

FloodSmart Plus



Flood Risk Assessment

Site Address

Robin Lodge Nursery
Part Lane
Swallowfield
Wokingham
RG7 1TB

Date

2025-03-19

Report Status

FINAL

Site Area

3966 m²

Report Reference

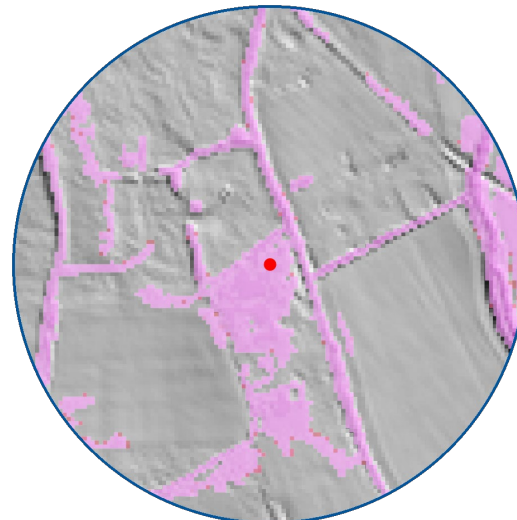
84709R1

Grid Reference

472756, 164608

Report Prepared for

Ex-Army Builders Ltd



RISK – Very Low to High

The Site is located in Flood Zone 3a, this equates to a High probability of flooding from the nearby river. Surface water (pluvial) flood risks range from Very Low to High. Groundwater flood risks are Moderate and flooding risks from artificial sources (i.e. canals, reservoirs and sewers) are Low. Mitigation measures are recommended in this report to reduce the risks to an acceptable level over the lifetime of the development.

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1. Executive summary



A review has been undertaken of national environmental data sets to assess the flood risk to the Site from all sources of flooding in accordance with the National Planning Policy Framework (NPPF) (2024) and National Planning Practice Guidance (NPPG) (published in 2014 and updated in August 2022). A site-specific flood risk assessment, to assess the flood risk to and from the development Site, is provided within this concise interpretative report written by an experienced GeoSmart consultant. Baseline flood risk and residual risks that remain after the flood risk management and mitigation measures are implemented are summarised in the table below.

Site analysis

Source of Flood Risk	Baseline ¹	After analysis ²	After Mitigation ³
River (fluvial) flooding	High		Medium
Sea (coastal/tidal) flooding	Very Low		N/A
Surface water (pluvial) flooding	Very Low to High		Very Low to Low
Groundwater flooding	Moderate		Low
Other flood risk factors present	Yes		Yes (bridges, reservoirs)
Is any other further work recommended?	Yes		(see below)

1 BASELINE risks assigned for the whole Site, using national risk maps, including the benefit of EA flood defences.

2 AFTER ANALYSIS modification of risk assessment based on detailed site specific analysis including some or all of the following: flood model data, high resolution mapping, building location, access routes, topographic and CCTV surveys.

3 AFTER MITIGATION risks include risks to proposed development / asset and occupants if mitigation measures recommended in this report are implemented, including the impacts of climate change.

*N/A indicates where mitigation is not required.

Summary of existing and proposed development

The Site is currently occupied by a concrete base, formerly on which was placed a mobile home, and two greenhouses (Units A and B on the current Site plan). Development proposals

comprise the demolition of the current structures and the construction of two commercial buildings, an open log store, associated parking and landscaping, plus the construction of an acoustic screen surrounding the Site. Unit A contains an area of warehouse/storage and Unit B contains two offices, a canteen, lockers, a reception area and storage rooms.

Summary of flood risks

The flood risks from all sources have been assessed as part of this report and are as follows:

- Historical flooding related to drainage/surface water is understood to have previously occurred at the northern and eastern boundaries of the Site which appears to have slightly encroached onto the Site itself. This flooding occurred in July 2007.

River (fluvial) and Sea (Estuarine/Coastal) flooding

- According to the Environment Agency's (EA) Flood Map for Planning Purposes, the Site is located within a fluvial Flood Zone 3 (High probability).
- The Site does not benefit from the presence of formal flood defences and no flood defences are planned for the future.
- According to the EA's Risk of Flooding from Rivers and Sea (RoFRS) map, which considers the type, condition and crest height of flood defences, the Site has a risk of flooding ranging from Medium to High. from the nearby watercourse, the River Blackwater. The majority of the Site is at Higher risk of fluvial flooding.
- The Site could potentially be at risk from flooding due to blockage or failure of a culvert located on the drainage ditch that runs parallel to the northern boundary of the Site.
- Modelled flood data obtained from the EA has been analysed in line with the most up to date guidance on climate change (EA, 2022), to confirm a maximum "design" flood level at the Site.
- During a 1 in 100 year plus 25% climate change allowance event the flood depth at the Site may be up to 1.35 m. Flood mitigation measures are included below.
- Emergency evacuation routes are available to the south.

Surface water (pluvial) flooding

- According to the EA's Risk of Flooding from Surface Water (pluvial) flood mapping, the Site has a risk of pluvial flooding ranging from Very Low to High.
- Flood depths in the area proposed for development could be up to 0.6 m in the 1 in 100 year plus climate change event.

Groundwater flooding

- Groundwater Flood Risk screening data indicates that there is a Moderate potential risk of groundwater flooding at the surface in the vicinity of the Site during a 1 in 100 year event.

- The presence of permeable river terrace deposits beneath the Site (classified as a Secondary A Aquifer) which may be in hydraulic connectivity with the River Blackwater, suggest that a shallow groundwater body may be present beneath the Site.

Artificial sources of flooding

- The risk of flooding from artificial (man-made) sources such as reservoirs, sewers and canals has been assessed:
 - The EA's Risk of Flooding from Reservoir map confirms the Site is at risk of reservoir flooding. However, the potential for a breach of a reservoir to occur and flooding affecting the Site is low.
 - Ordnance Survey (OS) data confirms there are no canals near to the Site.
 - The Strategic Flood Risk Assessment (SFRA) (JBA Consulting, 2023) has identified 181 incidences or modelled incidences of flooding as a result of surcharging sewers within the RG7 1 postcode between 2000 and 2022. However, records held by Thames Water indicate that there have been no recorded incidences of flooding related to the surcharging of public sewers at the study Site.

The risk of flooding from artificial sources is considered to be Low.

- The risk to the development has been assessed over its expected year lifetime, including appropriate allowances for the impacts of climate change which could increase the flood risk to the Site. Risks identified include increases in river flooding and increased potential for surface water flooding and appropriate mitigation measures are proposed.

Recommendations

Recommendations for flood mitigation are provided below, based upon the proposed development and the flood risk identified at the Site.

- As there is a risk of flooding from fluvial sources, where flood depths could be up to 1.35 m across the area proposed for development, Finished Floor Levels (FFL) of the proposed buildings should be set to a minimum of 45.03 mAOD¹. Standard flood resilient design measures should also be incorporated.
- As there is a risk of flooding from surface water (pluvial) sources, where flood depths could be up to 0.6 m in the areas of the proposed buildings, Finished Floor Levels (FFL) of the proposed development should be set at least 0.9 m above surrounding ground levels and ground levels should aim to slope away from the buildings. This however, will be achieved through mitigation of fluvial sources. Ground levels should be designed to channel any overland flows from off-Site away from the development and Site drainage systems.
- As there is a risk of flooding from groundwater sources at the Site, ground levels should slope away from buildings. Risk to buried infrastructure should be considered along with

¹ 0.3 m above the 1 in 100 year plus climate change flood level of 44.73 mAOD.

water proofing of lower ground floor areas, standard flood resilient design and non-return valves on the sewer inlet. French drains and/or pumping systems may also be considered.

- Occupants /users of the Site should also be signed up to receive EA Flood Alerts and Flood Warnings.
- The ongoing management and maintenance of existing and any proposed drainage networks, under the riparian ownership of the developer, should be undertaken in perpetuity with the development.
- A Sustainable Drainage Strategy (SuDS) should be developed for the Site, for effective management of surface water runoff over the lifetime of the proposed development.

GeoSmart recommend the mitigation measures discussed within this report are considered as part of the proposed development where possible and evidence of this is provided to the Local Planning Authority as part of the planning application.

2. Introduction



Background and purpose

A site-specific flood risk assessment has been undertaken, to assess the flood risk to and from the development Site. This assessment has been undertaken by firstly compiling information concerning the Site and the surrounding area. The information gathered was then used to construct a 'conceptual site model', including an understanding of the appropriateness of the development as defined in the NPPF (2024) and the source(s) of any flood risk present, guided by the NPPG (published in 2014 and updated in August 2022). Finally, a preliminary assessment of the steps that can be taken to manage flood risk to the development was undertaken.

This report has been prepared with reference to the NPPF (2024) and NPPG (2022).

"The National Planning Policy Framework set out the Government's planning policies for England and how these are expected to be applied" (NPPF, 2024).

The NPPF (2024) and NPPG (2022) promote a sequential, risk-based approach to the location of development. This also applies to locating a development within a Site which has a variable risk of flooding.

"The approach is designed to ensure that areas at little or no risk of flooding from any source are developed in preference to areas at higher risk. This means avoiding, so far as possible, development in current and future medium and high flood risk areas considering all sources of flooding including areas at risk of surface water flooding" (Paragraph: 023. NPPG, 2022).

The purpose of this report is to provide clear and pragmatic advice regarding the nature and potential significance of flood hazards which may be present at the Site.

Report scope

In accordance with the requirements set out within NPPG 2022 (Paragraph: 021 Reference ID: 7-021-20220825), a thorough review of publicly and commercially available flood risk data and EA supplied data indicating potential sources of flood risk to the Site from rivers and coastal sources, surface run-off (pluvial), groundwater and reservoirs, including historical flood information and modelled flood extent. Appropriate measures are recommended to manage and mitigate the flood risk to the Site.

Information obtained from the EA and a review of the Wokingham Borough Council Strategic Flood Risk Assessment (SFRA) (JBA Consulting, 2023) and Wokingham Borough Council Core Strategy (Wokingham Borough Council, 2010) are used to ascertain local flooding issues and, where appropriate, identify information to support a Sequential and/or Exception test required as part of the NPPF (2024).

The existing and future flood risk to and from the Site from all flood sources is assessed in line with current best practice using the best available data. The risk to the development has been assessed over its expected lifetime, including appropriate allowances for the impacts of climate change. Residual risks that remain after the flood risk management and mitigation

measures are implemented, are considered with an explanation of how these risks can be managed to keep the users of the development safe over its lifetime.

An indication of whether the Site will potentially increase flood risk elsewhere is provided, including where the proposed development increases the building footprint at the Site. A drainage strategy to control runoff can be commissioned separately if identified as a requirement within this report.

Report limitations

It is noted that the findings presented in this report are based on a desk study of information supplied by third parties. Whilst we assume that all information is representative of past and present conditions, we can offer no guarantee as to its validity and a proportionate programme of site investigations would be required to fully verify these findings.

The basemap used is the OS Street View 1:10,000 scale, however, the Site boundary has been drawn using BlueSky aerial imagery to ensure the correct extent and proportion of the Site is analysed.

This report excludes consideration of potential hazards arising from any activities at the Site other than normal use and occupancy for the intended land uses. Hazards associated with any other activities have not been assessed and must be subject to a specific risk assessment by the parties responsible for those activities.

Datasets

The following table shows the sources of information that have been consulted as part of this report:

Table 1. Datasets consulted to obtain confirmation of sources of flooding and risk

Source of flooding	Datasets consulted				
	Commercial Flood Maps	Local Policy & Guidance Documents*	Environment Agency (Appendix B)	Thames Water (Appendix C)	OS Data
Historical	X	X	X		
River (fluvial) / Sea (tidal/coastal)	X	X	X		

Source of flooding	Datasets consulted				
	Commercial Flood Maps	Local Policy & Guidance Documents*	Environment Agency (Appendix B)	Thames Water (Appendix C)	OS Data
Surface water (pluvial)	X	X	X		
Groundwater	X	X			
Sewer		X		X	
Culvert/bridges		X			X
Reservoir		X	X		

*Local guidance and policy, referenced below, has been consulted to determine local flood conditions and requirements for flood mitigation measures.

Local policy and guidance

For this report, several documents have been consulted for local policy and guidance and relevant information is outlined below:

Wokingham Borough Council Core Strategy (Wokingham Borough Council, 2010):

CP1 – Sustainable development

Planning permission will be granted for development proposals that:

- 1) Maintain or enhance the high quality of the environment;
- 2) Minimise the emission of pollutants into the wider environment;
- 3) Limit any adverse effects on water quality (including ground water);
- 4) Ensure the provision of adequate drainage;
- 5) Minimise the consumption and use of resources and provide for recycling;
- 6) Incorporate facilities for recycling of water and waste to help reduce per capita water consumption;
- 7) Avoid areas of best and most versatile agricultural land;

- 8) Avoid areas where pollution (including noise) may impact upon the amenity of future occupiers;
- 9) Avoid increasing (and where possible reduce) risks of or from all forms of flooding (including from groundwater);
- 10) Provide attractive, functional, accessible, safe, secure and adaptable schemes;
- 11) Demonstrate how they support opportunities for reducing the need to travel, particularly by private car in line with CP6; and
- 12) Contribute towards the goal of reaching zero-carbon developments⁴¹ as soon as possible by:
 - a) Including appropriate on-site renewable energy features; and
 - b) Minimising energy and water consumption by measures including the use of appropriate layout and orientation, building form, design and construction, and design to take account of microclimate so as to minimise carbon dioxide emissions through giving careful consideration to how all aspects of development form."

Wokingham Borough Council Strategic Flood Risk Assessment (JBA Consulting, 2023):

5.1 Historical flooding

5.1.1 Historical flood records

Wokingham Borough has an extensive historical flooding record. Table 5-1 (of the SFRA) details the major flood events of which WBC has records of.

5.4 Fluvial flood risk

The primary fluvial flood risk is along the River Thames and the River Loddon. The extents are mainly confined to the route of the River Thames along the north-western border, and River Loddon through the centre of the Borough. Wider extents follow smaller tributaries such as Emm Brook and River Blackwater.

5.5 Surface water flooding

Surface water runoff is most likely to be caused by intense downpours e.g. thunderstorms. At times, the amount of water falling can completely overwhelm the drainage network, which is not designed to cope with extreme storms. The flooding can also be complicated by blockages to drainage networks, sewers being at capacity and/ or high-water levels in watercourses that cause local drainage networks to back up.

The EA Risk of Flooding from Surface Water mapping (RoFSW) shows that several communities are at risk of surface water flooding. The mapping shows that surface water predominantly follows topographical flow paths of existing watercourses or dry valleys and can pond in low-lying areas. Whilst in the majority of cases the risk is confined to roads,

there are notable prominent run-off flow routes around properties, e.g. properties situated at the foot of surrounding hills.

5.6 Sewer flooding

Sewer flooding occurs when intense rainfall/river flooding overloads sewer capacity (surface water, foul or combined), and/or when sewers cannot discharge to watercourses due to high water levels. Sewer flooding can also be caused by blockages, collapses, equipment failure or groundwater leaking into sewer pipes.

Since 1980, the Sewers for Adoption guidelines mean that new surface water sewers have been designed to have capacity for a 3.3% AEP rainfall event, although until recently this did not apply to smaller private systems. This means that sewers can be overwhelmed in larger rainfall and flood events.

New developments should not cause additional pressures on existing sewers due to the requirements to maintain greenfield runoff rates. However, increases in rainfall as a result of climate change can lead to existing sewers becoming overloaded, although this can be reduced through the use of well-designed SuDS to reduce surface water runoff.

Thames Water is the water company responsible for the management of the drainage networks across the Wokingham Borough. Thames Water provided a record of flooding incidents relating to public foul, combined or surface water sewers from January 2000 until May 2022.

5.8 Flooding from reservoirs

Reservoirs with an impounded volume greater than 25,000 cubic metres are governed by the Reservoirs Act 1975, available on the Government website [here](#), and are on a register held by the EA. The level and standard of inspection and maintenance required by a Supervising Panel of Engineers under the Act means that the risk of flooding from reservoirs is very low.

Flooding from reservoirs occurs following partial or complete failure of the control structure designed to retain water in the artificial storage area. Reservoir flooding is very different from other forms of flooding; it may happen with little, or no warning and evacuation will need to happen immediately. The likelihood of such flooding is difficult to estimate but is extremely low compared to flooding from other sources. It may not be possible to seek refuge upstairs from floodwater as buildings could be unsafe or unstable due to the force of water from the reservoir breach or failure.

The EA hold mapping showing what might happen if reservoirs fail. Developers and planners should check the Long-Term Risk of Flooding website before using the reservoir data shown in this SFRA to make sure they are using the most up to date mapping. The EA

provide two flooding scenarios for the reservoir flood maps: a 'dry-day' and a 'wet-day'. The 'dry-day' scenario shows the predicted flooding which would occur if the dam or reservoir fails when rivers are at normal levels. The 'wet-day' scenario shows the predicted worsening of the flooding which would be expected if a river is already experiencing an extreme natural flood. It should be noted that these datasets give no indication of the likelihood or probability of reservoir flooding.

The current mapping shows that there are seven reservoirs located within Wokingham Borough. There are a further eight reservoirs located outside Wokingham Borough but whose flood extents lie within Wokingham Borough boundary.

Guidance

Strategic Flood Risk Assessments are carried out by local authorities, in consultation with the Environment Agency, to assess the flood risk to the area from all sources both now and in the future due to climate change. They are used to inform planning decisions to ensure inappropriate development is avoided (NPPF, 2023).

Site information

The Site is located on Part Lane, Swallowfield in a setting of commercial and residential land use at National Grid Reference SU 72756, 64608.

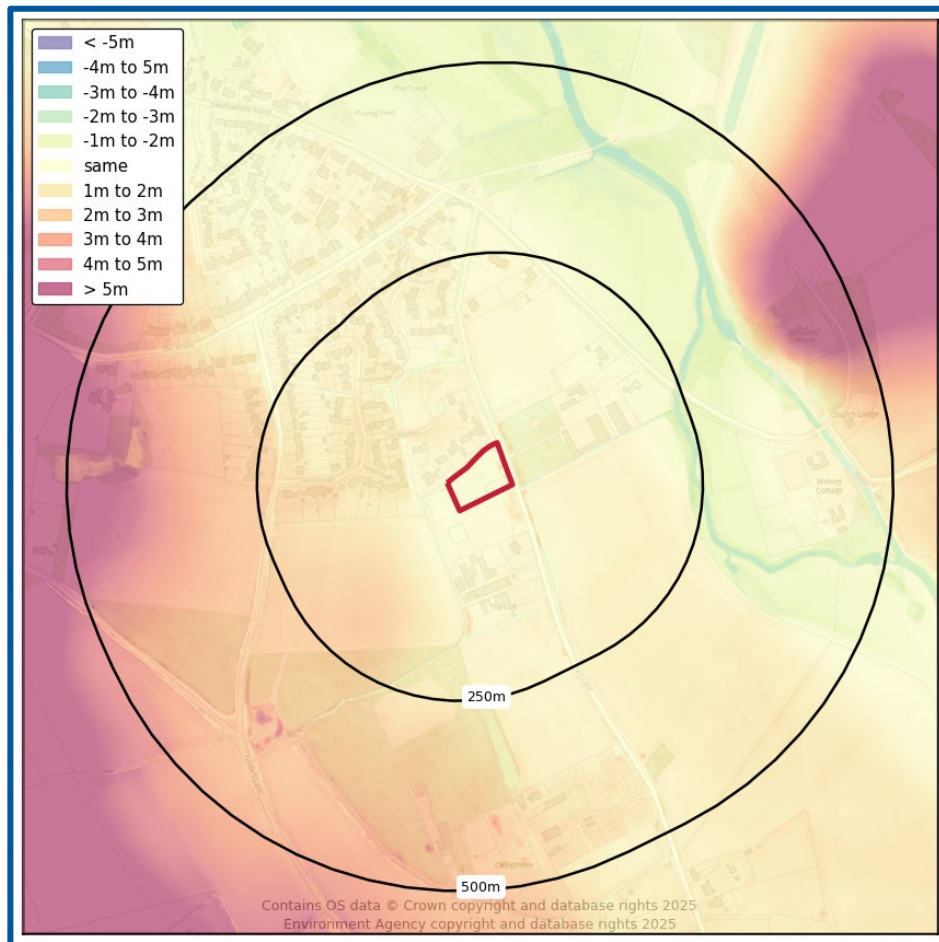
Figure 1. Aerial imagery of the Site (Bluesky, 2025)



Figure 2 indicates that ground levels within 500m of the Site rise and fall, due to the Site being located within a valley formation.

