

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

Householder Application for Planning Permission for works or extension to a dwelling

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.

Site Location	
Disclaimer: We can only make recommendation	ns based on the answers given in the questions.
If you cannot provide a postcode, the description help locate the site - for example "field to the No	n of site location must be completed. Please provide the most accurate site description you can, to orth of the Post Office".
Number	5
Suffix	
Property Name	
Address Line 1	
Dinglewell	
Address Line 2	
Address Line 3	
Gloucestershire	
Town/city	
Gloucester	
Postcode	
GL3 3HW	
	be completed if postcode is not known:
Easting (x)	Northing (y)
386750	217580
Description	

Planning Portal Reference: PP-11491491

Applicant Details
Name/Company
Title
Mr & Mrs
First name
Surname
Claridge
Company Name
n/a
Address
Address line 1
5 Dinglewell
Address line 2
Address line 3
Gloucestershire
Town/City
Gloucester
Country
Postcode
GL3 3HW
Are you an agent acting on behalf of the applicant?
✓ Yes○ No
Contact Details
Primary number
***** REDACTED *****
Secondary number
***** REDACTED *****

Fax number	
Email address	
***** REDACTED *****	
Agent Details	
Name/Company	
Title	
Mr	
First name	
Alan	
Surname	
Steele	
Company Name	
AGS Development Consultants	
Address	
Address line 1	
Corse Grange	
Address line 2	
Gloucester Road	
Address line 3	
Town/City	
Corse	
Country	
Postcode	
GL19 3RQ	
Contact Details	
Primary number	
***** REDACTED ******	
Secondary number	
***** REDACTED *****	

Fax number
Email address
***** REDACTED *****
Description of Proposed Works
Please describe the proposed works
Proposed single storey residential extension on existing raised patio to rear of dwelling .
Has the work already been started without consent?
○Yes
⊗ No
Materials
Does the proposed development require any materials to be used externally?
✓ Yes○ No

aterial)
Type:
Walls
Existing materials and finishes:
Facing bricks
Proposed materials and finishes:
Facing bricks to match existing
Tability blicks to match existing
Туре:
Roof
Existing metavials and finishes
Existing materials and finishes: No single storey roof currently
Proposed materials and finishes:
Proposed flat roof in rubber of GRP
Type:
Windows
Existing materials and finishes:
Double glazed Upvc .
Proposed materials and finishes:
Double glazed to match existing .
Туре:
Doors
Existing metavials and finishes
Existing materials and finishes: Double glazed Upvc
Proposed materials and finishes:
Double glazed to match existing .
re you supplying additional information on submitted plans, drawings or a design and access statement?
Yes Yes
) No
Yes, please state references for the plans, drawings and/or design and access statement
Site Location Plan
Existing Site Plan
Proposed Site Plan
Existing Dwelling Floor Plans
Proposed Floor Plans
Existing Elevations
Proposed Elevations
Site Level Plan
Design and Access Statement
Flood Risk Assessment

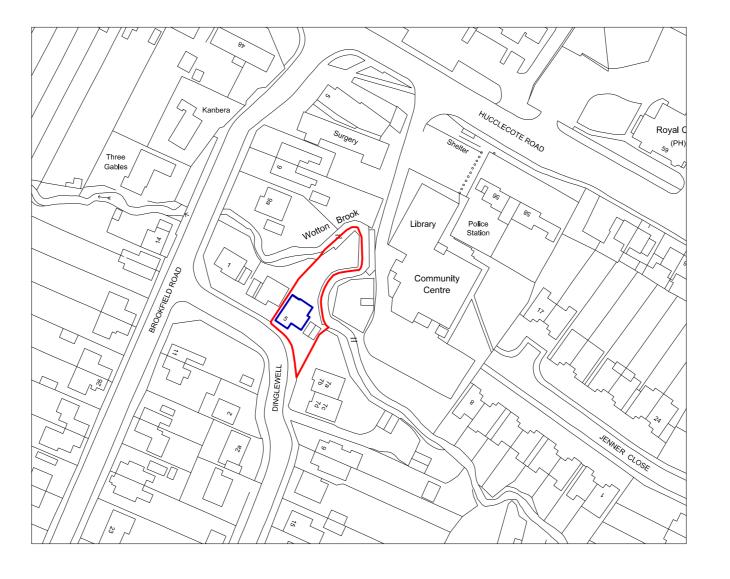
Please provide a description of existing and proposed materials and finishes to be used externally (including type, colour and name for each

Trees and Hedges Are there any trees or hedges on the property or on adjoining properties which are within falling distance of the proposed development? ○ Yes ② No Will any trees or hedges need to be removed or pruned in order to carry out your proposal? ○ Yes ② No
Pedestrian and Vehicle Access, Roads and Rights of Way
Is a new or altered vehicle access proposed to or from the public highway? ○ Yes ⊙ No
Is a new or altered pedestrian access proposed to or from the public highway? ○ Yes ⊙ No
Do the proposals require any diversions, extinguishment and/or creation of public rights of way? ○ Yes ○ No
Parking Will the proposed works affect existing car parking arrangements? ○ Yes ⊙ No
Site Visit
Can the site be seen from a public road, public footpath, bridleway or other public land? ⊘ Yes ○ No
If the planning authority needs to make an appointment to carry out a site visit, whom should they contact? ⊙ The agent ○ The applicant ○ Other person
Pre-application Advice
Has assistance or prior advice been sought from the local authority about this application?
If Yes, please complete the following information about the advice you were given (this will help the authority to deal with this application more efficiently):

Officer name:
Title
First Name
***** REDACTED *****
Surname
***** REDACTED *****
Reference
Date (must be pre-application submission)
29/04/2021
Details of the pre-application advice received
The need for a FRA, evidence that the current site levels are above any flood risk.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Authority Employee/Member
With 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
It 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.
Is 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
Is any of the land to which the application relates part of an Agricultural Holding? ○ Yes ⊙ No
Certificate Of Ownership - Certificate A

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 is part 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 relates but the land is, or is part of, an agricultural holding.
Person Role
○ The Applicant ⊙ The Agent
Title
Mr
First Name
Alan
Surname
Steele
Declaration Date
19/08/2022
☑ Declaration made
Declaration
I / We hereby apply for Householder 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
Alan Steele
Date
14/10/2022





