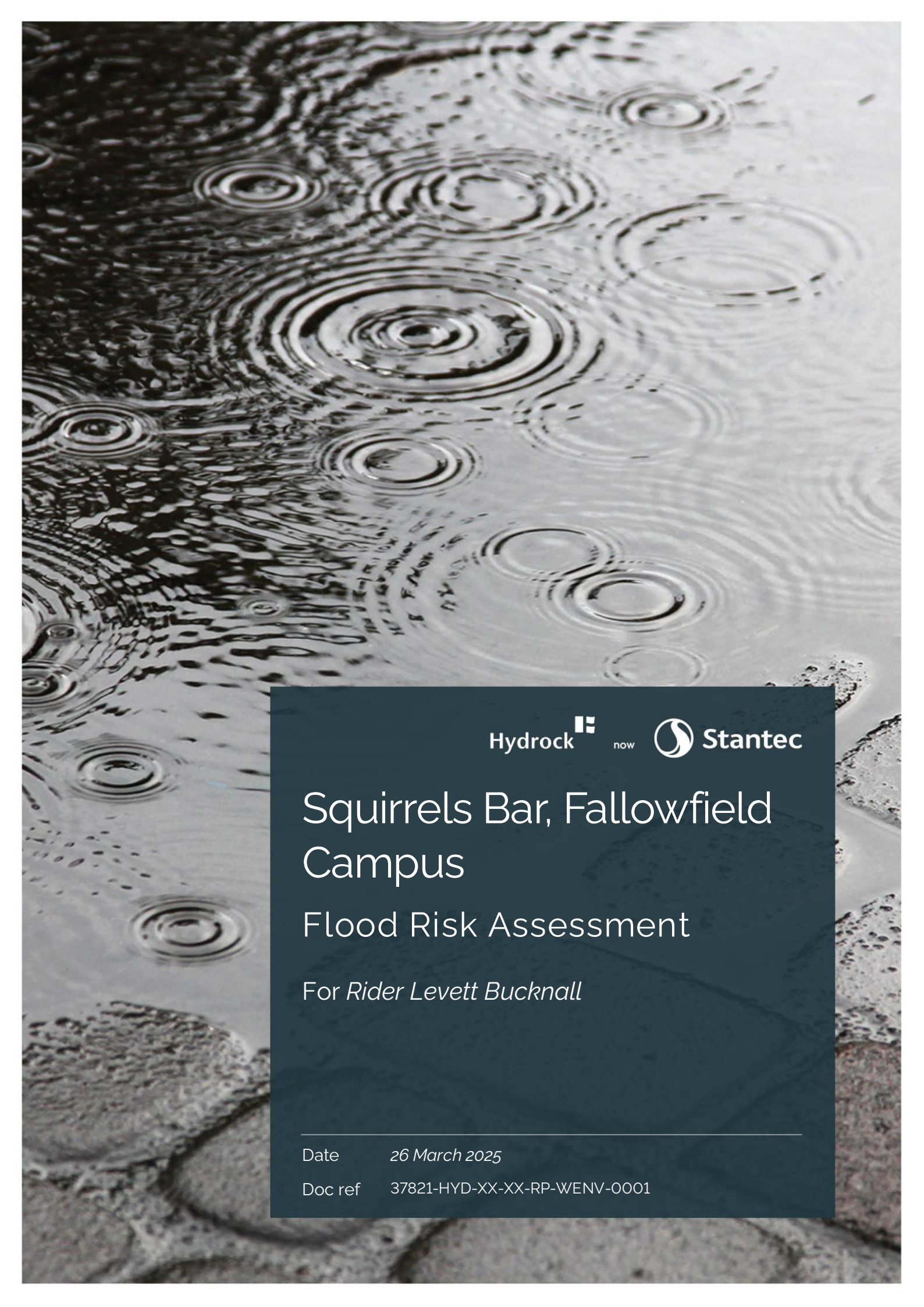




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Stantec

Squirrels Bar, Fallowfield Campus

Flood Risk Assessment

For Rider Levett Bucknall

Date 26 March 2025

Doc ref 37821-HYD-XX-XX-RP-WENV-0001

Document control sheet

Issued by	Hydrock Consultants Limited Second Floor 172 Edmund Street Birmingham B3 2HB United Kingdom	T +44 (0)121 7525197 E birmingham@hydrock.com hydrock.com
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Prepared by	Daisy Thurlow BSc (Hons)	
Checked by	Alexandros Petrakis BSc (Hons) MCIWEM C.WEM	
Approved by	Alexandros Petrakis BSc (Hons) MCIWEM C.WEM	

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Appendices

Appendix A *Proposed Site Layout*

Appendix B *Level 2 SFRA Groundwater Flooding Risk*

1. Introduction

Hydrock Consultants Limited (Hydrock), now Stantec, have been commissioned by Rider Levett Bucknall to undertake a Flood Risk Assessment (FRA), to be submitted in support of a planning application for the proposed temporary relocation of the Squirrels Bar, a key student social and events facility, as part of the redevelopment of the Fallowfield Campus.

This report has been completed in accordance with the National Planning Policy Framework (NPPF), updated February 2025 and its accompanying Planning Practice Guidance (PPG), updated February 2024. This report is an assessment of flood risk to the development, from on and off-site sources, and to off-site receptors arising from development at the site.

The report has been prepared to consider the requirements of the NPPF through:

- » Assessing whether the proposed development is likely to be affected by flooding;
- » Assessing whether the proposed development is appropriate in the suggested locations; and
- » Detailing measures necessary to mitigate any flood risk identified; to ensure that the proposed development and occupants would be safe, and that flood risk would not be increased as a result of development.

2. Existing Site Conditions

2.1 Site Location

The site is located at Fallowfield Campus within the University of Manchester, approximately 4.5 kilometres (km) south-east from Manchester City Centre.

The site address and Ordnance Survey Grid Reference is provided in **Table 1** with the site location shown in **Figure 1**.

Table 1: Site Referencing Information

Site Referencing Information	
Site Address	Gunnery Lane, Fallowfield, M14 6HE
Grid Reference	SJ 85999 94160 385999, 394160

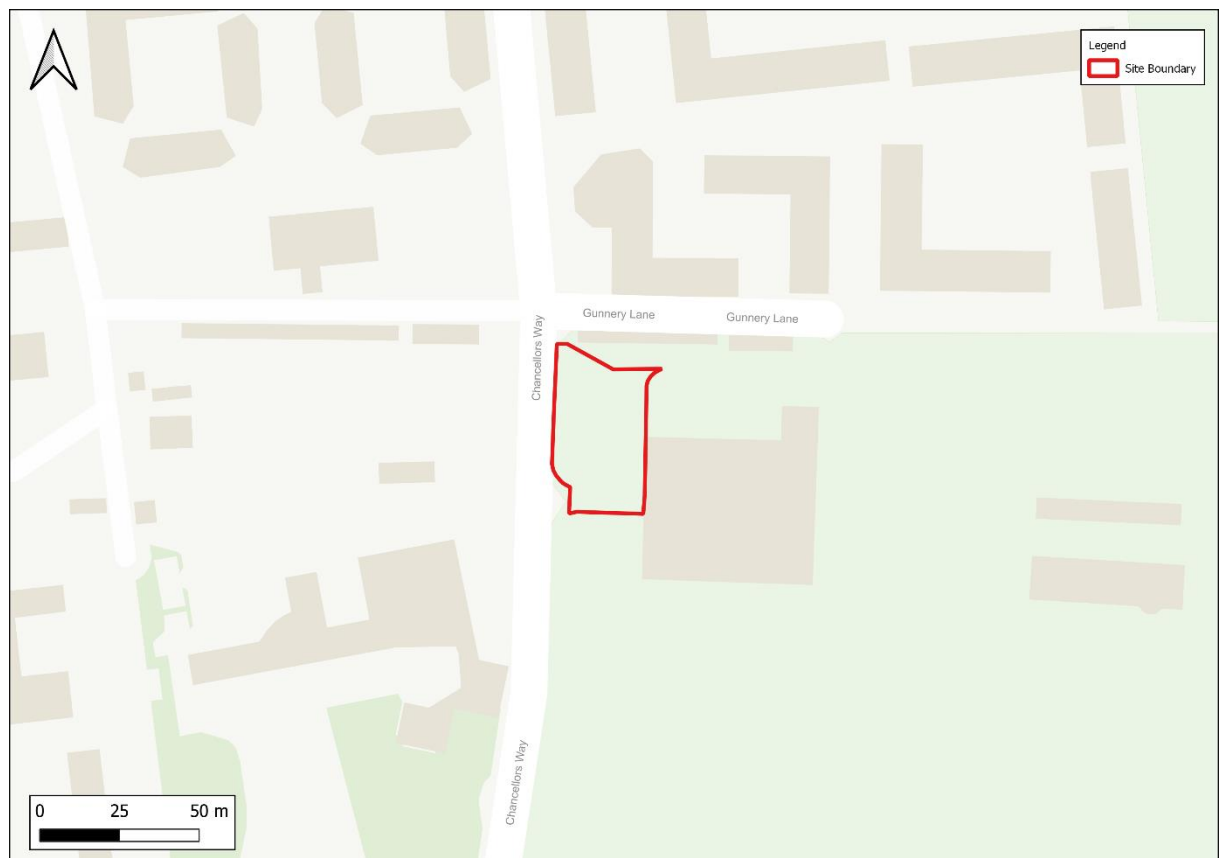


Figure 1: Site Location

2.2 Topography

Topographic levels to meters Above Ordnance Datum (m AOD) have been derived from a 1 m resolution Environment Agency (EA) composite Light Detecting and Ranging (LiDAR) DTM.