The ground levels on the Site are typically between 43.38 mAOD and 45.11 mAOD with the levels rising slightly towards the northern and eastern borders of the Site. This is based upon a Site specific topographic survey undertaken by Cryfield Surveys Ltd in February 2024 (see Appendix D). It should be noted that the topographical survey was conducted in February 2024 and since then the mobile home/caravan that was noted on the Site has since been removed. The concrete base on which it was positioned however remains on the Site.

Figure 2. Site Location and Relative Elevations (GeoSmart, 2025)



Development

The Site is currently occupied by a large open area accommodating a concrete base on which was formerly located a mobile home and two greenhouses, Unit A and B on the Site plan.

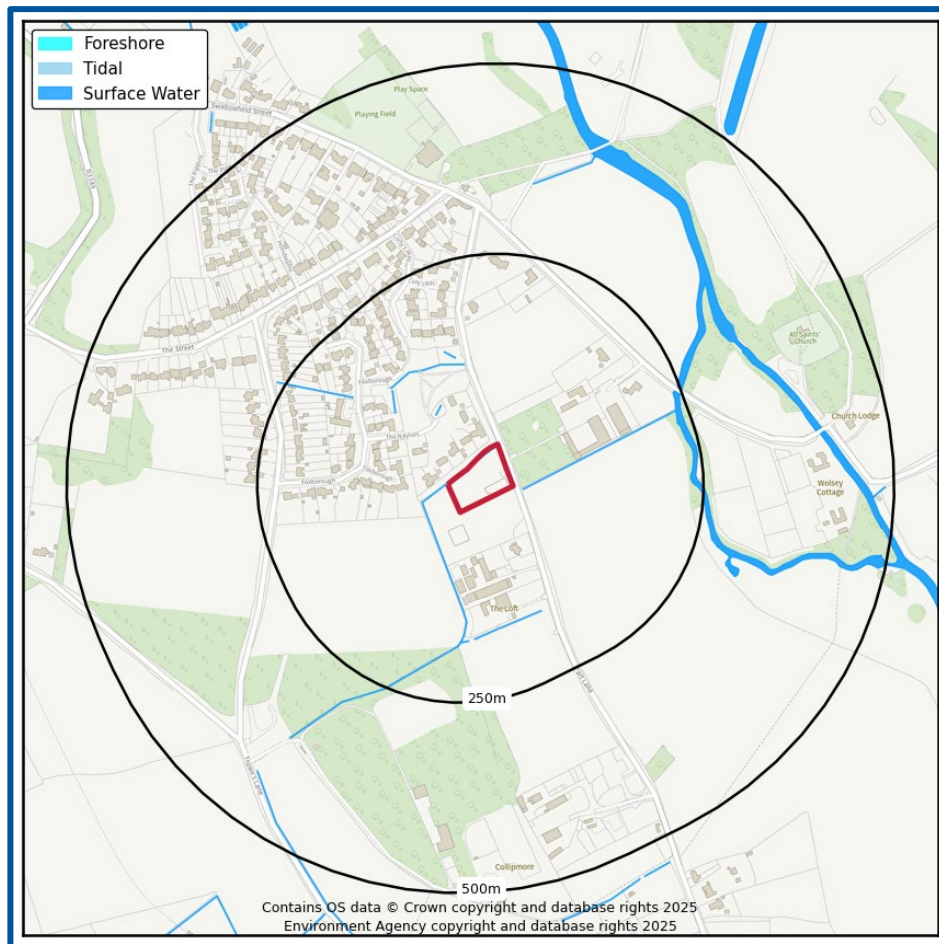
Development proposals comprise the demolition of the structures currently occupying the Site and the construction of two buildings with an open log store, associated parking and landscaping, plus the construction of an acoustic screen surrounding the Site. The proposed Unit A contains an area of warehouse/storage and the proposed Site B contains two offices, a canteen, lockers, a reception area and storage rooms. Site plans are included within Appendix A.

The effect of the overall development will result in an increase in number of occupants and/or users of the Site and will result in the change of use, nature or times of occupation. According to Annex 3 of the NPPG (2022), the vulnerability classification of the existing development is Less Vulnerable and proposed development is Less Vulnerable. The estimated lifespan of the development is 100 years.

Hydrological features

According to Ordnance Survey (OS) mapping included in Figure 3, there are numerous surface water features within 500 m of the Site.

Figure 3. Surface water features (EA, 2025)



Multiple drainage ditches are located within close proximity to the Site, including drainage channels directly adjacent to the northern edge of the Site and close to the western corner of the Site.

The Long River and Blackwater River are located approximately 240 m east and 400 m east of the Site respectively.

An unidentified water feature is located approximately 500 m north east of the Site.

Proximity to relevant infrastructure

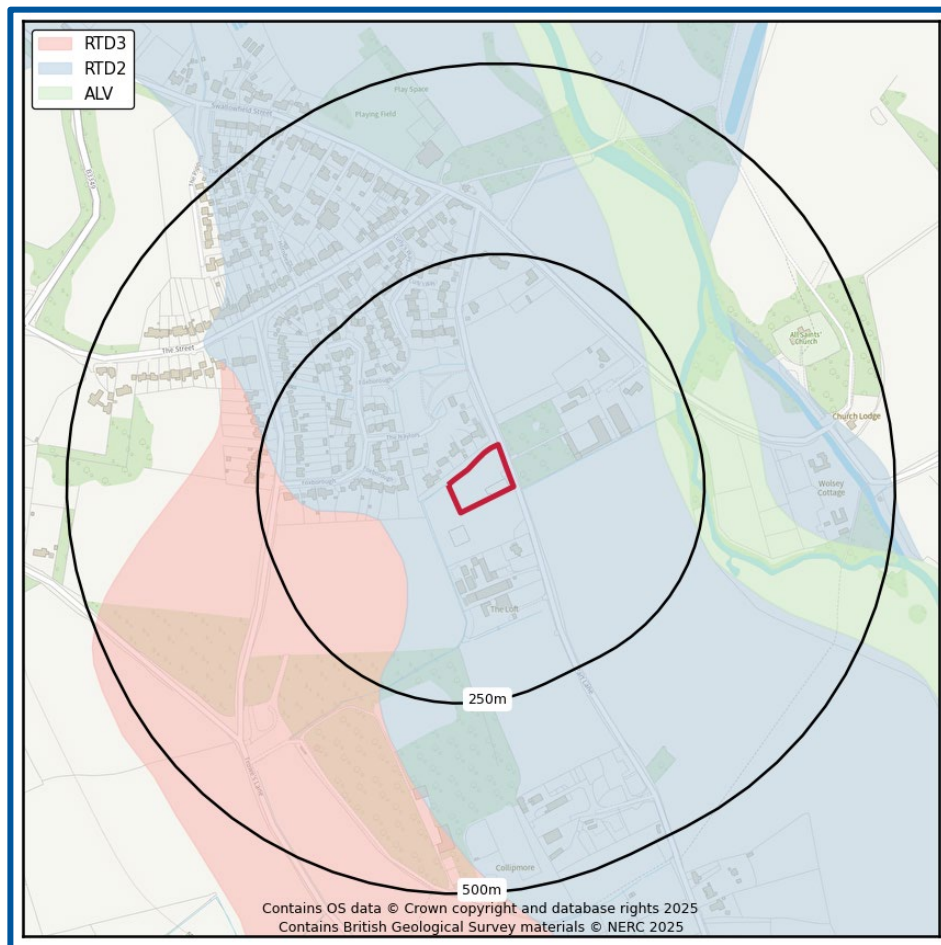
- A bridge crosses the Long River as Church Road crosses it approximately 250 m east of the Site and Blackwater River is crossed by the same road approximately 415 m east of the Site.

- According to a topographical survey undertaken by Cryfield Surveys Ltd (Appendix D) the drainage ditch located adjacent to the northern boundary of the Site, is culverted under Part Lane.

Hydrogeological features

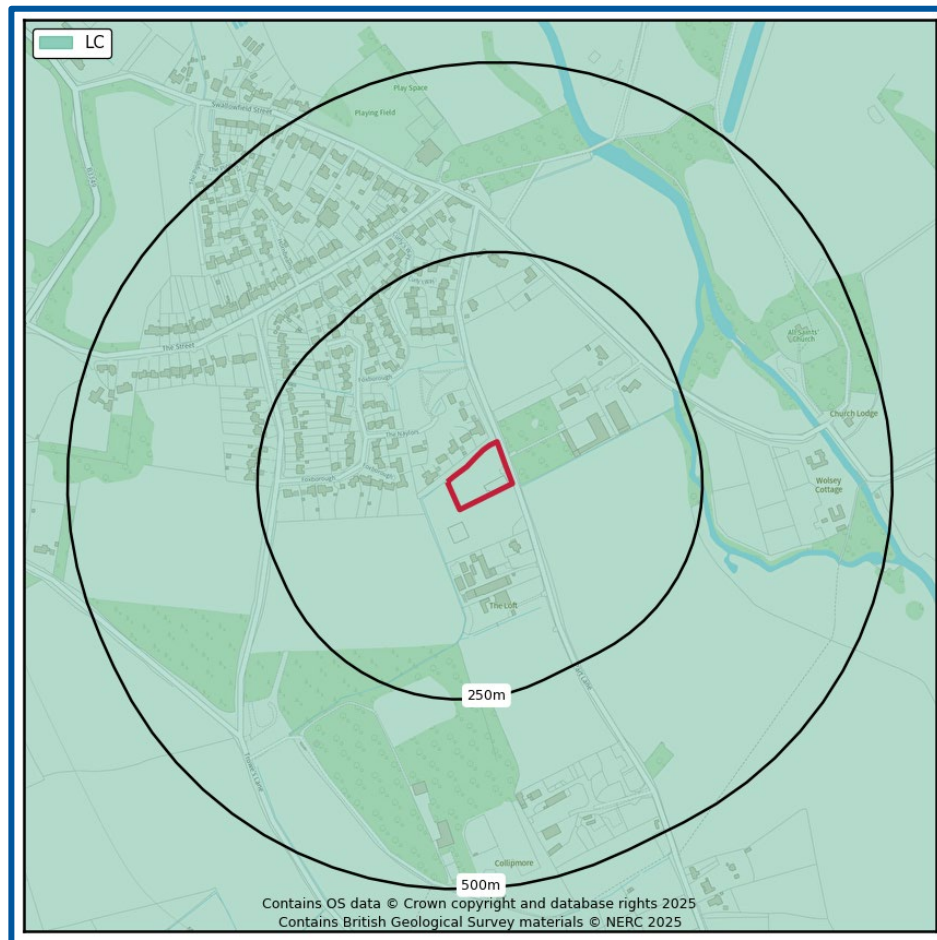
British Geological Survey (BGS) mapping indicates that the underlying superficial geology (Figure 4) consists of River Terrace Deposits 2 – Sand and Gravel (RTD2) (BGS, 2025) which are classified as a Secondary (A) Aquifer (EA, 2025).

Figure 4. Superficial Geology (BGS, 2025)



BGS mapping indicates that the underlying bedrock geology (Figure 5) consists of the London Clay Formation (LC) (BGS, 2025) which is classified as an Unproductive Strata (EA, 2025).

Figure 5. Bedrock Geology (BGS, 2025)



Geological conditions

A review of the BGS borehole database (BGS, 2025) indicates that the nearest and most relevant borehole to the Site (ref: SU76SW155) is located 20 m to the south east of the Site boundary at an elevation of 44.88 mAOD (inferred from LiDAR data), and indicates the following geology:

- Topsoil and clay to a depth of 0.61 m below ground level (bgl);
- Gravel to a depth of 2.44 m bgl;
- Clay to a depth of 3.05 m bgl, where the borehole was terminated.

Groundwater

No groundwater was recorded at borehole ref: SU76SW155 during drilling performed on 20/05/1975.

3. Flood risk to the development



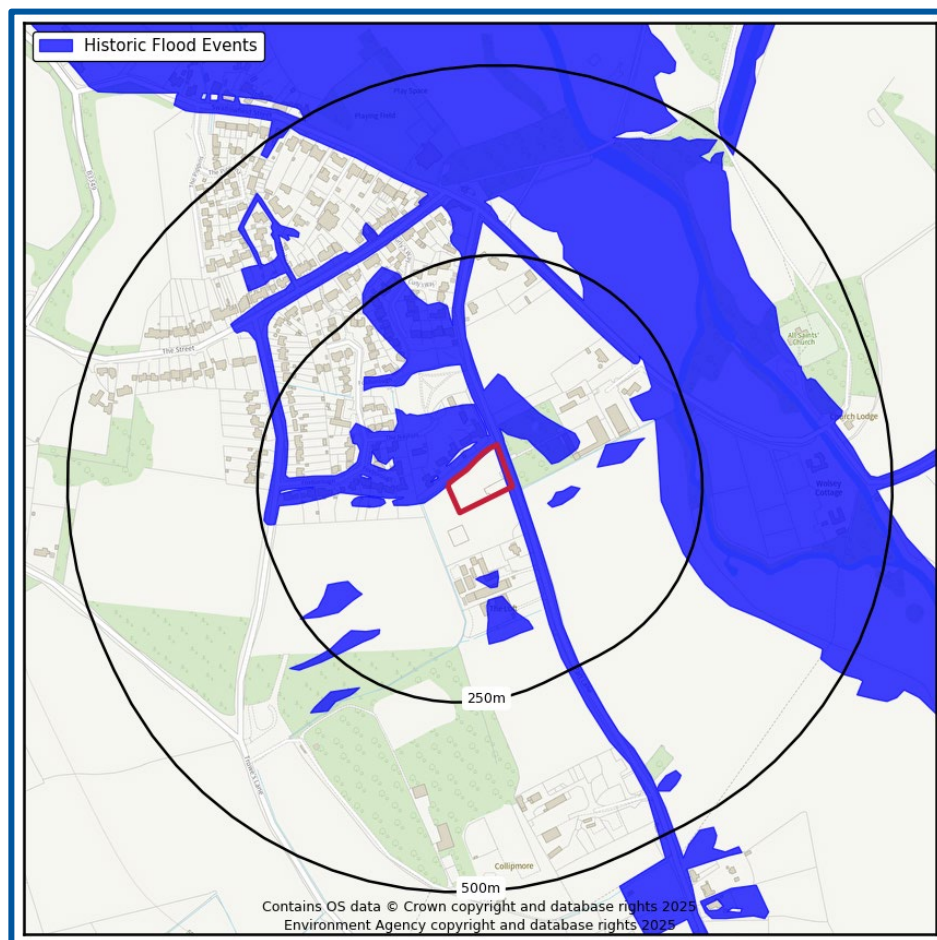
Historical flood events

According to the EA's Historical Flood Map (Figure 6) and Figure 5-1 of the SFRA (JBA Consulting, 2023), there has been a precious flood event which has affected the Site.

- On the 20th - 21st July 2007 there was flooding affecting the Site on its northern and eastern boundaries. The source of the flooding, as recorded in the Recorded Flood Outlines dataset provided by the EA, was determined to be local drainage/surface water. This information for the dataset was digitized from a Swallowfield Parish Council meeting notes. No further information is available and the meeting notes are only available upon request.

The purpose of historical flood data is to provide information on where and why flooding may have occurred in the past. The absence of any recorded events does not mean flooding has never occurred on-Site or that flooding will never occur at the Site.

Figure 6. EA Historic Flood Map (EA, 2025)



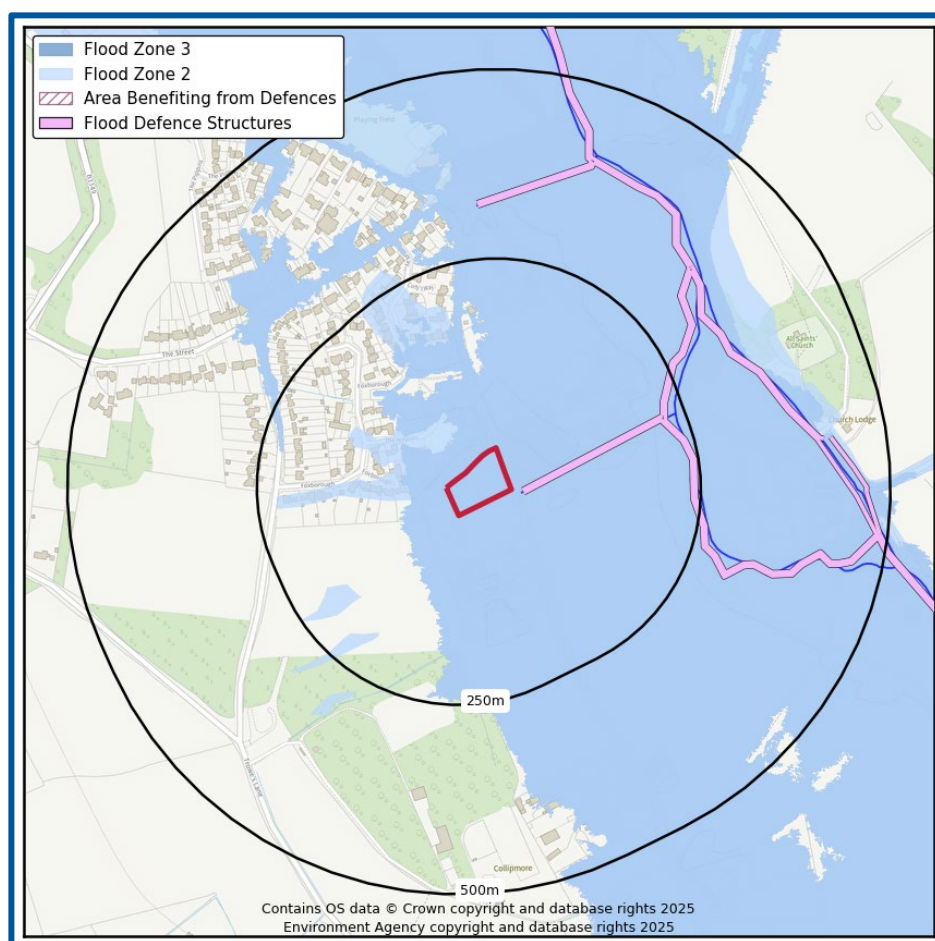
Rivers (fluvial) / Sea (coastal) / Estuarine (tidal) flooding

The predominant risk at the Site is from flooding from rivers, termed as fluvial flooding. The Site is located in an inland location and the risk of flooding from coastal and tidal processes are therefore considered to be Negligible.

