

P/47/11.

FLOOD RISK ASSESSMENT

52 EAST FRONT ROAD

**PAGHAM PO21 4ST
BOGNOR REGIS
WEST SUSSEX**

Notes

Please read these notes in addition to the existing Flood Risk Assessment (Robert Clark Associates, July 2008) in conjunction with the approved planning application P/99/08/.

The alterations to the proposed design are as follows:

- The main house and railway carriages remain at the existing FFL of +5.31m. The new seaside extension will be at the same FFL of +5.31m.
- The FFL of the new garden extension will be at +5.14m (instead of +5.10m in original proposal), with one bedroom replacing an exiting one. The existing bedroom is at a FFL of 4.15 m and the new FFL for the bedroom can be seen as a considerable improvement of the current situation.
- A storage area for boats and bikes is located under the new garden extension with a FFL of +2.74m. Boats can be loaded in through two 1.2m high 'slots in the wall', from the beach and from the parking area. Timber decking doubles up as temporary ramp (over shingle). Access to the storage area is from the parking area via a flight of 4 steps. The scheme for the basement storage area has been developed in consultation with the coastal engineer of Arun District Council, Mr Spencer, to meet the necessary environmental and safety requirements.

Alterations to Planning Policies

The SFRA Tidal Flood Zone Map classifies the site as in 3A tidal flood zone. If there were no flood defences, 'the area could be flooded:

- from the sea by a flood that has a 0.5% (1 in 200) or greater chance of happening each year.
- or from a river by a flood that has a 1% (1 in 100) or greater chance of happening each year.' (website of EA, May 2011)

The site does not fall into a functional flood plain (zone 3B).

The currently predicted 1 in 200 a year off-shore sea level for the year 2115 is +5.8m AOD (compared to +5.0m predicted in 2008). The

The new garden extension with a raised FFL of +5.14m considerably improves the existing situation (FFL +4.15m).

Flood resilience and resistance construction techniques shall be applied wherever possible.

Sabine Kunze, May 2011

----- Forwarded message -----

From: [REDACTED]
To: [REDACTED] **STRUCTURAL CONSULTANT**

Date: Thu, 14 Apr 2011 11:32:06 +0100

Subject: RE: option C to environmental officer

Dear Tim,

With the benefit of the text below, your later attachments and the subsequent telephone conversation, I can confirm that I am in principle happy with the current outline proposals from a coastal defence standpoint.

We discussed a) the practicalities of the "letter-box" and the worthwhileness of checking (with a 2D or 3D model) that the boat will physically fit through the gap, once the detailing of support to the construction above has been determined and b) the practicalities of providing a glass panel immediately adjacent to a shingle beach.

I understand that you, the architect and the client will now move to submit a Planning Application.

Regards,

Roger Spencer | Principal Engineer (Coastal), Services Department, Arun District Council | Location: Second Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF

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Willow Cottage, Herne Lane, Rustington, West Sussex BN16 3EE
E-Mail: rca-ltd@ukonline.co.uk



Proposed Re-development

52 East Front Road, Pagham

Bognor Regis

West Sussex

Flood Risk Assessment

On behalf of

Mr. & Mrs Evers

**July 2008
1213-R1**

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52 EAST FRONT ROAD, PAGHAM, WEST SUSSEX

PROPOSED RESIDENTIAL DEVELOPMENT

Flood Risk Assessment

1. Background

- 1.1 This report has been produced on behalf of Mr and Mrs Evers in support of a planning application for a re-development at No. 52, East Front Road.
- 1.2 The report concerns flood risk and has been prepared generally in accordance with the recommendations of Planning Policy Statement 25 – Development and Flood Risk (PPS 25).
- 1.3 The drawing supporting this report is Dwg. No. 1213/1.1 – Flood Risk Survey.

2. The Site

- 2.1 The site is located on the south side of East Front Road at OS Grid Reference SZ 8938 9744. The southern boundary is close to the foreshore with mean high water lying some 35 metres to the south-east.
- 2.2 The existing building is a residential dwelling with an annex used for living accommodation and a boat house. The site has an area of approximately 452m².
- 2.3 The site is in a residential area and this re-development is consistent with the general improvements that are being carried out at Pagham Beach.

3. Topography

- 3.1 Ground levels in the area fall generally towards East Front Road, which is at a level of around 3.5m AOD at the site. Levels on the site itself vary from 3.87 to 5.14m AOD, with floor levels for the main building being at 5.31 and that for the annex being at 4.15m AOD.
- 3.2 The site is predominantly below the 1 in 200 year off-shore sea level of 5.00m AOD currently predicted by the Environment Agency for the year 2115. However, it is protected by a concrete boundary wall which has a top level of around 6.05m AOD fronted by a substantial shingle bank.

4. Proposed Development

- 4.1 The development comprises general improvements and extensions to the existing dwelling and the annex, which will include the raising of floor levels.

- 4.2 The existing main building will have its floor level raised from 5.31 to 6.10m AOD and the annex will be raised from 4.15 to 5.10m AOD, thus improving the protection against flooding for the occupants.
- 4.3 The re-development will provide 3 bedrooms in a similar arrangement to the existing dwelling and no increase in the occupancy is therefore proposed. The outline of the new building is indicated on the supporting drawing.

5. Flooding History

- 5.1 The site is shown to lie within Flood Zone 3 on the Environment Agency's flood map. However, these Flood Zones show the probability of flooding without the presence of sea defences/ coast protection works.
- 5.2 Coast Protection Works in the area are administered by Arun District Council who have permissive powers to carry out works to prevent erosion and inundation by the sea. Arun DC currently have a 'hold the line' approach and will thus carry out works here that have a positive cost/benefit ratio with the aid of government grant and will maintain the existing defences. Major erosion of the shingle foreshore is therefore not expected and overtopping rates would not be significant.
- 5.3 There are no known recorded flooding incidents at the site.

6. Foul and Surface Water Drainage

- 6.1 The new building will be drained to the public foul water sewer in East Front Road.
- 6.2 Surface water from the new building will drain to soakaways, which operate well in the prevailing ground conditions. New soakaways will be designed to the Building Regulations Approved Document H.

7. Conclusions and Recommendations

- 7.1 The site is shown to lie within Flood Zone 3 on the Environment Agency's Flood Map and a Flood Risk Assessment has been carried out in accordance with PPS 25.
- 7.2 The Flood Risk Assessment has shown that the proposed new living accommodation will have floor levels of 5.1 and 6.1m AOD, which are above the current 1 in 200 year off-shore sea level of 5.0m AOD predicted for the year 2115. The re-development will represent an improvement to the flood protection for the site and the occupants.
- 7.3 New surface water drainage will be taken to soakaways designed to the Building Regulations and foul drainage to the public sewer in East Front Road.
- 7.4 Whilst the risk of flooding is low, the new building should nevertheless be designed in accordance with good practice in flood risk areas, employing flood resilient materials and building techniques with raised electrics wherever practicable.

1213/RTFC-R1