

# M&S South Ruislip

## Flood Risk Assessment and Drainage Statement

ENV-22687  
Flood Risk Assessment and  
Drainage Statement  
02  
November 2025

## REPORT

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### Document status

Version	Purpose of document	Authored by	Reviewed by	Approved by	Review date
01	First Draft	Penelope Moody/ Caitlin Evans	Francesca Caggiano	Chris Rogers	31/10/2025
02	Updated with Client Comments	Penelope Moody	Francesca Caggiano	Chris Rogers	13/11/2025

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### Approval for issue

Chris Rogers

13th November 2025

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- Appendix D** Topographic Survey and LiDAR
- Appendix E** Existing and Proposed Development Plans

# 1 Introduction

- 1.1 RPS was commissioned to prepare a Flood Risk Assessment (FRA) and Drainage Statement for Unit 1, Victoria Retail Park, Crown Road, Ruislip, HA4 0AJ in relation to the proposed *“Continued use as a retail unit (Class E(a)), including food sales, with external alterations to the front, rear and side elevations of the unit, demolition and other works to the existing garden centre, provision of external plant area, installation of new trolley bays, cycle parking and other associated works and reconfiguration of existing mezzanine and installation of additional mezzanine floorspace”*.
- 1.2 The aim of the FRA is to outline the potential for the site to be impacted by flooding, the impacts of the proposed development on flooding in the vicinity of the site, and the proposed measures which could be incorporated into the development to mitigate the identified risk. The report has been produced in accordance with the guidance detailed in the National Planning Policy Framework (NPPF) and the associated Planning Practice Guidance (PPG). Reference has also been made to the London Borough of Hillingdon (the Council) Strategic Flood Risk Assessment (SFRA).
- 1.3 This report has been produced in consultation with the Environment Agency (EA) and the Lead Local Flood Authority (LLFA). The site is not located within an Internal Drainage Board (IDB) District.
- 1.4 This report is not intended to provide a detailed drainage strategy for the development. The proposal will not increase the impermeable area at the site, only minimal external works are proposed, as such the existing drainage infrastructure serving the site will be retained.
- 1.5 The desk study was undertaken by reference to information provided / published by the following bodies:
- EA;
  - London Borough of Hillingdon (the Council);
  - Centre for Ecology and Hydrology (CEH);
  - British Geological Survey (BGS);
  - Ordnance Survey (OS); and
  - Thames Water (TW).

## 2 Planning Policy Context

### National Planning Policy

- 2.1 The National Planning Policy Framework (NPPF)<sup>1</sup> was released in March 2012 and was updated in December 2024. The document advises of the requirements for a site-specific Flood Risk Assessment (FRA) for any of the following cases (Planning and Flood Risk paragraph 181 (footnote 63)):
- All proposals (including minor development and change of use) located within the EA designated floodplain, recognised as either Flood Zone 2 (medium probability) or Flood Zone 3 (high probability);
  - All proposals of 1 hectare (ha) or greater in an area located in Flood Zone 1 (low probability);
  - All proposals within an area which has critical drainage problems (as notified to the Local Planning Authority by the EA);
  - Land identified in a strategic flood risk assessment as being at increased flood risk in future; and
  - Where proposed development may be subject to other sources of flooding, where its development would introduce a more vulnerable use.
- 2.2 Paragraph 182 of the updated NPPF identifies that applications which could affect drainage on or around the site should incorporate sustainable drainage systems to control flow rates and reduce volumes of runoff; and which are proportionate to the nature and scale of the proposal. These should provide multifunctional benefits wherever possible, through facilitating improvements in water quality and biodiversity, as well as benefits for amenity. Sustainable drainage systems provided as part of development proposals should:
- a. Take account of advice from the Lead Local Flood Authority;
  - b. Have appropriate proposed minimum operational standards; and
  - c. Have maintenance arrangements in place to ensure an acceptable standard of operation for the lifetime of the development.
- 2.3 Defra published their 'National technical standards for sustainable drainage systems'<sup>2</sup> on the 19<sup>th</sup> of June 2025. These are supported by the revised NPPF.

### Regional Planning Policy

- 2.4 The development site is within the London Borough of Hillingdon, which is covered by the London Plan 2021, published in March 2021. The London Plan contains various policies pertaining to flood risk and drainage, the relevant aspects of which are reproduced below.

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<sup>1</sup><https://www.gov.uk/government/publications/national-planning-policy-framework--2>

<sup>2</sup> <https://www.gov.uk/government/publications/national-standards-for-sustainable-drainage-systems/national-standards-for-sustainable-drainage-systems-suds>

### **Policy SI12 Flood Risk Management**

- A. Current and expected flood risk from all sources (as defined in paragraph 9.2.12) across London should be managed in a sustainable and cost-effective way in collaboration with the Environment Agency, the Lead Local Flood Authorities, developers and infrastructure providers.
- B. Development Plans should use the Mayor's Regional Flood Risk Appraisal and their Strategic Flood Risk Assessment as well as Local Flood Risk Management Strategies, where necessary, to identify areas where particular and cumulative flood risk issues exist and develop actions and policy approaches aimed at reducing these risks. Boroughs should co-operate and jointly address cross-boundary flood risk issues including with authorities outside London.
- C. Development proposals should ensure that flood risk is minimised and mitigated, and that residual risk is addressed. This should include, where possible, making space for water and aiming for development to be set back from the banks of watercourses.
- D. Developments Plans and development proposals should contribute to the delivery of the measures set out in Thames Estuary 2100 Plan. The Mayor will work with the Environment Agency and relevant local planning authorities, including authorities outside London, to safeguard an appropriate location for a new Thames Barrier.
- E. Development proposals for utility services should be designed to remain operational under flood conditions and buildings should be designed for quick recovery following a flood.
- F. Development proposals adjacent to flood defences will be required to protect the integrity of flood defences and allow access for future maintenance and upgrading. Unless exceptional circumstances are demonstrated for not doing so, development proposals should be set back from flood defences to allow for any foreseeable future maintenance and upgrades in a sustainable and cost-effective way.
- G. Natural flood management methods should be employed in development proposals due to their multiple benefits including increasing flood storage and creating recreational areas and habitat.

### **Policy SI13 Sustainable Drainage**

- A. Lead Local Flood Authorities should identify – through their Local Flood Risk Management Strategies and Surface Water Management Plans – areas where there are particular surface water management issues and aim to reduce these risks. Increases in surface water runoff outside these areas also need to be identified and addressed.
- B. Development proposals should aim to achieve greenfield run-off rates and ensure that surface water run-off is managed as close to its source as possible. There should also be a preference for green over grey features, in line with the following drainage hierarchy:
  - 1) rainwater use as a resource (for example rainwater harvesting, blue roofs for irrigation)
  - 2) rainwater infiltration to ground at or close to source
  - 3) rainwater attenuation in green infrastructure features for gradual release (for example green roofs, rain gardens)
  - 4) rainwater discharge direct to a watercourse (unless not appropriate)
  - 5) controlled rainwater discharge to a surface water sewer or drain

- 6) controlled rainwater discharge to a combined sewer.
- C. Development proposals for impermeable surfacing should normally be resisted unless they can be shown to be unavoidable, including on small surfaces such as front gardens and driveways.
- D. Drainage should be designed and implemented in ways that promote multiple benefits including increased water use efficiency, improve water quality, and enhance biodiversity, urban greening, amenity and recreation.

### Local Planning Policy

2.5 The Local Plan Part 1 - Strategic Policies was adopted in November 2012 and is active until 2026. It contains the following Policies relating to flood risk and drainage:

#### Policy EM1: Climate Change Adaption and Mitigation

“The Council will ensure that climate change mitigation is addressed at every stage of the development process by:

(...) 11. Requiring major development proposals to consider the whole water cycle impact which includes flood risk management, foul and surface water drainage and water consumption.

12. Giving preference to development of previously developed land to avoid the loss of further green areas.”

#### Policy EM6: Flood Risk Management

“The Council will require new development to be directed away from Flood Zones 2 and 3 in accordance with the principles of the National Planning Policy Framework (NPPF).

The subsequent Hillingdon Local Plan: Part 2 -Site Specific Allocations LDD will be subjected to the Sequential Test in accordance with the NPPF. Sites will only be allocated within Flood Zones 2 or 3 where there are overriding issues that outweigh flood risk. In these instances, policy criteria will be set requiring future applicants of these sites to demonstrate that flood risk can be suitably mitigated.

The Council will require all development across the borough to use sustainable urban drainage systems (SUDS) unless demonstrated that it is not viable. The Council will encourage SUDS to be linked to water efficiency methods. The Council may require developer contributions to guarantee the long term maintenance and performance of SUDS is to an appropriate standard.”

2.6 The Local Plan Part 2-Development Management Policies was adopted in January 2020. It contains the following Policies relating to flood risk and drainage:

#### Policy DME18 : Waterside Development

A) Development on sites that adjoin or include a watercourse should:

- i. have regard to the relevant provisions of the Thames River Basin Management Plan and any other relevant Catchment Management Plans;
- ii. not extend within 8 metres of the top of the bank of a main river or 5 metres either side of an ordinary watercourse or an appropriate width as may be agreed by the Council;
- iii. where feasible, secure the implementation of environmental enhancements to open sections of river or watercourse; and

- iv. where feasible, implement a scheme for restoring culverted sections of river or watercourses which must include an adequate buffer for flooding and maintenance purposes.

B) Where on-site environmental enhancements or deculverting are financially viable but not feasible, the Council will seek a financial contribution towards relevant projects for the enhancement or deculverting of other sections of rivers or watercourses.

C) Existing wharves and their access will be protected for continued use.

D) Proposals that would adversely affect the infrastructure of main rivers and ordinary watercourses, or which fail to secure feasible enhancements or deculverting, will be resisted.

E) Development located in or adjacent to watercourses should enhance the waterside environment and biodiversity by demonstrating a high design quality which respects the historic significance of the canal and character of the waterway and provides access and improved amenity to the waterfront. (...)"

### **Policy DMEI 9: Management of Flood Risk**

"A) Development proposals in Flood Zones 2 and 3a will be required to demonstrate that there are no suitable sites available in areas of lower flood risk. Where no appropriate sites are available, development should be located on the areas of lowest flood risk within the site. Flood defences should provide protection for the lifetime of the development. Finished floor levels should reflect the Environment Agency's latest guidance on climate change.

B) Development proposals in these areas will be required to submit an appropriate level Flood Risk Assessment (FRA) to demonstrate that the development is resilient to all sources of flooding.

C) Development in Flood Zone 3b will be refused in principle unless identified as an appropriate development in Flood Risk Planning Policy Guidance. Development for appropriate uses in Flood Zone 3b will only be approved if accompanied by an appropriate FRA that demonstrates the development will be resistant and resilient to flooding and suitable warning and evacuation methods are in place.

D) Developments may be required to make contributions (through legal agreements) to previously identified flood improvement works that will benefit the development site.

E) Proposals that fail to make appropriate provision for flood risk mitigation, or which would increase the risk or consequences of flooding, will be refused."

### **Policy DMEI 10: Water Management, Efficiency, and Quality**

"A) Applications for all new build developments (not conversions, change of use, or refurbishment) are required to include a drainage assessment demonstrating that appropriate sustainable drainage systems (SuDS) have been incorporated in accordance with the London Plan Hierarchy (Policy 5.13: Sustainable drainage).

B) All major new build developments, as well as minor developments in Critical Drainage Areas or an area identified at risk from surface water flooding must be designed to reduce surface water run-off rates to no higher than the pre-development greenfield run-off rate in a 1:100 year storm scenario, plus an appropriate allowance for climate change for the worst storm duration. The assessment is required regardless of the changes in impermeable areas and the fact that a site has an existing high run-off rate will not constitute justification.

C) Rain Gardens and non householder development should be designed to reduce surface water run-off rates to Greenfield run-off rates.

D) Schemes for the use of SuDS must be accompanied by adequate arrangements for the management and maintenance of the measures used, with appropriate contributions made to the Council where necessary.

E) Proposals that would fail to make adequate provision for the control and reduction of surface water run-off rates will be refused.

F) Developments should be drained by a SuDS system and must include appropriate methods to avoid pollution of the water environment. Preference should be given to utilising the drainage options in the SuDS hierarchy which remove the key pollutants that hinder improving water quality in Hillingdon. Major development should adopt a 'treatment train' approach where water flows through different SuDS to ensure resilience in the system.

Water Efficiency

G) All new development proposals (including refurbishments and conversions) will be required to include water efficiency measures, including the collection and reuse of rain water and grey water.(...)

I) It is expected that major development<sup>8</sup> proposals will provide an integrated approach to surface water run-off attenuation, water collection, recycling and reuse.”

Water and Wastewater Infrastructure

J) All new development proposals will be required to demonstrate that there is sufficient capacity in the water and wastewater infrastructure network to support the proposed development. Where there is a capacity constraint the local planning authority will require the developer to provide a detailed water and/or drainage strategy to inform what infrastructure is required, where, when and how it will be delivered.

2.7 The Council combined with other west London boroughs of Brent, Barnet, Ealing, Harrow, Hounslow to produce the SFRA. The SFRA identifies and maps flood risk from all sources at a borough-wide scale as well as providing guidance on producing site specific FRAs. Relevant information from the SFRA has been referenced throughout this FRA report.

**Climate Change Allowances**

**Peak River Flow**

2.8 Peak river flow allowances show the anticipated changes to peak flow by management catchment. EA guidance on the application of climate changes allowance is dependent on development vulnerability. Annex 3: Flood risk vulnerability classification deems the current site to be classified as 'Less Vulnerable'. The EA require that for 'Less Vulnerable' developments, the 'Central' allowance should be used to assess climate change (CC). Given the indicative development lifespan of commercial developments as 60years, the 2080's epoch will be considered. As presented within Table 1, this accounts for a 17% increase in peak river flows.