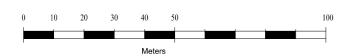
project

drawing

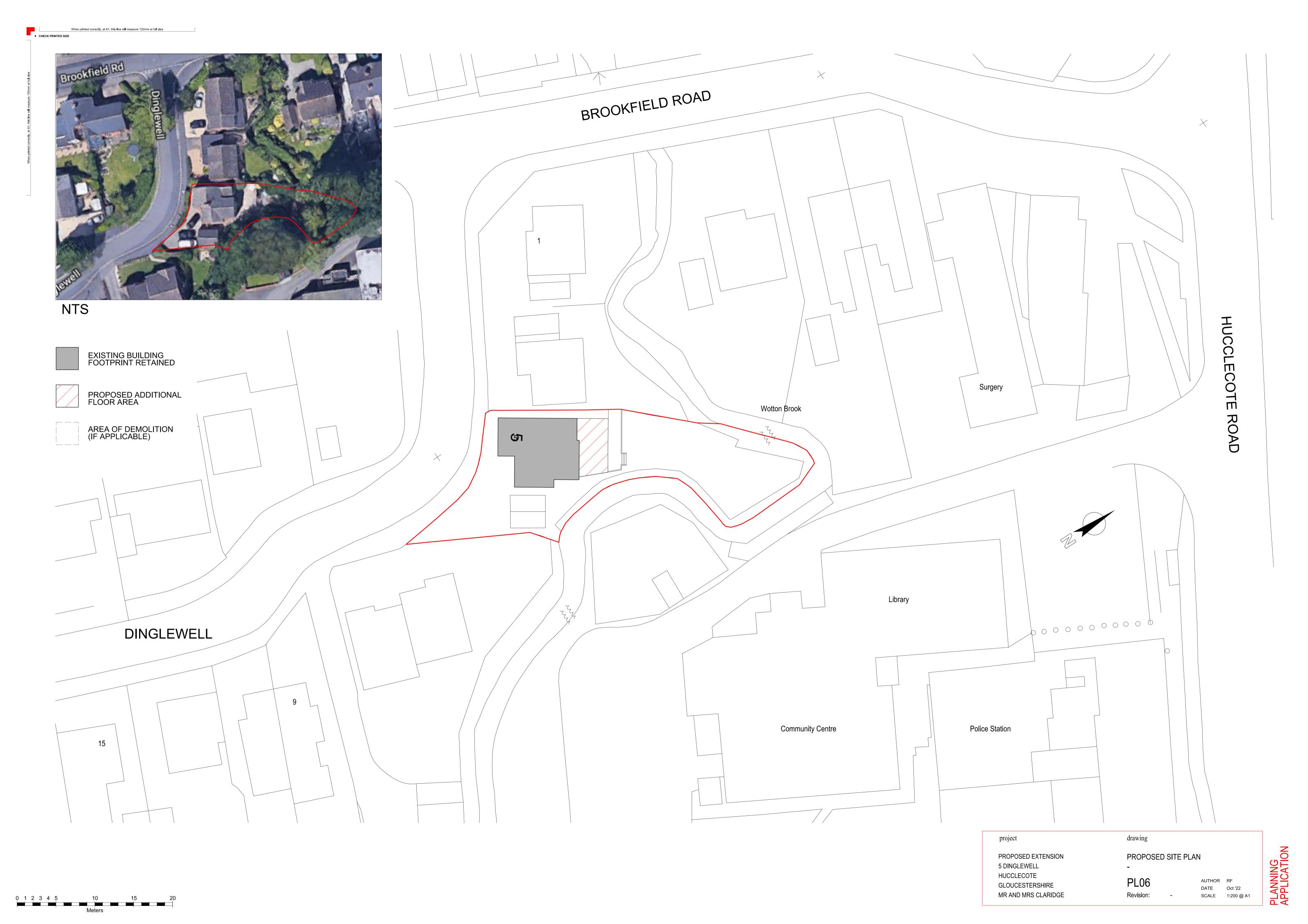
PROPOSED EXTENSION
5 DINGLEWELL
HUCCLECOTE
GLOUCESTERSHIRE
MR AND MRS CLARIDGE

SITE LOCATION PLAN

PL01 Revision: AUTHOR RF
DATE Oct '22
SCALE 1/1250 @ A3





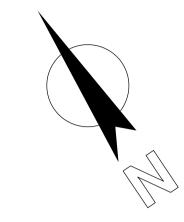


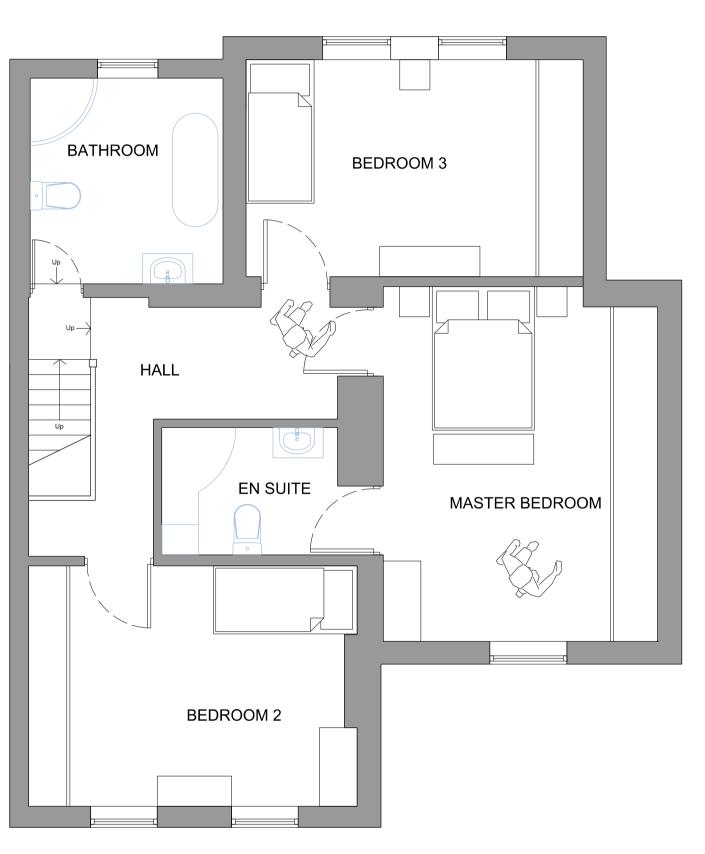
Dinglewell

Sorse Grange, Corse, Gloss GL19 3RQ Date: August 22 Site Levels Plan

Drawing No: 718/01 Rev







FIRST FLOOR PLAN

drawing

PROPOSED EXTENSION
5 DINGLEWELL
HUCCLECOTE
GLOUCESTER

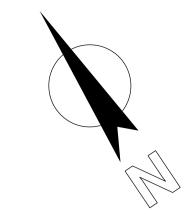
MR AND MRS CLARIDGE

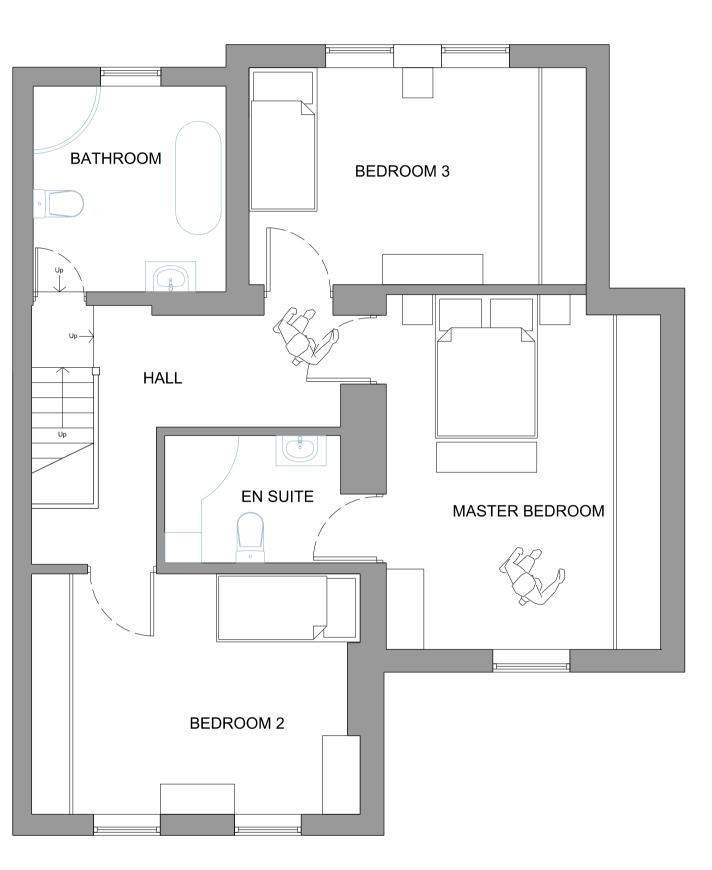
