5.16 Loss of mitigation measures during the lifetime of the property

A copy of this report should be included with the 'New Homeowners Handbook' and any potential purchaser made aware of the mitigation measures included on the site and the long-term maintenance requirement.

5.17 Flood Warning

Whilst the probability of an event of sufficient magnitude to cause floodwaters to reach the levels discussed in this report is low, the risk of such an occurrence is always present. With the sophisticated techniques now employed by the Environment Agency to predict the onset of flood events the opportunity now exists for all residents within the flood risk area to receive flood warnings. This forewarning could be sufficient to either allow occupants to evacuate the area or prepare themselves and the property for a flood event. It is therefore recommended that the Environment Agency's Floodline Service is contacted to find out if it is possible to register for Floodline Warnings Direct, which is a free service that provides flood warnings direct by telephone, mobile, fax or pager.

Off Site Impact

5.18 There is no increased risk associated with this development and there should be no impact on any neighbouring properties. There is a minor increase in displaced flood water generated by this development site although considered negligible.

Residual Risk

5.19 With the introduction of the controls discussed, the potential for harm to life or damage to property for this site is considered to be very low level.

6.0 SURFACE WATER DRAINAGE

Existing Discharge

6.1 The existing site characteristics are summarised as below;

Total Site Area	0.146 hectares (1,460m²)
Current Site Condition	Developed ~ 'Brownfield'
Existing Impermeable Area	875m²
Proposed Impermeable Area	1,375m² (max), 875m² (min)
Existing Surface Water Discharge Method	Discharges to public system As existing.

Proposed Discharge

6.2 The requirement of NPPF is that the surface water run-off from the development proposals replicates the natural drainage characteristics of the pre-developed site. The intention for surface water disposal from the extended property will be to control discharge and attenuate flows within the site. There will be no increase in surface water runoff from this site.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The conclusions of the Flood Risk Assessment for the proposed single storey rear extension to the existing commercial premises to provide additional hearse parking, chapels, workshops and cold storage, vehicular access improvements, change of use and conversion of the existing first floor offices to residential maisonette incorporating the existing second floor residential flat.

7.1 The Flood Map at this location has been derived using detailed fluvial modelling of the River Dour, completed by JBA Consulting in 2015. And updated in 2016. Analysis of the Environment Agency Product Data 4 Information indicates that part of the site lies within the outline of a Flood Zone 3 (High Probability) with a 1% probability of fluvial flooding, Flood Zone 2 (Medium Probability) with a 0.1% probability of fluvial flooding in any given year and that part of the site is outside the extreme flood outline known as Flood Zone 1.

7.2 The development is for 'more vulnerable' use. The footprint of the building envelope will be increased due to the introduction of an additional garages and offices therefore reducing the potential storage for displaced water during an extreme event although this is insignificant.

7.3 There will be an increase in surface water runoff generated by this development which will be contained within the site and have a controlled discharge to the public system. Post–development will increase the impermeable surface finishes from 875m² to 1,375m² although this could be reduced to 875m² should the new access and parking areas be constructed in permeable finishes.

7.4 Reference to Table 3 of the Technical Guidance to NPPF, 'More vulnerable' land use does require the exception test performing for Flood Zone 3 development sites. This assessment demonstrates that by introducing the recommendations made in this report the development will be safe, without increasing flood risk elsewhere.

7.5 Parts of the site fall within Flood Zones 1, 2 and 3. The proposed layout seeks to locate the development in the lower risk areas of the site with access and parking set within the higher risk area.

7.6 In Frames 14 and 15 in the 1% AEP + CC 'Undefended' scenario node points 8, 9, 10, 11, 13 & 14 become surcharged by between 30mm – 160mm. From Frames 17 & 18 it is seen that there is minimal Fluvial Flood Depths cross the site. The nodes most impacted are 9 and 10 which appear to be close to the riverbank and a low spot which will be brought up to suit the adjacent finishes.

7.7 Safe refuge is available at the first-floor level (17.292mAOD and above) which is approximately 2.9m above the ground floor level 14.375mAOD. This is significantly above the predicted extreme level and would limit the potential need for any specialist rescue by the Emergency Services. The internal route to the higher-level refuge areas is to be kept clear at all times and identified as escape routes. All habitants are to be made aware of these provisions.

7.8 As this development is for extensions and refurbishment of the existing property there will be limited scope for raising floor levels above those that currently exist. The proposed finished floor level for the extension to the commercial property is 14.375mAOD.

7.9 The risks have been considered for the flooding hazards associated with site, with the following mitigation measures required.

7.10 A copy of this report should be included with the 'New Homeowners Handbook' and any potential future purchaser made aware of the mitigation measures included on the site and the long-term maintenance requirement.

7.11 The owners of the new properties are to be encouraged to register for 'Floodline' Warnings Direct.

7.12 This report should be issued to the Environment Agency via the planning process and confirmation obtained that the mitigation measures including all finished floor levels are acceptable to minimise the risk to life and damage to

the development and that drainage conditions are not worsened elsewhere as a result of this development.

7.13 The risks have been considered for the flooding hazards associated with site, with the following mitigation measures required in accordance with CLG2007.

(a) The ground floor level of the extension and refurbished property is to be set no lower than the existing ground floor level. It is recommended that the entrances will have good quality doors installed that will provide protection in a flood event.

(b) *Floors* – The ground floor of the existing building is assumed to be of solid construction which provides an effective seal against water rising up through the floor. The new extensions ground floor will have a solid floor constructed. Solid concrete floors generally suffer less damage than suspended floors and are less expensive and faster to restore following exposure to floodwater.

(c) *Walls* – new walls should be constructed in brickwork at ground floor level. The use of stud walls and plasterboard on the ground floor of the development should be avoided wherever possible as these absorb water and generally need to be removed and rebuilt after a flood event.

(d) All external doors are to be of good quality and fitted with suitable seals to limit ingress of water should an extreme flood event occur.

(e) There should be no openings such as air bricks below the predicted extreme level to avoid ingress of water should an extreme event occur.

(f) *Services* - Boilers should be mounted on a wall above the level that floodwater is likely to reach. Electricity sockets should be located at least one metre above floor (or well above likely flood level) with distribution cables dropping from an upper level. Service meters should also be at least one metre above floor level (or well above likely flood level) and placed in plastic housings.

- Tridax Limited considers that with the inclusion of the above, the site is sustainable in terms of flood risk and that the proposals do not increase the risk to the neighbouring properties.

APPENDIX A

Drawings

213-001 Rev / – Site Location & Existing Plans

213-002 Rev / – Existing Floor Plans

213-003 Rev / – Existing Elevations & Sections

213-004 Rev A – Proposed Ground & First Floor

213-005 Rev A – Proposed Second Floor & Roof

213-006 Rev A – Proposed Elevations & Sections

213-007 Rev / – Photo Sheet

213-008 Rev B – Proposed Site Plan & Access

213-009 Rev A – Site Location & Existing Plans

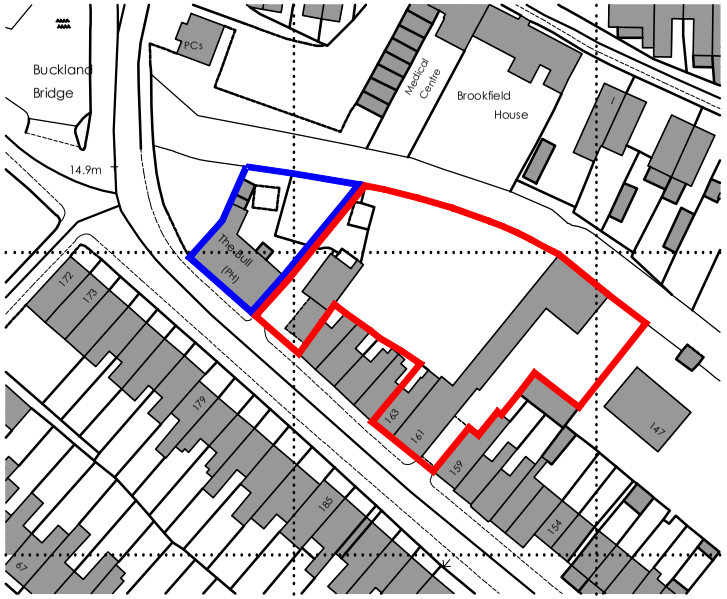
213-010 Rev C – Proposed Site Location A1