**Table 1. Change to Peak River flow allowances in London Management Catchment**

Allowance Category	Central	Higher	Upper
<b>2020s</b>	10%	14%	26%
<b>2050s</b>	7%	14%	30%
<b>2080s</b>	<b>17%</b>	27%	54%

**Peak Rainfall Intensity**

- 2.9 Peak rainfall intensity allowances show the anticipated changes to rainfall intensities by management catchment. Management catchments are sub-catchments of river basin districts peak rainfall intensity allowances are used to consider how climate change might impact rainfall and surface water runoff in the future to ensure developments are designed to consider this risk.
- 2.10 In May 2022 the EA released revised climate change allowances for England which updates the earlier version of ‘Adapting to Climate Change: Advice to Flood & Coastal Risk Management.’ The climate change allowances are based on UKCP18 Local 2.2km projections and the ‘Future-Drainage’ research program. Allowances are provided in England by management catchments instead of at a national scale.
- 2.11 The site is located within the London Management Catchment and extreme rainfall allowances are outlined below in Table 2. Given the indicative development lifespan of the developments as 60-years, the expected uplift for the site accounting for climate change is 25%for extreme rainfall.

**Table 2. Change to extreme rainfall intensity London Management Catchment**

Change to extreme rainfall intensity		
<b>Applies to the London Management Catchment</b>	Total potential change anticipated for 1% annual exceedance rainfall event	
	Total potential change anticipated for ‘2050s’ (2040- 2069)	Total potential change anticipated for the ‘2070s’ (2061-2125)
<b>Upper Estimate</b>	40%	40%
<b>Central Estimate</b>	25%	25%

### 3 Consultation

#### Environment Agency

- 3.1 The FRA has been produced in consultation with the Partnership and Strategic Overview Team at the EA. Modelled flood level data has been requested from the EA, as well as details of historic flooding and flood defences within the vicinity of the site. The information provided by the EA is included as **Appendix A** and is summarised in Section 6.

#### Water Authority

- 3.2 The public sewer network within the vicinity of the site is operated by TW. Preliminary consultation with TW has identified no recorded incidents of flooding at the site caused by surcharging of public sewers. The full response is provided in full in **Appendix B**.

#### Lead Local Flood Authority

- 3.3 The site is within the administrative boundary of the London Borough of Hillingdon (the Council). Consultation has been undertaken with the Council, and it was confirmed that they do not have any reports of historical flooding of the site. The full response is provided in **Appendix C**.

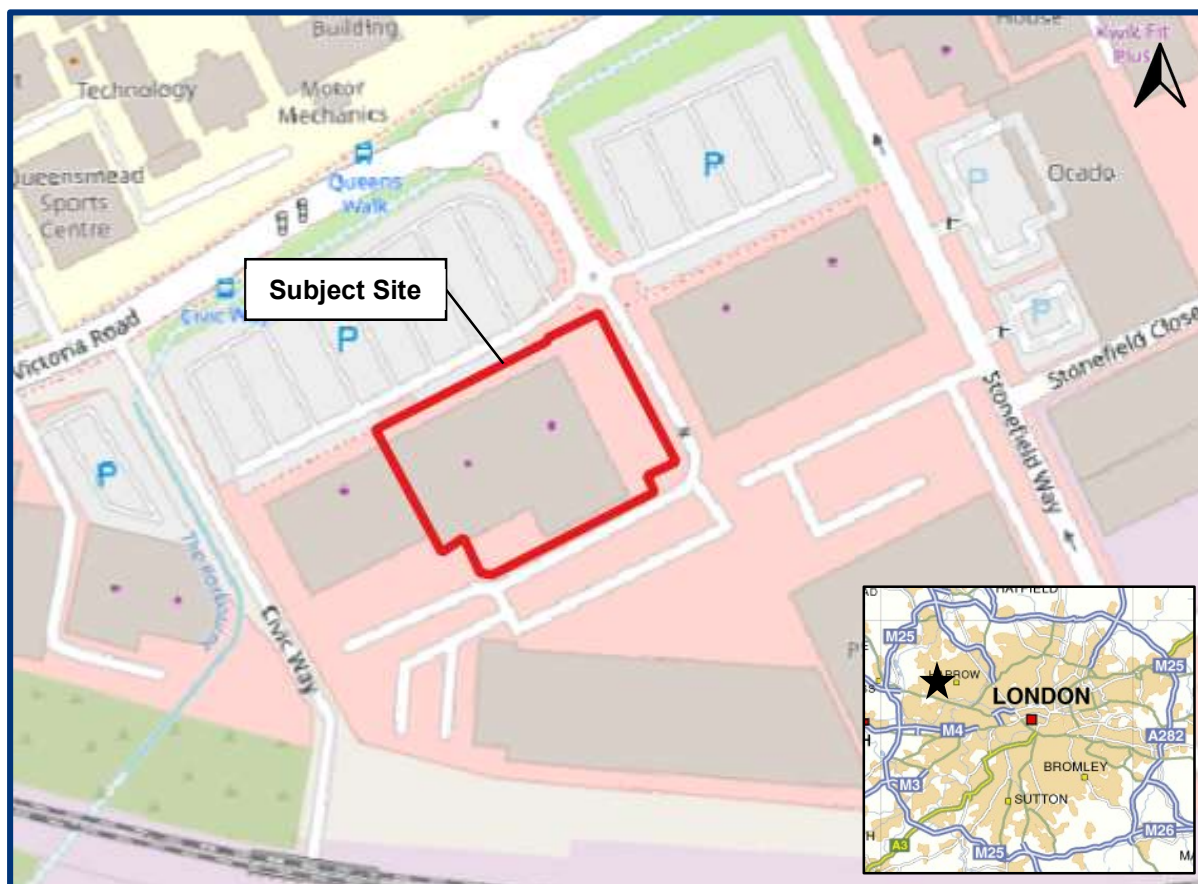
#### Internal Drainage Board

- 3.4 The site is not located within an IDB District.

## 4 Site Description

### Site Description

- 4.1 The site is located at National Grid Reference TQ 11881 85365, is rectangular in shape and occupies an area of approximately 0.59 hectares (ha). The site location is presented in **Figure 1**.



- 4.2 The site is currently occupied by a commercial store and surrounding hardstanding now in use as storage areas to the south of the site building. Soft landscaping is present around

### Figure 1. Site Location

the eastern boundary of the site.

- 4.3 Vehicular access to the site is available from the north and south via Crown Road. Pedestrian access is available from the north and east.
- 4.4 The site is approximately 100% hardstanding.

### Surrounding Land Uses

- 4.5 Land to the east and the west is commercial in nature; and industrial buildings are present to the south. The Chiltern Main Line is further south of the site and connects to South Ruislip Railway Station to the west. Car parking facilities are to the north, followed by educational buildings.

- 4.6 There are no designated sensitive areas (e.g. Special Area of Conservation (SAC), Special Protection Area (SPA) or Site of Special Scientific Interest (SSSI)) within close proximity to the site.

### Topography

- 4.7 A topographic survey has been provided and is summarised below provided in metres Above Ordnance Datum (m AOD):
- The ground level immediately north of the site is 34.56m AOD. This falls towards the car park further north, which ranges from 34.29m AOD to 34.65m AOD. The area of highest elevation in the car park is in the centre and is oriented SW-NE.
  - South of the site is another area of hardstanding which lies between 34.39 and 34.62m AOD. The areas of highest elevation are immediately south of the site.
  - The threshold level of the site is noted as being 34.69m AOD at the north entrances and between 34.70 and 34.71m AOD at the south/eastern entrances.
- 4.8 A topographic map of the site can be found in **Appendix D**. It is noted that no raising of ground level is proposed as part of this development.

## 5 Proposed Development

- 5.1 The proposed development is as follows: *“Continued use as a retail unit (Class E(a)), including food sales, with external alterations to the front, rear and side elevations of the unit, demolition of the existing garden centre, provision of plant area, installation of new trolley bays, cycle parking and other associated works and reconfiguration of existing mezzanine and installation of additional mezzanine floorspace”.*
- 5.2 The development plans are shown in **Appendix E**. It is not proposed to make any changes to FFLs at the site.
- 5.3 The site is and will continue to be accessed from the east via Crown Road, which itself is accessed by a roundabout on Victoria Road (north of the site).
- 5.4 The property is and will continue to be accessed via a car park immediately north of the building.
- 5.5 It is not proposed to raise ground levels at the site and as such compensatory flood storage will not be required.
- 5.6 The site is currently 100% hardstanding. There will be no increase in hardstanding as part of the development.
- 5.7 The proposed use of the site is classified as ‘Less Vulnerable’ within the PPG.
- 5.8 The existing drainage network will be retained as no hardstanding will be affected nor increased at the site and only minimal external works are proposed.

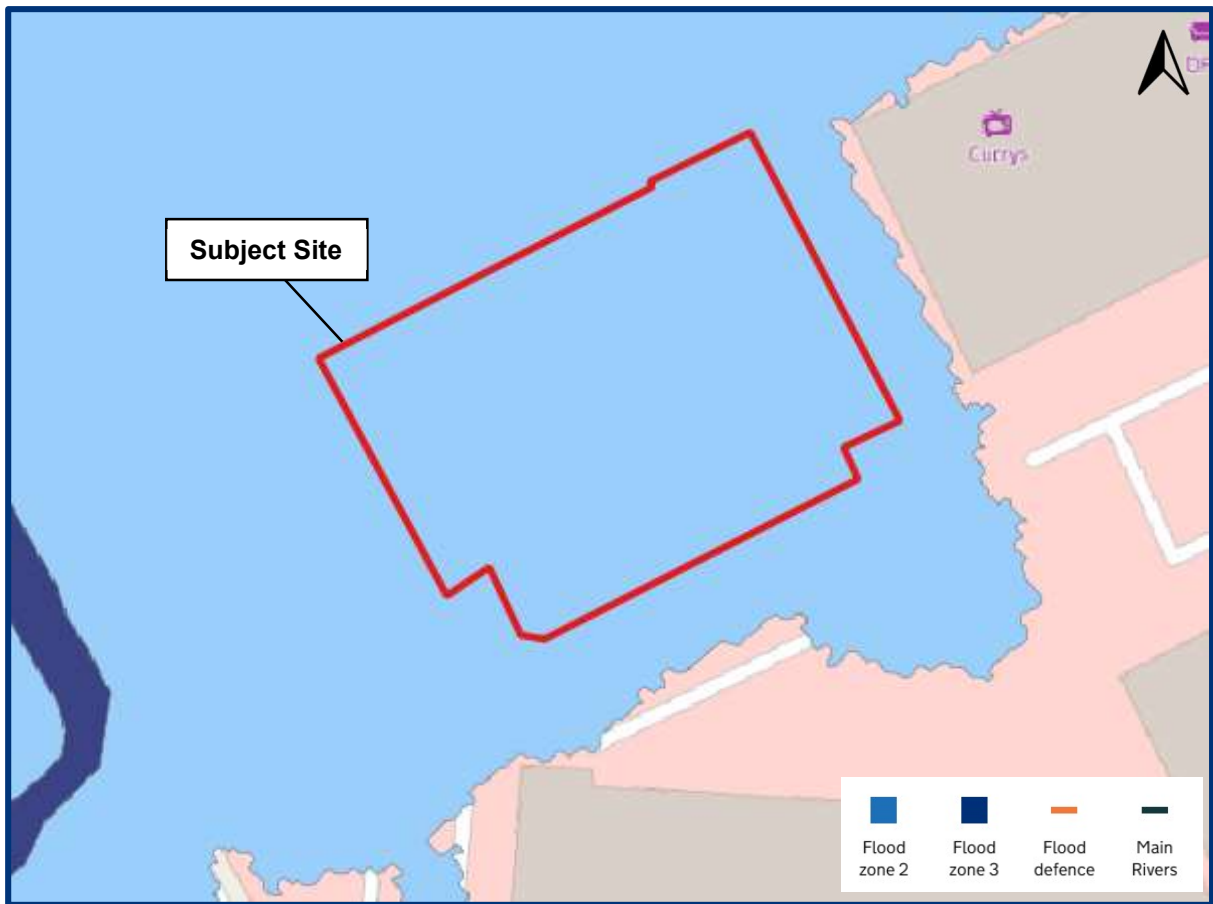
## 6 Hydrological Setting

### Nearby Watercourses

- 6.1 OS Mapping indicates that the nearest surface water feature is the Roxbourne, a designated EA Main River flowing to the west and north of the site. It lies approximately 84m away at the closest point. This river is an open channel to the west of the site and is culverted to the immediate north of the site.
- 6.2 No other significant artificial watercourses / features (e.g. canals, reservoirs) have been identified within 1km of the site.

### Fluvial / Tidal Flood Risk Classification

- 6.3 The EA Flood Map for Planning, which was updated on 25th March 2025, is available online classifies fluvial and tidal flood risk according to the following:
- Flood Zone 1: Land assessed as having a less than 1 in 1000 year (0.1%) annual probability of river or sea flooding;
  - Flood Zone 2: Land assessed as having between a 1 in 100 (1%) and 1 in 1000 (0.1%) annual probability of river flooding, or between a 1 in 200 (0.5%) and 1 in 1000 (0.1%) annual probability of sea flooding;
  - Flood Zone 3: Land assessed as having a 1 in 100 (>1%) or greater annual probability of river flooding, or a 1 in 200 (>0.5%) or greater annual probability of sea flooding.
- 6.4 The EA Flood Map for Planning, which is presented below in **Figure 2**, indicates that the site is solely located within Flood Zone 2.



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**Figure 2. EA Flood Map for Planning**

### Flood Model Data

6.5 The EA has been consulted for additional information related to the fluvial/tidal risk to the site. They have provided flood model results from the River Crane (2024) Model by AECOM', including 1D and 2D node levels and both defended and undefended flood extents. RPS have processed and mapped the modelling results and a summary of the information is presented below. The full EA response is provided in **Appendix A**.