project

EXISTING GROUND AND FIRST FLOOR PLANS

PL03 AUTHOR RF
DATE Oct '22
Revision: - SCALE 1/50 @ A1







FIRST FLOOR PLAN

project

5 DINGLEWELL

HUCCLECOTE

GLOUCESTER

PROPOSED EXTENSION

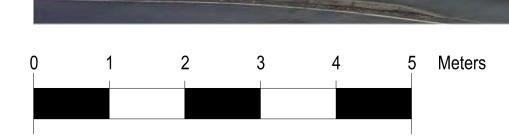
MR AND MRS CLARIDGE

drawing

PROPOSED GROUND AND FIRST FLOOR PLANS

PL07 Revision: - AUTHOR RF DATE Oct '22 SCALE 1/50 @ A1







PROPOSED EXTENSION
5 DINGLEWELL
HUCCLECOTE
GLOUCESTER
MR AND MRS CLARIDGE

project

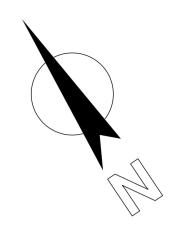
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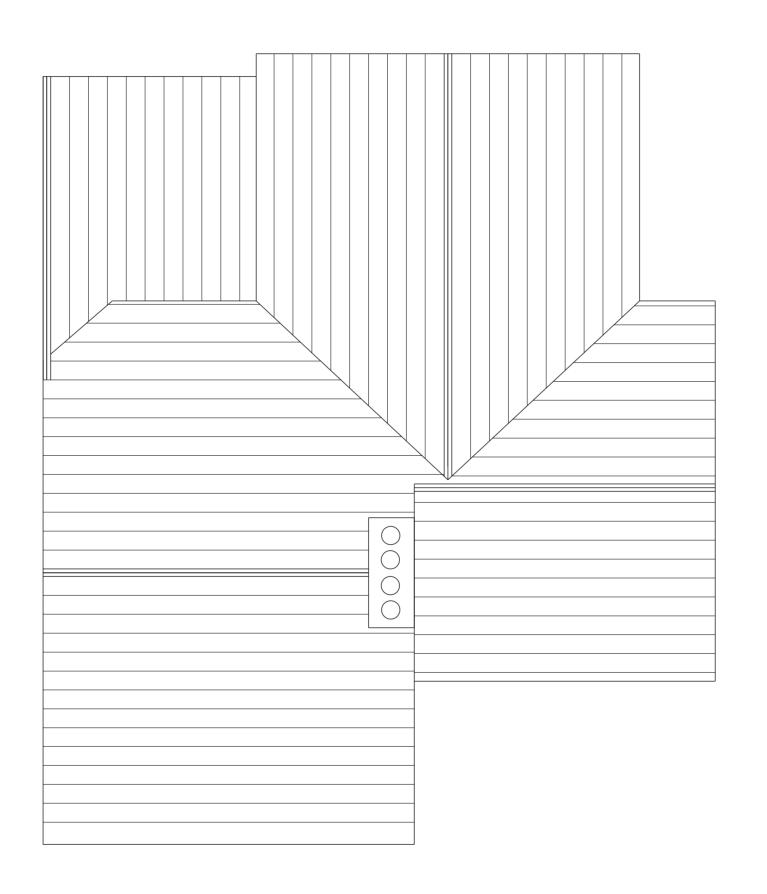
EXISTING ELEVATIONS
-