River (fluvial) flooding occurs during times of heavy rainfall or snow melt when watercourses' capacity can be exceeded, over topping the banks and flood defences.

According to the EA's Flood Map for Planning Purposes (Figure 7), the Site is located within fluvial Flood Zone 3 and is therefore classified as having a High probability of fluvial flooding from the nearby watercourse.

Figure 7. EA Flood Map for Planning Purposes (EA, 2025)



Guidance

As defined in the NPPF (2024):

Ignoring the presence of any defences, land located in a Flood Zone 3 is considered to have High probability of flooding with a 1 in 100 year or greater annual probability of fluvial flooding or a 1 in 200 or greater annual probability of coastal flooding in any one year.

Development of “Water-Compatible” and “Less Vulnerable” land uses are suitable for this zone with “More Vulnerable” and “Essential Infrastructure” requiring an Exception test to be passed prior to development taking place. (see glossary for terminology).

Flood defences

Guidance

Sites that are located close to flood defences are likely to be zones where rapid inundation will occur in the event of the flood defences being overtopped or breached. A Site located close to flood defences (within 250 m) may require a more detailed FRA subject to local topography.

Existing flood defences

According to the EA (2024), the Site is located within an area benefitting from flood defences, categorised as a 'Reduction in Flood Risk area'.

The EA's Asset Information Management Systems (AIMS) dataset (2024) identifies the following assets within the vicinity of the Site:

- An area of natural high ground (Asset ID: 134624 and 134625) is located approximately 20 m east of the Site, designed to provide protection for up to a 1 in 5 year event. The condition grade of this feature was listed as '2' = Adequate.
- Another area of natural high ground surrounds the River Blackwater (Asset ID: 14096 and 14097) is located approximately 225 m east of the Site, designed to provide protection for up to a 1 in 5 year event. The condition grade of this feature was listed as '3' = Suspect.

Model data

As the Site is located within the EA's fluvial floodplain, modelled flood elevation data was obtained from the EA on 19/02/2025 and has been used to assess flood risk and to inform any recommendations for flood mitigation in regard to the proposed development.

Defended modelled data from the River Blackwater Modelling Study (Peter Brett Associates, 2007) has been extracted from the in-channel flood level and flow data provided, as the in-

channel node point is located at a cross section to the Site.² The data is provided in Table 2 and also within Appendix B.

² The accuracy of the modelled flood levels are not known. These are dependent on the accuracy of input datasets such as LiDAR data, used to model the impacts of flooding within the 2D domain. Confirmation of the accuracy of the modelled flood data can be obtained separately from the Environment Agency.

Table 2. EA present day modelled flood data

Ground levels on-Site (mAOD)	Modelled Flood Data (Node Point: 06324BL_MN_01.015)				
	Flood data	1 in 20 year	1 in 50 year	1 in 100 year	1 in 120 year
43.38 to 45.11**	Flood flows (m ³ /s)	25.02	29.42	34.07	41.08
	Flood levels (mAOD)	43.94	44.10	44.35	44.63
	On-Site Flood depths (m)	N/A*	Up to 0.72	Up to 0.97	Up to 1.25

*As evidenced by flood extent data, there is an area of higher ground to the east of the Site, in-between the Site and the river, which prevents flooding during this event.

** Ground levels provided by the topographical survey from the Site. As mentioned previously, it should be noted that the topographical survey was conducted in February 2024 and since then the mobile home/caravan that was noted on the Site has since been removed. The concrete base on which it was positioned however remains on the Site.

Figure 8 shows the modelled flood extents associated with overtopping of the flood defences during the present day flooding scenarios. Flood extent data for a 1 in 50 year event was not included in the data provided by the EA.

Figure 8. Modelled present day flooding scenarios (Peter Brett Associates, 2007)



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Climate change factors

The EA's *Flood risk assessments: climate change allowances* guidance (published in February 2016 and updated in May 2022) has been used to inform a suitable increase in peak river flows for the proposed development. The updated guidance confirms 'Less Vulnerable' developments are required to undertake a Basic assessment approach.

As the Site is located within the Loddon and tributaries Management Catchment and the proposed development is classed as Less Vulnerable, where the proposed lifespan is approximately 100 years, the Central (25%) allowance has been used to determine a suitable climate change factor to apply to river data.

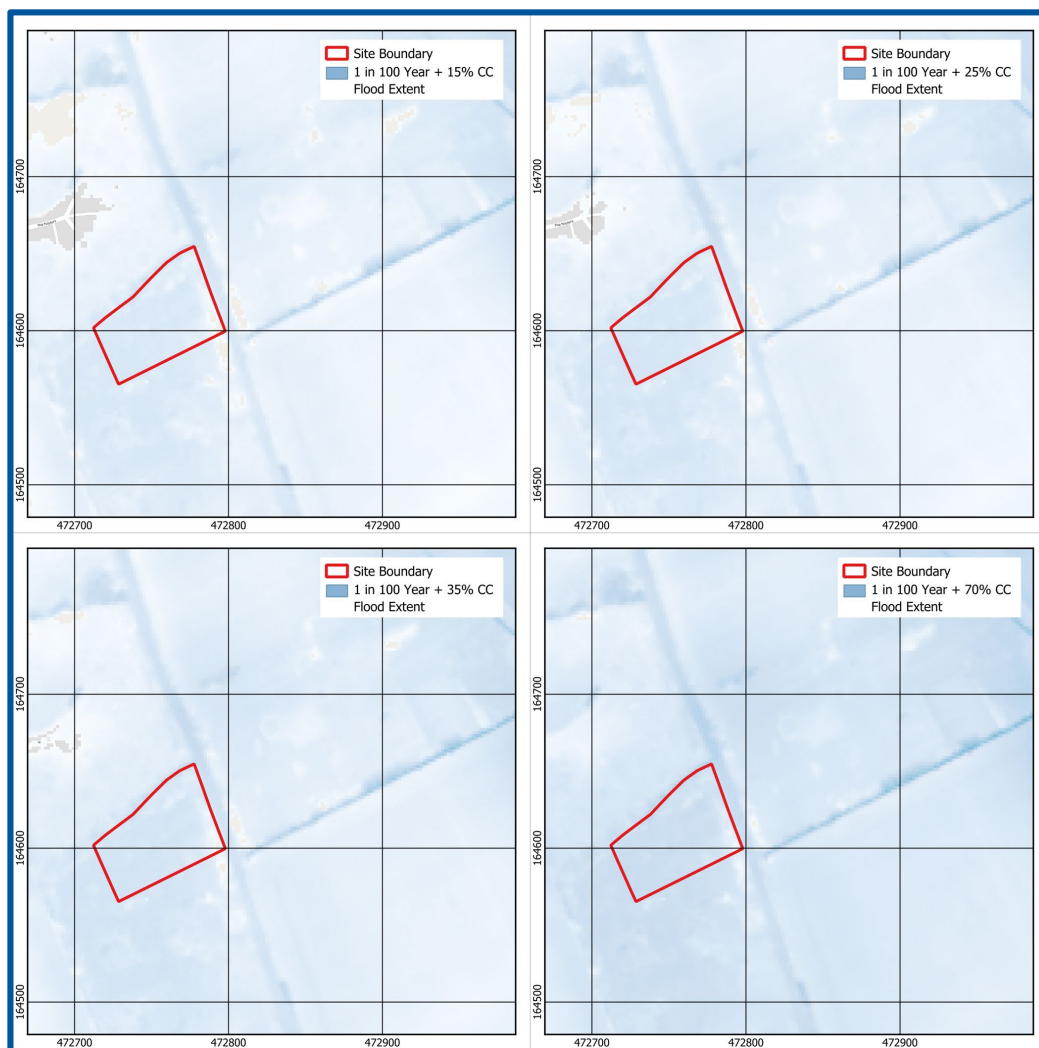
Defended modelled data including allowances for climate change are provided in an update to the River Blackwater Modelling Study performed in 2017 (JBA Consulting, 2017); this provides 2D floodplain depth data. Climate change allowances used in this study include 15%, 25%, 35% and 70%. The model results are summarised in Table 3 and shown on Figure 9.

Table 3. Flood levels plus climate change allowances

Ground levels on-Site (mAOD)	Modelled Flood Levels (mAOD)			
	1 in 100 year plus 15% allowance for climate change flood level (mAOD)	1 in 100 year plus 25% 2070 central allowance for climate change flood level (mAOD)	1 in 100 year plus 35% allowance for climate change flood level (mAOD)	1 in 100 year plus 70% allowance for climate change flood level (mAOD)
43.38 to 45.11*	44.62	44.73	44.83	45.16
Flood depth (m)	Up to 1.24	Up to 1.35	Up to 1.45	Up to 1.78

* Ground levels provided by the topographical survey from the Site. As mentioned previously, it should be noted that the topographical survey was conducted in February 2024 and since then the mobile home/caravan that was noted on the Site has since been removed. The concrete base on which it was positioned however remains on the Site.

Figure 9. Modelled climate change flooding scenarios (Peter Brett Associates, 2017)



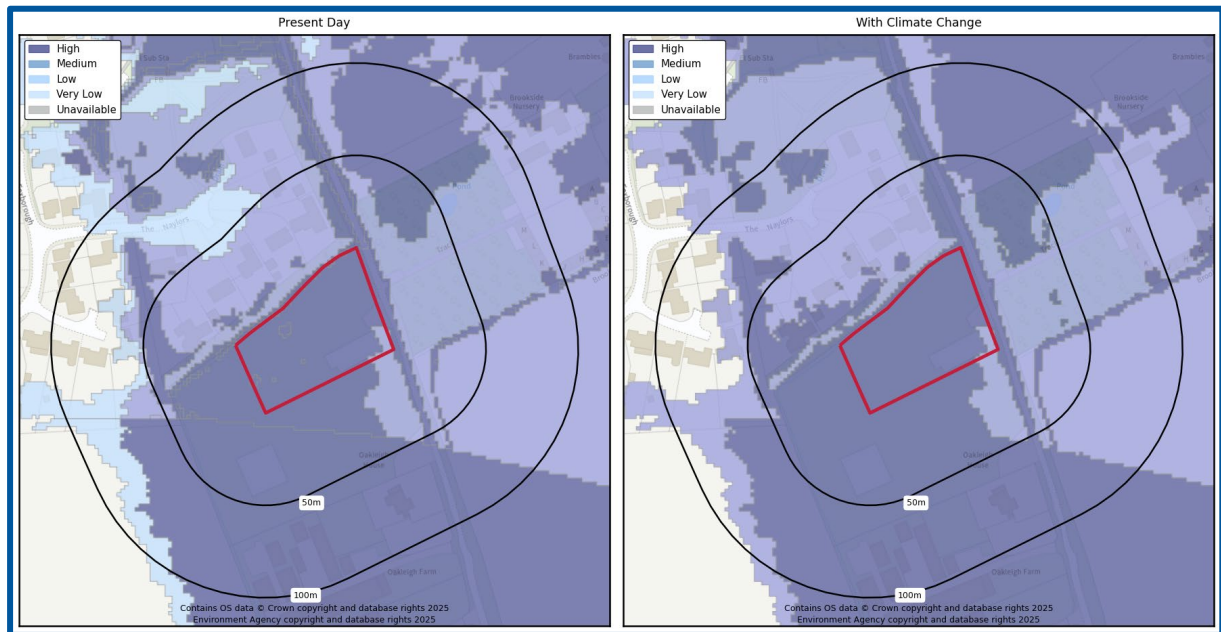
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Flood risk including the benefit of defences

The type and condition of existing flood defences influence the 'actual' risk of fluvial flooding to the Site, albeit the long-term residual risk of flooding (ignoring the defences) should be considered when proposing new development.

According to the EA's Risk of Flooding from Rivers and Sea (RoFRS) map (Figure 10), which considers the type, condition and crest height of flood defences, the Site has a risk of flooding ranging from Medium to High. from the nearby watercourse, the River Blackwater. The majority of the Site is classified as being at High risk.

Figure 10. Risk of Flooding from Rivers and Sea map (EA, 2025)



Surface water (pluvial) flooding

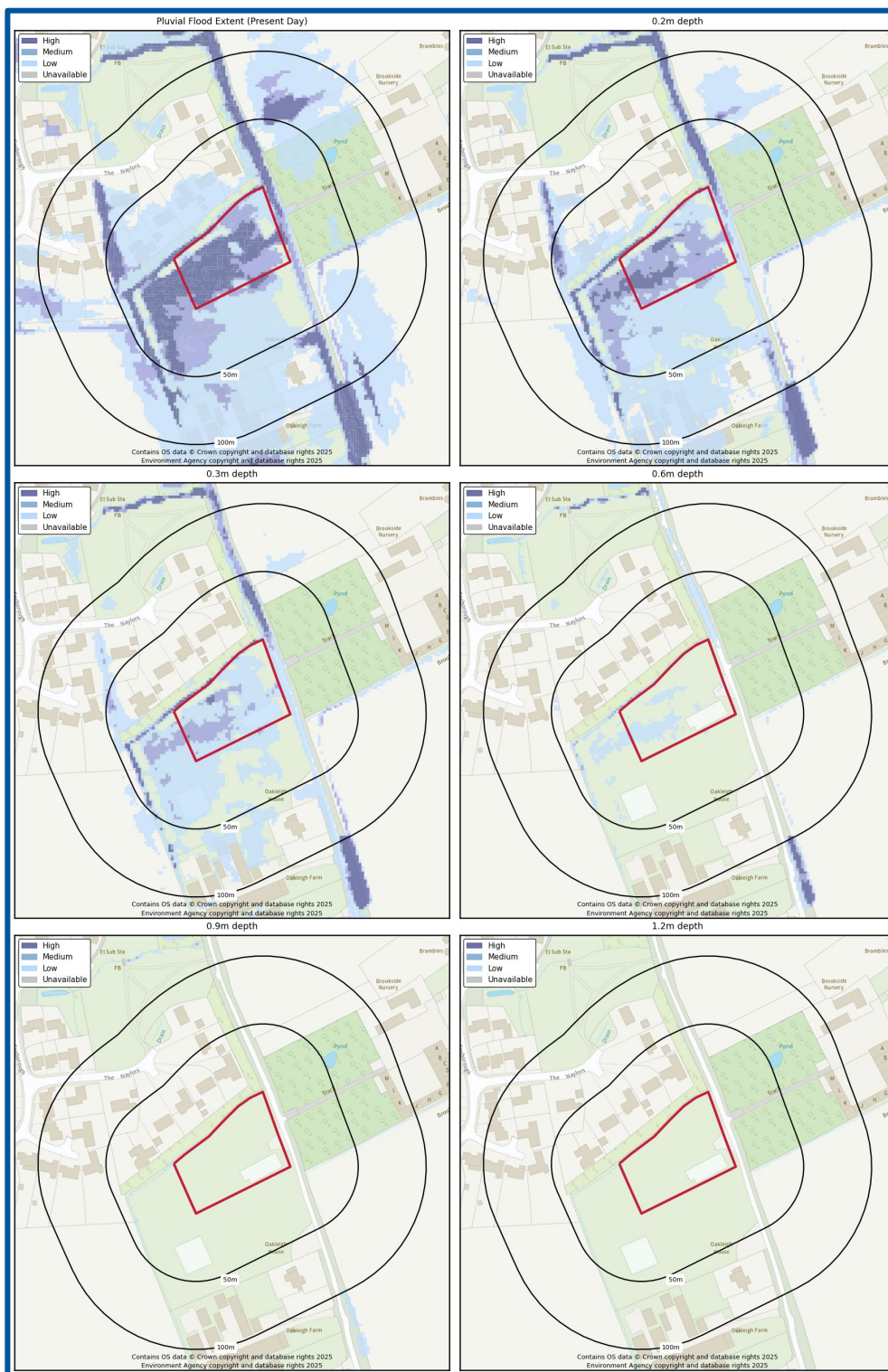
Surface water flooding occurs when intense rainfall exceeds the infiltration capacity of the ground and overwhelms the drainage systems. It can occur in most locations even at higher elevations and at significant distances from river and coastal floodplains.

According to the EA's Risk of Flooding from Surface Water (pluvial) flood mapping (Figure 11), the Site is at a variable risk of pluvial flooding ranging from Very Low to High.

Figure 11 shows the extent and depth of flooding during various modelled flood scenarios:

- During the Low risk event (1 - 0.1% AEP), flooding of up to 0.6 m would impact the south-west part of the Site, including the proposed building A.
- During the Medium risk event (3.3 - 1% AEP), flooding of up to 0.3 m would impact south-west corner of the Site, including the proposed building A.
- During the High risk event (>3.3% AEP), flooding of up to 0.2 m would impact the south-western part of the Site and central-northern part of the Site, including the proposed building A and car parking adjacent to building B.

Figure 11. EA surface water flood extent and depth map (EA, 2025)



Guidance

According to EA's surface water flood risk map the Site is at:

- Very Low risk - chance of flooding of less than 1 in 1000 (0.1%).
- Low risk - chance of flooding of between a 1 in 1000 & 1 in 100 (0.1% and 1%).
- Medium risk - chance of flooding of between a 1 in 100 and 1 in 30 (1% and 3.3%).
- High risk - chance of flooding of greater than 1 in 30 (3.3%).

The SFRA does not include any reported incidents of historical surface water flooding within the borough and therefore it cannot be determined whether this has previously occurred at the Site. The SFRA confirms that the Site is not located within a Critical Drainage Area (CDA)³ (JBA Consulting, 2023).

Guidance

According to EA's surface water flood risk map the following advisory guidance applies to the Site:

Flood Depths :

- 0.15 to 0.3 m - Flooding would: typically exceed kerb height, likely exceed the level of a damp-proof course, cause property flooding in some areas.
- 0.3 to 0.9 m - Flooding is likely to exceed average property threshold levels and cause internal flooding. Resilience measures are typically effective up to a water depth of 0.6 m above floor level.

Climate change factors

Paragraph 002 of the National Planning Practice Guidance (August, 2022) requires consideration of the 1% AP (1 in 100 year) event, including an appropriate allowance for climate change.

As the Site is located within the Loddon and tributaries Management Catchment and the proposed development is classed as Less Vulnerable, where the proposed lifespan is approximately 100 years, the Upper End (40%) allowance is required to determine a suitable climate change factor to apply to rainfall data.