- The model includes in channel 1D nodes taken in Roxbourne for the 1 in 2, 1 in 20, 1 in 30, 1 in 50, 1 in 75, 1 in 100, 1 in 100 +17% Climate Change (CC), 1 in 100 +27%CC, 1 in 100 +54%CC, 1 in 200 and 1 in 1000-year events.
- 2D defended out of bank levels and extents are also provided for the 1 in 2, 1 in 20, 1 in 30, 1 in 50, 1 in 75, 1 in 100, 1 in 100 +17% Climate Change (CC), 1 in 100 +27%CC, 1 in 100 +54%CC, 1 in 200 and 1 in 1000-year events.
- Undefended 2D extents are provided for the 1 in 100 and 1 in 1000-year events. No undefended 2D nodes were provided.
- While the EA's online flood map for planning shows the site to be in Flood Zone 2, the modelled 1 in 100-year undefended outline (Flood Zone 3) is shown to flood the majority of the site, therefore highlighting a discrepancy across EA data. Given

that the River Crane Model is recent (2024), this supersedes the strategic online mapping. Therefore, the site actually lies within Flood Zone 3

- During the defended scenarios provided, the 1 in 100 year +17% CC event is shown to cover the entire site. The extent of the defended 1 in 30-year flood event is shown to cover the carpark area and encroach on the site boundary in the north corner.
- As discussed previously, a 17% increase in peak river flow should be considered as the design event for the development, in line with EA guidance.
- The nearest in channel 1D nodes to the site indicate that flood levels of between 34.53m AOD and 34.63m AOD are seen during the 1 in 100 year +17% event.
- No undefended 2D nodes are provided. The defended nodes for the 1 in 100 +17%CC event indicate that flood levels surrounding the site reach **34.64m AOD**.
- Building thresholds are set at approximately 34.70m AOD, indicating that no water ingress into the building would occur during this event. External areas surrounding the site are set at 34.57m AOD in the east, 34.53m AOD in the centre and 34.66m AOD in the west, indicating shallow flood depths mostly up to 0.11m.
- Flood depths in the car park north of the site will reach 0.15m during the 1 in 30-year event. In the area of the car park closest to the site, depths will reach 0.21m.
- In the area of hard standing south of the site, flood depths will reach 0.24m in some areas during the 1 in 100 +17%CC event. The ground is uneven and ranges from 34.40m AOD to 34.57m AOD.

6.6 The EA Historic Flood Map and Recorded Flood Outlines map shows that there are no recorded incidents affecting the site within this database.

### EA Defences

6.7 Natural High Ground is seen along both banks of the Roxbourne.

### EA Flood Warning and Alert Areas

6.8 The EA defines a Flood Warning Area as “*geographical areas where we expect flooding to occur and where we provide a Flood Warning Service. They generally contain properties that are expected to flood from rivers or the sea and in some areas, from groundwater.*”

6.9 The site is located in the Flood Warning Area “the Yeading Brook East at South Ruislip”.

6.10 The EA defines Flood alert Areas as “*Flood Alert Areas are geographical areas where it is possible for flooding of low-lying land and roads to occur from rivers, sea and in some locations groundwater.*”

6.11 The site is located in the Flood Alert Area described as “the Yeading Brooks East and West at Ruislip and Harrow”.

### Surface Water Flood Risk Classification

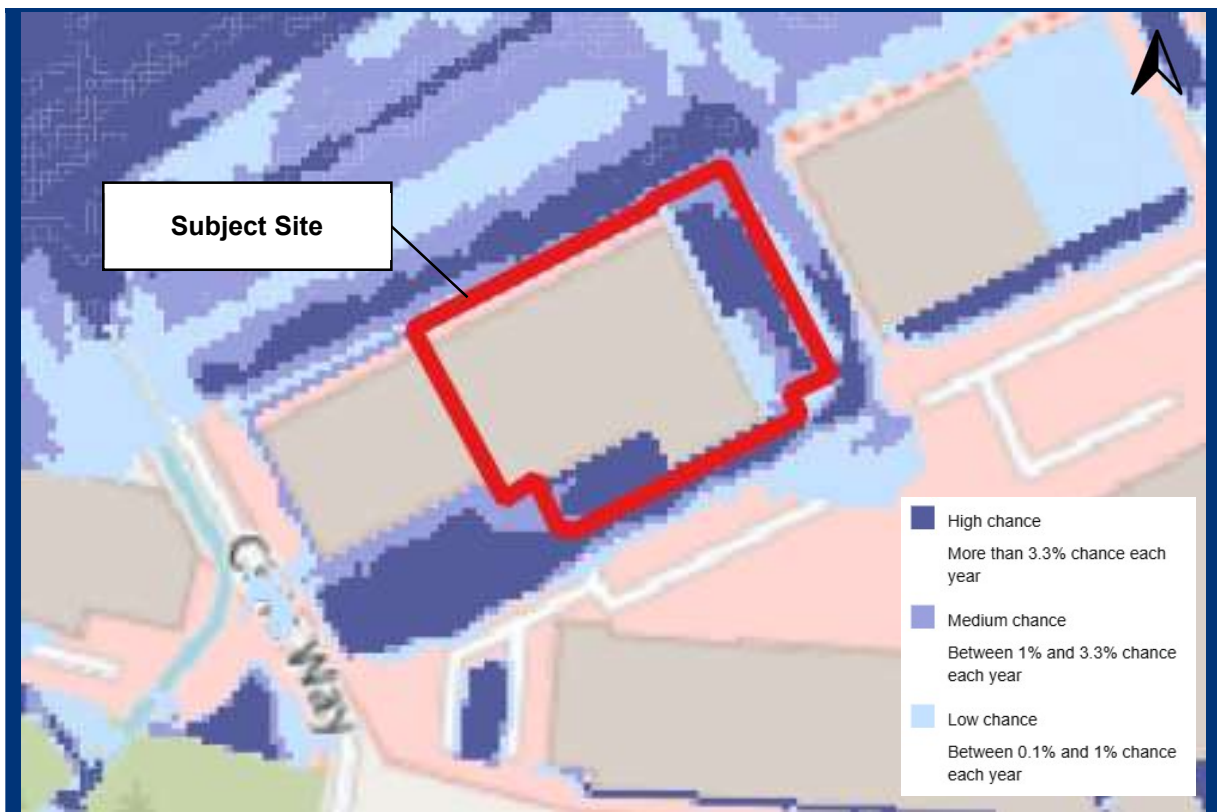
6.12 This report has considered two surface water flooding scenarios; one for the present-day scenario, and one for a future scenario between 2040 and 2060 which accounts for the ‘central’ allowance for peak rainfall intensities. The risk categories are outlined below:

- High Chance: Areas that have a chance of surface water flooding of greater than 3.3% each year.

- Medium Chance: Areas that have a chance of surface water flooding between 1% and 3.3% each year.
- Low Chance: Areas that have a chance of surface water flooding between 0.1% and 1% each year.
- Very Low Chance: Areas that have less than a 0.1% chance of surface water flooding each year.

6.13 An extract of the updated present-day scenario of the Flood Map for Surface Water is presented in **Figure 3** and shows that the site is surrounded by a 'very low' risk to a 'high' risk of flooding from this source. EA mapping indicates that the majority of surface water flooding surrounding the site has a 'low' chance of reaching a velocity of 0.5m/s, and a small area has a 'medium' chance of reaching 0.5m/s to the northwest corner of the boundary.

The climate change event shows that the site building remains 'very low risk', and the risk level for the majority of hardstanding areas increases to a 'moderate' to 'high' risk; and smaller patches of 'low' risk.

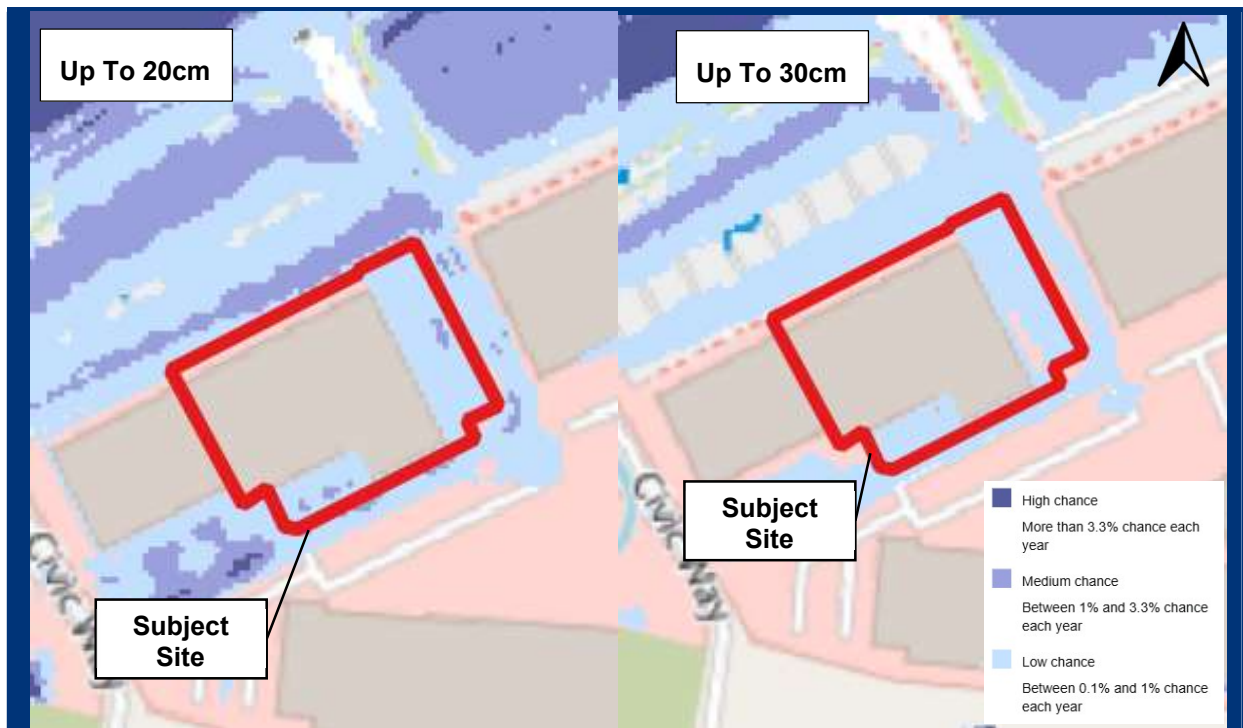


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**Figure 3. EA Risk of Flooding from Surface Water**

6.14 The present-day surface water depth map shows that the depths surrounding the site have a medium chance of reaching 200mm. The flood depths surrounding the site have a low chance of reaching 300mm. The EA flood depth mapping is shown in **Figure 4**. No flood depths are shown to exceed 300mm surrounding the site.

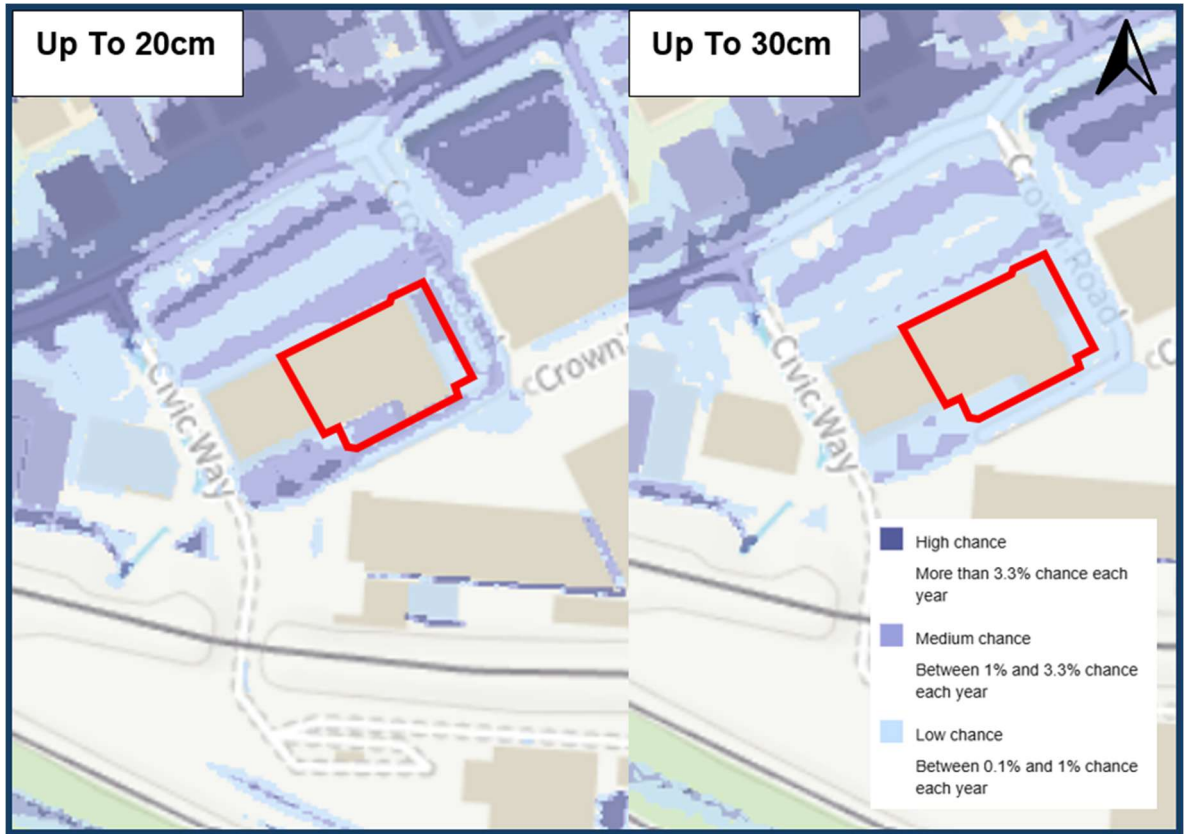
6.15 Interrogation of LiDAR data to the north of the site in flooded areas shows a slight topographic depression of approximately 134mm. However, this does not correspond with levels shown in the topographic survey, where the depression is not present. Ponding is more likely to be present in the far north of the car park, where the elevation is lowest.