213-011 Rev A – Proposed Site Location A3

Topographical Survey

LAN @ 1:500

0 10 20 30 40 50 metres



SITE LOCATION PLAN @ 1:1250

0 10 20 30 40 50 100

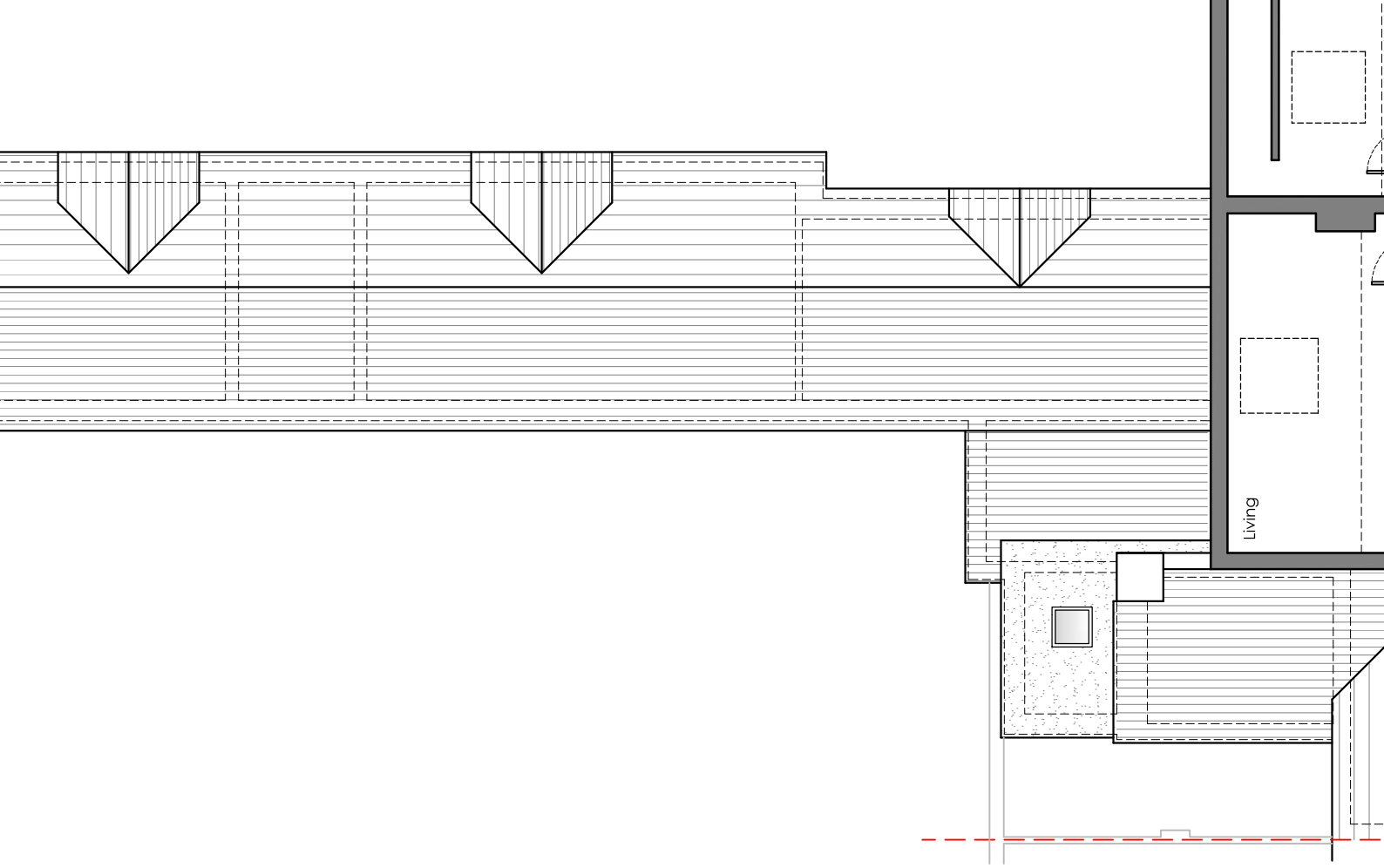
ADJOINING SITE, IN CLIENTS OWNERSHIP

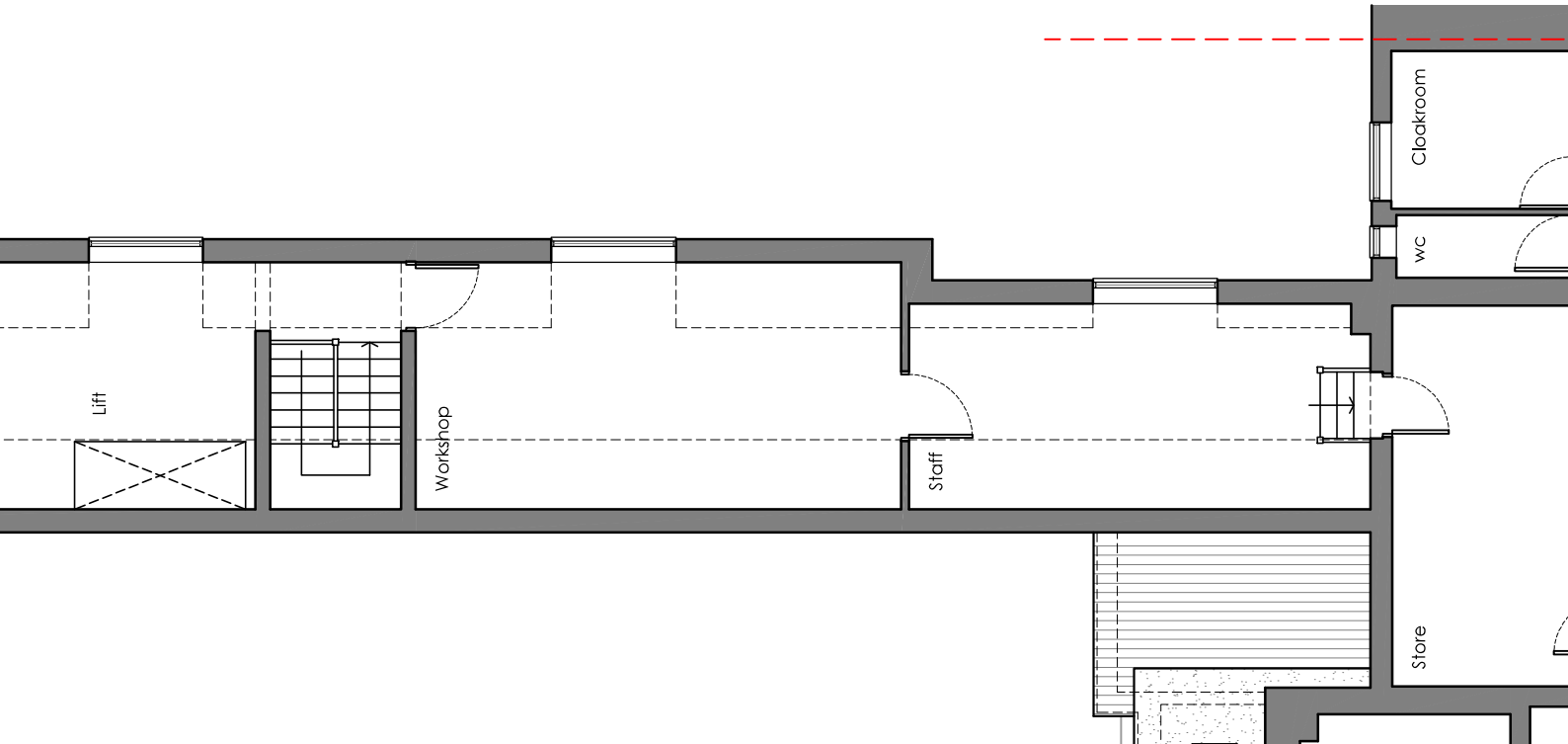
PROPOSED APPLICATION SITE = 0.146 Ha

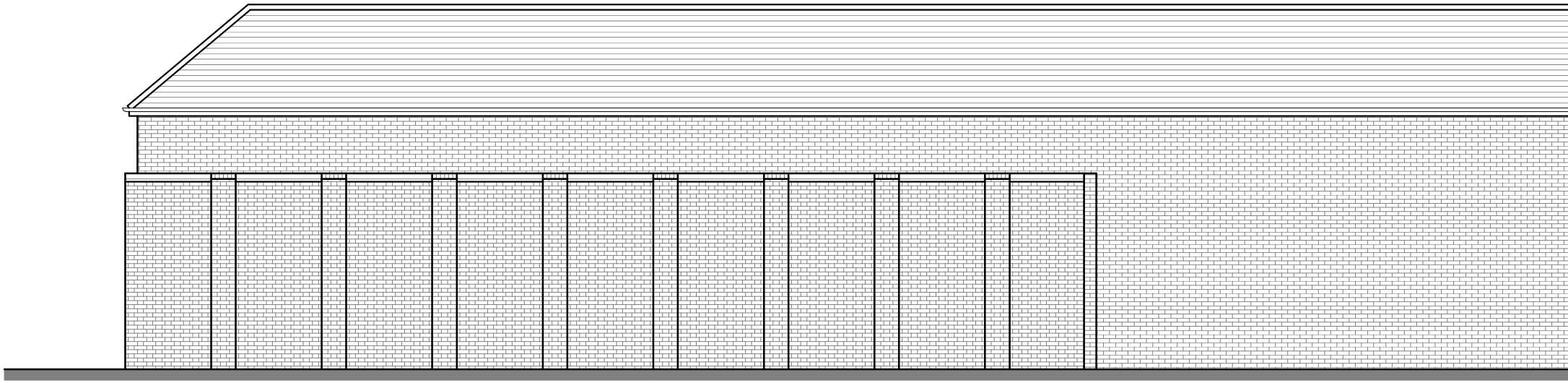
ORDNAN

EXISTING

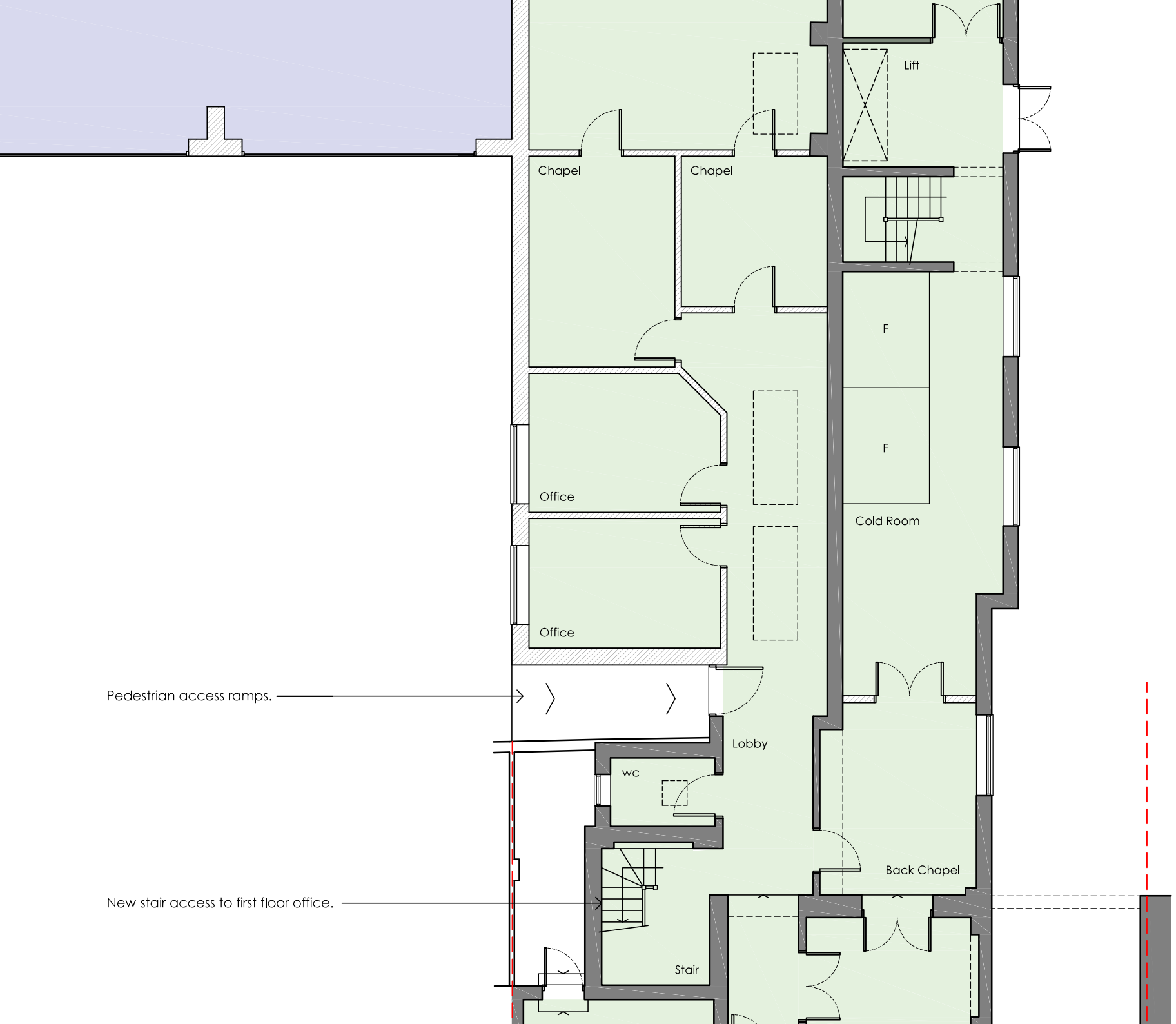
KEY:

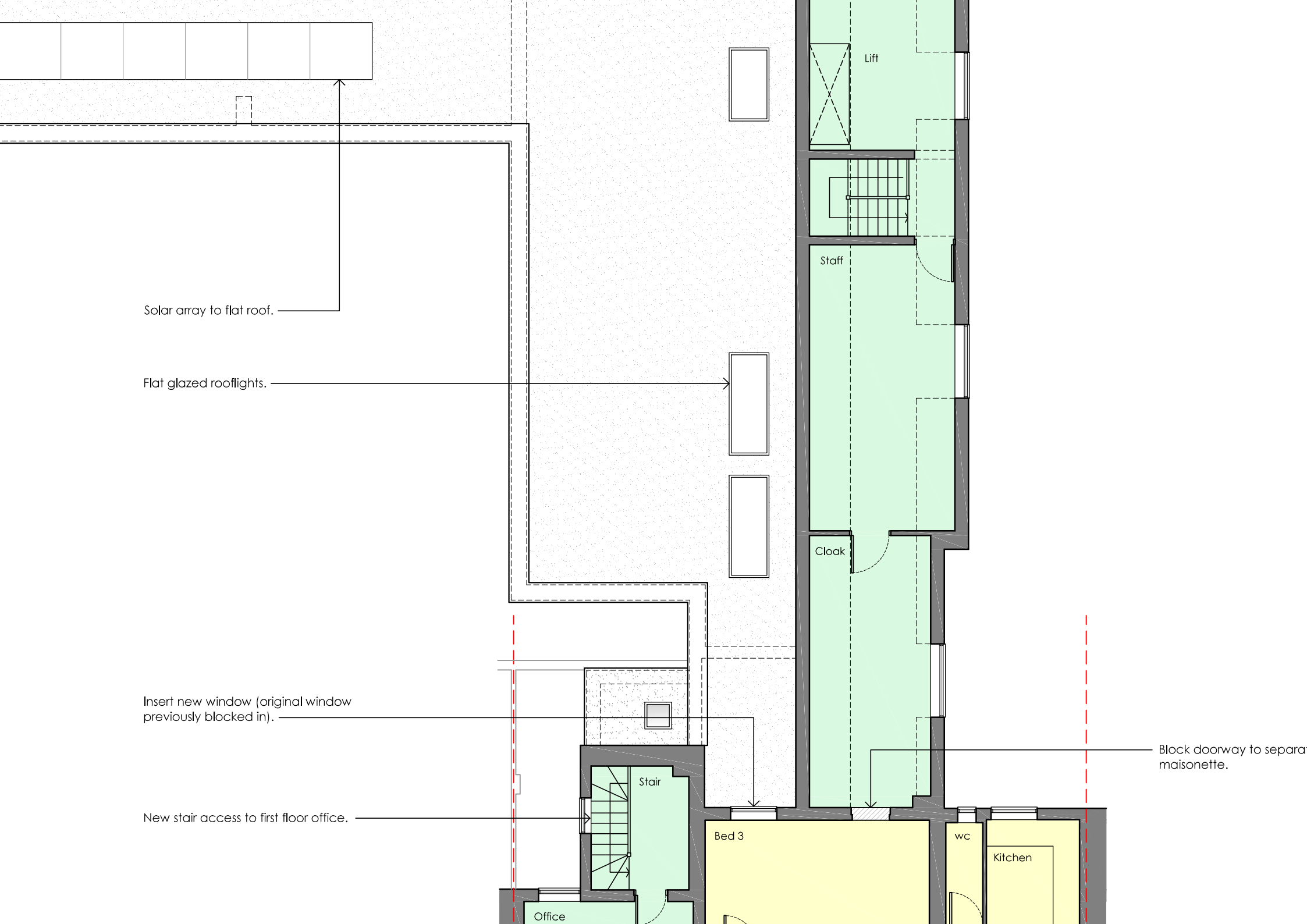

Living

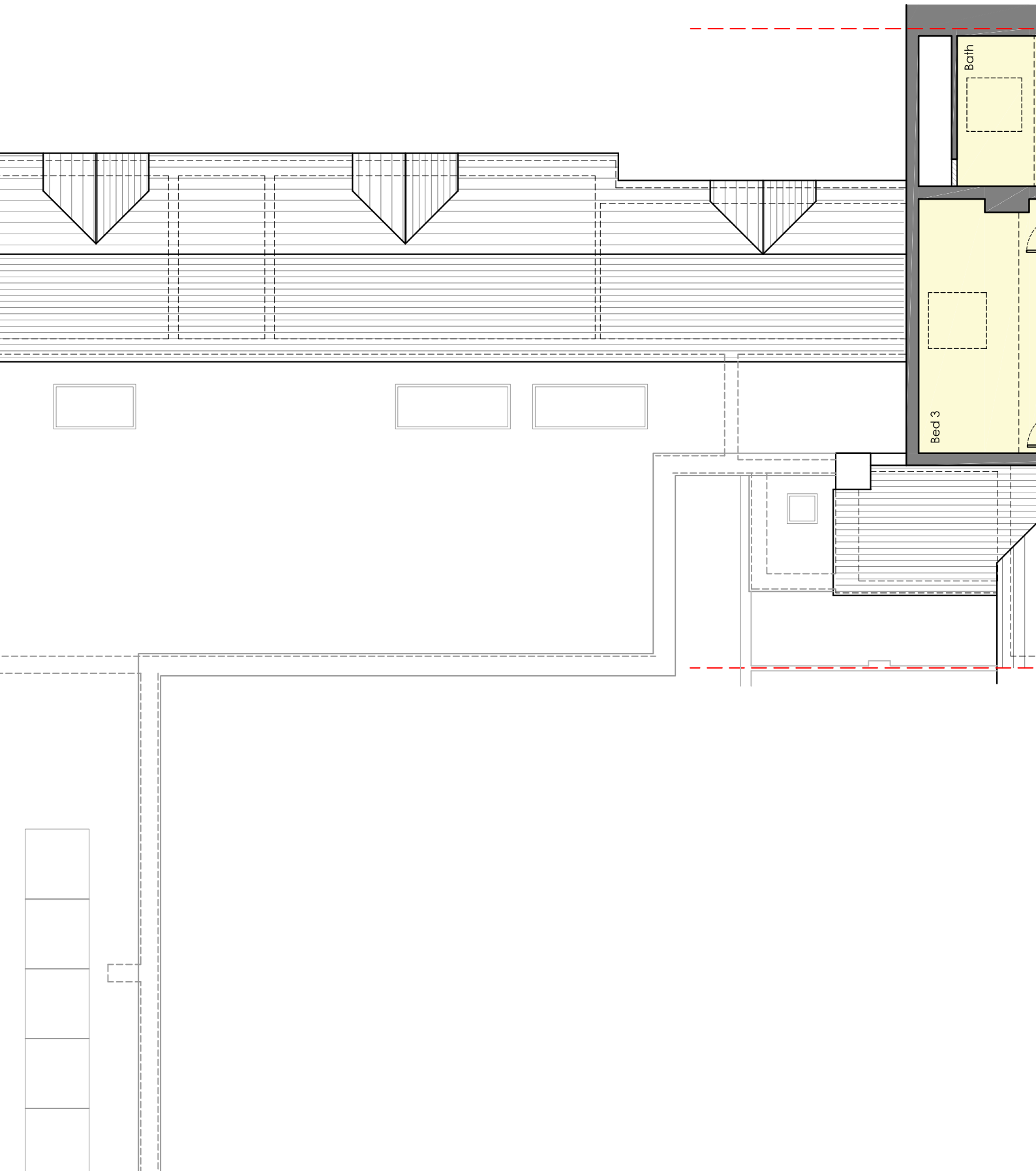

Cloakroom
wc
Lift
Workshop
Staff
Store

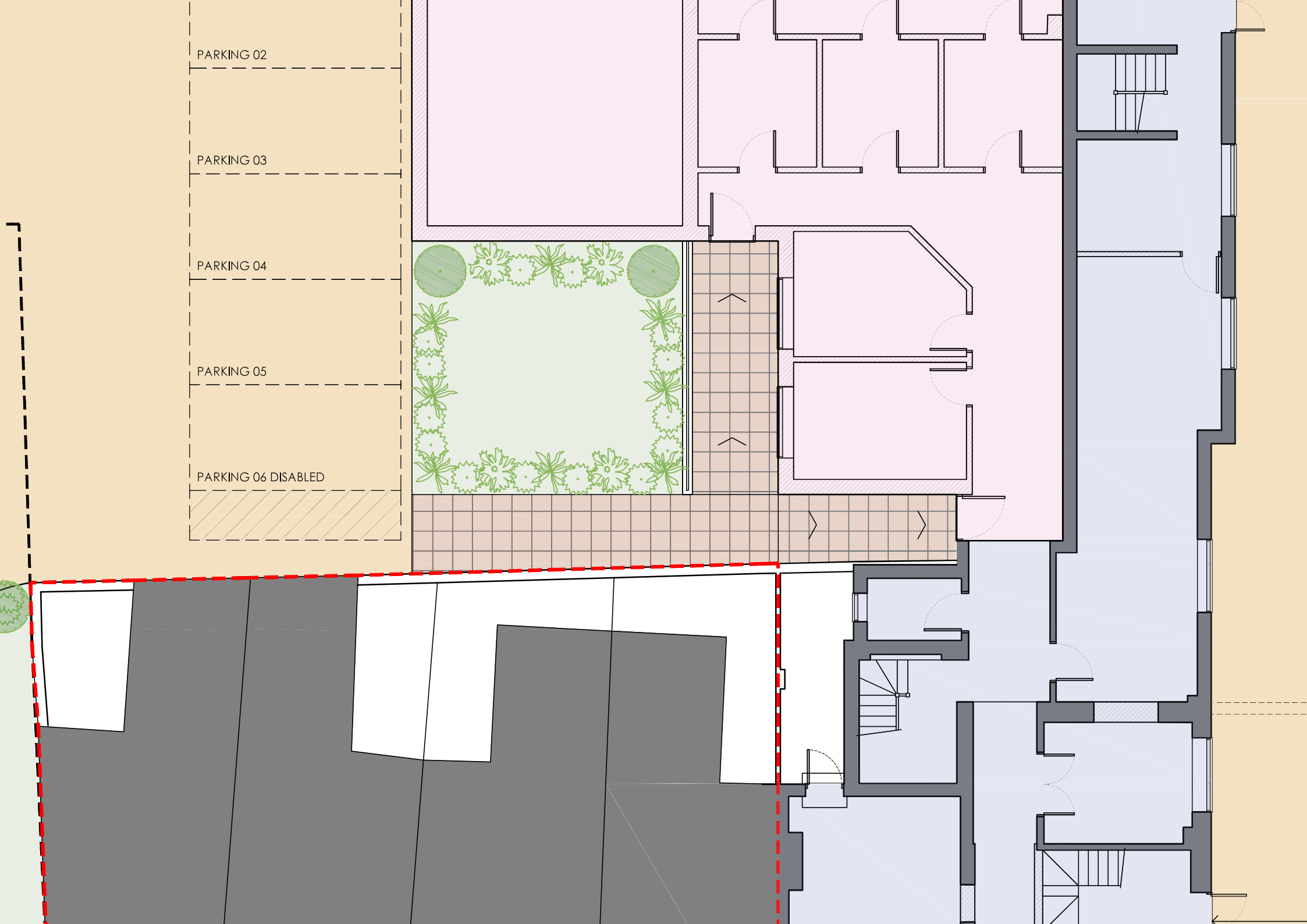


LEFT FLANK ELEVATION


Lift
Chapel
Chapel
F
F
Cold Room
Office
Office
Pedestrian access ramps.
Lobby
wc
Back Chapel
New stair access to first floor office.
Stair


Solar array to flat roof.
Flat glazed rooflights.
