FLOOD RISK ASSESSMENT

Land at 47 Sedgeborough Rd, Whalley Range, Manchester M16 7EU

Reference: U0639 FRA-v2

Dec-25

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Purpose of this report

1.1 Urban Water has been appointed to undertake a Level 2 – Scoping Study Flood Risk Assessment for a development located at M16 7EU.

Objectives

1.2 The objectives of this FRA are to demonstrate the following:

- Whether the proposed development will likely be affected by current or future flooding.
- Whether the proposed development will increase flood risk elsewhere.
- Whether the flood risks associated with the proposed development can be satisfactorily managed.
- Whether the measures proposed to deal with the flood risk are sustainable.

Documents Consulted

1.3 To achieve these objectives, the following documents have been consulted and referenced:

The National Planning Policy Framework (NPPF)
CIRIA C753 document The SuDS Manual, 2015
Local Flood Risk Management Strategy (LFRMS)
Level 1 Strategic Flood Risk Assessment (SFRA)
Aerial photographs and topographical survey of the site
British Geological Society Records
Local Council flood Maps
Environment Agency flood maps
The CIRIA publication 'C635 Designing for exceedance in urban drainage Good practice'

Development Site and Location

2.1 The site is located at Sedgeborough Road, Whalley Range. The nearest postcode is M16 7EU. Refer to appendix A for site location plan.

2.2 The current use of the site is the car park of a disused building. The current user vulnerability classification of the site is Less vulnerable . The site is located in the River Flood Zone 2. Refer to Appendix B for more details.

Development Proposals

2.3 The proposed development includes the construction of a new residential building adjacent to 47 Sedgeborough Road to provide two apartments, including associated access, parking, and landscaping.. Refer to Appendix B for the layout of the proposed development.

2.4 The vulnerability classification of the proposed development is More vulnerable with an estimated lifetime between 50 and 100 years.

Site Hydrology and Hydrogeology

Hydrology 2.5 The River Irwell is located approximately 1500 m away from the development.

Aquifer 2.6 The development is located within a secondary aquifer type A. Aquifers type A consist of permeable layers capable of supporting water supplies at a local rather than strategic scale. They are generally aquifers formerly classified as minor aquifers.

Source Protection Zone 2.7 The site is not located within a Source Protection Zone.

Groundwater Levels 2.8 The ground water levels for this site are unknown.

Site Geology

Bedrock

2.9 The British Geological Survey records of the site show that it is located within the Wilmslow Sandstone Formation - Sandstone.

Superficial Deposits

2.10 The British Geological Survey records show that the superficial deposits are Glaciofluvial Sheet Deposits, Devensian - Sand and Gravel.

National Planning Policy Framework (NPPF)

3.1 The NPPF and its technical guidance is a set of planning policies with the key objective of contributing to sustainable development. As part of it, they ensure that flood risk and sustainability are considered during the planning process. This ensures that developments are not located in flood risk areas and directs developments to lower risk areas. The NPPF applies a sequential risk-based approach to determining land suitability for development in flood risk areas. The NPPF also encourages developers to seek opportunities to reduce the overall level of flood risk through the development layout and the application of Sustainable Drainage Systems (SuDS).

The Flood and Water Management Act (2010)

3.2 The Flood and Water Management Act aims to reduce the flood risk associated with extreme weather events. It provides robust flood risk management for people, homes and businesses and encourages using SuDS for developments. A robust SuDS strategy should consider the recommendations in this Flood Risk Assessment.

Strategic Flood Risk Assessment (SFRA)

3.3 Planning policy with regard to development and flood risk in the area is detailed in the Strategic Flood Risk Assessment (SFRA) which was published in 2010. The proposed development site is located within the administrative boundary of the Manchester City Council.

3.4 The SFRA commits to direct new development to locations at the lowest flood risk. The SFRA provides information on the levels and flood hazards that could result from flooding. The Environment Agency flood zone maps and the SFRA ignore the presence of existing flood defences when defining the potential extent of flooding.

3.5 This report follows the guidance given in the Strategic Flood Risk Assessment by evaluating the flood risk and providing relevant flood mitigation.

4.1 The NPPF guidance states that the sequential test "is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. This means avoiding, so far as possible, development in current and future medium and high flood risk areas considering all sources of flooding including areas at risk of surface water flooding."

Applicability of the Sequential Test

4.2 The flood risks were determined by identifying all the sources of flooding and assessing their possible impact and likelihood to development. It is confirmed that the development is:

- In Flood Zone 2, based on the Planning Flood Risk Map
- In Flood Zone 2, based on the Flood Level information Provided by the Environment Agency
- At Medium risk of surface flooding
- At very low risk of groundwater flooding
- Within a critical drainage area
- Outside of an area with sewer flooding

4.3 In accordance with the NPPF, a Sequential Test is required given the identified flood risk at the site. The assessment has been undertaken within the red line boundary of the planning application, and the proposed development has been located in the area of lowest flood risk available within the site. With regard to alternative reasonably available sites, it is considered unlikely that opportunities exist in areas of lower flood probability, given the small scale of the scheme and its requirement to be delivered in proximity to the established land use and ownership. On this basis, it is concluded that the proposed development satisfies the requirements of the Sequential Test. Notwithstanding this, further engagement with the Local Planning Authority is recommended to confirm the proportionality of this approach.

Exception Test

4.4 Fluvial flood risk has been assessed using the Environment Agency Flood Map for Planning, in accordance with the sequential risk-based approach set out in the NPPF and Planning Practice Guidance. The requirement for the Exception Test is determined by the vulnerability classification of the proposed land use in relation to the mapped Flood Zone designation. This ensures that the need for an Exception Test is based on the statutory flood map, while more detailed datasets are used within the FRA to refine site-specific risk and mitigation measures.

Step 1
Flood Zone categorisation

4.5 The proposed development lies within Flood Zone 2 on the Environment Agency Flood Map for Planning. The Flood Zone 2 is considered to have a medium probability of flooding with a 1000 to 100 years annual probability or 0.1-1.0%AEP.

Step 2
Flood risk vulnerability

4.6 In Annex 3: Flood risk vulnerability classification of the NPPF Planning Practice Guide, the proposed development is classified as 'More vulnerable '.

Step 3
Flood Zone incompatibility

4.7 Flood risk vulnerability and flood zone 'incompatibility' table 2 of the NPPF Planning Practice Guide states that More vulnerable developments in flood Zone 2 do not require an exception test.

The Exception Test

4.8 The exception test is not required.

5.1 The development has been assessed for the following potential flood risks, river and tidal flood risk, surface water flooding, flooding from groundwater, reservoir flood risk and drainage systems.

Flood Defence and Historic Flooding

5.2 The Environment Agency records show that the site does not benefit from flood defences. They also show that the area around the site has not been flooded in the past. See Appendix C for details.

Flooding from river and sea

5.3 The site is affected by River Flooding. The proposed development lies within Flood Zone 2 on the Environment Agency Flood Map for Planning. The Flood Zone 2 is considered to have a medium probability of flooding with a 1000 to 100 years annual probability or 0.1-1.0%AEP.

5.4 The climate change allowance has been taken from the EA peak river flow map. The vulnerability of the development, the design life of the building, and the flood zone classification were used to determine it. The climate change allowance for this site is 35%. The nearest climate change allowance of 30% provided by the EA was used as the most representative to complete this assessment.

5.5 The levels provided by the Environment Agency are shown in table 1 below. Further details are provided in Appendix D.

Flood levels in channel

Return Period	Flood Level (m AOD)
1 in 20 (5%)	NIL
1 in 30 (3.3%	NIL
1 in 100 (1%)	NIL
1 in 100 + 30%(CC)	NIL
1 in 1000 (0.1%)	NIL

Flood levels at Site

Return Period	Flood Level (m AOD)
1 in 20 (5%)	NIL
1 in 30 (3.3%	NIL
1 in 100 (1%)	NIL
1 in 100 + 30%(CC)	NIL
1 in 1000 (0.1%)	NIL
1 in 1000 + 30% (0.1%)	30.721

5.6 The site is not affected by the 1 in 100 + CC storm event. Nevertheless theFlood data from the Environment Agency (Corn Brook, 2017) indicates a maximum predicted flood level of 30.721 m AOD under the 1 in 1000 +30% CC scenario.

Surface water (overland flows) flood risk

5.7 The Environment Agency maps show that the flood risk from surface water is medium. The residual risk of localised ponding remains likely. The Environment Agency surface water flood risk maps are defined by applying a specific procedure based on digital terrain models and assumptions regarding infiltration and urban drainage losses. The surface water flood maps are determined by the Environment Agency as follows:

5.8 *"Once we combined the data from local detailed models and the national model, we removed flooding to a depth of less than 75mm. This is because in surface water flood modelling, most land is covered by some water as rain falls across the area. While this very shallow floodwater may be an inconvenience, it is generally unlikely to prevent access or cause flooding to properties.*

Building footprints are raised above their surroundings as part of the modelling process. We have used an uplift of 30cm above the 'zero' elevation of the building. This means that in the raw model outputs, buildings can look like they are not at risk of flooding.

The map does not provide property-specific data and cannot specify whether individual buildings are themselves at risk. However, it is important that the RoFSW maps indicate where buildings are considered to be in a flood risk area.

To do this, we infill building footprints, based on how much of the building's exterior wall and area of the property is wet.

We used building outlines from the OS MasterMap layer to do this.

Finally, we infill small dry areas (less than 50m2) surrounded by floodwater and remove small wet areas (less than 100m2). This is an important step in cleaning our data."

5.9 The strategic flood risk for the Manchester City Council confirms that the flood risk for the site is Medium. The surface water flood data has not been produced to determine the flood levels at individual properties. This data does not contain the climate change allowances for depth levels. Therefore, the Design flood level given below is an assumption. The new development may

have greater or lower surface water flood depths.

5.10 Based on the Environment Agency and the Strategic Flood Risk Assessment's surface water mapping, together with the presence of surface water drainage systems at the site and surrounding area, it is concluded that the site is at Medium risk of flooding from surface water sources. The depth of water is taken from the future flood risk of the RoFSW dataset. This dataset shows future flood risk based on UKCP18 climate projections and the high-emission RCP 8.5 scenario. It uses the 'Central' allowance for the 2050s (2040–2060), accounting for increased peak rainfall and surface water flooding. The potential depth of water is 200 mm with a low probability of occurrence. The average ground level at the location of the surface water flooding is 30.6 m AOD. The surface water flood level on this site could be in the region of 30.8 m AOD.This level has been taken to complete this flood risk assessment

Flooding from drainage systems in adjacent areas

5.11 The council records have been reviewed. The flooding from drainage incidents maps were not found in the Strategic Flood Risk Assessment. Therefore, for the purpose of this report, it has been assumed that the risk of flooding from drainage systems is low.

Reservoirs Risks

5.12 The Reservoir Flood Map (RFM) produced by the Environment Agency do not show the risk to individual properties of dam breach flooding. The maps do not indicate or relate to any particular probability of dam breach flooding. The maps were prepared for emergency planning purposes. They can be used to help reservoir owners produce on-site plans, and the Local Resilience Forum produce off-site plans and to prioritise areas for evacuation/early warning in the event of a potential dam failure. The RFM shows that the development could be within the possible dam breach flooding path. See Appendix C.

Groundwater flood risk

5.13 The British Geological Survey's flood risk susceptibility maps show that the development has limited susceptibility to groundwater flooding. The risk of groundwater flood to the site is considered very low. Refer to appendix C for

record drawings.

Critical Drainage Areas

5.14 The development falls within a Critical Drainage Area. The risks of critical problems and the increase of downstream flooding are high. Critical Drainage Area (CDA) is an area that has critical drainage problems and which has been notified to the local planning authority by the Environment Agency.