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**Figure 4. EA Surface Water Flood Depths (present-day scenario)**

6.16 In the climate change scenario, surface water flood depths have a 'low' to 'medium' chance of reaching 20cm, and a 'low' chance of reaching 30cm.



**Figure 5: EA Surface Water Flood Depths (climate change scenario)**

6.17 RPS notes that this modelling has several limitations, most significantly that it does not accurately represent the presence of drainage infrastructure in urban areas. Consequently, the EA states that the maps ‘are not suitable for use at an individual property level’ and are instead for indicative purposes (e.g. they don’t take into account local drainage capacities, changes in topography/new builds etc).

**Reservoir Flood Risk Classification**

6.18 EA mapping also indicates that the site is not located within an area potentially at risk of reservoir flooding.

**Local Authority Flood Risk Assessment**

6.19 The Council joined with several other West London Boroughs (Barnet, Brent, Ealing, Harrow, and Hounslow) to produce a joint West London Level 1 SFRA, which was published in 2018. It provides an overview of flood risk from various sources within the borough. Information relevant to this assessment is summarised below:

- The Thames Water 2017 sewer flood records indicate that the site has no recorded incidents prior to the data collection year.
- The ‘susceptibility to groundwater flooding’ map shows that the site is within an area in which no data is provided, suggests that the groundwater levels are anticipated to be lower than the lowest category provided of <25%. The site is also outside of the data extents for the ‘increased potential for elevated groundwater’ map.
- The site is not within a Source Protection Zone (SPZ).

- The reservoir flood extent map which provides the wet-day scenario, shows that the site is not expected to be affected by flooding from this source.
- The flood management infrastructure mapping shows the following:
  - An EA Main River is present to approximately 103m west of the site; it is culverted further upstream and downstream of the site.
  - There are no Ordinary Watercourses within 1km of the site.
  - EA Flood defences are present along the main river to the west of the site.
  - The EA Risk of flooding from Rivers and Seas shows that the site has a ‘low risk’ for the present day. There is no data for this site for the climate change scenario.
- The fluvial and tidal flood risk mapping shows the following:
  - The site is within Flood Zone 2 in line with the EA online map for planning however as discussed in section 6.5, the site is actually within Flood Zone 3 .
  - The site is within an EA Flood Warning and Alert area.
  - The EA recorded historical flood map indicates that there are no recorded flood incidents at the site.
  - There are no EA flood storage areas within 1km of the site.
  - The site is not within an area in which a flood alleviation scheme is present.
  - The site is expected to be affected by flooding from the River Crane and is within the flood outline for the River Crane scenarios, including the 1 in 100-year and 1 in 100-year plus 17%CC.
  - The Thames Tidal Breach Inundation mapping shows that the site is not within the expected flood extent for the River Thames.
- The Surface Water Flood Maps show that the site is at ‘very low’ to ‘high’ risk of flooding from surface water in the present day and climate change scenarios.
- The Policy maps show the following:
  - The site is not allocated for development.
  - The site is within the council’s Critical Drainage Area (CDA).
  - The site is within ‘Flood Zone 3a (Surface Water)’. The West London SFRA defines ‘Flood Zone 3a (Surface Water)’ as *“Land within EA modelled surface water flood risk extents predicted for up to and including 1 in 100-year return period events”*.
  - The site is not within EA Fluvial and Tidal Flood Zone 3a or 3b.

## 7 Hydrogeological Setting

- 7.1 British Geological Survey (BGS) online mapping (1:50,000 scale) indicates that the site is not underlain by superficial geology. The bedrock geology underlying the site is London Clay, which is comprised of clay, silt and sand.
- 7.2 There are no BGS Borehole data logs within the site boundary. The closest BGS borehole data is as follows:
- BGS Borehole (Ref: TQ18NW1/A) is positioned approximately 50m north of the site and approximately 40m north of the culverted section of the Roxbourne River. This borehole has a maximum depth of 5.97m and groundwater was found at 2.43m below ground level (bgl).
  - BGS Borehole (Ref: TQ18NW13) is positioned approximately 56m northeast of the site and approximately 4m south of the culverted section of the Roxbourne River. This borehole has a maximum depth of 21m, and groundwater was found at 1.5mbgl.
- 7.3 The soils are described as 'slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils' by the National Soils Research Institute.
- 7.4 According to the EA's Aquifer Designation Mapping, the bedrock geology is classified as an Unproductive Aquifer. These formations have a low permeability and have negligible significance for water supply or base flow.
- 7.5 EA online groundwater Source Protection Zone (SPZ) mapping indicates that the site is not located within a groundwater SPZ.

## 8 Flood Risk and Mitigation

8.1 The key sources of flooding that could potentially impact the site are discussed below:

### Fluvial / Tidal Flooding

8.2 The EA Flood Map for Planning indicates that the site is located within Flood Zone 2. The annual probability of flooding is classified as land which is assessed as having between a 1 in 100 (1%) and 1 in 1000 (0.1%) annual probability of river flooding.

8.3 RPS has obtained and processed the most up to date EA modelled data for the site. Site specific flood maps from the River Crane (2024) model are available in **Appendix A** and the following assessment has been made using this data:

- The site is shown to be within the modelled undefended 1 in 100 (Flood Zone 3) extent.
- The site is also shown to be within the defended 1 in 100 +17% Climate change extent, with approximate flood depths of 0.15m/150mm occurring at the front entrance/ carpark along the north perimeter of the building. 2D defended flood levels on site are shown to reach 34.64m AOD.
- The car park to the north, southern boundary and hardstanding to the south all experience flooding during the 1 in 100 +17%CC event, as described in Section 6. However, flood depths would be shallow ranging from 0.04m to 0.15m in close proximity to the building. No water entry from fluvial sources is predicted given that building thresholds are set at 34.70mAOD (0.06m above the designed flood level).

8.4 The EA historical flood map shows that there are no recorded incidents affecting the site.

8.5 The site is not afforded protection by formal flood defences.

8.6 Although the EA Flood Map for Planning shows the site to be in Flood Zone 2, the modelled flood data provided by the EA indicates that the site is actually mainly within Flood Zone 3.

8.7 The PPG details the suitability of different land uses within each flood zone. The proposed land use is classified as 'Less Vulnerable' and such uses are generally considered appropriate within Flood Zone 3.

8.8 The risk to site from fluvial sources is considered to be **moderate** across the hardstanding, **low** at the building itself; and the risk to site from tidal sources is considered to be **low**.

### Surface Water Flooding (Overland Flow)

8.9 This can occur during intense rainfall events, when water cannot soak into the ground or enter drainage systems. The EA surface water flood extent map does not consider the presence of any pre-existing drainage and the capacity of this infrastructure; and thus, is likely to overestimate the surface water flood risk.

8.10 EA surface water mapping indicates that the site is surrounded by a 'very low' risk to a 'high' risk of flooding from this source. Depths for the flooded areas are shown to have a 'low' to 'medium' chance of reaching 300mm. Since the area south of the buildings has an elevation ranging from 34.40 to 34.53m AOD, estimated flood level would potentially reach 34.70m AOD. The threshold level of the building is 34.70m AOD, matching the predicted flood level for surface water. This means ingress of surface water to the building may be possible during the present-day and climate change scenarios however if occurs flood depths would be minimal.

- 8.11 A topographic survey of the site showed ground levels fall away to the north of the site. This, therefore, is where surface water is likely to pond.
- 8.12 The Council's SFRA indicates that the site is within a CDA; and is within Flood Zone 3a (Surface Water).
- 8.13 The risk of flooding from surface water velocity map shows that the flood velocity has a 'low' chance of reaching 0.5m/s. In line with 'Flood Risks to People' guidance document reference FD2321/TR2 published by the EA and DEFRA in 2006, flood depths are considered to be passable by vehicles and also by pedestrians so long flood velocities remain under 2m/s. As such it is anticipated that safe access/egress will be maintained.
- 8.14 Additionally, it is important to note that EA surface water modelling does not take into account the drainage capabilities of the local network. As such, flood depths are likely to be shallower than the one predicted during both events.
- 8.15 The risk to site from surface water sources is considered to be **moderate**.

### Flooding from Sewers

- 8.16 Sewer flooding can occur during periods of heavy rainfall when a sewer becomes blocked or is of inadequate capacity. The site is currently served by TW (detailed in Section 8).
- 8.17 The Council's SFRA Level 1 maps shows that the Thames Water 2017 data sourced does not have any recorded incidents affecting the site.
- 8.18 Consultation with TW in July 2025 confirmed that there have been no recorded incidents of flooding affecting the site from surcharging of public sewers. The consultation with TW can be found in **Appendix B**.
- 8.19 The risk to site from sewer is considered to be **low**.

### Groundwater Flooding

- 8.20 This can occur in low-lying areas when groundwater levels rise above surface levels, or within underground structures.
- 8.21 The Council's SFRA Level 1 susceptibility to groundwater flooding map shows that the site is within an area in which no data is provided. This suggests that the groundwater levels are anticipated to be lower than the lowest category provided of <25%. The site is also outside of the 'increased potential for elevated groundwater' map. The SFRA data is not likely to be as accurate as BGS borehole data regarding groundwater levels in the area.
- 8.22 There are no BGS boreholes within the site boundary, however the closest boreholes (BGS Ref: TQ18NW1/A and TQ18NW13) located approximately 50m and 56m north of site found groundwater 2.43m bgl and 1.5m bgl respectively. It is expected that groundwater within the surrounding area of site will be in hydrological connectivity with the Roxbourne River given its close proximity.
- 8.23 Groundwater flooding is a primary concern for developments with below ground-level floors. The site does not contain any basements, thus the risk to site from groundwater is considered to be **low**.

### Other Sources

- 8.24 There is a limited risk of flooding occurring as a result of a break in a water main, flows are expected to proceed in line with topographical and remain confined to road infrastructure.

- 8.25 The risk of flooding associated with reservoirs, canals and other artificial structures is considered to be low given the absence of any such structures in the site vicinity.
- 8.26 The risk to site from other sources including infrastructure failure, canals, and reservoirs sources is considered to be **low**.

### **Proposed Mitigation**

- 8.27 The recommendations for the site are outlined below.

### **Finished Floor Levels**

- 8.28 The proposed development is for the continued use of an existing building as a retail unit. Finished floor levels will be retained and they are set above the predicted designated fluvial flood level and match the predicted surface water flood level including an allowance for climate change.
- 8.29 The proposed installation of plant machinery in the south east of the site (outside of the building footprint and within the southern portion of the demolished garden centre) will need to be raised a minimum of 300mm above the predicted flood levels of 36.64m AOD. Sensitive equipment may need to be raised a minimum of 600mm above the predicted flood levels. The plant machinery and associated infrastructure will be raised on voids, allowing water to flow beneath the units. This means the plant area will not have a significant impact on the overland flow pathways and given the very shallow flood depths at the site, compensatory flood storage is not considered to be required.

### **Flood Warning and Emergency Services**

- 8.30 The site operators should sign up to the EA Flood Alerts for the 'The Yeading Brooks East and West at Ruislip and Harrow' flood alert area; and/or flood warnings for the 'The Yeading Brook East at South Ruislip' area.

### **Flood Resilient and Resistance Measures**

- 8.31 Ensure the existing surface water drainage network serving hardstanding areas of the site is regularly inspected and maintained.
- 8.32 Ensuring voids under plant area are regularly inspected and clear of debris.
- 8.33 Check the availability of insurance at a commercially viable rate.

### **Event Exceedance**

- 8.34 The mitigation measures proposed as part of the development scheme are considered appropriate to help mitigate against event exceedance scenarios.

## 9 Sequential Test and Exception Test

### Sequential Test

- 9.1 The NPPF requires the Local Authority to apply the Sequential Test in consideration of new development. The aim of the Test is to steer new development to areas at the lowest probability of flooding. Given that the subject site has not been allocated as one of the Council's proposed future development sites, it has not been specifically assessed within the SFRA.
- 9.2 The proposed development is currently a commercial store and the proposal will not increase the vulnerability classification, only minor works are proposed for the continued use of the store, therefore the sequential test is not considered necessary.

### The Exception Test

- 9.3 According to Table 3 of the PPG to the NPPF, 'Less vulnerable' developments are considered appropriate within Flood Zone 1, 2 and 3a without the requirement to apply the Exception Test. Therefore, application of the Exception Test is not required for the proposed development.

## 10 Drainage Statement

- 10.1 The Project solely comprises the reconfiguration and works to the former Homebase Unit. The proposed external alterations will not impact on the existing hardstanding surfaces.
- 10.2 No increase in hardstanding is proposed as part of the works and the existing drainage infrastructure serving the site will be retained.