PL05

AUTHOR RF
DATE Oct '22
- SCALE 1/50 @ A1

LANNING





project

PROPOSED EXTENSION
5 DINGLEWELL
HUCCLECOTE
GLOUCESTER
MR AND MRS CLARIDGE

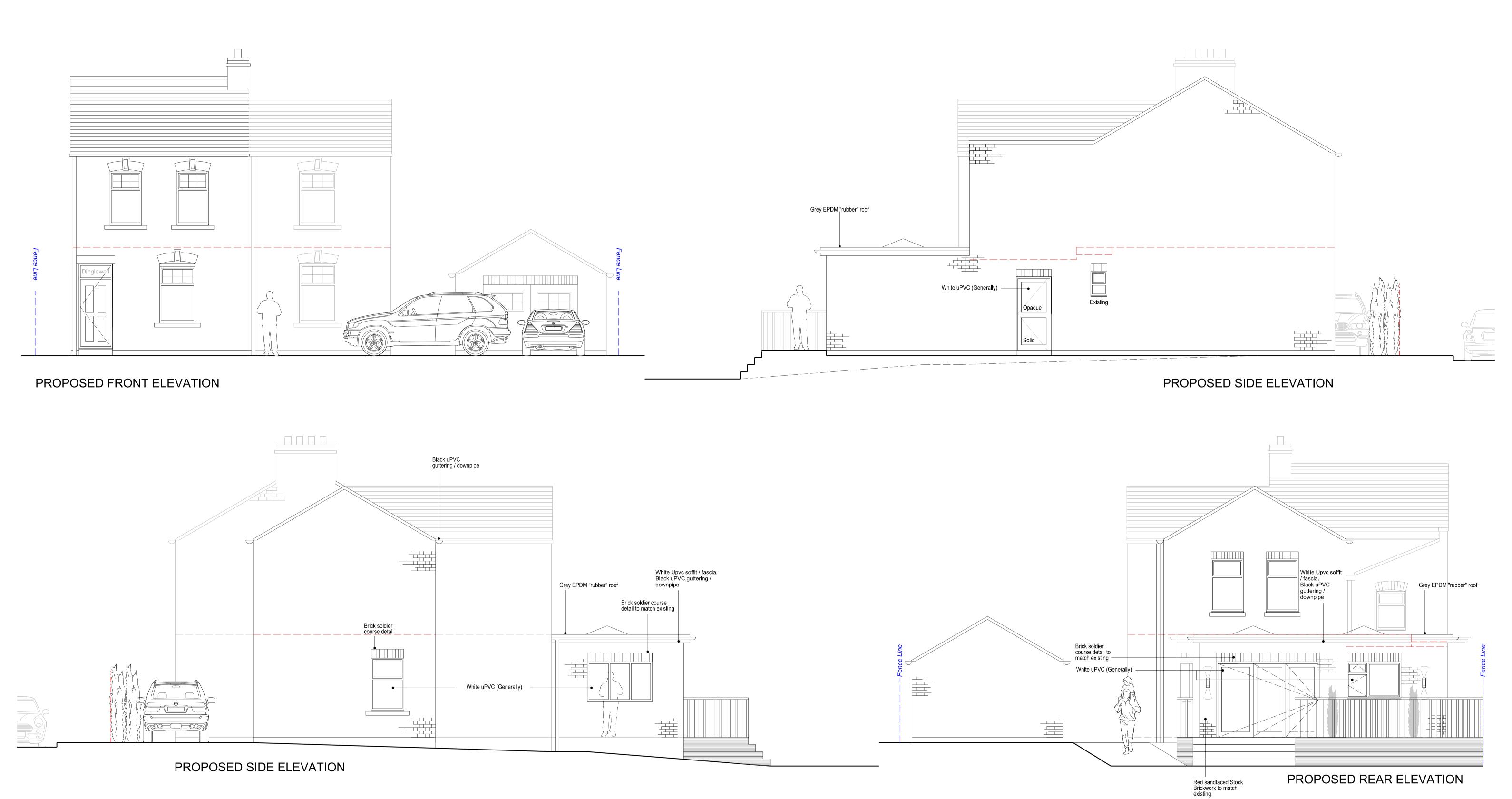
drawing

EXISTING ROOF PLAN

PL04
Revision: -

AUTHOR RF
DATE Oct '22
SCALE 1/50 @ A2





0 1 2 3 4 5 Meters

project drawing

PROPOSED EXTENSION PROPOSED ELEVATIONS

5 DINGLEWELL

HUCCLECOTE

GLOUCESTER

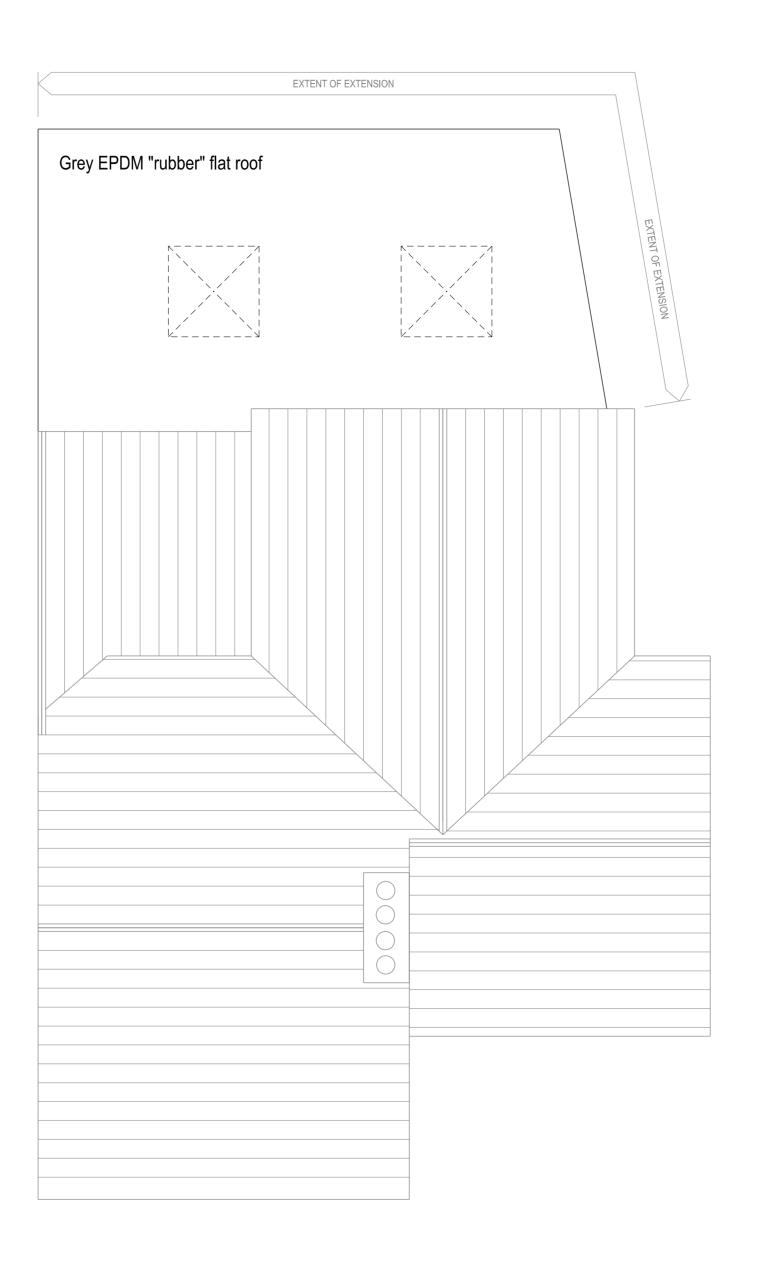
MR AND MRS CLARIDGE

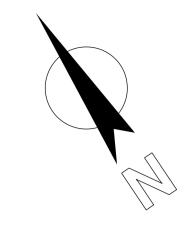
PLO9

Author RF

DATE Oct '22

Revision: - SCALE 1/50 @ A1





project

PROPOSED EXTENSION
5 DINGLEWELL
HUCCLECOTE
GLOUCESTER
MR AND MRS CLARIDGE

drawing

PROPOSED ROOF PLAN

PL08 Revision: - AUTHOR RF
DATE Oct '22
SCALE 1/50 @ A2



Flood Risk Technical Note

Site: 5 Dinglewell, Hucclecote, Gloucestershire

Prepared by:

Approved by:

Date: 28 February 2022





1.0 Introduction

- 1.1 This Technical Note has been produced to assess the flood risks affecting the site of the proposed development at 5 Dinglewell, Hucclecote, Gloucestershire, GL3 3HW.
- 1.2 This flood risk assessment (FRA) will support the planning application for a proposed extension to the rear of the existing property with a footprint of approximately 30m².
- 1.3 In terms of the advice within the 2021 National Planning Policy Framework (NPPF), extensions with a footprint of less than 250m² are considered to be minor development.
- 5 Dinglewell is in close proximity to the Wotton Brook and is thought to be in an area at risk of flooding. The NPPF recommends that minor extensions within Flood Zone 3 or 2 should follow the standing advice when completing an FRA. The requirements of the standing advice are listed in Section 2.0, below.
- 1.5 This FRA risk will fulfil the requirements of the NPPF's standing advice, not only in the provision of required information but also in terms of the design recommendations to ensure that any flood risk is mitigated for the lifetime of the development.

