

2A Claremont Road, Teddington, TW11 8DG
Nimbus Engineering Consultants Ltd
Flood Risk Assessment Report
May 2024

**FLOOD RISK ASSESSMENT REPORT FOR
2A CLAREMONT ROAD, TEDDINGTON, TW11 8DG**

DOCUMENT NUMBER: C3281-R1-REV-A

PREPARED BY



Table of Contents

1. SITE DETAILS.....	3
1.1 Site Location	3
1.2 Proposed Development.....	3
2. PLANNING POLICIES.....	4
2.1 National Planning Policies	4
2.2 Local Planning Policy	4
3. FLOOD RISK	7
3.1 Flood Zones	7
3.2 Flooding from Land (Overland Flow)	9
3.3 Flooding from Groundwater.....	12
3.4 Flooding from Sewers.....	13
3.5 Flooding from Reservoirs, Canals, or Other Artificial Sources	14
4. RESIDUAL RISK AND MITIGATION MEASURES	15
4.1. Residual Risks	15
5. SAFE ACCESS AND EGRESS	16
6. CONCLUSIONS	17

APPENDICES

APPENDIX A – DRAWINGS

1. SITE DETAILS

Site Name	2A Claremont Road
Site Address	2A Claremont Road, Teddington, TW11 8DG
Purpose of Development	Residential
Existing Land Use	Brownfield
County	Greater London
Country	England
Local Planning Authority	London Borough of Richmond

1.1 Site Location

The location of the project site is shown on the site location plan shown in Appendix

A.

1.2 Proposed Development

The proposals involve the conversion of the current offices into 3 flats.

2. PLANNING POLICIES

2.1 National Planning Policies

- NPPF's Technical Guidance States:

“The effect of development is generally to reduce the permeability of at least part of the site. This markedly changes the sites response to rainfall. Without specific measures, the volume of water that runs off the site and the peak run-off flow rate is likely to increase. Inadequate surface water drainage arrangements in new development can threaten the development itself and increase the risk of flooding others.”

2.2 Local Planning Policy

The report has been written in conjunction with the following local planning policies:

- Surface Water Management Plan for the London Borough of Richmond.
- Strategic Flood Risk Assessment report for the London Borough of Richmond.
- London Borough of Richmond Preliminary Flood Risk Assessment report
- London Borough of Richmond Strategic Flood Risk Assessment – Interactive Surface Water Flood Risk Map

- The London Plan, Policy S1.12, which states:
 - 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 cooperate 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.

3. FLOOD RISK

The possible causes of flooding set out in NPPF are considered in this section in relation to flood risk to the site itself and the effects of the development of the site on the flood risk elsewhere.

3.1 Flood Zones

The Environment Agency has developed a flood risk map which shows the relative risk of flooding for different return periods. Flood zones assume that no defences are present and so where these do exist, they are only indicative of the potential for flooding.

The Environment Agency's Flood Map for Planning (Rivers and Sea), shown in Figure 1 overleaf, indicates the site is in Flood Zone 1, and not at risk of flooding from rivers or the sea.