## 11 Summary and Conclusions

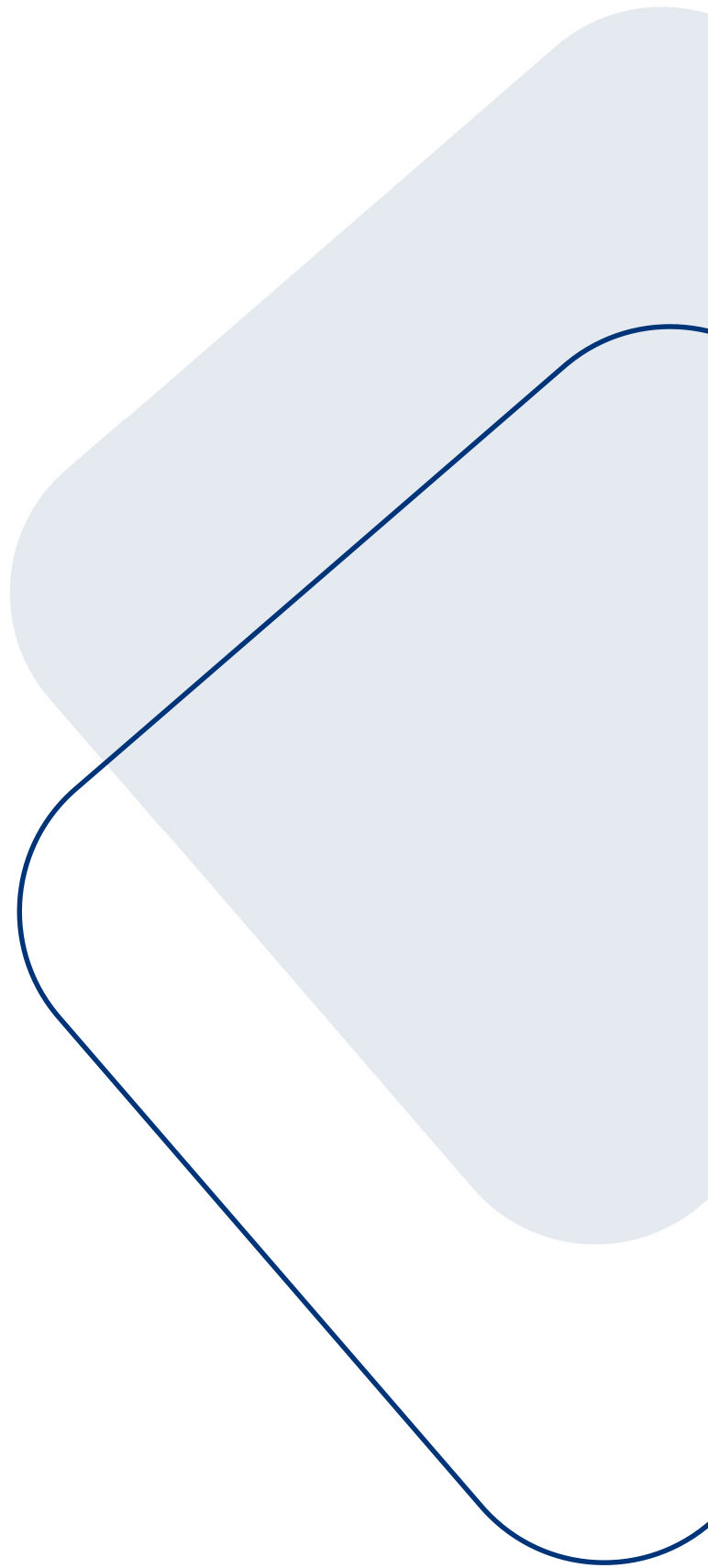
- 11.1 The aim of the FRA is to outline the potential for the site to be impacted by flooding, the potential impacts of the development on flooding both onsite and in the vicinity, and the proposed measures which can be incorporated into the development to mitigate the identified risks. The report has been produced in accordance with the guidance detailed in the NPPF. Reference has also been made to the SFRA and following consultation with the EA’s Partnership and Strategic Overview Team.
- 11.2 The potential flood risks to the site, and the measures proposed to mitigate the identified risks, are summarised in **Table 3**.

**Table 3. Proposed Mitigation**

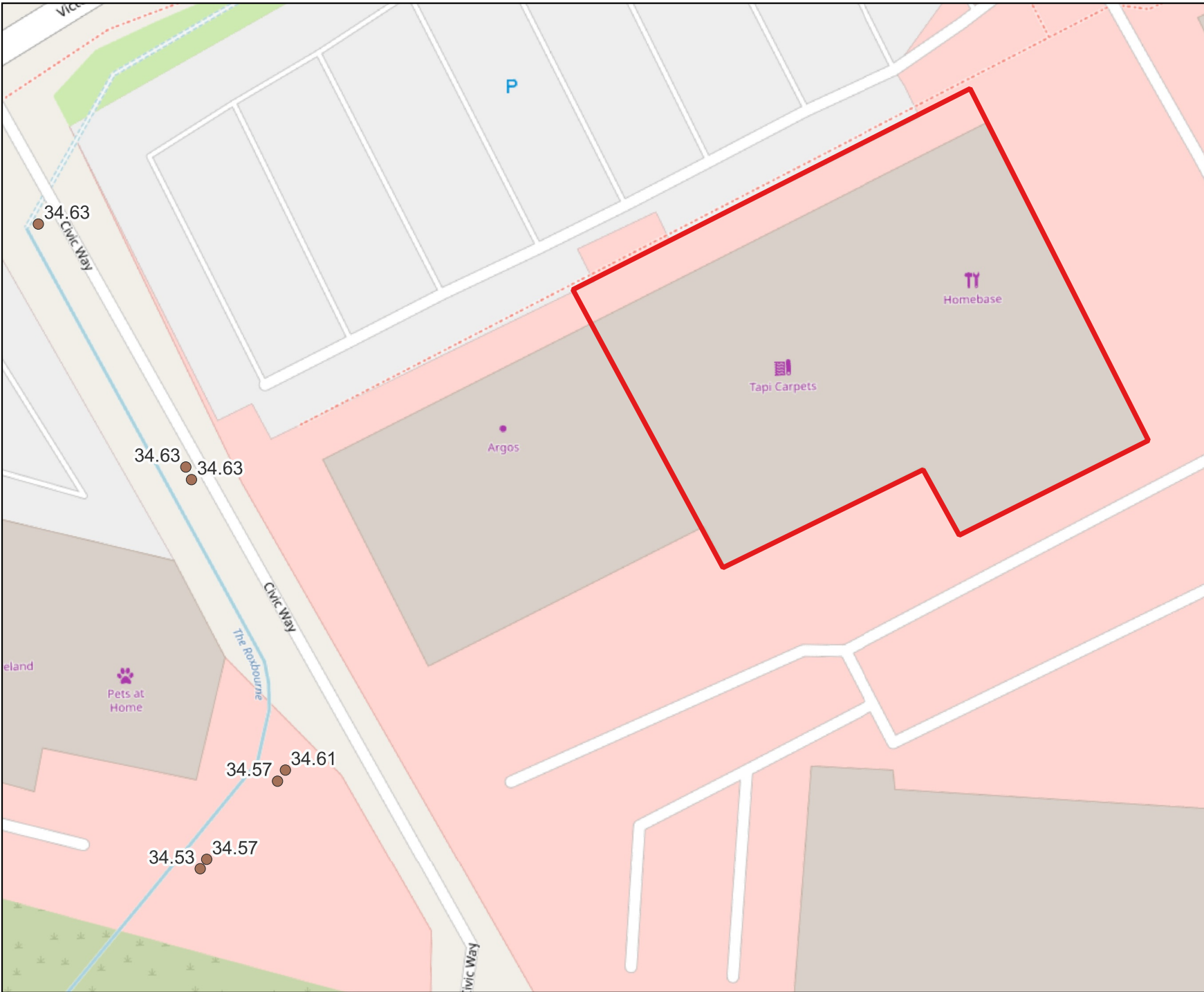
Source of Flooding	Identified Risk			Mitigation Proposed	Residual Risk		
	L	M	H		L	M	H
Fluvial		✓		Site users should sign up to receive EA Flood Warnings and Alerts			
				Plant will be raised at least 300mm above flood levels, using voids so as not to obstruct flow and so it remains operational in case of a flood event	✓		
Tidal	✓			None.	✓		
Sewers	✓			None.	✓		
Surface Water		✓		Plant will be raised at least 300mm above flood levels, using voids so as not to obstruct flow and so it remains operational in case of a flood event.	✓		
Groundwater	✓			None.	✓		
Other Sources (e.g. reservoirs, water mains)	✓			None.	✓		

- 11.3 The risk to site from all known sources of flooding has been assessed. The residual risk is low to medium for fluvial and surface water sources with the incorporation of mitigation measures proposed above.
- 11.4 All other known sources including tidal, sewerage, groundwater, and other sources including reservoirs and artificial sources is considered to be low.
- 11.5 It has been demonstrated that the development meets the Sequential Test, and the Exception Test is not required for this development.
- 11.6 The proposal will not increase the impermeable area at the site, the existing drainage network on site will be retained.
- 11.7 Overall, it has been demonstrated that the development will not increase flood risk on site or elsewhere.

## Appendices



## Appendix A EA Detailed Flood Data



Notes

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 2. If received electronically it is the recipients responsibility to print to the correct scale. Only written dimensions should be used.

- Site Boundary
- 1D Level - 1 in 100+17%CC event

20 Farringdon Street  
 London, EC4A 4AB  
 E:rps hydrologyservices  
 @rpsgroup.com

**Client:** M+S Property  
**Title:** River Crane (2014) 1D Levels during the 1 in 100 +17% CC event

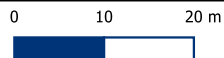
**Site:** M+S South Ruislip

**Date:** 26-09-2025

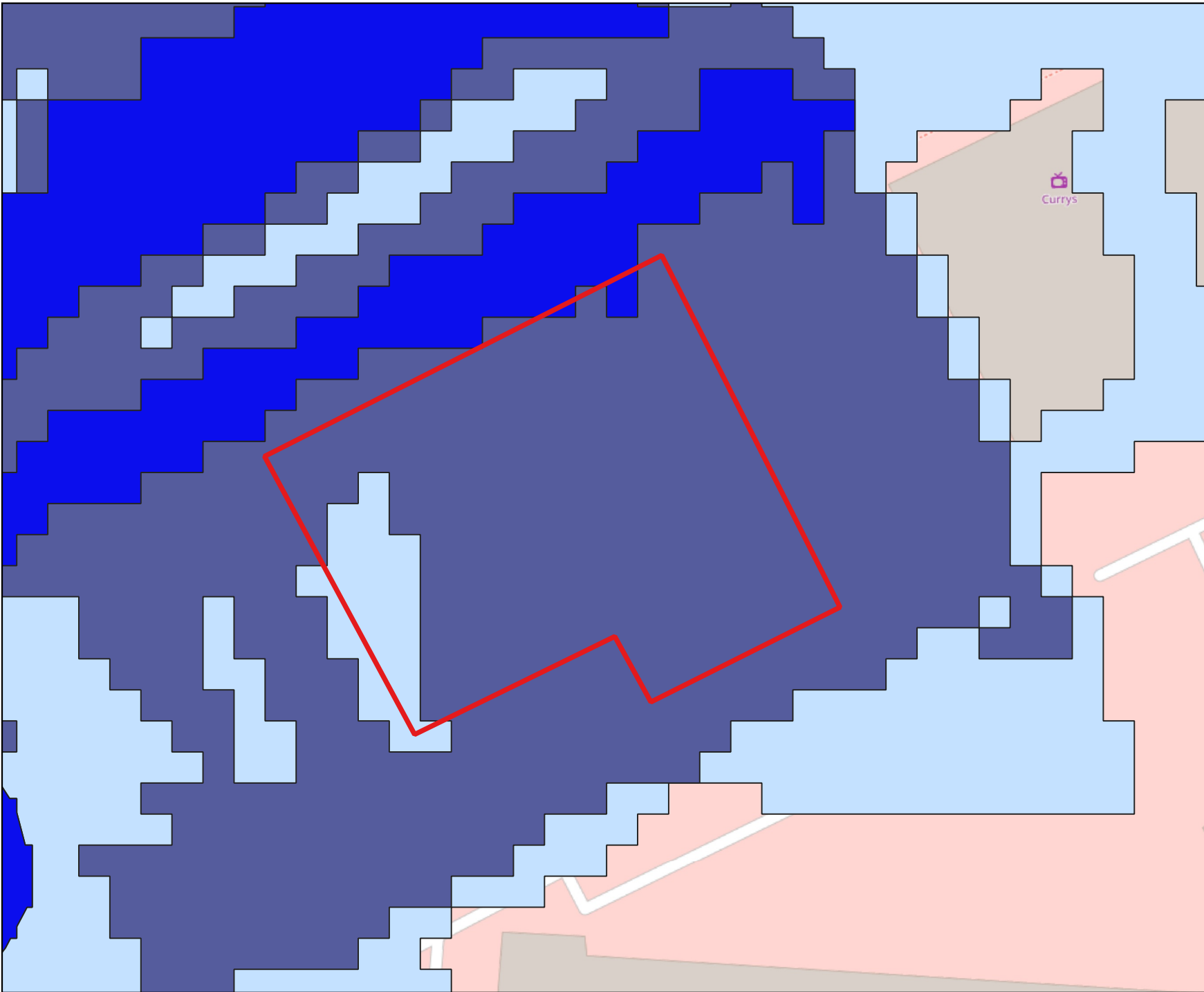
**Scale:** 1:842      **Size:** A4

**Job Ref:** ENV-22687      **Rev:** 00

Drawn CE	Checked FC	Approved JM
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-  Site Boundary
-  1\_in\_30\_(3.33%)\_Defended
-  1\_in\_100\_(1%)\_Defended
-  1\_in\_1000\_(0.1%)\_Defended



