

Development Control Gloucester City Council PO Box 3252, Gloucester, GL1 9FW 01452 396396 development.control@gloucester.gov.uk www.gloucester.gov.uk/planning

### Application for Planning Permission

### Town and Country Planning Act 1990 (as amended)

### Publication of applications on planning authority websites

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website. If you require any further clarification, please contact the Authority's planning department.

If you cannot provide a postcode,	he description of site location must be completed. Please provide the most accurate site description you can, to
help locate the site - for example	field to the North of the Post Office".
Number	2
Suffix	
Property Name	
Address Line 1	
St Oswalds Road	
Address Line 2	
Address Line 3	
Town/city	
Gloucester	
Postcode	
GL1 2SF	
D 1 12 C 12 L	tion must be completed if postcode is not known:
	AL HE CAN
Description of site local Easting (x)  383364	Northing (y) 219705

Planning Portal Reference: PP-11037509

Applicant Details
Name/Company
Title
First name
Scott
Surname
Fletcher
Company Name
Walden & Fletcher Electrical Contractors
Address
Address
Address line 1
2, St Oswalds Road
Address line 2
Address line 3
Town/City
Gloucester
Country
Postcode
GL1 2SF
Are you an agent acting on behalf of the applicant?
○ No
Contact Details
Primary number
***** REDACTED *****
Secondary number

Fax number
Email address
***** REDACTED *****
Agent Details
Name/Company
Title
Mr
First name
Kevin
Surname
Long
Company Name
RES Architecture Gloucester Ltd
Address
Address line 1
Highnam Business Centre, Unit 19.1
Address line 2
Newent Road
Address line 3
Highnam
Town/City
Gloucester
Country
Postcode
GL2 8DN
Contact Details
Primary number
***** REDACTED ******
Secondary number

Fax number
Email address
***** REDACTED *****
Site Area
What is the measurement of the site area? (numeric characters only).
429.00
Unit
Sq. metres
Description of the Proposal
Please note in regard to:
<ul> <li>Fire Statements - From 1 August 2021, planning applications for buildings of over 18 metres (or 7 stories) tall containing more than one dwelling will require a 'Fire Statement' for the application to be considered valid. There are some exemptions. View government planning guidance on fire statements or access the fire statement template and guidance.</li> <li>Permission In Principle - If you are applying for Technical Details Consent on a site that has been granted Permission In Principle, please include the relevant details in the description below.</li> <li>Public Service Infrastructure - From 1 August 2021, applications for certain public service infrastructure developments will be eligible for faster determination timeframes. See help for further details or view government planning guidance on determination periods.</li> </ul>
Please describe details of the proposed development or works including any change of use
Demolition of existing office building and construction of new office building and associated landscaping works
Has the work or change of use already started?  O Yes
<ul><li>⊘ No</li></ul>
Existing Use
Please describe the current use of the site
Commercial Premises
Is the site currently vacant?
<ul><li>○ Yes</li><li>② No</li></ul>
Does the proposal involve any of the following? If Yes, you will need to submit an appropriate contamination assessment with your application.

Land which is known to be contaminated
○ Yes ⊙ No
Land where contamination is suspected for all or part of the site
○ Yes ⊙ No
A proposed use that would be particularly vulnerable to the presence of contamination  O Yes
⊘ No
Materials
Does the proposed development require any materials to be used externally?
○ No

m	aterial)
	Туре:
	Roof
	Existing materials and finishes:  A mix of metal roof, flat roof and pitched roofs throughout the site
	Proposed materials and finishes: Flat roof hidden by parapet wall arrangement. Rubberised finish to flat roof
	Type: Windows
	Existing materials and finishes: A mix of old wooden windows painted white, and white uPVC windows.
	Proposed materials and finishes: Anthracite uPVC windows, with double glazing.
	Type: Vehicle access and hard standing
	Existing materials and finishes:  Poor condition tarmac and concrete bases in place
	Proposed materials and finishes:  New tarmac surface to provide new parking area for business.
	Type: Walls
	Existing materials and finishes:  Existing materials on site are a mix of brickwork of varying colours, sizes and textures
	Proposed materials and finishes:  Proposed materials to comprise of a mix of brick, light coloured render and timber cladding
	Type: Doors
	Existing materials and finishes:  Mix of wood and white uPVC doors.
	Proposed materials and finishes: Anthracite grey uPVC doors.
્	re you supplying additional information on submitted plans, drawings or a design and access statement? ) Yes ) No
	Yes, please state references for the plans, drawings and/or design and access statement
	- Flood Risk Assessment & Flood Evacuation Management Plan - Arboricultural Report

Please provide a description of existing and proposed materials and finishes to be used externally (including type, colour and name for each

Pedestrian and Vehicle Access, Roads and Rights of Way
Is a new or altered vehicular access proposed to or from the public highway?
<ul><li>✓ Yes</li><li>✓ No</li></ul>
Is a new or altered pedestrian access proposed to or from the public highway?
○ Yes
⊗ No
Are there any new public roads to be provided within the site?
<ul><li>○ Yes</li><li>※ No</li></ul>
Are there any new public rights of way to be provided within or adjacent to the site?
<ul><li>○ Yes</li><li>⊙ No</li></ul>
Do the proposals require any diversions/extinguishments and/or creation of rights of way?
○ Yes
⊗ No
If you answered Yes to any of the above questions, please show details on your plans/drawings and state their reference numbers
Widening of existing site access (refer to site layout plan PL08)
Vehicle Parking
Does the site have any existing vehicle/cycle parking spaces or will the proposed development add/remove any parking spaces?  ② Yes ○ No  Please provide information on the existing and proposed number of on-site parking spaces  Vehicle Type: Cars Existing number of spaces: 3  Total proposed (including spaces retained): 5  Difference in spaces: 2
<ul> <li>Yes</li> <li>No</li> <li>Please provide information on the existing and proposed number of on-site parking spaces</li> <li>Vehicle Type:</li> <li>Cars</li> <li>Existing number of spaces:</li> <li>Total proposed (including spaces retained):</li> <li>5</li> <li>Difference in spaces:</li> </ul>

part of the local landscape character?   Yes
No lf Yes to either or both of the above, you may need to provide a full tree survey, at the discretion of the local planning authority. If a tree survey is required, this and the accompanying plan should be submitted alongside the application. The local planning authority should make clear on its website what the survey should contain, in accordance with the current 'BS5837: Trees in relation to design, demolition and construction - Recommendations'.
Assessment of Flood Risk
Is the site within an area at risk of flooding? (Check the location on the Government's Flood map for planning. You should also refer to national standing advice and your local planning authority requirements for information as necessary.)   Yes  No
Is your proposal within 20 metres of a watercourse (e.g. river, stream or beck)?  ○ Yes  ⊙ No
Will the proposal increase the flood risk elsewhere?  ○ Yes  ⊙ No
How will surface water be disposed of?
☐ Sustainable drainage system
Existing water course
Soakaway
✓ Main sewer
☐ Pond/lake
Biodiversity and Geological Conservation  Is there a reasonable likelihood of the following being affected adversely or conserved and enhanced within the application site, or on land adjacent to or near the application site?
To assist in answering this question correctly, please refer to the help text which provides guidance on determining if any important biodiversity or geological conservation features may be present or nearby; and whether they are likely to be affected by the proposals.
a) Protected and priority species  ○ Yes, on the development site  ○ Yes, on land adjacent to or near the proposed development  ⊙ No
b) Designated sites, important habitats or other biodiversity features  ○ Yes, on the development site  ○ Yes, on land adjacent to or near the proposed development  ⊙ No
c) Features of geological conservation importance  Yes, on the development site  Yes, on land adjacent to or near the proposed development  No

## Failure to submit all information required will result in your application being deemed invalid. It will not be considered valid until all information required by the local planning authority has been submitted. Your local planning authority will be able to advise on the content of any assessments that may be required. Foul Sewage Please state how foul sewage is to be disposed of: ✓ Mains sewer ☐ Septic tank ☐ Package treatment plant Cess pit Other Unknown Are you proposing to connect to the existing drainage system? ✓ Yes ○ No Ounknown If Yes, please include the details of the existing system on the application drawings and state the plan(s)/drawing(s) references Connection to existing on-site drainage Waste Storage and Collection Do the plans incorporate areas to store and aid the collection of waste? Yes ○ No If Yes, please provide details: Bin and recycling store (see plan PL08) Have arrangements been made for the separate storage and collection of recyclable waste? Yes ○ No If Yes, please provide details: Bin and recycling store (see plan PL08) Trade Effluent Does the proposal involve the need to dispose of trade effluents or trade waste? ○ Yes ✓ No

Where a development proposal is likely to affect features of biodiversity or geological conservation interest, you will need to submit, with the

application, sufficient information and assessments to allow the local planning authority to determine the proposal.

Supporting information requirements

Resi	dential/Dwelling	Units		
Does y	our proposal include the	e gain, loss or change of use of resider	ntial units?	
○ Yes <b>⊘</b> No				
All T	ypes of Develop	oment: Non-Residential Fl	oorspace	
-		e loss, gain or change of use of non-re- nis context covers all uses except Use (	-	
Yes     No			5.000 00 2.10g. 00.000	
Please	add details of the Use	Classes and floorspace.		
not be these	used in most cases. A or any 'Sui Generis' us	Also, the list does not include the ne	at includes the now revoked Use Class wly introduced Use Classes E and F1- where prompted. Multiple 'Other' opti	2. To provide details in relation to
	Class:			
	c) - Light industrial sting gross internal flo	porspace (square metres):		
96.5				
<b>Gro</b> 96.5		to be lost by change of use or demo	olition (square metres):	
	=	loorspace proposed (including char	nges of use) (square metres):	
148 <b>Net</b>		nal floorspace following developme	nt (square metres):	
51.5	=		, ,	
Totals	Existing gross internal floorspace (square metres)	Gross internal floorspace to be lost by change of use or demolition (square metres)	Total gross new internal floorspace proposed (including changes of use) (square metres)	Net additional gross internal floorspace following development (square metres)
	96.5	96.5	148.1	51.5999999999999
	or gain of rooms		acts the lose or main of reasons.	
FOI IIO	leis, residentiai iristitutio	ons and hostels please additionally indi	cate the loss of gain of rooms.	
•	loyment	oos on the site or will the proposed day	velopment increase or decrease the numb	per of amployage?
O Yes	re any existing employe	ees on the site of will the proposed dev	relopment increase or decrease the numb	iei oi empioyees:
Houi	rs of Opening			

Are Hours of Opening relevant to this proposal?  ○ Yes  ⊙ No
Industrial or Commercial Processes and Machinery  Does this proposal involve the carrying out of industrial or commercial activities and processes?  ○ Yes  ○ No  Is the proposal for a waste management development?  ○ Yes  ○ No
Hazardous Substances  Does the proposal involve the use or storage of Hazardous Substances?  ○ Yes ○ No
Site Visit  Can the site be seen from a public road, public footpath, bridleway or other public land?               Yes
Pre-application Advice  Has assistance or prior advice been sought from the local authority about this application?  ○ Yes ○ No

Authority Employee/Member
Vith respect to the Authority, is the applicant and/or agent one of the following: a) a member of staff b) an elected member c) related to a member of staff d) related to an elected member
t is an important principle of decision-making that the process is open and transparent.
For the purposes of this question, "related to" means related, by birth or otherwise, closely enough that a fair-minded and informed observer, having considered the facts, would conclude that there was bias on the part of the decision-maker in the Local Planning Authority.
Do any of the above statements apply?  ☐ Yes ☐ No
Ownership Certificates and Agricultural Land Declaration
Certificates under Article 14 - Town and Country Planning (Development Management Procedure) England) Order 2015 (as amended)
Please answer the following questions to determine which Certificate of Ownership you need to complete: A, B, C or D.
s the applicant the sole owner of all the land to which this application relates; and has the applicant been the sole owner for more than 21 days?  Yes  No
s any of the land to which the application relates part of an Agricultural Holding? ○ Yes ⊙ No
Certificate Of Ownership - Certificate A
certify/The applicant certifies that on the day 21 days before the date of this application nobody except myself/ the applicant was the owner* of any part of the land or building to which the application relates, and that none of the land to which the application relates is, or spart of, an agricultural holding**
"owner" is a person with a freehold interest or leasehold interest with at least 7 years left to run.
* "agricultural holding" has the meaning given by reference to the definition of "agricultural tenant" in section 65(8) of the Act.
NOTE: You should sign Certificate B, C or D, as appropriate, if you are the sole owner of the land or building to which the application elates but the land is, or is part of, an agricultural holding.
Person Role
○ The Applicant ② The Agent
Title
Mr
First Name
Kevin
Surname
Long

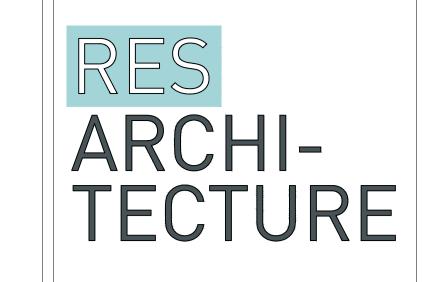
✓ Declaration made
Declaration
I / We hereby apply for Full planning permission as described in this form and accompanying plans/drawings and additional information. I / We confirm that, to the best of my/our knowledge, any facts stated are true and accurate and any opinions given are the genuine options of the persons giving them. I / We also accept that: Once submitted, this information will be transmitted to the Local Planning Authority and, once validated by them, be made available as part of a public register and on the authority's website; our system will automatically generate and send you emails in regard to the submission of this application.
✓ I / We agree to the outlined declaration
Signed
Kevin Long
Date
11/02/2022

**Declaration Date** 





SITE LOCATION PLAN 1:1250



RES Architecture Ltd
Unit 19.0
Highnam Business Centre
Highnam
Gloucester
GL2 8DN

N

REV DESCRIPTION DATE
- - - -

PROJECT
Walden & Fletcher Electrical
Contractors LTD
2 St Oswalds Road Gloucester
Gloucestershire GL1 2SF

DRAWING

CHECKED BY

SCALE

Site Plans

PROJECT NO ARC.1485

DATE 16.10.2020

DRAWN BY LL

PL05

Various at A1

# Flood Risk Assessment &

# Flood Evacuation Management Plan

SITE:

2 St Oswalds Road, Gloucester, GL1 2SF



This document is comprised of 14 pages

### Introduction

This document has been prepared on behalf of the property owner, Walden & Fletcher Electrical Contractors Ltd.

The document comprises of a Flood Risk Assessment, Drainage Strategy and Flood Evacuation Management Plan to support the planning application in respect of the proposed redevelopment of the site, namely 2 St Oswalds Road, Gloucester, GL1 2SF.

This document outlines / addresses the following keys considerations:

- Potential flood risk to the site.
- Impact of the proposed development on flood risk elsewhere.
- Proposed measures to mitigate any risk identified.
- Implementation of Sustainable Drainage Systems (SuDS).

### **Existing Site**

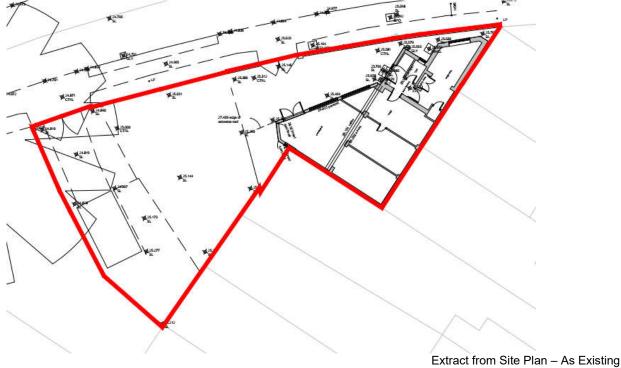
The site measures 0.0415 ha (Hectares) in area and is located at National Grid Reference : 383364 E / 219705 N.

The site currently serves a commercial purpose incorporating office and storage accommodation.

Refer to Appendix documents A and B.

Almost the entire site is occupied by buildings and areas of hardstanding, i.e. < 3% permeable surfaces / green spaces.





### **Proposed Development**

The proposed development involves complete demolition of the existing buildings and removal of existing hardstanding areas.

The proposals centre around the construction of a 2-storey office building to serve the growing demands of the client / owner.

The proposed building will occupy an area of 107m<sup>2</sup>, equal to 26% of the site area.

The hardstanding area will occupy 277m<sup>2</sup>, equal to 71% of the site area.

The remaining site area equal to  $31m^2 / 7.5\%$  will be finished as soft landscaping.

### Refer to Appendix document C.



Extract from Site Plan - As Proposed

### **Ground Conditions**

No historic or recent borehole records exist for the site.

Reference to the British Geological Survey online mapping resource indicates that the site is underlain by Gravels of The River Severn, namely Third (Main) Terrace.

The Cranfield Soil and Agrifood : Soilscapes resource identifies the site as comprising of : Freely draining lime-rich loamy soils.

The Environment Agency's online 'Groundwater Source Protection Zones' map indicates that the site is <u>not</u> located within a Groundwater Source Protection Zone.

Reference to the Environment Agency Groundwater Vulnerability mapping resource suggests that the site falls within the category of 'Medium'.

The aquifer designation status for the site is 'Secondary (undifferentiated)'

In summary, the likelihood of a pollutant reaching the groundwater and the type of aquifer present, are both items for which risk levels and concern is not high.

### **Local Drainage**

A Severn Trent drainage search was conducted. It concluded that both foul and surface water from the property discharges into a public sewer. *Refer to Appendix D.* 



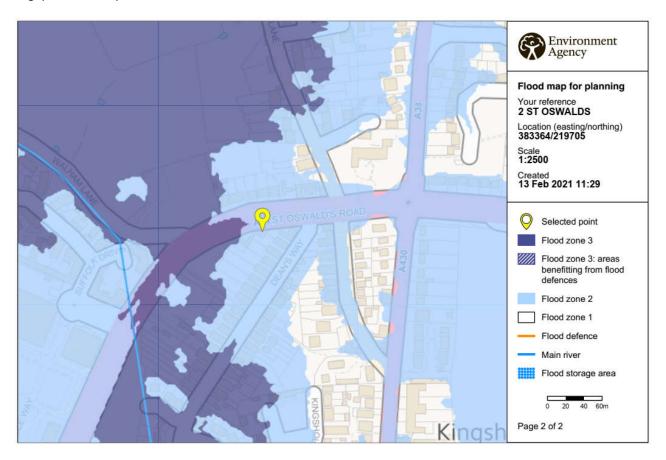
Whilst the public sewer map does not indicate the presence of public sewer, disposal main or lateral drain within the boundaries of the property, it is understood that such assets exist. The private sewer transfer on October 1<sup>st</sup> 2011 is the most likely explanation as to why drainage arrangements serving the property are not recorded.

