

GMS/LEM/04/34072

July 2012

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FLOOD RISK ASSESSMENT

Client:	E. V. Waddington Ltd
Site:	Phase 3, Shortwood Business Park Hoyland, Barnsley
Planning Authority:	Barnsley Metropolitan Borough Council

EXECUTIVE SUMMARY

The project comprises the proposed development of a 1.3 ha brownfield site for future commercial/industrial use.

The Environment Agency and Barnsley Metropolitan Borough Council Level 1 Strategic Flood Risk Assessment flood maps indicate the site lies outside the flood zone. Under the National Planning Policy Framework the proposed development is appropriate to this site and application of the Sequential Test can, therefore, be demonstrated.

The site is to be re-graded in preparation for future development. Existing surface water run-off is to the ground and it is intended that proposed surface water run-off is also to the ground, until such time as building development on the site proceeds.



INTRODUCTION

This Flood Risk Assessment (FRA) has been prepared in accordance with the National Planning Policy Framework (March 2012) on the instructions of E. V. Waddington Ltd. Any other parties using the information in this report do so at their own risk, unless previously approved in writing.

The project comprises the proposed re-grading of a 1.3 ha brownfield site for future commercial/industrial use.

THE DEVELOPMENT

Site Location & Description

The site is located off the Dearne Valley Parkway, 5 km to the south-east of Barnsley, and is centred on National Grid Reference 435866, 401454. The site was part of the former High Royd Colliery.

The site is currently undeveloped scrubland, occupying an empty plot within Shortwood Business Park.

The surrounding land is arable. The nearest watercourse is Short Wood Dike, 1 km to the north-west. The nearest surface water feature is the purpose-built attenuation pond which serves the business park.

Site Levels

The site falls at approximately 1 in 15 south-east to north-west, from Dearne Valley Parkway to High Royd Lane. Dearne Valley Parkway is at a level of around 137.0 m AOD and High Royd Lane is around 127.0 m AOD.

It is proposed that the site is re-graded to create two plateaus for future units. Plateau levels are to be 130.65 m AOD and 129.40 m AOD.

Site Layout

A proposed earthworks plan is appended.

Environment Agency Flood Map

The Environment Agency (EA) flood zone map shows the site to lie within Zone 1 (Low Risk).

Barnsley Metropolitan Borough Council Strategic Flood Risk Assessment (SFRA)

A Level 1 SFRA was undertaken by JBA Consulting in September 2010 on behalf of Barnsley MBC. The flood map A-2 shows the business park, identified as employment site ES10, to lie outside the area at risk of flooding.

Technical Guidance to the National Planning Policy Framework

The Technical Guidance to the National Planning Policy Framework sets out the principles for assessing the suitability of sites for development, in relation to flood risk, as part of the planning process. A risk-based approach is adopted through a strategic approach with regard to site selection and a methodology for managing flood “pathways” and reducing the adverse consequences of flooding.

Initially the “Sequential Test” is applied to the allocation of land suitable for development. Following this, if appropriate, the “Exception Test” is applied where it must be demonstrated that the development provides wider sustainability benefits to the community outweighing flood risk.

Sequential Test

Table 2 of the Technical Guidance provide details of vulnerability classifications for particular types of development in relation to flood risk zones. General industry, storage and distribution uses are classed as “Less Vulnerable”.

Table 3 indicates that “Less Vulnerable” development is compatible with Flood Zones 1, 2, and 3a and incompatible with Zone 3b.

It is therefore concluded that the proposed development is appropriate to the site and that application of the Sequential Test can be adequately demonstrated.

Exception Test

Application of the Exception Test is not required in this case.

FLOOD RISK

Potential Sources of Flooding

The EA and SFRA maps are intended for general guidance on flood risk and it is also necessary to consider other, more detailed, sources in relation to local factors.

Watercourse

The site is elevated relative to Short Wood Dike and the risk of flooding is minimal.

Surface water

The site is below the level of Dearne Valley Parkway. The road is positively drained to highway drains. Thus, the risk from surface water run-off is considered to be low.

Sewerage

The site may be at risk of flooding resulting from surcharging of the local drainage system. However, the surrounding sewers are owned and maintained by Yorkshire water. We are not aware of any flood issues relating to these sewers. The site is elevated relative to the attenuation pond on the site and the risk of flooding is minimal.