 20 Farringdon Street  
 London, EC4A 4AB  
 E:rpshydrologyservices@rpsgroup.com

Client: M+S Property

Title: River Crane (2014)  
DEFENDED extents

Site: M+S South Ruislip

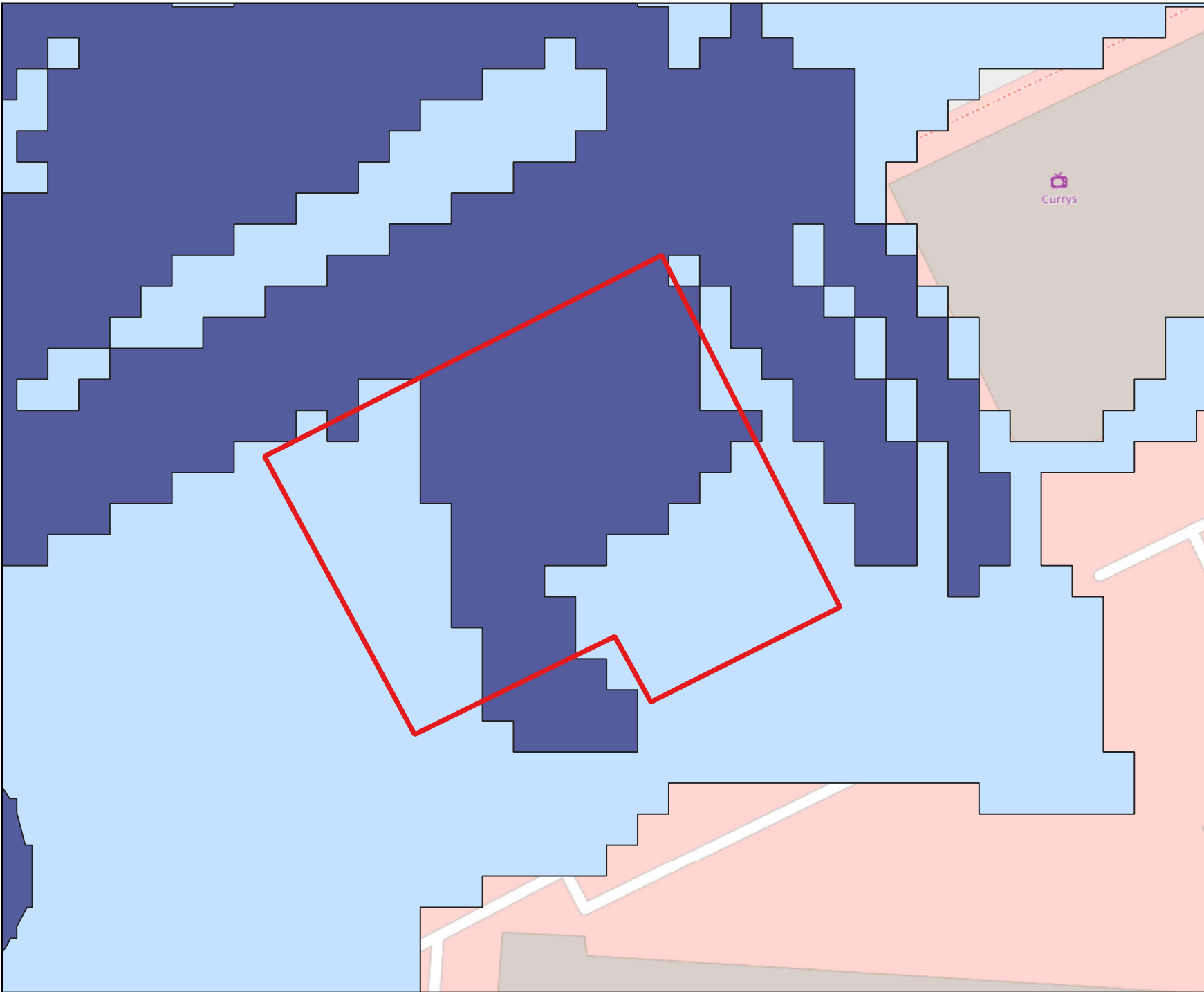
Date: 26-09-2025

Scale: 1:842      Size: A4

Job Ref: ENV-22687      Rev: 00

Drawn CE	Checked FC	Approved JM
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- Site Boundary
- 1\_in\_100\_(1%)\_Undefended
- 1\_in\_1000\_(0.1%)\_Undefended

20 Farringdon Street  
 London, EC4A 4AB  
 E:rps hydrologyservices@rpsgroup.com

Client: M+S Property

Title: River Crane (2014)  
 UNDEFENDED extents

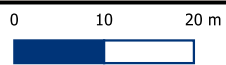
Site: M+S South Ruislip

Date: 26-09-2025

Scale: 1:842	Size: A4
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Job Ref: ENV-22687	Rev: 00
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## Appendix B Thames Water Correspondence

# Sewer Flooding

History Enquiry



Property Searches

Annissa Dryden

20 FARRINGDON STREET,

**Search address supplied** Homebase Ltd  
Unit 1  
Crown Road  
Victoria Retail Park  
Ruislip  
HA4 0AJ

**Your reference** South Ruslip

**Our reference** SFH/SFH Standard/2025\_5199074

**Received date** 23 July 2025

**Search date** 23 July 2025



Thames Water Utilities Ltd  
Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB



[property.searches@thameswater.co.uk](mailto:property.searches@thameswater.co.uk)  
[thameswater.co.uk/propertysearches](https://thameswater.co.uk/propertysearches)



0800 009 4540

# Sewer Flooding

History Enquiry



Property Searches

**Search address supplied:** Homebase Ltd,Unit 1,Crown Road,Victoria Retail Park,Ruislip,HA4 0AJ

**This search is recommended to check for any sewer flooding at a specific address or area**

TWUL are responsible in respect of the following:-

- (i) any negligent or incorrect entry in the records searched;
- (ii) any negligent or incorrect interpretation of the records searched;
- (iii) and any negligent or incorrect recording of that interpretation in the search report
- (iv) compensation payments



Thames Water Utilities Ltd  
Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB



[property.searches@thameswater.co.uk](mailto:property.searches@thameswater.co.uk)  
[thameswater.co.uk/propertysearches](http://thameswater.co.uk/propertysearches)



0800 009 4540

### History of Sewer Flooding

#### **Is the requested address or area at risk of flooding due to overloaded public sewers?**

The flooding records held by Thames Water indicate that there have been no incidents of flooding in the requested area as a result of surcharging public sewers.

For your guidance:

- A sewer is “overloaded” when the flow from a storm is unable to pass through it due to a permanent problem (e.g. flat gradient, small diameter). Flooding as a result of temporary problems such as blockages, siltation, collapses and equipment or operational failures are excluded.
- “Internal flooding” from public sewers is defined as flooding, which enters a building or passes below a suspended floor. For reporting purposes, buildings are restricted to those normally occupied and used for residential, public, commercial, business or industrial purposes.
- “At Risk” properties are those that the water company is required to include in the Regulatory Register that is presented annually to the Director General of Water Services. These are defined as properties that have suffered, or are likely to suffer, internal flooding from public foul, combined or surface water sewers due to overloading of the sewerage system more frequently than the relevant reference period (either once or twice in ten years) as determined by the Company’s reporting procedure.
- Flooding as a result of storm events proven to be exceptional and beyond the reference period of one in ten years are not included on the At Risk Register.
- Properties may be at risk of flooding but not included on the Register where flooding incidents have not been reported to the Company.
- Public Sewers are defined as those for which the Company holds statutory responsibility under the Water Industry Act 1991.
- It should be noted that flooding can occur from private sewers and drains which are not the responsibility of the Company. This report excludes flooding from private sewers and drains and the Company makes no comment upon this matter.
- For further information please contact Thames Water on Tel: 0800 316 9800 or website [www.thameswater.co.uk](http://www.thameswater.co.uk)



Thames Water Utilities Ltd  
Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB



[property.searches@thameswater.co.uk](mailto:property.searches@thameswater.co.uk)  
[thameswater.co.uk/propertysearches](http://thameswater.co.uk/propertysearches)



0800 009 4540

## Appendix C LLFA Correspondence

## Dryden, AnnissaKay

---

**From:** Zoe Bassindale <ZBassindale@hillingdon.gov.uk>  
**Sent:** 04 July 2025 16:25  
**To:** Dryden, AnnissaKay  
**Cc:** Ian Thynne  
**Subject:** RE: Request for flood risk data for 1 Victoria Retail Park, Crown Road, Ruislip, HA4 0AJ

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

You don't often get email from zbassindale@hillingdon.gov.uk. [Learn why this is important](#)

**⚠ CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.



Good afternoon, Annissa,

There are no historical flooding reports at this location on our records.

For further information on the flood risk within Hillingdon, we recommend reading through the [West London Strategic Flood Risk Assessment](#).

Kind regards,

**Zoe Bassindale**

*Please note that I only work a limited number of hours for Hillingdon Council's Lead Local Flood Authority (LLFA). I will aim to respond to you as soon as I can.*

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---

**From:** Dryden, AnnissaKay <AnnissaKay.Dryden@rps.tetrattech.com>  
**Sent:** 25 June 2025 15:58  
**To:** Flooding <flooding@hillingdon.gov.uk>  
**Subject:** Request for flood risk data for 1 Victoria Retail Park, Crown Road, Ruislip, HA4 0AJ

You don't often get email from annissakay.dryden@rps.tetrattech.com. [Learn why this is important](#)

Good afternoon,

I am looking to obtain some further details regarding flooding for a site located at 1 Victoria Retail Park, Crown Road, Ruislip, HA4 0AJ.

We would like to request the following (if available):

1. Any information on historic flooding
2. Details of any groundwater flooding issues in the area
3. Details of any sewerage flood risk at the site.
4. Details of any other (reservoir, canal etc) flood risk at the site.

Thank you for your assistance.

Kind regards,  
Annissa

**Annissa-Kay Dryden | Ann-is-sah** (She/Her)

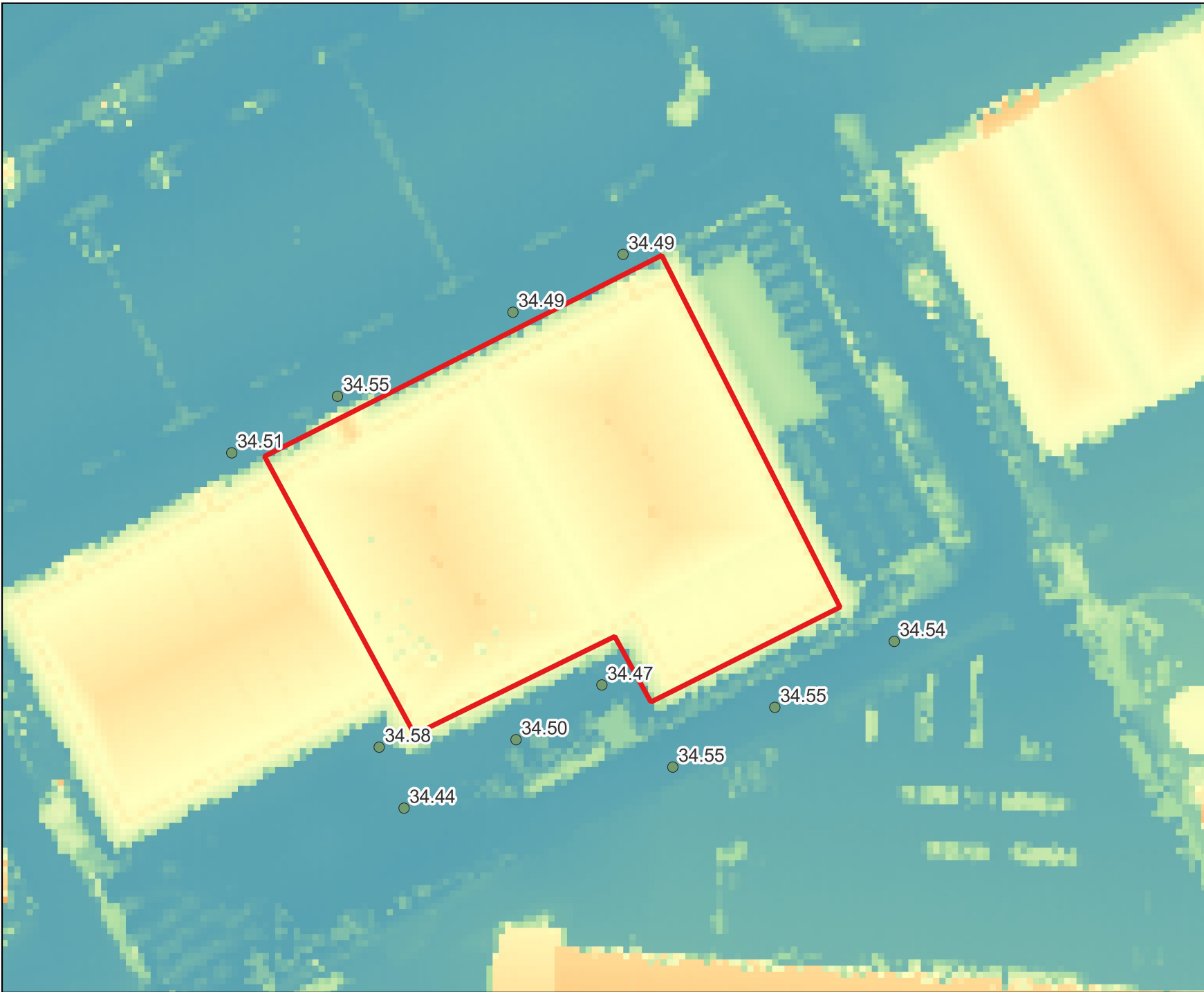
Hydrology Consultant  
RPS | Consulting UK & Ireland  
20 Farringdon Street  
London, EC4A 4AB, United Kingdom  
**T** +44 20 3691 0500 **M** 07702640467  
**E** annissakay.dryden@rps.tetratech.com



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## Appendix D Topographic Survey and LiDAR



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Site Boundary  
● LiDAR Nodes (mAOD)  
 LiDAR (mAOD)  
 52.64  
 32.56