Records confirm the presence of a 450mm diameter public surface water sewer running parallel with the adjacent public highway. This sewer runs in a Westerly direction, terminating at the culverted River Twyver.

### **Flood Zone Classification**

The Environment Agency determines the site as falling within <u>Flood Zone 2</u>, an area with a medium probability of flooding.

Flood Zone 2 defines the site as having between a 1 in 100 and 1 in 1,000 annual probability of river flooding (1% - 0.1%).



In accordance with National Planning Practice Guidance (NPPG) tables, commercial developments such as the proposed are classified as 'Less Vulnerable' and therefore can be considered 'Appropriate for Development'.

### Flood Zone Classification - Local Guidance

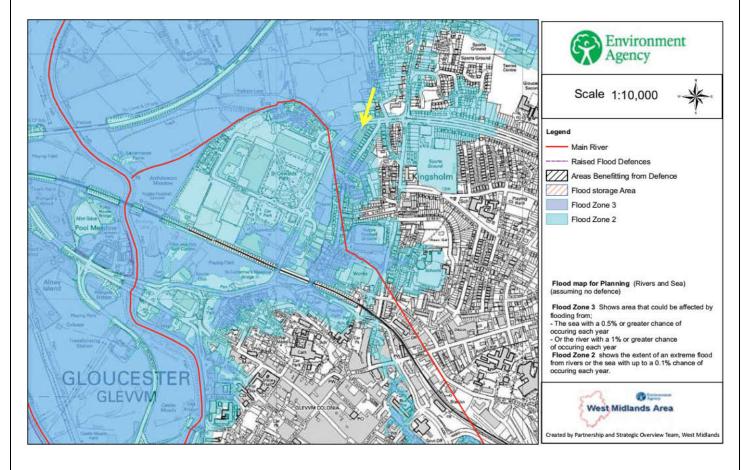
Reference to Gloucestershire County Council: Strategic Flood Risk Assessment (SFRA) map identifies less than one third of the site area, towards the West boundary as falling within SFRA Level 1, Flood Zone 3a. The remainder of the site falls outside of any SFRA flood zone classifications. 'Less Vulnerable' development remains 'Appropriate' under this categorisation.



### **Reference Maps**

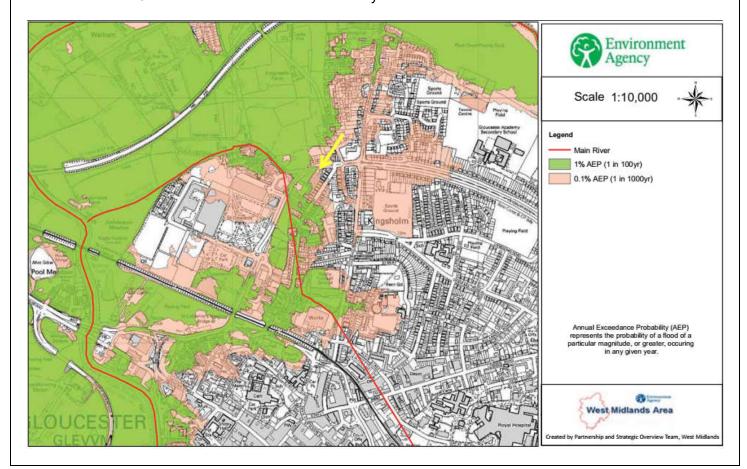
### Flood Map for Planning (Rivers and Sea)

Site identified in Flood Zone 2



### **Modelled Flood Outlines**

Site identified as 0.1% Annual Exceedance Probability



### <u>DEFRA Data Sources / Mapping – Record of Historic Flooding</u> Site identified as falling within the zone of known historic flooding.



### **Risk Assessment**

The categorisation of the site by the Environment Agency as Zone 2 and only part of the site falling under flood risk categorisation under the SFRA, suggests that the flood risk can reasonably be determined as manageable.

Nevertheless, historic flood records do indicate flooding having occurred on the site, though information pertaining to dates and extent of flooding are not available.

The River Twyver, categorised as a Main River, is located within 160 metres of the site and is considered a significant source of flooding.

Fluvial flooding could occur if the culverted River Twyver became blocked and surcharge during or following an extreme rainfall / tidal event or tide locked during higher flow events in the River Severn. Fluvial / tidal flooding could also occur if the River Severn overtopped its banks during or following an extreme rainfall / tidal event.

Although the application site is located towards the outer extremities of the flood risk zone, due consideration is required nevertheless.

The Joint Core Strategy Level 2 SFRA includes modelling of the 1 in 20 year, 1 in 100 year, 1 in 100 year plus climate change and 1 in 1000 year fluvial flood events and the 1 in 200 year, 1 in 200 year climate change and 1 in 1000 year tidal event scenarios.

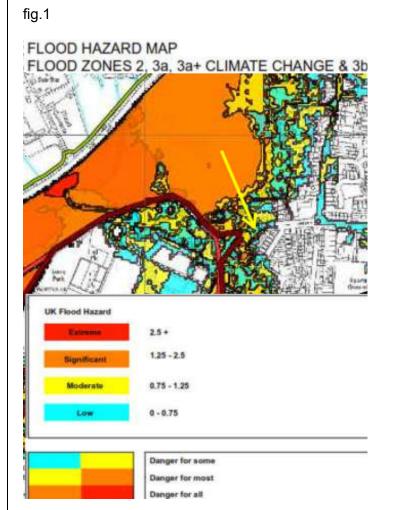
Relevant flood hazard maps and blockage map extracts are included here in fig. 1 - 3 inc (overleaf).

Reference to these records and models is key in determining flood risk at the application site currently as well as with consideration of factors such as climate change, further urbanisation, etc.

The Flood Hazard Map for Climate Change scenarios and River Twyver culvert blockages demonstrates that the site can be determined as having a Flood Hazard Rating of 'Low' (0.0 - 0.75).

The rating level considers hazard in relation to flood depth, velocity and debris.

This classification of risk then translates into a 'Class 1' flood hazard (Low). This being, 'Danger for some', i.e. flood zone with deep or fast flowing water that presents a hazard for some people (i.e. children).



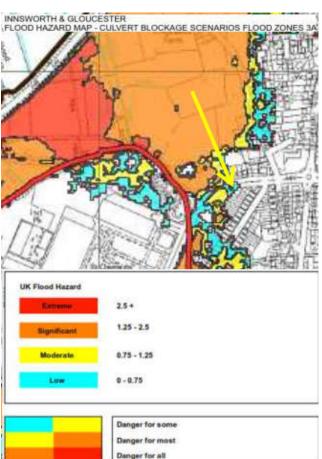
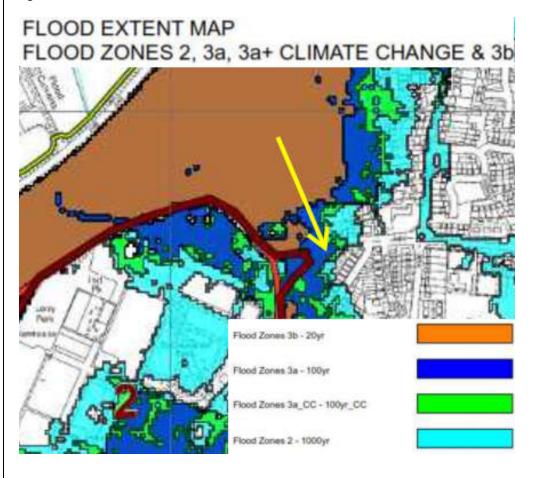


fig.2

fig.3



Other sources of flood risk relate to Groundwater Flooding and Sewer Flooding.

The SFRA states that there are no records of groundwater flooding in Gloucester. This issue can therefore be set aside in terms of considering risk to the application site.

Sewer Flooding typically occurs in the case of surface water or combined use sewers where extreme rainfall, blockages or damage results in the assets becoming overwhelmed.

Whilst the SFRA determines that the postcode of the application site (GL1 2) is deemed as 'high' risk from sewer flooding, the location and level of the application site would suggest that risk is manageable. The proposed development will not rely on connection to the existing surface water sewer and therefore aids in diminishing any local risk of sewer flooding.

### **Conclusions**

The Environment Agency 'Flood Map for Planning' shows that the site is located within Flood Zone 2 – an area considered to be at flood risk with a max. 1% (1 in 100) annual probability of fluvial flooding and / or a 0.5% (1 in 200) or greater annual probability of tidal flooding.

The site is identified at flood risk during the 1% fluvial / 50% tidal Annual Exceedance Probability (AEP) + climate change event.

According to Environment Agency modelling, the estimated in channel flood level during this event is 11.6m AOD.

As a point of reference, the public highway adjacent to the site sits nominally at 11.6m AOD. Therefore, it is proposed that finished floor level of the proposed commercial building sits at no less than 11.75m AOD so as to afford the proposed development suitable protection in the event of future flooding.

The level of the site in relation to the adjacent highway naturally results in the proposed building and hardstanding areas sitting above the 11.6m AOD peak flood level, therefore negating any vulnerability to the site / property.

It is intended that all surface water drainage from the site is dealt with by way of SuDS and that there shall be no retained connection to the existing public surface water sewer. This is proposed so as to reduce pressure on the existing infrastructure, namely the culverted River Tywver, and limit the impact of the application site in the event of any future flood scenarios.

Implementation of SuDS by way of permeable paving areas as well as soakaways / attenuation is the natural route to best safeguard the site and the surrounding area in the context of impact on flood risk.

Once implemented, the site owner will be responsible for the maintenance of the surface water drainage system.

Through assessment of the risk and implementation of the proposed mitigation measures we intend that the application site meets the requirements set out by The Joint Core Strategy (JCS) and the Gloucester City Plan (GCP).

"Development shall be safe from flooding and shall not lead to an increase in flood risk elsewhere. In accordance with the National Planning Policy Framework, flood risk betterment shall be sought through the development process".

The following measures will ensure that the proposed development provides a betterment to the flood risk associated with the site and surrounding area and will not increase fluvial / tidal flood risk elsewhere.

- Implementation of SuDS in place of existing arrangement of discharge into public surface water sewer and therefore the nearby watercourse.
- Implementation of permeable paving and attenuation crates to provide on site capacity in the event of heavy rainfall and flooding events.
- Alteration of hardstanding arrangement to prevent surface water run off into the adjacent highway and therefore the public surface water sewer.

### **Mitigation Measures**

To minimise the impact of a flood event, the following measures should be employed:

- Ensure finished floor level to the proposed building be set at 11.75m AOD (minimum).
- Where site gradients allow, set hardstanding areas above 11.6m AOD.
- Select robust materials in the construction and façade finish of the proposed building.
- Select solid flooring materials to the ground floor level, e.g. concrete, vinyl, etc.
- Ensure all electrical accessories and distribution are suitably raised.

### Surface Water Management / Drainage Strategy

To satisfy the preferences determined in the hierarchy of drainage options, all surface water management to the proposed site is to be by way of Infiltration (into the ground) by way of soakaways and permeable paving.

### Permeable Paving

The vehicular traffic to the application site will largely comprise of light commercial and passenger vehicles. With exception to the main area of access / egress which may on occasion need to accommodate heavier delivery vehicles, the bulk of the hardstanding areas can be formed using porous / permeable paving.

Allowing for 220 m<sup>2</sup> of permeable paving to the site will equate to 80% of the total proposed hardstanding areas.

On the basis of a 300mm subbase incorporating 30% voids, the permeable surface can reasonably provide an attenuation volume of 19.8 m<sup>3</sup>.

For the purpose of establishing a benchmark for the performance and maintenance requirements of the permeable paving, it is assumed that Omega Flow Permeable Paviours or equal approved will be the selected paving material. This paving system offers a typical flow rate of water leaving the permeable system of 2 to 7 l/s/ha (litres/second/hectare), pending detailed assessment.

### Soakaway / Attenuation

The rainwater / surface water run off from the proposed building is to be discharged by way of soakaways. The underlain sub soils suggest the site to be appropriate for the implementation of soakaways.

Initial investigations and available data suggests good percolation levels on the site.

Based upon a roof area of 107 m<sup>2</sup> and an absorption rate of 50mm per hr/3000, a volume / capacity requirement of 1.78 m<sup>3</sup> can be assumed (subject to detailed design).

On this basis an arrangement of 18 nr 1000x500x400mm Polypipe Polystorm Soakaway and Attenuation Crates is proposed. This will provide a capacity of 3.42 m³, therefore providing circa 48% excess capacity / contingency over and above the 1.78 m³ capacity required.

### **SUDS Maintenance Schedule**

<u>Soakaway and Attenuation Crates</u>
18 nr 1000x500x400mm Polypipe Polystorm Soakaway and Attenuation Crates to manage rainwater runoff.

To provide an extended service life to the soakaway, an intermediate / access chamber is to be installed ahead of the inlet to the soakaway.

This will also negate regular maintenance of the soakaway itself.

This chamber will incorporate a removable silt trap (pictured, right) enabling simple maintenance by the property occupier.



Maintenance Activity	Comments	Frequency
Occasional Maintenance		
Remove access cover from chamber. Lift out silt trap. Dispose of collected silt. Return silt trap to chamber.		12 monthly or more frequently if required. Suggest inspection at 6 month intervals initially.

### Omega Flow Permeable Paviours

The maintenance requirements for the paved area are LOW.

Maintenance Activity	Comments	Frequency		
Routine Maintenance				
Litter and debris removal.		Monthly		
Visual inspection of paving surface.		Monthly.		
Occasional Maintenance				
Brushing of pavement surface.	Joints in paving become silted over time. Inspect visually. Undertake maintenance where joints are greater than 50% silted.	6 monthly or more frequently if required.		
Filling joints between paving blocks with suitable aggregate.	Following brushing joints may need to be topped up with suitable aggregate.	6 monthly + subject to brushing frequency.		
Infrequent Maintenance				
Jet washing of pavement surface.	Silt collected in pavement joints that cannot be removed by brushing.	12 monthly subject to visual inspection.		
Filling joints between paving blocks with suitable aggregate.	Following jet washing, joints may need to be topped up with suitable aggregate.	12 monthly + subject to jet washing requirement.		

### Flood Evacuation Management Plan - Introduction

The site owner will display the Flood Evacuation Management Plan to inform site users of the flood risk and to provide advice on what to do in the event of a flood.

The Environment Agency Flood Alert service is not available for this property. The address is deemed Low risk of flooding and therefore the flood warning / notification service cannot be subscribed to.

Reference to other resources will be suggested in terms of being alert to / aware of potential flooding.

The flood level at the 1% Fluvial / 50% Tidal AEP + CC event is determined as being 11.6m AOD. It can therefore be expected that whilst the site itself may be free of flooding, the adjacent public highway will demonstrate evidence of flooding.

Furthermore, the adjacent public highway is configured in such a way that exit by vehicle is only possible in the Westbound direction. Travel in that direction in a flood event should be advised against as doing so is likely to encounter greater flooding.

Reference to ground level data and historic flood data suggest a simple evacuation plan based around exiting the site and heading East. Map records and Ordnance Survey data suggests that the roundabout to the East of the site where St Oswalds Road meets Estcourt Road can be regarded as a 'safe' location.

The plan shall be implemented in full prior to the development first being brought into use and maintained for the lifetime of the development.

### Flood Evacuation Management Plan

Issue 1 - February 2021

### Property Address: 2 St Oswalds Road, Gloucester, Gloucestershire, GL1 2SF

This Plan is owned by and is the responsibility of the property owner / management company and is to be updated if required.

This plan should be reviewed:

- Every 3 years following first occupation or;
- As a result of lessons identified following a flood event or exercise, or;
- Following changes of ownership / use of the property or;
- Following changes to the Flood Warning process.

The Flood Evacuation Management Plan (FEMP) sets out the flood risk of the site, identifies the role of the Flood Warden, provides details of the proposed flood actions and identifies other key bodies.

The specifics regarding timing of evacuation and any suggested evacuation routes and actions may be overruled by the emergency services should they attend any flooding incident on or near to the site.

The FEMP is a 'living' document and therefore should be periodically reviewed and updated to provide advice and guidance to staff, occupants and visitors in the event of an extreme flood.

The advice of the emergency services should be followed at all times and on the ground decisions will supersede this FEMP.

### FLOOD RISK

The site is determined as being at risk of flood due to its proximity to the River Twyver.

Flooding of the site itself is not anticipated.

Low level flooding equal to the level of the public highway adjacent to the site is expected.

### **VULNERABILITY & FLOOD WARNING**

The site is classified as Less Vulnerable and therefore is appropriate within the flood zone classification area.

The Environment Agency Flood Warning / Alert system <u>does not</u> apply to the site due to the Low risk categorisation.

### IDENTIFICATION OF A FLOOD / TRIGGER TO EVACUATE

As above, the site is deemed Low risk and therefore subscription to automatic flood warning / notification is not possible.

The Flood Warden will monitor public resources / external bodies for advice, planning and notice of flood risk / events. Namely, Environment Agency, MET Office and Gloucestershire Constabulary.

### COMMUNICATION

As above, a Flood Warden will be appointed on site.

The Flood Warden shall ensure that all visitors and employees understand and follow the evacuation plan. In addition, the Flood Warden shall contact any employees or planned visitors and communicate that the site has been evacuated and only to return / travel to the site once contacted to do so.

### SAFE EXIT / EVACUATION

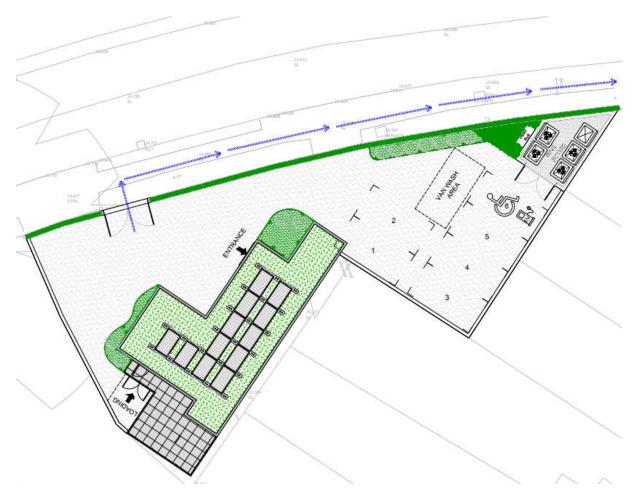
Fig 1. Demonstrates the route of safe exit / evacuation from the site (blue arrows).

The extent of flooding is not anticipated to compromise safe exit of the site on foot in the Easterly direction. Upon leaving the site, continue heading East to the roundabout where St Oswalds Road meets Estcourt Road. This is deemed the 'Safe' location free of flood risk.

As above, the advice of the emergency services should be followed at all times and on the ground decisions will supersede this FEMP.

