

MARGARET'S COTTAGE SANDHURST GLOUCESTER GL2 9NP

## FLOOD RISK ASSESSMENT

Development at :

**THE PRIORY GROSMONT WHITBY YO22 5QJ**



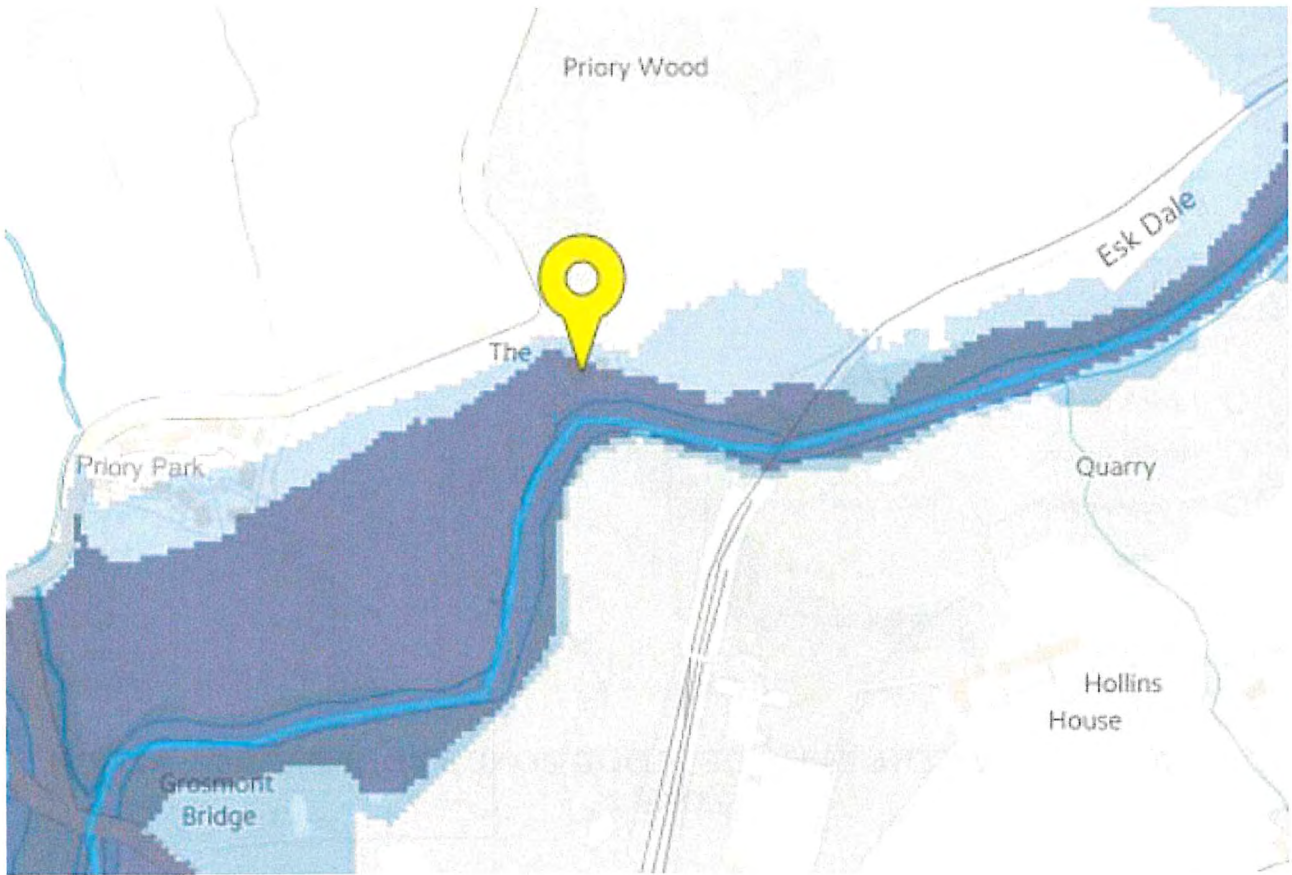
**Dated : 20 January 2018**

NYMNP  
-2 FEB 2013



**GEOGRAPHICAL AREA FOR THE WHOLE SITE**

**ENVIRONMENT AGENCY FLOOD MAPPING FOR PLANNING**

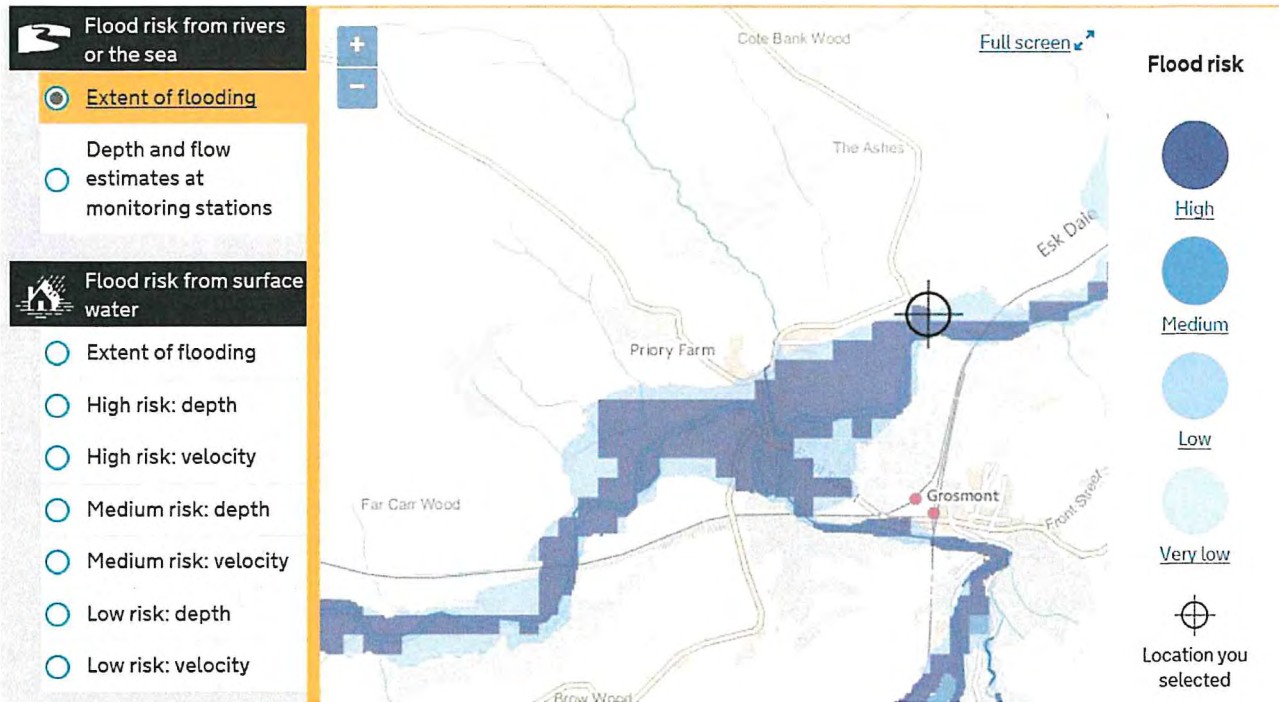


**SHOWN TO BE ON THE EDGE OF FLOOD ZONE 3 BORDERED BY FLOOD ZONE 2.**

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**ENVIRONMENT AGENCY LONG TERM FLOOD MAPPING.**



**AGAIN SHOWN ON THE EDGE OF FLOOD ZONE 3 BORDERED BY FLOOD ZONE 2 .**

**ENVIRONMENT AGENCY MAPPING FOR SURFACE WATER THREAT.**



**NO THREAT**

# PROPOSED REGENERATION OF A DELIPATED OUT-HOUSE WITHIN THE CURTILAGE OF THE PRIORY GROSMONT WHITBY YO22 5QJ

## FLOOD RISK ASSESSMENT/DESK TOP STUDY.

This study report is written to accompany a planning application with regard to the above. Detailed plans are within the application. It adheres to the criteria within the National Planning Policy Framework (NPPF) and the Environment Agency (EA) Advisory Notes to local authorities.

The site stands in the countryside just North of the River Esk Anecdotally there is no record of the property having been flooded but the modelled mapping from the EA shows that it is on the edge of Flood Zone 3 and bordered by Flood Zone 2.

It will not have any residential usage but be returned to a work centre for members of the family who live at the premises. There are no plans to raise the ground floor of the building and there is no sleeping accommodation included in the plans . It is purely designed to be used as a work centre with restoration being carried out in keeping with the original building.