The site is shown to be very flat ranging from 44.5-45m AOD. Levels are higher in the north at 45m AOD and gradually decrease to the south west of the site to 44.5m AOD. The surrounding land is shown to be higher in the north and decreases to the south. A LiDAR Plan is shown in **Figure 2**.

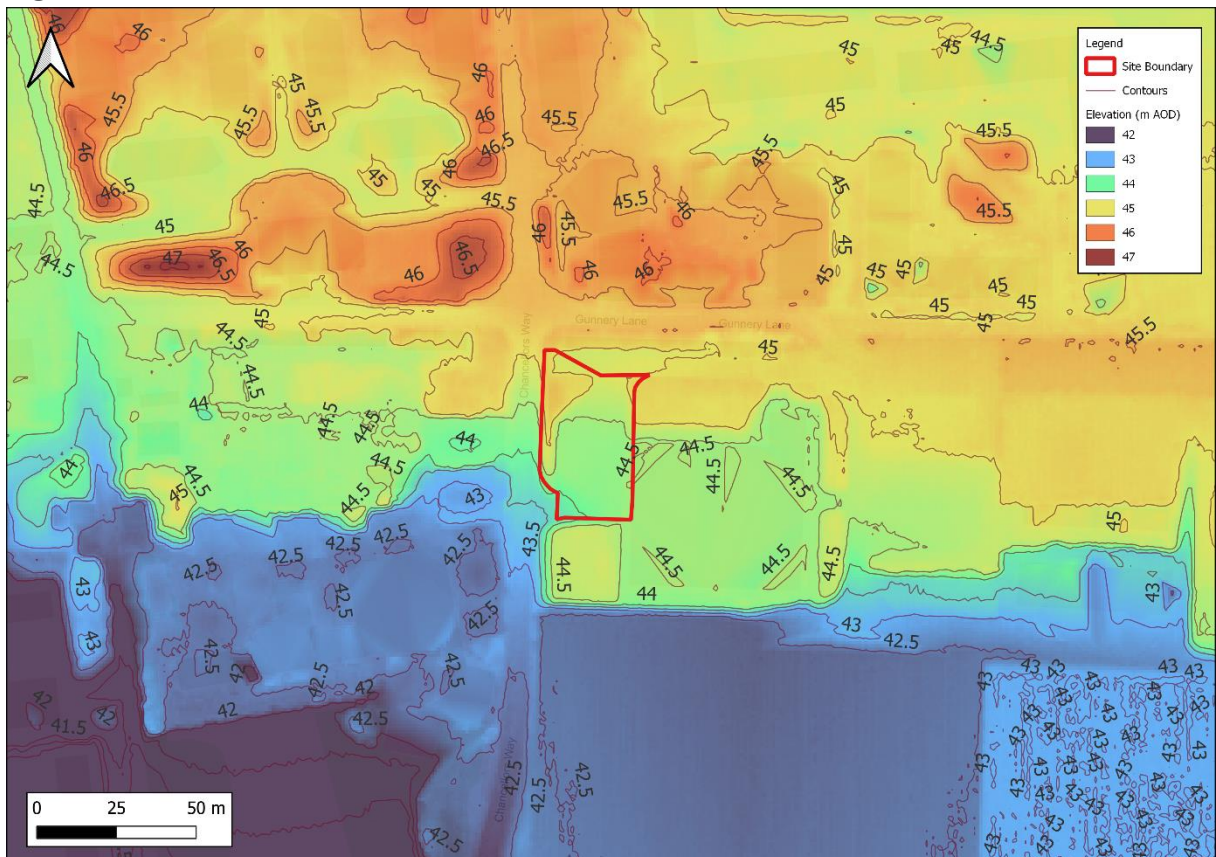


Figure 2: LiDAR Plan

2.3 Hydrology

The site's catchment falls within the Upper Mersey Management Catchment with the River Mersey, a Main River under Environment Agency (EA) jurisdiction, located approximately 2.7km west of the site.

There are three brooks located near to the site. Platt Brook is approximately 570m north of the site, Fallowfield Brook is culverted and located approximately 250m south of the site and Cringle Brook is culverted and located approximately 630m south of the site. The location of these watercourses can be seen in **Figure 3**.



Figure 3: Location of nearby watercourses

2.4 Geology and Hydrogeology

According to British Geological Survey (BGS)¹ geology mapping [accessed March 2025] the site is underlain by bedrock geology described as Chester Formation (Sandstone). There are records of superficial geology deposits located on site described as Till, Devensian - Diamicton.

The superficial geology is classified as a Secondary (undifferentiated) Aquifer according to the Department for Environment, Food & Rural Affairs MAGIC² mapping. A secondary undifferentiated aquifer is a classification of aquifer assigned when it is not possible to attribute either category A or B to a rock type. These aquifers generally consist of layers of rock or drift deposits that have high intergranular and/or fracture permeability, allowing for significant water storage and supporting water supply on a strategic scale. The bedrock geology is classified as a Principal Aquifer which is described as a regionally extensive aquifer or aquifer system that has the potential to be used as a source of potable (drinkable) water.

Soilscapes³ mapping, shows the site to be located within 'Slowly permeable seasonally wet acid loamy and clayey soils with impeded drainage'.

¹ BGS Geology Viewer (BETA)

² MAGIC (defra.gov.uk)

³ LandIS - Land Information System - Soilscapes soil types viewer

BGS Historical Borehole⁴ records indicate there are no boreholes located on site.

⁴ GeolIndex - British Geological Survey

3. Proposed Development

The development proposals comprise the temporary re-provision of the Squirrels Bar, a key student social and events facility, to facilitate the demolition of the existing bar as part of the DBFO redevelopment of the Fallowfield Campus. The new facility is required to be fully operational by September 2025 and remain in use until July 2028, ensuring continuity of services and minimising disruption to students.

The University has decided to proceed with a portal steel frame, single-storey solution, with a GIA 400-500m² (TBC). The solution will ensure a fully operational bar and events space, within the approved budget and critical timeline, providing a lifespan of 10 years which gives the University the opportunity to re-purpose beyond 2028. The proposed site layout is presented in **Appendix A**.

The site will have a vulnerability classification of 'less vulnerable' in accordance with *Annex 3: Flood Risk Vulnerability Classification* of the PPG. As the proposed development is located in Flood Zone 1, the development is shown to be appropriate in accordance with *Table 2: Flood risk vulnerability and flood zone 'incompatibility'* of the PPG.

Table 2: NPPG Flood Risk Vulnerability and Flood Zone Incompatibility matrix

	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	Exception Test Required	✓	✓	✓
Zone 3a	X	X	Exception Test Required	✓	✓
Zone 3b	Exception Test Required	X	X	X	✓

4. Planning Policy

4.1 National Planning Policy Framework (Updated February 2025)

The National Planning Policy Framework (NPPF) sets out the Government's planning policies, and how these policies should be applied. Planning Practice Guidance (PPG) is available online and provides additional guidance to the NPPF, as well as providing links to relevant detailed documents. Section 4.2 provides further detail on the PPG.

Paragraph 170 of the NPPF states "inappropriate development in areas at risk of flooding should be avoided by directing development away from areas of highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere."

Paragraph 172 of the NPPF states "All plans should apply a sequential, risk-based approach to the location of development - taking into account all sources of flood risk and the current and future impacts of climate change - so as to avoid, where possible, flood risk to people and property. They should do this, and manage any residual risk by:

- » Applying the sequential test and then, if necessary, the exception test as set out below;
- » Safeguarding land from development that is required, or likely to be required, for current or future flood management;
- » Using opportunities provided by new development and improvements in green and other infrastructure to reduce the causes and impacts of flooding, (making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management); and
- » where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to relocate development, including housing, to more suitable locations.