2A Claremont Road, Teddington, TW11 8DG

Nimbus Engineering Consultants Ltd

Flood Risk Assessment Report

May 2024

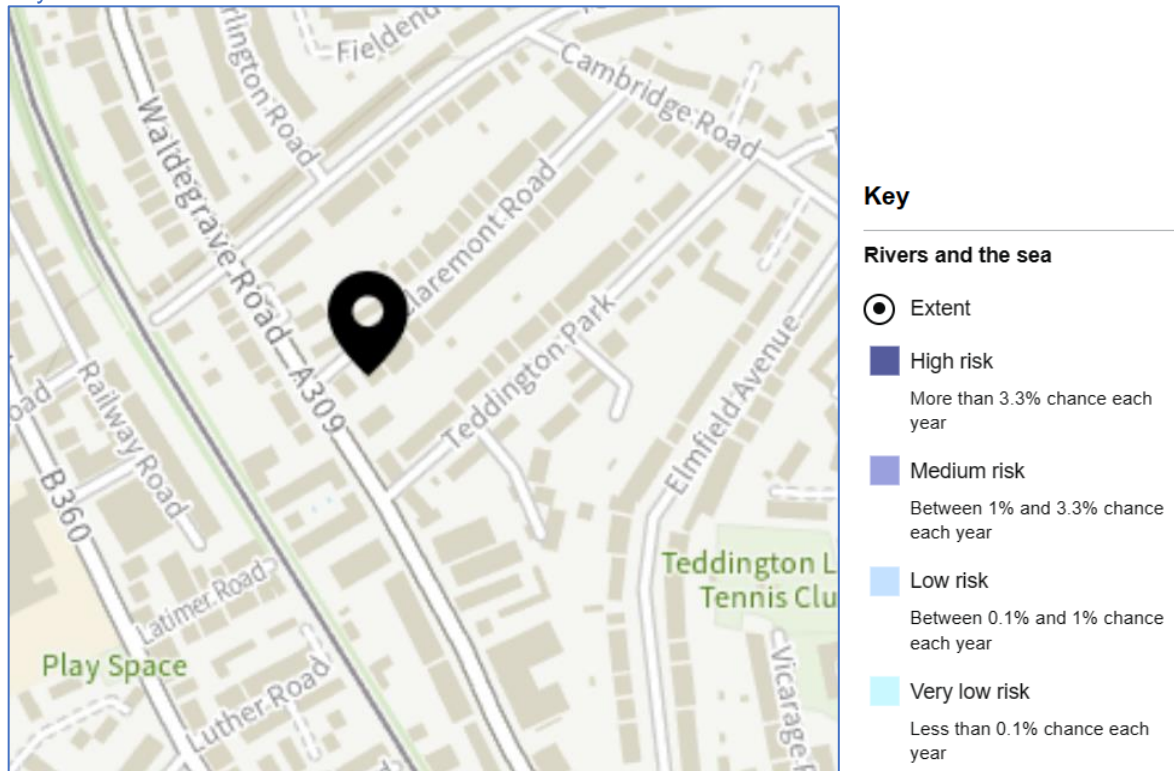


Figure 1 – Environment Agency Flood Map for flooding extent from rivers and sea for the proposed development

3.2 Flooding from Land (Overland Flow)

The area for this proposed conversion is shown to be at a very low risk of surface water flooding. However, there are areas surrounding the site with a low to high risk of surface water flooding, of depths mostly below 300mm at the southern part of Waldegrave Road, and depths of between 300mm and 900mm along Teddington Park, according to the Environmental Agency's flood map in Figure 2 below.