Insert new window (original window previously blocked in).
New stair access to first floor office.
Block doorway to separa
maisonette.
Lift
Staff
Cloak
Stair
Office
Bed 3
wc
Kitchen


Bath
Bed 3


PARKING 02
PARKING 03
PARKING 04
PARKING 05
PARKING 06 DISABLED

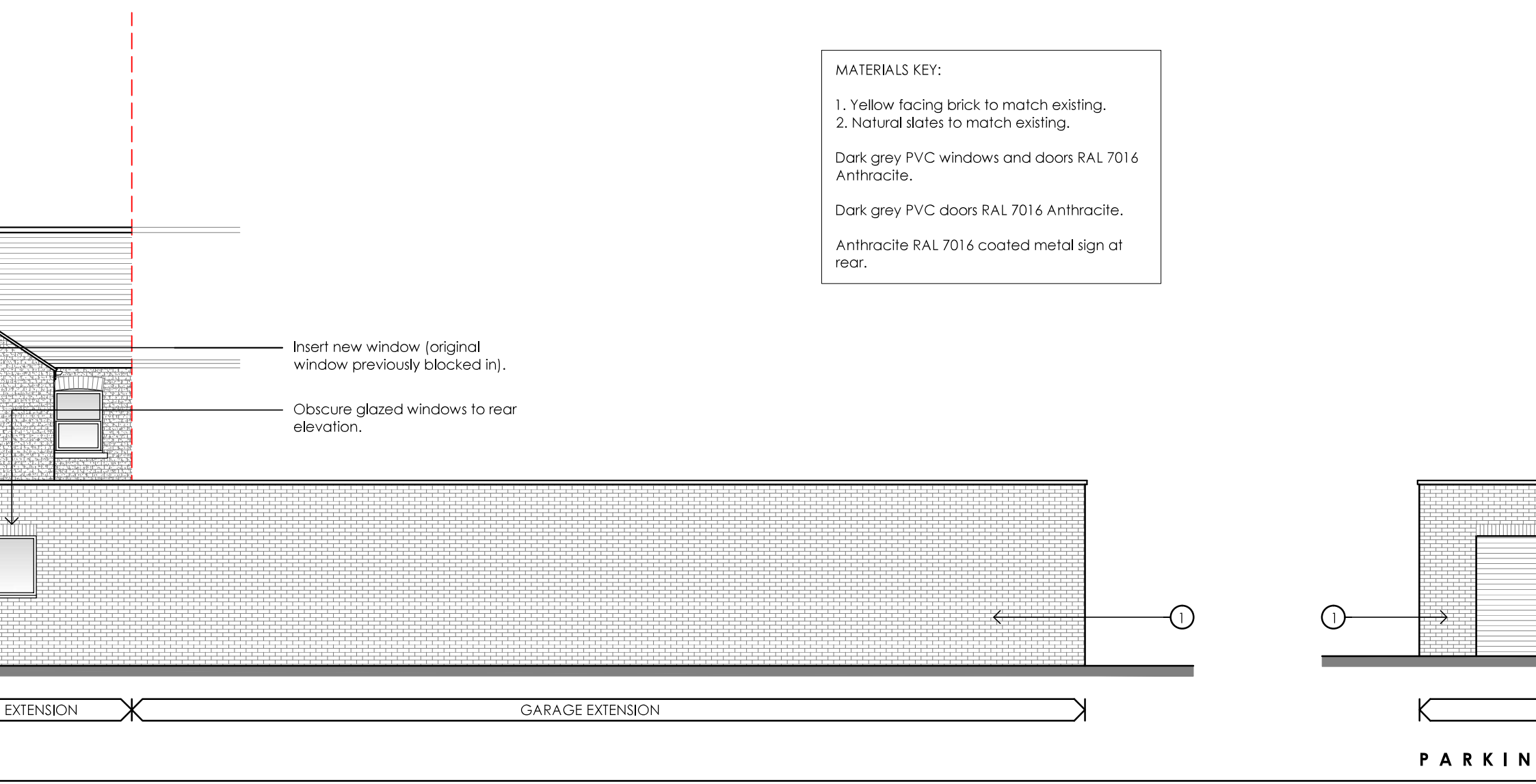
MATERIALS KEY:

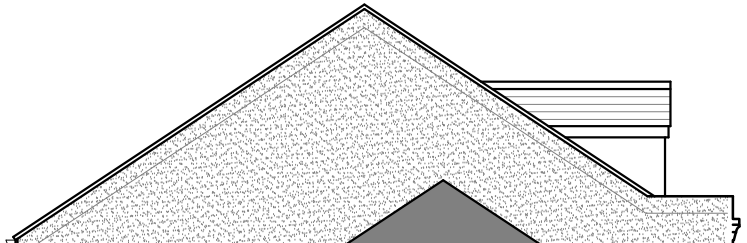
1. Yellow facing brick to match existing.
2. Natural slates to match existing.