Paragraph 181 of the NPPF states "when determining planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

- » Within the site, the most vulnerable development is located in areas of lowest flood risk unless there are overriding reasons to prefer a different location;
- » The development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment;
- » It incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;
- » Any residual risk can be safely managed; and
- » Safe access and egress routes are included where appropriate, as part of an agreed emergency plan.

In accordance with the NPPF, a site-specific FRA is required for sites within the following categories:

- » In Flood Zone 1, all proposals involving:

- » Sites of 1 hectare or more.
- » Land which has been identified by the EA as having critical drainage problems.
- » Land identified in a strategic flood risk assessment (SFRA) as being at increased flood risk in the future.
- » Land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use.
- » All proposals for development in Flood Zone 2 and 3.

4.2 Planning Practice Guidance (Updated February 2024)

The PPG provides additional direction to the NPPF, with details provided in each section of the document on how to conform to the NPPF.

All land in England is classified as falling into one of three main flood zones, with the zones referring to the probability of river or sea flooding, ignoring the existence of defences. The PPG identifies and describes the EA flood zones as:

- » Flood Zone 1 (Low Risk) comprises land assessed as having a $\leq 0.1\%$ AEP of fluvial flooding in any given year, equivalent to the 1 in 1,000-year return period flood event.
- » Flood Zone 2 (Moderate Risk) comprises land assessed as having a 0.1-1% AEP of fluvial flooding in any given year, equivalent to the 1 in 1,000 - 1 in 100-year return period flood event.
- » Flood zone 3 (High Risk) comprises land assessed as having a $\geq 1\%$ AEP of fluvial flooding in any given year, equivalent to the ≤ 1 in 100-year return period flood event.
 - » Flood Zone 3 a (High Risk) comprises land assessed as having a 1-3.33% AEP of fluvial flooding in any given year, equivalent to the 1 in 100 - 1 in 30-year return period flood event.
 - » Flood Zone 3 b (Functional Floodplain) comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the EA. Flood zone 3b is defined as land that has a 3.33% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or land that is designed to flood (such as a flood attenuation scheme, even if it would only flood in more extreme events).

4.3 Environment Agency's (EA) Climate Change Allowances (Updated July 2021)⁵

Climate change allowances for peak river flows in England have been predicted and provided by the Environment Agency (EA), covering projections for 'River Basin Districts' and their 'Management Catchments'.

The site's catchment falls within the Upper Mersey Management Catchment. **Table 3** identifies the peak flow allowances predicted by the EA for this Management Catchment.

⁵ Flood risk assessments: climate change allowances - GOV.UK (www.gov.uk)

Table 3: Peak River Flow Allowance for the Upper Mersey Management Catchment

Allowance Category	Total potential change anticipated for the '2020s' (2015-2039)	Total potential change anticipated for the '2050s' (2040-2069)	Total potential change anticipated for the '2080s' (2070-2115)
Upper End	27%	51%	85%
Higher Central	17%	31%	53%
Central	13%	22%	41%

To determine the appropriate allowance for use in a Flood Risk Assessment, the Flood Zone classification, flood risk vulnerability and anticipated lifespan of the development are to be considered. **Table 4** summarises the EA's guidance on determining this allowance.

Table 4: Application of the appropriate Climate Change Allowance

Flood Zone	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
1	Use the central allowance where a location may fall within Flood Zone 2 or 3 in the future.				
2	Use the higher central allowance	Use the central allowance			
3a	Use the higher central allowance	Development should not be permitted	Use the central allowance		
3b	Use the higher central allowance	Development should not be permitted			Use the central allowance

If development is considered appropriate by the local authority when not in accordance with Flood Zone vulnerability categories, then it would be appropriate to use the higher central allowance.

According to **Table 4**, the appropriate allowance to use for this site is the 'central allowance'. This is due to the sites classification as 'less vulnerable' in accordance with Annex 3: Flood Risk Vulnerability Classification of the PPG. The proposal states that the facility will remain in use until July 2028 and has been given a lifespan of 10 years. Therefore, due to the temporary nature of the development and its classification, a Climate Change Allowance of 13% is deemed appropriate to consider when any calculations or judgements are made in relation to this site.

4.4 Manchester City Council Local Plan (2022-2039)⁶

The Manchester City Council Local Plan (2022-2039) is the key strategic planning document for Greater Manchester which sets out bold plans to give people, communities and businesses hope and confidence for the future. Within this plan a number of strategic objectives have been identified.

Objective 8, 'Improving the quality of our natural environment and access to green spaces', states that it will 'Promote the role of green space in climate resilience and reducing flood risk'.

Policy JP-S4 named 'Flood Risk and the Water Environment', details that a catchment based approach will be taken in managing flood risk by '*locating and designing development so as to minimise the impacts of current and future flood risk, including retrofitting or relocating existing developments, infrastructure and places to increase resilience to flooding*'. The Plan also states that '*A flood risk assessment will be required to inform any development, in accordance with policy JP-S4.*'

4.4.1 Core Strategy Development Plan (July 2012)⁷

The Core Strategy was adopted by Manchester City Council in July 2012 and is the key document in Manchester's Local Development Framework, covering a period of 15 years from 2012 to 2027. It outlines the Council's vision for Manchester in 2027 along with the planning policies which will be used to deliver that vision.

Within the Flood Risk chapter of the Core Strategy, it details that Planning Policy 25 (Development and Flood Risk) '*requires local authorities to identify flood risk in their area through an appropriately-detailed Strategic Flood Risk Assessment (SFRA) which covers all sources of flood-risk; for Manchester this is flooding from rivers (fluvial), canals and reservoirs, groundwater, surface-water and sewers, and the implications of climate change.*'

Policy EN 14 named 'Flood Risk', states that '*In line with the risk-based sequential approach contained within PPS25, development should be directed away from sites at the greatest risk of flooding, and towards sites with little or no risk of flooding; this should take account of all sources of flooding identified in the Manchester-Salford-Trafford Strategic Flood Risk Assessment (SFRA). In addition to the requirements for site-specific Flood Risk Assessments (FRAs) set out in PPS25, an appropriate FRA will also be required for all development proposals, including changes of use, on sites greater than 0.5ha within Critical Drainage Areas (CDAs) and Canal Hazard Zones identified in the SFRA.*'

⁶ [Microsoft Word - Places for Everyone Joint Development Plan .docx](#)

⁷ [Core Strategy | Manchester City Council](#)

4.5 Manchester City, Salford City and Trafford Council Level 1 Strategic Flood Risk Assessment (March 2010)⁸

The Manchester City, Salford City and Trafford Council Level 1 SFRA, produced by JBA, has been reviewed in relation to this site and application.

Sources of flooding have been detailed within the SFRA that put Fallowfield at risk. Fallowfield has been flagged as experiencing sewer and drainage problems during rainfall events. Additionally, five historical flood events have been recorded to have affected Fallowfield from 1911 to 2010. Information presented within the Level 1 SFRA is assessed and considered further within Section 5 of this report.

4.6 Manchester City, Salford City and Trafford Council Level 2 Strategic Flood Risk Assessment (March 2011)⁹

The Manchester City, Salford City and Trafford Council Level 2 SFRA, produced by JBA, has been reviewed in relation to this site and application. The Level 2 SFRA provides a detailed understanding of flood risk across Manchester, Salford and Trafford from all sources to help support the application of the Sequential Test and provide an assessment of the likelihood of a site passing the Exception Test.

It has been stated within the report that '*Historic flooding of properties and the railway at Fallowfield likely to be related to the local watercourses and surface water.*' Additionally, Fallowfield has been classed as a critical drainage area within Manchester. Information presented within the Level 2 SFRA is assessed and considered further within Section 5 of this report.

⁸ [Strategic Flood Risk Assessment \(SFRA\) | Manchester City Council](#)

⁹ [Strategic Flood Risk Assessment \(SFRA\) | Manchester City Council](#)

5. Sources of Flood Risk

The NPPF requires flood risk from the following sources to be assessed:

- » Tidal and fluvial sources (sea and river flooding);
- » Pluvial sources (flooding resulting from overland flows);
- » Groundwater sources;
- » Sewer flooding; and
- » Artificial sources, canals, reservoirs etc.

Each of these sources are addressed within this section of the report.