2.0 Standing Advice for Minor Extensions

- 2.1 Standing advice for FRA's is presented in the NPPF for minor developments in Flood Zone 3. The key points of the standing advice is as follows:
 - , The FRA should provide a plan showing the finished floor levels and the estimated flood levels.
 - The FRA should state all levels in relation to Ordnance Datum.
 - Make sure the floor levels are either no lower than existing floor levels or 300 millimetres (mm) above the estimated flood level.
 - Flood resistant materials should be used up to at least 300mm above the estimated flood level.
 - Flood resilience plans should follow the guidance in the CIRIA Property Flood Resilience Code of Practice.
 - " Plans also need to show how the development will not flooded by surface water or groundwater. This could be achieved by:
 - i. diverting water away from buildings but safely managing it within the site, or;
 - ii. by raising floor levels above the estimated flood depths of surface and groundwater flooding

3.0 Flood Risk at 5 Dinglewell

Fluvial Flood Risk

- 3.1 Upon review of the Environment Agency's (EA) Flood Map for Planning (Appendix A) the rear garden leading up to the rear threshold of 5 Dinglewell is shown to be within Flood Zone 3 (High Risk). This implicates the site as being within an area at a 1 in 100-year or greater risk of flooding.
- The property of 5 Dinglewell is within Flood Zone 2 (Medium Risk), thus is considered to be at risk of fluvial flooding between the 1 in 1,000-year and 1 in 100-year return periods.



- 3.3 To investigate fluvial flood risk in more detail, a Product 4 data request was made to the EA. The Product 4 information contains modelled flood levels (stages) for different return periods, stated in metres Above Ordnance Datum (mAOD). The Product 4 can be seen in full in Appendix B.
- The Product 4 data provides flood stages for nodes at different points on and around the Wotton Brook in the vicinity of 5 Dinglewell. There are two nodes that represent the stages at the rear and front of 5 Dinglewell. The node to the rear of the property is 2D_02 and the node to the front is 2D_01.
- 3.5 The modelled stages at these two nodes for different return periods are presented in Table 3.1, below:

Table 3.1: Modelled Return Periods on Wotton Brook

	4%	2%	1.33%	1%	0.5%	0.1%
	(1 in 25)	(1 in 50)	(1 in 75)	(1 in 100)	(1 in 200)	(1 in 1000)
2D_01	-	-	-	-	29.23	29.37
2D_02	28.96	28.99	29.02	29.03	29.08	29.18

- 3.6 There has been no topographical survey of the site to date. What is known is that 5 Dinglewell has an existing raised patio to the rear of the property that is higher than the surrounding ground levels. This patio is raised so that it meets the floor levels of the property at the rear of the dwelling and matches the path level that leads to the front of the property.
- 3.7 The levels of the raised patio are comparable to the external levels towards the front of the property, which are in the region of 29.40 mAOD.
- 3.8 The raised levels of the patio are not reflected in the EA Flood Map for Planning, which is developed using the EA's flow model, which is based on Digital Terrain Model (DTM) data using ground levels that are represented on a 5m or 10m grid. Therefore, the extent of flooding is based on ground levels that are averaged over a 5m or 10m grid area and do not reflect small-scale level changes or local areas of higher ground.
- 3.9 In the case of the existing raised patio, this is shown as being within a flood risk area, but the levels of the patio when compared to the surrounding land are strongly suggestive that that the patio would, in fact, be above the flood stages presented in Table 3.1.
- 3.10 The data in Table 3.1 show that the 1 in 100-year return period flood level at 2D_02 is 29.03 mAOD, thus 370mm below the approximate patio level of 29.40 mAOD. This suggests that the patio is not within Flood Zone 3. Referring to the 1 in 1000-year flood level at the rear of the property (node 2D_02) this is 29.18 mAOD. The approximate patio level of 29.40 is also higher than this, thus it can be concluded that the existing patio is effectively in Flood Zone 1 (Low Risk).
- 3.11 The above discussion is important because the new extension would be at the same level as the existing patio, thus would also be above the 1 in 100 and 1 in 1000-year flooded areas.
- 3.12 The footprint of the proposed extension would not exceed that of the existing patio, thus no additional volume would be removed from the floodplain over the existing situation.
- 3.13 Therefore, in terms of fluvial flood risk the proposed extension would effectively be above the modelled 1 in 100-year and 1 in 1000-year fluvial flood levels and no volume would be removed from the floodplain over the existing. Therefore, fluvial risk to the development is low and would not be increased elsewhere as a result of the development. The existing situation and local hydraulic conditions would remain unchanged.

Surface Water Flood Risk

3.14 The Environment Agency's Surface Water Flood Map (Appendix C) shows that the site is not within the risk area associated with the 'design' 1 in 100-year return period rainfall event.



- 3.15 Surface water flooding from the 1 in 100-year rainfall event is shown to remain within the confines of the channel of the Wotton Brook.
- 3.16 The 1 in 1000-year (low risk) surface water flood event extends over a wider area, including the location of the proposed extension.
- 3.17 In the 1 in 1000-year (low risk) surface water flood event flood depths are expected to be between 300mm and 900mm and with velocities of over 0.25 m/s. Therefore, flood hazard can be expected to be medium to high in the 1 in 1000-year (low risk) surface water flood event. However, it should be borne in mind that this is the 'low risk' flood event, which is not used to determine the appropriateness of development.
- 3.18 The surface water flood map is based on DTM data on a 2m resolution (in 90% of urban areas) and 5m grid elsewhere. However, there are inevitably still assumptions in the model because urban drainage capacity is the biggest uncertainty in the modelling. The Surface Water Flood Map still cannot represent every detail of the urban landscape and very local mechanisms of flooding.
- 3.19 Therefore, like Flood Map for Planning, the Surface Water Flood Map is not a 100% accurate reflection of how flooding would occur. It is anticipated that the existing patio is above the mapped flood levels for the 1 in 1000-year return period surface water flood event.
- 3.20 Because the proposed extension would not have a greater footprint than the existing patio and would have levels no lower than the existing patio, it is expected that it would not actually be within the 1 in 1000-year 'low' surface water flood risk area, but would, in fact, be in the 'very low' surface water flood risk area. Regardless of this, the proposed extension would be appropriate within an area of 'low' surface water flood risk.

Groundwater Flooding

- 3.21 The BGS online 1:50,000 Geoindex mapping shows the site as being in an area of Charmouth Mudstone Formation. This is a sedimentary bedrock formed approximately 183 to 199 million years ago in the Jurassic Period.
- 3.22 The BGS online 1:50,000 Geoindex mapping does not include any information on the superficial deposits in the area. However, Defra's 'Magic Map' online application, which includes soilscape information for England, shows that 5 Dinglewell is within an area of 'lime-rich loamy and clayey soils with impeded drainage'.
- 3.23 Therefore, the solid and drift geology can be considered as hydraulically unproductive and not typically able to support groundwater.
- 3.24 In support of the above statement, the site is not within any Groundwater Source Protection Zones (SPZ's) and the site is shown as being within a 'Secondary (Undifferentiated) Unproductive' Bedrock Aquifer area and 'Secondary (Undifferentiated)' Superficial Aquifer area.
- 3.25 Therefore, it can be concluded that the site is within an area of hydraulically unproductive, non-aquiferous geology that is at very low risk of groundwater flooding.

