HUCKLESBY
ARCHITECTS

FLOOD ASSESSMENT REPORT
in support of

HOUSEHOLDER PLANNING APPLICATION
AND
LISTED BUILDING CONSENT

for
Demolition of existing Conservatory and replacement with new Kitchen extension including new external boiler

Bridge House
Bury Road
Rickinghall
Suffolk
IP22 1HA

Figure 1 – View of existing dwelling from entrance to site

Prepared by Sarah Hucklesby RIBA
Hucklesby Architects

Introduction

The existing site is located to the South of Bury Road running through the village of Rickinghall, and the main access to the site is from the junction of Water Lane and Bury Road on the North East corner of the site.

Reference to the Environment Agency Flood Risk maps show that Bridge House and its garden are variably covered by Flood Risk categories 1, 2 and 3. This is due to a small, un-named stream which transects the garden and runs under Bury Road before taking an easterly turn. *(Refer Flood Map below)*. This stream is one of many tributaries forming the headwaters of the River Waveney. It is variably between 6 and 10 feet wide at its bed as it passes through the garden of Bridge House. Its tends to completely dry up from around May/June through to October and even in the other months only flows generally at a shallow level.

The applications for Householder Planning Permission and Listed Building Consent are for the demolition of an existing Conservatory on the East elevation of Bridge House. This is to be replaced by a new extension to the existing Kitchen on this side of the building, on the footprint of the existing Conservatory. A new external replacement boiler is also to be fitted to the North elevation.

Paragraph 167 of the NPPF states:

When determining any planning applications, local planning authorities should ensure that flood risk is not increased elsewhere. Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and exception tests, as applicable) it can be demonstrated that:

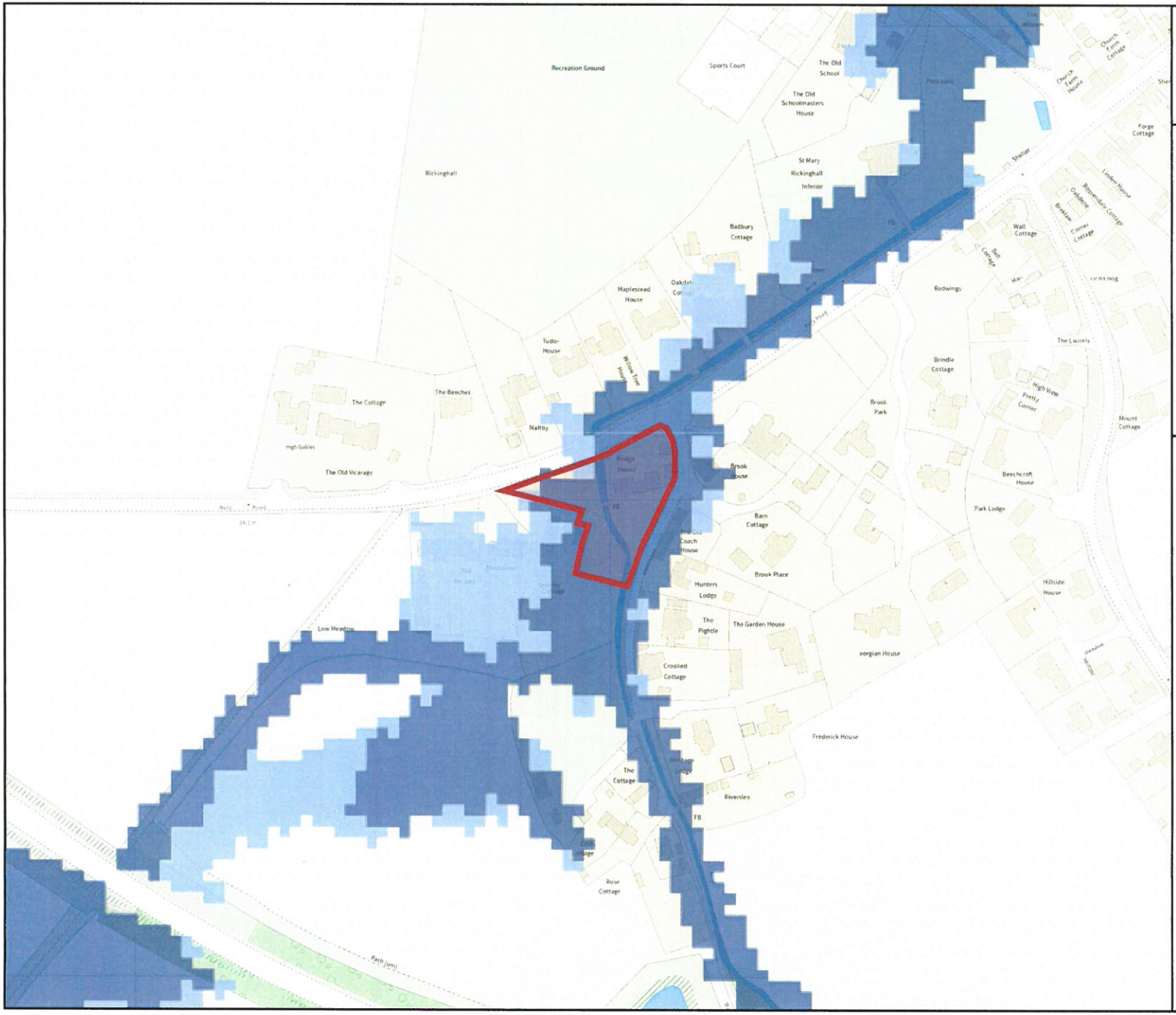
(a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location.