Whilst flood level adjacent to the site are not deemed to be of a level that would impede exit using vehicles, the suitability of nearby roads is not known. Therefore, exit on foot remains the chosen evacuation method.

Fig 1. – Evacuation Route



### FLOOD ALERT CONTACT NUMBERS

<u>Flood Alerts: The Rivers in Tewkesbury, Cheltenham and Gloucester</u> EA Floodline Warning Direct – 0345 988 11 88.

### **Local Authority Contact Number**

Gloucester City Council, Emergency Management – 01452 753231 available 24/7/365

### **Emergency Services**

Police, Ambulance Service, Fire Service, Coastguard – 999 to request

### **IMPORTANT**

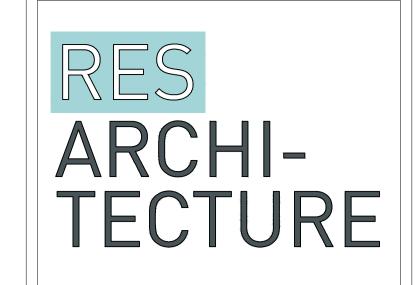
In the event that flood levels exceed those anticipated, site users should not evacuate the building into flood water unless instructed to do so otherwise by the emergency services.







SITE LOCATION PLAN 1:1250



RES Architecture Ltd
Unit 19.0
Highnam Business Centre
Highnam
Gloucester
GL2 8DN

DESCRIPTION

DATE

PROJECT
Walden & Fletcher Electrical
Contractors LTD
2 St Oswalds Road Gloucester
Gloucestershire GL1 2SF

DRAWING

CHECKED BY

SCALE

Site Plans

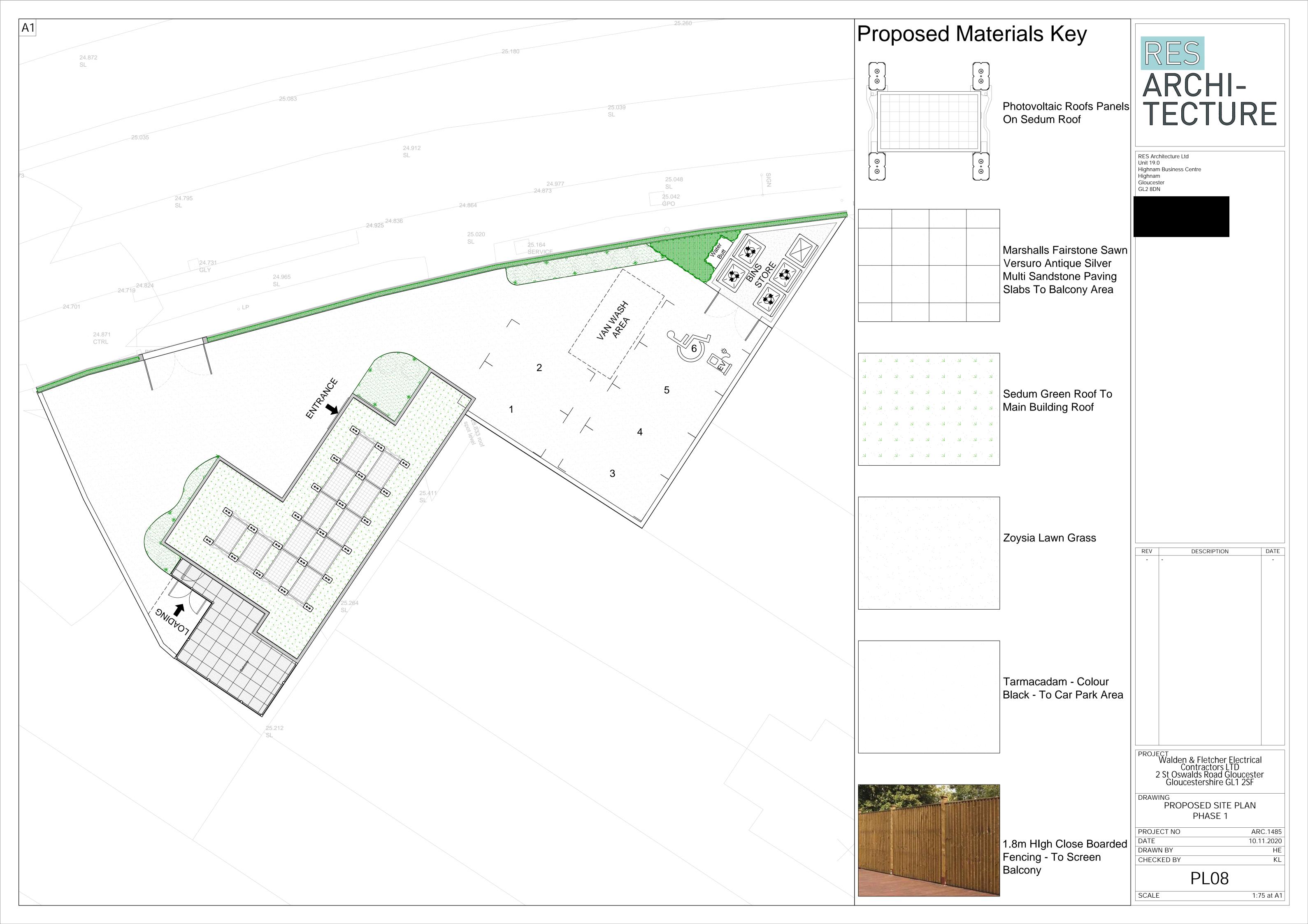
PROJECT NO ARC.1485

DATE 16.10.2020

DRAWN BY LL

PL05

Various at A1









**Assured Searches Ltd** 

IVY COURT High Street Nailsea Bristol BS48 1AW Order Date: Wednesday, 10 June 2020

Order No: **60088152** 

Customer Ref: JMH.kth.W5266-5

Severn Trent Searches has carried out enquiries into the following property, in line with its published terms of sale upon request from Assured Searches Ltd

2 St Oswalds Road GLOUCESTER GL1 2SF

### **Commercial Standard Drainage and Water Report**

The Search Report on the above property was completed on 10 Jun, 2020 by Marie Freer, a technician employed by Severn Trent Searches.

This report should only be used for individual property transactions where the search area is less than 1 hectare, and the intended use of the property is:

- not as a single, residential, domestic property: or
- · not land or buildings being, or to be developed as a single, residential, domestic property

Should this Report be used for any other purpose; the Company's liability, as detailed in Appendix 3 will not apply.

On receipt of this document you have accepted the Terms and Conditions (see Appendix 3) which covers properties up to 1 hectare.

From 1st October 2011 ownership of private sewers and lateral drains changed in accordance with The Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011. The contents of this search reflect these changes.

For further information please visit: www.severntrentsearches.com//category/sewer-transfer/

In the event of any queries about the preparation of this Search Report, enquiries should be directed to:

Or the Customer Service Manager, Severn Trent Searches at the address below.

Severn Trent Searches PO Box 10155 Nottingham NG1 9HQ

or

Severn Trent Searches DX 723860 Nottingham 43

For further information about our products and services please visit:

www.severntrentsearches.com

### 2 St Oswalds Road, GLOUCESTER, GL1 2SF

Questi	ion	Answei
Maps		
1.1	Where relevant, please include a copy of an extract from the public sewer map.	Map Provided
1.2	Where relevant, please include a copy of an extract from the map of waterworks.	Map Provided
Drain	age	
2.1	Does foul water from the property drain to a public sewer?	Yes
2.2	Does surface water from the property drain to a public sewer?	Yes
2.3	Is a surface water drainage charge payable?	See Details
2.4	Does the public sewer map indicate any public sewer, disposal main or lateral drain within the boundaries of the property?	No, See Details
2.4.1	Does the public sewer map indicate any public pumping station or any other ancillary apparatus within the boundaries of the property?	No
2.5	Does the public sewer map indicate any public sewer within 30.48 metres (100 feet) of any buildings within the property?	Yes
2.5.1	Does the public sewer map indicate any public pumping station or any other ancillary apparatus within 50 metres of any buildings within the property?	No
2.6	Are any sewers or lateral drains serving, or which are proposed to serve the property, the subject of an existing adoption agreement or an application for such an agreement?	No
2.7	Has a Sewerage Undertaker approved or been consulted about any plans to erect a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain?	No
2.8	Is the building which is or forms part of the property at risk of internal flooding due to overloaded public sewers?	No
2.9	Please state the distance from the property to the nearest boundary of the nearest sewage treatment works.	See Details
Wate	r	
3.1	Is the property connected to mains water supply?	Yes
3.2	Are there any water mains, resource mains or discharge pipes within the boundaries of the property?	No
3.3	Is any water main or service pipe serving, or which is proposed to serve the property, the subject of an existing adoption agreement or an application for such an agreement?	No
3.4	Is the property at risk of receiving low water pressure or flow?	No
3.5	What is the classification of the water supply for the property?	See Details
3.6	Is there a meter installed at this property?	Yes
3.7	Please include details of the location of any water meter serving the property.	See Details
Charg	ging	
4.1.1	Who is responsible for providing the sewerage services for the property?	See Answe
4.1.2	Who is responsible for providing the water services for the property?	See Answe
4.2	Who bills the property for sewerage services?	See Details
4.3	Who bills the property for water services?	See Details
Addit	ional	
5.1	Is there a Consent to discharge Trade Effluent under S118 of the Water Industry Act, 1991 into the public sewer?	No Consen



### SEWER RECORD 2 St Oswalds Road, GLOUCESTER, GL1 2SF

Date of Issue: 10 June 2020



1. Do not scale off this Map. This Map is furnished as a general guide and no warranty as to its correctness is given or implied. This Map must not be relied upon in the event of any development or works in the vicinity of Severn Trent Water's assets. 2. On 1 October 2011 most private sewers and private lateral drains transferred to the ownership of Water Companies. Severn Trent Water does not possess complete records of these assets. These assets may not be displayed on this map. 3. Reproduction by permission of Ordnance Survey on behalf of HMSO. © Crown Copyright and database right 2020. All rights reserved. Ordnance Survey licence number 0100031673. Document users other than Severn Trent Water business users are advised that this document is provided for reference purpose only and is subject to copyright, therefore, no further copies should be made from it.



### WATER RECORD 2 St Oswalds Road, GLOUCESTER, GL1 2SF

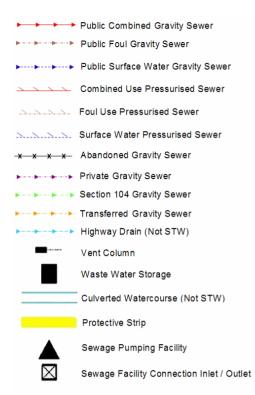


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### **MAP KEYS**

### **Sewer Record**



_	Hyrdrobrake	•	Sewerage Air Valve		
_	•	0	•		
	Lamphole		Sewerage Hatch Box Point		
	Outfall	_	Sewerage Isolation Valve		
	Overflow Overflow	₩.	Soakaway		
	O		Surface Water Manhole		
=	Penstock	_	Blind Shaft		
•	Petrol Interceptor	_			
		•	Combined Use Manhole		
STW	Sewage Treatment Works	DS	Disposal Site		
*	Sewer Blockage	_	Flushing Chamber		
☆	Sewer Collapse	_	Foul Use Manhole		
	Sewer Chemical Injection Point	•			
	,	•	Grease Trap		
Notos	Sewer Junction	+	Head Node		
Notes  The majority of private gravity sewers and lateral drains shown in magenta transferred into public ownership in October 2011, providing they met the relevant criteria. Please note that private					

The majority of private gravity sewers and lateral drains shown in magenta transferred into public ownership in October 2011, providing they met the relevant criteria. Please note that private pressurised sewers and drains within the boundary of the property they serve remain private. Sewers shown in green which remain the subject of an adoption agreement under Section 102 or 104 of the Water Industry Act (1991) are not the responsibility of the Sewerage Undertaker. Please refer to response to Question 2.6 in search report to check current status of the sewers. All Sewers that have been transferred to the Sewerage Undertaker after 1st October 2011, which they have a record of but have not surveyed and confirmed, are shown in orange.

Please note, the full extent and route of these sewers may not be plotted on the sewer map. By October 1st 2016 any private pumping station and associated apparatus serving a lateral drain or sewer which was operational before July 1st 2011 will have transferred over to the Sewerage Undertaker's responsibility and become a public asset (subject to any appeals).

### **Water Record**

	Distribution Main		Pumping Facility	<del></del>	Water Isolation Valve (Closed)	Ö	Change in Characteristic
	Trunk Main (local/primary)	$\triangle$	Booster Facility	+	Water Isolation Valve (Open)	<u> </u>	Marker Post
	Strategic Main		Potable Water Storage	-€-	Water Isolation Valve (Partially Open)	>	Cable Junction
	Fire Supply Main		Water Tower	<b>—</b>	Water Air Valve	모	Anode
	Fire Main	<b>♦</b>	Well / Borehole	<del></del>	Pressure Reducing Valve	⊠	Boundary Box
	Non-Domestic Customer Service Pipe	$\Diamond$	Intake	<del>-</del>	Pressure Sustaining Valve	×	Stop Tap
	Domestic Customer Service Pipe		Water Treatment Works / Chamber	<del></del>	Non-Return Valve	•	Cross Piece
<del>&lt; × × ×</del>	Abandoned Main	•	Draw-off Tower		Float Valve	0	Strainer
<u> </u>	Elevated Main	$\circ$	Bowser Point	•	Hydrant (Single/Double)	<u> </u>	Listening Post
	Aqueduct	$\boxtimes$	Water Facility Connection	0	Washout (Single/Double)	-	Revenue Meter
	Duct	$\overline{}$	Pipe Support Structure	•	Bulk Meter	В	Housing, Building
	Pre-1937 Properties	-(	Open Pipe		Water Hatch Box	K	Housing, Kiosk
::::::: <b>:</b>	SSSI Area	-(	Discharge	$\Diamond$	Pressure Tapping		Housing, Other
	Protective Strip	<b>E</b> —	End Cap	<b>♦</b>	Insertion Flow Meter Point	$\Rightarrow$	Quality Sample Point



Question 1.1 Q1.1

# Where relevant, please include a copy of an extract from the public sewer map.

**Map Provided** 

A copy of an extract from the public sewer map is included in which the location of the property is identified.

#### **Guidance Notes**

Pipes that are shown on the public sewer map as sewers, disposal mains or lateral drains are defined as those for which the Sewerage Undertaker holds statutory responsibility under the Water Industry Act 1991. The Sewerage Undertaker is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only. Sewers or lateral drains indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an "as constructed" record. It is recommended that these details are checked with the developer. Please note that following the private sewer transfer on October 1st 2011 there may be additional public assets other than those indicated on the map. Particular attention should be paid to public pumping stations (indicated on the plan by a black triangle) which will have associated pressurised sewers serving the pumping station which may not be plotted on the sewer plan even if they have transferred into public ownership. Assets other than public sewers, disposal mains or lateral drains may be shown on the copy extract, for information.

Question 1.2 Q1.2

# Where relevant, please include a copy of an extract from the map of waterworks.

Map Provided

A copy of an extract from the map of waterworks is included in which the location of the property is identified.

#### **Guidance Notes**

Pipes that are shown on the map of waterworks as water mains, resource mains or discharge pipes are defined as those for which a Water Undertaker holds statutory responsibility under the Water Industry Act 1991. Assets other than water mains, resource mains or discharge pipes may be shown on the plan, for information only. Water Undertakers are not responsible for private water mains or private service pipes connecting the property to the public water main and do not hold details of these. These may pass through land outside of the control of the seller, or may be shared with adjacent properties. The buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal. The extract of the map of waterworks shows water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.



Question 2.1 Q2.1

# Does foul water from the property drain to a public sewer?

Records indicate that foul water from the property does drain to a public sewer.

Yes

#### **Guidance Notes**

The connection status of the property is based on information held on the records by the responsible water company. Sewerage Undertakers are not responsible for any private drains and private sewers that do not connect the property to the public sewerage system, and do not hold details of these. The property owner will normally have sole responsibility for private drains serving the property and may have shared responsibility with other users, if the property is served by a private sewer which also serves other properties but does not connect into the public system. These may pass through land outside of the control of the seller and the buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal.

Question 2.2 Q2.2

# Does surface water from the property drain to a public sewer?

Records indicate that surface water from the property does drain to a public sewer.

Yes

#### **Guidance Notes**

The connection status of the property is based on information held on the records by the responsible water company. Sewerage Undertakers are not responsible for private drains and private sewers that do not connect the property to the public sewerage system and do not hold details of these. The property owner will normally have sole responsibility for private drains serving the property and may have shared responsibility, with other users, if the property is served by a private sewer which also serves other properties but does not connect into the public sewerage system. These may pass through land outside of the control of the seller and the buyer may wish to investigate whether separate rights or easements are needed for their inspection, repair or renewal. In some cases, Sewerage Undertaker records do not distinguish between foul and surface water connections to the public sewerage system. If on inspection the buyer finds that the property is not connected for surface water drainage, the property may be eligible for a rebate of the surface water drainage charge. Details can be obtained from the sewerage retailer.

Question 2.3 Q2.3

# Is a surface water drainage charge payable?

Records indicate that a surface water drainage charge is applicable at this property.

See Details

#### **Guidance Notes**

Any applicable surface water charge may be raised by the current sewerage retailer. However, if upon inspection the property owner believes that surface water does not drain to the public sewerage system, application can be made to the sewerage retailer to end surface water charges.





Question 2.4 Q2.4

# Does the public sewer map indicate any public sewer, disposal main or lateral drain within the boundaries of the property?

No, See Details

The public sewer map does not indicate any public sewers, disposal mains or lateral drains within the boundaries of the property. However, following the private sewer transfer on October 1st 2011 there are lateral drains and public sewers which are not recorded on the public sewer map but which may prevent or restrict development of the property if built before 2011. It is possible that such sewers and/or lateral drains are present within the property boundary. It is recommended that further investigations are undertaken at the property to determine the drainage arrangement.

#### **Guidance Notes**

The approximate boundary of the property has been determined by reference to the Ordnance Survey record. Please note that from 1st October 2011 the majority of private sewers and lateral drains connected to the public network as of 1st July 2011 transferred into public ownership and therefore there may be additional public assets within or close to the boundary which may not be shown on the public sewer plan if the property was built before 2011. Private sewers and lateral drains laid since 1st July 2011 will be transferred under a secondary scheme at a later date which is yet to be determined. The presence of public assets running within the boundary of the property may restrict further development. If there are any plans to develop the property further enquiries should be made to the sewerage undertaker's Build Over department. The sewerage undertaker has a legal right of access to carry out work on its assets, subject to notice. This may result in employees of the Company or its contractors needing to enter the property to carry out work.

Question 2.4.1 Q2.4.1

# Does the public sewer map indicate any public pumping station or any other ancillary apparatus within the boundaries of the property?