6.1 The Flood hazard assessment has demonstrated that the site is:

- In Flood Zone 2, based on the Planning Flood Risk Map
- In Flood Zone 2, based on the Flood Level information Provided by the Environment Agency
- At Medium risk of surface flooding
- At very low risk of groundwater flooding
- Within a critical drainage area
- Outside of an area with sewer flooding

6.2 Under the NPPF it is necessary to demonstrate that, for any new development on the site, it is possible to provide an adequate level of flood protection for personnel working or living at the development.

Design Flood Level

6.3 The design flood level is the maximum estimated water level during the design storm event including an allowance for climate change in line with current best practice and the national planning policy guidance.

6.4 The Design Flood Level for this development has been determined by evaluating the levels from the Fluvial/Sea, Surface Water and Groundwater flood levels.

6.5 For this site, the Design Flood Level is 30.8m AOD. This is the highest level and corresponds to the Surface Water Flood Level.

Flood Protection

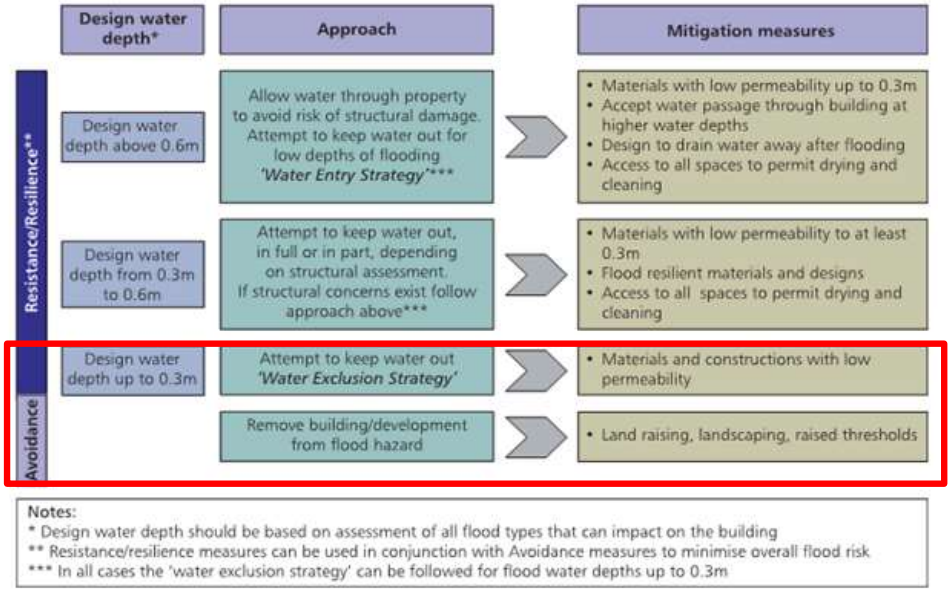
6.6 The National Planning Guidance standing advice and Environment Agency recommends that where possible, flood avoidance is provided by establishing the development's finished floor level 600mm above (freeboard) the design flood level. However, this level can be reduced if there is a high level of certainty about the estimated flood level. For this site the estimated free board has been determined to be 0.3m above the Design Flood Level due to the quality of the flood risk information available and the type of risk. The finished floor should be 31.1m AOD. It would involve a height differential of 0.5m. This is the distance between the average

external level (30.6m AOD) and the potential Finished Floor Level.

6.7 It is possible to achieve this FFL. As the foundations and other parts of the building may be in contact with water, the following flood mitigation is proposed.

6.8 The flood mitigation strategies for the development has been based on the CLG 2007 Improving the Flood Performance of New Buildings. See the figure below for the strategy highlighted in red. The strategy is based on the water level within the proximity to the building.

Rationale for flood resilient and/or resistant design strategies



6.9 The design water depth for this site is 0.2m. The development should utilise building materials that are suitable for a 'water exclusion strategy'. Materials classified as "Good" (highlighted in red) in the Figure below shall be used for new construction up to 31.4m AOD.

Flood resilience characteristics of building materials (based on laboratory testing)

Material	Resilience characteristics*		
	Water penetration	Drying ability	Retention of pre-flood dimensions, integrity
Bricks			
Engineering bricks (Classes A and B)	Good	Good	Good
Facing bricks (pressed)	Medium	Medium	Good
Facing bricks (handmade)	Poor	Poor	Poor
Blocks			
Concrete (3.5N, 7N)	Poor	Medium	Good
Aircrete	Medium	Poor	Good
Timber board			
OSB2, 11mm thick	Medium	Poor	Poor
OSB3, 18mm thick	Medium	Poor	Poor
Gypsum plasterboard			
Gypsum Plasterboard, 9mm thick	Poor	Not assessed	Poor
Mortars			
Below d.p.c. 1:3(cement:sand)	Good	Good	Good
Above d.p.c. 1:6(cement:sand)	Good	Good	Good

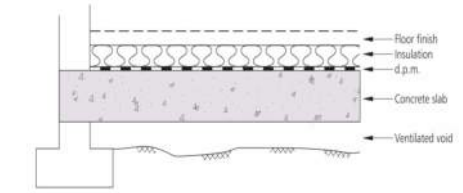
*Resilience characteristics are related to the testing carried out and exclude aspects such as ability to withstand freeze/thaw cycles, cleanability and mould growth

6.10 New services and fittings (communications wiring, heating systems, electrical services, water, electricity and gas meters) should be placed at above the level of 31.4m AOD. All service entries should be sealed (e.g. with expanding foam or similar closed cell material).

6.11 Closed-cell insulation should be used for pipes. Sealed PVC external framed doors or good fit and sealed wooden frames should be used.

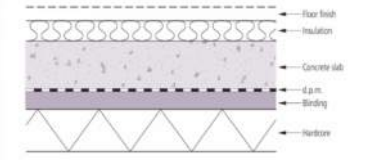
6.12 Suspended concrete floor slab at least 150mm thick is the preferred option. Beam and Block slabs with geomembrane and 75mm min screed can also be used. There should be a minimum space of 150mm ventilated void between the ground level and the bottom of the floor slab. Damp proof membranes should be included in the design. Floor insulation should be of the closed-cell type. Under floor services using ferrous materials should be avoided. Ceramic/concrete-based floor tiles, sitting on a bed of sand, cement render and water resistant grout can be used. Ground-bearing slabs are also an option. See figures below.

Suspended Concrete Slab detail



- Reinforced concrete slab at least 150mm thick and complying with structural requirements for uplift forces
- Damp proof membrane of polythene at least 1200 gauge
- Insulation as rigid closed-cell material
- Ceramic tiles or stone floor finishes and including skirting boards.

Ground bearing Concrete Slab detail

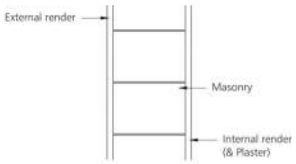


- Hardcore bed at least 100mm thick of well compacted inert material, blinded with fine inert material to provide a smooth base
- Damp proof membrane of polythene at least 1200 gauge
- Concrete slab at least 150mm thick
- Insulation as rigid closed-cell material
- Ceramic tiles or stone floor finishes and skirting boards.

6.13 Concrete blocks used in foundations should be sealed with an impermeable material or encased in concrete to prevent water movement from the ground to the wall construction.In new walls use extended periscope subfloor ventilators or fit removable airbrick covers; fix plasterboard sheets horizontally rather than vertically, or split sheets mid-height with a dado rail, to reduce the extent of replacement; specify lime- or cement-based renovating plasters or renders rather than gypsum-based, with water-resistant paint finishes. The use of water-proof, water-resistant or micro-porous surface coatings on masonry should be avoided as they can inhibit the drying-out of the building fabric.

6.14 Good quality facing bricks or external renders with water-repellent properties can be used for the external face. See the examples below of external walls that can be used.

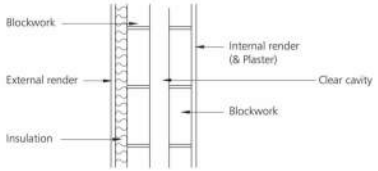
Solid External Wall



- External cement based render, preferably with lime content. Composition depends on masonry. The following mixes have good resilient properties:
  - 1 cement : 6 sand on bricks;
  - 1 cement : 4 sand: ½ lime on concrete blockwork or bricks;
  - 1 cement : 6 sand: 1 lime on Aircrete blocks.
- Masonry with minimum thickness of 300mm (thin mortar joint construction using Aircrete blocks is effective as demonstrated in laboratory tests) or alternatively reinforced concrete wall
- Internal cement-based render, preferably with lime content. Composition depends on masonry; the following mix is effective for flood resilience:
  - 1 cement : 6 sand: 1 lime on Aircrete.

  Apply external and internal renders, following good practice guidance, ensuring minimum total thickness of 20mm and at least two coats.
- Use external insulation in preference to internal insulation.

Cavity External Walls – Clear cavity

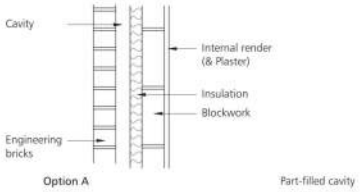


Clear cavity

- External cement based render, preferably with lime content. Composition depends on masonry; the following mixes are effective for flood resilience:
  - 1 cement: 4 sand: ½ lime on concrete blockwork (or bricks);
  - 1 cement: 6 sand: 1 lime on Aircrete.

  Apply render following good practice guidance, ensuring minimum total thickness of 20mm and two coats.
- Internal cement based render, preferably with lime content. Composition depends on masonry. The following mix works well:
  - 1 cement: 6 sand: 1 lime on Aircrete.
- Stainless steel wall ties should be used to minimise corrosion and consequent staining.

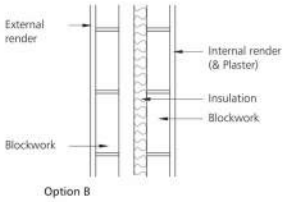
Cavity External Walls- Part fill Option A



Part-filled cavity – Option A

- External face consisting of engineering bricks up to required level for flood protection (up to 0.6m maximum above floor level plus one course). Other external facing materials can be used above this level, but ensure interface is watertight.
- Rigid insulation.
- Internal face consisting of blocks.
- Internal cement based render, preferably with lime content. Composition depends on masonry; the following mix is effective:
  - 1 cement : 6 sand: 1 lime on Aircrete.
- Ensure stainless steel wall ties are used to minimise corrosion and consequent staining.
- Sacrificial plasterboard can be used, but it needs to be removed between ground floor and flood level. The board should be fitted horizontally to make removal easier. In some cases a dado rail can be used to cover the joints.

Cavity External Walls- Part fill Option B



Part-filled cavity – Option B

- External cement based render, preferably with lime content. Composition depends on masonry; the following mixes are effective:
  - 1 cement : 4 sand: ½ lime on concrete blockwork
  - 1 cement : 6 sand: 1 lime on Aircrete.
- External face consisting of blocks.
- Rigid insulation.
- Internal face consisting of blocks.
- Internal cement based render, preferably with lime content. Composition depends on masonry; the following mix is effective for flood resilience:
  - 1 cement : 6 sand: 1 lime on Aircrete.
- Ensure stainless steel wall ties are used to minimise corrosion and consequent staining.

6.15 The Development Management Procedure Order (2015) requires that the Environment Agency and Council is consulted on developments within Areas with Critical Drainage Problems (ACDPs). The development is within a Critical Drainage Area, the local authority expects that the new development to reduce flood risks downstream, rather than having just neutral impact. It also expects that Sustainable Drainage Systems (SuDS) are used for managing surface water. Refer to section 7 of this report.

7.1 The NPPF specifically stipulates that consideration should be given to potential off-site flood impacts of any proposed development. These off-site impacts are in relation to the following:

- Surface water management
- Flood flow conveyance, storage and climate change

Surface Water Management

7.2 The surface water run-off will be disposed of using SuDS techniques. The aim is to provide a sustainable design that accommodates the proposed attenuation volume and replicates the existing drainage regime using the SuDS hierarchy, is shown in the figure below.