4.0 Summary and Recommendations

Summary

4.1 The location of the proposed extension is shown to be within Flood Zone 3 (High Risk) according to the EA flood map for planning. However, because this mapping uses DTM information mapped over a 5m to 10m grid, it does not reflect the raised levels of the existing patio, which is above the 1 in 100-year and 1 in 1000-year flood stages, as provided in the modelled information within the EA's Product 4 data. As such, the proposed extension, which would have the same footprint as the patio and be set at the same topographic level, would also be above the 1 in 100-year and 1 in 1000-year flood event and, therefore, would not be at risk of flooding and would be appropriate in this location.



- 4.2 Moreover, because the proposed extension would have the same footprint as the existing raised patio, it would not be removing any additional volume of flooding over the existing situation and, as such, would not be increasing flood risk in the local area. The existing situation and local hydraulic conditions would remain unchanged.
- 4.3 The EA Surface Water Flood Map shows the location of the proposed extension as being in an are of 'low' surface water flood risk. However, the resolution of the DTM used to construct the Surface Water Flood Map and the inherent uncertainties and assumptions associated with the Surface Water Flood Map means that the raised level of the existing patio (and, therefore, the raised level of the proposed extension) would not be within an area of 'low' surface water flood risk, but would, in fact effectively be at 'very low' risk of surface water flooding.
- 4.4 The site is in an area of hydraulically unproductive, non-aquiferous solid and drift geology and, as such, groundwater flood risk is anticipated to be very low.
- 4.5 In conclusion, the location of the proposed extension would be in a localised area of raised ground where the existing patio is located, which means it would be above any fluvial and surface water flood levels. Additionally, because the proposed extension would not have a greater footprint than the existing patio, there would be no volume removed from the fluvial or surface water flood risk areas as a result of the development and the local hydraulic regime would remain unchanged, meaning that flood risk would not increase elsewhere as a result of the extension.
- 4.6 This technical note has provided the requirements of the standing advice that can be offered at this point in time, with the following recommendations being put forward so that all requirements can be fulfilled.

Recommendations

- 4.7 Modelled flood levels (stages) have been provided in the Product 4 information and it is expected that the level of the existing patio is above the 1 in 100-year and 1 in 1000-year flood stages, thus the proposed extension would also be above the modelled flood levels. However, this should be verified by carrying out a topographical survey on the site, with all levels relating to mAOD so they can be directly compared with the flood stages reported in the Product 4 information.
- 4.8 It is also suggested that a plan of the proposed extension is provided, showing its extent and FFL's relating back to mAOD.
- 4.9 Where possible, floor levels should either be no lower than existing floor levels of the property or 300mm above the estimated 1 in 100-year flood level of 29.08 mAOD.



Appendix A

Environment Agency Flood Map for Planning



Flood map for planning

Your reference Location (easting/northing) Created

5 Dinglewell 386750/217582 22 Feb 2022 12:02

Your selected location is in flood zone 2, an area with a medium probability of flooding.

This means:

- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see www.gov.uk/guidance/flood-risk-assessment-standing-advice)

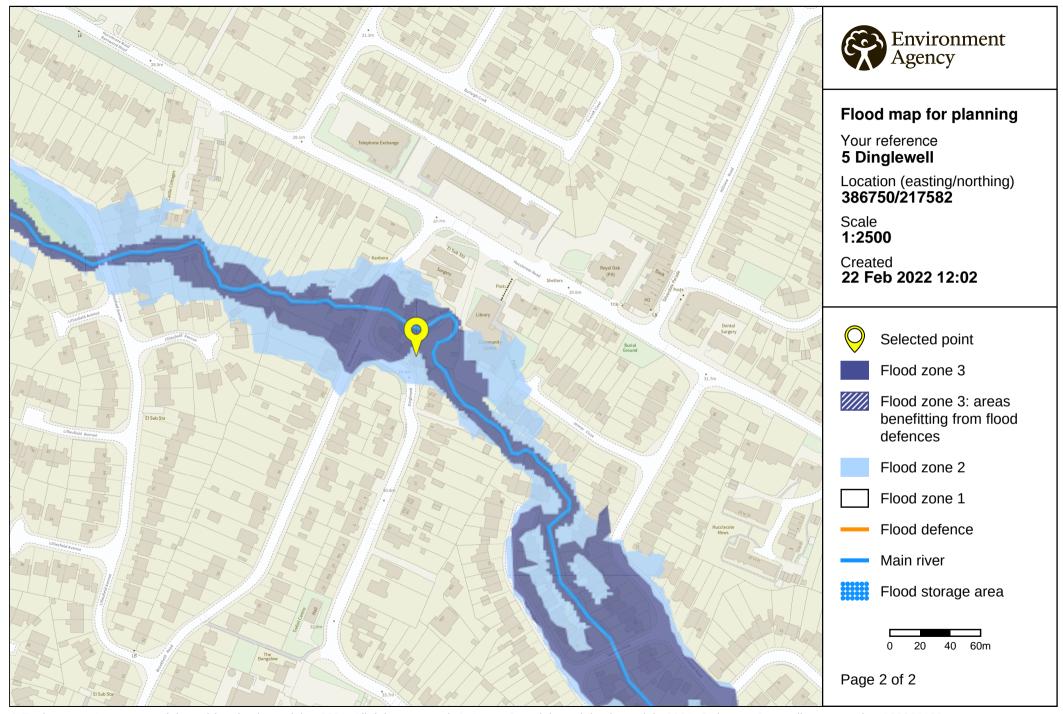
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence which sets out the terms and conditions for using government data. https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2021 OS 100024198. https://flood-map-for-planning.service.gov.uk/os-terms



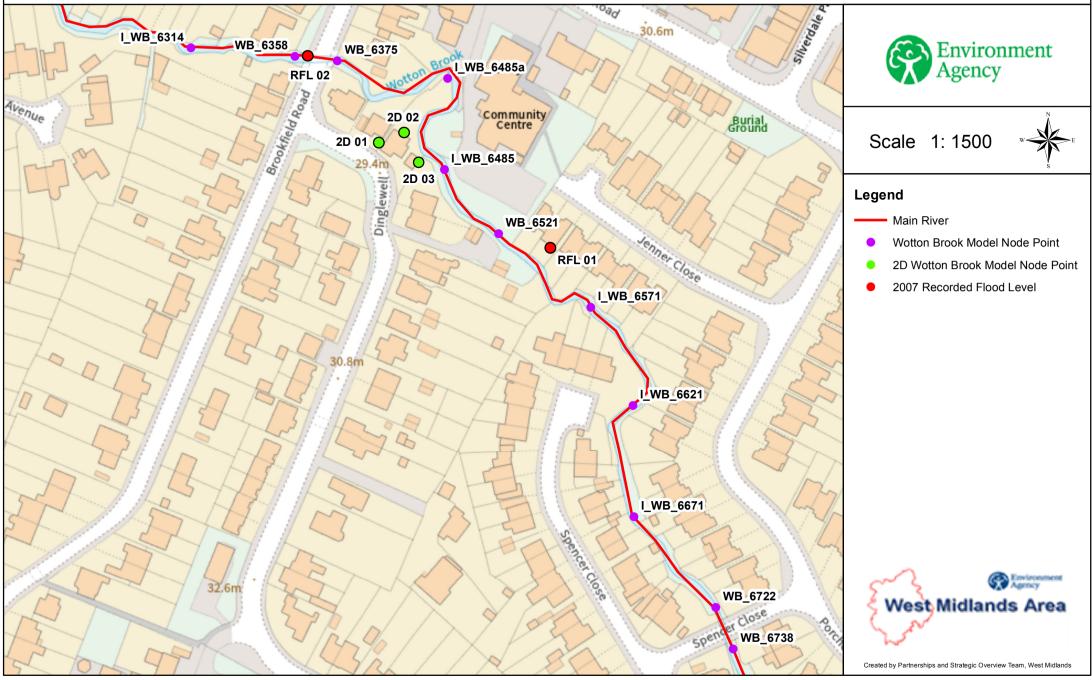
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Appendix B