No

The public sewer map does not indicate a public pumping station or other ancillary apparatus within the boundaries of the property. However, as of 1st October 2016, any pumping station that was contructed prior to 1st July 2011 and serves more than one property will become the responsibility of the sewerage undertaker. Although the sewerage undertaker has no record of any pumping station at this property there may be pumping stations which meet the adoption criteria which they are not aware of and are not recorded on the public sewer map.

## **Guidance Notes**

The approximate boundary of the property has been determined by reference to the Ordnance Survey record. Please note that privately owned pumping stations built prior to 1st July 2011 which serve more than one property and pump to the existing public sewer are eligible for transfer into public ownership as of 1st October 2016. Pumping stations that serve a single property but sit outside the curtilage of that property will also be eligible for transfer. Please see Appendix 3 for further details. Any other ancillary apparatus is shown on the public sewer map and is referenced on the map key. A full glossary is also available on our website at www.severntrentsearches.com/glossary/



Question 2.5 Q2.5

# Does the public sewer map indicate any public sewer within 30.48 metres (100 feet) of any buildings within the property?

Yes

The public sewer map included indicates that there is a public foul sewer or public sewer asset within 30.48 metres (100 feet) of a building within the property.

#### **Guidance Notes**

The public sewer map shows the location of public sewers. Please note that from 1st October 2011, private sewers and lateral drains connected to the public network as of 1st July 2011 transferred into public ownership and from that date there may be public sewers closer to the property than those shown on the map. The presence of a public foul sewer within 30.48 metres (100 feet) of the building(s) within the property can result in the Local Authority requiring a property to be connected to the public foul sewer. The measure is estimated from the Ordnance Survey record, between the building(s) within the boundary of the property and the nearest public foul sewer.

Question 2.5.1 Q2.5.1

# Does the public sewer map indicate any public pumping station or any other ancillary apparatus within 50 metres of any buildings within the property?

No

The public sewer map does not indicate a public pumping station or other ancillary apparatus within 50m of a building within the property. However, following the transfer of some private pumping stations into public ownership, from 1st October 2016 there may be public pumping stations which are not marked on the public sewer map.

# **Guidance Notes**

The public sewer map shows the location of public pumping stations, pressurised mains and other ancillary apparatus. Please note that privately owned pumping stations built prior to 1st July 2011 which serve more than one property and pump to the existing public sewer are eligible for transfer into public ownership as of 1st October 2016. Pumping stations that serve a single property but sit outside the curtilage of that property will also be eligible for transfer. Pumping stations also have pressurised sewers associated with them and these may not be plotted on the public sewer map if the sewerage undertaker is unaware of the pumping station. The presence of a pumping station, pressurised rising main or other ancillary apparatus may restrict further development. Please see Appendix 3 for further details. Any other ancillary apparatus is shown on the public sewer map and is referenced on the map key. A full glossary is also available on our website at www.severntrentsearches.com/glossary/.



Question 2.6 Q2.6

Are any sewers or lateral drains serving, or which are proposed to serve the property, the subject of an existing adoption agreement or an application for such an agreement?

No

The property is part of an established development and is not subject to an adoption agreement.

#### **Guidance Notes**

The majority of private sewers and lateral drains subject to adoption agreements were transferred into public ownership from 1st October 2011 and there may therefore be additional public sewers other than those shown on the plan. Further details can be found in Appendix 2. Buyers should consult with the current owner to ascertain the extent of their liability for privately held assets.

Question 2.7 Q2.7

Has a Sewerage Undertaker approved or been consulted about any plans to erect a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain?

No

There are no records in relation to any approval or consultation about plans to erect a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain. However, the Sewerage Undertaker might not be aware of a building or extension on the property over or in the vicinity of a public sewer, disposal main or drain.

#### **Guidance Notes**

Buildings or extensions erected over a public sewer, disposal main or lateral drain in contravention of building controls or which conflict with the provisions of the Water Industry Act 1991, may have to be removed or altered. Please note that from 1st October 2011 the majority of private sewers and lateral drains connected to the public network as of 1st July 2011 transferred into public ownership and there may therefore be formerly private sewers and lateral drains which will have been built over. Please visit www.severntrentsearches.com/category/sewer-transfer for further information.





Question 2.8 Q2.8

# Is the building which is or forms part of the property at risk of internal flooding due to overloaded public sewers?

No

The property is not recorded as being at risk of internal flooding due to overloaded public sewers.

#### **Guidance Notes**

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 Sewerage Undertaker is required to include in the Regulatory Register that is reported annually to the Water Services Regulation Authority. 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 Sewerage Undertaker'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. Please note that from 1st October 2011 the majority of private sewers and lateral drains connected to the public network as of 1st July 2011 transferred into public ownership. Details of formerly private sewers at risk from internal flooding are not recorded in the Regulatory Register and will not be added until a flooding occurrence. There may therefore be public sewers at risk from internal flooding that are not recorded on the "At Risk" register.

Question 2.9 Q2.9

# Please state the distance from the property to the nearest boundary of the nearest sewage treatment works.

See Details

The nearest sewage treatment works is 4.593 KM to the South West of the property. The name of the nearest sewage treatment works is Netheridge.

### **Guidance Notes**

The nearest sewage treatment works will not always be the sewage treatment works serving the catchments within which the property is situated. The Sewerage Undertakers records were inspected to determine the nearest sewage treatment works. It should be noted therefore that there may be private sewage treatment works closer than the one detailed above that have not been identified.

Question 3.1 Q3.1

## Is the property connected to mains water supply?

Records indicate that the property is connected to mains water supply.

Yes



Question 3.2 Q3.2

# Are there any water mains, resource mains or discharge pipes within the boundaries of the property?

No

The map of waterworks does not indicate any water mains, resource mains or discharge pipes within the boundaries of the property.

#### **Guidance Notes**

The approximate boundary of the property has been determined by reference to the Ordnance Survey record. The presence of a public water main, resource main or discharge pipe within the boundary of the property may restrict further development within it. Water Undertakers have a statutory right of access to carry out work on their assets, subject to notice. This may result in employees of the Company or its contractors needing to enter the property to carry out work.

Question 3.3 Q3.3

Is any water main or service pipe serving, or which is proposed to serve the property, the subject of an existing adoption agreement or an application for such an agreement?

No

Records confirm that water mains or service pipes serving the property are not the subject of an existing adoption agreement or an application for such an agreement.

# **Guidance Notes**

Where the property is part of a very recent or ongoing development and the water mains and service pipes are not the subject of an adoption application, buyers should consult with the developer to confirm that the Water Undertaker will be asked to provide a water supply to the development or to ascertain the extent of any private water supply system for which they will hold maintenance and renewal liabilities.



Question 3.4 Q3.4

# Is the property at risk of receiving low water pressure or flow?

Records confirm that the property is not recorded on a register kept by the Water Undertaker as being at risk of receiving low water pressure or flow.

No

#### **Guidance Notes**

'Low water pressure' means water pressure below the regulatory reference level which is the minimum pressure when demand on the system is not abnormal. Water Undertakers are required to include in the Regulatory Register that is reported annually to the Water Services Regulation Authority properties receiving pressure below the reference level, provided that allowable exclusions do not apply (i.e. events which can cause pressure to temporarily fall below the reference level). Water Companies are required to include in the Regulatory Register that is reported annually to the Director General of Water Services properties receiving pressure below the reference level, provided that allowable exclusions do not apply (i.e. events which can cause pressure to temporarily fall below the reference level). The reference level of service is a flow of 9 litres/minute at a pressure of 10 metres head on the customer's side of the main stop tap (mst). The reference level of service must be applied on the customer's side of a meter or any other company fittings that are on the customer's side of the main stop tap. The reference level applies to a single property. Where more than one property is served by a common service pipe, the flow assumed in the reference level must be appropriately increased to take account of the total number of properties served. For two properties, a flow of 18 litres/minute at a pressure of 10 metres head on the customer's side of the mst is appropriate. For three or more properties the appropriate flow should be calculated from the standard loadings provided in BS806-3 or Institute of Plumbing handbook.Allowable exclusions: The Company is required to include in the Regulatory Register properties receiving pressure below the reference level, provided that allowable exclusions listed below do not apply. Abnormal demand: This exclusion is intended to cover abnormal peaks in demand and not the daily, weekly or monthly peaks in demand which are normally expected. Companies should exclude from the reported DG2 figures properties which are affected by low pressure only on those days with the highest peak demands. During the report year Companies may exclude, for each property, up to five days of low pressure caused by peak demand. Planned maintenance: Companies should not report under DG2 low pressures caused by planned maintenance. It is not intended that Companies identify the number of properties affected in each instance. However, Companies must maintain sufficiently accurate records to verify that low pressure incidents that are excluded from DG2 because of planned maintenance are actually caused by maintenance. One-off incidents: This exclusion covers a number of causes of low pressure, mains bursts, failures of Company equipment (such as PRVs or booster pumps), firefighting and action by a third party. However, if problems of this type affect a property frequently, they cannot be classed as one-off events and further investigation will be required before they can be excluded.



Question 3.5 Q3.5

# What is the classification of the water supply for the property?

The water supplied to the property has an average water hardness of 65.08 mg/l calcium which is defined as Moderately Hard by Severn Trent Water.

See Details

#### **Guidance Notes**

Neither hard nor soft water is considered to pose any risk to health. Hardness comes from naturally occurring calcium and magnesium mineral salts which are dissolved from the rocks through which rain water flows. Hardness is expressed as the equivalent amount of calcium carbonate in parts per million (mg/l). Hard water causes scaling in hot water systems, kettles, electric irons and domestic appliances. Scaling of heating elements may shorten their life and may make appliances less efficient. More information is available on the water undertaker's website.

Water hardness can be expressed in various indices for example the hardness settings for dishwashers are commonly expressed in Clark's degrees, but check with the manufacturer as there are also other units. The following table explains how to convert mg/l calcium and mg/l calcium carbonate classifications.

TO CONVERT FROM:	TO CLARK DEGREES	TO FRENCH DEGREES	TO GERMAN DEGREES
mg/l calcium	multiply by 0.18	multiply by 0.25	multiply by 0.14
mg/l calcium carbonate	multiply by 0.07	multiply by 0.10	multiply by 0.056

Question 3.6 Q3.6

# Is there a meter installed at this property?

Records indicate that there is a meter installed at this property.

Yes





Question 3.7 Q3.7

# Please include details of the location of any water meter serving the property.

Records indicate that the property is served by a water meter, which is located outside of the building which is or forms part of the property, and in particular is located;

See Details

EXTERNAL CHAMBER LHS ENT 50YDS R/O DEANS WAY, Meter Number:00495546, Size:15mm.

(Note: the meter location has been downloaded from the meter reader records and is provided as general guidance).

For further information regarding the water meter serving this property please contact:

Severn Trent Water PO Box 5310 Coventry CV3 6SD

Tel: 0345 7500 500 For Billing Enquiries only Tel: 0345 7090 646 For Metering Enquiries only Tel: 0115 971 3550 For Search Enquiries only

http://www.stwater.co.uk

#### **Guidance Notes**

The meter location has been downloaded directly from the water undertaker's records. These are entered on site by meter readers, and a number of abbreviations are used. A glossary of commonly used abbreviations is available on our website at www.severntrentsearches.com/meter-location-glossary

Question 4.1.1 Q4.1.1

# Who is responsible for providing the sewerage services for the property?

The Sewerage Undertakers for the area are:

See Answer

Severn Trent Water PO Box 5310 Coventry CV3 6SD

Tel: 0345 7500 500 For Billing Enquiries only Tel: 0345 7090 646 For Metering Enquiries only Tel: 0115 971 3550 For Search Enquiries only

http://www.stwater.co.uk



Question 4.1.2 Q4.1.2

# Who is responsible for providing the water services for the property?

The Water Undertakers for the area are:

See Answer

Severn Trent Water PO Box 5310 Coventry CV3 6SD

Tel: 0345 7500 500 For Billing Enquiries only Tel: 0345 7090 646 For Metering Enquiries only Tel: 0115 971 3550 For Search Enquiries only

http://www.stwater.co.uk

Question 4.2 Q4.2

# Who bills the property for sewerage services?

For details of who is currently billing the sewerage services for this property please contact the current owner. For a list of all potential retailers of sewerage services for the property please visit www.open-water.org.uk

See Details

Question 4.3 Q4.3

# Who bills the property for water services?

For details of who is currently billing the water services for this property please contact the current owner. For a list of all potential retailers of water services for the property please visit www.open-water.org.uk

See Details



Question 5.1 Q5.1

# Is there a Consent to discharge Trade Effluent under S118 of the Water Industry Act, 1991 into the public sewer?

No Consent

There is no Consent to Discharge Trade Effluent at this address. However, your client should be reminded that it is an offence under S129 of the Water Industry Act of Discharge Trade Effluent without Consent. If you have any queries please contact the sewerage undertaker.

#### **Guidance Notes**

Disputes between an occupier of a Trade Premises and the Sewerage Undertaker can be referred to the Director General of Water Services (OFWAT) on telephone number 0121 625 1300. Trade Effluent is defined by S141 of the Water Industry Act as "any liquid, with or without particles of matter in suspension in the liquid, which is wholly or in part produced in the course of any trade or industry carried on at trade premises" but does not include "domestic sewerage". As defined by the same Act as "any premises used or intended to be used for carrying on any trade or industry". Any Consent to Discharge Trade Effluent is used under S118 of the Water Industry Act 1991 and will be subject to certain conditions. Disputes between an occupier of a Trade Premises and the Sewerage Undertaker can be referred to the Director General of Water Service (OFWAT) on telephone number 0121 625 1300.

# **Glossary for Commercial Drainage and Water Search**

Definition of terms:

'the 1991 Act' means the Water Industry Act 1991;

'the 2000 Regulations' means the Water Supply (Water Quality) Regulations 2000;

'the 2001 Regulations' means the Water Supply (Water Quality) Regulations 2001;

'adoption agreement' means an agreement made or to be made under Section 51A(1) or 104(1) of the 1991 Act;

'bond' means a surety granted by a developer who is a party to an adoption agreement;

'bond waiver' means an agreement with a developer for the provision of a form of financial security as a substitute for a bond; 'calendar year' means the twelve months ending 31st December;

'discharge pipe' means a pipe which discharges are made or are to be made under Section 165(1) of the 1991 Act;

'disposal main' means (subject to section 219(2) of the 1991 Act) any outfall pipe or other pipe which - (a) is a pipe for the conveyance of effluent to or from any sewage disposal works, whether of a Sewerage Undertaker or of any other person; and (b) is not a public sewer;

'drain' means (subject to Section 219(2) of the 1991 Act) a drain used for the drainage of one building or of any buildings or yards appurtenant to buildings within the same curtilage;

'effluent' means any liquid, including particles of matter and other substance in suspension in the liquid;

'financial year' means the twelve months ending with 31st March;

'lateral drain' means - (a) that part of a drain which runs from the curtilage of a building (or buildings or yards within the same curtilage) to the sewer with which the drain communicates or is to communicate; or (b) (if different and the context so requires) the part of a drain identified in a declaration of vesting made under Section 102 of the 1991 Act or in an agreement made under Section 104 of that Act;

**'licensed water supplier'** means a company which is the holder for the time being of a water supply license under Section 17A(1) of the 1991 Act;

'maintenance period' means the period so specified in an adoption agreement as a period of time - (a) from the date of issue of a certificate by a Sewerage Undertaker to the effect that a developer has built (or substantially built) a private sewer or lateral drain to that Undertakers satisfaction; and (b) until the date that private sewer or lateral drain is vested in the Sewerage Undertaker:

'map of waterworks' means the map made available under Section 198(3) of the 1991 Act in relation to the information specified in subsection (1A);

'private sewer' means a pipe or pipes which drain foul or surface water, or both, from premises, and are not vested in a Sewerage Undertaker;

'public sewer' means, subject to Section 106(1A) of the 1991 Act, a sewer for the time being vested in a Sewerage Undertaker in its capacity as such, whether vested in that Undertaker - (a) by virtue of a scheme under Schedule 2 to the Water Act 1989; (b) by virtue of a scheme under Schedule 2 to the 1991 Act; (c) under Section 179 of the 1991 Act; or (d) otherwise;

'public sewer map' means the map made available under Section 199(5) of the 1991 Act;

**'resource main'** means (subject to Section 219(2) of the 1991 Act) any pipe, not being a trunk main, which is or is to be used for the purpose of- (a) conveying water from one source of supply to another, from a source of supply to a regulating reservoir or from a regulating reservoir to a source of supply; or (b) giving or taking a supply of water in bulk;

'sewerage services' includes the collection and disposal of foul and surface water and any other services which are required to be provided by a Sewerage Undertaker for the purpose of carrying out its functions;

**'Sewerage Undertaker'** means the company appointed to be the Sewerage Undertaker under Section 6(1) of the 1991 Act for the area in which the property is or will be situated;

'surface water' includes water from roofs and other impermeable surfaces within the curtilage of the property;

'trade effluent' any liquid, either with or without suspended particles, which is wholly or partly produced in the course of any trade or industry carried on at trade premises. It does not include domestic sewage.

'water main' means (subject to Section 219(2) of the 1991 Act) any pipe, not being a pipe for the time being vested in a person other than the Water Undertaker, which is used or to be used by a Water Undertaker or licensed water supplier for the purpose of making a general supply of water available to customers or potential customers of the Undertaker or supplier, as distinct from for the purpose of providing a supply to particular customers;

'water meter' means any apparatus for measuring or showing the volume of water supplied to, or of effluent discharged from any premises;

'water supplier' means the company supplying water in the water supply zone, whether a Water Undertaker or licensed water supplier;

'water supply zone' in relation to a calender year, means the names and areas designated by a Water Undertaker within its area of supply that are to be its water supply zones for that year;

'Water Undertaker' means the company appointed to be the Water Undertaker under Section 6(1) of the 1991 Act for the area in which the property is or will be situated.

In this Report, references to a pipe, including references to a main, a drain or a sewer, shall include references to a tunnel or conduit which serves or is to serve as the pipe in question and to any accessories for the pipe.