(b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment.

(c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate.

(d) any residual risk can be safely managed; and

(e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.



Environment Agency

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
603740/274966

Scale
1:2500

Created
20 Nov 2023 14:31

- Selected area
- Flood zone 3
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Water storage area

0 20 40 60m

Response to the Issues

(a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location.

The site will be located in all the Flood Risk category areas (1, 2 and 3) as it is located within the footprint of the existing house, which has all these Flood Risk categories. The proposed kitchen extension is on the footprint of an existing part of the building – the existing Conservatory, which is to be demolished and replaced. Thus, no part of the development could be considered as more vulnerable than any other part.

(b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment.

The new extension is to be constructed in lime rendered masonry. The floor level of the new extension will match the existing, and internally will be finished with plasterboard on timber battens, horizontally fixed to enable ease of replacement as necessary. The new external window on the East Elevation *(refer Hucklesby Architects drawing number E0879/11 and 14A)* is also 1050mm internally from finished floor level. A demountable flood barrier system by Lakeside Flood Solutions Ltd or similar is to be provided to fit the glazed timber double doors and side screen on the South Elevation *(See Appendix A)* in the event of flooding.

Services including electrical sockets and switches will be located a minimum of 1000mm above Finished Floor Level. Any new air bricks will be fitted with 'Ventguard' units to make these watertight in the event of flooding *(See Appendix A)*

(c) it incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate.

Any new drainage connections are to be fitted with proprietary non-return valves. There is no increase in roof area, and therefore there will be no additional load on the existing surface water drainage system. The sink added to the new Kitchen layout replaces an existing fitting and will be connected to the existing foul drain. The dishwasher and fridge/freezer also replace existing units.

(d) any residual risk can be safely managed

There is not considered to be any residual risk; the requirements recommended by the Environment Agency for protection of the fabric (see (b) above) are incorporated within the proposals, and circulation into and out of the building remains unaffected, with no loss of external doors, allowing for Means of Escape as before.

(e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan.

The safe access and existing escape routes are unaffected by the proposed extension. No changes are therefore required to any emergency plan for the dwelling.

APPENDIX A

LAKESIDE
FLOOD SOLUTIONS

LAKESIDE DEMOUNTABLE ALUMINIUM FLOOD BARRIER

PRODUCT DATA SHEET

ENVIRONMENT AGENCY

Approved for use on EA 2018 Framework

34 years of excellence
1988 -2022

LAKESIDE
FLOOD SOLUTIONS

PRODUCT DATA SHEET

LFS Demountable Aluminium Flood Barrier

The UK's Leading Flood Barrier System.
Bespoke ground U channel.
Tested to 2.1m H, zero leakage.