Product 4 Data Package

Wotton Brook Model Node Location Map including GL3 3HW - created 05/01/2022 [245550]





Product 4 (Detailed Flood Risk Data) for 5 Dinglewell,

Hucclecote, Gloucester, GL3 3HW

Reference number: 245550 Date of issue: 10 January 2022

Model Information

The following information and attached maps contain a summary of the modelled information relevant to the area of interest. The information provided is based on the best available data as of the date of issue.

Model Name	Release Date			
Wotton Brook	2007			

Flood Map for Planning (Rivers and Sea)

The Flood Map for Planning (Rivers and Sea) indicates the area at risk of flooding, assuming no flood defences exist, for a flood event with a 0.5% chance of occurring in any year for flooding from the sea, or a 1% chance of occurring in any year for fluvial (river) flooding (Flood Zone 3). It also shows the extent of the Extreme Flood Outlines (Flood Zone 2) which represents the extent of a flood event with a 0.1% chance of occurring in any year, or the highest recorded historic extent if greater. The Flood Zones refer to the land at risk of flooding and do not refer to individual properties. It is possible for properties to be built at a level above the floodplain but still fall within the risk area.

This Flood Map only indicates the extent and likelihood of flooding from rivers or the sea. It should also be remembered that flooding may occur from other sources such as surface water, sewers, road drainage, etc.

To find out which flood zone a location is in please use: https://flood-map-for-planning.service.gov.uk/

Definition of flood zones

• **Zone 1** - The area is within the lowest probability of flooding from rivers and the sea, where the chance of flooding in any one year is less than 0.1% (i.e. a 1000 to 1 chance).



- Zone 2 The area which falls between the extent of a flood with an annual probability of 0.1% (i.e. a 1000 to 1 chance) fluvial and tidal, or greatest recorded historic flood, whichever is greater, and the extent of a flood with an annual probability of 1% (i.e. a 100 to 1 chance) fluvial / 0.5% (i.e. a 200 to 1 chance) tidal. (Land shown in light blue on the Flood Map).
- **Zone 3** The chance of flooding in any one year is greater than or equal to 1% (i.e. a 100 to 1 chance) for river flooding and greater than or equal to 0.5% (i.e. a 200 to 1 chance) for coastal and tidal flooding.

Note: The Flood Zones shown on the Environment Agency's Flood Map for Planning (Rivers and Sea) do not take account of the possible impacts of climate change and consequent changes in the future probability of flooding. Reference should therefore also be made to the Strategic Flood Risk Assessment when considering location and potential future flood risks to developments and land uses.

Areas Benefitting From Defences

Where possible we show the areas that benefit from the flood defences, in the event of flooding:

- from rivers with a 1% (1 in 100) chance in any given year, or;
- from the sea with a 0.5% (1 in 200) chance in any given year.

If the defences were not there, these areas would flood. Please note that we do not show all areas that benefit from flood defences.

The associated Dataset is available here: https://data.gov.uk/dataset/flood-map-for-planning-rivers-and-sea-areas-benefiting-from-defences



Node Data/ Modelled Levels

The attached map will show a selection of 1D & 2D model node points near to your site. The fluvial levels for these node points are shown below.

Fluvial Flood Levels (m AOD)

The modelled levels are given in m AOD (N), m AOD indicates metres Above Ordnance Datum (Newlyn).

The information is taken from the model referenced above and does not include the updated climate change figures.

					Annual Exceedance Probability - Maximum Water Levels (m AOD)							
Node Label	Easting	Northing	50% (1 in 2)	20% (1 in 5)	10% (1 in 10)	4% (1 in 25)	2% (1 in 50)	1.33% (1 in 75)	1% (1 in 100)	1% (1 in 100) inc. 20% increase in inflows	0.5% (1 in 200)	0.1% (1 in 1000)
WB_6738	386886	217379	29.54	29.92	30.16	30.57	30.95	31.08	31.13	31.24	31.25	31.36
WB_6722	386878	217396	29.41	29.70	29.86	30.05	30.19	30.29	30.35	30.53	30.52	30.98
I_WB_6671	386847	217432	29.19	29.47	29.61	29.80	29.93	30.03	30.07	30.23	30.22	30.64
I_WB_6621	386844	217477	28.98	29.26	29.39	29.56	29.68	29.74	29.79	29.91	29.90	30.20
I_WB_6571	386829	217514	28.75	29.06	29.18	29.34	29.44	29.51	29.55	29.65	29.64	29.94
WB_6521	386791	217544	28.43	28.88	28.99	29.10	29.18	29.23	29.27	29.34	29.36	29.59
I_WB_6485	386770	217570	28.24	28.82	28.91	29.00	29.06	29.10	29.13	29.24	29.24	29.62
I_WB_6485a	386773	217606	28.18	28.80	28.89	28.93	28.93	28.94	28.94	28.94	28.96	28.93
WB_6375	386728	217614	28.14	28.77	28.91	29.03	29.12	29.18	29.21	29.30	29.31	29.55
WB_6358	386711	217614	27.78	28.03	28.19	28.43	28.62	28.72	28.80	29.03	29.01	29.48
I_WB_6314	386671	217618	27.53	27.75	27.87	28.01	28.12	28.18	28.22	28.33	28.32	28.65
2D 01	386745	217580	-	-	-	-	-	-	-	-	29.23	29.37
2D 02	386755	217584	-	-	-	28.96	28.99	29.02	29.03	-	29.08	29.18
2D 03	386761	217572	-	-	-	28.99	29.05	29.09	29.11	-	29.21	29.53



Modelled Flood Extents

Available modelled flood outlines produced as part of the detailed modelling have been provided to you in GIS format, these show modelled flood extents. Climate change will increase flood risk due to overtopping of defences.

https://ea.sharefile.com/d-sd2b41f46f20426eb

Climate Change

The 'Flood Risk Assessments: Climate Change Allowances' are published on gov.uk. This is in replacement of previous climate change allowances for planning applications. The data provided in this product does not include the new allowances. You will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding. The climate change factors are now more complex and a single uplift percentage across England cannot be justified.