5.1 Tidal Flood Risk

Due to the site's distance from the nearest tidal waterbody and its minimum ground elevation of approximately 44.5m AOD, the risk of tidal flooding is negligible.

5.2 Fluvial Flood Risk

According to the current EA Flood Map for Planning (**Figure 4**), the site is wholly located within Flood Zone 1 (Low Probability).

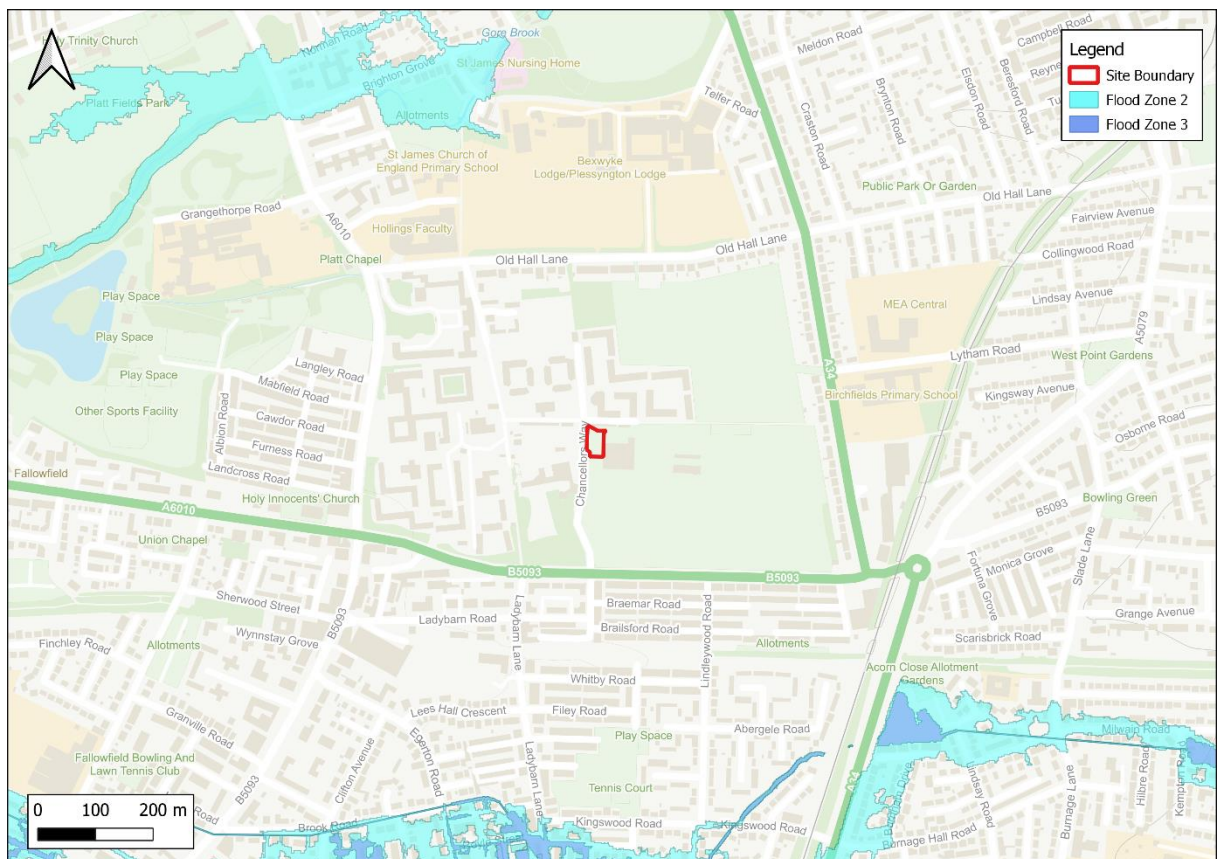


Figure 4: EA's Flood Map for Planning

As noted in **Section 2.3**, the River Mersey, a Main River under Environment Agency (EA) jurisdiction, is located approximately 2.7km west of the site. Platt Brook is located 570m north of

the site, Fallowfield Brook is culverted and approximately 250m south of the site and Cringle Brook is culverted and approximately 630m south of the site.

Although there is evidence within the SFRA to suggest the area is at risk of fluvial flooding due to local watercourses, according to the 'Recorded Flood Outlines' dataset provided by the EA, the site is shown to be outside the extents of historical flooding events.

Therefore, the site is concluded to be at 'low' risk from fluvial flooding.

5.3 Surface Water Flood Risk

Surface water (pluvial) flooding is caused by rainfall levels exceeding the natural infiltration properties of the surrounding soils. Flooding can also occur owing to the absence of a natural method of drainage such as watercourses or ditches, or where soil infiltration rates are low. Flooding often results in ponding of water at low points or when surface water flow routes are blocked by an obstruction.

According to the EA Long Term Flood Risk Map (Surface Water) in **Figure 5**, the development site boundary is entirely at a 'Very Low' risk of surface water flooding (<0.1% annual probability). There are areas of 'Low' to 'High' risk (0.1%-3.3% annual probability) located to the south and south west of the site however, these areas do not breach the site boundary. Additionally, it is likely that this will drain in a southerly direction away from the site in accordance with the topography of the area.

As such, the site is considered to be at 'low' risk of flooding from surface water.

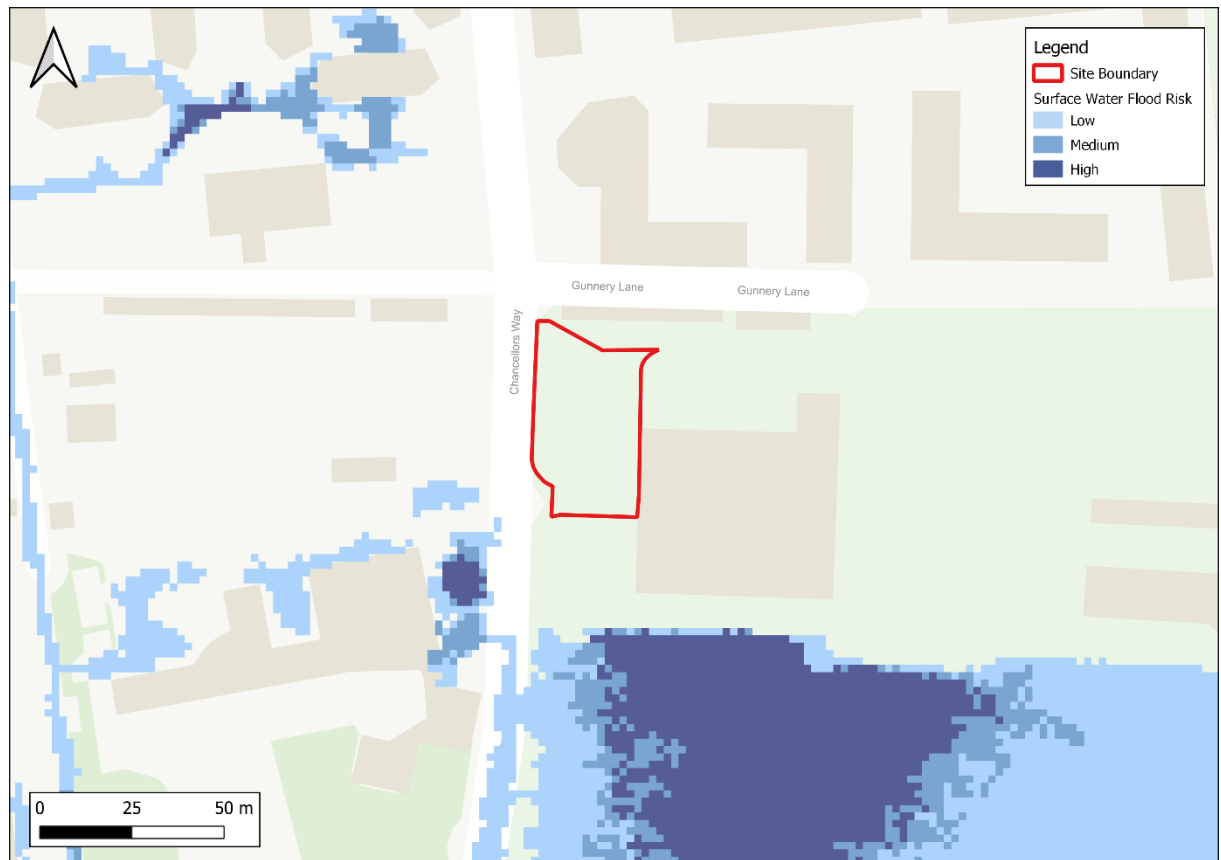


Figure 5: EA's Long Term Flood Risk map (Surface Water)

5.3.1 National Flood Risk Assessment 2 (January 2025)

In January 2025, National Flood Risk Assessment 2 (NaFRA2) mapping was made available by the EA, which built upon the previous update to the National Flood Risk Assessment in 2018. NaFRA2 has integrated climate change projections within this update and so this is a consideration made when assessing flood risk extents. **Figure 6**, shows the updated NaFRA2 surface water flood mapping in relation to the site.