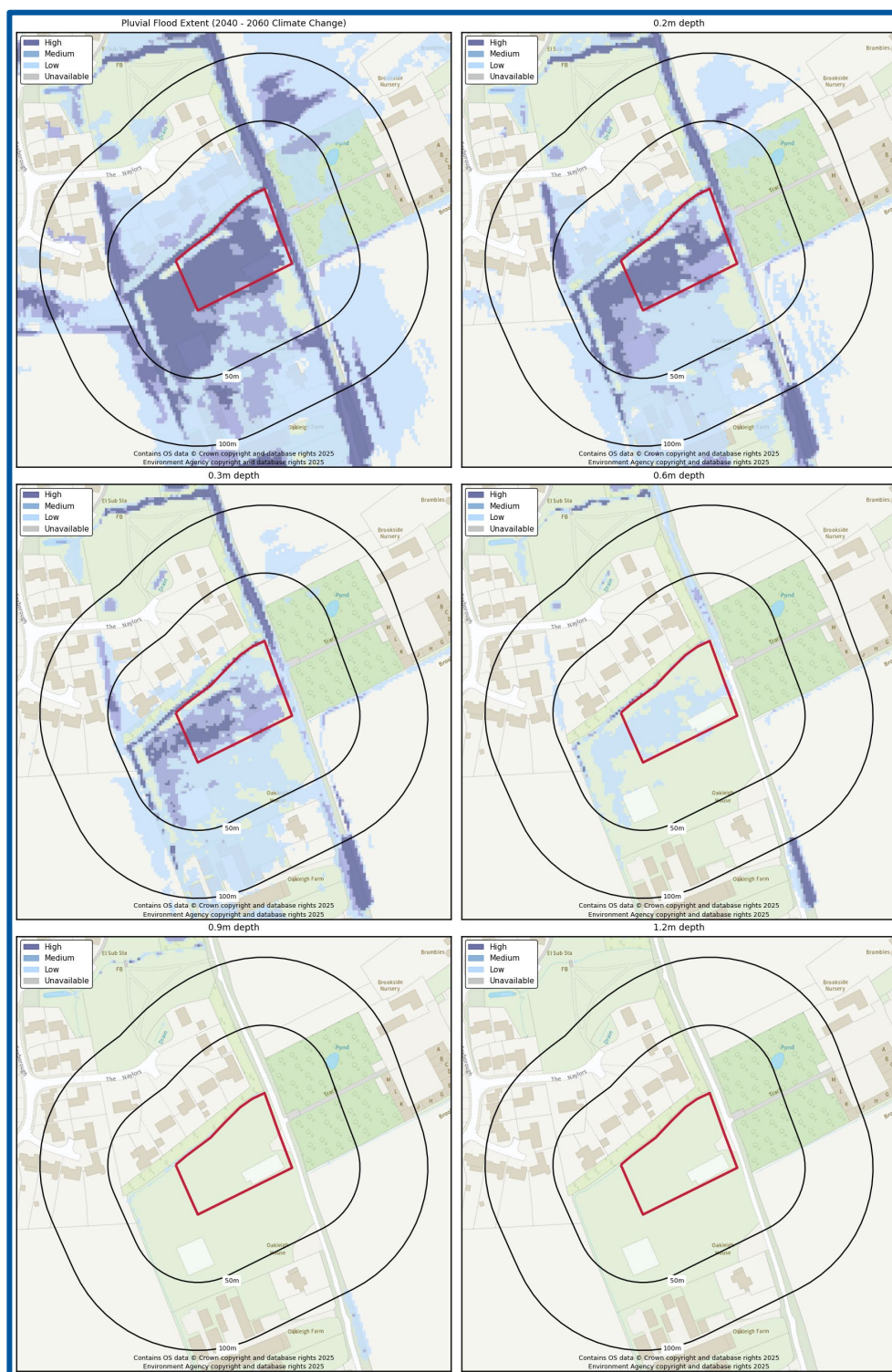
³ A Critical Drainage Area (CDA) is an area that has critical drainage problems and which has been notified to the local planning authority as such by the Environment Agency in line with the National Planning Policy Framework (NPPF, 2024). CDA's are specific to Flood Zone 1, defined as areas where runoff can and may have historically contributed to flooding downstream, although they are not necessarily areas where flooding problems may occur. Where a Site is located in Flood Zone 1 and within a CDA, a Flood Risk Assessment (FRA) is required and the Council may also request Sustainable Drainage Scheme (SuDS) features to be included within the proposed development.

As part of RoFSW mapping, climate change modelling has been applied exclusively for the central allowance up to the 2050s epoch. Whilst it should be noted that the risk of pluvial flooding is likely to be greater than this dataset indicates for the lifetime of the development, in the absence of more extensive modelling scenarios this data is considered the best resource at the time of writing.

According to the RoFSW climate change modelling:

- During the High risk event (>3.3% AEP), flooding of up to 0.3 m would impact the south-east areas of the Site and an area of the Site adjacent to the northern boundary. Flooding would occur in areas of the Site that would impact on the proposed building A and car parking associated with proposed building B.
- During the Medium risk event (3.3 - 1% AEP), flooding of up to 0.3 m would impact a majority of the Site including, the areas in which building A and B are proposed to be located.
- During the Low risk event (1 - 0.1% AEP) , flooding of up to 0.6 m would impact large parts of the Site, including the proposed building A and car parking spaces for the proposed development.

Figure 12. EA future surface water flood extent and depth map (EA, 2025)



Surface water flooding flow routes

Analysis of OS mapping, ground elevation data and the EA's pluvial flow route mapping in the 1 in 1000 year (Low probability) event and Overland Flow Pathways mapping confirms the Site is located next to a potential overland flow route.

During a 1 in 100 year event flows could potentially affect the buildings and/or access routes to the Site.

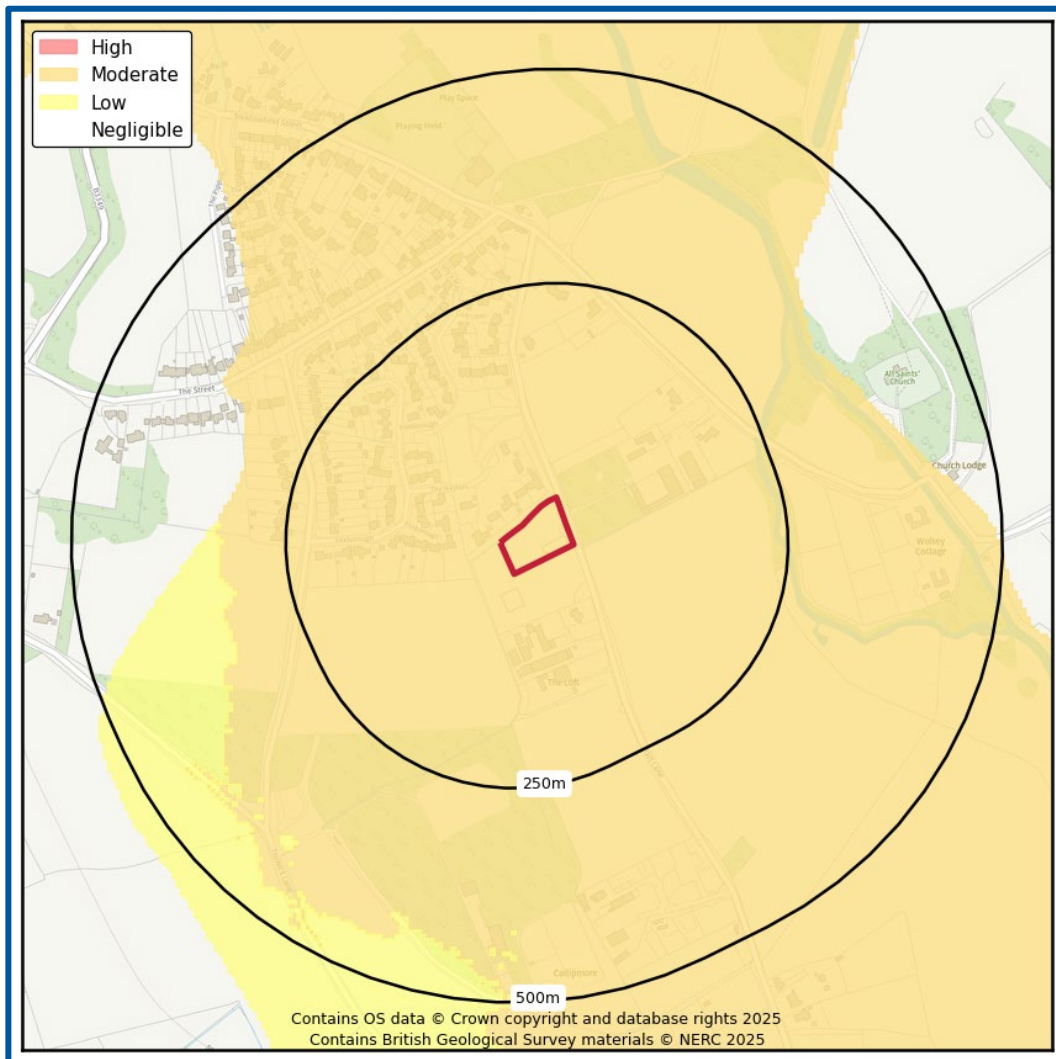
Local drainage features, such as the drainage ditch running adjacent to the northern boundary and the proposed acoustic screens for the Site, are not accounted for in the EA model and have been identified, which may intercept and mitigate the surface water flooding.

Groundwater flooding

Groundwater flooding occurs when sub-surface water emerges from the ground at the surface or into Made Ground and structures. This may be as a result of persistent rainfall that recharges aquifers until they are full; or may be as a result of high river levels, or tides, driving water through near-surface deposits. Flooding may last a long time compared to surface water flooding, from weeks to months. Hence the amount of damage that is caused to property may be substantially higher.

Groundwater Flood Risk screening data (Figure 13) indicates there is a Moderate risk of groundwater flooding at surface in the vicinity from permeable superficial deposits during a 1 in 100 year event.

Figure 13. GeoSmart GW5 Groundwater Flood Risk Map (GeoSmart, 2025)



Mapped classes within the screening map combine likelihood, possible severity and the uncertainty associated with predicting the subsurface system. The map is a national scale screening tool to prompt site-specific assessment where the impact of groundwater flooding would have significant adverse consequences. Mapping limitations and a number of local factors may reduce groundwater flood risk to land and property even where it lies within mapped groundwater flood risk zones, which do not mean that groundwater floods will occur across the whole of the risk area.

A site-specific assessment has been undertaken to refine the groundwater risk screening information on the basis of site-specific datasets (see Section 3) including BGS borehole data and the EA's fluvial and tidal floodplain data (where available) to develop a conceptual groundwater model. The risk rating is refined further using the vulnerability of receptors including occupants and the existing and proposed Site layout, including the presence of basements and buried infrastructure. The presence of any nearby or on-Site surface water features such as drainage ditches, which could intercept groundwater have also been considered.

It is understood there are no existing basements and a basement is not proposed as part of the development. Note: the risks are higher for basements, buried infrastructure and soakaway systems which may be affected by high groundwater levels.

According to a review of the hydrogeology (Section 3), the Site is underlain by permeable superficial deposits above low permeability bedrock. A shallow groundwater table may be present within the superficial deposits. Groundwater levels may rise in the superficial aquifer in a seasonal response to prolonged rainfall recharge which may cause an unusually high peak in groundwater levels during some years.

Groundwater levels may also rise in the superficial aquifer in response to high river events due to the potential hydraulic continuity with the nearby River Blackwater. This continuity would take place through the permeable river terrace deposits underlying the Site and the alluvium (ALV) superficial deposits which underlie the River Blackwater.

It is noted groundwater flooding may occur in response to prolonged high water levels, bypassing flood defences even if overtopping does not occur

The design of the proposed structures should consider the groundwater pathway through permeable formations.

Despite the presence of an underlying aquifer the Site would only be at risk of groundwater flooding if the water table reaches the base of the Site development or the ground surface when groundwater seepage could lead to overland flow and ponding.

The nearby BGS borehole (ref: SU76SW155) may not have encountered groundwater within 3.05 m of ground surface (or at least no groundwater was recorded on the borehole log). This borehole was drilled in 1975. Permeable gravel deposits were however recorded on the borehole log within the upper c. 2.5 m.

Spring lines have not been identified in close proximity to the Site.

The hydrogeological characteristics suggest there is potential for a groundwater table beneath the Site.

The baseline groundwater flood risk rating is Moderate. On the basis of the site-specific assessment, and in the absence of any recent or Site-specific groundwater level information, the groundwater flood risk remains as Moderate.

Guidance

Moderate Risk - There will be a significant possibility that incidence of groundwater flooding could lead to damage to property or harm to other sensitive receptors at, or near, this location.

Climate change predictions suggest an increase in the frequency and intensity of extremes in groundwater levels. Rainfall recharge patterns will vary regionally resulting in changes to average groundwater levels. A rise in peak river levels will lead to a response of increased groundwater levels in adjacent aquifers subject to the predicted climate change increases in peak river level for the local catchment.

The impact of climate change on groundwater levels beneath the Site is linked to the predicted risk in both peak river levels and sea levels and also the variation in rainfall recharge which is uncertain.

Flooding from artificial sources

Artificial sources of flood risk include waterbodies or watercourses that have been amended by means of human intervention rather than natural processes. Examples include reservoirs (and associated water supply infrastructure), docks, sewers and canals. The flooding mechanism associated with flood risk from artificial sources is primarily related to breach or failure of structures (reservoir, lake, sewer, canal, flood storage areas, etc.).

Sewer flooding

Table 5-3 of the SFRA has identified 181 incidences of flooding as a result of surcharging sewers within the RG7 1 postcode. However, it is recognised that this four digit postcode covers a large area and instances of flooding are not specific to the Site (JBA Consulting, 2023). It is noted that the recorded incidences have occurred since 2000. In the most recent year of data (2022), there were no recorded incidences of flooding as a result of surcharging sewers within the RG7 1 postcode, whereas in 2021 there were seven recorded incidents.

Records held by Thames Water indicate that there have been no recorded incidences of flooding related to the surcharging of public sewers at the study Site (Thames Water, 2025; Appendix C).

Guidance

Properties classified as “at risk” are those 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 either once or twice in the ten year reference period. Records held by the sewage utility company provide information relating to reported incidents, the absence of any records does not mean that the Site is not at risk of flooding.

Canal failure

According to Ordnance Survey (OS) mapping, there are no canals within 500 m of the Site.

Water supply infrastructure

Water supply infrastructure is comprised of a piped network to distribute water to private houses or industrial, commercial or institution establishments and other usage points. In urban areas, this represents a particular risk of flooding due to the large amount of water supply infrastructure, its condition and the density of buildings. The risks of flooding to properties from burst water mains cannot be readily assessed.

If more information regarding the condition and history of the water supply infrastructure within the vicinity of the Site is required, then it is advisable to contact the local water supplier (Thames Water).

Culverts and bridges

The blockage of watercourses or structures by debris (that is, any material moved by a flowing stream including vegetation, sediment and man-made materials or refuse) reduces flow

capacity and raises water levels, potentially increasing the risk of flooding. High water levels can cause saturation, seepage and percolation leading to failure of earth embankments or other structures. Debris accumulations can change flow patterns, leading to scour, sedimentation or structural failure.

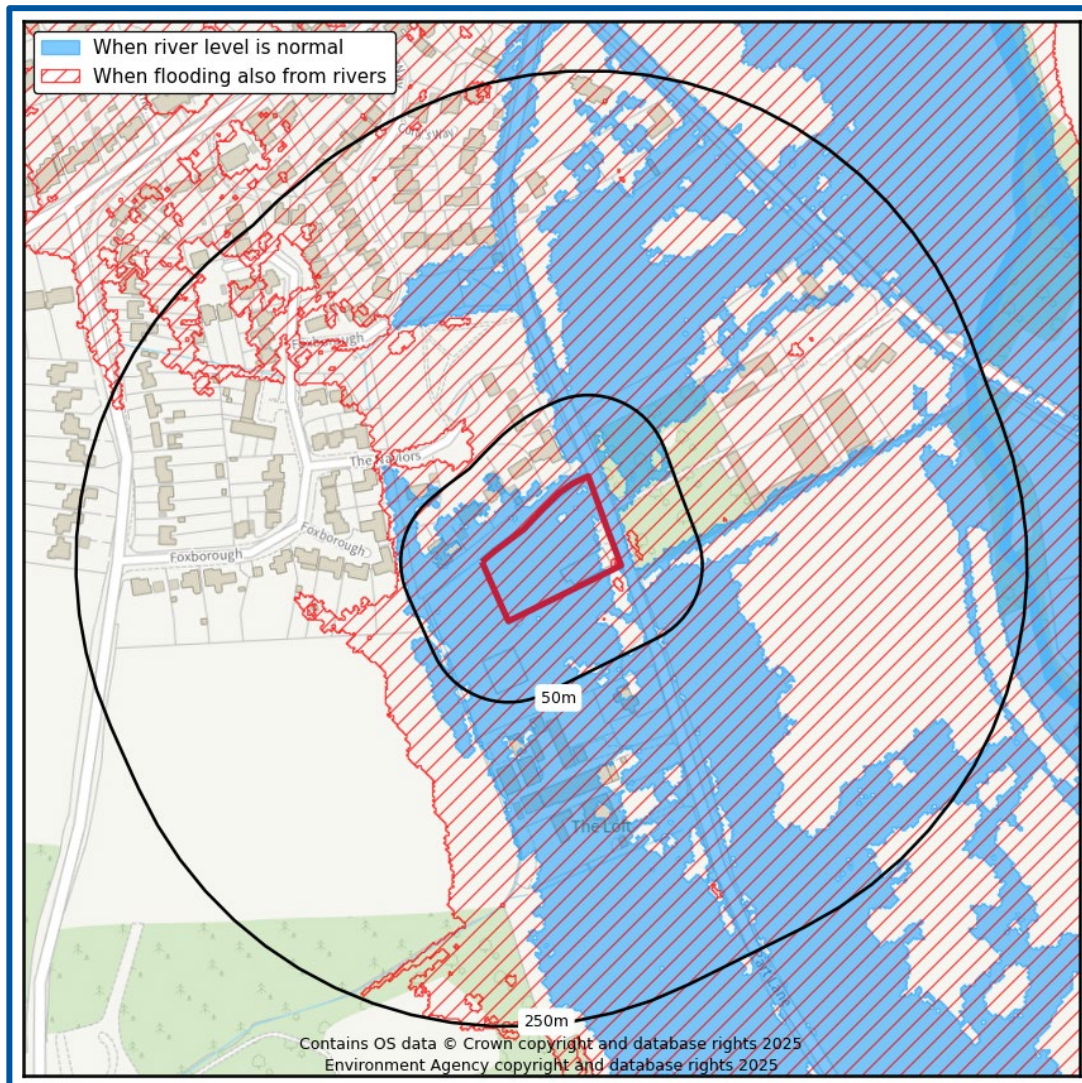
Culverts and bridges have been identified within 50 m of the Site. These structures may pose a flood risk to the Site should they become blocked or damaged.

Reservoir flooding

According to the EA's Risk of Flooding from Reservoir mapping the Site is at risk of flooding from reservoirs (Figure 14) (EA, 2025).

The Site is considered to be at risk of flooding from the Bramshill House Pond, Tundry Pond and Wellington Country Park Lake. These are located approximately 5.3 km south east, 12.8 km south east and 1.5 km south of the Site respectively.

Figure 14. EA Risk of Reservoir Flooding (EA, 2025)



Guidance

The risk of reservoir flooding is related to the failure of a large reservoir (holding over 25,000 m³ of water) and is based on the worst-case scenario. Reservoir flooding is extremely unlikely to occur (EA, 2025).

4. Flood risk from the development



Floodplain storage

Where flood storage from any source of flooding is to be lost as a result of development, on-site level-for-level compensatory storage, accounting for the predicted impacts of climate change over the lifetime of the development, should be provided. Where it is not possible to provide compensatory storage on-site, it may be acceptable to provide it off-site if it is hydraulically and hydrologically linked.

The loss of floodplain storage is less likely to be a concern in areas benefitting from appropriate flood risk management infrastructure or where the source of flood risk is solely tidal.

The development is located within a fluvial Flood Zone 3, but does not involve a net increase in the built footprint. Therefore, there would be no additional displacement of flood water and compensatory flood storage is not required. Note: the proposed buildings A and B are positioned in the same locations as the current Site structures but represent a decrease in building sizes. Therefore, these developments would displace less flood water than the buildings currently occupying the Site.

Drainage and run-off

Based on the topography and surface water flood risk in the vicinity, interference or interaction with overland flow paths and inflows from off-Site is considered possible. It is recommended that steps are taken to manage these potential inflows within the Site drainage system.

The potential surface water run-off generated from the Site during a 1 in 100 year return period should be calculated, using FEH 2013 rainfall data from the online Flood Estimation Handbook (FEH), developed by NERC (2009) and CEH (2016).