The Environment Agency will incorporate the new allowances into future modelling studies. For now it remains the applicant's responsibility to demonstrate through their proposal and flood risk assessments that new developments will be safe in flood risk terms for its lifetime.

Recorded Flood Outlines

Following an examination of our records of historical flooding we do hold records of flooding for this area, please find tabulated information below for these recorded flood events.

Flood Event Date	Recorded Level/s	Source of Flooding	Cause of Flooding	
July 2007	RFL 01: 29.57m AOD(N) RFL 02: 29.07m AOD(N)	Wotton Brook	Channel capacity exceeded (no raised defences)	

The recorded flood levels (RFLs) detailed above were taken at approximate National Grid References 386813, 217538 (RFL 01); and 386716, 217614 (RFL 02). They have also been identified on the attached 'Node Point Map' for ease of reference.

The corresponding recorded flood outline/s can be accessed here: https://data.gov.uk/dataset/recorded-flood-outlines1

Please note; the records of flooding from between October 2019 and March 2020 and beyond are still being reviewed, the outcomes of which have not yet been published or reflected within this request for information.

The Recorded Flood Outlines take into account the presence of defences, structures, and other infrastructure where they existed at the time of flooding. It includes flood extents that may have been affected by overtopping, breaches or blockages. Any flood extents shown do not necessarily indicate that properties were flooded internally. It is also possible that the pattern of flooding in



this area has changed and that this area would now flood or not flood under different circumstances.

Please note that our records are not comprehensive and that the map is an indicative outline of areas which have previously flooded, not all properties within this area will have flooded. It is possible that other flooding may have occurred that we do not have records for.

You may also wish to contact your Local Authority or Internal Drainage Board (where relevant), to see if they have other relevant local flood information.

Flood Defences

Flood defences do not completely remove the chance of flooding. They can be overtopped by water levels which exceed the capacity of the defences.

If flood defences are located in your area, you can access this data here: https://data.gov.uk/dataset/spatial-flood-defences-including-standardised-attributes

Planning developments

If you have requested this information to help inform a development proposal, then you should note the information on GOV.UK on the use of Environment Agency Information for Flood Risk Assessments. You can also request pre application advice:

https://www.gov.uk/planning-applications-assessing-flood-risk https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion

Supporting Information

River modelling: technical standards and assessment guidance

The link below contains standards for the flood risk management industry on how to build and review hydraulic models and provide evidence for flood risk management decisions.

https://www.gov.uk/government/publications/river-modelling-technical-standards-and-assessment

Surface Water

Managing the risk of flooding from surface water is the responsibility of Lead Local Flood Authorities. The 'risk of flooding from surface water' map has been produced by the Environment Agency on behalf of government, using information and input from Lead Local Flood Authorities.

You may wish to contact your Local Authority who may be able to provide further detailed information on surface water.



It is not possible to say for certain what the flood risk is but we use the best information available to provide an indication so that people can make informed choices about living with or managing the risks. The information we supply does not provide an indicator of flood risk at an individual site level. Further information can be found on the Agency's website:

https://flood-warning-information.service.gov.uk/long-term-flood-risk

Flood Risk from Reservoirs

The Flood Risk from Reservoirs map can be found on the Long Term Flood Risk Information website:

https://flood-warning-information.service.gov.uk/long-term-flood-risk/map?map=Reservoirs

Flood Alert & Flood Warning Area

We issue flood alert/warnings to specific areas when flooding is expected. If you receive a flood warning you should take immediate action.

You can check whether you are in a Flood Alert/Warning Area and register online using the links below:

https://www.gov.uk/check-flood-risk

https://www.gov.uk/sign-up-for-flood-warnings

If you would prefer to register by telephone, or if you need help during the registration process, please call Floodline on 0345 988 1188.

The associated dataset for flood warning areas is available here: https://data.gov.uk/dataset/flood-warning-areas3

The associated dataset for flood alert areas is available here: https://data.gov.uk/dataset/flood-alert-areas2

Flood Risk Activity Permits

We now consider applications for works, which may be Flood Risk Activities, under Environmental Permitting Regulations. This replaces the process of applying for a Flood Defence Consent. You may need an environmental Permit for flood risk activities if you want to do work:

- in, under, over or near a main river (including where the river is in a culvert)
- on or near a flood defence on a main river
- in the flood plain of a main river
- on or near a sea defence

Please go to this website to find out more about how to apply:



https://www.gov.uk/guidance/flood-risk-activities-environmental-permits.

Please be aware that Bespoke and Standard Rules permits can take up to 2 months to determine and will incur a charge.

Further details about the Environment Agency information supplied can be found on the GOV.UK website:

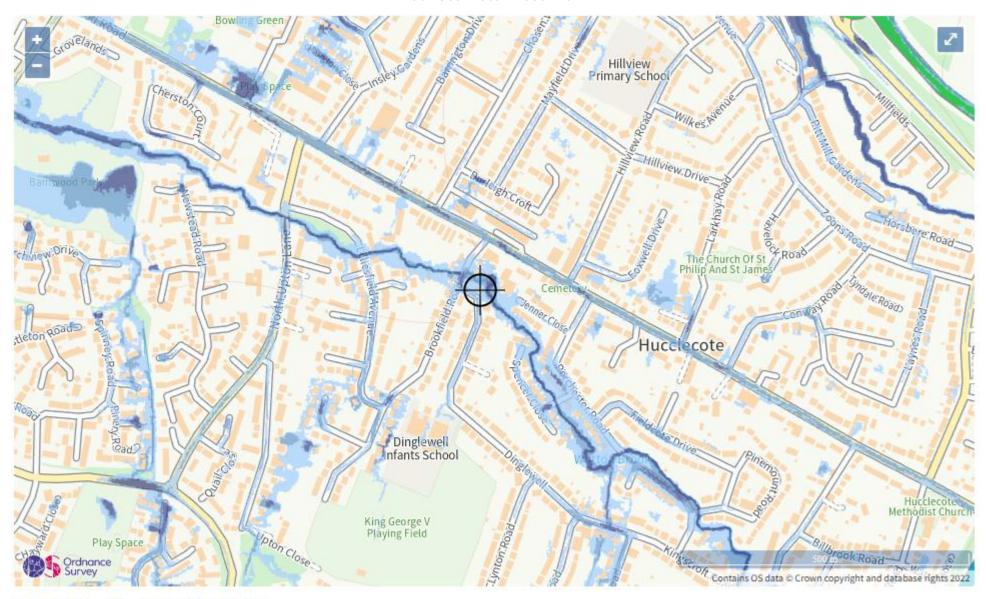
https://www.gov.uk/browse/environment-countryside/flooding-extreme-weather



Appendix C

Environment Agency Surface Water Flood Map

Surface Water Flood Risk



Extent of flooding from surface water





<u>Low</u>

<u>N</u> (

Very low

N (

Location you selected