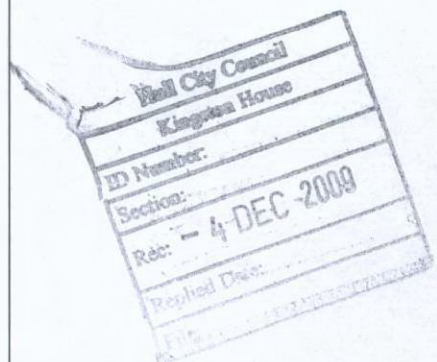




Flood Risk & Run-Off Assessment
Of
Development Land at Calvert Lane
East Ella, Hull
for
British Rail Board (Residuary) Limited

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Hull City Council
Kingston House
ID Number:
Section:
Rec: - 4 DEC 2009
Replied Date:
File:

1.0 Introduction

- 1.1 This Flood Risk Assessment has been prepared by Met Consulting Engineers Limited on behalf of British Rail Board (Residuary) Limited. It has broadly been prepared in accordance with guidance in Planning Policy Statement 25: Development and Flood Risk (PPS25).

At the request of the Planning Authority, a Flood Risk and Run-Off Assessment is required to accompany the application to develop land at Calvert Lane, East Ella, Hull, for residential purposes.

- 1.2 The site under consideration is only part of a much larger area of ownership and is identified as Sites B and C on the enclosed location Plan, the adjoining sites are only considered in terms of their impact on, or from, development of Sites B and C.
- 1.3 The sites are located to the West of Calvert Lane within the district of East Ella, approximately 2 kilometres West of Hull City Centre in a predominantly residential area.
- 1.4 The sites are currently derelict and have been left vacant for some considerable time and as a result they have become heavily overgrown making access to certain parts of the sites difficult.
- 1.5 The sites under consideration are generally flat, with an average ground level of around 3.0m AOD, and a copy of the topographical survey is attached in Appendix C of this report.

- 1.6 As a consequence of Planning Policy Statement 25, issued December 2006 which refers to Development and Flood Risk, it is necessary to provide an assessment of the potential problems which are associated with:
- a. Permitting the development
 - b. Potential risk of flooding
 - c. Safety of occupants of dwellings
 - d. Impact upon the local hydrological network
- 1.7 In the absence of a report, a Planning Authority are required to use the “Precautionary Principle” (Sequential Test), which indicates to the approving authority, that they should refuse the application, unless there are grounds for not doing so.
- 1.8 In order to provide a Flood Risk Assessment use has been made of information contained at the offices of the Environment Agency and also the Indicative Flood Plain Maps for fluvial events and return periods for the 1 in 100 year storm event, which have been produced by the Institute of Hydrology.
- 1.9 The Environment Agency and Yorkshire Water have been consulted and their information and comments have been used in this report.

2.0 Information Sources

2.1 The principal information sources which have been used for this Flood Risk Assessment are:

- i. Geological Maps
- ii. Yorkshire Water – Main Drainage
- iii. Environment Agency - Flood Defence
- iv. PPS25: Development and Flood Risk.
- v. Hull City Council - Strategic Flood Risk Assessment.
- vi. The Pitt Report.

2.2 These have been reviewed in conjunction with an inspection of the current:

- i. Drainage records
- ii. Flood maps
- iii. Visual inspection of land and surrounding area.

3.0 Geology & Hydrogeology

- 3.1 There is no Ground Investigation Report available at the time of writing this report, however from previous experience of working widely around the area, it is usual to encounter shallow ground water issues, sometimes tidal, and the sub-soils tend to comprise of Silty wet Clays becoming soft with depth.
- 3.2 In order to establish the geological setting of the site the 1:50,000 scale British Geological Survey (BGS) map for the area has been examined. The records indicate that the site is underlain with deposits of Alluvium from the Quaternary Age. Below the top soil, stiff and very stiff brown clay with some gravel, which indicates boulder clay and soft, silty peaty deposits.
- 3.3 The above conditions are considered to be unsuitable for the use of soakaways, however, permeability testing should be carried out during Ground Investigation to verify this in conjunction with groundwater level monitoring.
- 3.4 The Groundwater Vulnerability Map of the Humber Estuary Sheet 13 indicates that the site is in a Non-Aquifer area.