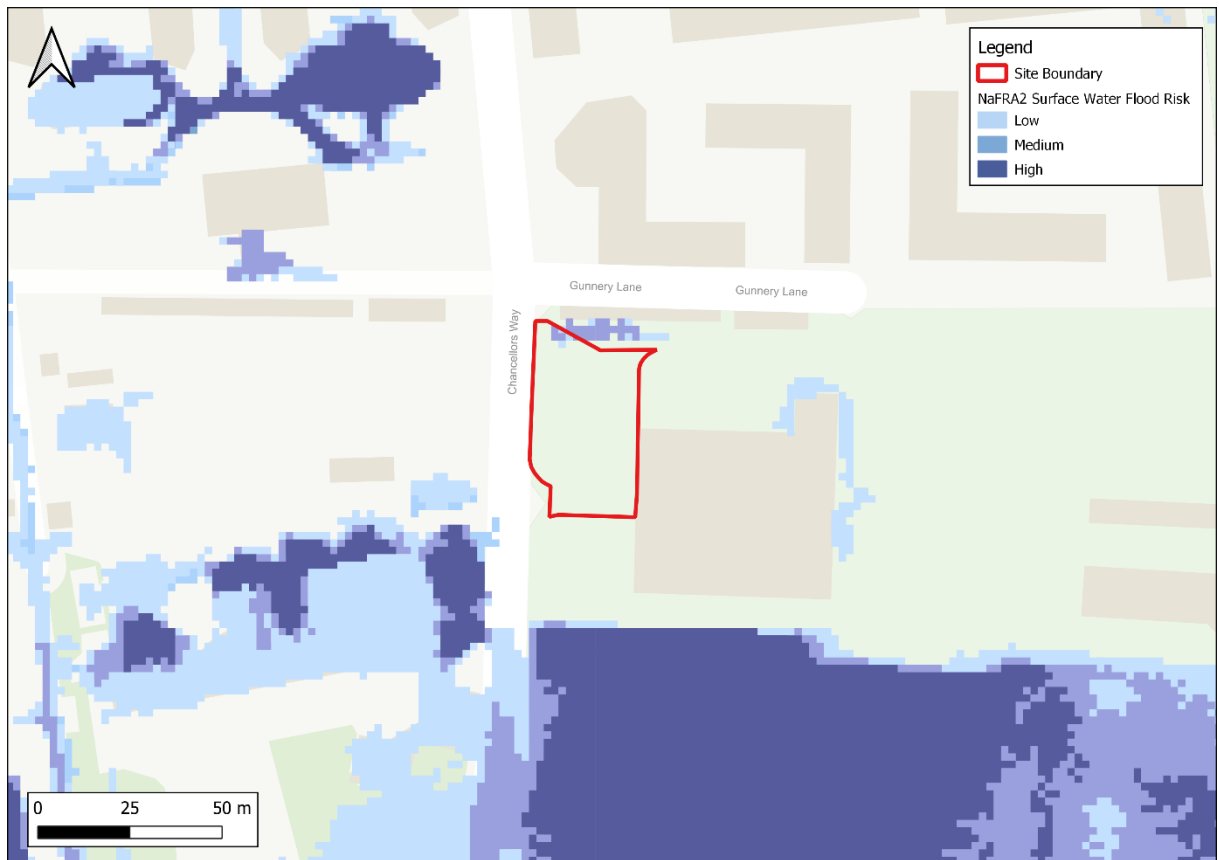


Figure 6: NaFRA2 Surface Water Flood Risk mapping (Extents) including Climate Change

As shown in **Figure 6**, the flood extent has very slightly increased in the northern boundary of the site with a 'low' to 'medium' (<0.1%-1% annual probability) risk of surface water. This is a very small and localised area and only slightly breaches the site boundary.

As such, it is considered that the development proposals will be at a 'very low' risk of surface water flooding, now and in the future with consideration of climate change.

5.4 Groundwater Flooding

Groundwater flooding is caused by the emergence of water originating from sub-surface permeable strata. A groundwater flood event results from a rise in groundwater level sufficient for the water table to intersect the ground surface and inundate low lying land. Periods of prolonged rainfall may also be a cause of groundwater flooding, with aquifers and soils becoming saturated.

The site itself is currently a car park. The bedrock identification as sandstone indicates a generally higher permeability of the geology at the site. The classification of the bedrock deposit as a Principal Aquifer is indicative that there is high capacity to store/transmit water through the underlying ground. The classification of the superficial deposit as a Secondary undifferentiated Aquifer is also indicative that there may be capacity to store/transmit water through the underlying ground. In addition, it has been indicated that soils at the site are clayey with impeded drainage, which may inhibit the rise of groundwater to a certain degree.

The topography of the site is such that if any groundwater was to emerge at the surface, it is unlikely to pond and would be directed downhill and away from the site in a south westerly direction.

The EA's Long Term Flood Risk service states that groundwater flooding is "unlikely in this area" and the SFRA's detailed in Section 4.5 and 4.6 show no indication of groundwater flooding at the site. A figure from the SFRA showing groundwater flooding within the Manchester City, Salford City and Trafford area can be found in Appendix B and confirms that the site is free from groundwater flooding.

Therefore, the site is considered to be at 'low' risk of flooding from groundwater.

5.5 Sewer Flooding

Flooding can occur owing to the failure of existing foul or surface water drainage infrastructure. If flows within the drainage system exceed the designed capacity or foreign matter causes blockages, overflow to the surface can occur, leading to flooding.

As mentioned in Section 4.5, Fallowfield has been flagged within the SFRA as experiencing sewer and drainage problems during rainfall events. Gunnery Lane and Chancellors Way are likely to contain sewers, however, the topography of the site is such that in the event of sewer capacity exceedance, flows would be directed downhill and to the south, without ponding on site.

As the residual risk is considered minimal, the site is considered to be at 'low' risk of sewer flooding.

5.6 Artificial Sources Flood Risk

Failures and overtopping of reservoirs and navigable water bodies, and failure of water mains, constitute the primary means of flooding from artificial sources.

The EA Reservoir Failure Extent mapping (**Figure 7**) shows the site to lie outside of the extents of potential reservoir flooding. In addition, the EA state that reservoir flooding is extremely unlikely to happen. All large reservoirs must be inspected and supervised by reservoir panel engineers. As the enforcement authority for the Reservoirs Act 1975 in England, the EA ensure that reservoirs are inspected regularly, and essential safety work is carried out.

