FLOOD RISK ASSESSMENT

AT

170 BRIGHTON ROAD
LANCING, SUSSEX BN15 8LL

ADUR DISTRICT COUNCIL
PLANNING APPLICATION
APPROVED
DATE 16 APR 2008

ADUR DISTRICT COUNCIL
PLANNING DIVISION
PLAN No. A/c/00236B
DATE 15 JAN 2008

Developer

lightwater developments limited
39 Stanford Avenue
Brighton
BN1 6GA

Tel/Fax: 01273 549900

Consultant Engineers

Robert Clarke Associates Ltd
Willow Cottage, Heme Lane
Rustington
Sussex BN16 3EE

Tel: 01903 778945

INDEX

1 Introduction

2. Flood Risk Assessment requirements

3. Current Flood Risk Conditions

4. Proposed development site levels AOD

5. Site Drainage

6. Sequential Test (PPS25)

APPENDICES

A Site Location Plan

B Site Level Survey

C Environment Agency Flood Map

D Proposed Development Plans

1.

Introduction

This Flood Risk Assessment report was complied by **Lightwater Developments Limited** and **Robert Clark Associates Ltd (Chartered Civil Engineers)**, in accordance with Planning Policy Statement 25 : **Development and Flood Risk (PPS25)**

The existing site is a single residential dwelling currently split as two self contained flats each on a separate level.

The Planning Application is for the development of 2 no. semi detached units with garage/utility/storage rooms on the ground floor and living accommodation on the first and second floors.

2.

Flood Risk Assessment requirements

The Environment Agency FRA Guidance Note 2 relates to the commissioning and undertaking of Flood Risk Assessments and details the following requirements for the report:

Location Plan – See appendix A, Site Location Plan

Development proposals – See attached drawings Appendix D

Existing information on flood risks to the area – See Appendix C, Environment Agency Flood Map

Site levels related to Ordinance Datum - See Appendix B, Site Level Survey

Potential sources of flooding – see section 3 of this report

Assessment of the impact of flooding on a site – see section 4

3.

Current Flood Risk Conditions of Existing Dwelling

The existing dwelling was built as a single dwelling in

The site levels range from 2.22m AOD on the northern (roadside) boundary, rising to 4.97m AOD for the ground floor finished floor level at mid site and dropping off to the edge of the 'Widewater' on the southern most boundary.

All the existing site levels are indicated in Appendix B – Site Level Survey

The Site sits at the northern edge of the 'Widewater'. Beyond the 'Widewater perpendicular to the site are the newly completed Sea defences.

The Environment Agency Flood Map shown that the site is within a tidal flood plain.
See Appendix C

There is no known history of flooding in this area.

4.

Proposed Development and Levels

The proposed development consists of two semi detached new homes.

As noted in section 3, the tidal flood level for the 1 in 200 year storm event is 5.5m AOD

The current newly completed sea defences in front of the site offer protection of up to 7.4m AOD

The lower ground floor finished levels are 2.50m AOD but this part of the building is designated for parking and utilities. This area opens out onto the pavement in Brighton Road.

For the site to flood the sea defences would need to be breached. It is difficult to assess the exact 1 in 200 year flood level without carrying out a detailed breach analysis which is deemed to be excessive for a development of this size.

Therefore, it is proposed to use the existing ground floor levels as a worst case scenario to set the first floor levels of this dwelling.

The second floor accommodation provides finished floor levels in excess of 7.75m and therefore will not be at risk from currently predicted flood risk levels as determined by the Environment Agency.

5.

Site Surface Water Drainage

The existing building. Drives and garage occupies an area of 195m/sq

The proposed building would occupy an area of 195m/sq

The calculated run off from the existing site during a 1 in 200 year storm would be 9.21 litres/sec. (peak rainfall of 157mm/hr).

The calculated run off from the proposed site during a 1 in 200 year storm would be 9.21 litres/sec (peak rainfall of 157mm/hr). Additionally, it is proposed to install greywater recycling systems which would further reduce run off.

As the overall impermeable surface is not increased by the development it is considered that the existing systems will not be further affected and therefore remain adequate. However the new and additional greywater systems will further reduce the overall run off.

It is assumed that in the event of a 1 in 200 year storm, excessive run off will also discharge in to the 'Widewater'.

6.

Sequential Test as per PPS25 guidance notes

As outlined in Planning Policy Statement 25, justification for the development is required as the site in within a known flood zone.

The justification for this development is as follows:

The existing site is occupied by a single dwelling currently arranged as two self contained flats.

The proposed development for 2 semi detached homes will increase and improve the overall existing living accommodation making it more accessible for family occupation and therefore meet the need for additional housing without excessive development of the site

The newly completed sea defences provide protection in excess of the EA's flood risk levels. See section 3



© Crown Copyright 2008

APPENDIX A

Site Location Plan

Text Only | Cymraeg | 13 January 2008 | HOME | ABOUT US | OUR VIEWS | CONTACT US | HELP | Search for... | Go

Environment Agency

creating a better place

You are in: Maps > Flood Map | I'm looking for...

Maps

- Maps
- How to use the flood map
- What to do in a flood
- Current flood warnings
- Flood risk and home insurance
- Your questions answered

Search for another location:

Search for:

(•) Placename
( ) Postcode

Search

Overview map :



See also...

- New development
- Terms and conditions of use

Map of BN15 8LL :

Click on Learn more, then click the symbol or area on the map to see more information.

Click on the map to ...
(•) Zoom ( ) **Learn more**

Current map scale: 1:20,000



© Crown copyright. All rights reserved. Environment Agency, 100026380, 2006

What's on the map?

1. Tick the boxes.
2. Click the name next to the box to find out more.

Flood maps more

☑ **Flood maps** more
Click *Learn more* to see details.

- Flooding from rivers or sea without defences
- Extent of extreme flood
- Flood defences
- Areas benefiting from flood defences

Click here to find out what else is in your backyard.

We are not responsible for the content of other web sites.

Anglian | Midlands | North East | North West | South West | Southern | Thames | Wales

©The Environment Agency 2008
Privacy Policy

Author: Environment Agency | enquiries@environment-agency.gov.uk

APPENDIX C

Environment Agency Flood Map