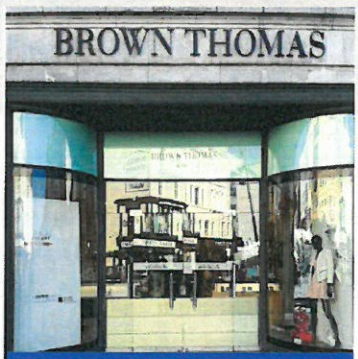
Specification:

- Anodised Aluminium 6063 T5 Side & Middle Posts with EPDM Waterproof Seals
- Anodised Aluminium 6063 T5 Barrier Profiles with EVA Waterproof Seals
- Stainless Steel S.S. 304 Ground U Channel with EPDM Waterproof Seal
- Anodised Aluminium 6063 T5 Ground U Channel Cover Plate & Triangle Pressing Wedge
- Tested to British Standard BS 851188

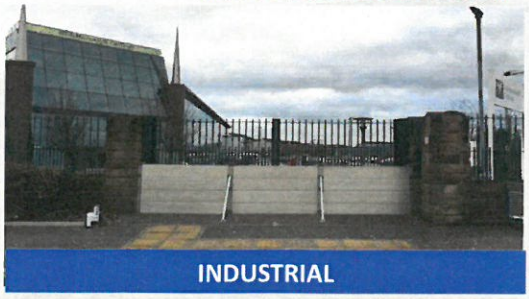
Key features:

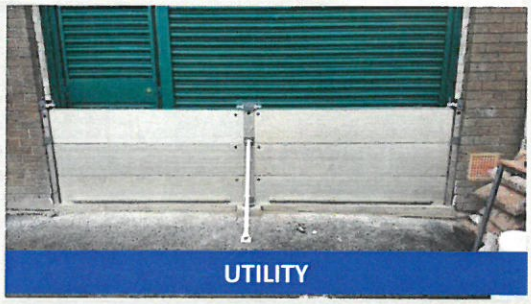
- Robust aluminium yet lightweight; easy to install and store away by one person.
- Extremely user-friendly; no tools required for self-installation within seconds.
- Discreet ground U channel and bespoke interlocking system ensures continuous watertight seal.
- Anodized finish, maintenance-free.
- Tested up to 2.1m high with zero leakage, proven to work in real-life floods.
- Option to use system without Ground Channel
- Suitable for all types of premises: residential, commercial, industrial, utilities and infrastructure.


RESIDENTIAL



COMMERCIAL


INDUSTRIAL


UTILITY

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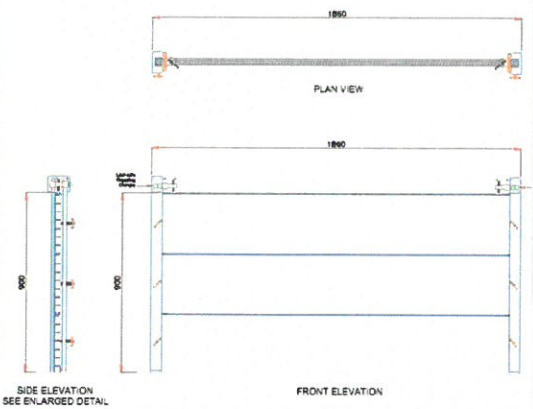
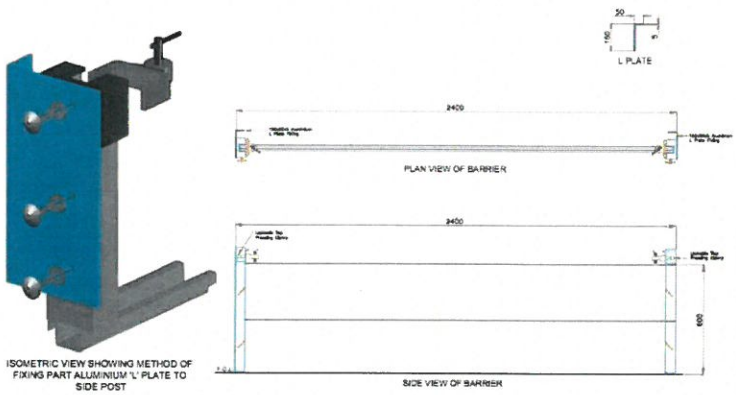
01792 561117
sales@lakesidefloodsolutions.co.uk
Bruce Road, Fforestfach Industrial Estate, Swansea SA5 4HS
www.lakesidefloodsolutions.co.uk

