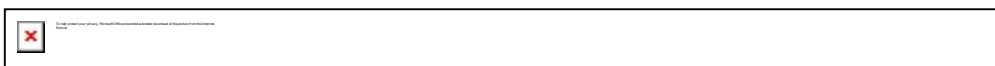
----- Original Message -----

**From:** wastewaterdeveloperservices@uuplc.co.uk [wastewaterdeveloperservices@uuplc.co.uk]

**Sent:** 23/10/2024 12:15

**To:** s.shaw@thelkgroup.com

**Subject:** Our ref 06498720 - Request for Information - 40 Demesne Road, Manchester, M16 8HJ (FRA 24 1099)



Good Afternoon Sam

Thank you for your email.

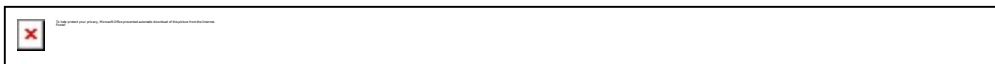
Your request has been sent to the engineer, who will respond to you directly.

Kind Regards

|                                                                                                                 |                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br>Water for the North West | <b>Yvonne Manboard</b><br>Customer Advisor Advanced<br>Developer Services & Metering<br>Customer Services<br>unitedutilities.com<br><b>Tel:</b> 0345 072 6067<br>(Option 2 for Wastewater Services) |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

If you believe you have received a good service today, you can report this on the link below. This only takes a minute, and I would really appreciate it.

<https://unitedutilities.thewowawards.co.uk/nominate>



----- Original Message -----

**From:** Sam Shaw [s.shaw@thelkgroup.com]

**Sent:** 18/10/2024 12:31

**To:** wastewaterdeveloperservices@uuplc.co.uk

**Subject:** Request for Information - 40 Demesne Road, Manchester, M16 8HJ (FRA 24 1099)

To whom it may concern,

LK Consult Ltd. has been commissioned to undertake a Flood Risk Assessment (FRA)/ Sustainable Drainage Systems (SuDS) Strategy, for a site located at 40 Demesne Road, Manchester, M16 8HJ, centered at approximate National Grid Reference 383302 394687.

The area of interest appears to be within Flood Zone 2.

The site location is attached to this email.

To complete the FRA/SuDS Strategy, we would be grateful if you could supply us with the following, if available, for the vicinity of the site:

1. Details of any flood defences in the immediate area, including their extent, crest levels (and datum), assumed level of standard, construction and maintenance regime, as well as any other structures which may influence the local hydraulics.
2. Records of any historic flood events and potential sources of flooding from rivers, land drainage, groundwater, foul and surface water sewers on site and in the area.
3. Any restrictions applied to ordinary watercourses and sewers in the area.
4. Highway drainage restrictions and records.
5. Indications if the site is within the Critical Drainage Area.
6. Policies that may relate to Sustainable Drainage Systems (SuDS).

If you have any queries, please do not hesitate to get in touch.

We are, of course, happy to pay your reasonable charge for this service. Please let me know by return what information is available, what the charge will be, and we will pay the relevant fees by debit card as soon as possible.

Any advice or recommendations you may have regarding the potential discharges from the development of this site would also be appreciated.

We will be in contact with all other relevant authorities to get a more complete understanding of the issues in the area.

Regards

Sam Shaw



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