Mouchel Business Services

Renewal of Mobile Classroom at Moulton Chapel Primary School

FLOOD RISK ASSESSMENT

Report No: 3886-MOU-FRA

Issue: 01

Date: July 12

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EXECUTIVE SUMMARY

The proposed development is the renewal of an existing mobile classroom which is located at Moulton Chapel Primary School. The unit lies in a flood risk zone 2 the primary flood risk is a drainage channel which runs along the eastern boundary of the site.

In accordance With PPS25 the development falls within the 'More Vulnerable' uses of land and as such Table D3 of PPS25 indicates that development of this nature is appropriate for this location.

1.0 INTRODUCTION

1.1 This report has been prepared in support of the planning application for the renewal of a mobile classroom at Moulton Chapel Primary School. The aim of the report is to consider the risk of flooding from both fluvial and tidal sources and the impact of the proposed development on the existing site and the surrounding area.

2.0 APPLICATION SITE

2.1 The proposed site is located at Moulton Chapel Primary School, Eaugate Road, Moulton Chapel, within the South Holland District Council administrative area. The Ordnance Survey grid reference for the site is TF300168. A location map of the development is contained within Appendix A. The proposed development is a renewal of an existing mobile classroom.

2.2 The total area of the site is approximately 0.74 hectares with approximately 0.68 hectares being grassed playing fields and the remainder being made up of buildings and parking areas.

2.3 The site is surrounded by agricultural land.

2.4 The site and the surrounding land is generally flat with ground levels approximately 4m AOD, the finished floor level of the classroom will be 375mm above existing ground levels.

3.0 FLOOD RISK ANALYSIS

3.1 In order to meet the requirements of PPS25 South Holland District Council has commissioned Royal Haskoning to prepare a Strategic Flood Risk Assessment. The final report was published in January 2010.

3.2 The primary source of flooding is the land drain that runs along the eastern edge of the site. The SFRA concludes that the actual risk form primary sources of flooding are assessed as being a product of:

- Medium probability (assigned because the standards of primary defence are variable) and
- Low consequence (assigned because of the District's generally rural nature and because urban flooding is likely to be shallow with minimal impact).

3.3 The risk of secondary sources of flooding (i.e. IDB drainage systems and sewers) is assessed as Medium. The findings reflect the protection afforded to the area by the flood defences and the extensive organised system of lowland IDB drains.

3.4 The Environment Agency Indicative Flood Plan Shows that the site lies within a flood risk zone 2 with a 0.1% chance of flooding occurring in any year. This assumes that no flood defences or protection exist. Applying the Flood Risk Vulnerability Classification in accordance with Table D1 of PPS25 the proposed development is classified as 'More Vulnerable' and is therefore appropriate in this location.

3.5 The site is not affected by overtopping or a breach of the defences from the River Welland or the River Nene.

3.6 Surface water flooding can occur from an intense rainfall event, often over a short period in time, in particular if the water is unable to soak into the ground or enter the drainage system. However, as the surrounding area is generally flat it is unlikely that a rapid inundation of the site will occur. It is more likely that local ponding of water with a shallow depth and low velocity will occur. It is proposed that the surface water drainage will be connected into the existing system. As this is a renewal of an existing mobile unit there will be no increase in discharge. There is no indication that the area suffers from any ground water problems.

3.7 Where buildings must be located in areas with high levels of flood risk the incorporation of flood resistance and resilience can reduce the impacts should inundation occur. Standard measures include the provision of a minimum freeboard above ground or predicted flood and the use of resilient fixtures and fittings within. However, due to the high level of flood waters in this area as a result of a breach it would not be practical to raise the floor above this level. The proposed building is of a temporary 'Portakabin' construction and therefore if any flood damage was to occur the building would simply be replaced.