LAKESIDE
FLOOD SOLUTIONS

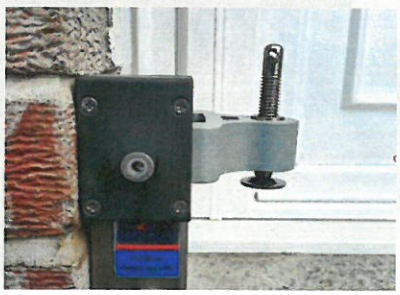
PRODUCT DATA SHEET

GA Drawings and 3D Impressions available upon request



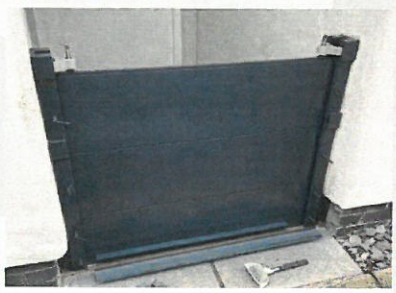


Bespoke Barrier Accessories



LOCKABLE TOP CLAMPS

SIDE POST COVER PLATES



POWER COATING

STORAGE RACKING UNIT

STORAGE RACKING UNIT

STOCK ITEMISATION

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GENERAL INFORMATION

⚠ Prior to the installation of any flood protection equipment, it is strongly advised that a flood protection risk assessment is carried out by a suitably qualified building surveyor, architect, structural engineer, civil engineer or those deemed competent, to ensure the relevant routes for water entry have been properly identified and the structural integrity of the building is not compromised by the installation of such products.

⚠ Ventguard has been designed to protect air-bricks or air vents. It should **NOT** be used to protect gas flues, chimney or other heating outlets or vents which serve white goods appliances. If in doubt, seek professional advice prior to installation of the product.

Ventguard is designed for the temporary mitigation of flood risk and should be seen as part of a suite of measures to reduce the risk of flood water entering a property.

Ventguard can be used on domestic properties, commercial premises, schools and other public buildings. It can be used in fresh or salt water flood conditions.

Ventguard can be used on brick or rendered finishes.

Ventguard is reusable and once installed can be manually sealed in seconds.

PRODUCT INFORMATION

Ventguard is manufactured from glass reinforced nylon. All component parts of a life expired unit can be recycled.

Ventguard has been tested against the standard set of tests as defined in BSI PAS 1188-1:2014 which represent typical conditions which may be experienced during a flood in the United Kingdom.

This includes testing for leakage under static water levels 900mm above the aperture threshold level, waves up to 0.1m high and parallel currents up to 1.0m/s.

Maximum recorded leakage rates during testing were 0.015 ltr/m/hr.

Conformance of the product to BSI PAS 1188-1:2014 does not mean it is suitable for all buildings or locations. If the user has any uncertainty about the suitability of a product they should seek professional guidance.

FLOODGATE

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VENTGUARD

Fitting & Maintenance Manual

⚠ **Important Information**

Advice and Safety - Please read before installation.

The safety advice given by the emergency services should always be adhered to during flood conditions.

What's Included


Ventguard


Plugs


Screws


Rawlplugs


Instructions

Note: It is the responsibility of the installer to confirm currency of the documents

Issue 4: 10/2021

Ventguard Fitting Instructions

Installation Steps

Preparatory steps

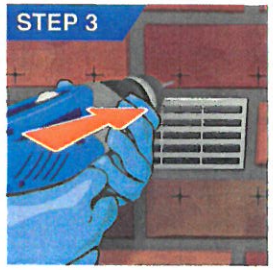
⚠ **Suitable hand and eye protection should be worn when fitting Ventguard.**

- To help achieve an effective seal, ensure the wall surrounding the air brick is flat and level and can be drilled.