20 Farringdon Street  
 London, EC4A 4AB  
 E:rps hydrologyservices  
 @rpsgroup.com

Client: M+S Property

Title: LiDAR - M+S South Ruislip

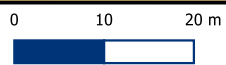
Site: M+S South Ruislip

Date: 26-09-2025

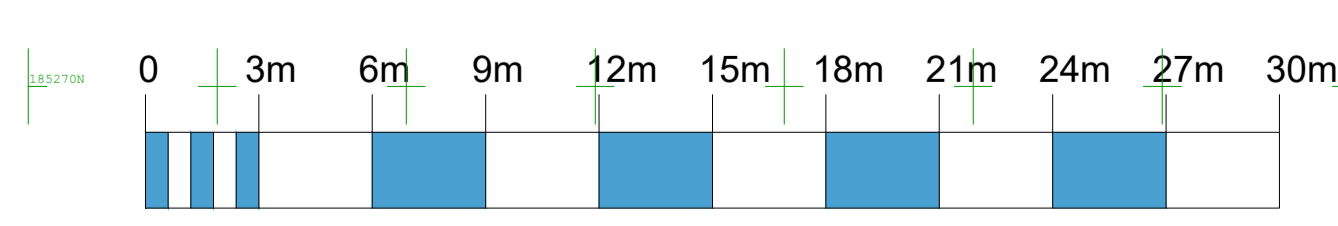
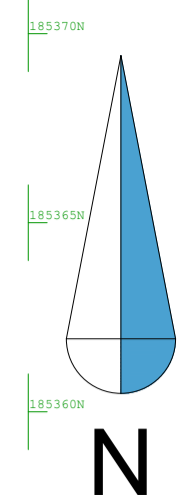
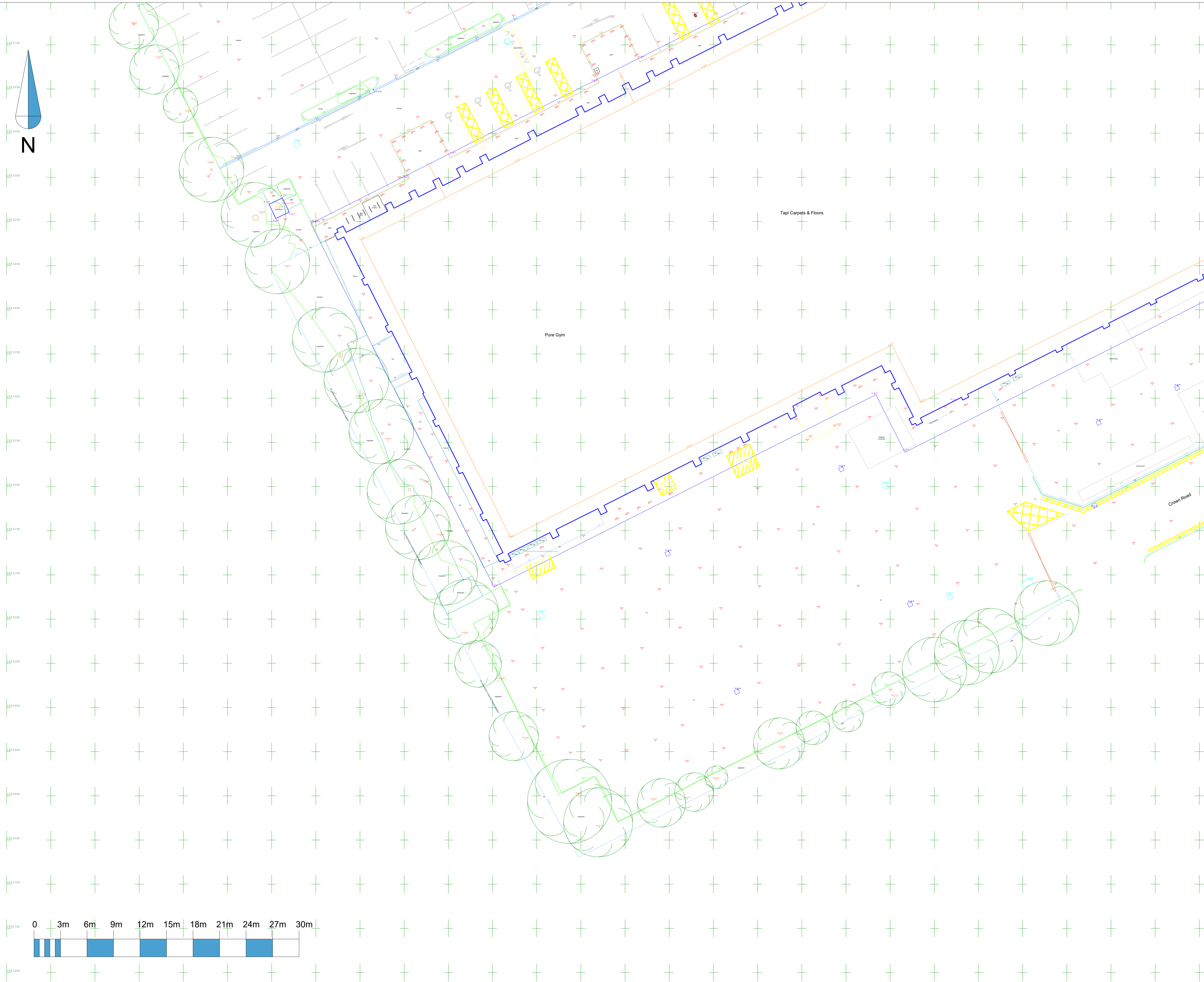
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Job Ref: ENV-22687	Rev: 00
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Drawn CE	Checked FC	Approved JM
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**Notes: Coordinate System**

The survey has been orientated to the O.S. National Grid (OSGB36) via GPS and the O.S. Active Network. True OSGB36 coordinates have been established at:

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and a further OSGB36 point established to create a true O.S. bearing for angle orientation.

**ON DETAIL SURVEY**

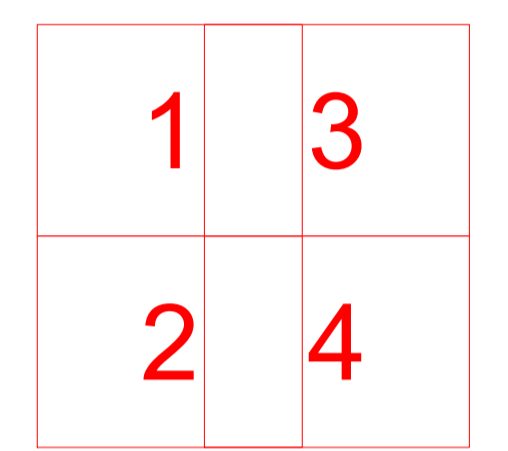
A/C	Air Conditioning Unit	EP	Electric Pole	OH	Overhead	Tac	Tactile Paving
AV	Air Valve	FB	Fire Hydrant	PS	Parking Meter	TP	Telephone Pole
BL	Bed Level	FB	Flower Bed	PS	Paving Slab	TCB	Telephone Call Box
BB	Beltline Beacon	FW	Foul	PO	Post	THL	Threshold Level
BS	Boiler	GV	Gas Valve	PS	Post Box	T/F	Top Of Fence
BH	Borehole	GY	Gully	R	Riser	T/P	Top Of Parapet Level
Bk	Brick	IC	Inspection Cover	RE	Rodding Eye	T/V	Top Of Vegetation
BSP	Brick Spaving	IL	Invert Level	RS	Road Sign	T/W	Top Of Wall
BT	British Telecom	JB	Junction Box	SP	Sign Post	TL	Traffic Lights
CAB	Cabinet	KO	Kerb Outlet	S/A	Soakaway	UTL	Unable to Lift
CP	Catch Pit	LP	Lamp Post	SL	Slab	VP	Vent Pipe
Co	Concrete	LI	Light	SC	Stop Cock	WL	Water Level
CL	Cover Level	MH	Manhole Cover	SW	Stop Valve	WM	Water Meter
CLL	Cable	MR	Manhole Box	S	Stump	WO	Water Wash Out
dl	Disagitated	MB	Multiple Bole	SW	Surface Water	WO	Water Wash Out
DCH	Drainage Channel	NVP	No Visible Pipes	STN	Survey Control Station		
EF	Earth Foot	OVG	Overgrown				

**ON FENCES/WALLS/DIVISIONS**

A/B	Armco Crash Barrier	H/F	Hera's Fence	P/R	Post and Rail Fence	BW	Brick Wall
B/W	Barbed Wire Fence	H/R	Hand Rail	P/W	Post and Wire Fence	CW	Concrete Wall
CL	Chain Link Fence	IR	Iron Rail Fence	S/F	Safety Fence	RW	Reinforcing Wall
C/B	Close Boarded Fence	P/L	Palisade Fence	T/F	Trellis Fence	SW	Stone Wall
E/F	Electric Fence	P/F	Picket Fence	W/M	Wire Mesh Fence	TW	Timber Wall

**ON BUILDINGS**

CHM	Chimney	EL	Eave Level	HH	Head Height	SH	Sill Height
DH	Door Head	FR	Flat Roof Level	PL	Parapet Level	SWP	Soil Pipe
DP	Down Pipe	FL	Floor Level	RL	Ridge Level	THL	Threshold Level



Rev	Comments	By	Chkd	Date
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-	-	-	-	-
-	-	-	-	-
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**Project Name**  
Former Homebase, Victoria Retail Park, Ruislip, HA4 0AJ

**CAD Drawing Name**  
SB13174 - TOPO

**Drawing Title**  
Topographical Survey of (2 OF 4 A1)

**Client**  
TSA Riley

**Date** 15/08/2025

**Scale** A1 @ 1:200

<b>Drawn By</b> SB - MG	<b>Checked By</b> SB - XX	<b>SB Code</b> SB13174	<b>Revision</b> -
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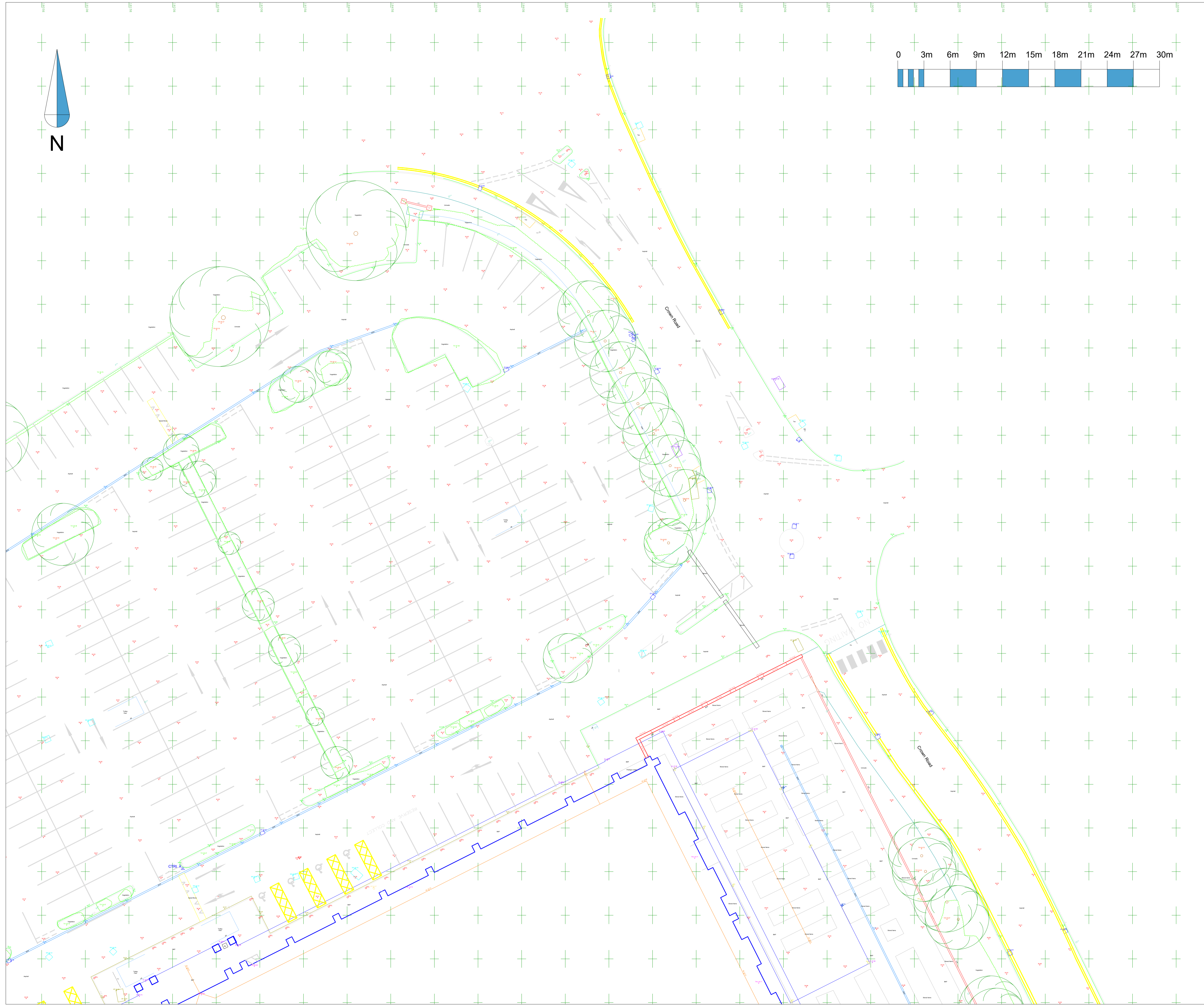
<b>Grid Orientation</b> NORTH GPS	<b>Site Level Datum</b> OS GPS
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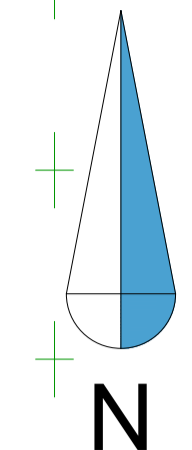
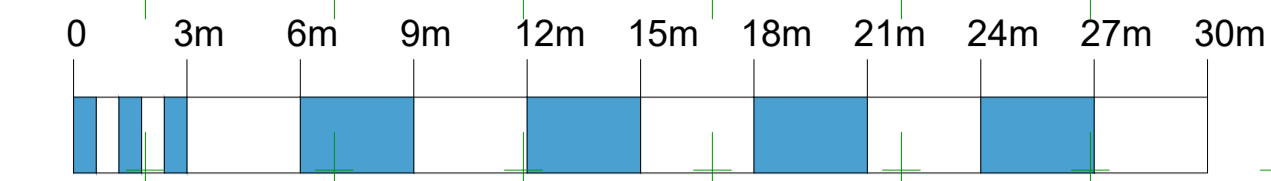