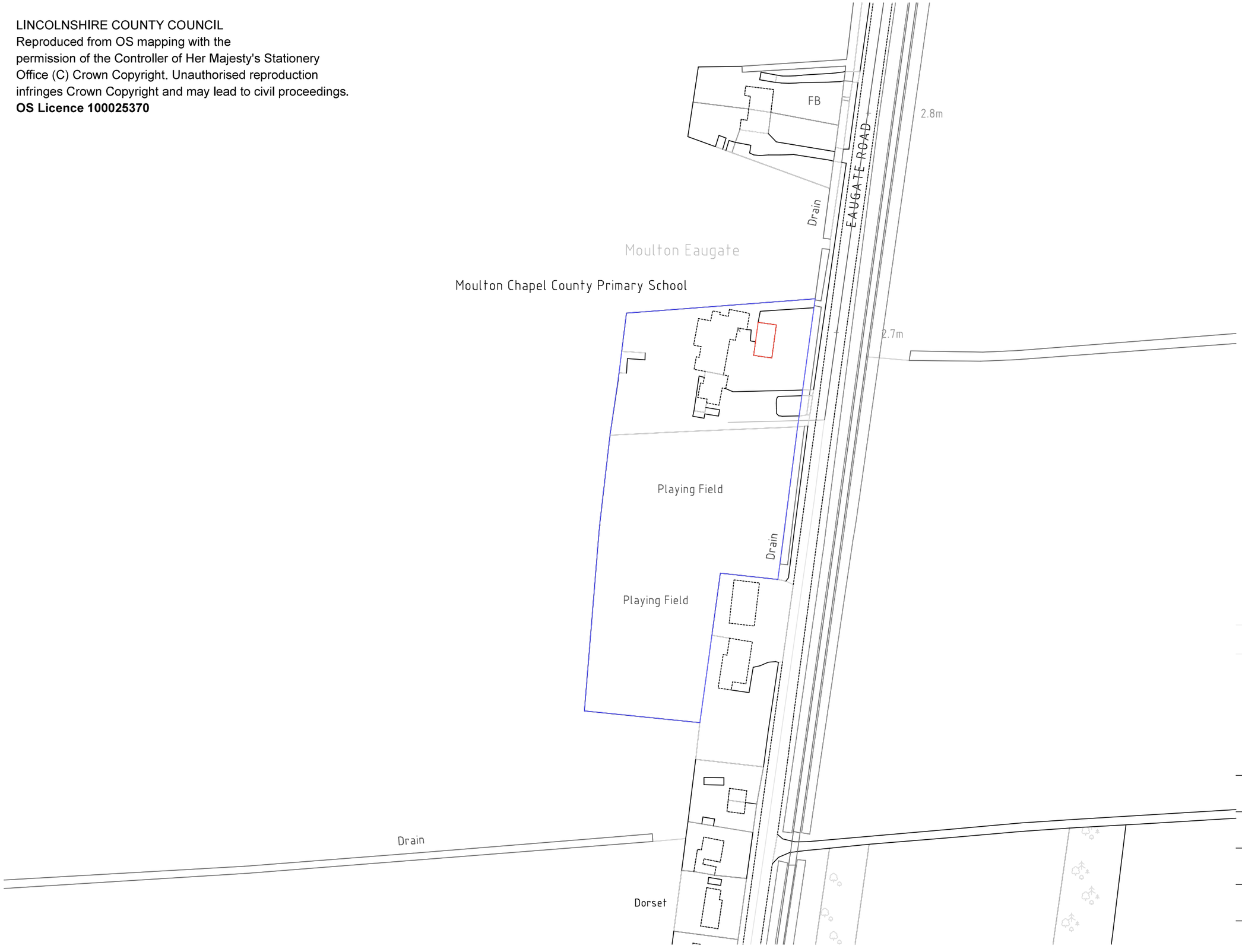
4.0 CONCLUSIONS

4.1 The proposed development is within a flood risk zone 2 and falls within the 'More Vulnerable' uses of land. Table D3 of PPS25 indicates that development of this nature is appropriate for this location.

4.2 As this is a renewal of an existing unit there is no increase in impermeable area and therefore no increased risk of surface water flooding.

APPENDIX A – SITE LOCATION PLAN

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Location Plan 1:1250

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Client
LINCOLNSHIRE COUNTY COUNCIL

Project
RENEWAL OF EXISTING MOBILE CLASSROOM
MOULTON CHAPEL PRIMARY SCHOOL

Drawing Title
LOCATION PLAN

Drawn By	Checked By
OS Data	

Scale	Date
1:1250 @ A3	**MARCH 2012**

Project No.	Drawing No.	Revision
H0029	**P.001**	

Drawing Status
PLANNING

APPENDIX B – ENVIRONMENT AGENCY DATA

Our ref: CCN-2011- **32128**

Victoria Shailer
<v.shailer@sghconsulting.com>

Your ref:

Date: 17 July 2012

Dear **Victoria**

Basic Flood Risk Assessment Data Request for Moulton Chapel Primary School, Eaugate Road, Moulton Chapel, Spalding, PE12 0XJ. NGR: TF 30164 18060.