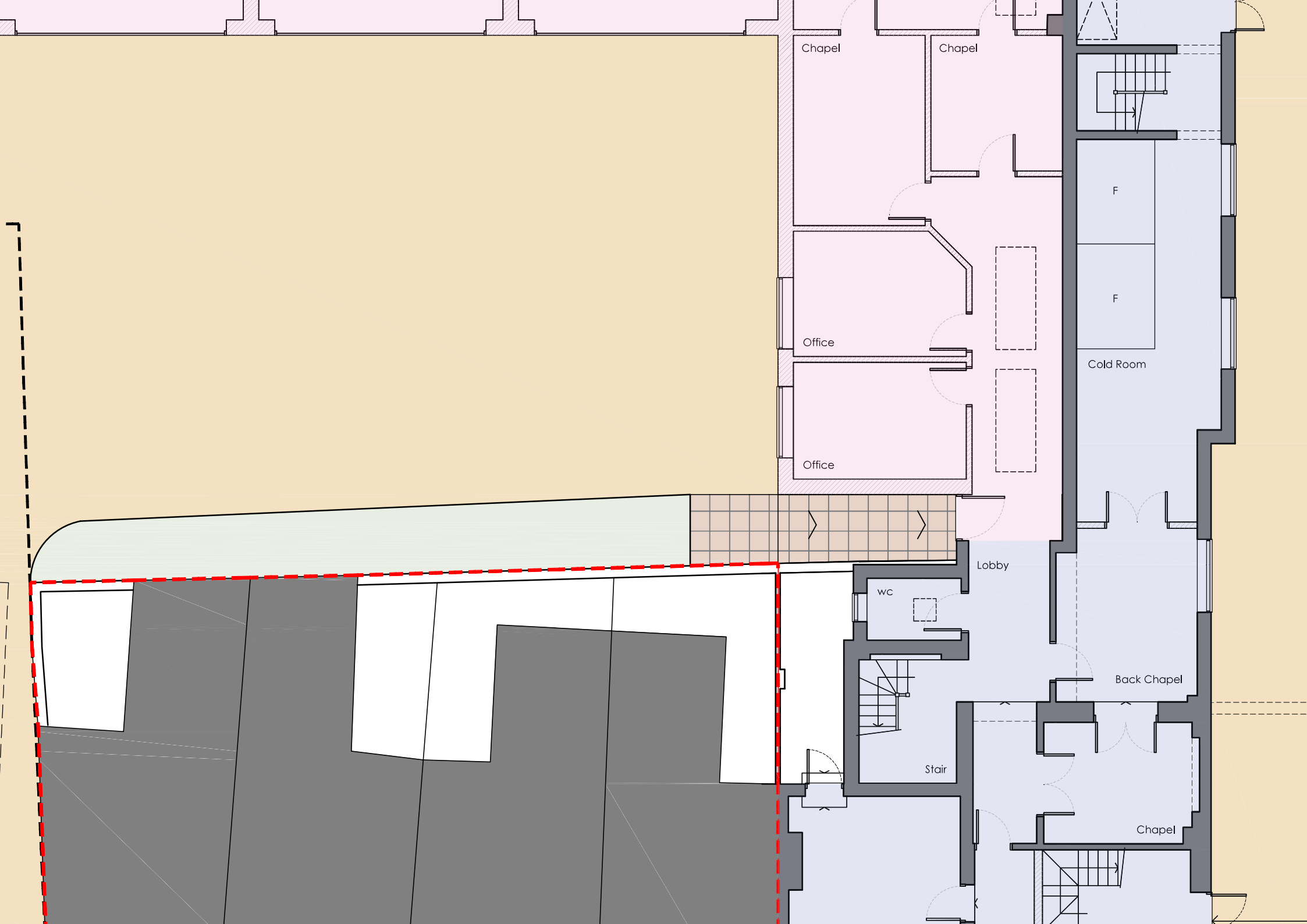
Dark grey PVC windows and doors RAL 7016 Anthracite.

Dark grey PVC doors RAL 7016 Anthracite.

Anthracite RAL 7016 coated metal sign at rear.






Chapel
Chapel
F
F
Office
Office
Cold Room
Lobby
wc
Back Chapel
Stair
Chapel

LAN @ 1:500

20 30 40 50 metres

ADJOINING SITE, IN CLIENTS OWNERSHIP

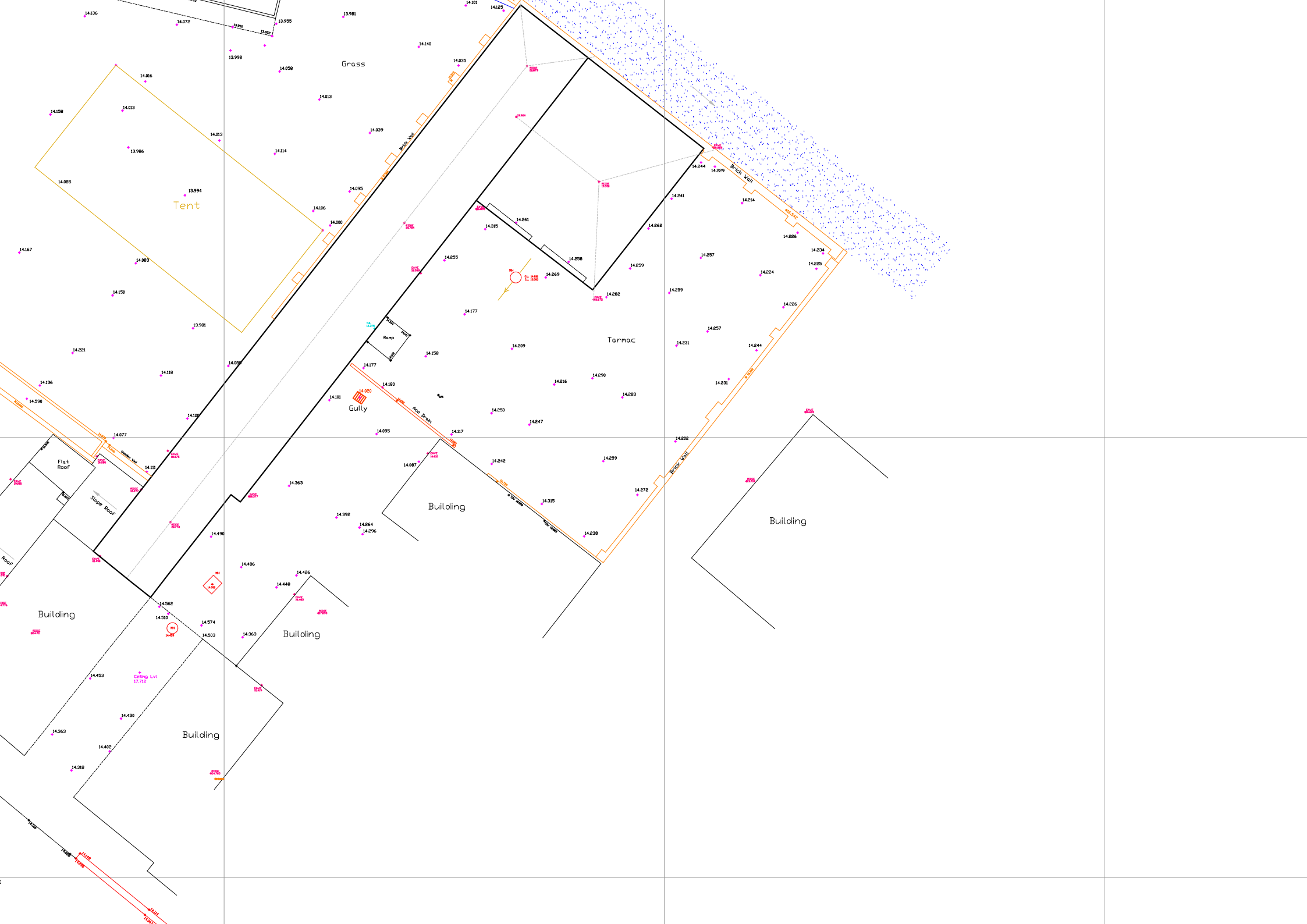
PROPOSED APPLICATION SITE = 0.146 Ha

KEY:

North

ORDNAN

EXISTING


Grass
Tent
Tarmac
Ramp
Gully
Aco Drain
Brick Wall
Building
Building
Building
Building
Building
Flat Roof
Slope Roof
Roof
Ceiling Lvl 17.712

APPENDIX B

Environment Agency Details

Product Data 4

Flood Prevention Diagram

Product 4 (Detailed Flood Risk) for: 161 London Road, Dover, Kent, CT17 0TG
Requested by: Steve Carr / Tridax
Reference: KSL 287053 RL
Date: 11 November 2022

Contents

The information provided is based on the best data available as of the date of this letter.

You may feel it is appropriate to contact our office at regular intervals, to check whether any amendments/ improvements have been made to the data for this location. Should you contact us again, after a period of time, please quote the above reference in order to help us deal with your query.

Please refer to the Open Government Licence which explains the permitted use of this information.

Orchard House, Endeavour Park, London Road, Addington, West Malling, Kent, ME19 5SH.
Email: kslenquiries@environment-agency.gov.uk

Flood Map Confirmation

The Flood Map:

Our Flood Map shows the natural floodplain for areas at risk from fluvial and tidal flooding. The floodplain is specifically mapped ignoring the presence and effects of flood defences. Although flood defences reduce the risk of flooding they cannot completely remove that risk as they may be overtopped or breached during a flood event.

The Flood Map shows the probability of a flood of a particular magnitude, or greater, occurring in any given year. This is known as the Annual Exceedance Probability (AEP). Flood Zone 3 indicates areas of land having a 1 in 100 or greater annual probability (1% AEP) of flooding from rivers, or a 1 in 200 or greater annual probability (0.5% AEP) of flooding from the sea. Flood Zone 2 indicates areas of land having up to a 1 in 1000 annual probability (0.1% AEP) of flooding from rivers or the sea. The Flood Map also shows the location of some flood defences and the areas that benefit from them.

The Flood Map is intended to act as a guide to indicate the potential risk of flooding. When producing it we use the best data available to us at the time of completion, taking into account historic flooding and local knowledge. The Flood Map is updated on a quarterly basis to account for any amendments required. These amendments are then displayed on the internet at https://flood-map-for-planning.service.gov.uk/.

At this Site:

The Flood Map shows that parts of this site lie within the outline of the 1% (Flood Zone 3) chance of flooding from rivers in any given year.

The Flood Map also shows that parts of this site lie within the outline of the 0.1 % (Flood Zone 2) chance of flooding from rivers in any given year.

The Flood Map also shows that parts of your site are outside the extreme flood outline (0.1%), known as Flood Zone 1.