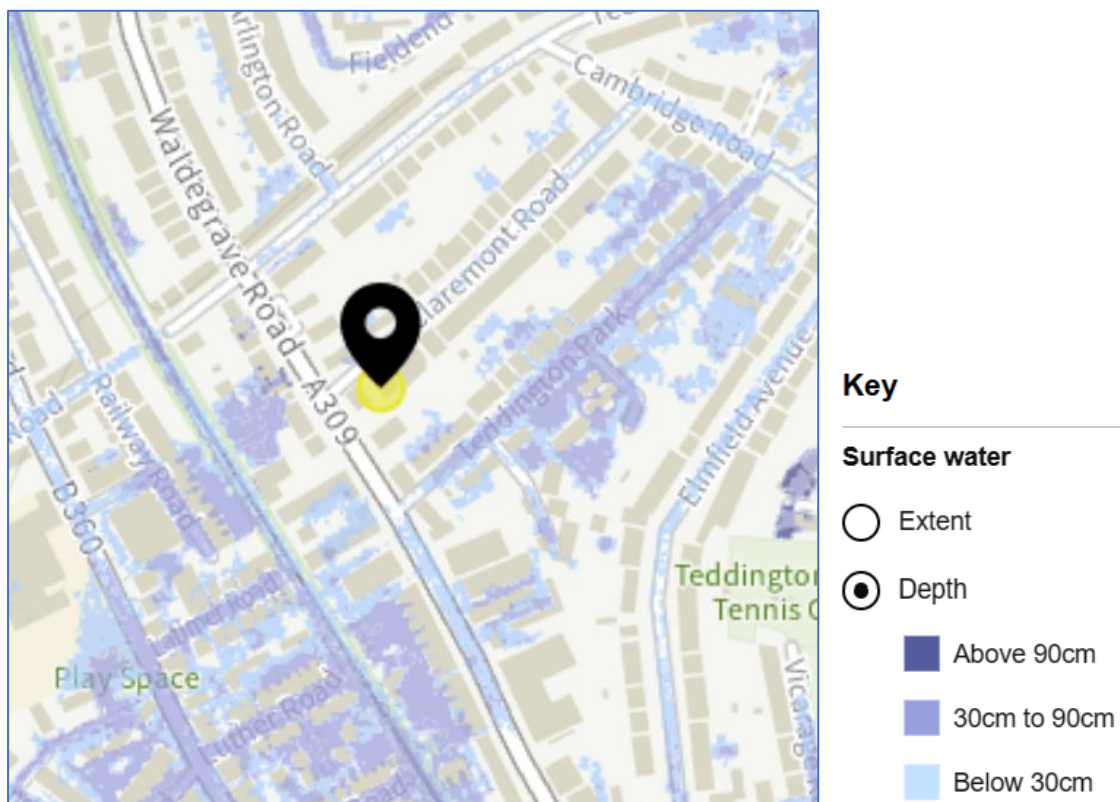


Figure 2 – Environment Agency Surface Water Flood Map for the proposed development.

We have also assessed the interactive surface water flood risk maps, from the London Borough of Richmond, as this is shown as Figure 3 and Figure 4 on the following pages of this report.



Figure 3 – Richmond Borough SFRA, Interactive Surface Water Flood Map, 1 in 100-year storm event

The above map confirms that this site for the conversion from residential to office use is not at risk of flooding from surface water, for the 1 in 100-year storm event. The map overleaf also confirms that the proposed conversion site is not at risk of surface water flooding for the 1 in 1000-year storm event.

However, some of the roads surrounding the proposed development site are at risk of surface water flooding, therefore the residents need to be made aware of hidden dangers such as blown manholes, and to seek refuge in their dwellings during extreme surface water flooding.