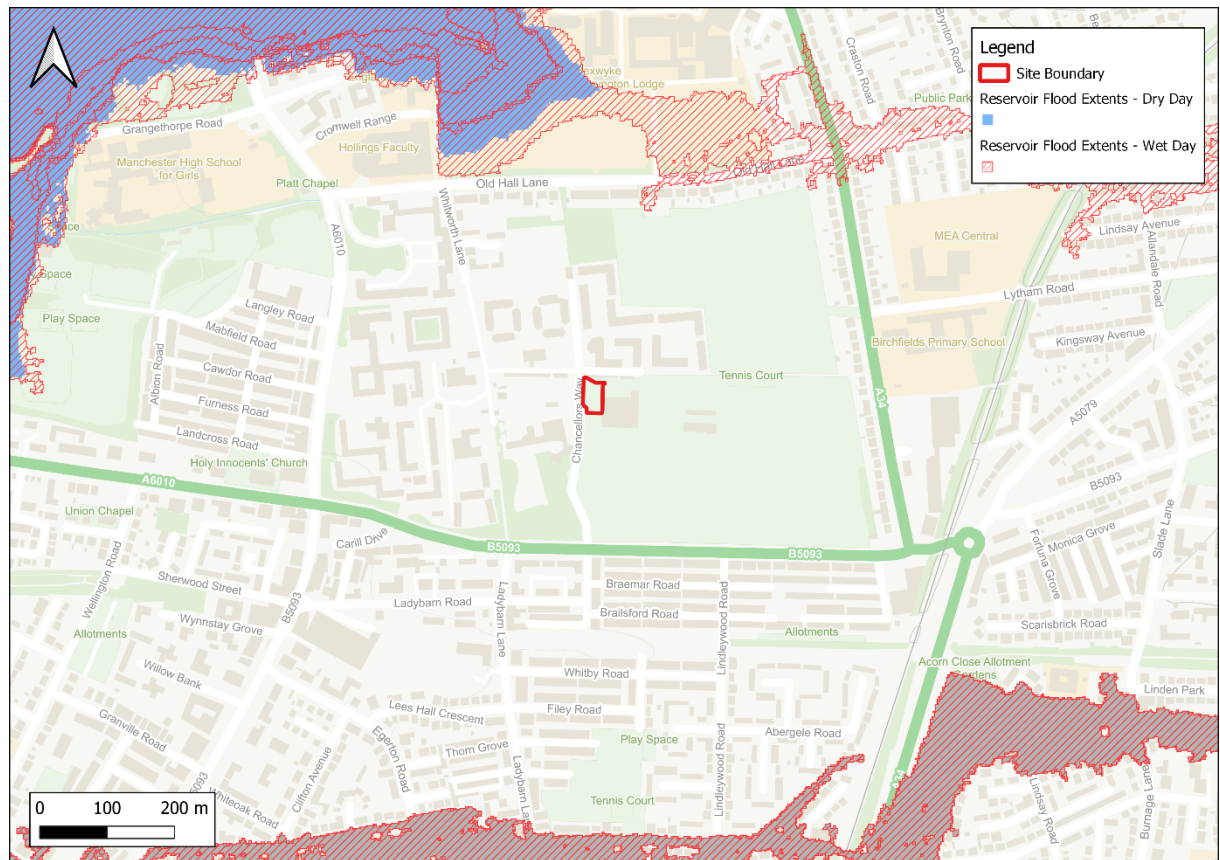


Figure 7: EA Reservoir Failure Extent Mapping

There are no other manmade waterbodies in the vicinity of the site, therefore, the risk to the site from artificial sources of flood risk is considered to be 'low'.

6. Sequential and Exception Tests

6.1 The Sequential Test

The NPPF requires that a sequential, risk-based approach is followed to steer new developments to areas with the lowest probability of flooding (i.e. Flood Zone 1, then 2, then 3).

As the site is located entirely within Flood Zone 1, and at low or negligible risk of all other sources of flooding, a Sequential Test is not required.

6.2 The Exception Test

The Exception Test is used where no suitable development areas can be found in low-risk areas, the risk of flooding is clearly outweighed by other sustainability factors, and the development will be safe for its lifetime, taking climate change into account. Paragraph 178 of the NPPF states that for the Exception Test to be passed:

- » It must be demonstrated that the development provides wider sustainability benefits to the community that outweigh the flood risk, informed by a Strategic Flood Risk Assessment where one has been prepared; and
- » A site-specific flood risk assessment must demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.

As the site is located within Flood Zone 1 and has a flood risk vulnerability classification of 'Less Vulnerable', in accordance with the '*NPPG Flood Risk Vulnerability and Flood Zone Incompatibility matrix*' (Table 2 of this report), the Exception Test is not required for the site.

7. Conclusions

Hydrock Consultants Limited (Hydrock), now Stantec, have been commissioned by Rider Levett Bucknall to undertake a Flood Risk Assessment (FRA), to be submitted in support of a planning application for the proposed temporary relocation of the Squirrels Bar, a key student social and events facility, as part of the redevelopment of the Fallowfield Campus.

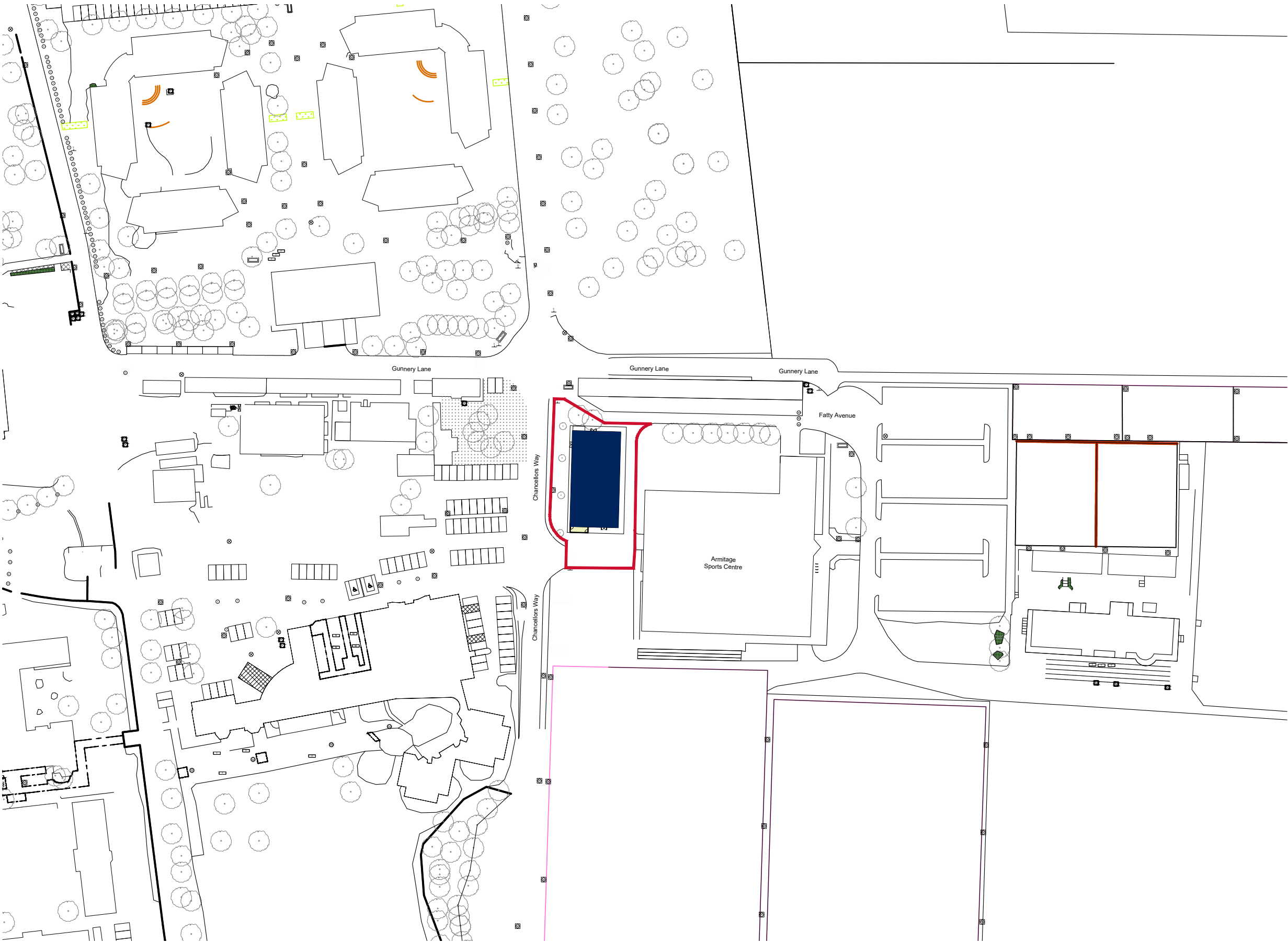
The site is located within Flood Zone 1, and is therefore classified as having a 'low' risk of flooding from tidal and/or fluvial sources. The site is considered to be at low risk of flooding from surface water and all other assessed sources.

This report therefore demonstrates that, in respect to flood risk, the proposed development:

- » Is suitable in the location proposed;
- » Will be adequately flood resistant and resilient;
- » Will not place additional persons at risk of flooding;
- » Will not increase flood risk elsewhere as a result of the proposed development through the loss of floodplain storage or impedance of flood flows; and
- » Will put in place measures to ensure surface water is appropriately managed.

This report concludes that in flood risk context, the proposals are safe and appropriate and do not increase flood risk.

Appendix A Proposed Site Layout



LEGEND

PLANNING BOUNDARY LINE

Rev	Description	Date
P01	First issue.	06/03/2025
P02	Updated to suit new site boundary	19/03/2025

Client:

UOM

Project Title:

SQUIRRELS BAR
REPROVISION

RLB ID:	Drawing Number:
004150	02

Drawing Title:

LOCATION PLAN

Stage:	Status:	Revision:
PLANNING	S0	P01

Date:	Size	Scale:
26/03/2025	A3	1:1250



1 King Street, Manchester, UK, M2 6AW
+44 (0) 161 868 7700 RLB_UK RLB.com

Contact: Amy Le Vasseur@uk.rlb.com

Author: Thomas.Tunstall@uk.rlb.com

QA: Amy Le Vasseur@uk.rlb.com

This drawing is to be read in conjunction with all other associated specifications, schedules, drawings and information issued.