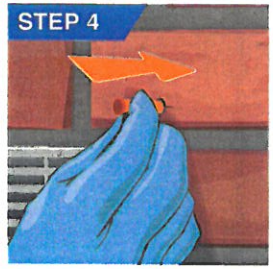
⚠ **Installing against uneven surfaces can result in damage to the Ventguard.**

- The air brick should be at least 3" (7.5cm) from ground level to allow correct fitting of Ventguard.
- This Ventguard can be used to protect an air brick with maximum dimensions of 10" x 5"(25cm x 13cm)

Position the Ventguard with the black tubes along the bottom edge, onto the wall surrounding the air brick. Making sure the Ventguard is level, mark the wall through each of the screw holes.



Using a 5.5mm masonry drill bit, drill into each of the marks on the wall.



Insert the supplied rawlplugs into each hole, ensuring the top of the plug is flush with the wall.

Cover the underside of the flange with a suitable all weather, exterior silicone sealant.

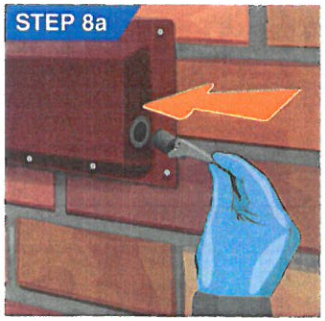
NOTE: The sealant should be capable of bonding to both plastic and masonry.

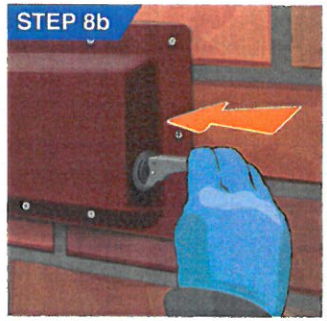
Screw the Ventguard to the wall using the supplied screws.

⚠ **Do not apply excessive force to the screws as this may split the plastic and/or strip the screw head.**

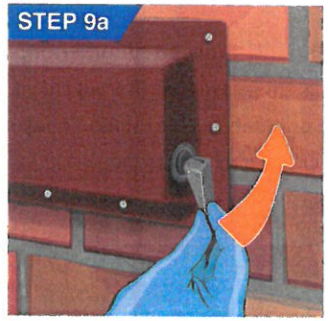
Run a beading of silicone sealant around all edges of the Ventguard.

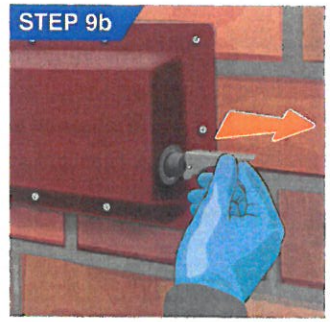
Using Ventguard





On flood warning or when flooding is imminent, insert the supplied plugs into the 2 tubes, ensuring they are fully locked in place.





Once flooding subsides and/or the flood warning is cancelled, remove both plugs and store in a safe place ready for next use.

MAINTENANCE AND STORAGE INSTRUCTIONS

Ensure that the plastic tubes on either side of the Ventguard are kept clear of debris and vegetation which would otherwise hinder placement of the plugs.

Periodically, and after every flood event, inspect the Ventguard for damage. A unit showing signs of damage should be replaced immediately.

Periodically, and after every flood event, inspect the silicon sealant around the edge of the unit. If the sealant shows signs of deterioration, remove and apply a fresh layer (see Step 7).

Screws showing signs of weathering should be replaced.

To allow air to flow through the unit, the plastic plugs should only be inserted when flooding is imminent. When not in use, the plastic plugs should be stored in a dry, safe area ready for the next deployment.

Replacement plugs are available to purchase from Floodgate Ltd.