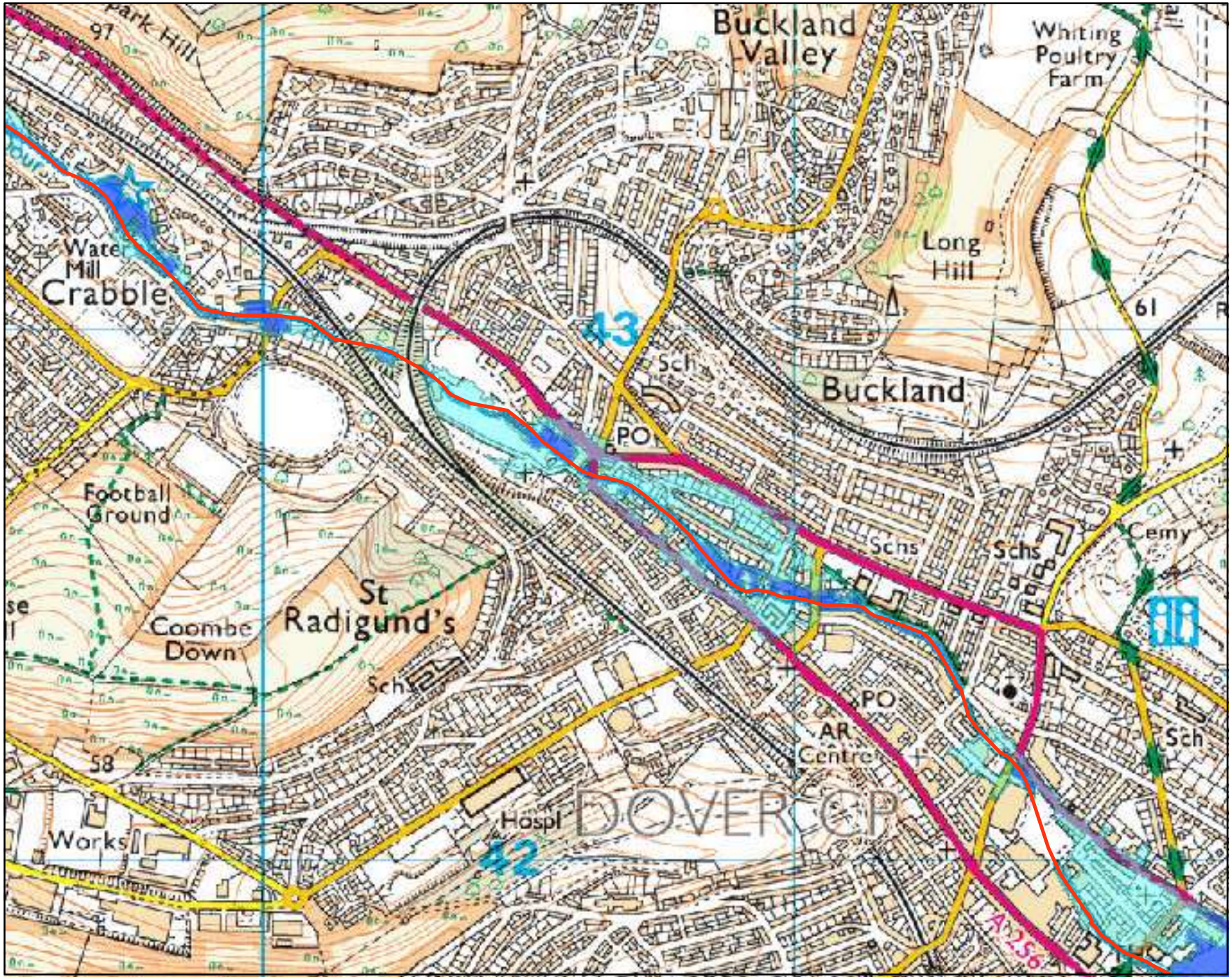
Enclosed is an extract of our Flood Map which shows this information for your area.

Method of production

The Flood Map at this location has been derived using detailed fluvial modelling of the River Dour, completed by JBA Consulting in 2015.

Orchard House, Endeavour Park, London Road, Addington, West Malling, Kent, ME19 5SH.
Email: kslenquiries@environment-agency.gov.uk

Flood Map centred on 161 London Road, Dover, Kent, CT17 0TG
Created 11 November 2022 [Ref: KSL 287053 RL]



Environment Agency

N

Legend

- Main River
- Flood Defences
- Flood Storage Areas
- Areas Benefiting from Flood Defences
- 1% AEP Fluvial 0.5% AEP Tidal
- 0.1% AEP Flooding

Annual Exceedance Probability (AEP). The probability of a flood of a particular magnitude, or greater, occurring in any given year.

Scale 1:10,000

0 250 500

Metres

Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Model Output Data

You have requested flood levels and/or depths for various return periods at this location.

2D

A 2D TuFLOW model has been used to represent the floodplain as a grid. The flood water levels and/or depths have been calculated for each grid cell. The modelled flood levels / depths presented here are for the closest most appropriate model grid cells. Any additional information you may need to know about the modelling from which they are derived and/or any specific use or health warnings for their use are set out below.

The table below gives fluvial flood depths and levels taken from the 2D model.

A map showing the location of the points from which the data is taken is enclosed. Please refer to the Open Government Licence which explains the permitted use of this information.

Orchard House, Endeavour Park, London Road, Addington, West Malling, Kent, ME19 5SH.
Email: kslenquiries@environment-agency.gov.uk

Data Points Map centred on 161 London Road, Dover, Kent, CT17 0TG
Created 11 November 2022 [Ref: KSL 287053 RL]

Environment Agency

N

Legend

- Main River
- Data Points

Scale 1:400

0 10 20

Metres

Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Table 1: Modelled Fluvial Flood Levels for Annual Exceedance Probability (AEP) events shown (metres AOD)

Point ID	National Grid Reference		Modelled Fluvial Flood Levels for Annual Exceedance Probability (AEP) events shown (metres AOD)										
			Undefended										
	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.3% AEP	2% AEP	1.3% AEP	1% AEP	1% AEP + CC (20%)	0.4% AEP	0.1% AEP
1	630704	142688	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	630697	142679	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.26
3	630694	142690	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.26
4	630686	142679	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.27
5	630675	142668	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	630674	142677	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	630684	142689	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.27
8	630692	142699	0.00	0.00	0.00	0.00	0.00	13.93	13.98	14.02	14.13	14.15	14.25
9	630681	142699	0.00	0.00	0.00	0.00	0.00	0.00	13.98	14.05	14.12	14.16	14.28
10	630675	142692	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.05	14.12	14.15	14.28
11	630670	142686	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.12	14.15	14.31
12	630666	142694	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.29
13	630671	142700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.05	14.12	14.15	14.28
14	630664	142706	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.17	14.20	14.33
15	630659	142698	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.38
16	630654	142690	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.48
17	630656	142704	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.40
18	630652	142696	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.41
19	630647	142689	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.52
20	630641	142684	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.61

Data taken from the River Dour Fluvial Mapping Study, completed by JBA Consulting in 2015.

Climate change (CC) data represents modelled levels with a 20% increase in river flows.

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent.

There are no health warnings or additional information for these levels, or the model from which they were produced.

Orchard House, Endeavour Park, London Road, Addington, West Malling, Kent, ME19 5SH.
Email: kslenquiries@environment-agency.gov.uk

Table 2: Modelled Fluvial Flood Depths for Annual Exceedance Probability (AEP) events shown (metres)

Point ID	National Grid Reference		Modelled Fluvial Flood Depths for Annual Exceedance Probability (AEP) events shown (metres)										
			Undefended										
	Easting	Northing	50% AEP	20% AEP	10% AEP	5% AEP	3.3% AEP	2% AEP	1.3% AEP	1% AEP	1% AEP + CC (20%)	0.4% AEP	0.1% AEP
1	630704	142688	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	630697	142679	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
3	630694	142690	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
4	630686	142679	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
5	630675	142668	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	630674	142677	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	630684	142689	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
8	630692	142699	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.04	0.06	0.14
9	630681	142699	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.08	0.16	0.19	0.32
10	630675	142692	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.16	0.19	0.32
11	630670	142686	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.13
12	630666	142694	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
13	630671	142700	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.03	0.16
14	630664	142706	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.07	0.19
15	630659	142698	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
16	630654	142690	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
17	630656	142704	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
18	630652	142696	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16
19	630647	142689	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
20	630641	142684	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17

Data taken from the River Dour Fluvial Mapping Study, completed by JBA Consulting in 2015.

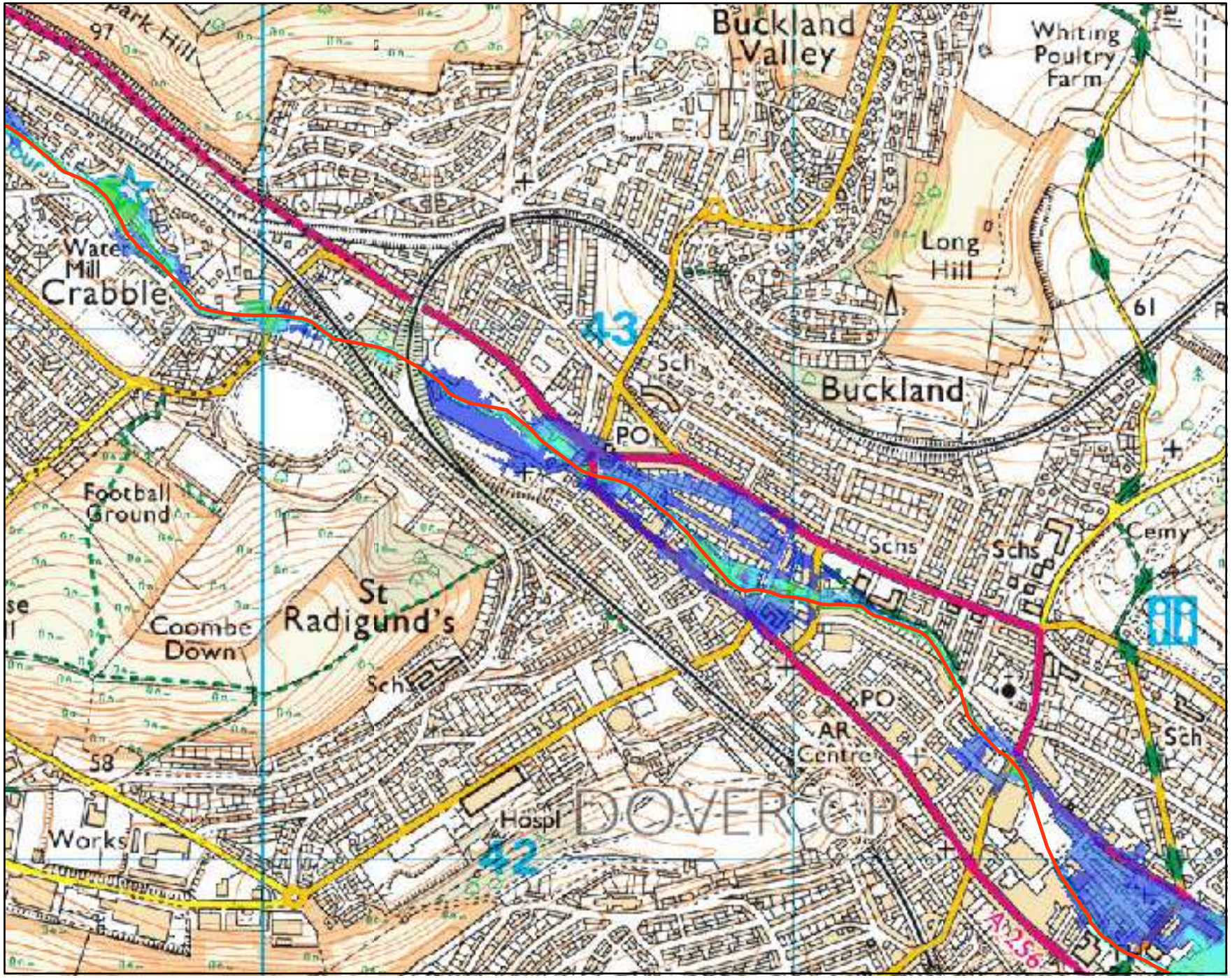
Climate change (CC) data represents modelled depths with a 20% increase in river flows.