# **Explanation of the main Map Keys**

For an explanation of the full key, please visit <a href="www.severntrentsearches.com/glossary">www.severntrentsearches.com/glossary</a>

Water Record		
Distribution Main		A local water main that distributes water supplies to premises within a geographical area
Trunk Main		A water main that provides water supplies to distribution mains or transfers water between water sources, water treatment works and reservoirs
Abandoned Main	<del>&lt; × × ×</del>	A water main no longer in use that formerly supplied water and is still in existence
Aqueduct		A large diameter pipe that carries water from a water supply source to a water treatment works or reservoir
Protective Strip		A strip of land over the line of a water main within which no buildings should be placed or ground levels altered in order to protect the integrity of and access to the pipe
Discharge	-(	A point where water can be flushed from a water supply system into a watercourse
Fire Main		A pipe that supplies water into an area to enable connections to be made solely for the purpose of extinguishing fires
Water Facility Connection	Ø	Inlet to a water pumping facility or outlet from a water pumping facility

Sewer Record		
Public Combined Gravity Sewer	<b></b>	A public sewer that is in the ownership and control of the Sewerage Undertaker that drains by gravity and receives both foul and surface water flows from more than one property.
Public Foul Gravity Sewer	<b>&gt;&gt;</b> >	A public sewer that is in the ownership and control of the Sewerage Undertaker that drains by gravity and receives foul water flows from more than one property.
Public Surface Water Gravity Sewer	<b>▶</b> →- <b>▶</b>	A public sewer that is in the ownership and control of the Sewerage Undertaker that drains by gravity and receives surface water flows from more than one
Abandoned Gravity Sewer	<del>←× × ×</del>	A sewer no longer in use that formerly received drainage by gravity and is still in existence.
Combined Use Pressurised Sewer		A public sewer that is in the ownership and control of the Sewerage Undertaker through which both foul and surface water flows are pumped and receives drainage from more than one property
Foul Use Pressurised Sewer		A public sewer that is in the ownership and control of the Sewerage Undertaker through which foul water flows are pumped and receives drainage from more than one property.
Foul Use Manhole	•	A vertical access shaft from ground level to a foul sewer to allow cleaning, inspection, connections and repairs
Sewage Pumping Facility	•	This is usually an underground facility which may be accommodated in an above ground building and pumps from a low-lying area to a higher one. Foul sewage and/or surface water flows from a sewerage system by gravity into the pumping station and the flows are then pumped into another sewerage system or to a sewage works.

#### **Guidance Notes**

#### General protection of sewers and water mains

The Water Industry Act 1991 gives rights to the Water Companies in respect of pipes which are their responsibility but which are situated in private land. These rights which are usually in respect of sewers or water mains; permit the Water Company to carry out future works on such pipes such as general repair and maintenance.

## Permitted activities/uses within the strip of land above such pipes

This strip of land, generally known as 'the sterilized strip', has statutory protection and its width varies according to the size and depth of the pipe in question.

#### Acceptable:

- Use of the strip of land for agricultural or garden purposes or as an open space
- Placing of fences over the line of the pipe which are of an easily removable nature
- Placing of sewers, drains, cables or wires within the strip of land, subject to prior consultation
- · Construction of roads or access across the strip of land, subject to prior consultation

## Unacceptable:

- · Construction of any permanent building, wall or structure even for agricultural purposes or garden purpose expect in certain circumstances where our formal consent is given (please see below)
- · Use the strip of land for any purpose which may endanger or damage the pipe
- · Removal of any earth supporting the pipe
- · Planting of trees or shrubs within the strip of land
- · Alteration to the level of the strip of land whether by excavation or tipping of any materials
- · Covering any apparatus on the surface of the strip of land e.g. manholes, air valves etc
- · Making access to the pipe more difficult/expensive e.g. by special or ornamental surfacing

#### Building over public sewers

Severn Trent Water is responsible for public sewers within its area and many public sewers cross private land . The Company have to ensure that no development is carried out which may damage a public sewer, cause risk of flooding or restrict future access for maintenance

Wherever possible Severn Trent Water prefers to avoid the need to build over or close to a sewer by repositioning the proposed development or diverting the sewer. "Close to" is normally defined as being within 3 metres of the sewer. However, in some cases where the risk to the public sewer is small or can be reduced to acceptable levels and where diversion is not possible. Severn Trent may be willing to allow building over or close to a sewer.

Building close to or over a public sewer without having obtained our formal approval is illegal and it may also jeopardise the future sale of your property.

If you are unsure whether your building works affects a public sewer you can find out by calling the relevant office number,

	West Office	East Office
Areas Covered	Shropshire Staffordshire Worcestershire West Midlands (except Coventry) Chester Herefordshire	Nottinghamshire Derbyshire Leicestershire Warwickshire Coventry Lincolnshire Yorkshire Northamptonshire Cambridgeshire Oxfordshire
Telephone Number	01902 793 871	0116 2343 834
Opening Times	Mon-Thurs 08:00-17:00hrs Fri 08:30-16:30	Mon-Thurs 08:00-17:00hrs Fri 08:30-16:30
Postal Address	Severn Trent Water Ltd. Asset Protection West Regis Road Tettenhall Wolverhampton	Severn Trent Water Ltd. Asset Protection East Gorse Hill Anstey Leicester

# **Rights to discharge Trade Effluent**

All industrial waste waters (trade effluents) are subject to a discharge consent system under either the Water Resources Act 1991 or the Water Industry Act 1991.

Three categories of waste waters are can be discharged from commercial premises:

**Domestic Sewage** - effluent from staff toilets, wash hand basins, showers, and kitchen areas. This is also sometimes known as foul drainage and will usually be kept separate from the trade effluent whilst on the company site, although it is mixed once it reaches the main sewerage system. The charge for this is usually included as part of a water bill.

**Trade Effluent** - effluent from all processes on the site, including all rinse water, washing water and any other discharge related to the process (even if it is clean water). The local water company charge for this if it goes to sewer. Occasionally, effluent is discharged directly into a river or other water course: in this instance, the Environment Agency make a charge. Trade effluent is legally defined as "any liquid, either with or without suspended particles, which is wholly or partly produced in the course of any trade or industry carried on at trade premises". It does not include domestic sewage.

Rainwater - rainwater from roofs, carparks and other outside areas discharges into a surface drainage system. This is separate from the foul drainage system and is regulated by the Environment Agency rather than the water company. Rainwater is either channelled to surface drains located in roads adjacent to the property or is sometimes discharged directly to a river or stream. There is not normally a charge for discharge of rainwater, although companies do have a duty to ensure it is not contaminated by oils or any other substance.

## Consent to discharge

The Water Industry Act gives companies the right to discharge to a public sewer but only with the prior consent or agreement of the water company.

Water companies maintain the sewerage system, provide treatment for the waste, and dispose of the final treated effluent. To allow them to do this effectively, they can impose special restrictions on an effluent before allowing the discharge. These restrictions depend upon the type of treatment provided by the water company, the size of connecting sewers and the

- the nature or composition of the effluent
- the maximum daily volume allowed
- the maximum rate of flow
- the sewer into which the effluent is discharged.

capacity of the waste water treatment works (WWTW). They can also include:

A number of other factors may also be included in a consent to discharge, eg the temperature or pH of the effluent. Certain substances are prohibited from being disposed of in this way.

In addition to the type and quality of the effluent, the Water Industry Act also gives the water companies the right to charge for carrying, treating and disposing of the waste.

#### **Complaint Procedure**

Whilst Severn Trent Searches has made every effort to ensure the information contained in this Commercial Drainage and Water Search is accurate we do accept that on occasions, customers may not be happy and seek clarification or confirmation that our records are correct. For such instances, Severn Trent Searches has developed a set of minimum standards that would apply when dealing with customer enquiries and complaints. These are listed below.

## Severn Trent Searches: Commercial Drainage and Water Search Complaint Procedure

As a minimum standard Severn Trent Searches, PO Box 10155, Nottingham, NG1 9HQ.

We will endeavour to resolve any telephone contact or complaint at the time of the call, however, if that isn't possible, we will advise you on how soon we can respond. If you are not happy with our initial response, we will advise you to write in via email, fax or letter explaining the reasons why you are not satisfied.

We will investigate and research the matter in detail and provide a written response within 5 working days of receipt of your complaint.

Depending on the scale of investigation required, we will keep you informed of the progress and update you with new timescales if necessary.

If we find your complaint to be justified, or we have made any errors that change the outcome in your search result, we will automatically provide you with a revised search and also undertake the necessary action, as within our control, to put things right as soon as practically possible. Customers will be kept informed of the progress of any action required.

If the search takes us longer than 15 working days to complete and we have not communicated the reasons for the delay, we will provide the search free of charge.

A complaint will normally be dealt with fully within 20 working days of the date of its receipt. If there are valid reasons for the consideration taking longer, you will be kept fully informed in writing or via telephone or email as you prefer and receive a response at the very latest within 40 working days.

If you are still not satisfied with our response or action, we will refer the matter to a Senior Manager/ Company Director for resolution. At your request we will liaise with counseling organisations on your behalf.

Complaints should be sent to:

Customer Services Severn Trent Searches PO Box 10155 Nottingham NG1 9HQ



#### Private sewer transfer - notes for property owners and conveyancers

#### The transfer

The private sewer transfer occurred in October 2011, and was designed to bring the majority of private sewers in England and Wales into public ownership.

#### Drains, lateral drains and sewers - definitions

A drain is a disposal pipe serving a single property or properties (such as flats) within a single curtilage. A lateral drain is any section of that drain which extends beyond the curtilage of the property. A sewer is a disposal pipe serving two or more separate properties. Full legal definitions of these terms can be found in the glossary.

## Assets transferred into public ownership

The majority of all sewers and lateral drains that were connected to the public system prior to 1st July 2011 transferred into public ownership on 1st October 2011. Water companies were given five years to identify and adopt private pumping stations and associated apparatus, ending in October 2016.

#### Assets not transferred into public ownership

Some assets were excluded from the transfer, including:

Any assets not connected prior to 1st July 2011. These will transfer under a secondary scheme at a later date.

Drains within the boundary of the property they serve.

Sewers on Crown Land (such as prisons) where notice has been received from the relevant authority that the sewers should be exempt

Sewers owned by Railway Authorities.

Sewers and drains which do not discharge to the public system, such as Sustainable Drainage Systems.

Drainage systems contained within a single property curtilage (e.g. retail parks, caravan parks).

Private Pumping stations and associated pressurised mains which serve one property.

Sewers where the owner successfully appeals to OFWAT to retain ownership (see below).

Private treatment works, septic tanks and cesspits.

#### **Appeals**

Any owner of a private sewer, lateral drain or pumping station had the right to appeal of OFWAT to retain ownership. These had to be lodged before 30th September 2011\* OFWAT then determined whether the asset in question should be exempt from the transfer. During the appeal process, assets remained private.

\*Appeals process differs slightly for pumping stations, Visit OFWAT's website for more details (ofwat.gov.uk).

#### Procedures for new sewers

### The Flood and Water Management Act 2010

Once Section 42 of the Flood and Water Management Act 2010 comes into force, adoption of all new sewers which connect to the public network will be mandatory. A new national Mandatory Build Standard will also be introduced specifying the standards to which new sewers must be built.

## Issues for property owners

### Liability

Since the transfer, the majority of property owners have a greatly reduced liability for repairs to the drainage system. Should the search indicate the property is not connected to mains drainage or that there are no public assets nearby, it is recommended that further investigations be made into the drainage arrangements, as the property owner may have a substantial liability.

#### Sewers within property boundaries

The transfer resulted in a greater number of public sewers and lateral drains within property boundaries, many of which are not plotted on the Public Sewer Map. Property owners need to be aware that Severn Trent Water have statutory rights of access to land where their assets are located should they need to access the mains.

There are also formerly private sewers which have been built over without the Sewerage Undertaker's consent. Providing normal planning procedures were followed, this should not present any significant issues, although property owners need to be aware that the Sewerage Undertaker may need to access the sewer.

#### **Developing Properties**

Building over or close to a public asset requires consent from Severn Trent Water. This includes transferred private sewers and lateral drains within property boundaries. Full details can be found on the Severn Trent Water website. Should you wish to develop a property, Severn Trent Searches are able to arrange a survey of both private and public drainage systems. This survey meets the required standard to accompany an application to build over or close to a public sewer made to Severn Trent Water.

## What to do if there is a blockage in the Sewer within the property boundary

If there is a problem with a pipe within the property boundary, the occupier should call Severn Trent Water on 0800 783 4444. The Sewerage Undertaker will then decide whether this is a private matter or if they are responsible. The Sewerage Undertaker may charge the homeowner for clearing a blockage etc for which they are not responsible. Any works needed would be agreed beforehand.

#### Changes to Drainage and Water searches

#### Section 104 sites

The transfer applied to sites undergoing adoption under Section 104 of the Water Industry Act (1991). However, some assets on these sites, such as pumping stations, sewers connected after July 2011 and surface water sewers not connecting to the public system, were not included in the transfer. In these circumstances the search will continue to show a Section 104 agreement in place.

# Sewers and lateral drains within property boundaries

Because private sewers were not previously required to be recorded on the public sewer records there are circumstances when we are unable to confirm the location of transferred sewers. On these occasions, the CON29DW report will advise as to whether there is likely to be a public asset within the boundary.

#### Proximity of sewers to the property

The majority of properties - particularly within urban areas - will have public sewers within 100 feet (30.48 metres). In the case of transferred assets not being shown on public sewer record, there will be occasions when we are unable to confirm this. In these circumstances we will advise whether there are likely to be assets in close proximity to the property. The absence of nearby public sewers could result in a property owner having a substantial liability for repairs to the drainage system.

#### Building over public sewers

A number of formerly private sewers have been built over and are now the responsibility of Severn Trent Water. Although the search will highlight whether there has been a build over enquiry to Severn Trent Water, this will only apply to sewers which were public at the time of development.

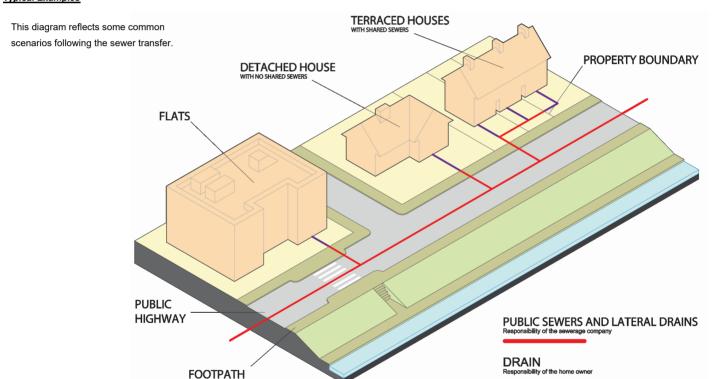
#### Sewer flooding

Whilst the search will still report the risk of sewer flooding to a property, following the transfer there is the possibility of sewer flooding from transferred sewers which will not have been previously recorded. The register will be updated as and when there is an occurrence.

#### **Pumping Stations**

The search indicates whether a transferred pumping station is located either within a property boundary, or within 50 metres of the property. Transferred pumping stations - which will not always have been built to Severn Trent Water's standards - initially require regular inspection and maintenance, which may prove disruptive. On occasion, there may be private pumping stations of which we are unaware. In these instances, please contact Severn Trent Water on 0800 783 444 or email privatepumpingstations@severntrent.co.uk

#### Typical Examples



#### **Terraced Properties**

It is common for terraced properties to have a public sewer passing within the property boundary. There are some exceptions, such as an end terrace upstream of neightbouring properties, as the section of drain will only serve that one property and so will remain private. Besides the situation shown in the diagram, a common alternative arrangement is for terraced houses to be served by a shared sewer to the rear which may also run in passageways between properties to join the main sewer in the highway.

## Semi-detached

The majority of semi-detached properties are connected to the public sewer via a shared connection. The section of drain which serves both properties is now public. Typically, the public sewer will be within the boundary of the property which is downstream on the drainage system as most sewers work on a gravity system.

#### **Detached Properties**

It is common for most detached properties to be connected to the public sewer via a direct connection. Therefore, for many detached properties it is unlikely that assets within the boundary of the property will have transferred. But the individual drainage arrangements at a specific property should be checked if details are required.

#### Flats/Apartments

Any shared drainage systems within a property curtilage remain private. This means with flats, only drains and sewers outside the boundary have transferred.

# Appendix 3

# COMMERCIAL STANDARD DRAINAGE AND WATER SEARCH TERMS & CONDITIONS

These Terms govern the basis on which the Report is supplied and the basis upon which the Customer and the Client have relied upon the Report.

#### Definitions

'Apparatus' means the sewers, disposal mains or lateral drains, water mains, resource mains or discharge pipes and associated infrastructure for which an Undertaker holds statutory responsibility under the Water Industry Act 1991 shown on the map attached to the Report:

'Client' means the person who is the intended recipient of the Report with an actual or potential interest in the Property.

'Company' means Severn Trent Property Solutions, the company producing the Report.

'Customer' means the person placing the Order, either on its own behalf as Client, or, as an agent for or a reseller to a Client.

'Order' means any request completed by the Customer requesting the Report in accordance with the Company's order procedure.

'Report' means the drainage and/or water report prepared by the Company in respect of the Property.

'Partner Undertakers' means Severn Trent Water Ltd, Hafren Dyfrdwy Ltd or South Staffordshire Water Plc. 'Person' means any individual, firm, body corporate, unincorporated association or partnership.

Property' means the address or location supplied by the Customer in the Order which satisfies one or more of the requirements set out in paragraph 2.1.

'Purpose' shall have the meaning set out in paragraph 2.2.

'Terms' means these Commercial Standard Drainage and Water Search Terms and Conditions.

'Third Party Undertaker' means any Undertaker other than a Partner Undertaker

'Undertaker' means a Sewerage and/or Water Undertaker (both as defined in the Water Industry Act 1991) providing water and sewerage services.

# 1. Agreement

- 1.1 The Company agrees to supply the Report to the Customer and, if applicable, the Customer shall provide the Report to the Client, subject to these Terms to the exclusion of all other terms and conditions including any terms and conditions which the Customer and/or Client purports to apply under any Order, confirmation of Order or any other document. The scope and limitations of the Report are described in paragraph 2 of these Terms
- 1.2 Where the Customer is not the Client, then the Customer shall ensure that these Terms are brought to the attention of the Client on or prior to the Customer placing the Order and that the Terms are provided with any copy of the Report provided by the Customer to the Client. The Customer is responsible for making sure that the Client is aware of the limitations and exclusions that are contained in these Terms and must draw the Client's attention to any disclaimers set out in the Report.
- 1.3 The Customer agrees that the placing of an Order for a Report indicates its acceptance of these Terms.
  1.4 Where the Customer is placing an Order on behalf of a Client, it warrants and represents to the Company that it is authorised to accept these Terms on behalf of the Client and to bind the Client to these Terms.