Because of that its flood classification would be considered “less vulnerable” and under the criteria of NPPF it would be treated as a “minor” development with a ground floor footprint below 250sq.metres. The increase from the original footprint is 16sq.metres.

It does not qualify for the sequential test or the exception test but a flood risk is required to consider people's safety and whether there would be any off-site implications.

Under NPPG it states that minor developments are unlikely to cause significant flood risk unless they :

- Have an adverse effect on a watercourse , flood plain or its flood defences
- Would Impede access to flood defence and management facilities, or
- Where the cumulative impact of such developments would have a significant effect on local flood storage capacity or flood flows .

None of these are considered to offer any threat.in this case.

The minimum requirements for an FRA that is submitted to the Local Planning Authority for minor development within Flood Zone 1/3, in relation to flood risk, is defined as follows,

1. **minor non residential extensions**:: industrial/commercial/leisure etc. extensions with a footprint less than 250 m2.
2. **Alterations**:: development that does not increase the size of buildings e.g.

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alterations to the external appearance.

3. **householder development:** For example; sheds, garages, games rooms etc. within the curtilage of the existing dwelling, in addition to physical extensions in the existing dwelling itself.

There is an extension in the proposed works but this replaces the old so there is an increase in footprint of only 16 sq.metres

According to the EA's advice the minimum requirements for an FRA that is submitted to the Local Planning Authority for Residential/Industrial/Commercial extensions less than 250m<sup>2</sup> within Flood Zones 2 or 3 should confirm that:

- Floor levels within the proposed development will be set no lower than existing levels.  
AND
- Flood proofing of the proposed development has been considered by the applicant and incorporated where appropriate.  
OR
- Floor levels within the extension will be set 300mm above the known or modelled 1%(1 in 100 chance each year) river flood level or 0.5% (1 in 200 chance each year) tidal and coastal flood level. This must be demonstrated by a plan to OS Datum/GPS showing finished floor levels relative to the known or modelled flood level.

It is considered that paragraphs 1 and 2 are appropriate for this development.

### **The Flood Threat**

The modelled flood risk mapping shows that there is a slight threat to the proposed building but it is on the edge of Flood Zone 3 bordered by Flood Zone 2 . Because of this the flood water levels would be low and there would be very little velocity in the waters .

Because of the nature of the proposed development if there was an exceptional flood the premises would not be open for use until the flood water had abated. This would be under the control of the family living on the site.

It is recommended that all electrical services to the site should be included in flood resilience measures. The main electrics should be governed by a dry switching area housed on site ( not within the new build) . All electrics within the proposed building should run from the ceiling area to switches and sockets housed at 0.4m above ground level .

The flooring should remain as existing slab with no woodwork being used. Any upstanding timbers used should be treated with flood resilient covering 0.4m above ground level . ANY drainage passing under the new build shall not be of metal due to corrosion possibilities.

It would be sensible for internal and external wall coverings to be treated with flood resistant membranes and any exit door should be of flood proof construction.

More detailed advice is contained in the Government Document “Improving flood performance of new building” and this is included with this report.

### **Flood Warning**

The EA has no such procedure for this area. However there is “safe haven” within the main property for use should flooding occur. It is not considered that an evacuation plan is necessary for the proposed work centre because it would not be open at times of possible flooding.

### **Groundwater**

It does not fall in a groundwater protection zone.

### **Safe Ingress/Egress**

This has been achievable at all times and there is no reason to believe this will change in the future.

### **Sustainable Drainage**

As the proposed building will be re-established like for like with the original there should be improvements to the drainage . This should be fitted with hydro brakes or similar devices as a control device to slowdown off-site drainage and interceptors should be fitted to clean the water before it reaches the receptor. There is no reason for major works to be considered.

### **Offsite Implications**

There will be none if the above recommendations are followed.

### **Residual Risks**

There will be none.



## **CONCLUSION**

The purpose of this Flood Risk Assessment is to consider the safety of people using the proposed property and to make sure it's development causes no offsite implications to neighbouring persons and property. Recommendations have been made to achieve this.

The safest form of protection is to ensure that the premises are not used when a flood threatens and it is advised that the property owner liaises with the local authority emergency department with regard to what warning procedures exist with the local authority.

It is considered there is a slight risk of flooding to the property during its sustainable lifetime and recommendations have been made in this report to combat the possible effects of this.

This report adheres to the criteria as outlined and flood resilience measures as recommended should be used as part of the building programme.

Signed

David Eggleton  
Managing Director