2A Claremont Road, Teddington, TW11 8DG

Nimbus Engineering Consultants Ltd

Flood Risk Assessment Report

May 2024

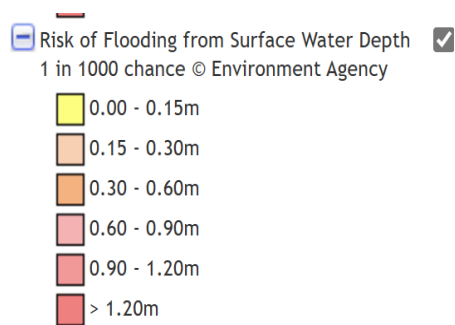
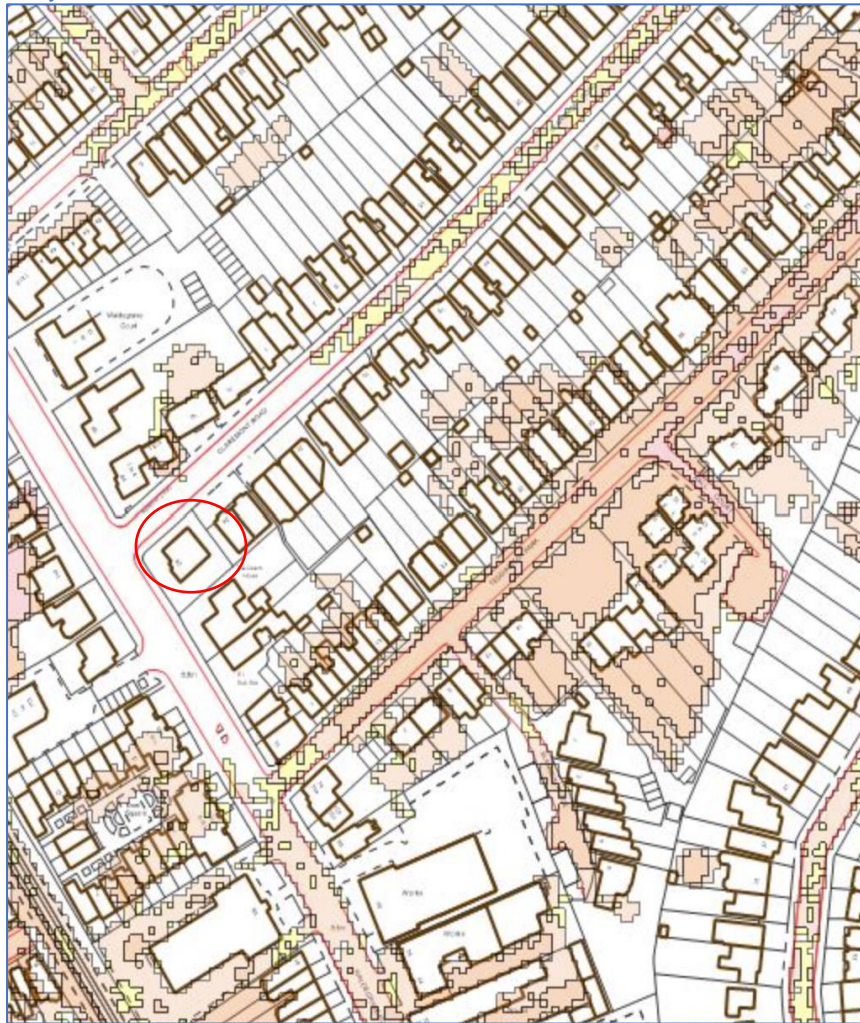


Figure 4– Richmond Borough SFRA, Interactive Surface Water Flood Map, 1 in 1000-year storm event

3.3 Flooding from Groundwater

The proposed site for this conversion from offices to residential, is at a 75% or more susceptibility of groundwater flooding, and this has been confirmed by both the SFRA report and the Environment Agency and shown on the map below. However, as the proposals are for an internal change of use only, there will be no excavations below ground level, therefore no risk of any over pumping required during the construction stage.



Figure 5 – Richmond Borough SFRA, Interactive Groundwater Flood Map

3.4 Flooding from Sewers

The proposed conversion site is within an area where there have been 0 to 10 incidents of sewer flooding, however, there have been no incidents at this site.