Residual Flood Risk

The site is not deemed to be at risk of flooding. The principal flood risk for consideration is to others.

DRAINAGE STRATEGY

The site survey indicates there is no positive drainage serving the site. Currently surface water run-off from the site drains to the ground and it is proposed that surface water run-off from the re-graded site will also drain to the ground. The impermeable area of the site will remain unchanged. Thus, flood risk to others will not increase as a result of re-grading of the site.

CONCLUSIONS

1. The site is not in an area at risk of flooding.
2. Surface water run-off will be to the ground as at present.
3. The level of risk and safeguards available are considered appropriate to this class of development.

A handwritten signature in blue ink, appearing to read 'G M Seaman'.

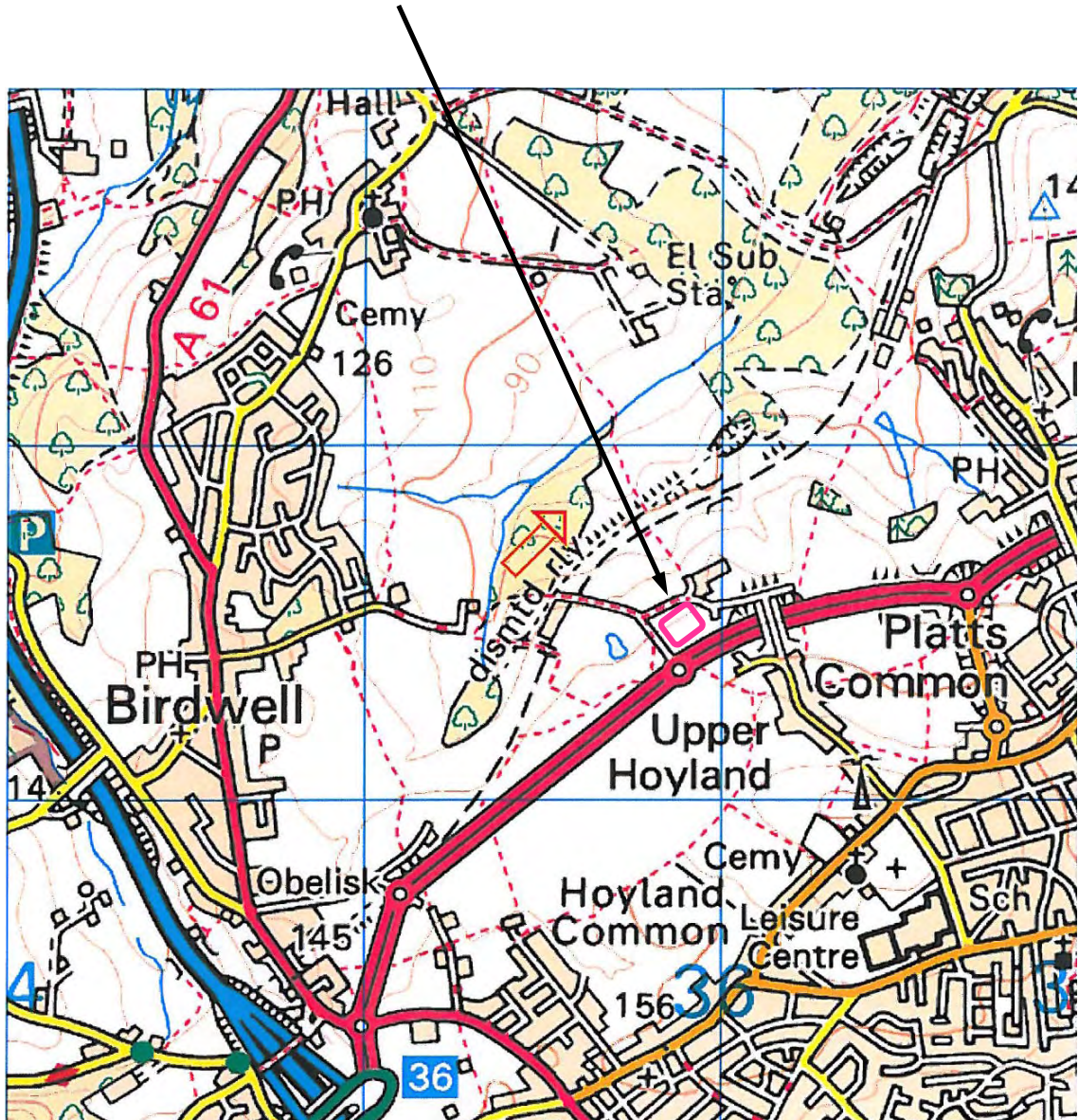
G M Seaman
Director

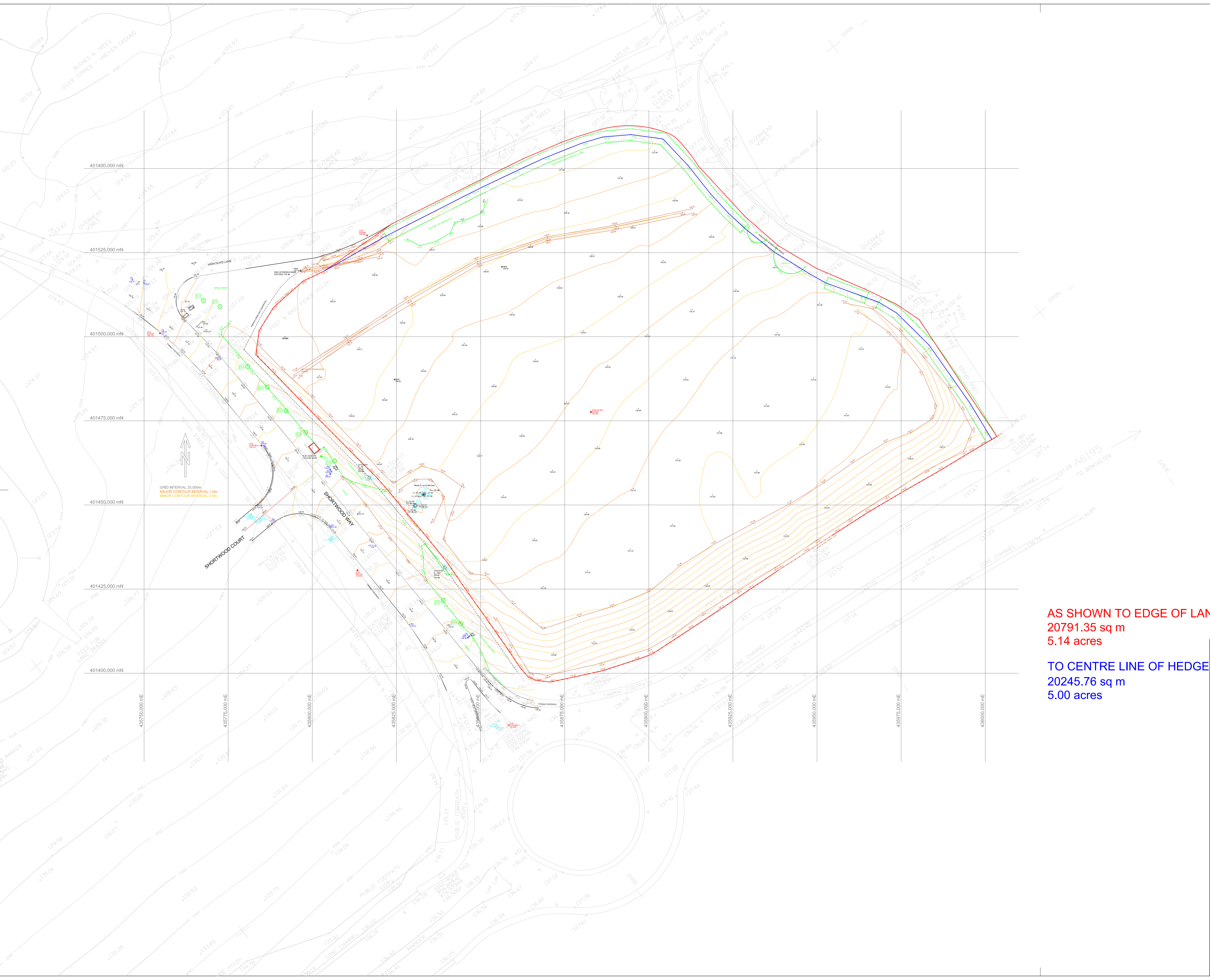
APPENDICES

- Location plan
- Topographical Survey – Remap drawing 3679/A
- Proposed Earthworks Plan - Eastwood & Partners drawing 34072/008/A
- Environment Agency - Flood zone map
- Barnsley Metropolitan Borough Council Level 1 SFRA – Flood map A-2