7.3 The Landis Top Soil classification is naturally wet. The SuDS techniques highlighted in red below could be used on-site. This assessment is based on the LANDIS Top Soil infiltration, ground conditions and available potential discharge points.

The SuDS Hierarchy (Source:EA Thames region, SuDS a practical guide)

	SUDS technique	Flood Reduction	Pollution Reduction	Landscape & Wildlife Benefit
Most Sustainable	**Living roofs**	✔	✔	✔
	Basins and ponds - Constructed wetlands - Balancing ponds - Detention basins - Retention ponds	✔	✔	✔
	Filter strips and swales	✔	✔	✔
	Infiltration devices - soakaways - infiltration trenches and basins	✔	✔	✔
	Permeable surfaces and filter drains - gravelled areas - solid paving blocks - porous paviors	✔	✔	
Least Sustainable	**Tanked systems** - over-sized pipes/tanks - storms cells	✔		

7.4 With no increase in the rate of surface water discharge from the site, compared to the site in its current configuration, the proposed development would have no adverse impact on surface water flood risk at the site or surrounding area. The SuDS should be designed at the detailed project stage.

Flood Flow conveyance and storage

7.5 Due to the size of the development and its location in the flood risk zone, flood compensation for this development is not required.

8.1 This flood risk assessment has identified the potential flooding mechanisms that could affect the site. As part of this, the following residual risks have been evaluated.

Public safety and Site Access

8.2 This assessment has demonstrated that the proposed development will have no adverse impact on flood risk in the area surrounding the site. Available evidence indicates that the development would not change surface water generation. Therefore, there is no basis to indicate that, with respect to flood risk, the proposed development would adversely impact public safety.

8.3 It will be necessary to ensure that all building users are fully informed of procedures to be implemented during the threat of imminent flooding.

Flood Warning and evacuation

8.4 The site is located outside an area covered by the Environment Agency Flood Alert service.

8.5 The occupants are encouraged to familiarise with Table 4 below. It shows the actions that must be taken for each flood warning or in the event of an evacuation notice.

8.6 Action to be taken in the event of an Alarm being Raised or a Flood Warning Received:
a. Raise the alarm and evacuate the site following the established Fire Drill procedures. The main assembly is as per the main house fire drill assembly point.
b. Contact Emergency Fire Services (999) if necessary and Environment Agency Floodline: (0845 988 1188) if the event is unexpected.
c. If safe to do so, locate and turn off critical services, e.g. water, gas & electricity.
d. Follow the routes below to evacuate the site altogether.

Actions that will be taken for each flood warning

Warning	Message	Timing	Action
 FLOOD ALERT	Flooding is possible. Be prepared.	2 hours to 2 days in advance of flooding.	- Be prepared for flooding. - Prepare a flood kit.
 FLOOD WARNING	Flooding is expected. Immediate action required.	Half an hour to 1 day in advance of flooding.	- Act now to protect your property. - Block doors with flood boards or sandbags and cover airbricks and other ventilation holes. - Move pets and valuables to a safe place. - Keep a flood kit ready. - Move any critical equipment and information to a safe location
 SEVERE FLOOD WARNING	Severe flooding. Danger to life.	When flooding poses a significant threat to life and different actions are required.	- Be ready should you need to evacuate from the property. - Co-operate with the emergency services and call 999 if you are in immediate danger.
Warning Removed	No further flooding is currently expected for your area.	Issued when a flood warning is no longer in force.	- Flood water may still be around and could be contaminated. - If you've been flooded, ring your buildings and contents insurance company as soon as possible.

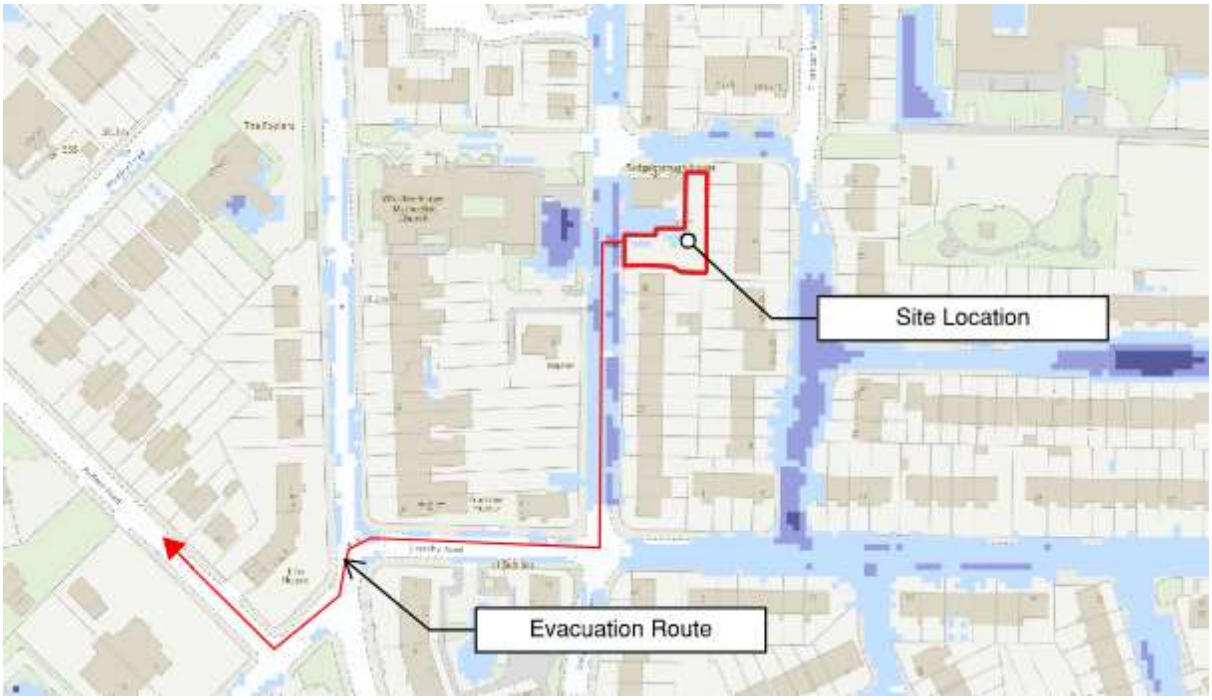
Useful local phone numbers

Please write your local phone numbers in the space provided below.
Make sure they are easy to find in the event of a flood.



8.7 The proposed evacuation route below shows how the development could be evacuated before the 1 in 1000 or 0.1% annual probability of flooding extreme flood occurs. Safe egress is achievable by following Sedgeborough Road, up to Catesby Road then following Rufford Road and reaching St Margaret´s Church which is shown to be beyond the extent of flooding. See figure below for details.

Evacuation Route



Conclusions 9

9.1 It is concluded that subject to the proposed mitigation measures, the site can be developed in accordance with the provisions of the NPPF and the requirements of the Environment Agency and the local planning authority.

9.2 This report demonstrates that the proposal will be safe, in terms of flood risk, for its design life and will not increase the flood risk elsewhere.

Appendix A


Site Location
383041.2 , 395508.3
Flaxpool Close
Stonesby Close
Thorncombe Road
Walford Street
Sedgeborough House
Western Lodge
Whalley Range Methodist Church
Manse
30.2m
2 to 8
10 to 16
12 to 18
20 to 26

Appendix B

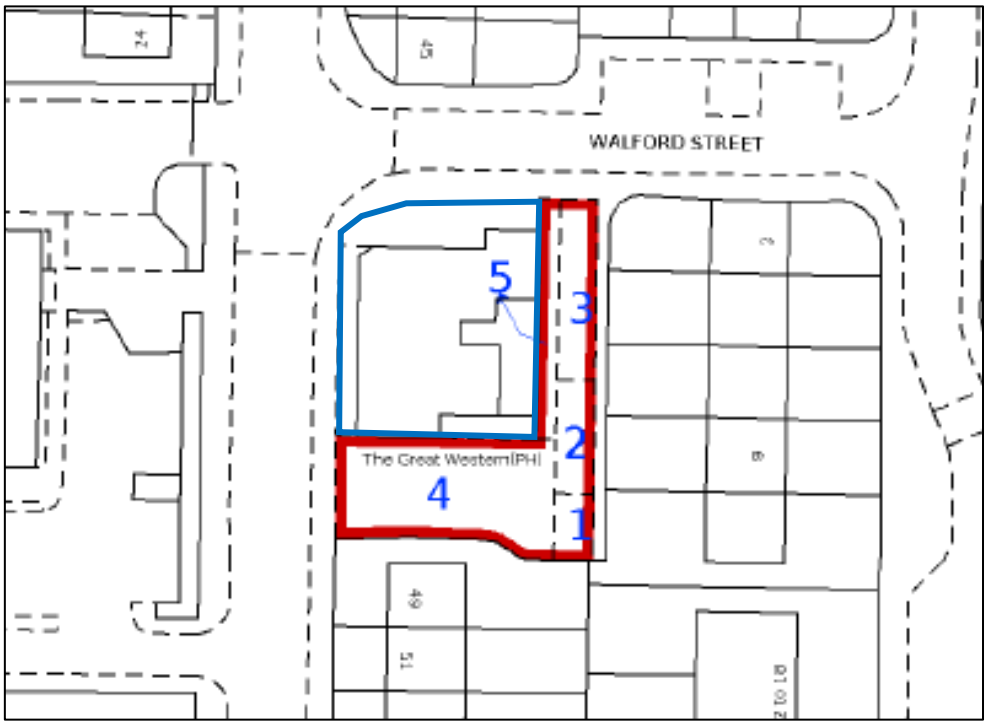
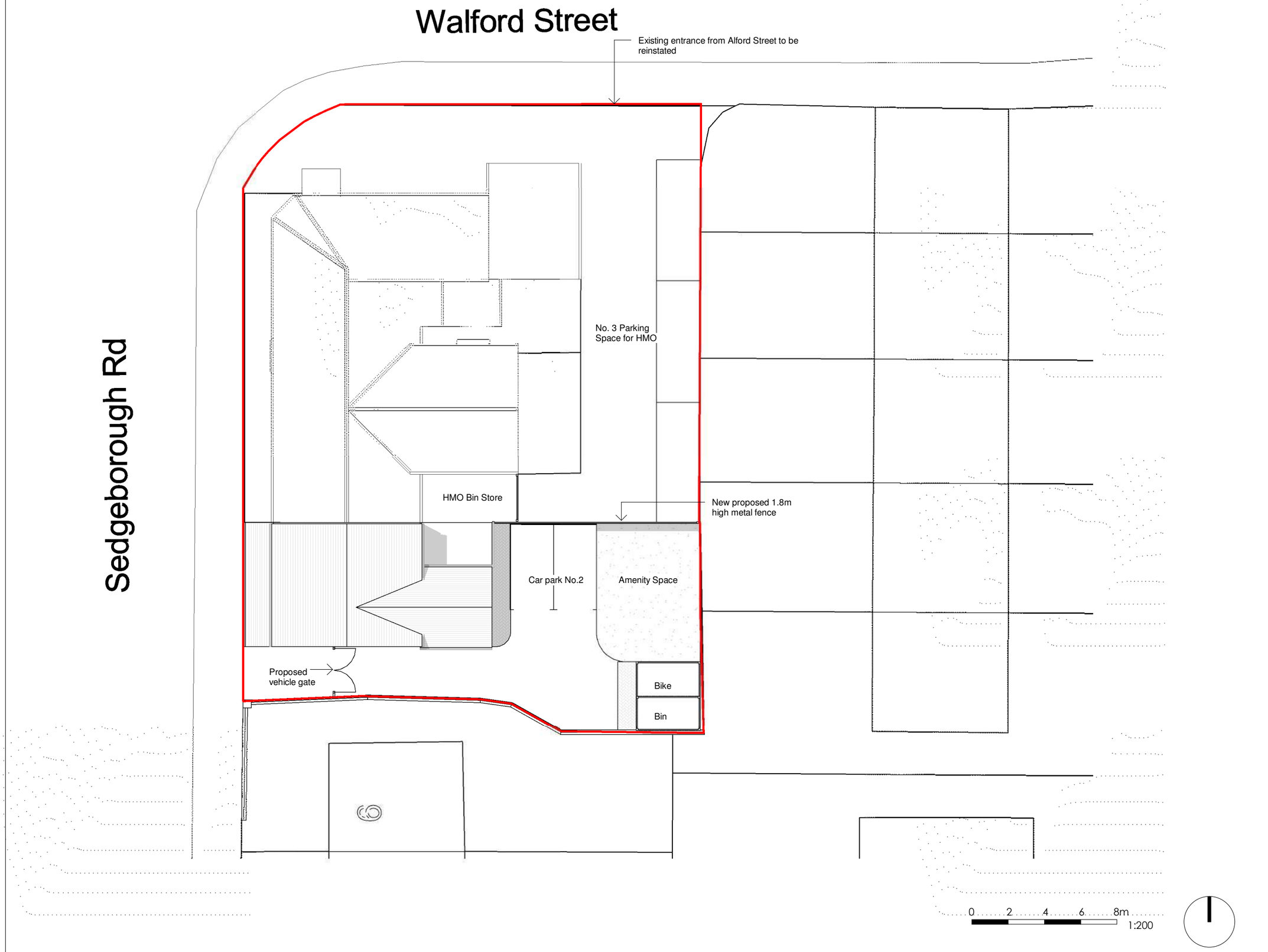


Figure 1: Extract of Land Resigry Plan with the site outlined red, and adjacent land in client's ownership outlined blue.