The NPPF (2024) recommends the effects of climate change are incorporated into FRA's. As per the most recent update to the NPPG (May 2022) the applicable climate change factor for the 1 in 30 ($\geq 3.3\%$ AEP) and 1 in 100 (< 3.3 to 1% AEP) year event to apply to surface water flooding is dependent upon the management catchment.

As the proposed development is commercial, the lifespan of the development and requirements for climate change should allow up to the 1% AEP upper end allowance. As the Site is located within the Loddon and tributaries Management Catchment the following peak rainfall allowances are to be applied.

Table 4. Climate change rainfall allowances

Loddon and tributaries Management Catchment	3.3% Annual exceedance rainfall event		1% Annual exceedance rainfall event	
	2050s	2070s	2050s	2070s
Upper end	35%	35%	40%	40%
Central	20%	25%	20%	25%

Sustainable Drainage System (SuDS)

It is recommended that attenuation of run-off is undertaken on-Site to compensate for proposed increases in impermeable surface areas. Attenuation may comprise the provision of storage within a Sustainable Drainage System (SuDS). SuDS can deliver benefits from improving the management of water quantity, water quality, biodiversity and amenity. Potential SuDS options are presented in the table below, subject to further investigation.

Table 5. SuDS features which may be feasible for the Site

Option	Description
Rainwater harvesting	Rainwater harvesting can collect run-off from the roofs for use in non-potable situations, using water butts for example.
Permeable paving	Permeable pavements can be used for driveways, footpaths and parking areas to increase the amount of permeable land cover. Suitable aggregate materials (angular gravels with suitable grading as per CIRIA, 2007) will improve water quality due to their filtration capacity. Plastic geocellular systems beneath these surfaces can increase the void space and therefore storage but do not allow filtration unless they are combined with aggregate material and/or permeable geotextiles.
Swales	Shallow, wide and vegetated channels that can store excess run-off whilst removing any pollutants.
Soakaways	An excavation filled with gravel within the Site. Surface water run-off is piped to the soakaway.
Attenuation basins/pond	Dry basin or a permanent pond that is designed to hold excess water during a rainfall event.

Additionally, the proposed acoustic screens for the Site should be constructed in a way that would not obstruct the flow of flood waters across the Site and allow the water to flow as it is currently.

5. Suitability of the proposed development



The information below outlines the suitability of proposed development in relation to national and local planning policy.

National policy and guidance

The aims of the national planning policies are achieved through application of the Sequential Test and in some cases the Exception Test.

Guidance

Sequential test: The aim of this test is to steer new development towards areas with the lowest risk of flooding (NPPF, 2024). Reasonably available sites located in Flood Zone 1 should be considered before those in Flood Zone 2 and only when there are no reasonably available sites in Flood Zones 1 and 2 should development in Flood Zone 3 be considered.

Exception test: In some cases, this may need to be applied once the Sequential Test has been considered. For the exception test to be passed it must be demonstrated that the development would provide wider sustainability benefits to the community that outweigh flood risk and a site-specific FRA 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.

Suitability of the proposed development, and whether the Sequential and Exception Tests are required, is based on the Flood Zone the Site is located within and the flood risk vulnerability classification of the existing and proposed development. Some developments may contain different elements of vulnerability and the highest vulnerability category should be used, unless the development is considered in its component parts.

This report has been produced to assess all development types, prior to any development. The vulnerability classification and Flood Zones are compared within the table overleaf (Table 2 of the NPPG (2022)).

As the Site is located within Flood Zone 3a and the proposed development is defined as Less Vulnerable, the proposals are acceptable.

Where the Sequential Test is required it must be demonstrated that there are no alternative reasonably available sites at lower risk of flooding within an area agreed with the Council (e.g. Wokingham Council) (NPPF (2024)).

Table 6. Flood risk vulnerability and flood zone 'incompatibility' (taken from NPPG, 2022)

Flood risk vulnerability classification		Essential infrastructure	Water compatible	Highly vulnerable	More vulnerable	Less vulnerable
Flood Zone	Zone 1 – low probability	✓	✓	✓	✓	✓
	Zone 2 – medium probability	✓	✓	Exception test required	✓	✓
	Zone 3a – high probability	Exception test required	✓	X	Exception test required	✓
	Zone 3b – functional flood plain	Exception test required	✓	X	X	X

EA Flood Risk Standing Advice for vulnerable developments located in Flood Zones 2 or 3 (February, 2022)

For all relevant vulnerable developments (i.e. more vulnerable, less vulnerable and water compatible), advice on the points should be followed:

- Surface water management;
- Access and evacuation; and
- Floor levels.

Surface water management

Plans for the management of surface water need to meet the requirements set out in either the local authority's:

- Surface water management plan where available; OR
- Strategic flood risk assessment.

They also need to meet the requirements of the approved building regulations Part H: drainage and water disposal. Read section H3 rainwater drainage.

Planning permission is required to use a material that can't absorb water (e.g. impermeable concrete) in a front garden larger than 5m².

Access and evacuation

Details of emergency escape plans should be provided for any parts of a building that are below the estimated flood level:

Plans should show:

- Single storey buildings or ground floors that don't have access to higher floors can access a space above the estimated flood level, e.g. higher ground nearby;
- Basement rooms have clear internal access to an upper level, e.g. a staircase;
- Occupants can leave the building if there's a flood and there's enough time for them to leave after flood warnings.

Floor levels

The following should be provided:

- average ground level of your site;
- ground level of the access road(s) next to your building;
- finished floor level of the lowest room in your building.

Finished floor levels should be a minimum of whichever is higher of 300mm above the:

- average ground level of the site;
- adjacent road level to the building;
- estimated river or sea flood level.

You should also use construction materials that have low permeability up to at least the same height as finished floor levels.

If you cannot raise floor levels to meet the minimum requirement, you will need to:

- raise them as much as possible;
- consider moving vulnerable uses to upper floors;
- include extra flood resistance and resilience measures.

When considering the height of floor levels, you should also consider any additional requirements set out in the SFRA. Flood water can put pressure on buildings causing structural issues. If your design aims to keep out a depth of more than 600mm of water, you should get advice from a structural engineer. They will need to check the design is safe.

Extra flood resistance and resilience measures

Follow the guidance in this section for developments in flood risk areas where you cannot raise the finished floor levels to the required height. You should design buildings to exclude flood water where possible and to speed recovery in case water gets in.

Make sure your flood resilience plans for the development follow the guidance in the CIRIA Property Flood Resilience Code of Practice. Please note that the code of practice uses the term 'recovery measures'. In this guide we use 'resilience measures'.

Flooding can affect the structural stability of buildings. If your building design would exclude more than 600mm of flood water, you should get advice from a structural engineer. They will need to check the design is safe. Only use resistance measures that will not cause structural stability issues during flooding. If it is not possible to safely exclude the estimated flood level, exclude it to the structural limit then allow additional water to flow through the property.

The design should be appropriately flood resistant and resilient by:

- using flood resistant materials that have low permeability to at least 600mm above the estimated flood level;
- making sure any doors, windows or other openings are flood resistant to at least 600mm above the estimated flood level;
- using flood resilient materials (for example lime plaster) to at least 600mm above the estimated flood level;
- by raising all sensitive electrical equipment, wiring and sockets to at least 600mm above the estimated flood level;
- making it easy for water to drain away after flooding such as installing a sump and a pump;
- making sure there is access to all spaces to enable drying and cleaning;
- ensuring that soil pipes are protected from back-flow such as by using non-return valves.

Temporary or demountable flood barriers are not appropriate for new buildings. Only consider them for existing buildings when:

- there is clear evidence that it would be inappropriate to raise floor levels and include passive resistance measures;
- an appropriate flood warning or other appropriate trigger is available.

6. Resilience and mitigation



Based on the flood risk identified at the Site, the national and local policies and guidance and proposed development, the mitigation measures outlined within this section of the report are likely to help protect the development from flooding.

Sea (coastal/tidal) flood mitigation measures

As the Site is not identified as being at risk of flooding from the sea, mitigation measures are not required.

Rivers (fluvial) flood mitigation measures

The Site is located within an area which is affected by flooding from rivers; the following table summarises the flood depths associated with the area proposed for development.

Table 7. Flood levels on-Site for various climate change scenarios

Ground levels on-Site (mAOD)	Modelled Flood Levels (mAOD)			
	1 in 100 year plus 15% allowance for climate change flood level (mAOD)	1 in 100 year plus 25% 2070 central allowance for climate change flood level (mAOD)*	1 in 100 year plus 35% allowance for climate change flood level (mAOD)	1 in 100 year plus 70% allowance for climate change flood level (mAOD)
43.38 to 45.11**	44.62	44.73	44.83	45.16
Flood depths (m)	Up to 1.24	Up to 1.35	Up to 1.45	Up to 1.78

*The 1 in 100 year plus 25% 2070 central allowance for climate change is the most relevant for the Site.

**** Ground levels are provided by the topographical survey from the Site. As mentioned previously, it should be noted that the topographical survey was conducted in February 2024 and since then the mobile home/caravan that was noted on the Site has since been removed. The concrete base on which it was positioned however remains on the Site.

Raising minimum floor levels

The vulnerability classification of the Site and the Flood Zone means proposals for the Site fall under the EA's Flood Risk Standing Advice (FRSA) for less vulnerable developments.

In this instance, in line with the EA's FRSA the recommended minimum Finished Floor Level (FFL) should be set at least 0.3 m above the 1 in 100 year plus 25% allowance for climate change flood level of 44.73 mAOD (i.e., the minimum FFL should be 45.03 mAOD).

If finished floor levels can be raised to the recommended level, this could reduce the flood risk to the development from High to Medium. Risk is only reduced to Medium given access to the Site and other infrastructure on the Site will flood.

Alternative Mitigation

Where it is not possible to raise the minimum finished floor levels to the recommended elevation, it may be appropriate to adopt a water exclusion strategy for flood depths up to 0.3 m in line with the EA's Standing Advice. A water exclusion strategy, using avoidance and resistance measures, is appropriate where floods are expected to last for short durations. Potential water exclusion strategies include:

- Passive flood door systems;
- Temporary flood barriers;
- Air brick covers (manual or automatic closing);
- Non-return flap valves on any sewer outfalls.
- Construction of local bunds;
- Landscaping to divert water away from the buildings;
- Sustainable Drainage Systems (SuDS) to store/intercept flood water;
- Boundary walls/fencing;

Avoidance and resistance measures are unlikely to completely prevent floodwater entering a building, particularly during longer duration flood events. Therefore, it is recommended that the following flood resilience measures are also considered.

- Flood resilient materials and designs:
 - Use of low permeability building materials up to 0.3 m;
 - Hard flooring and flood resilient metal staircases;
 - The use of internal lime plaster/render or where plasterboards are used these should be fitted horizontally instead of vertically and/or using moisture resistant plasterboard at lower levels;
 - Water, electricity and gas meters and electrical sockets should be located above the predicted flood level;
 - Communications wiring: wiring for telephone, internet and other services should be protected by suitable insulation in the distribution ducts to prevent damage.

Where flood depths are expected to exceed 0.6 m at the Site, a water entry strategy should be adopted to preserve building integrity and to promote flood resilience rather than resistance (which is more difficult to achieve for significant flood depths). A structural engineer should be consulted to confirm this would be a suitable strategy for the proposed

development, to ensure flood flows would not impact the structural integrity of the building. Potential strategies include:

- Ground floors designed to permit water passage at high flood depths;
- Hard flooring and flood resilient metal staircases;
- Heating systems, electrical sockets and utility meters should be raised above the predicted flood level where possible; and
- Sump and pump.

Where flood depths are expected to be between 0.3 m and 0.6 m both water exclusion and water entry strategies should be adopted depending on a structural assessment of the building.

If these mitigation measures are implemented this could reduce the flood risk to the development from High to Medium.

Surface water (pluvial) flood mitigation measures

The mitigation measures detailed above for fluvial flood risks are likely to be suitable for the relatively shallow flood depths which could be experienced in a 1 in 100 year plus climate change pluvial flood event.

In addition, the regular maintenance of any drains and culverts surrounding/on the Site should be undertaken to reduce the flood risk.

A Sustainable Drainage Strategy (SuDS) should be developed for the Site, for effective management of surface water runoff from the proposed development.

If suitable mitigation measures are implemented this would reduce the flood risk to the development from Very Low - High to Very Low - Low.

Groundwater flood mitigation measures

It is likely the flood mitigation measures recommended for the fluvial and pluvial flood risks will reduce the groundwater flood risk at the development. However, specific additional groundwater measures that may also be considered for the Moderate flood risk identified include:

- Waterproof tanking of the ground floor;
- Interceptor drains;
- Automatic sump to extract flood water; and
- Non-return flap valves on the proposed foul and surface water sewer lines.

If these mitigation measures are implemented this could reduce the flood risk to the development from Moderate to Low.

Reservoir flood mitigation measures

According to EA data, the nearest reservoir is situated approximately 1.5 km to the south of the Site.

There would be a relatively high rate and onset of flooding associated with a reservoir breach, it is therefore unlikely that safe access could be achieved unless a long warning period was provided. Therefore, occupants should get to the highest level of the building as possible and contact the emergency services.

Other flood risk mitigation measures

As the Site is not identified as at risk from other sources, mitigation measures are not required.

Residual flood risk mitigation measures

The risk to the Site has been assessed from all sources of flooding and appropriate mitigation and management measures proposed to keep the users of the development safe over its lifetime. There is however a residual risk of flooding associated with the potential for failure of mitigation measures if regular maintenance and upkeep isn't undertaken. If mitigation measures are not implemented or maintained, the risk to the development will remain as the baseline risk.

Further flood mitigation information

More information on flood resistance, resilience and water entry can be found here: http://www.planningportal.gov.uk/uploads/br/flood_performance.pdf

www.knowyourfloodrisk.co.uk

Emergency evacuation - safe access / egress and safe refuge

Emergency evacuation to land outside of the floodplain should be provided if feasible. Where this is not possible, 'more vulnerable' developments and, where possible, development in general (including basements), should have internal stair access to an area of safe refuge within the building to a level higher than the maximum likely water level. An area of safe refuge should be sufficient in size for all potential users and be reasonably accessible to the emergency services.

Emergency evacuation from the development and the Site should only be undertaken in strict accordance with any evacuation plans produced for the Site, with an understanding of the flood risks at the Site including available mitigation, the vulnerability of occupants and preferred evacuation routes.

Flood warnings

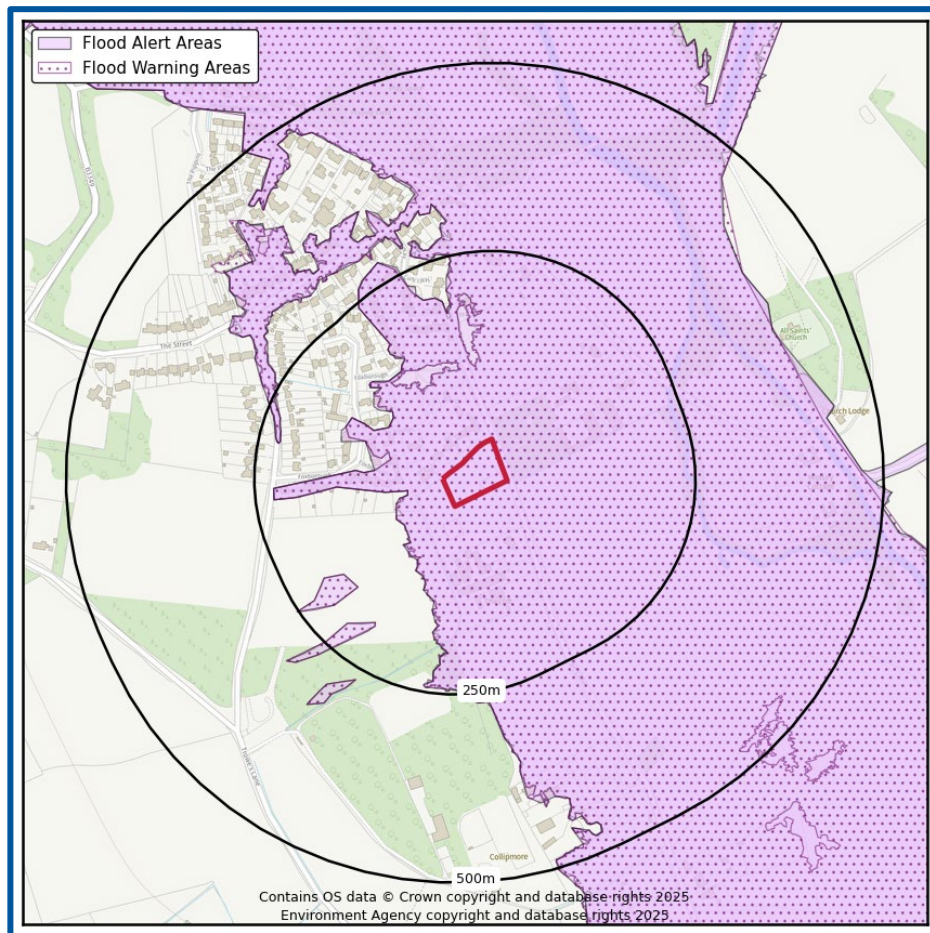
The EA operates a flood warning service in all areas at risk of flooding; this is available on their website: <https://www.gov.uk/check-flood-risk>. The Site is located within an EA Flood Alerts and Flood Warning coverage area so is able to receive alerts and/or warnings (see Figure 15,):

- EA Flood Alert coverage area (ref: 061WAF24BlkWater) quick dial code 173296. It is also located in EA Flood Alert coverage area (ref: 061WAF24LLoddon) quick dial code 173297.
- EA Flood Warning coverage area (ref: 061FWF24Swllowfd) quick dial code 173204.

All warnings are also available through the EA's 24 hour Floodline Service 0345 988 1188.

The EA aims to issue Flood Warnings 2 hours in advance of a flood event. Flood Warnings can provide adequate time to enable protection of property and evacuation from a Site, reducing risk to life and property.

Figure 15. EA Flood Warning Coverage for the local area (EA, 2025).



Emergency evacuation

Where possible, a safe access and egress route with a 'very low' hazard rating from areas within the floodplain to an area wholly outside the 1 in 100 year flood event including an allowance for climate change should be demonstrated.

Based on the EA's Flood Zone Map the closest dry evacuation area within Flood Zone 1 is along Part Lane (c. 875 m south – direct measurement). It is advised that evacuation from the premises would be the preferred option in a flood event if safe to do so. It is recommended that occupants prepare to evacuate as soon as an EA Flood Warning is issued in order to completely avoid flood waters.

On-Site refuge

Due to the nature of the development, on-Site refuge is not available. Evacuation and closure of the Site should be considered on the immediate receipt of a flood warning.

Other relevant information

Site users should be signed up to receive EAs Flood Alerts and Warnings.

Registration to the Environment Agency's flood warning scheme can be done by following this link: <https://www.gov.uk/sign-up-for-flood-warnings>.

It is recommended that main communication lines required for contacting the emergency services, electricity sockets/meters, water supply and first aid stations and supplies are not compromised by flood waters. Where possible these should all be raised above the extreme flood level.