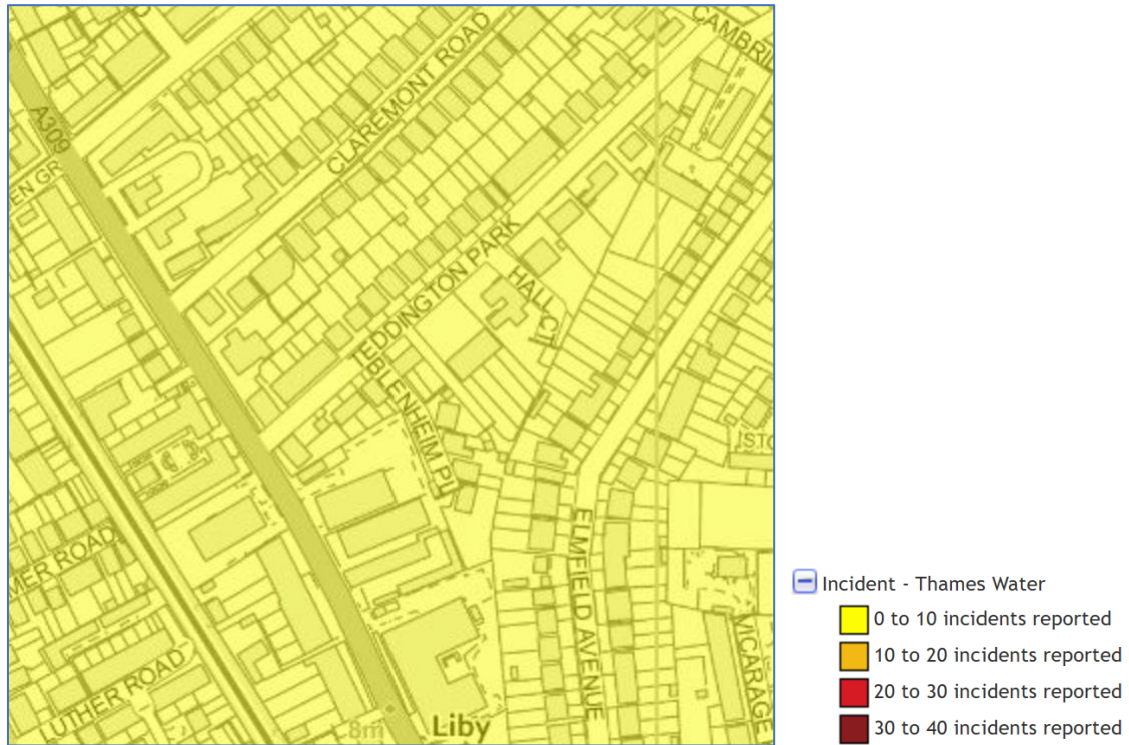


Figure 6 – Richmond Borough SFRA, Interactive Sewer Flood Map

3.5 Flooding from Reservoirs, Canals, or Other Artificial Sources

The Environment Agency's confirms that the site is at risk of reservoir flooding when there is also flooding from rivers. However flooding from reservoirs is very unlikely, and there are flood warnings in place.