Figure 2: Aerial view of the site appproximately outlined red.

47 Sedgeborough Road is currently part in use as a 14 bed HMO which has recently been established through a positive Lawful Development Certificate application approved by



General Notes

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Copyright on this drawing retained by the Architect.

LEGEND

Site Boundary

No.	Date	Dwn	App	Revision or reason for issue
P3	25/11/2025	SA	SH	Amended Proposal
P2	12/11/2025	SA	SH	Amended Proposal
P1	07/11/2025	SA	SH	Initial Issue

Client

HD Rental Properties Ltd

createitstudios
leave an impression

Create It Studios (NW) Ltd
3 Stevenson Square,
Manchester
M1 1DN

info@createitstudios.co.uk

Project Title

47 Sedgeborough Road, Whalley Range, Manchester M16 7EU

Scale / North Point

1 : 200

Drawing Title

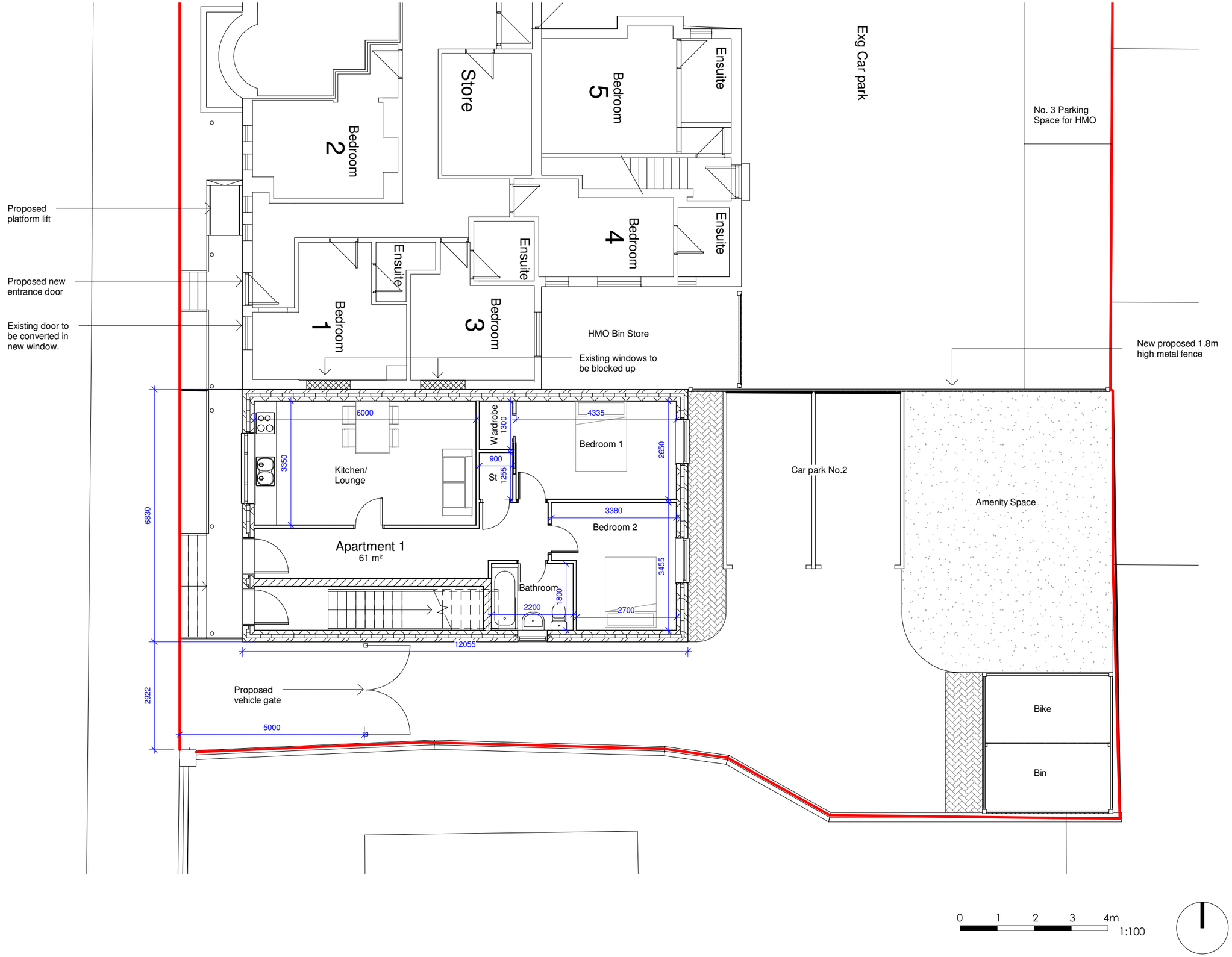
Proposed Site Plan

Drawing Number: A1635(02)AP001

Revision: P3

Drawing Status

Preliminary



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LEGEND

Site Boundary

No.	Date	Dwn	App	Revision or reason for issue
P3	25/11/2025	SA	SH	Amended Proposal
P2	12/11/2025	SA	SH	Amended Proposal
P1	07/11/2025	SA	SH	Initial Issue

Client

HD Rental Properties Ltd

Create It Studios (NW) Ltd
3 Stevenson Square,
Manchester
M1 1DN

info@createitstudios.co.uk

Project Title

47 Sedgeborough Road, Whalley Range, Manchester M16 7EU

Scale / North Point

1 : 100

Drawing Title

Proposed Ground Floor Plan

Drawing Number

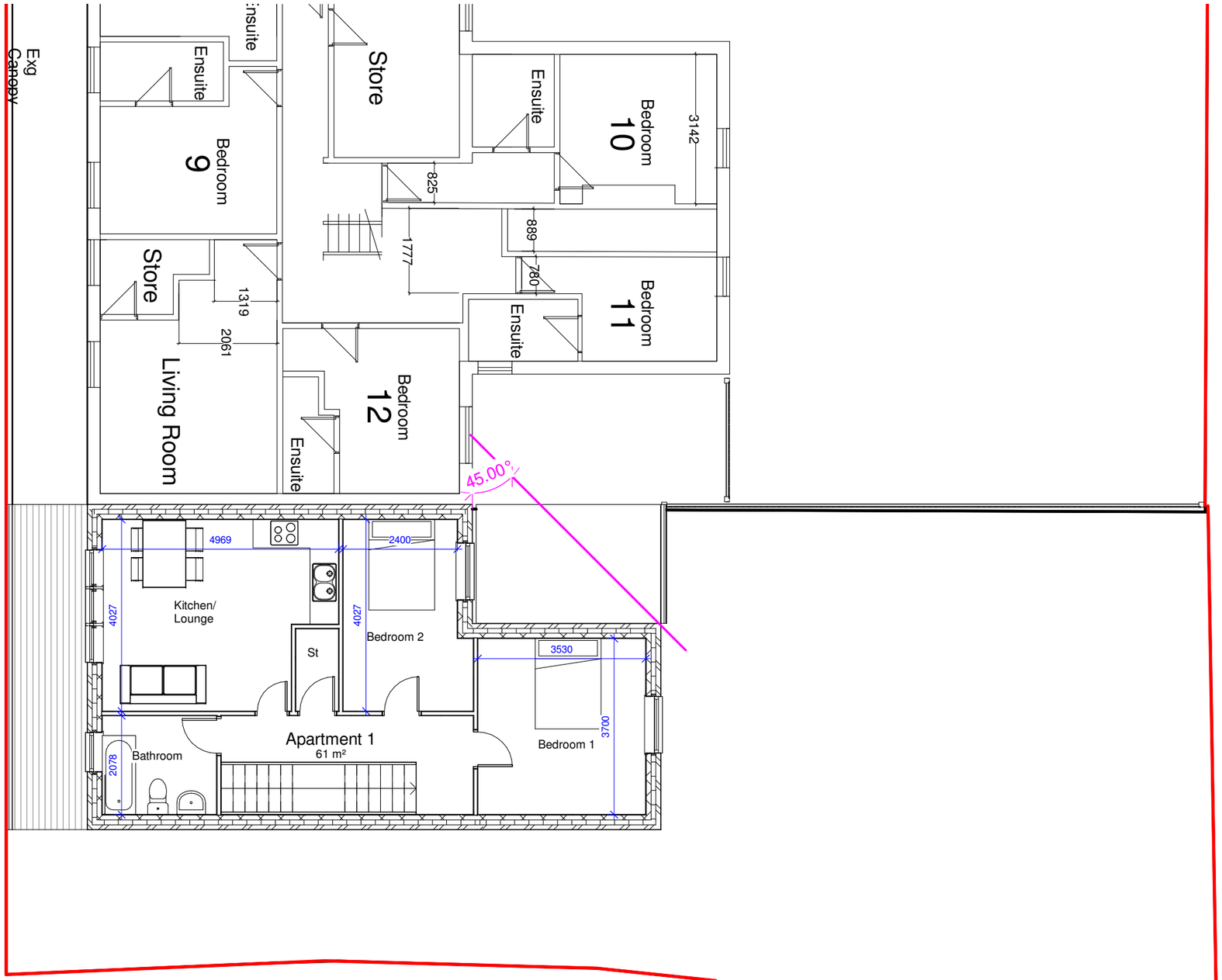
A1635(02)AP002

Revision

P3

Drawing Status

Preliminary



0 2 4 6 8m

1:200

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LEGEND

Site Boundary

No.	Date	Dwn	App	Revision or reason for issue
P3	25/11/2025	SA	SH	Amended Proposal
P2	12/11/2025	SA	SH	Amended Proposal
P1	07/11/2025	SA	SH	Initial Issue