Thank you for your request of 13 June 2012 to use Environment Agency data, Product 3, in the development of the Flood Risk Assessment (FRA) for the above site. The information is attached.

If you have requested this information to help inform a development proposal, then you should note the detail in the attached advisory text on the use of Environment Agency Information for Flood Risk Assessments / Flood Consequence Assessments.

Flood Map
The attached map includes the current Flood Map for your area. The Flood Map indicates the area at risk of flooding, **assuming no flood defences exist**, for a flood event with a 0.5% chance of occurring in any year for flooding from the sea, or a 1% chance of occurring for fluvial (river) flooding. It also shows the extent of the Extreme Flood Outline which represents the extent of a flood event with a 0.1% chance of occurring in any year, or the highest recorded historic extent if greater.

The Flood Map only indicates the extent and likelihood of flooding from rivers or the sea. It should also be remembered that flooding may occur from other sources such as surface water sewers, road drainage, etc.

From our modelling we can confirm that the site is not affect by overtopping or breaching from the River Welland or the River Nene.

For information on the flood risk from the lowland drainage system please contact South Holland Internal Drainage Board (tel: 01533 819600)

History of Flooding
With regards to the history of flooding I can advise that we do not have any records of flooding in this area. It is possible that other flooding may have occurred that we do not have records for, and other organisations, such as the Local Authority or Internal Drainage Boards, may have records.

Contd…/

Climate Change
Climate change will increase flood risk due to overtopping of defences. Please contact our Development & Flood Risk Team to discuss how this risk should be considered within your Flood Risk Assessment.

This information is provided subject to the enclosed notice, which you should read.

If you have any queries or would like to discuss the content of this letter further please contact Iain Drury using the telephone/email details below. Please quote our CCN reference number in all correspondence where data is referenced, including the Flood Risk Assessment.

Team Leader, Flood Risk Mapping & Data Management

Direct dial 01522 785011
Direct fax 01522 785018
Direct e-mail iain.drury@environment-agency.gov.uk

Enc.
FRA Advisory Text
Basic FRA Map
Standard Notice

Use of Environment Agency Information for Flood Risk / Flood Consequence Assessments

Important
If you have requested this information to help inform a development proposal, then we recommend that you undertake a formal pre-application enquiry using the form available from our website:-

http://www.environment-agency.gov.uk/research/planning/33580.aspx

Depending on the enquiry, we may also provide advice on other issues related to our responsibilities including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

In **England**, you should refer to the Environment Agency's Flood Risk Standing Advice and PPS25 and its associated Practice Guide for information about what flood risk assessment is needed for new development in the different flood zones. These documents can be accessed via:

http://www.environment-agency.gov.uk/research/planning/82587.aspx
http://www.communities.gov.uk/publications/planningandbuilding/pps25floodrisk
http://www.communities.gov.uk/publications/planningandbuilding/pps25practiceguide

You should also consult the Strategic Flood Risk Assessment produced by your local planning authority.

In **Wales,** you should refer to TAN15 for information about what flood consequence assessment is needed for new development in the different flood zones
http://new.wales.gov.uk/splash;jsessionid=8ylGTfGZthmB0t2vhp6hS1GcB1LXvZzB3Ylczf20Xn7LK3zK0nMk!981825250?orig=/topics/planning/policy/tans/tan15/

You should also consult the Strategic Flood Consequence Assessment if one has been produced by your local planning authority.

In both **England and Wales** you should note that:

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk / Consequence Assessment (FRA / FCA) where one is required, but does not constitute such an assessment on its own.