Do NOT scale this drawing. Check and verify ALL dimensions and levels and on site before work commences. For discrepancies or omissions contact Rider Levett Bucknall.

All work and materials to conform with current applicable statutory legislation and regulations.

All work to comply with Construction Design Management (CDM) 2015.

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Print colour check (CMYK) Print size check 9mm

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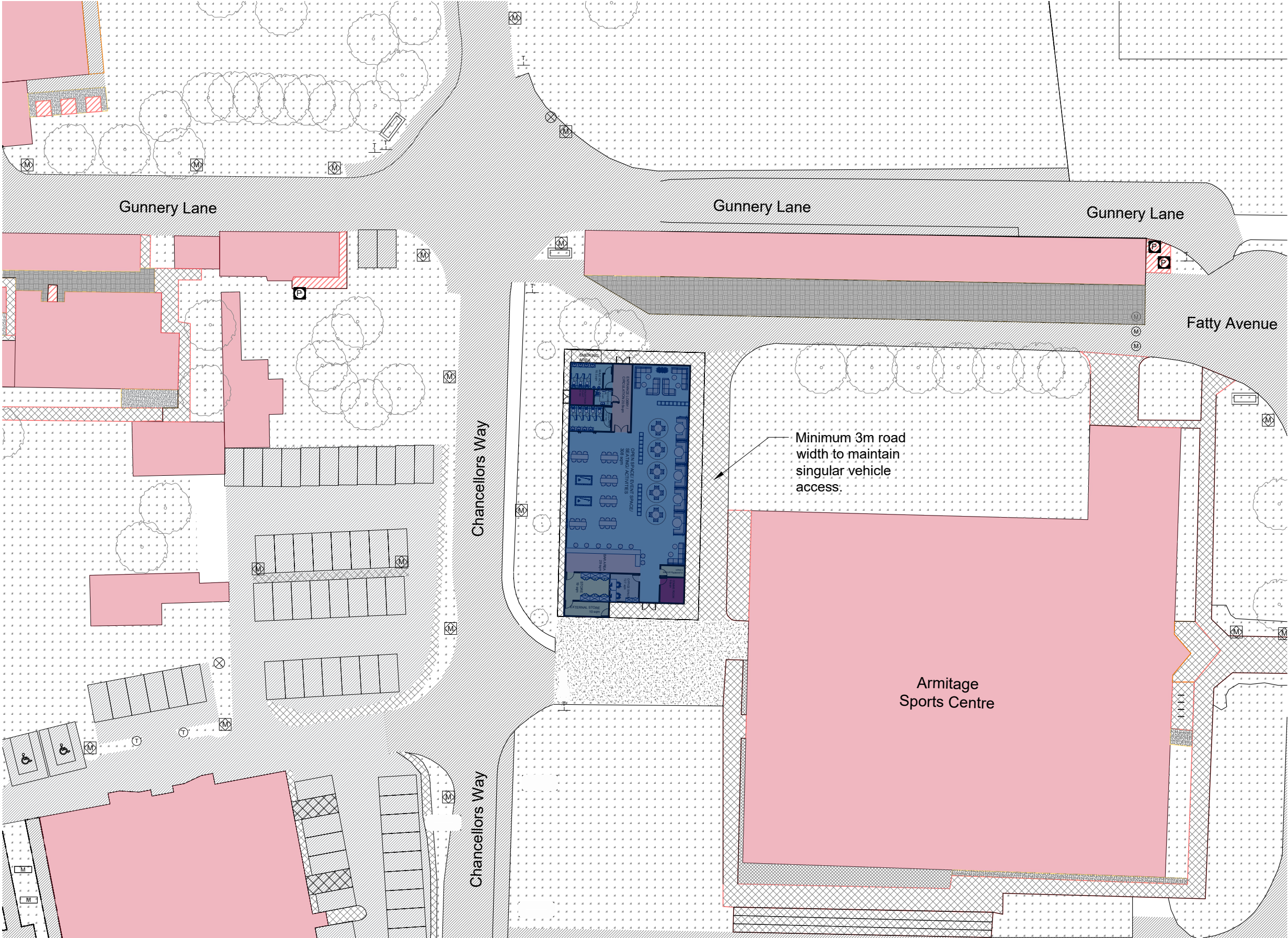
0 1m 2m 5m

1:100

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Location Plan

SCALE : 1:1250



LEGEND

- PROPOSED SQUIRRELS BAR
- EXISTING SURROUNDING BUILDINGS
- SOFT LANDSCAPE
- EXISTING/ PROPOSED FOOTPATH / ROAD
- HARD LANDSCAPE

Rev	Description	Date
P01	First issue.	06/03/2025
P02	Updated internal layout	18/03/2025
P03	Updated internal layout	20/03/2025

Client:

UOM

Project Title:

SQUIRRELS BAR
REPROVISION

RLB ID:

004150

Drawing Number:

03

Drawing Title:

PROPOSED SITE LAYOUT

Stage:	Status:	Revision:
PLANNING	S0	P01
Date:	Size:	Scale:
26/03/2025	A3	1:500



1 King Street, Manchester, UK, M2 6AW
+44 (0) 161 868 7700 RLB_UK RLB.com

Contact: Amy Le Vasseur@uk.rlb.com

Author: Thomas.Tunstall@uk.rlb.com

QA: Amy Le Vasseur@uk.rlb.com

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All work and materials to conform with current applicable statutory legislation and regulations.

All work to comply with Construction Design Management (CDM) 2015.

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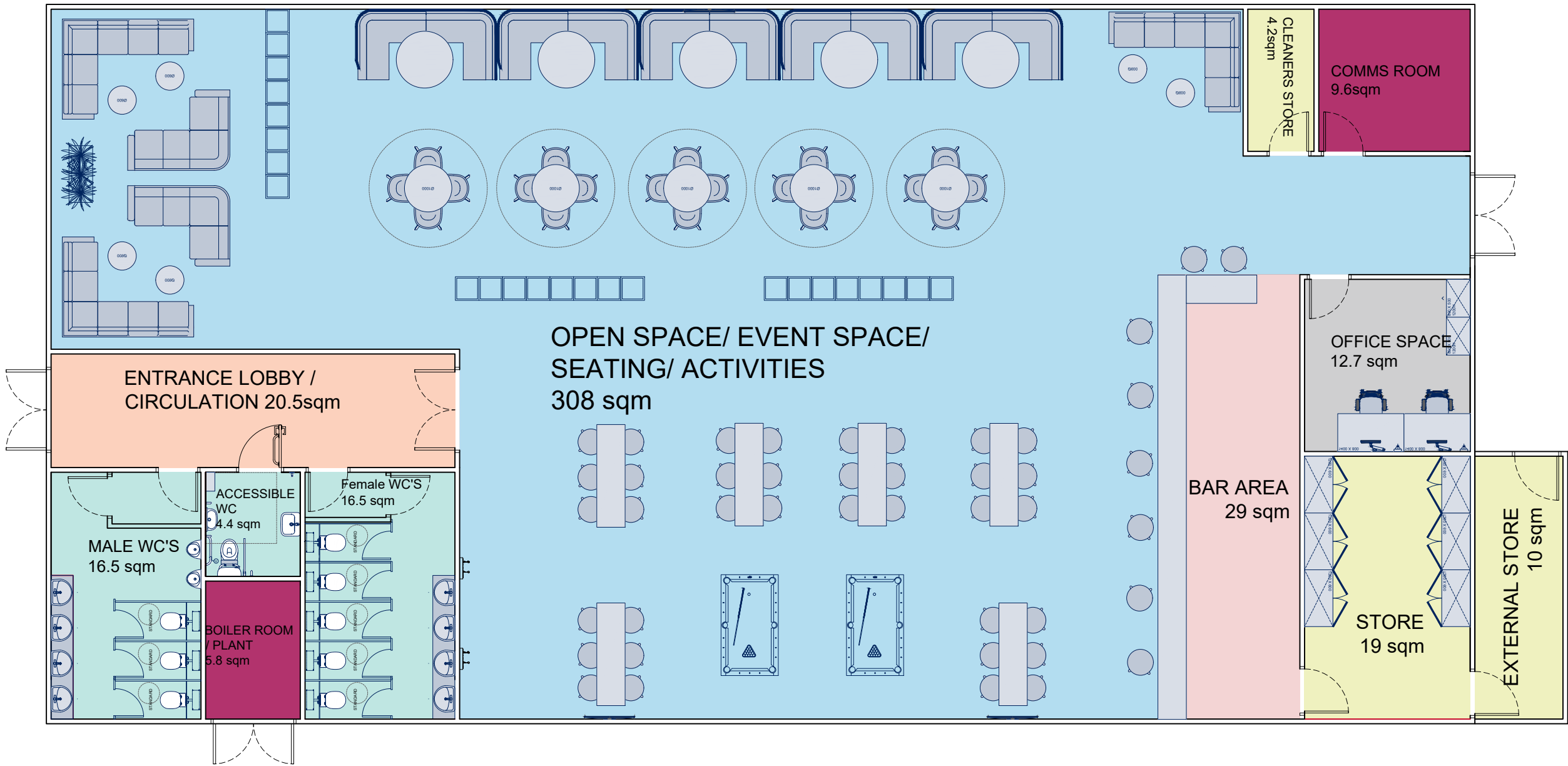
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0 5m 10m 15m 20m 30m