Client

HD Rental Properties Ltd

Create It Studios (NW) Ltd
3 Stevenson Square,
Manchester
M1 1DN

info@createitstudios.co.uk

Project Title

47 Sedgeborough Road, Whalley Range, Manchester M16 7EU

Scale / North Point

1 : 100

Drawing Title

Proposed First Floor Plan

Drawing Number

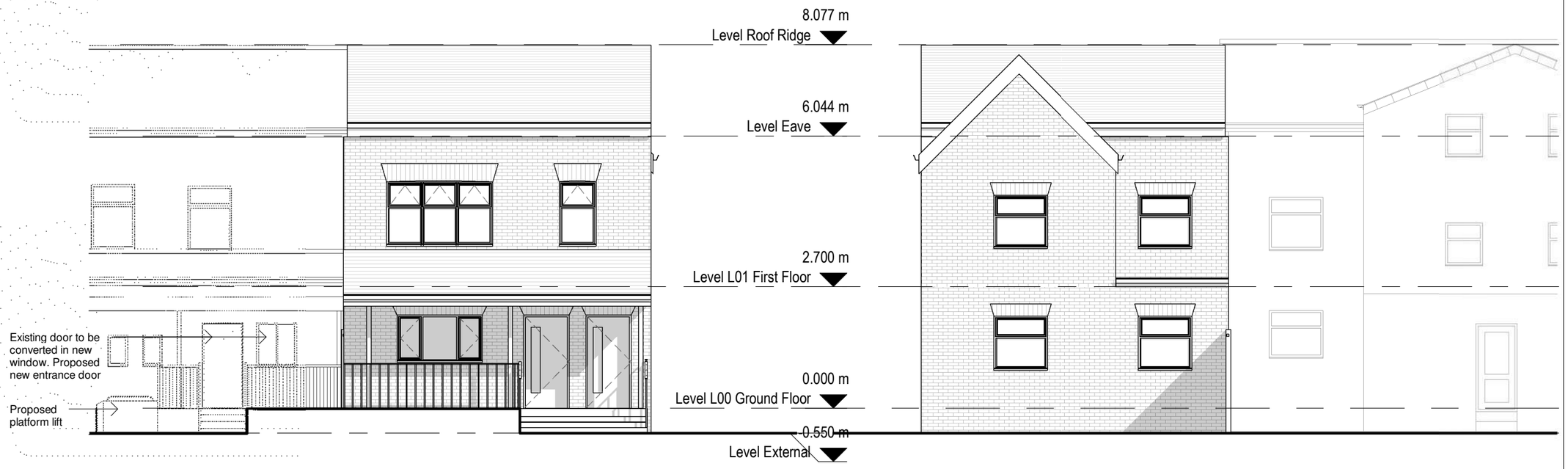
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Revision

P3

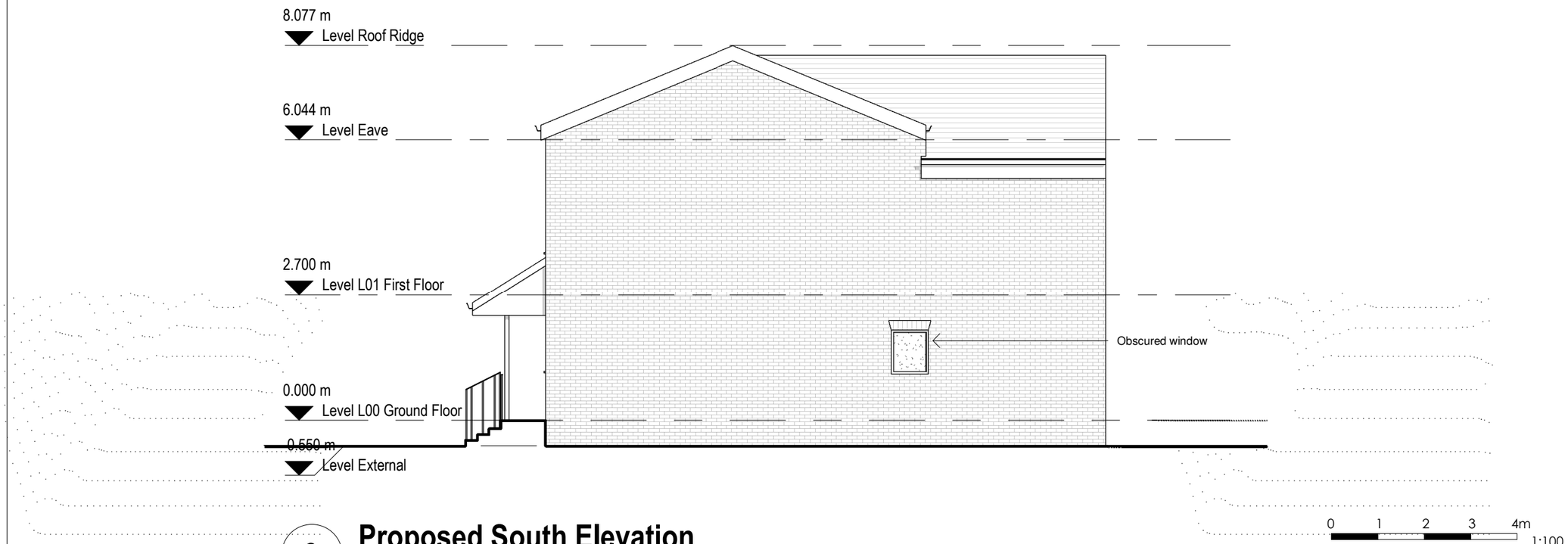
Drawing Status

Preliminary



1 Proposed West Elevation
1 : 100

2 Proposed East Elevation
1 : 100



3 Proposed South Elevation
1 : 100

General Notes

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No.	Date	Dwn	App	Revision or reason for issue
P3	25/11/2025	SA	SH	Amended Proposal
P2	12/11/2025	SA	SH	Amended Proposal
P1	07/11/2025	SA	SH	Initial Issue

Client

HD Rental Properties Ltd

Create It Studios (NW) Ltd
3 Stevenson Square,
Manchester
M1 1DN

info@createitstudios.co.uk

Project Title

47 Sedgeborough Road, Whalley Range, Manchester M16 7EU

Scale / North Point

1 : 100

Drawing Title

Proposed Elevations

Drawing Number: A1635(02)AP004

Revision: P3

Drawing Status

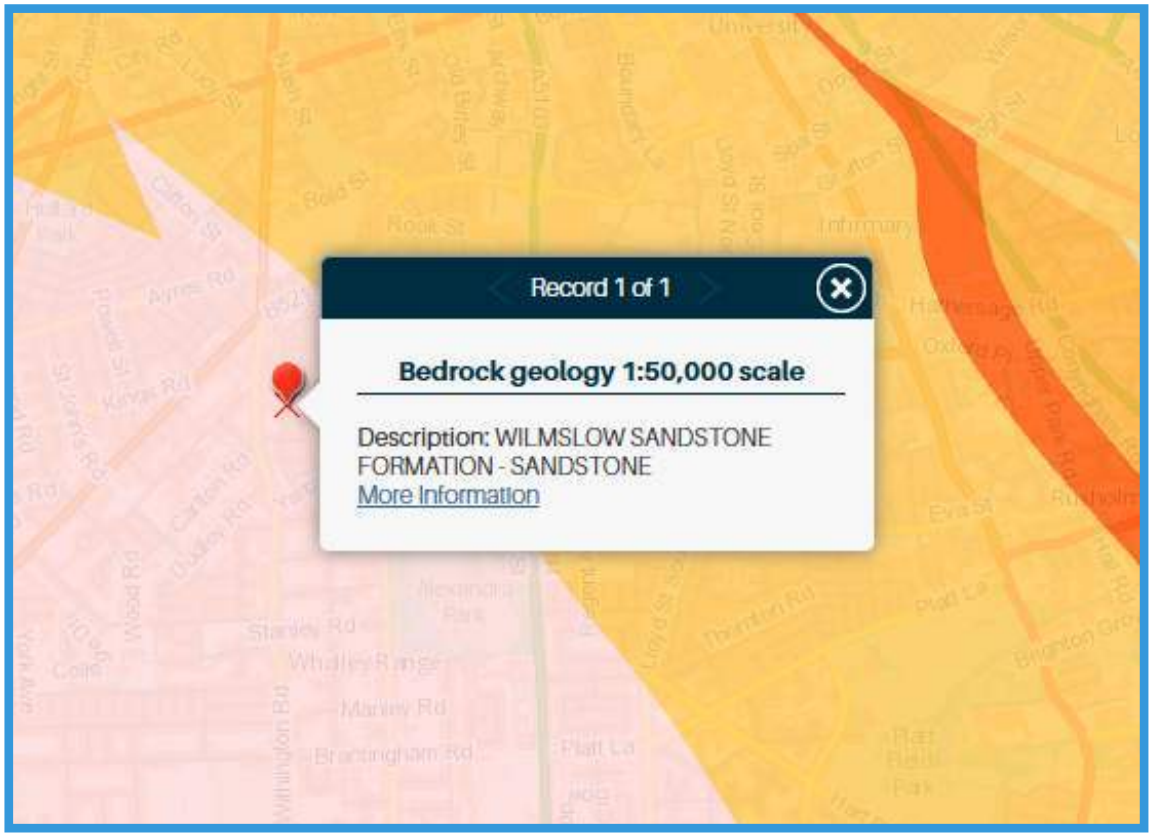
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Appendix C

SITE GEOLOGY

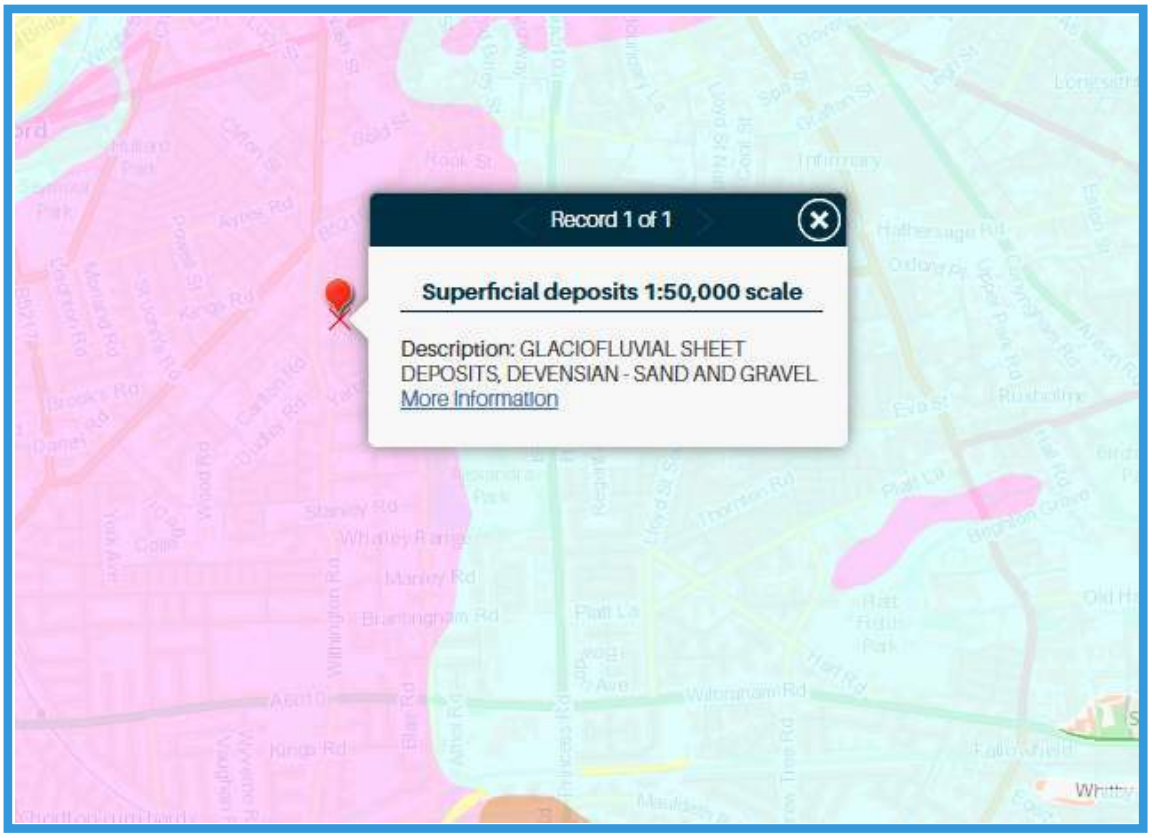
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GEOLOGY - BEDROCK - WILMSLOW SANDSTONE FORMATION - SANDSTONE