7. Conclusions and recommendations



Table 8. Risk ratings following Site analysis

Source of Flood Risk	Baseline ¹	After analysis ²	After Mitigation ³
River (fluvial) flooding	High		Medium
Sea (coastal/tidal) flooding	Very Low		N/A
Surface water (pluvial) flooding	Very Low to High		Very Low to Low
Groundwater flooding	Moderate		Low
Other flood risk factors present	Yes		Yes (bridges, reservoirs)
Is any other further work recommended?	Yes		(see below)

1 BASELINE risks assigned for the whole Site, using national risk maps, including the benefit of EA flood defences.

2 AFTER ANALYSIS modification of risk assessment based on detailed site specific analysis including some or all of the following: flood model data, high resolution mapping, building location, access routes, topographic and CCTV surveys.

3 AFTER MITIGATION risks include risks to proposed development / asset and occupants if mitigation measures recommended in this report are implemented, including the impacts of climate change.

*N/A indicates where mitigation is not required.

Table 9 provides a summary of where the responses to key questions are discussed in this report.

Less vulnerable developments in a Flood Zone 3 are acceptable according to the NPPF and providing the recommended mitigation measures are put in place (see previous sections) it is likely that flood risk to this Site will be reduced to an acceptable level.

Table 9. Summary of responses to key questions in the report

Key sources of flood risks identified	Rivers, surface water and groundwater (see Section 4).
Are standard mitigation measures likely to provide protection from flooding to/from the Site?	Yes (see Section 7).
Is any further work recommended?	Yes (see executive summary and Section 7).

8. Further information



The following table includes a list of additional products by GeoSmart:

Additional GeoSmart Products			
✓	Additional assessment: SuDSmart Report		The SuDSmart Report range assesses which drainage options are available for a Site. They build on technical detail starting from simple infiltration screening and work up to more complex SuDS Assessments detailing alternative options and designs. Please contact info@geosmartinfo.co.uk for further information.
	Additional assessment: EnviroSmart Report		Provides a robust desk-based assessment of potential contaminated land issues, taking into account the regulatory perspective. Our EnviroSmart reports are designed to be the most cost effective solution for planning conditions. Each report is individually prepared by a highly experienced consultant conversant with Local Authority requirements. Ideal for pre-planning or for addressing planning conditions for small developments. Can also be used for land transactions. Please contact info@geosmartinfo.co.uk for further information.

9. References and glossary



References

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Defra/Environment Agency (2005). Flood Risk Assessment Guidance for New Development. *Phase 2 Framework and Guidance for Assessing and Managing Flood Risk for New Development – Fill Documentation and Tools*. R & D Technical Report FD232-/TR2.

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Ministry of Housing, Communities & Local Government (2022). Planning Practice Guidance (NPPG). Flood Risk and Coastal Change. Accessed from <https://www.gov.uk/guidance/flood-risk-and-coastal-change> on 21/02/25.

Ordnance Survey Mapping (2025). © Crown copyright. All rights reserved. Licence number AL 100054687. For full terms and conditions visit: www.ordnancesurvey.co.uk

Thames Water (2025). Thames Water Property Searches – Sewer Flooding History Enquiry. SFH/SFH Standard/2025_5124200.

Wokingham Borough Council (2015). Local Flood Risk Management Strategy. Accessed from: <https://www.wokingham.gov.uk/sites/wokingham/files/2023->

06/Local%20Flood%20Risk%20Management%20Strategy%20April%202015%20%28PDF%20document%29.pdf on 21/02/25.

Wokingham Borough Council (2010). Adopted Core Strategy Development Plan Document.

Accessed from: [https://www.wokingham.gov.uk/sites/wokingham/files/2023-](https://www.wokingham.gov.uk/sites/wokingham/files/2023-06/Final%20adopted%20Core%20Strategy%20inc.%20cover.pdf)

06/Final%20adopted%20Core%20Strategy%20inc.%20cover.pdf on 21/02/25.

Glossary

General terms

BGS	British Geological Survey
EA	Environment Agency
GeoSmart groundwater flood risk model	GeoSmart's national groundwater flood risk model takes advantage of all the available data and provides a preliminary indication of groundwater flood risk on a 50m grid covering England and Wales. The model indicates the risk of the water table coming within 1 m of the ground surface for an indicative 1 in 100 year return period scenario.
Dry-Island	An area considered at low risk of flooding (e.g. In a Flood Zone 1) that is entirely surrounded by areas at higher risk of flooding (e.g. Flood Zone 2 and 3)
Flood resilience	Flood resilience or wet-proofing accepts that water will enter the building, but through careful design will minimise damage and allow the re-occupancy of the building quickly. Mitigation measures that reduce the damage to a property caused by flooding can include water entry strategies, raising electrical sockets off the floor, hard flooring.
Flood resistance	Flood resistance, or dry-proofing, stops water entering a building. Mitigation measures that prevent or reduce the likelihood of water entering a property can include raising flood levels or installation of sandbags.
Flood Zone 1	This zone has less than a 0.1% annual probability of river flooding
Flood Zone 2	This zone has between 0.1 and 1% annual probability of river flooding and between 0.1% and 0.5 % annual probability sea flooding
Flood Zone 3	This zone has more than a 1% annual probability of river flooding and 0.5% annual probability of sea flooding
Functional Flood Plain	An area of land where water has to flow or be stored in times of flood.

Hydrologic model	A computer model that simulates surface run-off or fluvial flow. The typical accuracy of hydrologic models such as this is $\pm 0.25\text{m}$ for estimating flood levels at particular locations.
OS	Ordnance Survey
Residual Flood Risk	The flood risk remaining after taking mitigating actions.
SFRA	Strategic Flood Risk Assessment. This is a brief flood risk assessment provided by the local council
SuDS	A Sustainable drainage system (SuDS) is designed to replicate, as closely as possible, the natural drainage from the Site (before development) to ensure that the flood risk downstream of the Site does not increase as a result of the land being developed. SuDS also significantly improve the quality of water leaving the Site and can also improve the amenity and biodiversity that a Site has to offer. There are a range of SuDS options available to provide effective surface water management that intercept and store excess run-off. Sites over 1 Ha will usually require a sustainable drainage assessment if planning permission is required. The current proposal is that from April 2014 for more than a single dwelling the drainage system will require approval from the SuDS Approval Board (SABs).

Aquifer Types

Principal aquifer	These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale.
Secondary A aquifer	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.
Secondary B aquifer	Predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.
Secondary undifferentiated	Has been assigned in cases where it has not been possible to attribute either category A or B to a rock type due to the variable characteristics of the rock type.
Unproductive Strata	These are rock layers or drift deposits with low permeability that has negligible significance for water supply or river base flow.

NPPF (2024) terms

Exception test	Applied once the sequential test has been passed. For the exception test to be passed it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk and a site-specific FRA 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.
Sequential test	Aims to steer new development to areas with the lowest probability of flooding.
Essential infrastructure	Essential infrastructure includes essential transport infrastructure, essential utility infrastructure and wind turbines.
Water compatible	Water compatible land uses include flood control infrastructure, water-based recreation and lifeguard/coastal stations.
Less vulnerable	Less vulnerable land uses include police/ambulance/fire stations which are not required to be operational during flooding and buildings used for shops/financial/professional/other services.
More vulnerable	More vulnerable land uses include hospitals, residential institutions, buildings used for dwelling houses/student halls/drinking establishments/hotels and sites used for holiday or short-let caravans and camping.
Highly vulnerable	Highly vulnerable land uses include police/ambulance/fire stations which are required to be operational during flooding, basement dwellings and caravans/mobile homes/park homes intended for permanent residential use.

Data Sources

Aerial Photography	Contains Ordnance Survey data © Crown copyright and database right 2025 BlueSky copyright and database rights 2025
Bedrock & Superficial Geology	Contains British Geological Survey materials © NERC 2025 Ordnance Survey data © Crown copyright and database right 2025
Flood Risk (Flood Zone/RoFRS/Historic Flooding/Pluvial/Surface Water Features/Reservoir/ Flood Alert & Warning)	Environment Agency copyright and database rights 2025 Ordnance Survey data © Crown copyright and database right 2025
Flood Risk (Groundwater)	GeoSmart, BGS & OS GW5 (v2.4) Map (GeoSmart, 2025) Contains British Geological Survey materials © NERC 2025 Ordnance Survey data © Crown copyright and database right 2025
Location Plan	Contains Ordnance Survey data © Crown copyright and database right 2025
Topographic Data	OS LiDAR/EA Contains Ordnance Survey data © Crown copyright and database right 2025 Environment Agency copyright and database rights 2025

10. Appendices



Appendix A



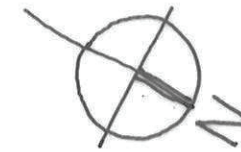
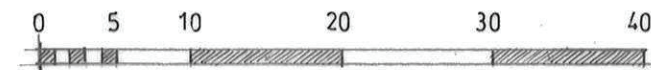
Site plans

Robin Lodge Nursery, Part Lane, Swallowfield, Reading, RG7 1TB

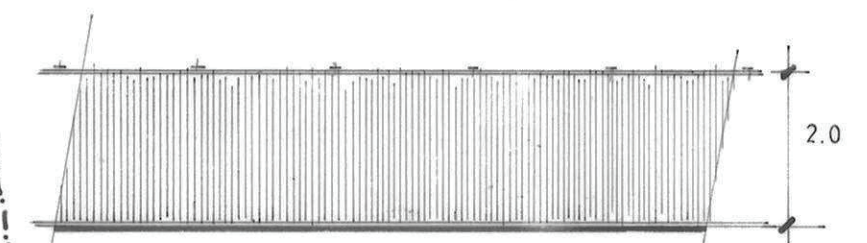


Map area bounded by: 472658,164474 472858,164674. Produced on 11 August 2021 from the OS National Geographic Database. Reproduction in whole or part is prohibited without the prior permission of Ordnance Survey. © Crown copyright 2021. Supplied by UKPlanningMaps.com a licensed OS partner (100054135). Unique plan reference: p4b/uk/674670/913740

Site plan 1. 500 / 1. 100

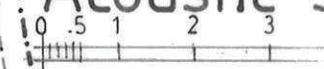


Line of proposed acoustic fence
wholly contained within application
site and no higher than 2.0m above
relative ground level.



Acoustic screen

Acoustic screen typically formed of
20mm thick laths overlapped or
tongue and groove jointed with no
gaps. Screen is to extend to ground
level with no gaps.



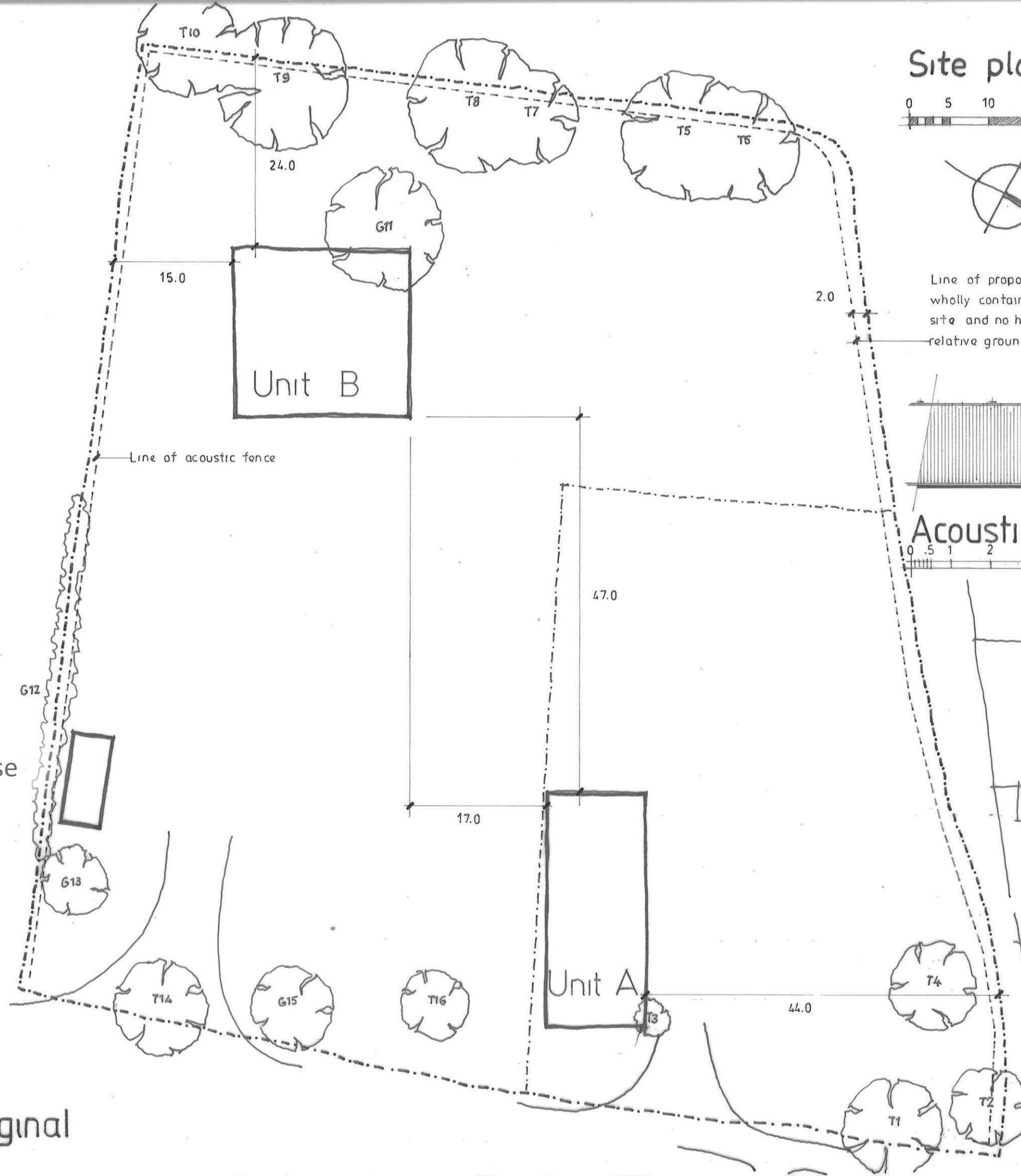
C July 2025 Concrete base indicated
B January 2025 Acoustic screen added

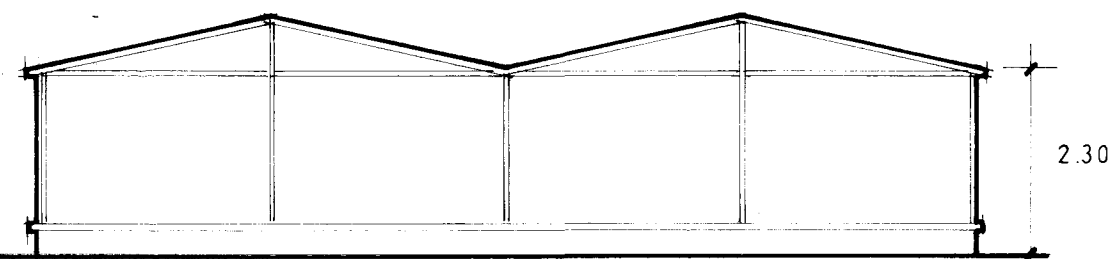
Robin Lodge,
Swallowfield
Existing (based on
survey)

979 / 02XXC

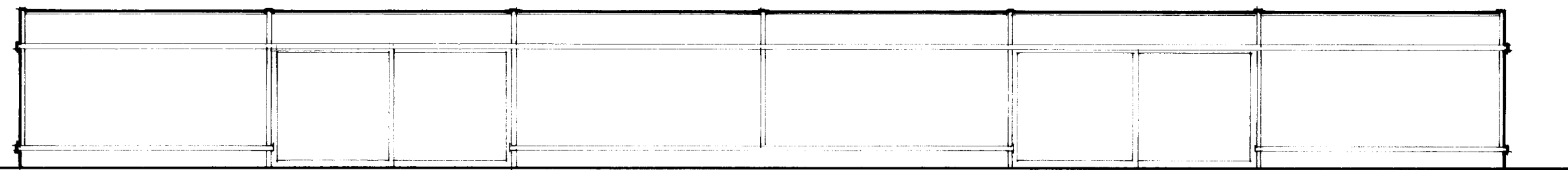
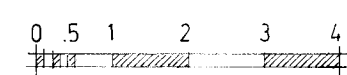
Concrete Base

A3 original

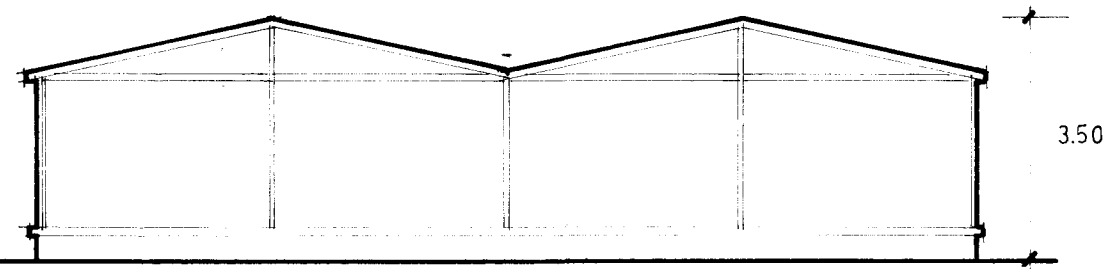




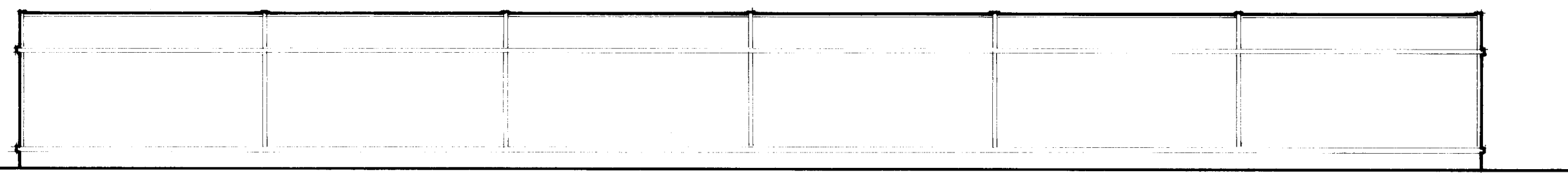
Front elevation (unit A)