#### 2. The Report

- 2.1 This report should only be used for individual property transactions where the search area is less than 1 hectare, and the intended use of the property is:
- 2.1.1. not as a single, residential, domestic property: or
- 2.1.2. not land or buildings being, or to be developed as a single, residential, domestic property
- 2.2 The Report is produced solely for use by the Client for the intended purpose of the Report (the "Purpose"). The Purpose is the identification of the location and connection of existing drainage (save that which is identified in clause 2.3.7) and/or water services at the Property in relation to the individual commercial property transaction in respect of the Property which is in the contemplation of the Client at the time of ordering the Report the Company shall not be liable in any circumstances in connection with the Report if it is used for any other purpose.
- 2.3 Whilst the Company will use its reasonable care and skill in producing the Report, it is provided to the Customer on the basis that the Customer and the Client acknowledge and agree to the following:-
- 2.3.1 the information contained in the Report details only the location and connection of existing drainage and/or water services at the Property at the date stated in the Report;
- 2.3.2 the Company's obligation in respect of the Report is to correctly reproduce and compile the information provided by the Partner Undertakers and any Third Party Information (in accordance with paragraph 3.5);
- 2.3.3 the Report does not give details about the actual state or condition of the Property or the existing drainage and/or water services nor should it be used or taken to indicate actual suitability or unsuitability of the Property for any particular purpose, or relied upon for determining saleability or value, or used as a substitute for any physical investigation or inspection. Further advice and information from appropriate experts and professionals should always be obtained if the Customer or the Client requires;
- 2.3.4 the information contained in the Report is dependent upon the accuracy of the information supplied by the Customer or Client including, but not limited to the address of the Property and any plan of the Property;
- 2.3.5 the statements in the Report marked as 'Guidance Notes' are intended to be general statements and advice in addition to the report on the Property. The Company cannot ensure that any such guidance notes are accurate, complete or valid and accepts no liability for such general statements and advice provided; and
- 2.3.6 the position and depth of any Apparatus shown on any maps attached to the Report is approximate, and is intended as a general guide only and no warranty as to its correctness is given or implied and the Company shall have no liability for any inaccuracy in respect of the position of the Apparatus shown on any map. The exact positions and depths should be obtained by excavation trial holes and the maps must not be relied on in the event of excavation or other works made in the vicinity of the Apparatus.
- 2.3.7 subject to the terms of this agreement, the Company is not liable to the Customer or the Client where the report does not provide details about the private sewers, drains, lateral drains, pumping stations and any associated apparatus that have transferred into the Undertaker and/or Partnership Undertaker's and/or the Third Party Undertaker's ownership as a direct result of the 'The Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011' and which are not shown on the public sewer record at the point at which the search was completed.
- 2.4 The Client and/or Customer shall notify the Company as soon as is practicable if it becomes aware of any defect or inaccuracy in the Report.

# 3. Limitation of Liability

- 3.1 The Company does not exclude its liability (if any) to the Customer and/or the Client:
- 3.1.1 for personal injury or death resulting from the Company's negligence;
- 3.1.2 for any matter for which it would be illegal for the Company to exclude or to attempt to exclude its liability; or
- **3.1.3** for fraud.
- 3.2 Subject to paragraph 3.1 the Company accepts no responsibility for and excludes its liability (whether for breach of contract, negligence or any other tort, under statute or statutory duty, restitution or otherwise at all) for.
- **3.2.1** any inaccuracy or error in the Report based on incomplete or inaccurate information supplied by the Customer and/or the Client;
- 3.2.2 any use of the Report by the Customer for any purpose other than the Purpose;
- 3.2.3 any inaccuracy or error in information provided by any Third Party Undertaker;
- 3.2.4 any error in a Report, which is based on any error or inaccuracy in a public register; or
- 3.2.5 any change in the location and connection of existing drainage and/or water services at the Property after the date stated in the Report.

- 3.3 Except as provided in paragraph 3.1 and paragraph 3.4 the Company's entire liability in respect of all causes of action arising by reason of or in connection with the Report (whether for breach of contract, negligence or any other tort, under statute or statutory duty or restitution or otherwise at all) shall not exceed 65 non non.
- 3.4 Except as provided in paragraph 3.1, the Company will be under no liability to the Customer and/or the Client whatsoever (whether in contract, tort (including negligence), breach of statutory duty, restitution or otherwise) for any indirect or consequential loss (both of which terms include, without limitation, pure economic loss, loss of profits, loss of business, depletion of goodwill and like loss) howsoever caused arising out of or in connection with these Terms and/or the provision of the Report.
- 3.5 Except as set out in paragraph 3.1, the Company hereby excludes to the fullest extent permissible in law, all conditions, warranties and stipulations, express (other than those set out in these Terms) or implied, statutory, customary or otherwise which, but for such exclusion, would or might subsist in favour of the Customer and/or the Client.
- 3.6 The Company shall not be in breach of these Terms or otherwise liable to the Customer and/or the Client for any failure to provide or delay in providing the Report to the extent that such failure or delay is due to a event or circumstance beyond the reasonable control of the Company including but not limited to any delay, failure of or defect in any machine, processing system or transmission link or any failure or default of a supplier or sub-contractor of the Company or any provider of any third party Information except to the extent that such failure or delay is caused by the negligence of the Company.
- 3.7 Where the Customer sells this Report to a Client under its own name or as a reseller of the Company (other than in the case of a bona fide legal adviser recharging the cost of the Report as a disbursement) the Company shall not in any circumstances (whether for breach of contract, negligence or any other tort, under statute or statutory duty, restitution or otherwise at all) be liable to the Customer for any loss (whether direct, indirect or consequential loss (all three of which terms include without limitation, pure economic loss, loss of profit, loss of business, depletion of goodwill and like loss)) or damage whatsoever caused in respect of the Report or any use of the Report or reliance placed upon it and the Customer shall indemnify and keep indemnified the Company in respect of any claim by the Client that the Company may incur or suffer.
  3.8 Where the Property falls within a geographical area where two or more different Undertakers provide
- water and sewerage services, the Company shall use extracts from reports provided by Third Party
  Undertakers in respect of the part of the Property that falls within the provision of services by Third Party
  Undertakers and such information shall not be produced specifically for the Company ("Third Party
  Undertakers and such information shall not be produced specifically for the Company ("Third Party
  Information"). Liability for accuracy of the Third Party Information used for the purpose of the Report will
  remain with that Third Party Undertaker and is subject to the Third Party Undertakers' terms and conditions of
  supply of such reports. The Company gives no warranty as to the correctness, accuracy or completeness of
  the Third Party Information and provided that the Company reproduces the Third Party Information in the
  Report correctly, the Company excludes all liability (whether for breach of contract, negligence or any other
  tort, under statute or statutory duty, restitution or otherwise) for any Third Party Information.
- 3.9 If the Customer and/or Client is acting as a consumer in purchasing the Report, then in respect of the party dealing as a consumer (the "Consumer"), the provisions of paragraphs, 3.3 to 3.5 shall not be deemed to apply and subject to paragraph 3.1, the Company shall only be liable to the Consumer for losses which the Consumer suffers as a result of the Company not providing the Report in accordance with these Terms. The Company is not responsible to the Consumer for any losses which it may incur which were not a foreseeable consequence of the Company breaching these Terms, including if the Consumer and the Company could not have contemplated those losses before or when the parties entered into these Terms. The Company's liability to the Consumer shall not in any circumstances include any business losses that it may incur, including but not limited to lost data, lost profits or business interruption.

#### 4. Copyright and Confidentiality

- 4.1 The Customer acknowledges and where the Customer is not the Client, the Customer shall procure that the Client acknowledges that the Report is confidential to the Customer and/or the Client and may only be used by the Customer and/or the Client for the Purpose and the proper performance of these Terms.
- 4.2 The copyright and any other intellectual property rights in the Report shall remain the property of the Company. No intellectual or other property rights are transferred or licensed to the Customer or the Client except to the extent expressly provided in these Terms. The maps contained in the Report are protected by Crown Copyright and must not be used for any purpose not anticipated by the Report.
- 4.3 The Customer and the Client are entitled to make copies of the Report for the Purpose but may only copy Ordnance Survey mapping or data contained in or attached to the Report if it has an appropriate licence from the originating source of that mapping or data.
- 4.4 The Customer agrees and where the Customer is not the Client, the Customer shall procure that the Client agrees, (in respect of both the original and any copies made) to respect and not to alter any trademark, copyright notice or other property marking which appears on the Report.
- 4.5 The Customer agrees and where the Customer is not the Client, the Customer shall procure that the Client agrees to indemnify and keep indemnified the Company against any losses, costs, claims and damage suffered by the Company as a result of any breach by either of them of the terms of paragraphs 4.1 to 4.4 inclusive.
- 4.6 The obligation to procure the compliance of the Client to the obligations set out in this paragraph 4 and in paragraph 6.5 shall not apply to Customers who are bona fide legal advisers recharging the cost of the Report to the Client as a disbursement.

## 5. Payment

- 5.1 Unless otherwise stated all prices are inclusive of VAT. The Customer shall pay the price of the Report specified by the Company, without any set off, deduction or counterclaim. Unless the Customer or Client has an account with the Company for payment for Reports, the Company must receive payments for Reports in full before the Report is produced. For Customers or Clients with accounts, payment terms will be as agreed with the Company.
- 5.2 Where the Property has two or more separate metered or un-metered water supplies, additional fees may be charged as notified to the Customer by the Company.

### 6. General

- 6.1 If any provision of these Terms is or becomes invalid or unenforceable, it will be taken to be removed from the rest of these terms to the extent that it is invalid or unenforceable. No other provision of these terms shall be affected.
- **6.2** Any failure by the Company to enforce any breach of the Terms shall not be deemed to be a waiver of any future breach of the Terms by the Customer or Client.
- **6.3** These Terms shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts.
- **6.4** Nothing in these Terms shall in any way restrict the Customer or Client's statutory or any other rights of access to the information contained in the Report.
- 6.5 The Company and the Customer agree and where the Customer is not the Client, the Customer shall procure that the Client agrees that these Terms contain all the terms which the Company and the Customer and/or the Client have agreed in relation to the subject matter of these Terms and supersede any prior written or oral agreements, representations or understandings between any of them in relation to such subject matter. Nothing in this paragraph 6.5 will exclude any liability which one party would otherwise have to another party in respect of any statements made fraudulently.
- 6.6 The Company may assign, delegate, licence, hold on trust or sub-contract all or any part of its rights and obligations under these Terms.

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# ARBORICULTURAL SURVEY, IMPACT ASSESSMENT AND TREE PROTECTION DETAILS



DEMOLITION OF EXISTING BUILDINGS
TO REPLACE WITH NEW MODERN
COMMERCIAL BUILDING

At:

For:

2 ST OSWALD'S ROAD, GLOUCESTER

MHP ref: 21040\_2 ST OSWALDS ROAD, GLOUCESTER\_TS AIA TPP\_V1







Arboricultural Survey, Impact Assessment and Tree Protection Details Instructed by Walden and Fletcher 2 St Oswald's Road, Gloucester

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# Issue record

Date	Version	Notes
23.03.2021	V1	Initial issue



# 1 INTRODUCTION

## 1.1 Introduction

- 1.1.1 My name is Matt Reid. I am a chartered arboriculturist with over 20 years industry experience. I hold the Level 6 Diploma in Arboriculture (ABC Awards) as well as other technical and trade level qualifications. I am a professional member of both the Arboricultural Association and of the Institute of Chartered Foresters.
- 1.1.2 I have worked in the arboricultural industry since 1999. My initial trade and professional experience comprised six years as an arboricultural contractor and climbing arborist. Following this I spent seven years as a local government tree officer. Since 2012 I have worked in private practice as an arboricultural consultant specialising in planning related matters and tree risk management.

# 1.2 Background

1.2.1 An application for planning permission is to be submitted for demolition of existing structures and erection of a new commercial building at 2 St Oswald's Road, Gloucester; hereafter referred to as 'the site'.

# 1.3 Instruction and scope

- 1.3.1 I am instructed by Walden and Fletcher to visit the site and to carry out an assessment of arboricultural features in accordance with British Standards (BS) 5837:2012 'Trees in Relation to Design Demolition and Construction Recommendations'.
- 1.3.2 I am to prepare the following information in relation to the proposals:
  - Tree survey in accordance with BS5837:2012.
  - Arboricultural Impacts Assessment.
  - Tree Protection Details.



## 2 GENERAL

# 2.1 Statutory tree protection and other designations

2.1.1 I have carried out the following desk-based tree-related constraints checks in relation to the site and the adjacent land.

	General summary information	Relevant to site?
Conservation Area <sup>1</sup>	<ul> <li>All trees with a trunk diameter greater than 75mm at 1.5m height are protected in the same way as for TPO (see below).</li> <li>Six weeks' notice must be given to the Local Planning Authority (LPA) prior to carrying out any tree works so that possible requirement for TPO can be assessed.</li> </ul>	No
Tree Preservation Order (TPO) <sup>2</sup>	<ul> <li>It is an offence to cut down, uproot, top or lop, wilfully damage or wilfully destroy relevant trees or woodlands.</li> <li>Formal permission must be applied for (and granted) by the LPA before carrying out tree works.</li> <li>Penalties of up to £20K (Magistrates Court) or unlimited fine (Crown Court).</li> </ul>	No
Timber volume	<ul> <li>Forestry Act 1967 limits felling of volumes of timber in any calendar quarter to 5 cubic metres (m³) unless a Felling Licence has been issued by the Forestry Commission.</li> <li>Any felling beyond this threshold may result in prosecution and/or issue of a Restocking Notice</li> </ul>	Yes
Ancient woodland <sup>3</sup>	Ancient Woodland is broadly defined as land that has been continuously wooded since 1600AD. It is irreplaceable habitat and is afforded a high level of protection by the National Planning Policy Framework (NPPF).	No
Ancient/veteran trees <sup>4</sup>	<ul> <li>Broadly defined as trees that are old for their species that have biodiversity, cultural and heritage value.</li> <li>Like ancient woodland such trees are irreplaceable habitats and are afforded a high level of protection by the National Planning Policy Framework (NPPF).</li> </ul>	No

Note: specific exceptions and exemptions do apply in relation to the summary information above. Where relevant these are highlighted in the following paragraphs.

<sup>&</sup>lt;sup>1</sup> Email communication Thu 18/03/2021 17:55.

<sup>&</sup>lt;sup>2</sup> Email communication Thu 18/03/2021 17:55.

<sup>&</sup>lt;sup>3</sup> https://magic.defra.gov.uk/magicmap.aspx Accessed 18.03.2021

<sup>&</sup>lt;sup>4</sup> https://ati.woodlandtrust.org.uk/ Accessed 18.03.2021



## 2.2 Limitations

- 2.2.1 I have been unable to access or clearly observe the whole of the base of the trunk of the subject tree due to large amounts of piled materials. My assessment of the tree is limited in this respect.
- 2.2.2 Trees are living organisms and self-supporting dynamic structures. Their physiological and structural condition can change rapidly in response to a wide range of biotic/abiotic factors. As such, the findings and recommendations of my tree survey are limited to 24 months from the date of my site visit.

# 2.3 Wildlife informative

- 2.3.1 Tree works should not be carried out until a reasonably detailed inspection of relevant trees has been carried out to determine if bat roosts and/or bird nests are present.
- 2.3.2 It is a criminal offence to intentionally damage/destroy the nest of any wild bird while it is in use or being built. Similarly it is an offence to intentionally/recklessly disturb roosting bats or to damage or destroy a bat roost.
- 2.3.3 The Arboricultural Association publishes useful advice in relation to trees and nesting birds<sup>5</sup>.

  Helpful advice with regards to bats and tree work is published by the UK Government<sup>6</sup>, the Arboricultural Association<sup>7</sup> and The Bat Conservation Trust<sup>8</sup>.

<sup>&</sup>lt;sup>5</sup> https://www.trees.org.uk/Help-Advice/Public/When-is-the-bird-nest-season

<sup>&</sup>lt;sup>6</sup> https://www.gov.uk/guidance/bats-protection-surveys-and-licences

<sup>&</sup>lt;sup>7</sup> https://www.trees.org.uk/Help-Advice/Public/Bats-and-trees-Who-does-what-where

<sup>8</sup> https://www.bats.org.uk/about-bats/where-do-bats-live/bat-roosts/roosts-in-trees



Arboricultural Survey, Impact Assessment and Tree Protection Details Instructed by Walden and Fletcher 2 St Oswald's Road, Gloucester

# 3 ARBORICULTURAL SURVEY

# 3.1 Site visit

3.1.1 I visited the site on 9 March 2021.

# 3.2 Findings

- 3.2.1 My findings are set out within the survey schedule at **Appendix 1**. They relate on a mature London plane tree that is situated to the west of the north-western corner of the site and on the boundary between the highway verge and an allotment.
- 3.2.2 The tree is prominent, clearly visible to the public and makes a positive contribution to the streetscene.



## TREE CONSTRAINTS AND DESIGN ADVICE

#### **Tree Quality Assessment** 4.1

4.1.1 Surveyed trees are represented using colour coding to indicate their quality and thereby suitability for retention. The quality assessment is as follows:

Quality grade	Definition
A	Green: high quality with estimated remaining life expectancy of at least 40 years.
В	Blue: moderate quality with estimated remaining life expectancy of at least 20 years
С	Grey: low quality with estimated remaining life expectancy of at least 10 years
U	Red - unsuitable for retention. Cannot realistically be retained for longer than 10 years

#### **Below Ground Constraints** 4.2

- 4.2.1 In accordance with BS5837:2012, below ground constraints, or Root Protection Areas (RPAs), for the surveyed trees are plotted onto the Tree Survey and Constraints Plan. These are represented as a circle with a broken red line centred on the base of each tree stem with a radius of 12 times stem diameter (measured at 1.5m above ground level.
- 4.2.2 BS5837:2012, a root protection area (RPA) is defined as "a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure should be treated as a priority". "The default position [when considering design layout in relation to RPAs] should be that structures are located outside the RPAs of trees to be retained".
- 4.2.3 Root systems can be damaged in several ways:



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- Root severance.
- Soil compaction.
- Contamination by spilled materials eg cement/diesel.

# 4.3 Above Ground Constraints

- 4.3.1 Above ground constraints posed by trees describe the capacity for trees to have an overbearing or dominating effect on new residential developments; usually post occupancy.
- 4.3.2 Typical above ground constraints include a number or combination of inconveniences including shading, branch spread, perceived fear of tree failure during strong winds and so on. If not adequately considered, above ground constraints can lead to repeated future requests to fell or heavily prune retained and protected trees.
- 4.3.3 The above ground parts of trees can be damaged in several ways:
  - Impact damage through contact with construction site plant.
  - Inappropriate pruning.
  - Other factors, for example, heat damage caused by bonfires.



# 5 ARBORICULTURAL IMPACT ASSESSMENT (AIA) & TREE PROTECTION PLAN (TPP)

# 5.1 Arboricultural Impact Assessment

- 5.1.1 Although the plane tree is located offsite, its RPA extends across the boundary and into the site
- 5.1.2 This means that there is potential for its encroaching roots to be damaged by demolition and construction activities.
- 5.1.3 In my opinion, however, provided that the existing hard surface is taken up in a controlled way, and that the ground is then protected using a proprietary cellular confinement system to prevent soil compaction and/or contamination the proposals can be achieved without resulting in significant harm to the tree.