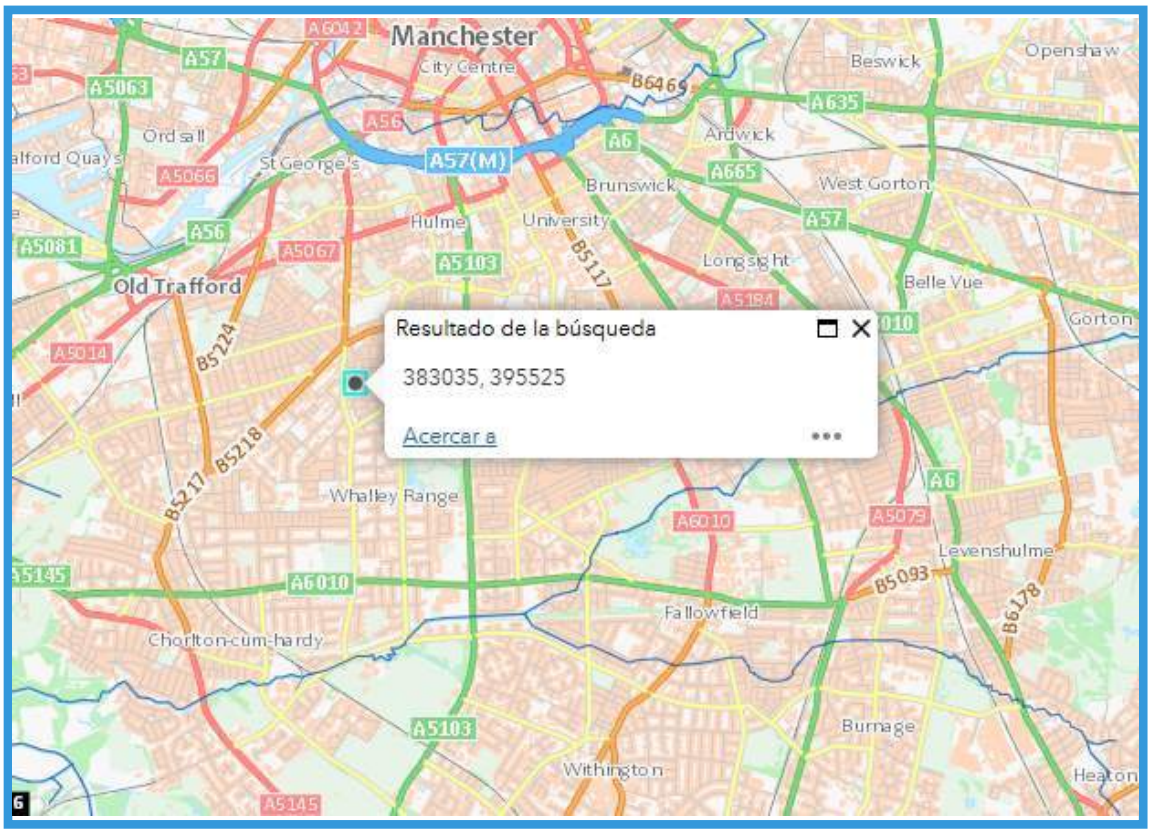
GEOINDEX ONSHORE

GEOLOGY - SUPERFICIAL DEPOSITS - GLACIOFLUVIAL SHEET DEPOSITS, DEVENSIAN - SAND AND GRAVEL

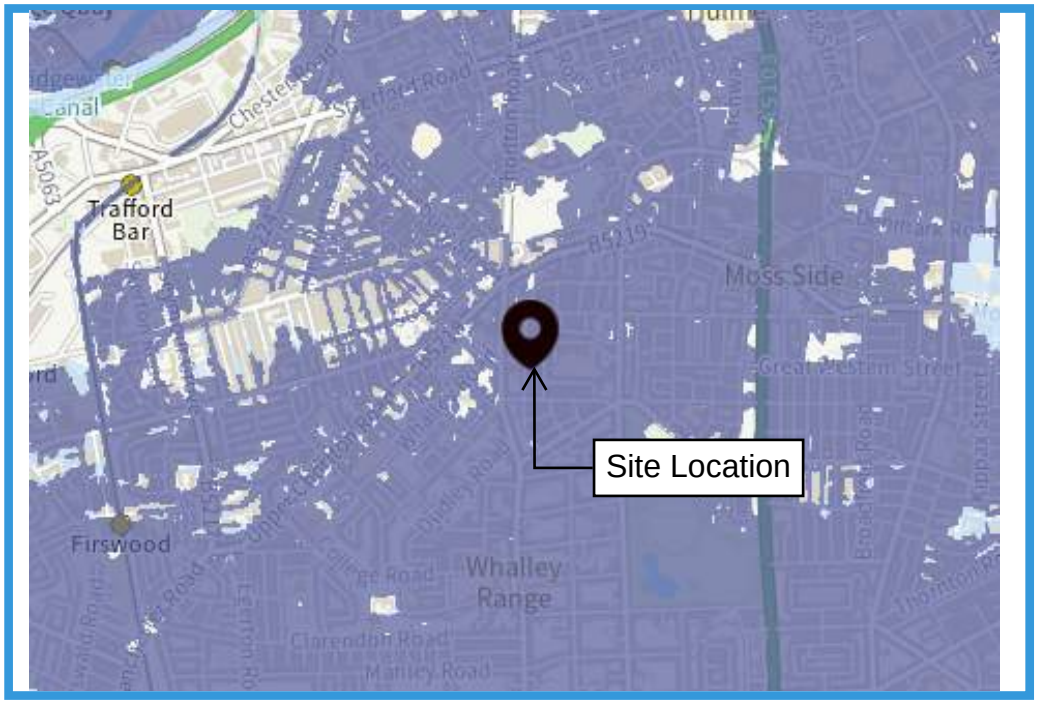


SITE HYDROGEOLOGY

Main River Map

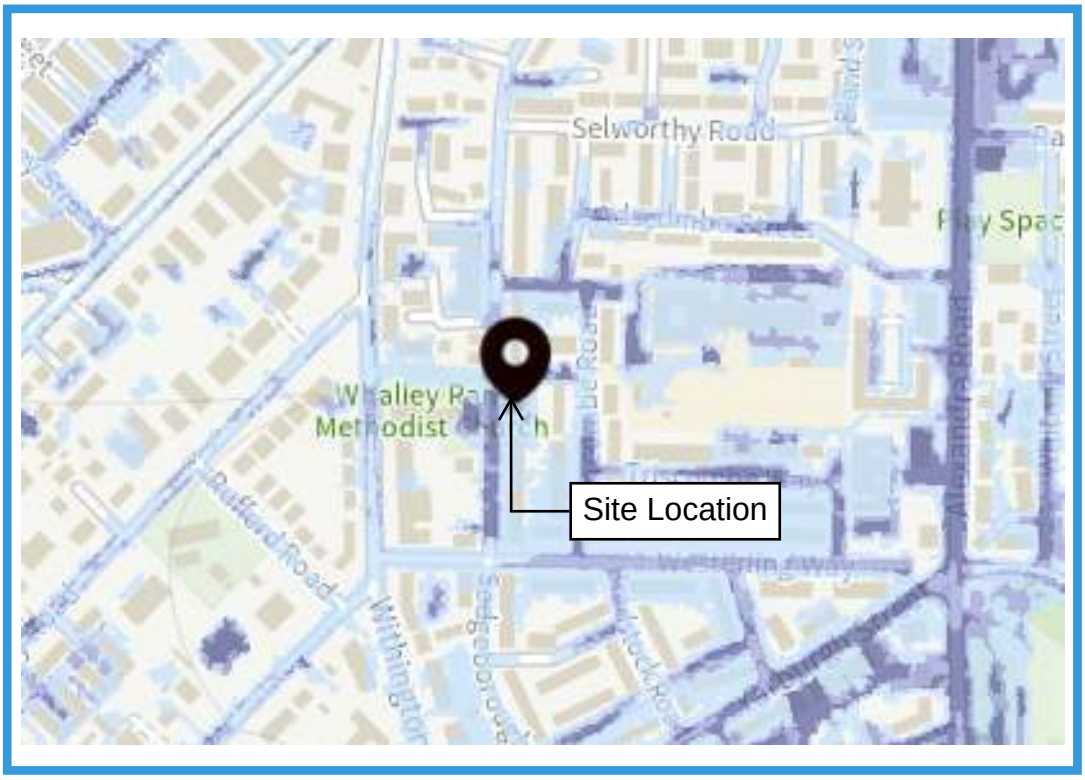




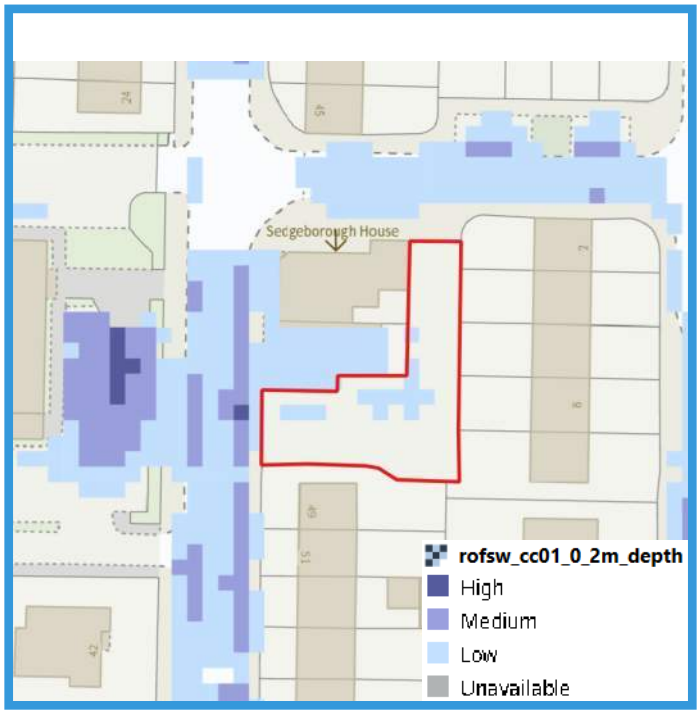


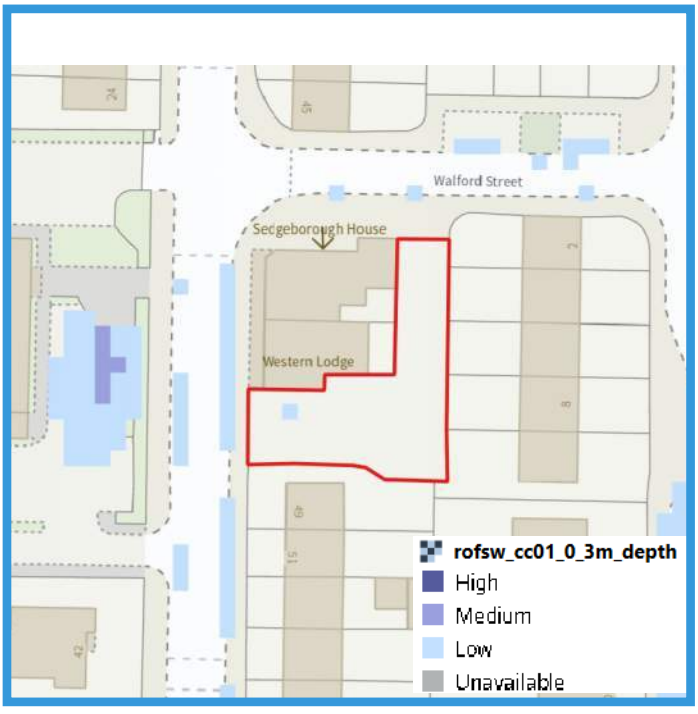
SITE SURFACE WATER FLOOD RISK

High risk means a chance of flooding greater than 3.3% (1:30)
Medium risk means a chance of flooding of btw 1% (1:100) and 3.3%
Low risk means a chance of flooding of btw 0.1% (1:1000) and 1%
Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding



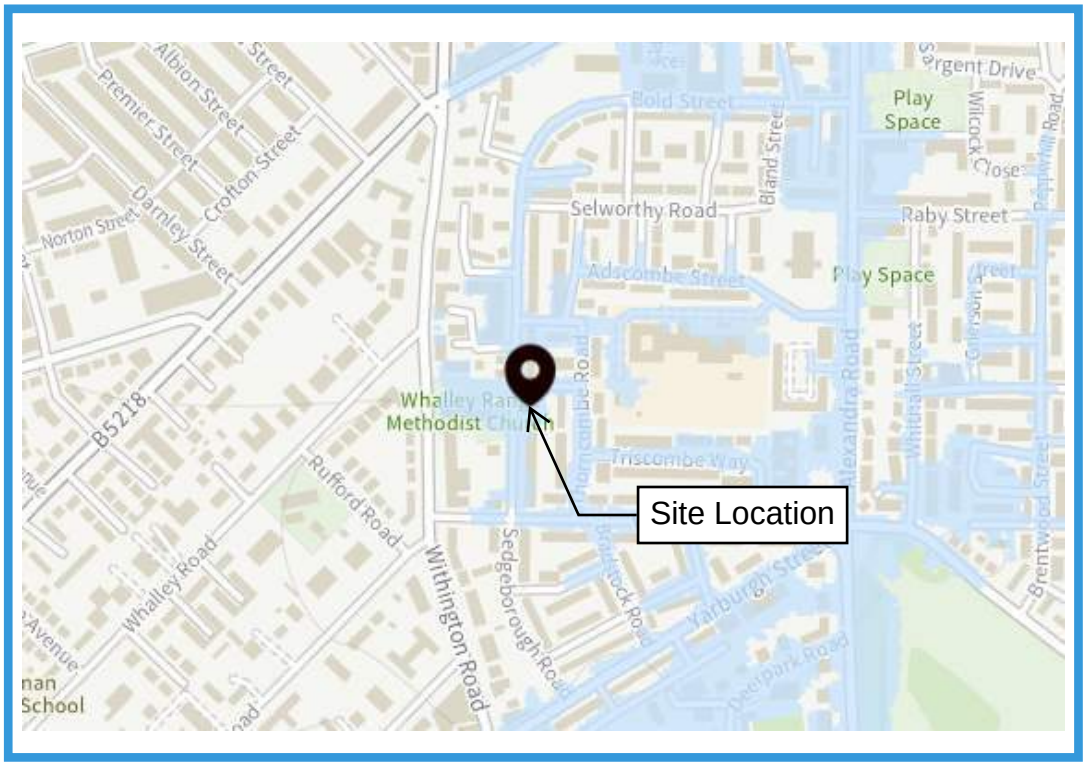
DEPTH





RIVER AND SEA FLOOD RISK MAP

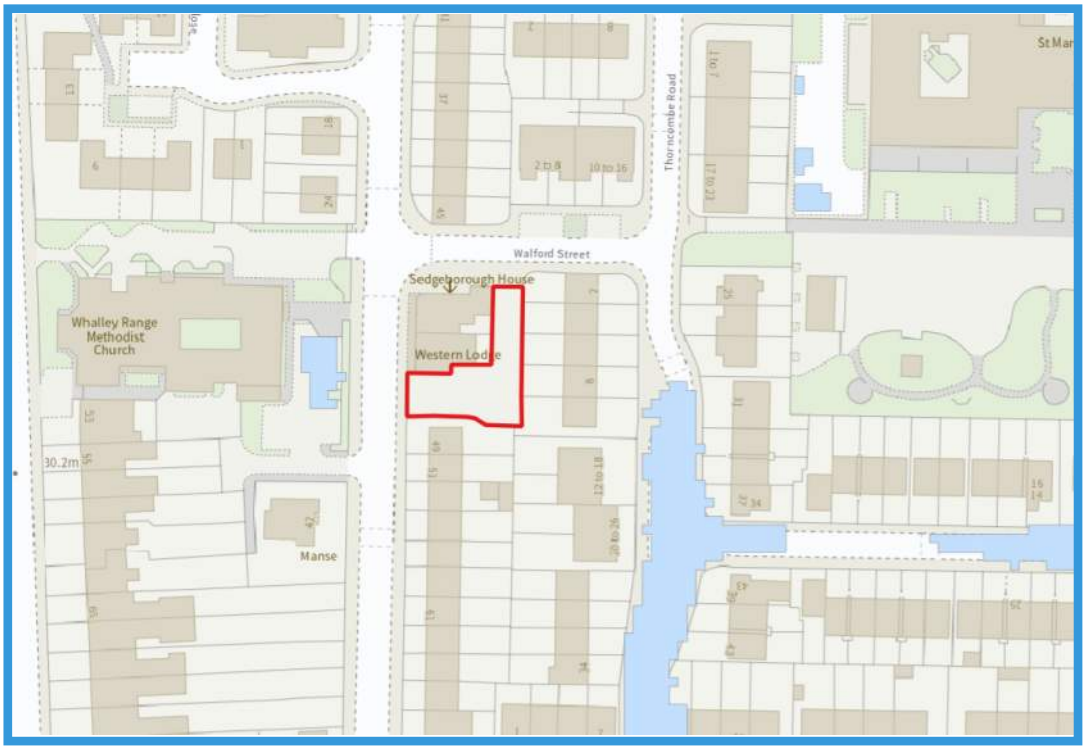
- High - greater than or equal to 1 in 30 (3.3%) chance of flooding in any year
- Medium –Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance of flooding in any given year
- Low –Less than 1 in 100 (1%) but greater than or equal to 1 in 1000 (0.1%) chance of flooding in any given year
- Very low –less than 1 in 1000 (0.1%) chance of flooding in any given year



Yearly chance of flooding between 2036 and 2069

- Flood area (extent)
- High chance
- Medium chance
- Low chance
- Very low chance
- No data available

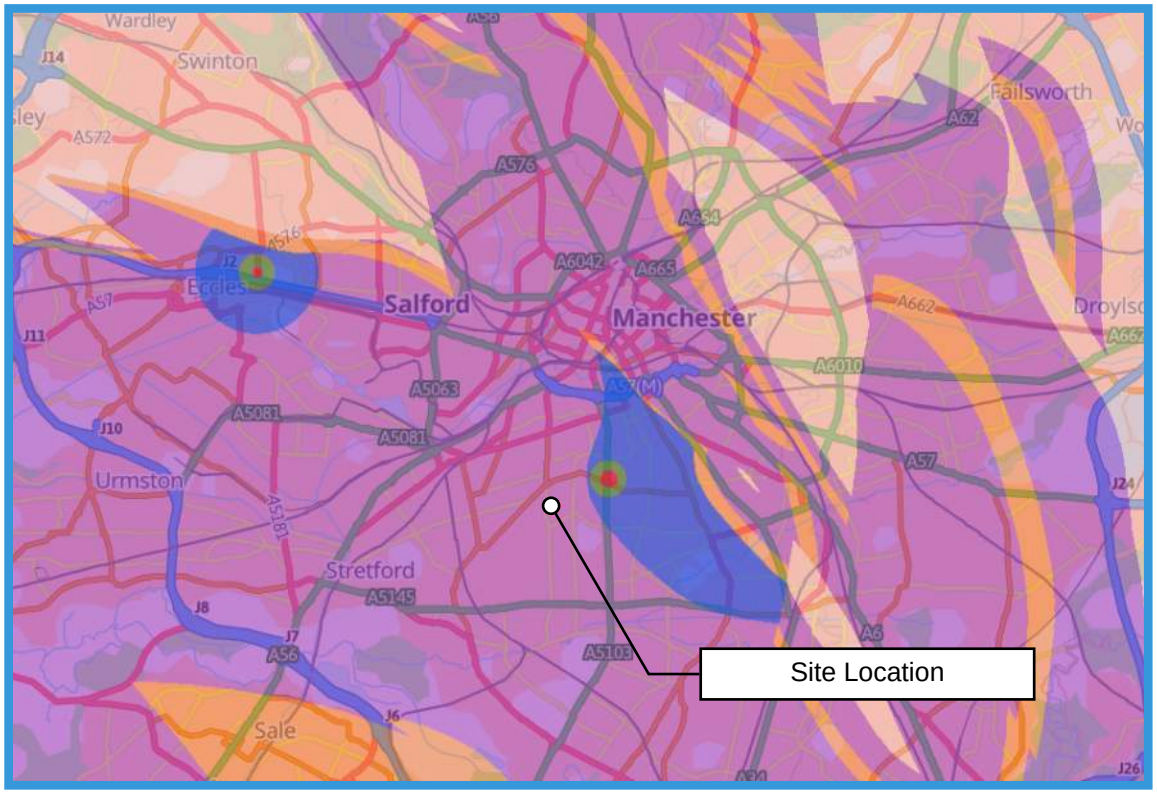
DEPTH



rofrs_cc01_4band_0_2m_depth

- High
- Medium
- Low
- Very low
- Unavailable

MAGIC RESULTS



Site Check Results

Site Check Report generated on Wed Oct 29 2025

The following features have been found in your search area:

You selected the location: Centroid Grid Ref: SJ83049550

Aquifer Designation Map (Superficial Drift) (England)

TYPOLOGY Secondary A

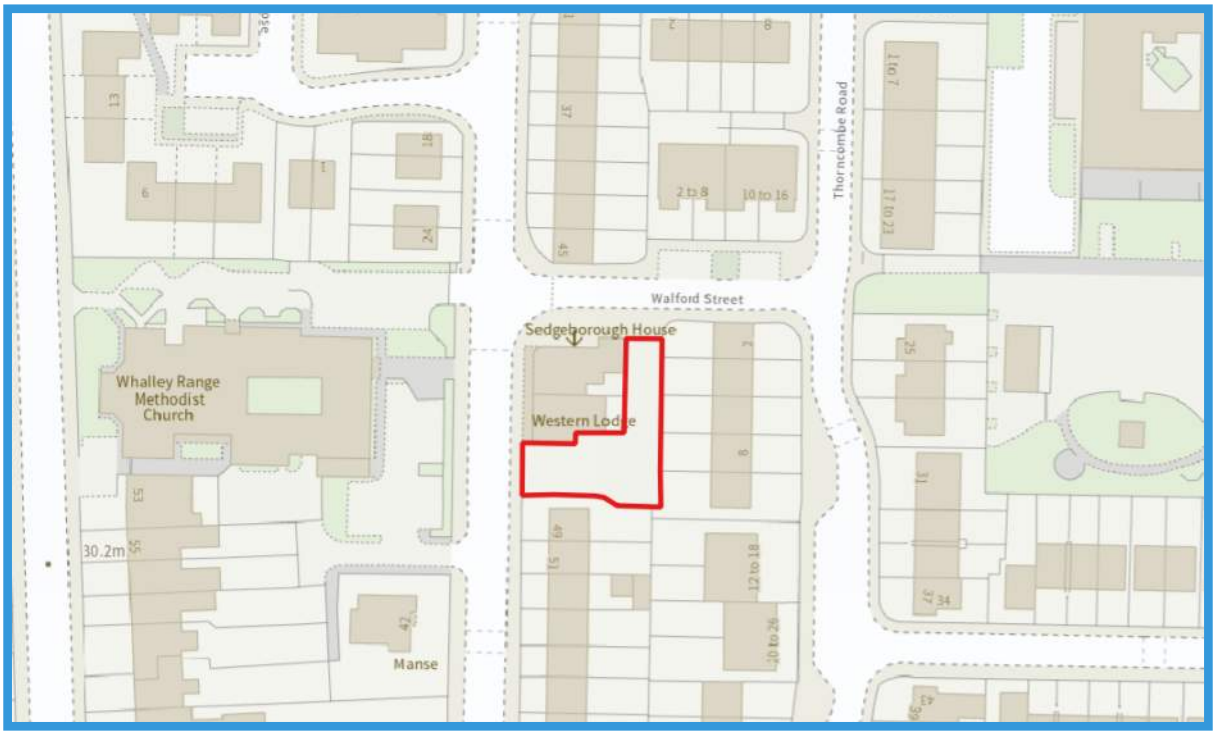
Aquifer Designation Map (Bedrock) (England)