1:500

PROPOSED SITE LAYOUT

SCALE : 1:500



LEGEND

- OPEN SPACE/ SEATING
- WC'S
- BAR/ STAFF AREA
- STORE ROOMS
- CIRCULATION
- OFFICE SPACE
- SERVICES/ BOILER/ COMMS

Total GIA: 460 Sqm

Rev	Description	Date
P01	First issue.	06/03/2025
P02	Internal layout updated.	18/03/2025
P03	Internal layout updated.	19/03/2025
P04	Internal layout updated.	20/03/2025

Client:

UOM

Project Title:

SQUIRRELS BAR
REPROVISION

RLB ID:

004150

Drawing Number:

04

Drawing Title:

PROPOSED FLOOR PLAN

Stage:	Status:	Revision:
PLANNING	S0	P04
Date:	Size:	Scale:
26/03/2025	A3	1:100



1 King Street, Manchester, UK, M2 6AW
+44 (0) 161 868 7700 RLB_UK RLB.com

Contact: Amy Le Vasseur@uk.rlb.com

Author: Thomas.Tunstall@uk.rlb.com

QA: Amy Le Vasseur@uk.rlb.com

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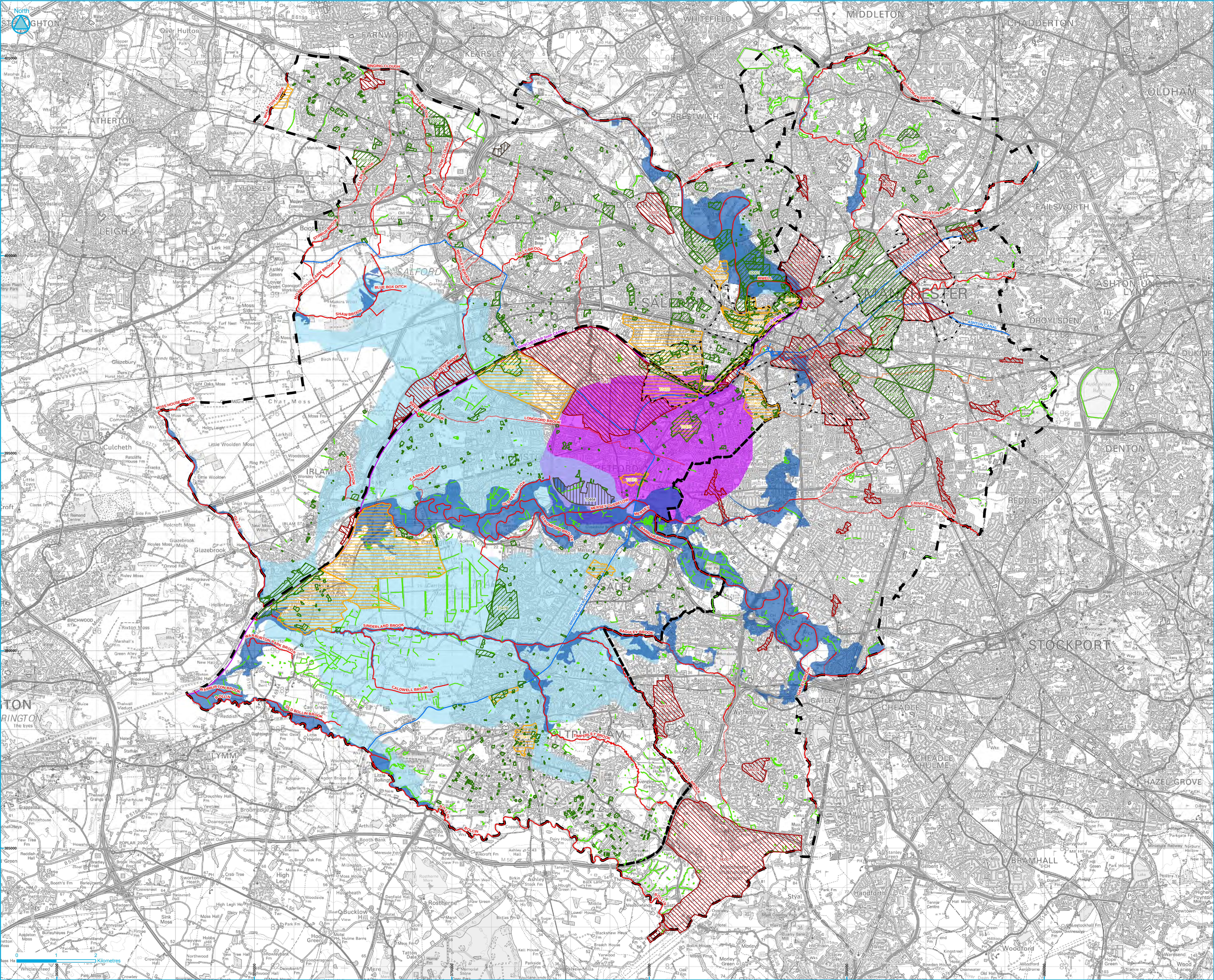


PROPOSED GF LAYOUT

SCALE : 1:100

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UOM

Appendix B Level 2 SFRA Groundwater Flooding Risk



- Council Boundary
- Ashton, Bridgewater and Rochdale Canals
- Manchester Ship Canal / Grey Inwell
- Other Waterbodies
- Main Rivers (V8.0)**
 - Culverted
 - Open
- Digitised River Lines**
 - Culverted
 - Open
- Groundwater Issue**
 - Areas at risk of GW Flooding
 - Areas of shallow GW
 - Areas at risk of GW rebound
- Potential Development Sites / Locations**
 - Employment
 - Housing
 - Mixed Use
 - Other
- Regional Centre Boundary

The map has been produced in accordance with PPS25: Development and Flood Risk and its Practice Guide. This map shows areas that are potentially at risk from groundwater flooding and should be used to scope suitable mitigation measures in a site specific Flood Risk Assessment.

The Main River information shown in the SFRA is provided by the Environment Agency; the centreline data may deviate from that shown on basemapping due to inherent differences in data resolution. Further information on Main Rivers is provided on the Environment Agency's website. The mapping of culverted sections of watercourse is a strategic screening only based upon Ordnance Survey 1:10,000 mapping and should be confirmed for more detailed studies such as site specific Flood Risk Assessment. The canals layer does not necessarily cover all the canal arms, but the modelled overtopping/breaching and hydraulic interactions with rivers and other waterbodies is complete and accurate as appropriate for a Strategic Flood Risk Assessment.

The information on the map is based on Environment Agency potential groundwater rebound areas, data from the Coal Authority, BGS drift geology mapping and Defra Groundwater Emergence Maps.

The River Inwell between Victoria Station and Pomona Island is not shown as a Main River on the Environment Agency's Flood Map although Flood Zones related to the river are. The same approach has been taken in this SFRA.

www.jeremybenn.co.uk
t 01925 570876
f 0845 882772
e info@jbaconsulting.co.uk

Bank Quay House
Sankey Street
Warrington
WA1 1NN
United Kingdom

Other offices at Atherstone, Doncaster, Edinburgh, Haywards Heath, Limerick, Newcastle upon Tyne, Newport, Northallerton, Salford, Skipton, Tadcaster & Wellingford

for

Manchester City, Salford City and Trafford Councils Level 2 Hybrid SFRA

Groundwater Flooding

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Checked by: J Dimelow	Date: 01/02/2011	
Approved by: J Cooper	Date: 01/02/2011	
File Name: ..\ArcViewMapping\Level1\MS2_GroundwaterFlooding_V1.3.mxd		
Drawing Number:	Status:	Scale:
GW_2.1	FINAL	1:45,000
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