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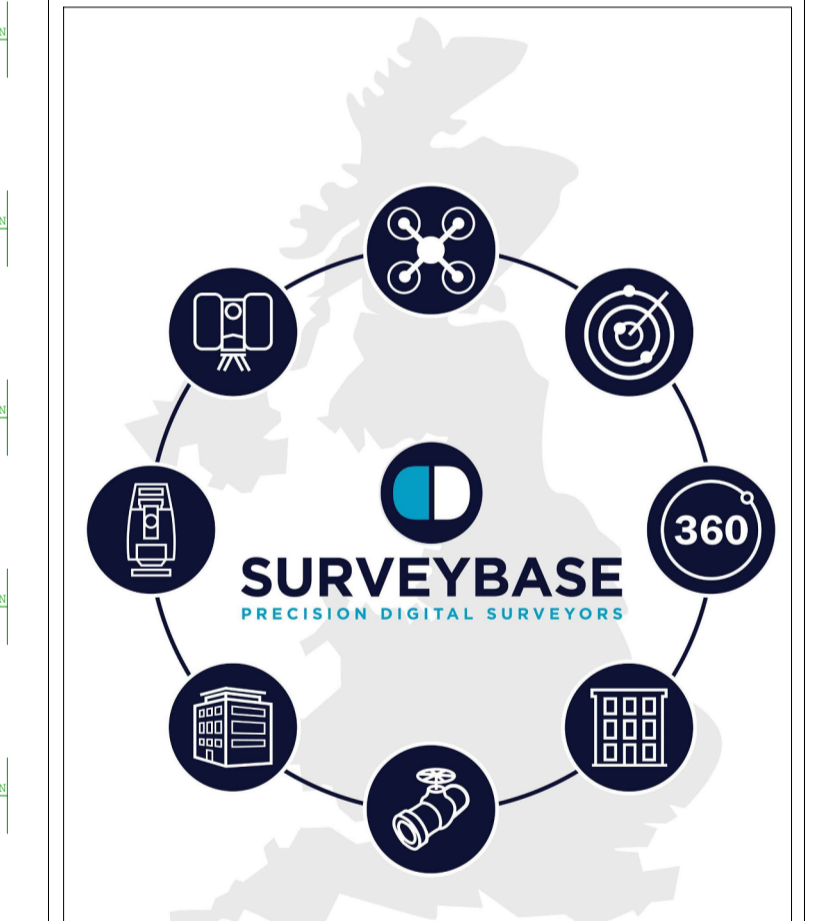
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Rev	Comments	By	Chkd	Date
-	-	-	-	-
-	-	-	-	-
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-	-	-	-	-



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**Project Name**  
Former Homebase, Victoria Retail Park, Ruislip, HA4 0AJ

**CAD Drawing Name**  
SB13174 - TOPO

**Drawing Title**  
Topographical Survey of  
(3 OF 4 A1)

**Client**  
TSA Riley

**Date**  
15/08/2025

**Scale**  
A1 @ 1:200

<b>Drawn By</b> SB - MG	<b>Checked By</b> SB - XX	<b>SB Code</b> SB13174	<b>Revision</b> -
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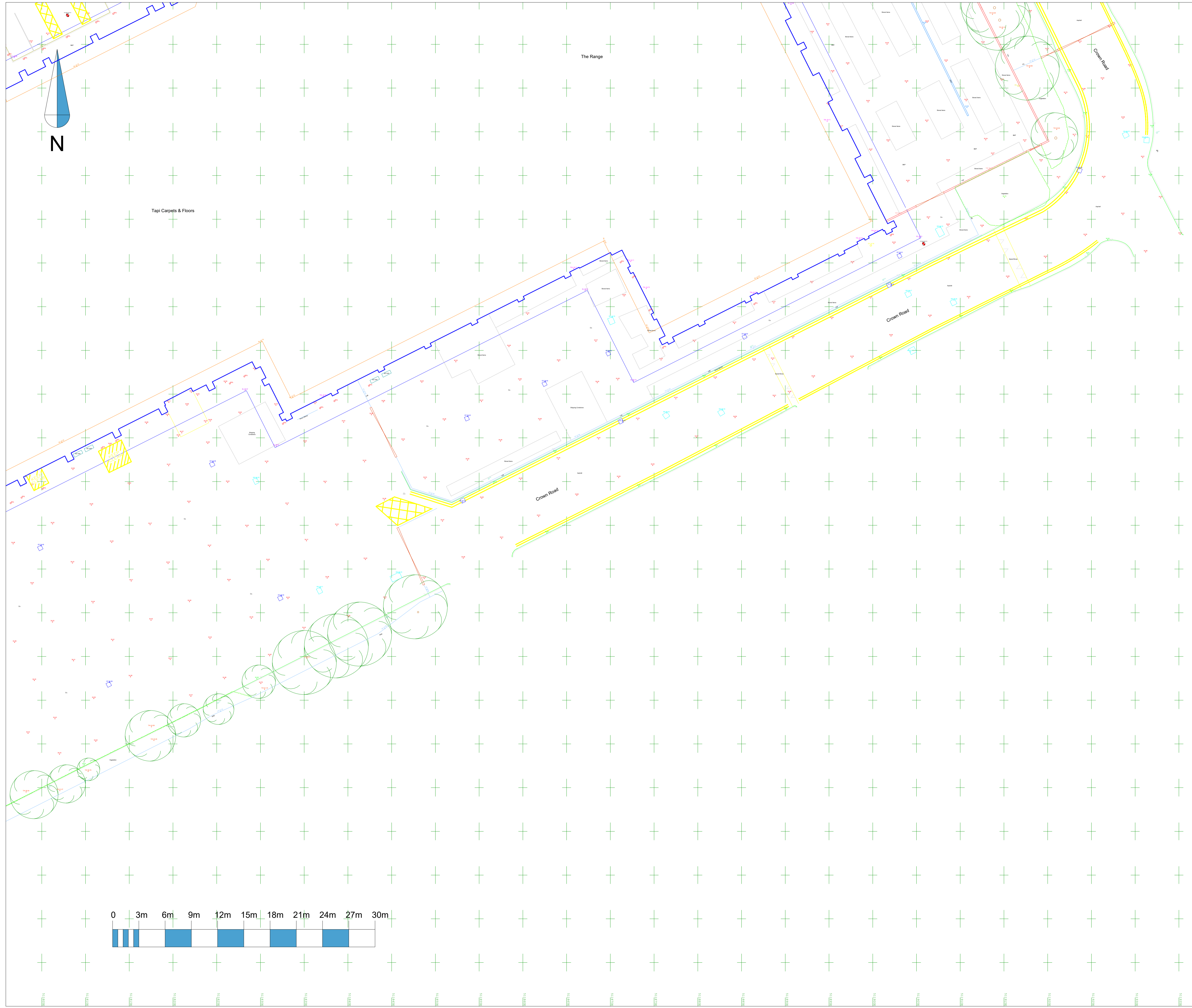
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**CAD Drawing Name**  
 SB13174 - TOPO

**Drawing Title**  
 Topographical Survey of (4 OF 4 A1)

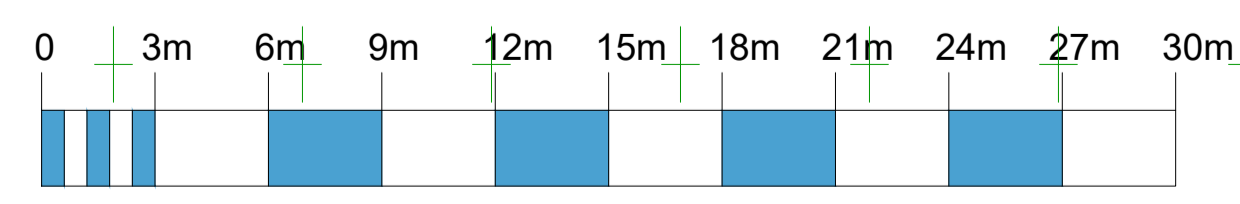
**Client**  
 TSA Riley

**Date** 15/08/2025  
**Scale** A1 @ 1:200

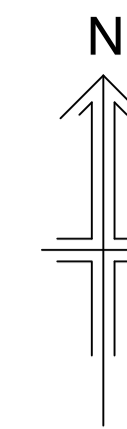
<b>Drawn By</b> SB - MG	<b>Checked By</b> SB - XX	<b>SB Code</b> SB13174	<b>Revision</b> -
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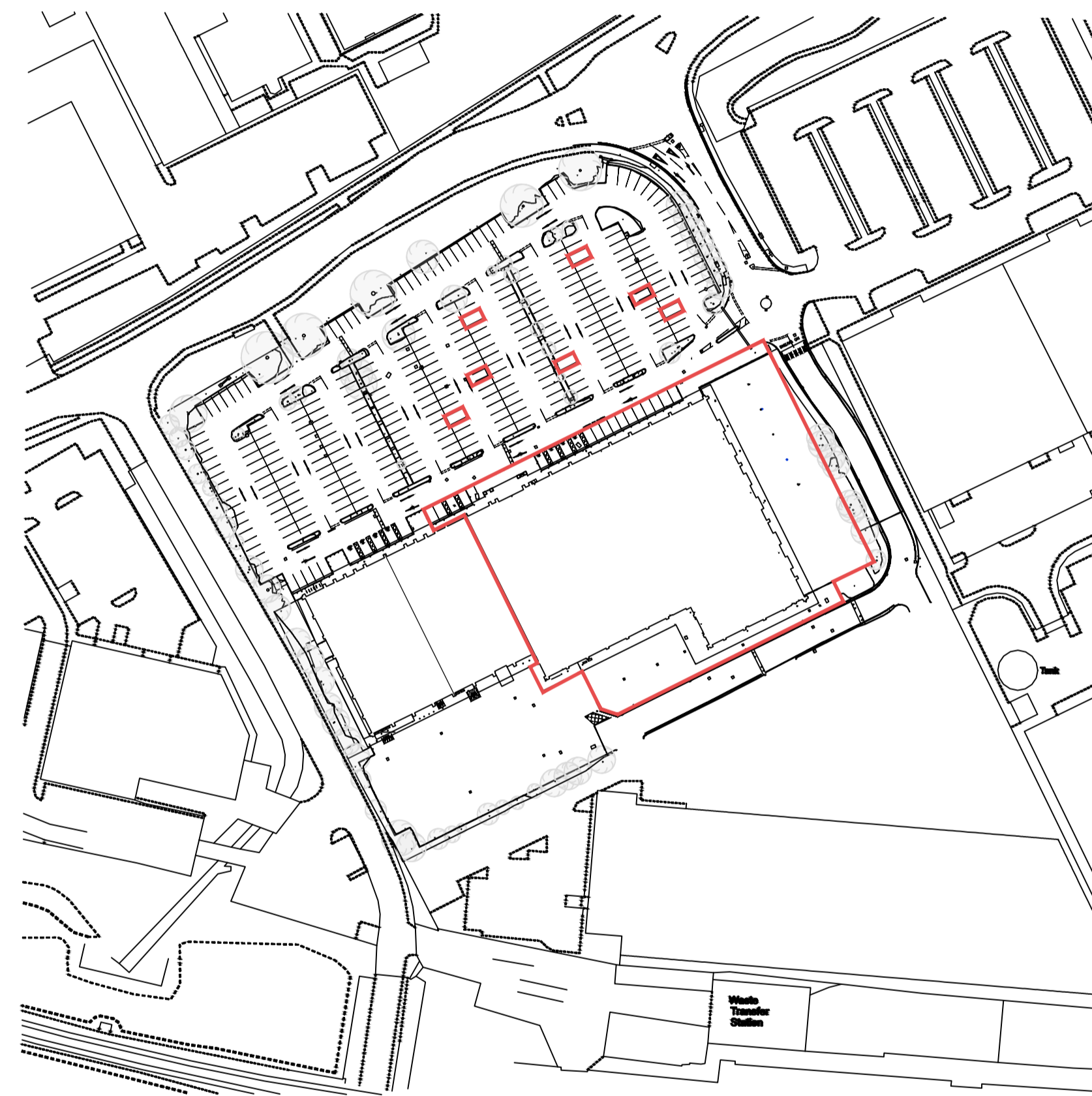
## Appendix E Existing and Proposed Development Plans



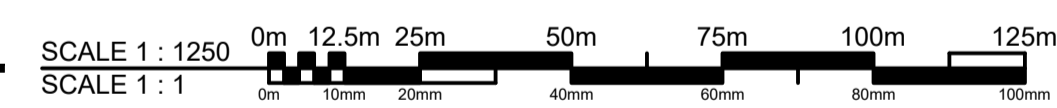
**NOTES** ORIGINAL A1

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— DENOTES APPLICATION BOUNDARY



SITE LOCATION PLAN \_ [SCALE 1:1250]



REV	DATE	DESCRIPTION	DRAWN	CHECKED
P02	29/10/25	Updated to Comments	SS	SS
P01	17/10/25	Red Line Updated	SS	SS
P00	12/08/25	First Issue of Drawing	TH	SS

**M&S**  
EST. 1884

STORE NAME  
**M&S**

COUNTRY  
**UK**

PROJECT  
**M&S SOUTH RUISLIP**

DRAWING  
**SITE LOCATION PLAN**

CONSULTANT  
**BROOKERFLYNN ARCHITECTS**

DISCIPLINE DESCRIPTION  
**ARCHITECT**

CONSULTANT LOGO

**BROOKERFLYNN**  
architects

SCALE	PAPER SIZE	DATE	DRAWN	CHECKED
1:1250	A1	SEP '25	TH	SS

STORE NUMBER	PROJECT No	DISCIPLINE CODE	DRAWING No
0000	RUI000	A	08901

CONSULTANT PROJECT No	STATUS	REVISION
24.1036	P	02

**PLANNING**