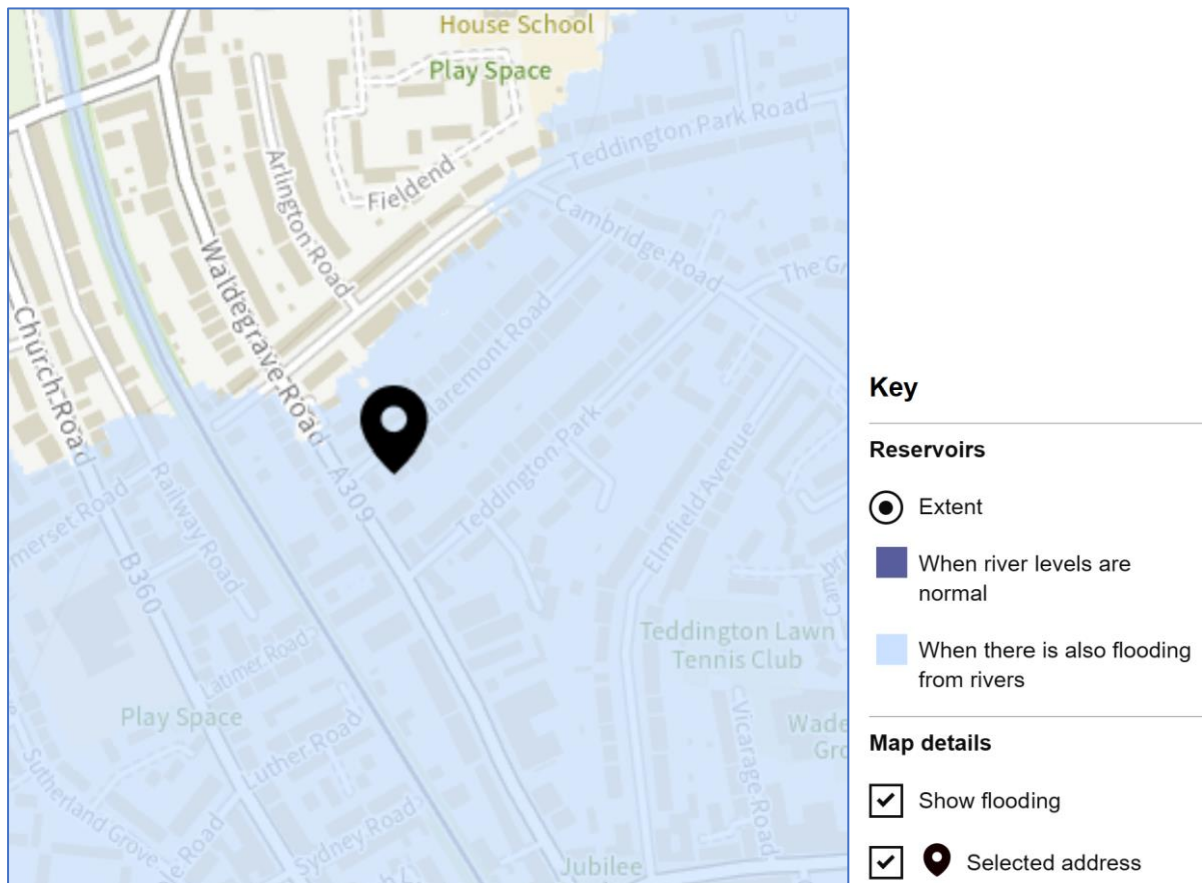


Figure 7 – Environment Agency Reservoir Flooding Map

4. RESIDUAL RISK AND MITIGATION MEASURES

4.1. Residual Risks

There is no risk of fluvial, pluvial, groundwater or sewer flooding to this proposed conversion site. Although there is a risk of reservoir flooding shown, flooding from reservoirs is very unlikely and flood warnings are in place.

Therefore, no mitigation measures are required.

5. SAFE ACCESS AND EGRESS

Some of the surrounding streets are at risk of surface water flooding, therefore occupants should not attempt to walk through floodwater unless instructed to do so by the emergency services, and they should be aware of hidden dangers such as blown manholes.