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent.

There are no health warnings or additional information for these depths, or the model from which they were produced.

Orchard House, Endeavour Park, London Road, Addington, West Malling, Kent, ME19 5SH.
Email: kslenquiries@environment-agency.gov.uk

Undefended Fluvial Flood Extents Map centred on 161 London Road, Dover, Kent, CT17 0TG
Created 11 November 2022 [Ref: KSL 287053 RL]



Environment Agency

N

Legend

Main River

Undefended Fluvial Flood Extents

Id

- 50% AEP
- 20% AEP
- 10% AEP
- 5% AEP
- 3.33% AEP
- 2% AEP
- 1.3% AEP
- 1% AEP
- 1% AEP + CC (20%)
- 0.4% AEP
- 0.1% AEP

Annual Exceedance Probability (AEP). The probability of a flood of a particular magnitude, or greater, occurring in any given year.

Climate Change (CC) extents based on the percentage increase in river flows specified.

Scale 1:10,000

0 250 500

Metres

Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Table 3: Modelled Fluvial CC Flood Levels for Annual Exceedance Probability (AEP) events shown (metres AOD)

Point ID	National Grid Reference		Modelled Fluvial CC Flood Levels for AEP events shown (metres AOD)				
			Undefended				
	Easting	Northing	1% AEP + CC (30%)	1% AEP + CC (35%)	1% AEP + CC (45%)	1% AEP + CC (50%)	1% AEP + CC (105%)
1	630704	142688	0.00	0.00	0.00	0.00	14.26
2	630697	142679	0.00	0.00	0.00	0.00	14.27
3	630694	142690	0.00	0.00	0.00	0.00	14.27
4	630686	142679	0.00	0.00	0.00	0.00	14.28
5	630675	142668	0.00	0.00	0.00	0.00	0.00
6	630674	142677	0.00	0.00	0.00	0.00	0.00
7	630684	142689	0.00	0.00	0.00	0.00	14.28
8	630692	142699	14.15	14.17	14.18	14.19	14.27
9	630681	142699	14.16	14.18	14.19	14.20	14.29
10	630675	142692	14.16	14.17	14.19	14.20	14.30
11	630670	142686	14.16	14.17	14.25	14.26	14.32
12	630666	142694	0.00	0.00	0.00	0.00	14.30
13	630671	142700	14.16	14.17	14.19	14.20	14.30
14	630664	142706	14.21	14.22	14.25	14.25	14.34
15	630659	142698	0.00	14.29	14.34	14.34	14.39
16	630654	142690	0.00	0.00	0.00	0.00	14.49
17	630656	142704	0.00	14.28	14.35	14.35	14.41
18	630652	142696	0.00	14.31	14.35	14.35	14.42
19	630647	142689	0.00	0.00	0.00	0.00	14.53
20	630641	142684	0.00	14.52	14.54	14.54	14.62

Data taken from the River Dour Fluvial Mapping Study, completed by JBA Consulting in 2015 and updated in 2016 with additional climate change allowances.

Climate change (CC) data represents modelled levels with the percentage increase in river flows specified.

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent. There are no health warnings or additional information for these levels, or the model from which they were produced.

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Table 4: Modelled Fluvial CC Flood Depths for Annual Exceedance Probability (AEP) events shown (metres)

Point ID	National Grid Reference		Modelled Fluvial CC Flood Depths for AEP events shown (metres)				
			Undefended				
	Easting	Northing	1% AEP + CC (30%)	1% AEP + CC (35%)	1% AEP + CC (45%)	1% AEP + CC (50%)	1% AEP + CC (105%)
1	630704	142688	0.00	0.00	0.00	0.00	0.18
2	630697	142679	0.00	0.00	0.00	0.00	0.07
3	630694	142690	0.00	0.00	0.00	0.00	0.08
4	630686	142679	0.00	0.00	0.00	0.00	0.09
5	630675	142668	0.00	0.00	0.00	0.00	0.00
6	630674	142677	0.00	0.00	0.00	0.00	0.00
7	630684	142689	0.00	0.00	0.00	0.00	0.09
8	630692	142699	0.06	0.07	0.08	0.08	0.15
9	630681	142699	0.19	0.21	0.23	0.23	0.33
10	630675	142692	0.19	0.21	0.23	0.23	0.33
11	630670	142686	0.03	0.04	0.07	0.07	0.13
12	630666	142694	0.00	0.00	0.00	0.00	0.13
13	630671	142700	0.04	0.05	0.07	0.08	0.18
14	630664	142706	0.08	0.09	0.11	0.11	0.20
15	630659	142698	0.00	0.01	0.05	0.05	0.11
16	630654	142690	0.00	0.00	0.00	0.00	0.03
17	630656	142704	0.00	0.01	0.03	0.03	0.10
18	630652	142696	0.00	0.07	0.10	0.10	0.17
19	630647	142689	0.00	0.00	0.00	0.00	0.13
20	630641	142684	0.00	0.09	0.10	0.10	0.18

Data taken from the River Dour Mapping Study, completed by JBA Consulting in 2015 and updated in 2016 with additional climate change allowances.

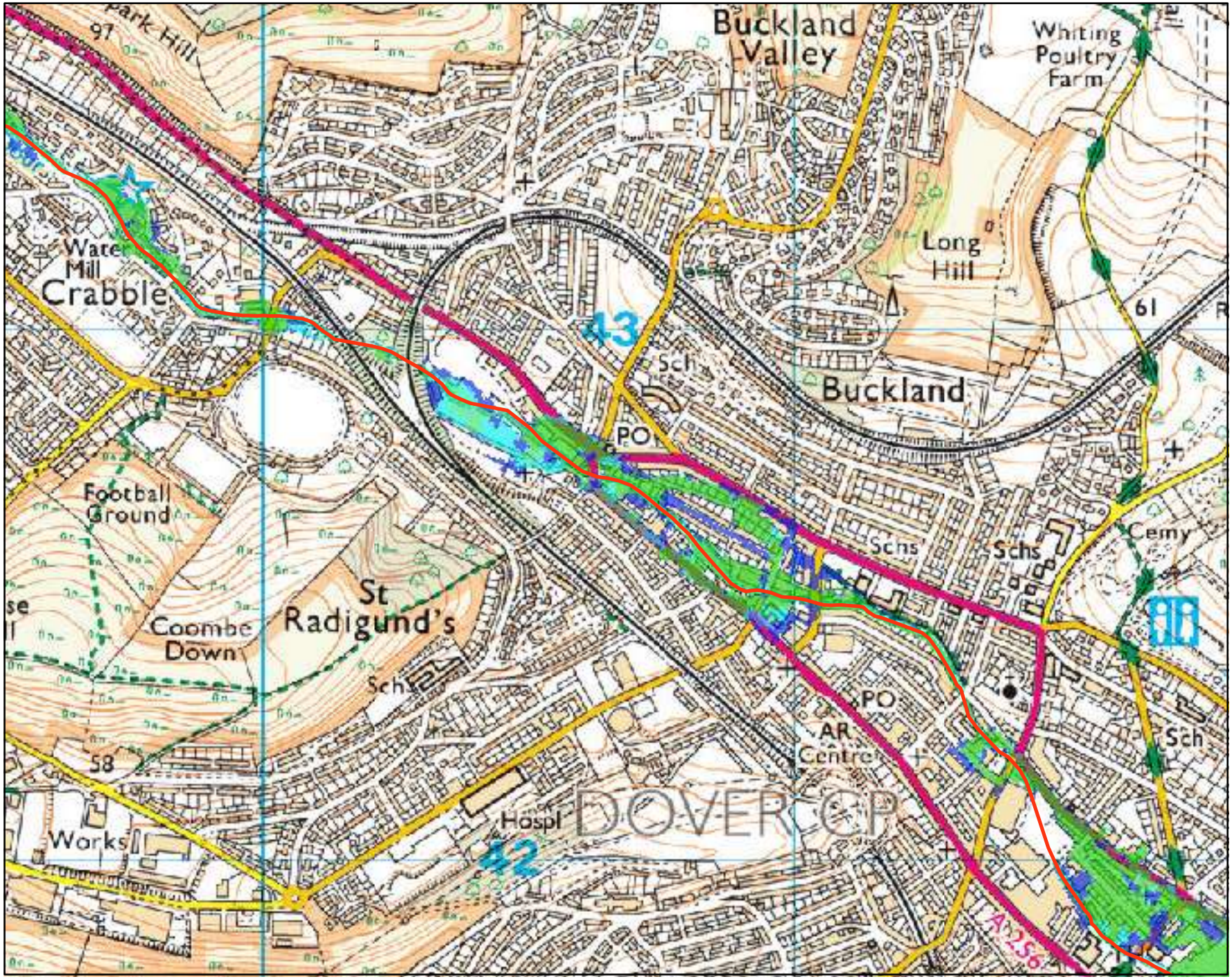
Climate change (CC) data represents modelled depths with the percentage increase in river flows specified.

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent.

There are no health warnings or additional information for these depths, or the model from which they were produced.