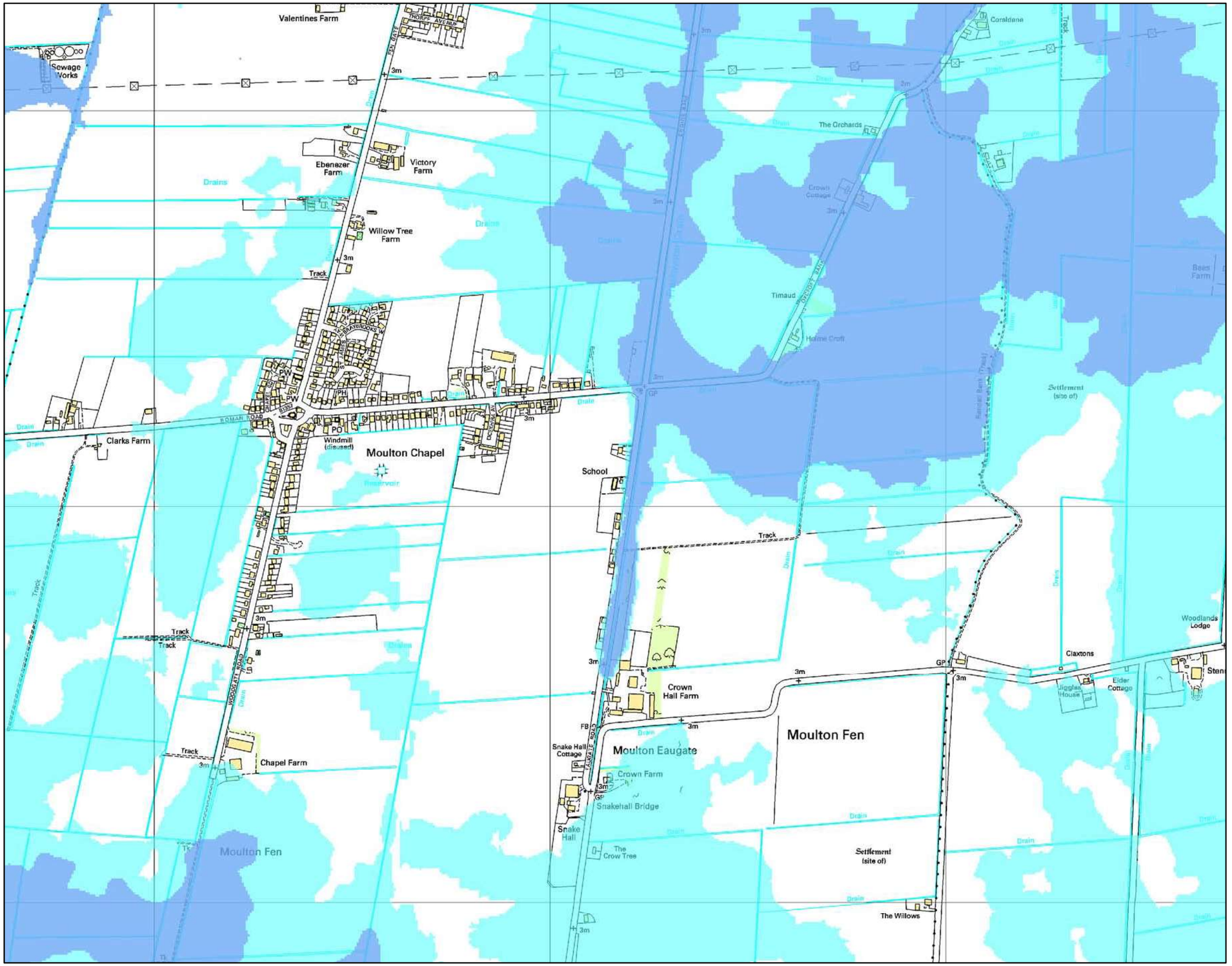
2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as

groundwater or overland runoff. The information produced by the local planning authority referred to above may assist here.

3. Where a planning application requires a FRA / FCA and this is not submitted or deficient, the Environment Agency may well raise an objection.

4. For more significant proposals in higher flood risk areas, we would be pleased to discuss details with you ahead of making any planning application, and you should also discuss the matter with your local planning authority.

Basic FRA Map centred on TF 30164 18060 - created July 2012 [Ref: CCN-2012-32128]



Environment Agency

Scale 1:10,000

N
W E
S

- Main River
- Raised_Defences
- Flood Storage Areas
- Area at Risk of Flooding from Rivers or The Sea
- Extreme Flood Outline

Dark blue shows the area that could be affected by flooding, either from rivers or the sea, if there were no flood defences. This 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.

Light blue shows the extent of the Extreme Flood Outline, which represents the extent of a flood event with a 0.1% chance of occurring in any year, or the highest recorded historic extent if greater.

These two colours show the extent of the natural floodplain if there were no flood defences or certain other manmade structures and channel improvements. Sites outside the two extents, but behind raised defences, may be affected by flooding if the defences are overtopped or fail.

Created by the Flood Risk Mapping & Data Management Team, Lincoln

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Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

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