# 5.2 Tree Protection and Arboricultural Method Statement Plan

- 5.2.1 This plan is at **Appendix 2**. **It** demonstrates that the proposals are feasible by showing how the plane tree can be effectively retained without harm. Locations and specifications of tree protection barriers and cellular confinement surfacing are provided.
- 5.2.2 The plan also contains a Method Statement for the management of tree protection during the proposals. This plan can be referred to by the Site Manager throughout the processes of demolition and construction.



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# 7 CONCLUSION

- 7.1.1 I conclude that the development proposals are feasible from an arboricultural perspective for the following key reasons:
  - No trees shall be removed to enable the construction of the proposals.
  - Tree protection measures can be implemented to ensure that construction works do not result in damage to the retained tree.
  - The large, prominent offsite plane tree will be retained as an important public visual amenity.



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# APPENDIX 1 - TREE SURVEY SCHEDULE



# TREES

Ref	Common name	Height (m)	Est	Stem dia (mm)	Est	N	Est	E	Est	S	Est	w	Est	Estimated first branch height (m)	1st branch direction	Estimated canopy height (m)	Life stage	Special status	General observations & management recommendations	Struct. cond.	Phys. cond.	ULE	Quality grading	RPA radius (m)	RPA area (m2)	TPO
T1	London plane	23	-	1700	-	10	#	11	#	8	#	11	#	4	E	5	М	None	Offsite tree possibly owned by county highways. Ivy on trunk and up into central crown.  Probably a lapsed former pollard.  A prominent tree in the street scene. Recommend remove all ivy.	Fair	Good	20+	B1	15	707	None

# KEY

Assessment criteria	Description
Reference number on plan	T: Tree, G: Group, W: Woodland, H: Hedgerow. This reference is recorded on the Tree Survey and Constraints Plan against the relevant survey item.
Common name (Scientific name)	Common names: normal type. Scientific names where required: italic type in brackets
Heights	Unit: metres (m). Recorded to the nearest half metre for heights upto 10m and to the nearest whole metre for heights above 10m.
Stem diameter	Unit: millimetres (mm). Rounded to the nearest 10mm. Single and multi-stemmed trees are measured at 1.5m above highest ground level or otherwise as in accordance with Annex C, BS5837:2012.
Estimates	Measured tree dimensions are identified by an '-' in the adjacent 'Estimate' column. Where dimensions have been estimated (offsite, or otherwise inaccessible survey items) this is clearly identified by a '#' in the adjacent 'Estimate' column.
Crown spread	Unit: metres (m). Directions refer to the four compass points (north, east, south, west). Dimensions are rounded-up to the nearest half metre for heights up to 10m and to the nearest whole metre for heights above 10m.
Estimated average lateral spread	Unit: metres (m). For hedgerows only. An estimate of the average width between branch tips.
Crown clearance height	<ul> <li>Unit: metres (m). The existing height above ground level of:</li> <li>First significant branch and the compass direction of its growth: North (N), North-east (NE), East (E), South-east (SE) etc.</li> <li>Canopy (height between branch tips and ground level).</li> </ul>
Life stage	Y – young (stake dependent), SM - Semi-Mature (still capable of being transplanted without preparation, up to 30cm girth and not yet sexually mature), EM – Early Mature (not yet having reached 75% of expected mature size), M – Mature (anything else up to normal life expectancy for the species), OM – Over Mature (anything beyond mature and in natural decline), V – Veteran, A - Ancient (any tree displaying characteristics described by the Ancient Tree Forum and referenced by Natural England).
Special status	<ul> <li>None</li> <li>Veteran: any tree judged to meet criteria as defined by the Ancient Tree Forum</li> <li>Ancient: any tree judged to meet criteria as defined by the Ancient Tree Forum1</li> </ul>
General observations and preliminary management recommendations	General observations are recorded in relation to a survey item's structural and/or physiological condition (eg the presence of any decay and physical defect) and /or any preliminary management recommendations that may be appropriate.
Structural condition	<ul> <li>Good: without any observable significant biomechnical structural weaknesses</li> <li>Fair: with minor biomechanical structural flaws. Some remedial action may be required</li> <li>Poor:with significant biomechanical weaknesses requiring intervention particularly where risk management is required.</li> </ul>

<sup>&</sup>lt;sup>1</sup> LONSDALE, D. (Ed). Ancient and other veteran trees: further guidance on management. The Tree Council. London. 2013.



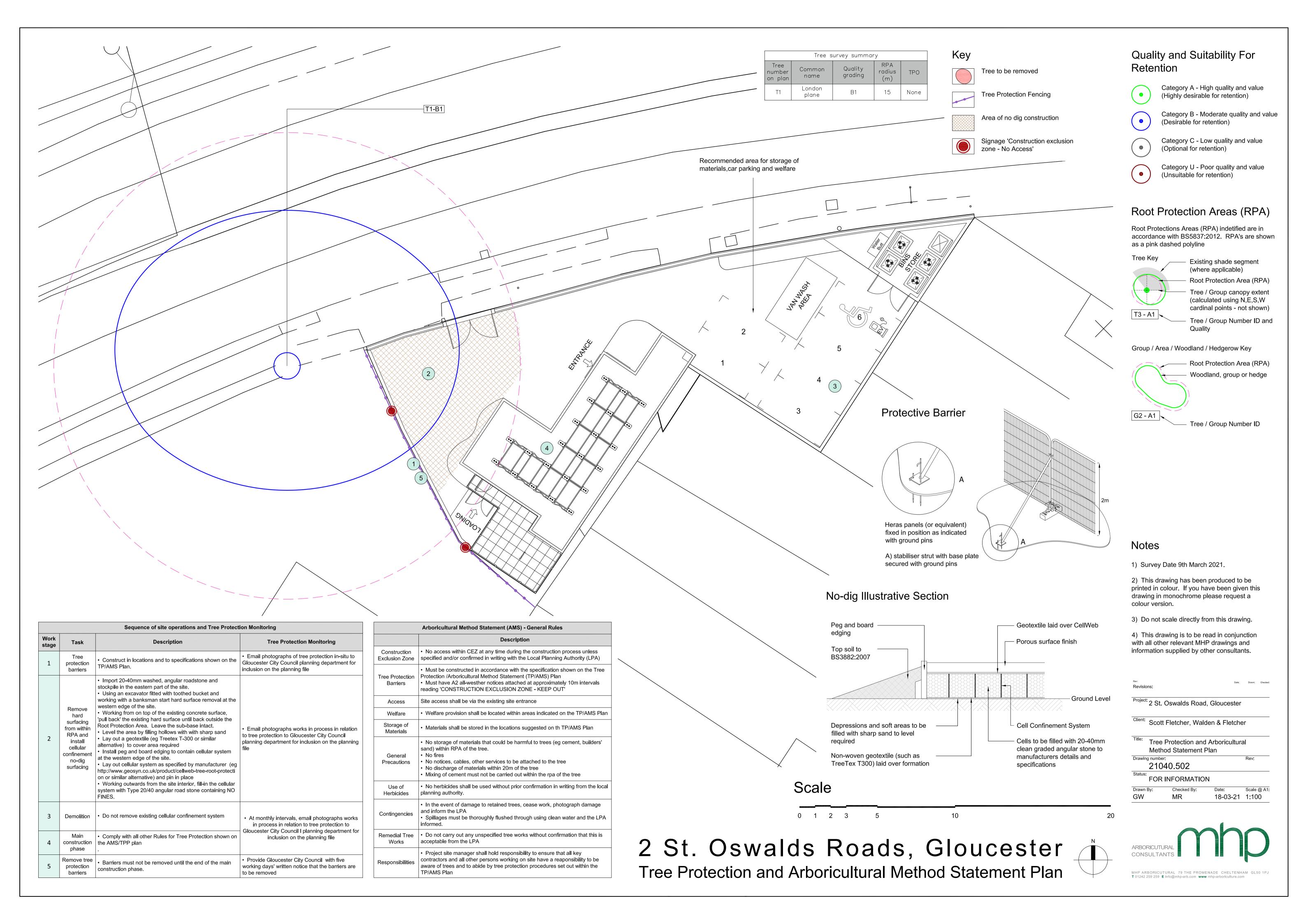
Arboricultural Survey, Impact Assessment and Tree Protection Details Instructed by Walden and Fletcher 2 St Oswalds Road, Gloucester

Assessment criteria	Description
	Good: no indications of impaired physiological function and in optimum condition for age and species
Physiological condition	Fair: with indicators of reduced vitality. Some intervention may be required
	Poor: with significantly impaired physiological function for age and species
Remaining contribution	Useful life expectancy, or the length of time a tree's is estimated to be able to make a useful contribution, is expressed in years as: <10, 10+, 20+, 40+.
	Assessed in accordance with Table 1, BS5837:2012. Colours relate to depiction on the Tree Constraints Plan.
	Category A (Green) Trees of high quality with an estimated remaining life expectancy of 40 years
	Category B (Blue) Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
Quality grading	Category C (Grey) Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.
	• Category U (Red) Unsuitable for retention. Trees in such a poor condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.
	Note - A, B and C trees are also given a sub-category of 1, 2 or 3 which reflects their arboricultural, landscape or cultural and conservation values respectively. Each subcategory has an equal weight, for
	example an A1 tree has the same retention priority as an A3 tree. More than one sub-category may be applied to a survey item as appropriate.
RPA radius	Root Protection Area (RPA): a layout design tool. Unit: metres (m). Radial distance from tree centre to define a circle that indicates on the Tree Survey Plan the minimum rooting area required to
RPA Idulus	maintain tree's viability. Calculated in accordance with Annex D, BS5837:2012
RPA area	Unit: square metres (m <sup>2</sup> ). The area of the RPA radius circle described above. Applies only to individual trees.



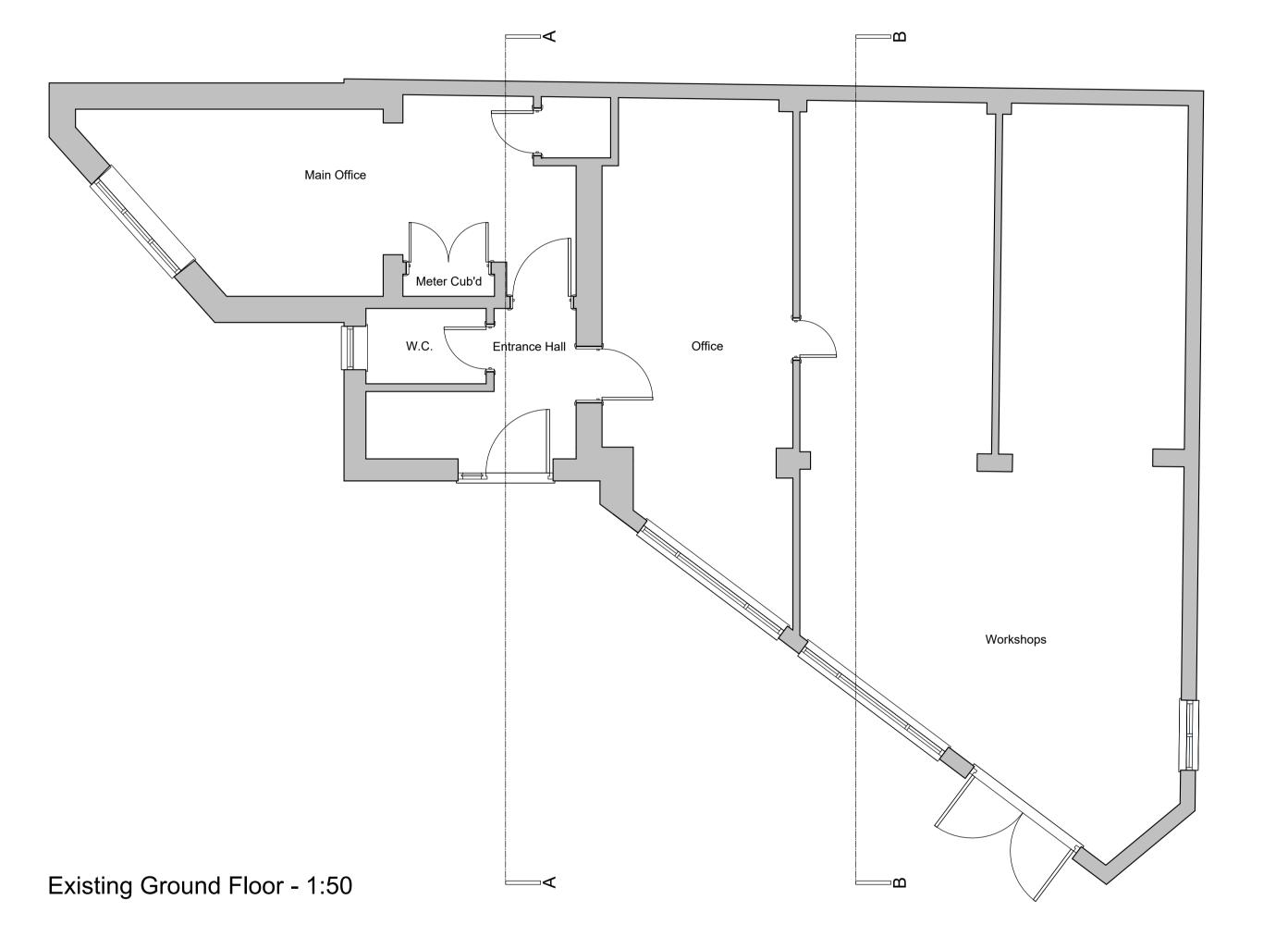
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# APPENDIX 2 - TREE PROTECTION AND ARBORICULTURAL METHOD STATEMENT PLAN











RES Architecture Ltd Unit 19.0 Highnam Business Centre Highnam Gloucester GL2 8DN

REV	DESCRIPTION	DATE
-	-	-
1 1	I .	1

PROJECT
Walden & Fletcher Electrical
Contractors LTD
2 St Oswalds Road Gloucester
Gloucestershire GL1 2SF

DRAWING

**Existing Floor Plans** 

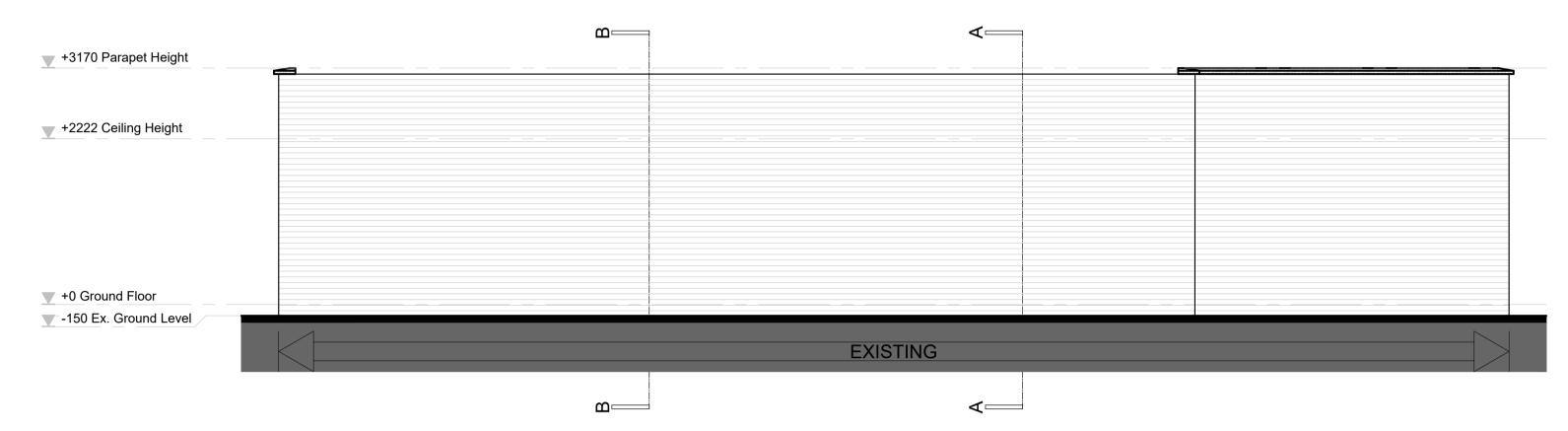
PROJECT NO ARC.1485
DATE 12.10.2020
DRAWN BY LL
CHECKED BY KL

PL01

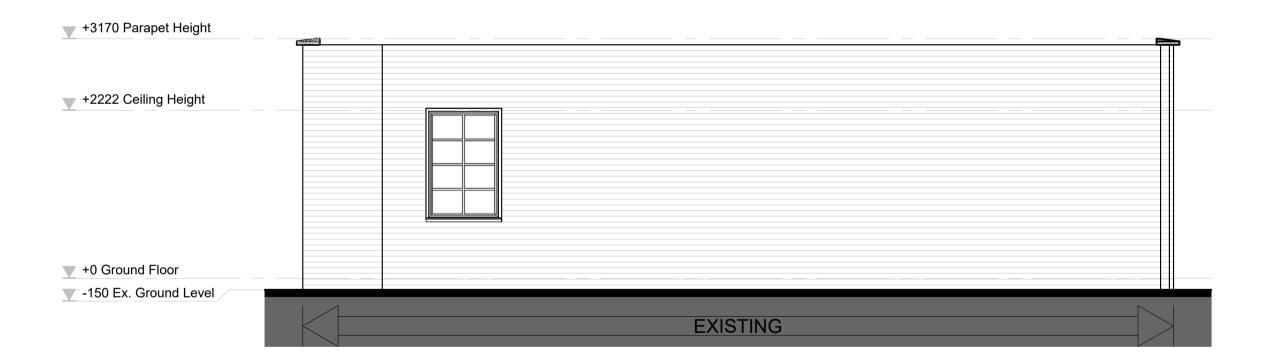
SCALE 1:50 at A1



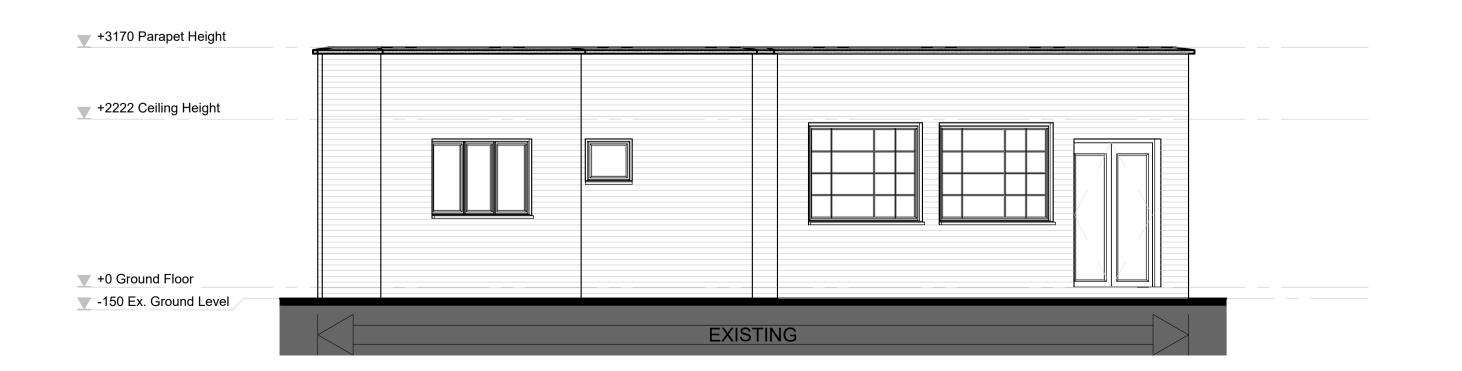
Existing South (Front) Elevation - 1:50



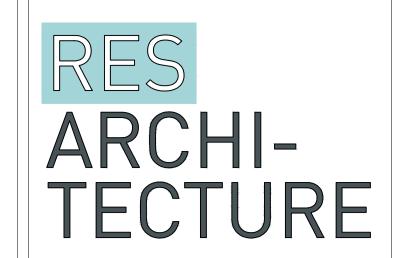
Existing North (Rear) Elevation - 1:50



Existing East (Side) Elevation - 1:50



Existing West (Side) Elevation - 1:50



RES Architecture Ltd
Unit 19.0
Highnam Business Centre
Highnam
Gloucester
GL2 8DN