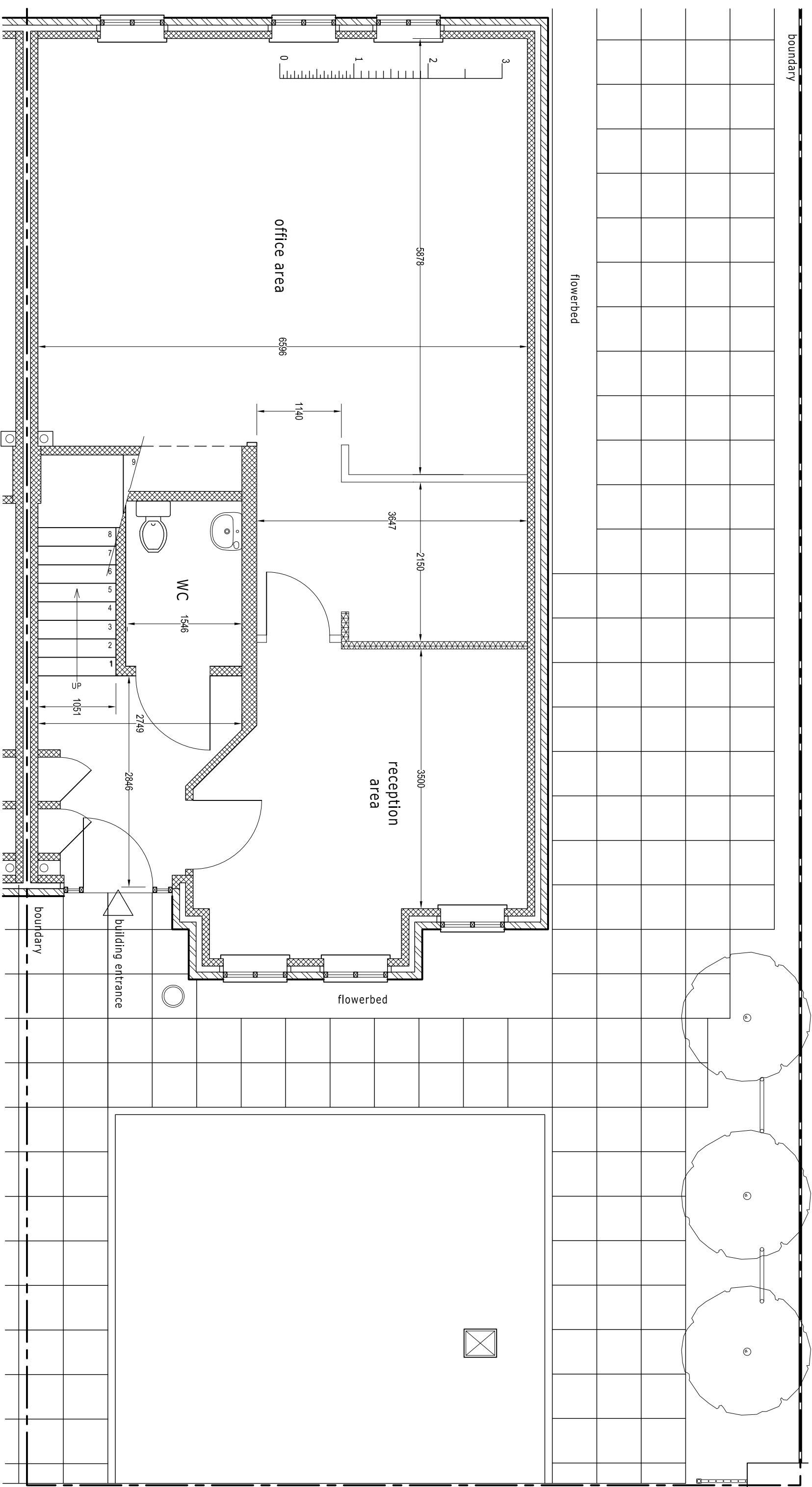
6. CONCLUSIONS

The site is at low risk from flooding from tidal, fluvial, pluvial and sewer flooding.

Although it is shown at a risk of reservoir flooding. The likelihood of a reservoir failing is very low, and flood warnings are in place.

Therefore, there is no reason this report should fail on flood risk grounds.

APPENDIX A – DRAWINGS



Project:

Residential Conversion.
George House, 2A Claremont Road,
Teddington, TW11 8DG

Title:

Existing Plan
Ground Floor General Arrangement

Drawn by

AWD

Date

18-04-24

Chkd by

B.003

Date

Scale

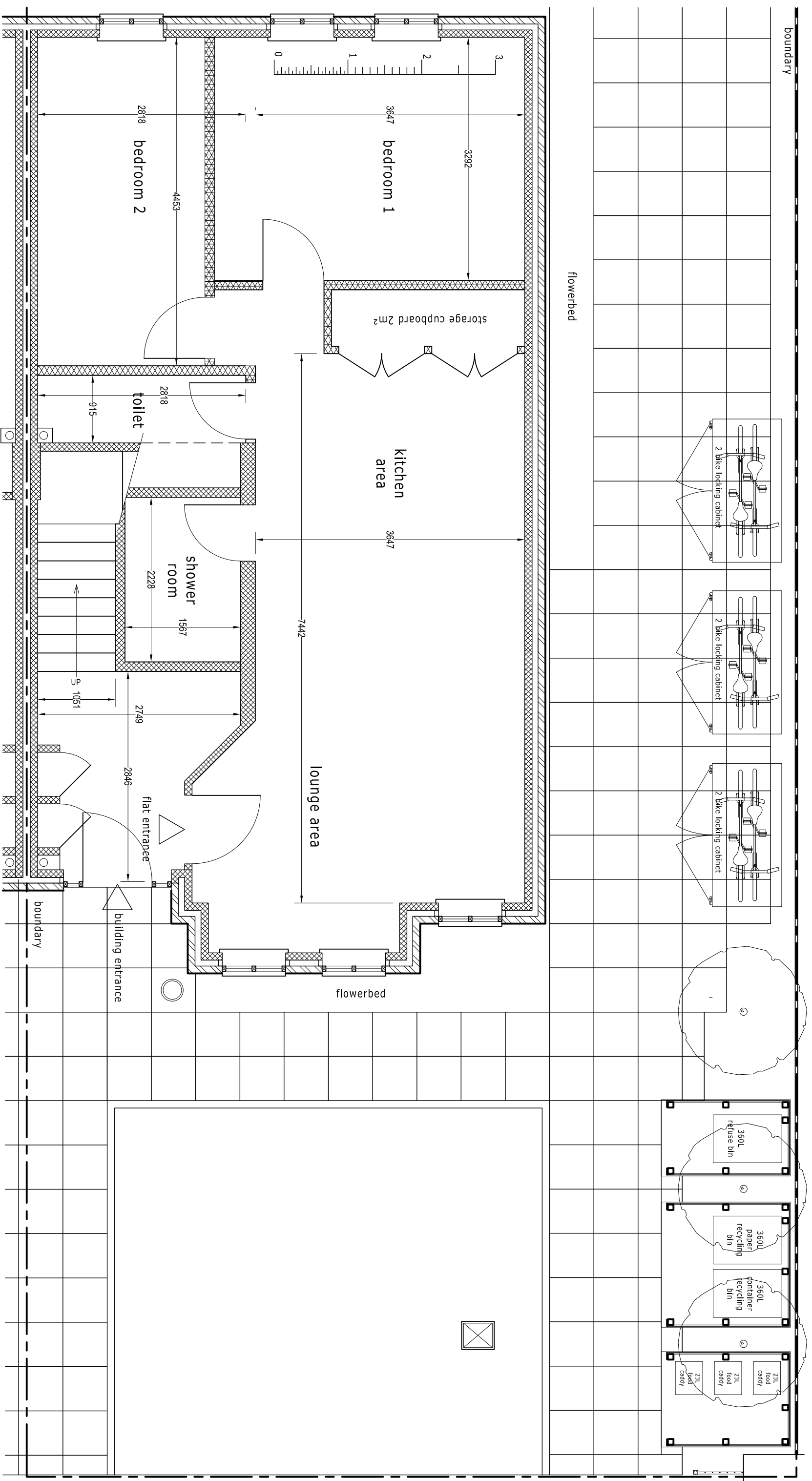
1:50 @ A3

Job no.

011-G.001

Issue

A



bedroom 1 floor area - 13.8m²
 bedroom 2 floor area - 10m²
 total floor area - 67.7m²



3d's
 Dalton Design & Draw

28 Albert Road,
 Teddington, London,
 TW11 0BD
 United Kingdom
 tel - 07984011202
 adalton263@aol.com

Project:
 Residential Conversion.
 George House, 2A Claremont Road,
 Teddington, TW11 8DG

Title:
 Proposed Plan
 Ground Floor General Arrangement

Drawn by	Date	Chkd by	Date	Scale
AWD	18-04-24			1:50 @ A3
Job no.	B.003			Issue
Dwg no.	011-G.008			A

George House, 2a, Claremont Road, Teddington, Richmond Upon Thames, TW11 8DG



Location Plan shows area bounded by: 515704.16, 171359.27 515845.58, 171500.69 (at a scale of 1:1250), OSGridRef: TQ15777142. The representation of a road, track or path is no evidence of a right of way. The representation of features as lines is no evidence of a property boundary.

Produced on 20th Mar 2024 from the Ordnance Survey National Geographic Database and incorporating surveyed revision available at this date. Reproduction in whole or part is prohibited without the prior permission of Ordnance Survey. © Crown copyright 2024. Supplied by www.buyaplan.co.uk a licensed Ordnance Survey partner (100053143). Unique plan reference: #00887656-547F8B.

Ordnance Survey and the OS Symbol are registered trademarks of Ordnance Survey, the national mapping agency of Great Britain. Buy A Plan® logo, pdf design and the www.buyaplan.co.uk website are Copyright © Passinc Ltd 2024.