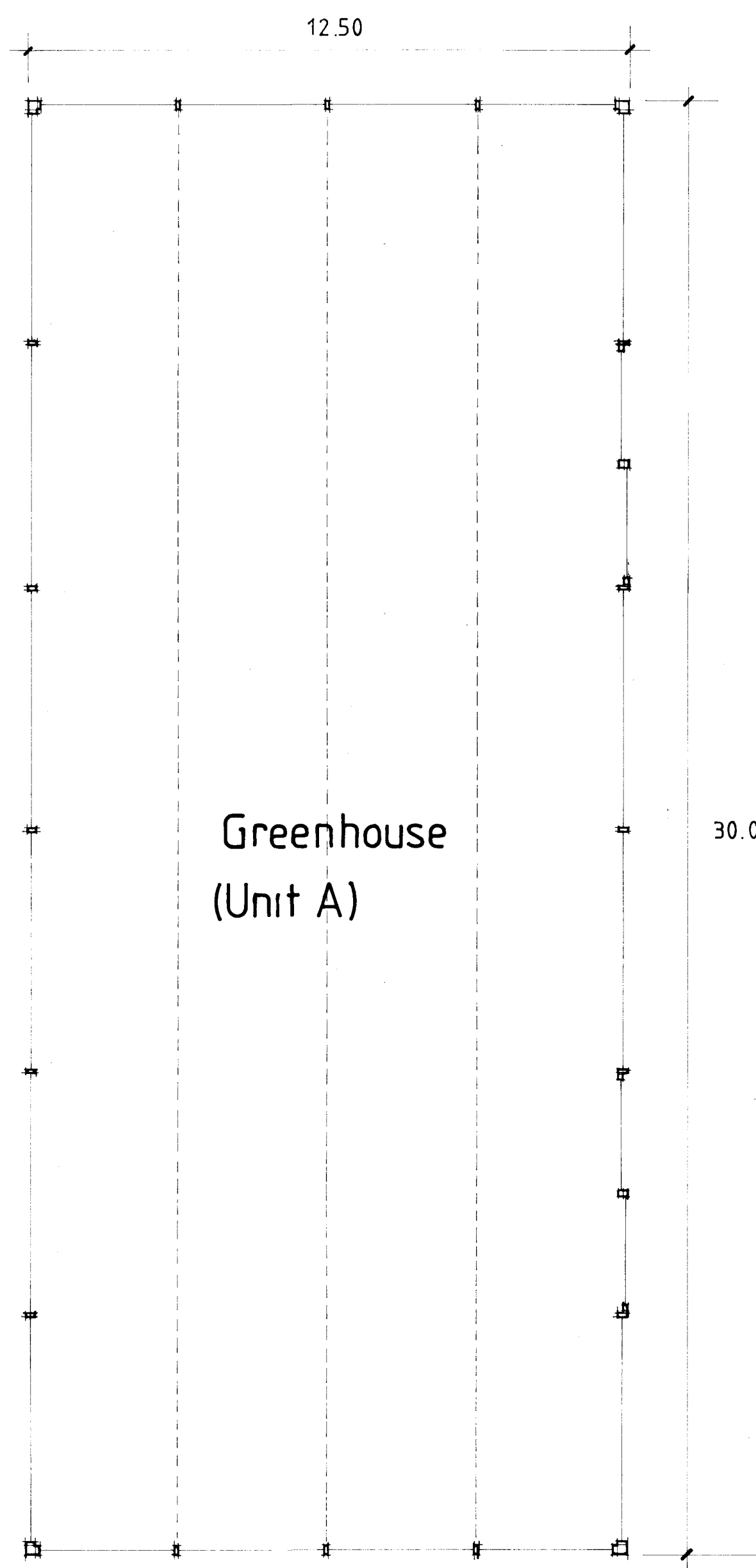
Side elevation (unit A)



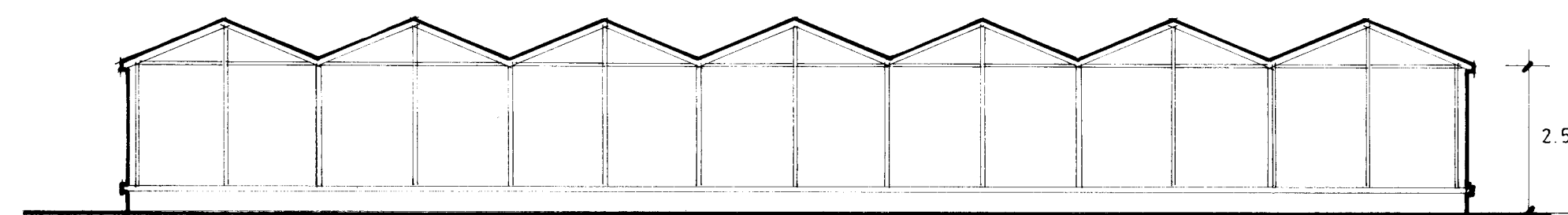
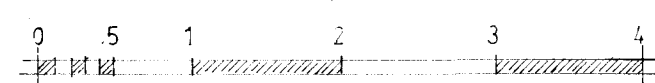
Rear elevation (unit A)



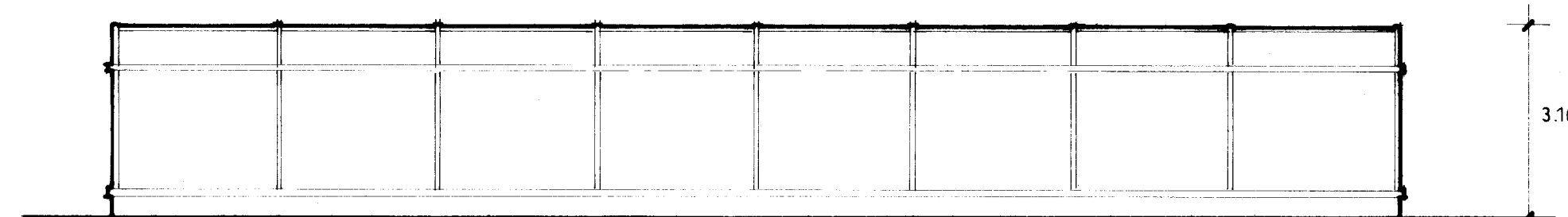
Side elevation (unit A)



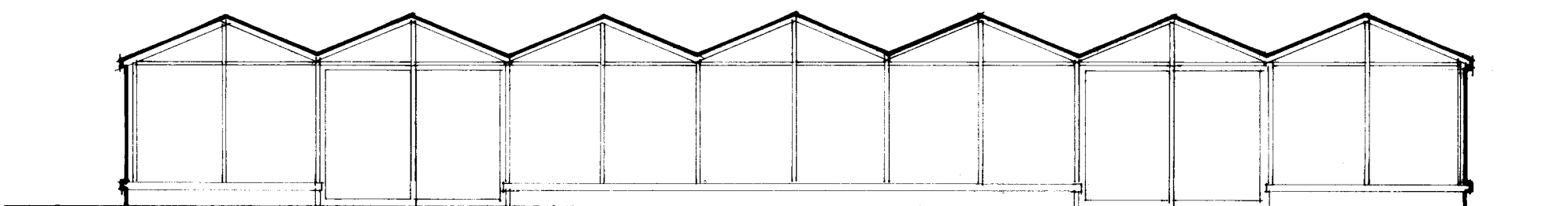
Floor plan (unit A)



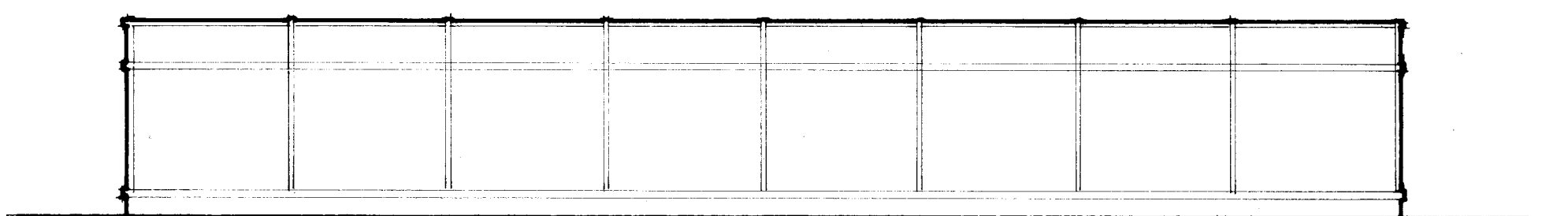
Front elevation (unit B)



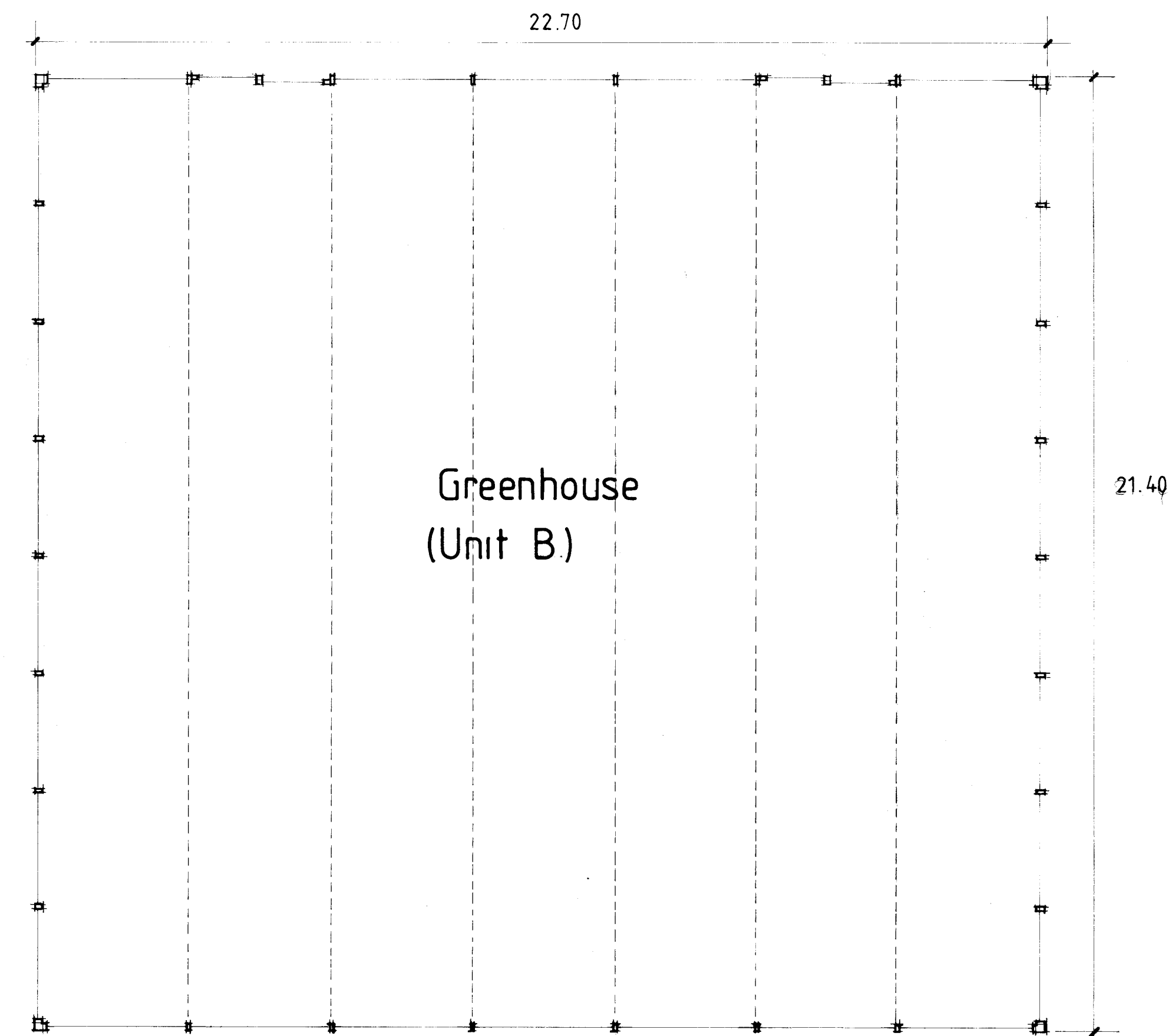
Side elevation (unit B)



Rear elevation (unit B)



Side elevation (unit B)



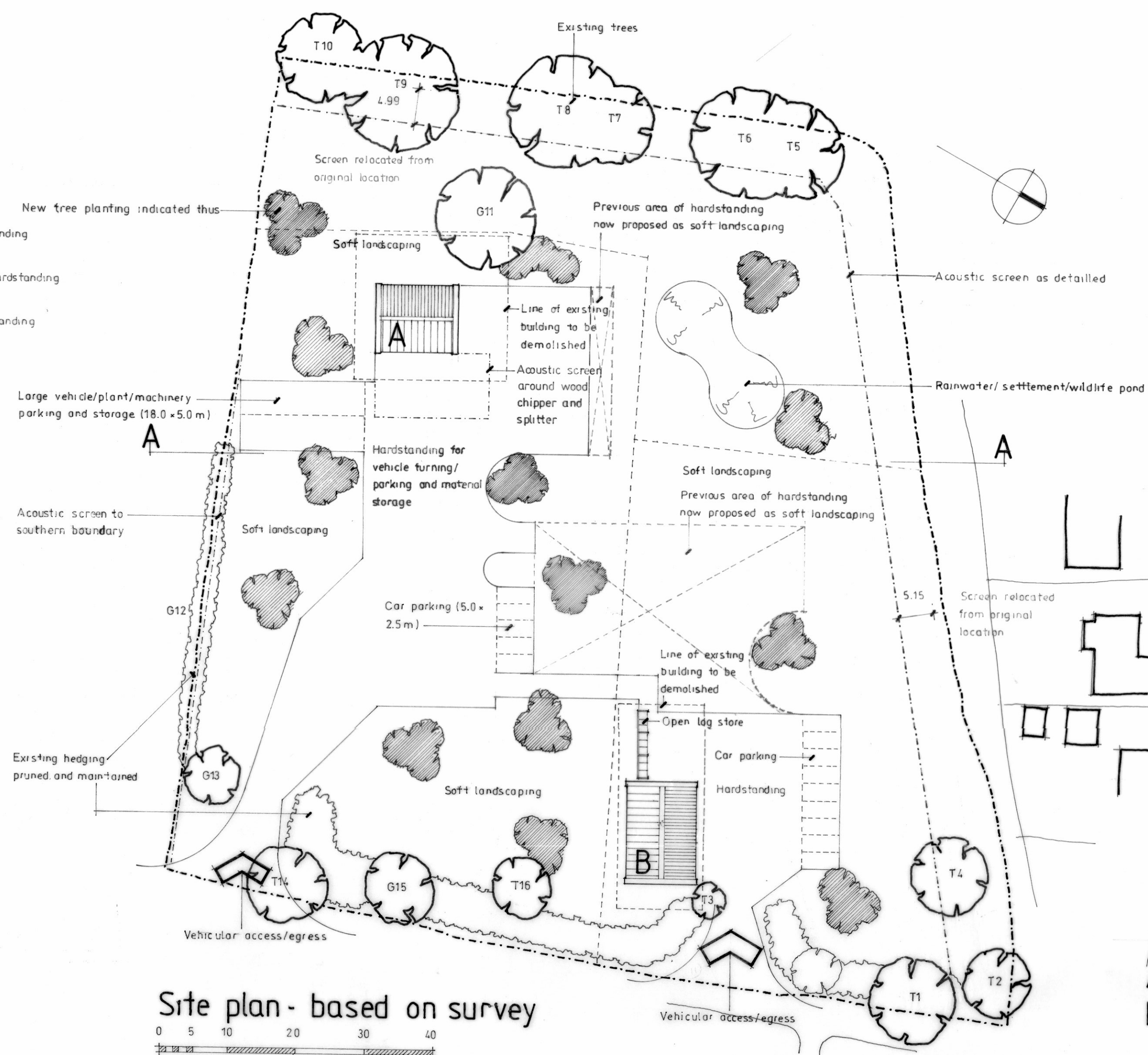
Floor plan (unit B)

project	Change of use
location	Robin Lodge Nursery, Part Lane, Swallowfield RG7 1TB
drawing	Existing
drawing no	979 / 01
scale	1 : 50 1 : 100
date	May 2021

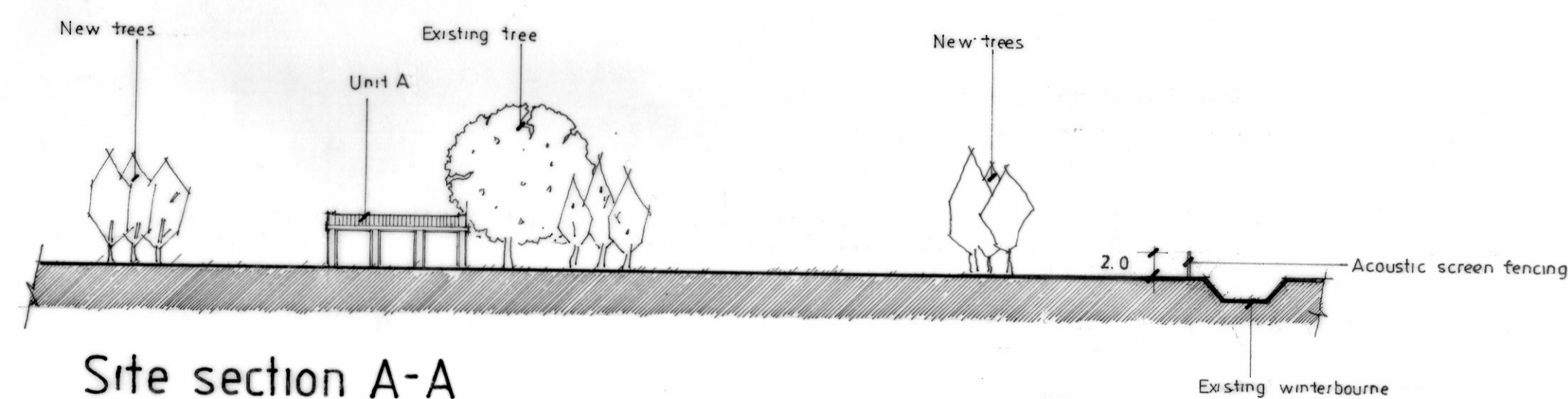
T.Neal Ltd
Architectural Design

office 01420 86688
mobile 07970 778 404
email tneal11td@gmail.com
6 Beakwood, Alton, Hampshire GU34 2LZ

Original scheme area of hardstanding
3,786 m²
Proposed area of reduction of hardstanding
993 m²
Percentage of reduction in hardstanding
26 %
Proposed area of hardstanding
2,793 m²