PROJECT
Walden & Fletcher Electrical
Contractors LTD
2 St Oswalds Road Gloucester
Gloucestershire GL1 2SF

DRAWING

Existing Elevations

PROJECT NO ARC.1485

DATE 16.10.2020

DRAWN BY LL

CHECKED BY KL

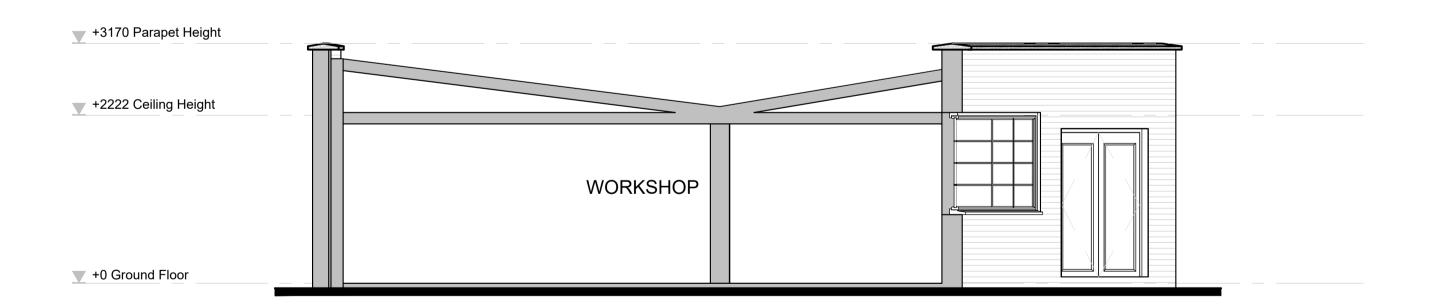
PL02

SCALE 1:50 at A1





Existing Section A-A - 1:50



Existing Section B-B - 1:50



RES Architecture Ltd
Unit 19.0
Highnam Business Centre
Highnam
Gloucester
GL2 8DN

REV DESCRIPTION DATE

PROJECT
Walden & Fletcher Electrical
Contractors LTD
2 St Oswalds Road Gloucester
Gloucestershire GL1 2SF

DRAWING

Section A-A & B-B

PROJECT NO ARC.1485

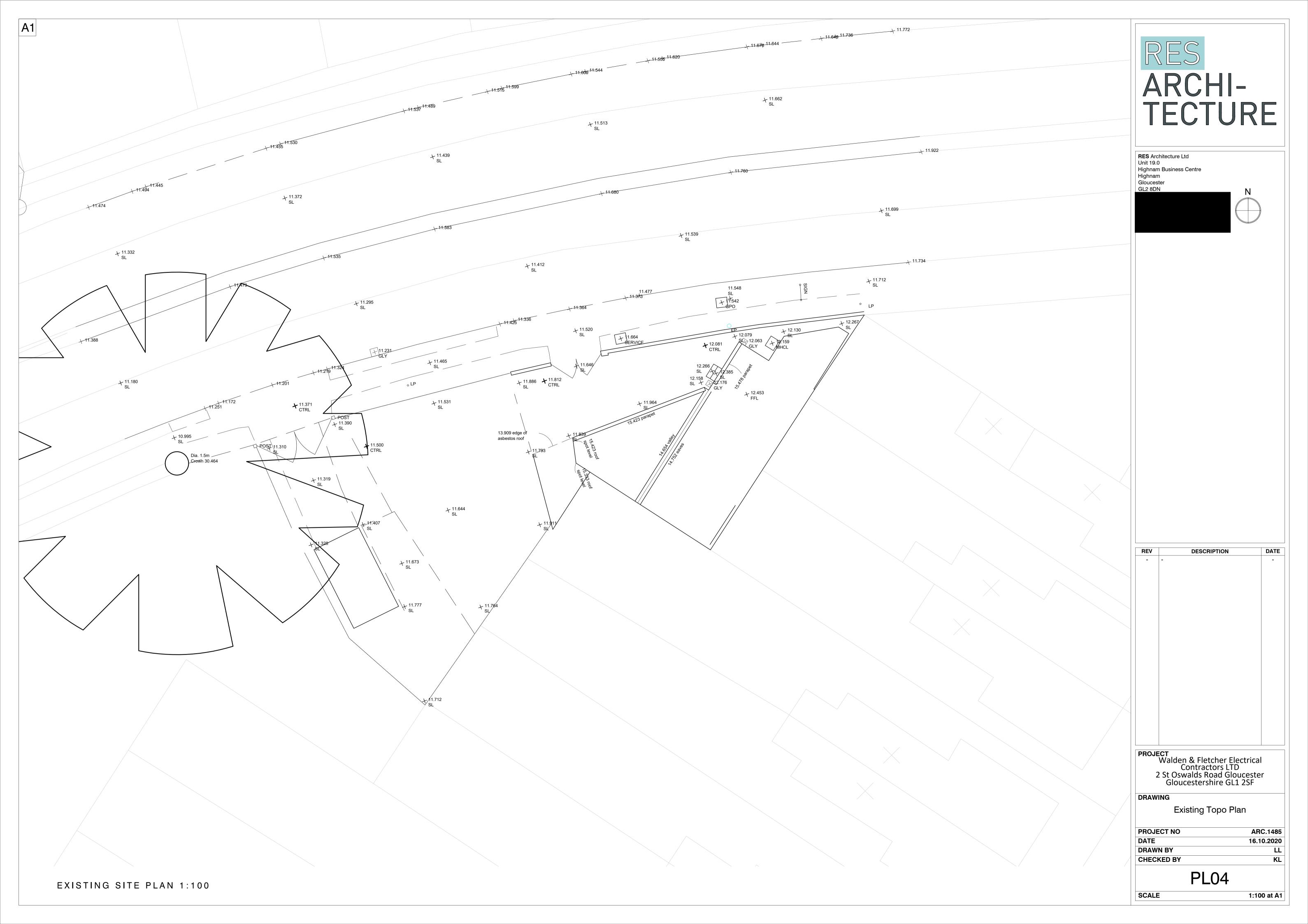
DATE 16.10.2020

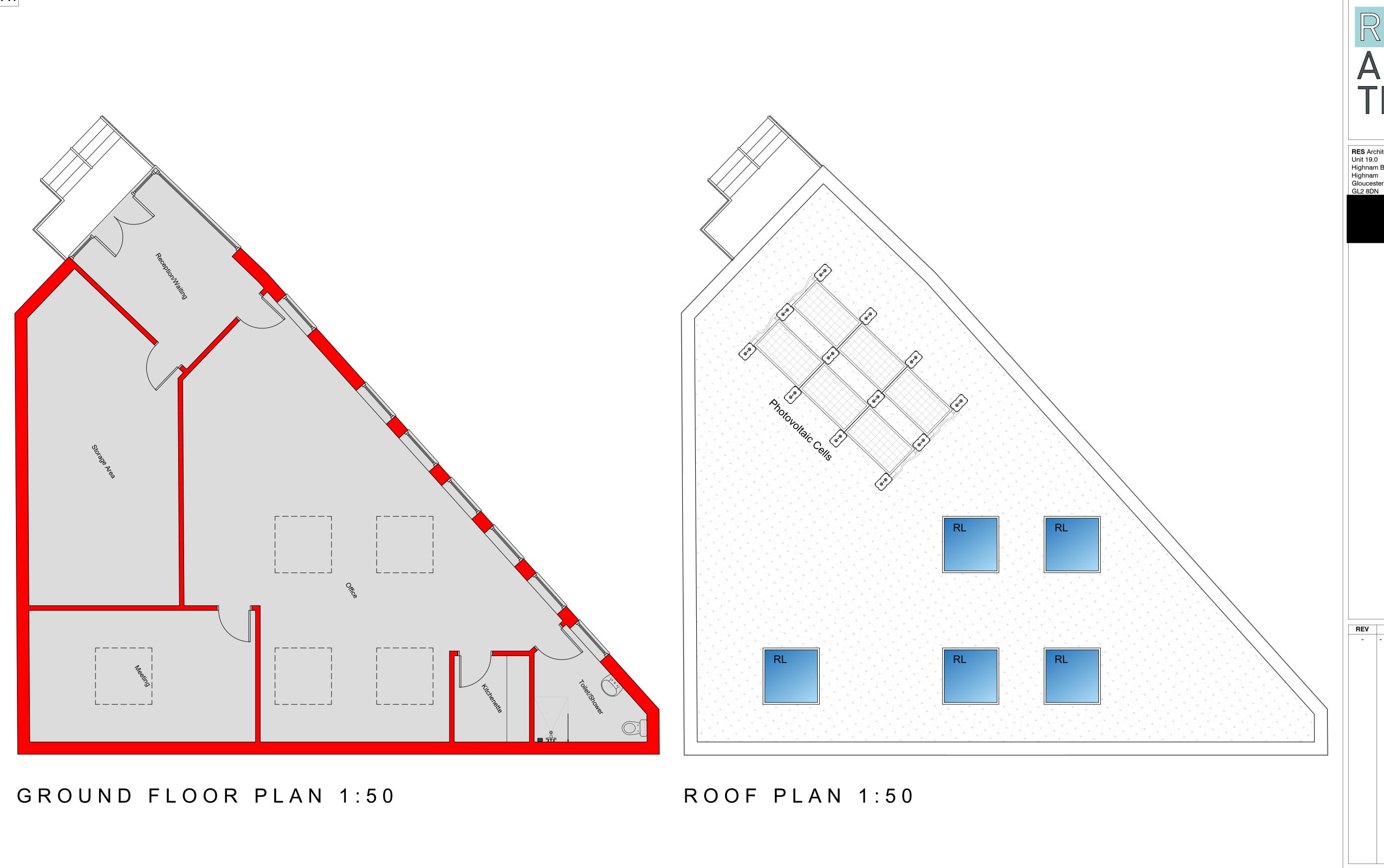
DRAWN BY LL

CHECKED BY KL

PL03

SCALE 1:50 at A1





ARCHI-TECTURE

RES Architecture Ltd
Unit 19.0
Highnam Business Centre
Highnam
Gloucester
GL2 8DN

DESCRIPTION

DATE

PROJECT
Walden & Fletcher Electrical
Contractors LTD
2 St Oswalds Road Gloucester
Gloucestershire GL1 2SF

Proposed Floor and Roof Plans

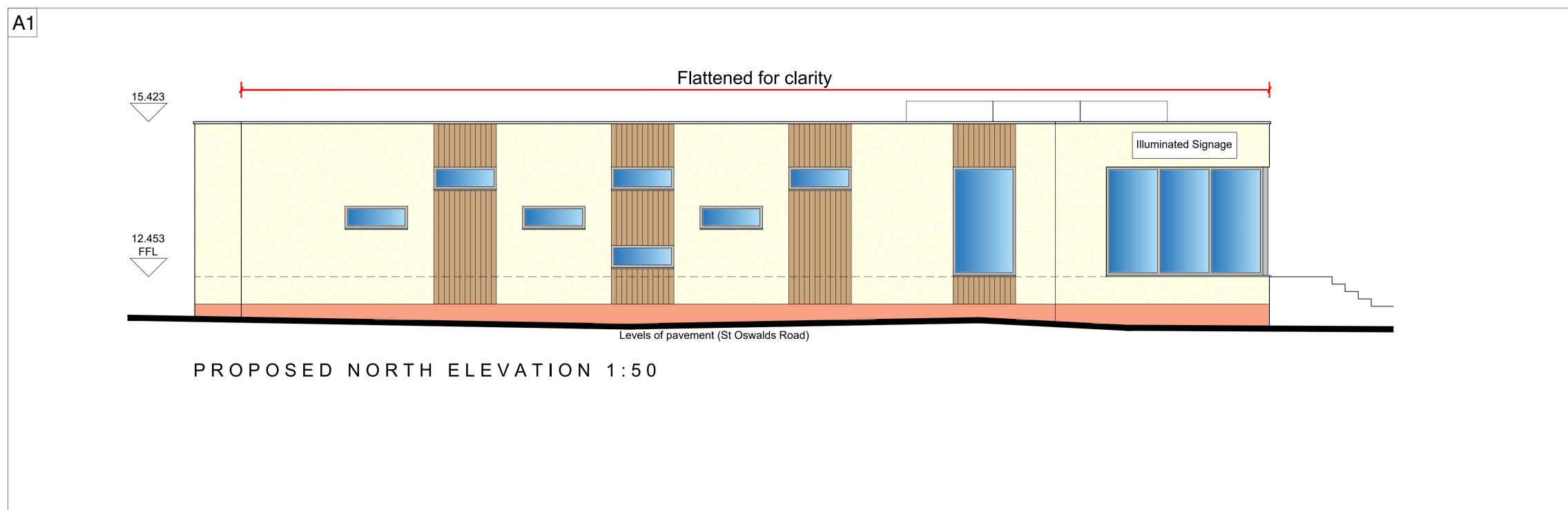
PROJECT NO DATE DRAWN BY CHECKED BY

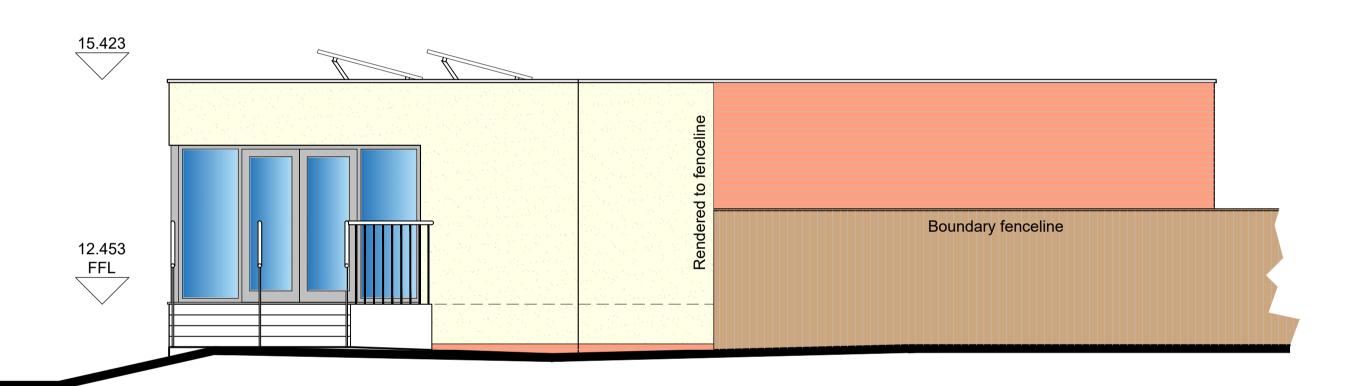
PL06

ARC.1485

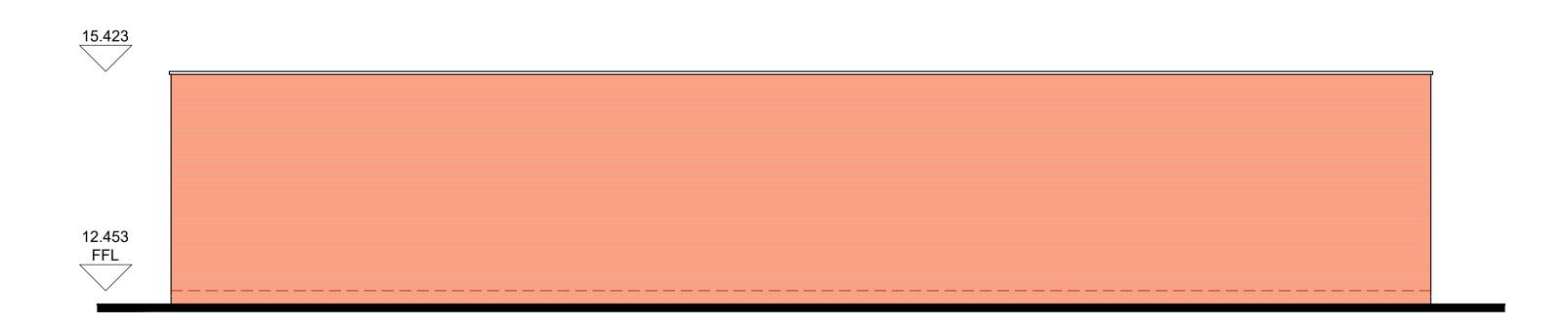
29.09.2021

1:50 at A1

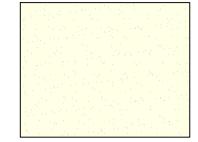




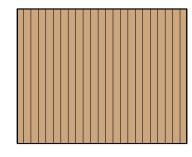
PROPOSED WEST ELEVATION 1:50



PROPOSED WEST ELEVATION 1:50

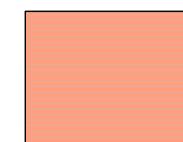


Render



Red Cedar Cladding

Brick





ARCHI-TECTURE

DESCRIPTION

DATE

PROJECT
Walden & Fletcher Electrical
Contractors LTD
2 St Oswalds Road Gloucester
Gloucestershire GL1 2SF

DRAWING

Proposed Elevations

PROJECT NO DATE **DRAWN BY** 

CHECKED BY

PL07

ARC.1485

29.09.2021

SCALE 1:50 at A1