Orchard House, Endeavour Park, London Road, Addington, West Malling, Kent, ME19 5SH.
Email: kslenquiries@environment-agency.gov.uk

Undefended Fluvial Climate Change Flood Extents Map centred on 161 London Road, Dover, Kent, CT17 0TG
Created 11 November 2022 [Ref: KSL 287053 RL]



Environment Agency

N

Legend

Main River

Undefended Climate Change Extents

Id

- 1% AEP + CC (30%)
- 1% AEP + CC (35%)
- 1% AEP + CC (45%)
- 1% AEP + CC (50%)
- 1% AEP + CC (105%)

Annual Exceedance Probability (AEP). The probability of a flood of a particular magnitude, or greater, occurring in any given year.

Climate Change (CC) extents based on the percentage increase in river flows specified.

Scale 1:10,000

0 250 500

Metres

Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

Defence Details

There are no formal flood defences owned or maintained by the Environment Agency in the area of this site/ property.

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Email: kslenquiries@environment-agency.gov.uk

Historic Flood Data

We do not hold records of historic flood events from rivers and/or the sea affecting the area local to this property. However, please be aware that this does not necessarily mean that flooding has not occurred here in the past, as our records are not comprehensive.

We would therefore advise that you make further enquiries locally with specific reference to flooding at this location. You should consider contacting the relevant Local Planning Authority and/or water/sewerage undertaker for the area.

Please be aware that flooding can come from different sources. Examples of these are:
- from rivers or the sea
- surface water (i.e. rainwater flowing over or accumulating on the ground before it is able to enter rivers or the drainage system)
- overflowing or backing up of sewer or drainage systems which have been overwhelmed
- groundwater rising up from underground aquifers

Currently the Environment Agency can only supply flood risk data relating to the chance of flooding from rivers or the sea. However you should be aware that in recent years, there has been an increase in flood damage caused by surface water flooding or drainage systems that have been overwhelmed.

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Additional Information

Information Warning - OS background mapping

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Planning advice and guidance

The Environment Agency are keen to work with partners to enable development which is resilient to flooding for its lifetime and provides wider benefits to communities. If you have requested this information to help inform a development proposal, then we recommend engaging with us as early as possible by using the pre-application form available from our website:
https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion

Complete the form in the link and email back to kslplanning@environment-agency.gov.uk.

We recognise the value of early engagement in development planning decisions. This allows complex issues to be discussed, innovative solutions to be developed that both enables new development and protects existing communities. Such engagement can often avoid delays in the planning process following planning application submission, by reaching agreements up-front. We offer a charged pre-application advice service for applicants who wish to discuss a development proposal.

We can also provide a preliminary opinion for free which will identify environmental constraints related to our responsibilities including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

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Email: kslenquiries@environment-agency.gov.uk

Flood Risk Assessments Guidance

Flood risk standing advice for applicants

In preparing your planning application submission, you should refer to the Environment Agency's Flood Risk Standing Advice and the Planning Practice Guidance for information about what flood risk assessment is needed for new development in the different Flood Zones. This information can be accessed via:

https://www.gov.uk/flood-risk-assessment-standing-advice

http://planningguidance.planningportal.gov.uk/

https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications

https://www.gov.uk/guidance/flood-risk-and-coastal-change

You should also consult the Strategic Flood Risk Assessment and flood risk local plan policies produced by your local planning authority.

You should note that:

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk Assessment where one is required, but does not constitute such an assessment on its own.
2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as groundwater or overland runoff. You should discuss surface water management with your Lead Local Flood Authority.
3. Where a planning application requires a FRA and this is not submitted or deficient, the Environment Agency may well raise an objection due to insufficient information

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Updated climate change requirements for flood risk assessments

On 20/07/2021 the 'Flood risk assessments: climate change allowances' were updated and published on gov.uk. You can view the updated allowances at 'Flood risk assessments: climate change allowances'.

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 Environment Agency will incorporate the new allowances into future modelling studies. It remains the applicant's responsibility to demonstrate through their proposals and flood risk assessments that new development will be safe in flood risk terms for its lifetime.

Surface Water

We have provided two national Surface Water maps, under our Strategic Overview for flooding, to your Lead Local Flood Authority who are responsible for local flood risk (i.e. surface runoff, ground water and ordinary watercourse), which alongside their existing local information will help them in determining what best represents surface water flood risk in your area.

Your Lead Local Flood Authority have reviewed these and determined what it believes best represents surface water flood risk. You should therefore contact this authority so they can provide you with the most up to date information about surface water flood risk in your area.

You may also wish to consider contacting the appropriate relevant Local Planning Authority and/or water/sewerage undertaker for the area. They may be able to provide some knowledge on the risk of flooding from other sources. We are working with these organisations to improve knowledge and understanding of surface water flooding.

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Email: kslenquiries@environment-agency.gov.uk

If you live in an area that is at risk of flooding, there are things you can do to reduce the damage that a flood can do to your home. The illustration below shows some examples.

Electrical sockets

Raising electrical sockets, fuse boxes and associated wiring to at least 1.5 metres above ground floor level will limit the risk of them being damaged by water during a flood. You may be able to use them again once the water has receded and the electricity supply is restored. If rewiring, bring cables down the wall from the top to the raised socket so that cabling doesn't get affected. Controls and ventilation systems should also be well above floor level.

TV and hi-fi

Mount your TV or hi-fi and speakers on the wall.

Walls

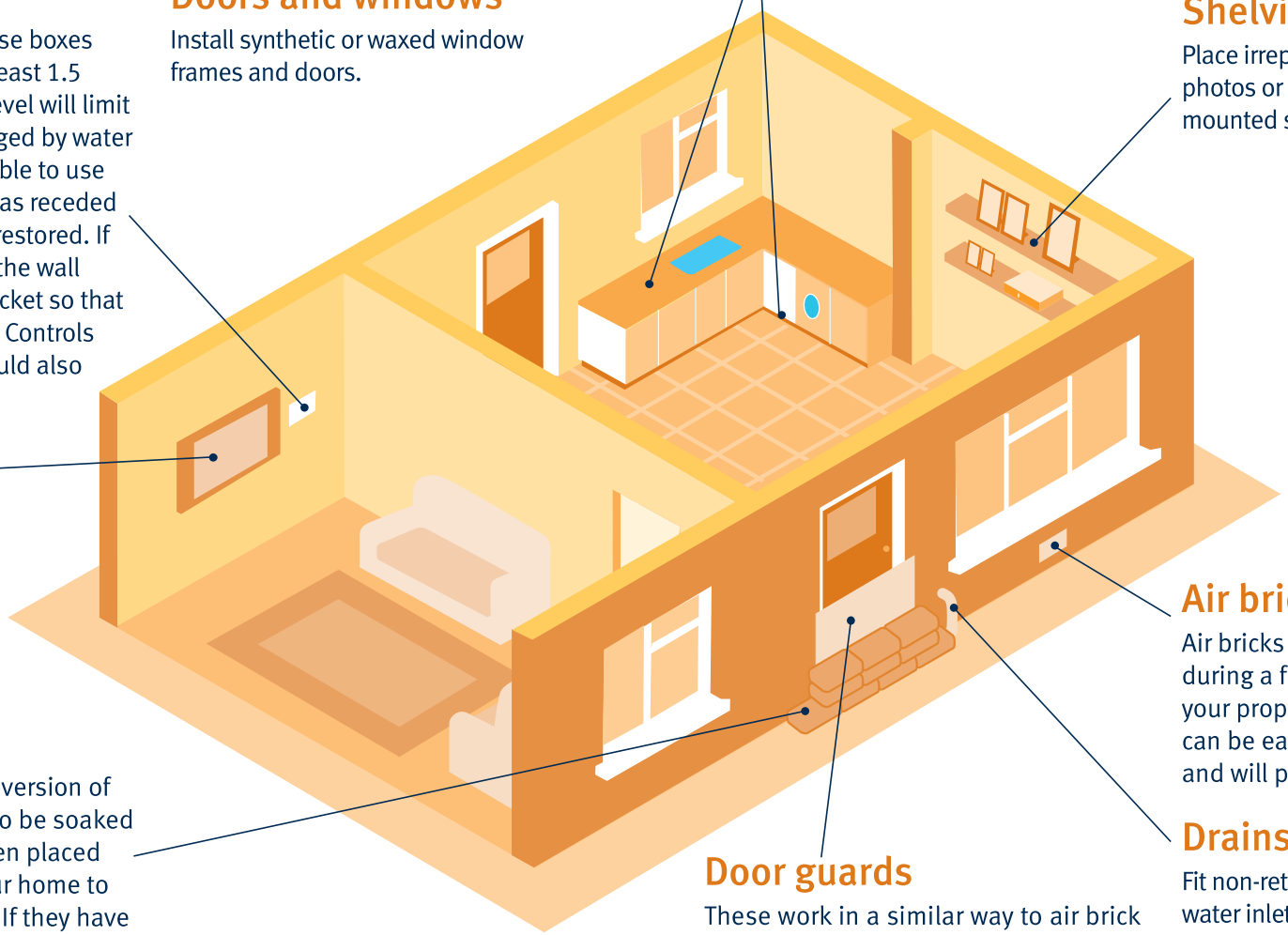
Use lime-based plaster instead of gypsum on walls.

Flood sacks

These are a lighter, modern version of sandbags. The sacks need to be soaked in water so they expand, then placed around the entrances to your home to protect against flood water. If they have not been in contact with contaminated water, they can be left to dry and shrink and can be reused. They take up little storage and can be cost-effective.

Doors and windows

Install synthetic or waxed window frames and doors.



Kitchen units and appliances

Fit stainless steel, plastic or solid wood kitchen units rather than chipboard. White goods such as fridges should be raised on plinths.

Door guards

These work in a similar way to air brick covers but on a larger scale. They can be placed across the bottom of your external doors to hold back low levels of water.

Flooring

Lay ceramic tiles or rugs on your ground floor rather than carpets. Rugs can easily be removed and placed out of reach. Non-carpeted floors can be easier to clean once the water has subsided and are cheaper to replace.

Shelving

Place irreplaceable items, such as family photos or treasured possessions, on high mounted shelves.

Air brick covers

Air bricks are used for ventilation, but during a flood, they can let water into your property. The covers are airtight, can be easily attached to the air bricks and will prevent water entering.

Drains and pipes

Fit non-return valves to all drains and water inlet pipes.