TYPOLOGY Principal

Source Protection Zones merged (England)

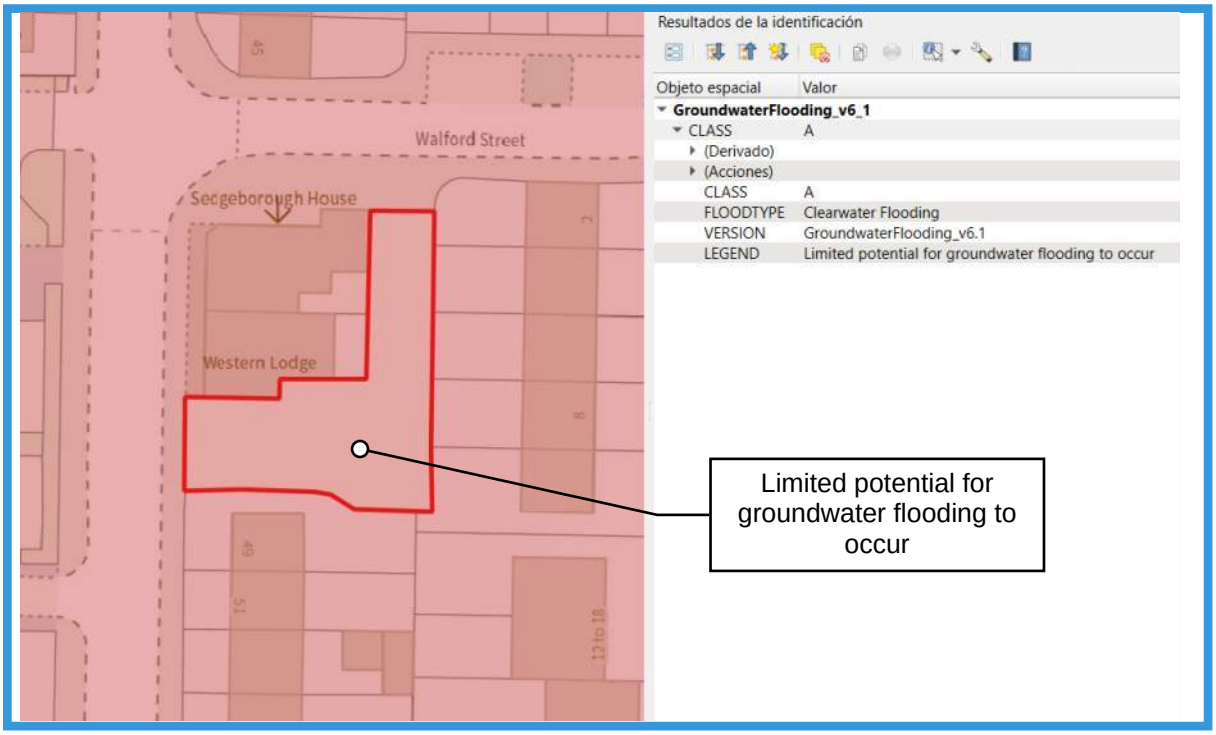
No Features found

HISTORIC FLOOD MAP



Historic Flood Outline

GROUND WATER FLOOD RISK

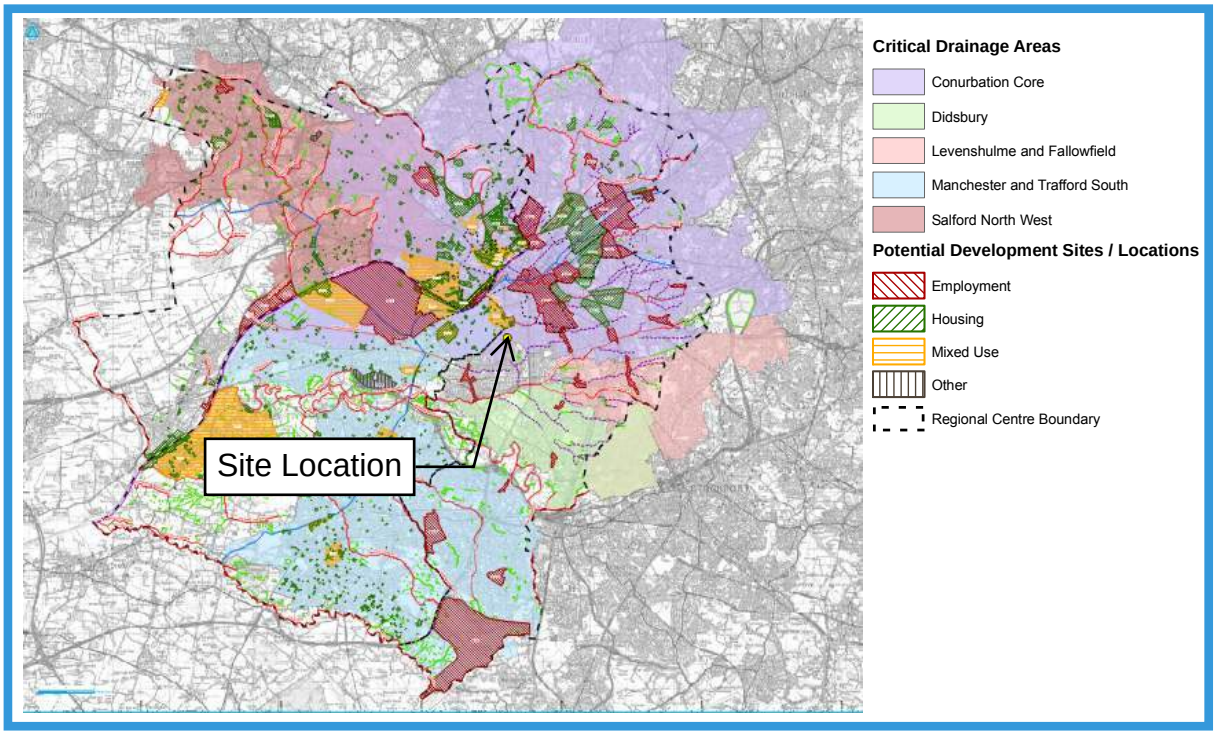


FLOOD WARNING AREA



Flood Warning areas

CRITICAL DRAINAGE AREA



Flood map for planning

Your reference	Location (easting/northing)	Created
Unspecified	**383041/395511**	**29 October 2025 22:04**

Your selected location is in flood zone 2, an area with a medium probability of flooding.

This means:

- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see https://www.gov.uk/guidance/flood-risk-assessment-standing-advice)

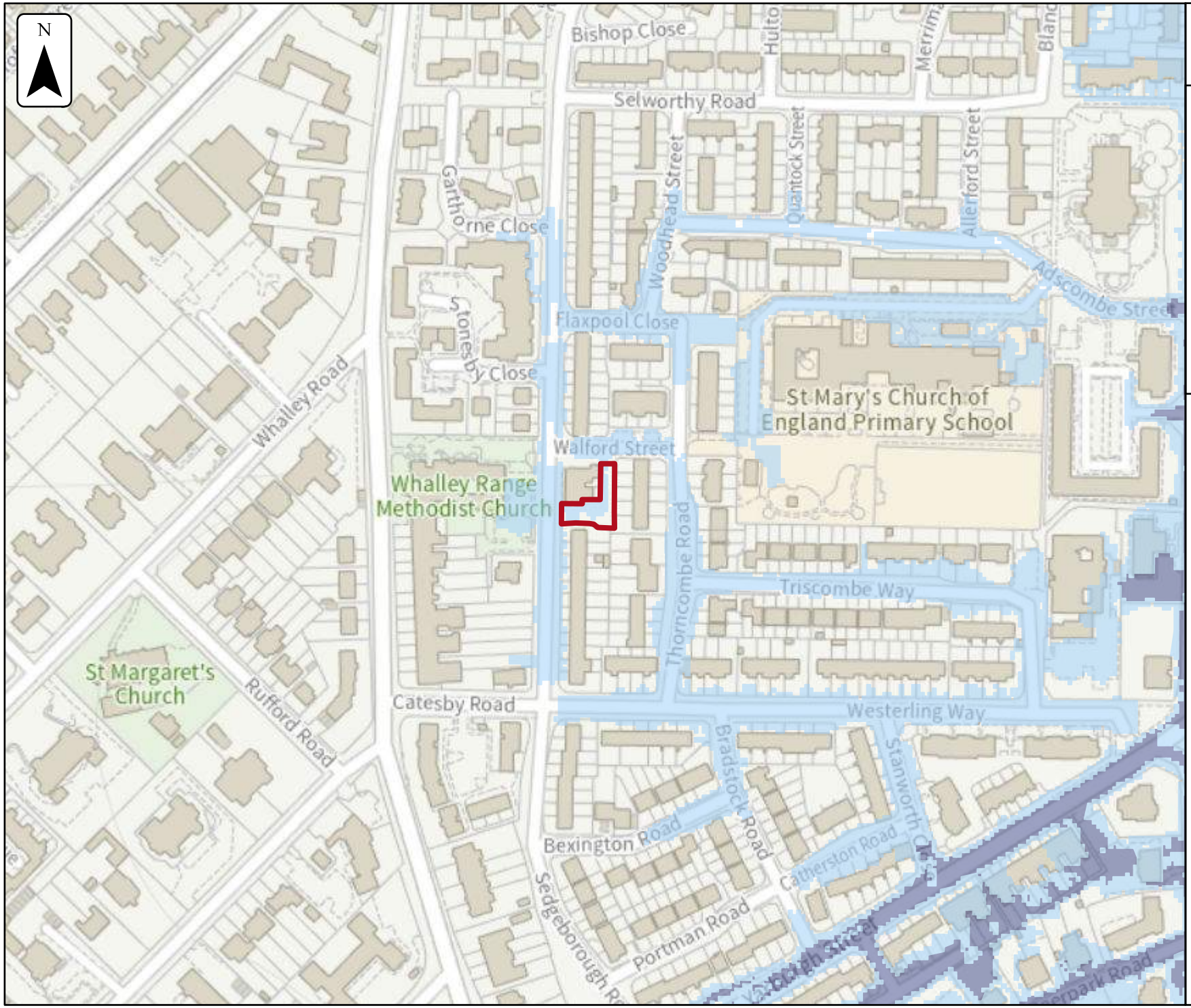
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2025 AC0000807064. https://flood-map-for-planning.service.gov.uk/os-terms



Environment Agency

Flood map for planning

Your reference
Unspecified

Location (easting/northing)
383041/395511

Scale
1:2,500

Created
29 Oct 2025 22:04

- Selected area
- Flood zone 3
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Water storage area

0 20 40 60 m

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Appendix D

FLOOD LEVELS

Corn Brook 2017

Flood Level at the property



Node	Easting	Northing	2yr	5yr	10yr	20yr	25yr	30yr	50yr	75yr	100yr	100yr +30CC	100yr +35CC	100yr +70CC	200yr	1000yr +30CC	1000yr
1	383030	395507	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	30.721	NIL
2	383041	395507	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	30.721	NIL
3	383047	395520	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL



1 in 1000



1000yr +30CC