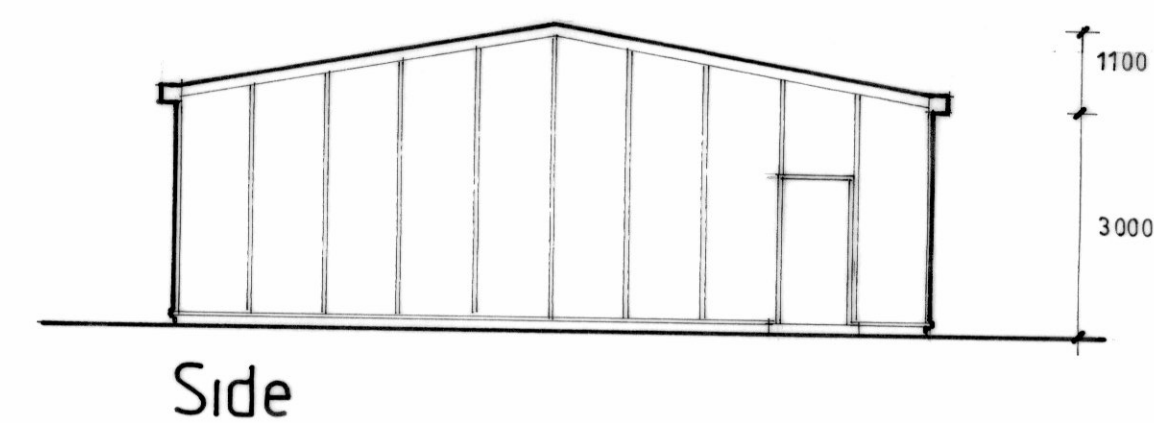


Site plan - based on survey

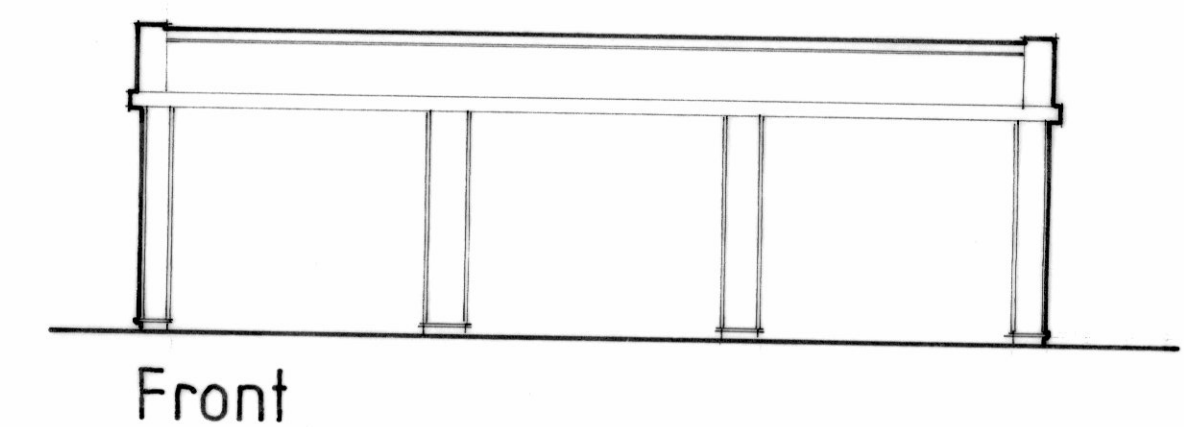


Site section A-A

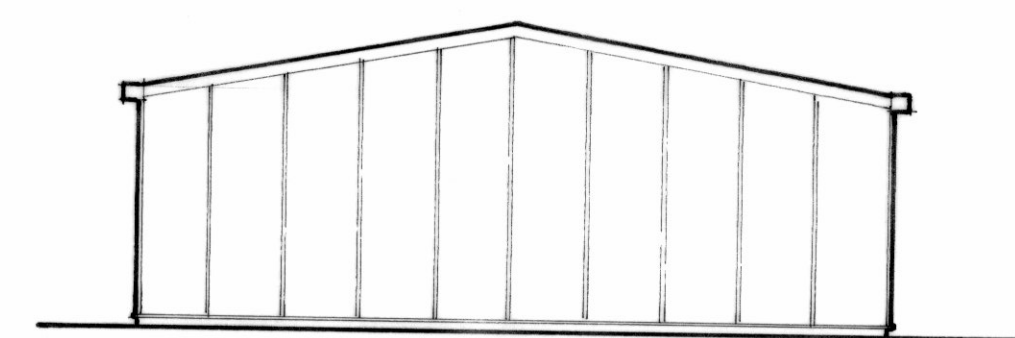
UNIT A



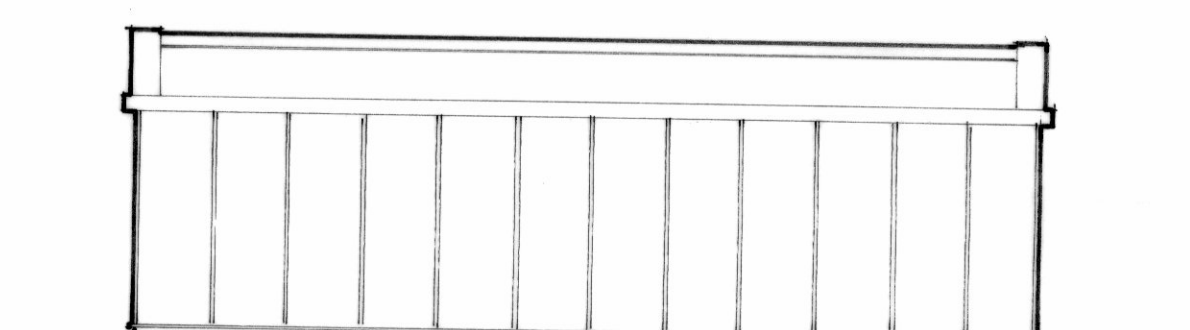
Side



Front



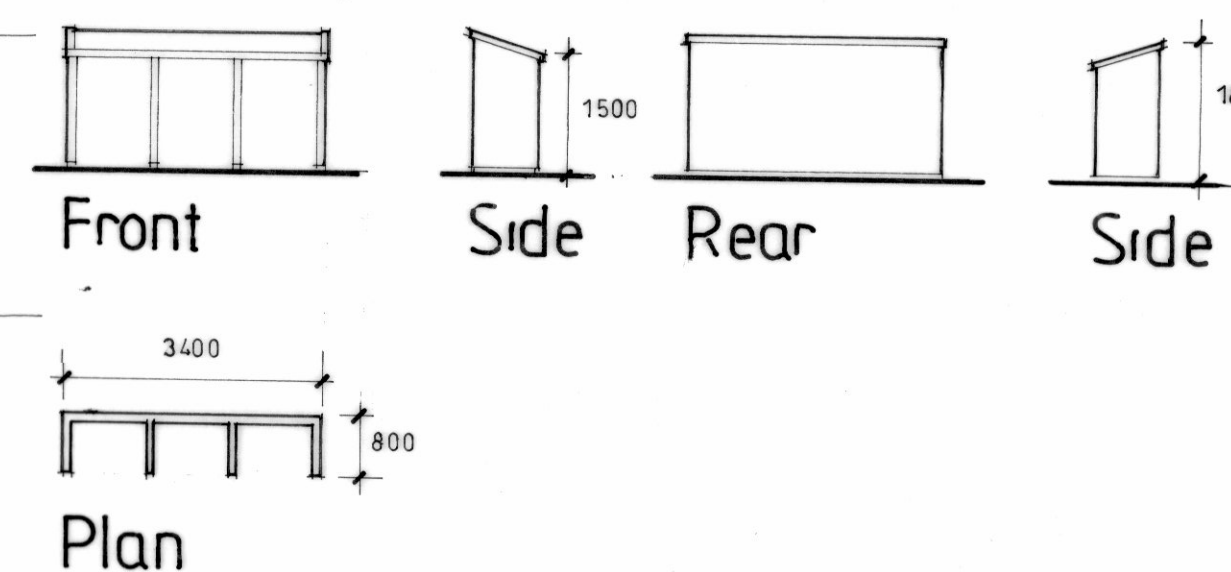
Side



Rear

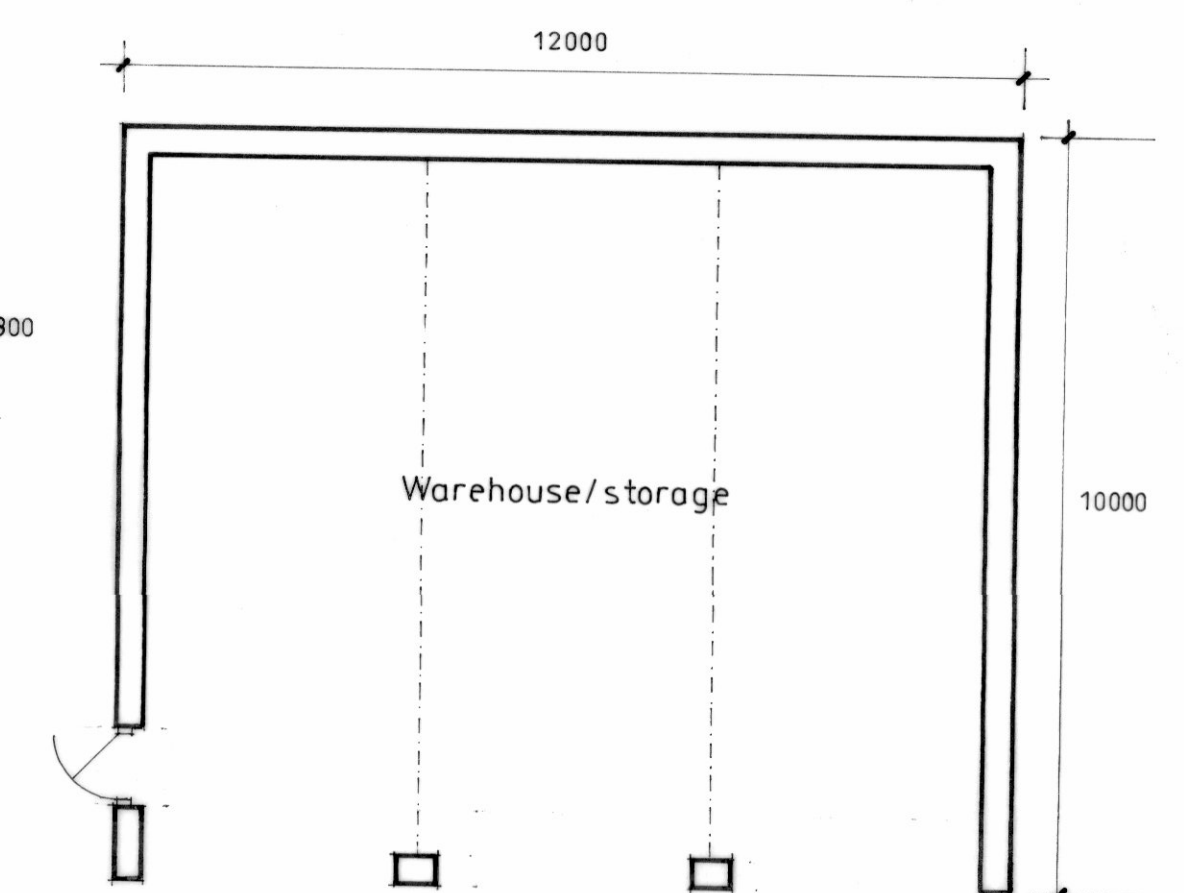
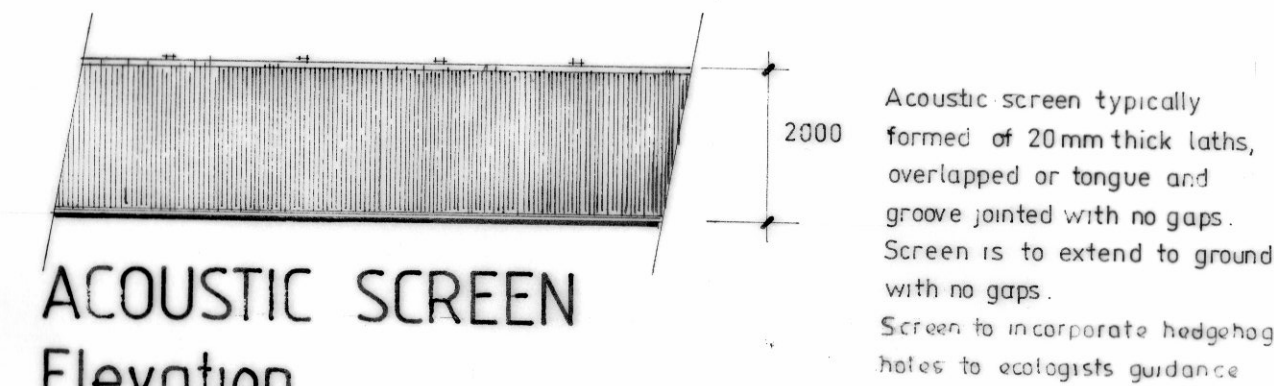
Profile steel sheet roof
Profile steel cladding

LOG STORE



Plan

ACOUSTIC SCREEN Elevation



Floor plan

- C March 17 Acoustic screen relocated
- B January 15 Hardstanding area reduced by 26%, bund removed from west/north boundary - acoustic screen indicated to west/north boundary
- A April Bund adjusted so no impingement on existing r.p.a. of trees. Acoustic screen indicated and detailed. Landscaping reduced to bund.

project Change of use/redevelopment
location Robin Lodge Nursery, Part Lane, Swallowfield
drawing Revised proposal (1 of 2)
drawing no. 979 / 10A & C
scale 1 : 100 1 : 500
date November 2022

Architectural Design, Planning and Project Build.
with
Ex - Army Builders Ltd
Trained by the Best

Yateley: 01252 308288
Reading: 01189 639904
Guildford: 01483 299346
Email: enquiries@ex-armybuilders.co.uk

Appendix B



Environment Agency data

River Blackwater Flood Study

Final Flood Mapping Report

Project Ref: 15945/003

August, 2007

Client:

Environment Agency
Thames Region (South East Area)
Swift House
Frimley Business Park
Camberley
Surrey
GU16 7SQ

peter brett associates

Caversham Bridge House
Waterman Place
Reading
Berkshire RG1 8DN

Tel: +44 (0)118 950 0761
Fax: +44 (0)118 959 7498
E-mail: reading@pba.co.uk

Appendix C



Thames Water sewer flooding history

Sewer Flooding

History Enquiry



Property
Searches

Geosmart Information Ltd

Suite 9-11
1st Floor
Old Bank

Search address supplied Robin Lodge Nursery
Part Lane
Swallowfield
Wokingham
RG7 1TB

Your reference 84709

Our reference SFH/SFH Standard/2025_5124200

Received date 21 February 2025

Search date 21 February 2025



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



property.searches@thameswater.co.uk
thameswater.co.uk/propertysearches



0800 009 4540

Sewer Flooding

History Enquiry



Property
Searches

Search address supplied: Robin Lodge Nursery, Part
Lane, Swallowfield, Wokingham, RG7 1TB

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
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



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



property.searches@thameswater.co.uk
thameswater.co.uk/propertysearches



0800 009 4540

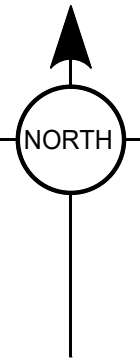
Appendix D



Site-specific topographic survey

ALL LEVELS ARE IN METRES DERIVED FROM GPS TRANSFORMATION.
GRID COORDINATES ARE ORDNANCE SURVEY OSG836 GRID DERIVED FROM GPS TRANSFORMATION. (NO SCALE FACTOR APPLIED)
PLOT SCALE ACCURACY OF 1:200.
TREE SPECIES TO BE CONFIRMED BY A SPECIALIST IF ESSENTIAL TO THE SURVEY.
SERVICE COVERS UNDER STRUCTURES/VEHICLES OR ONES THAT ARE BURIED MAY BE OMITTED FROM THE SURVEY. PIPE DETAILS SURVEYED FROM SURFACE ONLY.
BROKEN COVERS AND COVERS WITHIN BUSY HIGHWAYS WILL NOT BE LIFTED.
OVERHEAD CABLE POSITIONS/HEIGHTS SHOULD BE TREATED AS APPROXIMATE AND ARE LIABLE TO SEASONABLE CHANGE.
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- TEXT KEY -
- | | |
|------------------------------|---------------------------------|
| av - air valve | p & r fence - post & rail fence |
| bt - telecom | re - rodding eye |
| rs - road sign | |
| cav - cable television | |
| c/f fence - closeboard fence | nwp - rain water pipe |
| cbox - control box | sl - spot light |
| cl - cover level | sv - stop valve |
| cr - cable riser | sap - soil vent pipe |
| dp - depth | tom - temporary bench mark |
| ep - electric pole | thl - threshold level |
| el - earthing rod | tl - service light |
| fh - fire hydrant | loc - top of cap |
| fl - floor level | top - top of pipe |
| fs - fire switch | tot - top of tank |
| g - gully | tp - telecom pole |
| gv - gas valve | us - underside |
| ht - height | ul - unable to lift |
| ic - inspection cover | vp - vent pipe |
| il - invert level | wfc - water filled chamber |
| lp - lamp post | wm - water meter |
| mh - manhole | wo - wash out |
| mk - marker | wp - waste pipe |



STATION SCHEDULE				
ID	EASTINGS	NORTHINGS	LEVEL	TYPE
PROJECT				
ROBIN LODGE NURSERY, SWALLOWFIELD, RG7 1TB				
DRAWING TITLE				
TOPOGRAPHICAL SURVEY				
CLIENT				
ET PLANNING				
SURVEY DATE		SHEET SIZE	SURVEYOR	CHECKED
FEB 2024		A1	JTS	VCB
DRAWING NUMBER			SCALE	
1546-02			1:200	



Email: admin@cryfieldsurveys.co.uk Tel: 01928 935144
6 Rural Innovation Centre, Stoneleigh Park, Kenilworth, CV8 2LG.

Disclaimer

This report has been prepared by GeoSmart in its professional capacity as soil, groundwater, flood risk and drainage specialists, with reasonable skill, care and diligence within the agreed scope and terms of contract and taking account of the manpower and resources devoted to it by agreement with its client and is provided by GeoSmart solely for the internal use of its client.

The advice and opinions in this report should be read and relied on only in the context of the report as a whole, taking account of the terms of reference agreed with the client. The findings are based on the information made available to GeoSmart at the date of the report (and will have been assumed to be correct) and on current UK standards, codes, technology and practices as at that time. They do not purport to include any manner of legal advice or opinion. New information or changes in conditions and regulatory requirements may occur in future, which will change the conclusions presented here.

This report is confidential to the client. The client may submit the report to regulatory bodies, where appropriate. Should the client wish to release this report to any other third party for that party's reliance, GeoSmart may, by prior written agreement, agree to such release, provided that it is acknowledged that GeoSmart accepts no responsibility of any nature to any third party to whom this report or any part thereof is made known. GeoSmart accepts no responsibility for any loss or damage incurred as a result, and the third party does not acquire any rights whatsoever, contractual or otherwise, against GeoSmart except as expressly agreed with GeoSmart in writing.

For full T&Cs see <http://geosmartinfo.co.uk/terms-conditions>

Important consumer protection information

This search has been produced by GeoSmart Information Limited, Suite 9-11, 1st Floor, Old Bank Buildings, Bellstone, Shrewsbury, SY1 1HU.

Tel: 01743 298 100

Email: info@geosmartinfo.co.uk

GeoSmart Information Limited is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom.
- sets out minimum standards which firms compiling and selling search reports have to meet.
- promotes the best practice and quality standards within the industry for the benefit of consumers and property professionals.
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.
- By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports.
- act with integrity and carry out work with due skill, care and diligence.
- at all times maintain adequate and appropriate insurance to protect consumers.
- conduct business in an honest, fair and professional manner.
- handle complaints speedily and fairly.
- ensure that products and services comply with industry registration rules and standards and relevant laws.
- monitor their compliance with the Code.

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award up to £5,000 to you if the Ombudsman finds that you have suffered actual financial loss and/or aggravation, distress or inconvenience as a result of your search provider failing to keep to the Code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

TPOs contact details:

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk. Please ask your search provider if you would like a copy of the search code

Complaints procedure

GeoSmart Information Limited is registered with the Property Codes Compliance Board as a subscriber to the Search Code. A key commitment under the Code is that firms will handle any complaints both speedily and fairly. If you want to make a complaint, we will:

- Acknowledge it within 5 working days of receipt.
- Normally deal with it fully and provide a final response, in writing, within 20 working days of receipt.
- Keep you informed by letter, telephone or e-mail, as you prefer, if we need more time.
- Provide a final response, in writing, at the latest within 40 working days of receipt.
- Liaise, at your request, with anyone acting formally on your behalf.

If you are not satisfied with our final response, or if we exceed the response timescales, you may refer the complaint to The Property Ombudsman scheme (TPOs): Tel: 01722 333306, E-mail: admin@tpos.co.uk.

We will co-operate fully with the Ombudsman during an investigation and comply with his final decision. Complaints should be sent to:

Jessica Bayliff

Operations Manager and Principal Consultant

GeoSmart Information Limited

Suite 9-11, 1st Floor,

Old Bank Buildings,

Bellstone, Shrewsbury, SY1 1HU

Tel: 01743 298 100

martinlucass@geosmartinfo.co.uk

11. Terms and conditions, CDM regulations and data limitations



Terms and conditions can be found on our website:

<http://geosmartinfo.co.uk/terms-conditions/>

CDM regulations can be found on our website:

<http://geosmartinfo.co.uk/knowledge-hub/cdm-2015/>

Data use and limitations can be found on our website:

<http://geosmartinfo.co.uk/data-limitations/>