Location Plan

Shortwood Business Park, Hoyland





AS SHOWN TO EDGE OF LANE.
20791.35 sq m
5.14 acres

TO CENTRE LINE OF HEDGE
20245.76 sq m
5.00 acres

19.10.11	Existing foul drain IL's corrected.	A
Date	Amendments	Rev.

REMAP SURVEYS LTD.
107 Wellcarr Road, Sheffield, S8 8QP.
Telephone or fax. 0114 2747 626
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Client
EASTWOOD & PARTNERS

Project
SHORTWOOD BUSINESS PARK, HOYLAND, BARNSELY.

Drawing Title
TOPOGRAPHIC SURVEY

Scale	1:500	Date	19.09.2011
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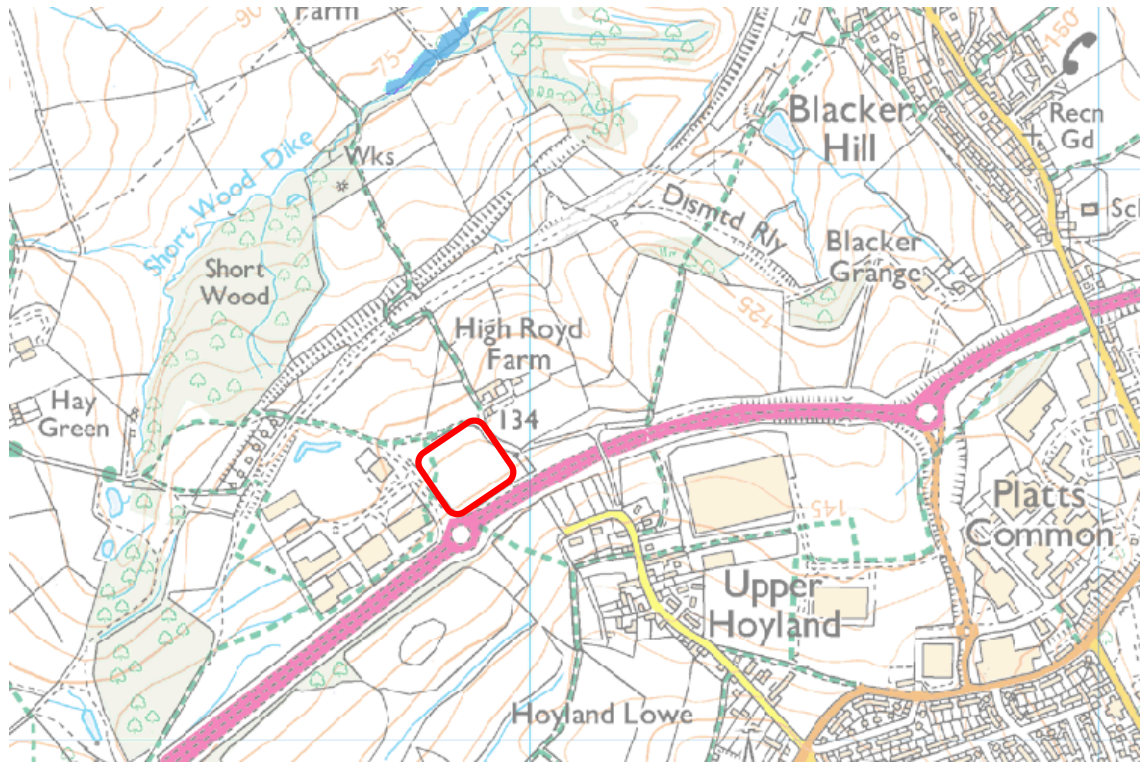
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NOTE

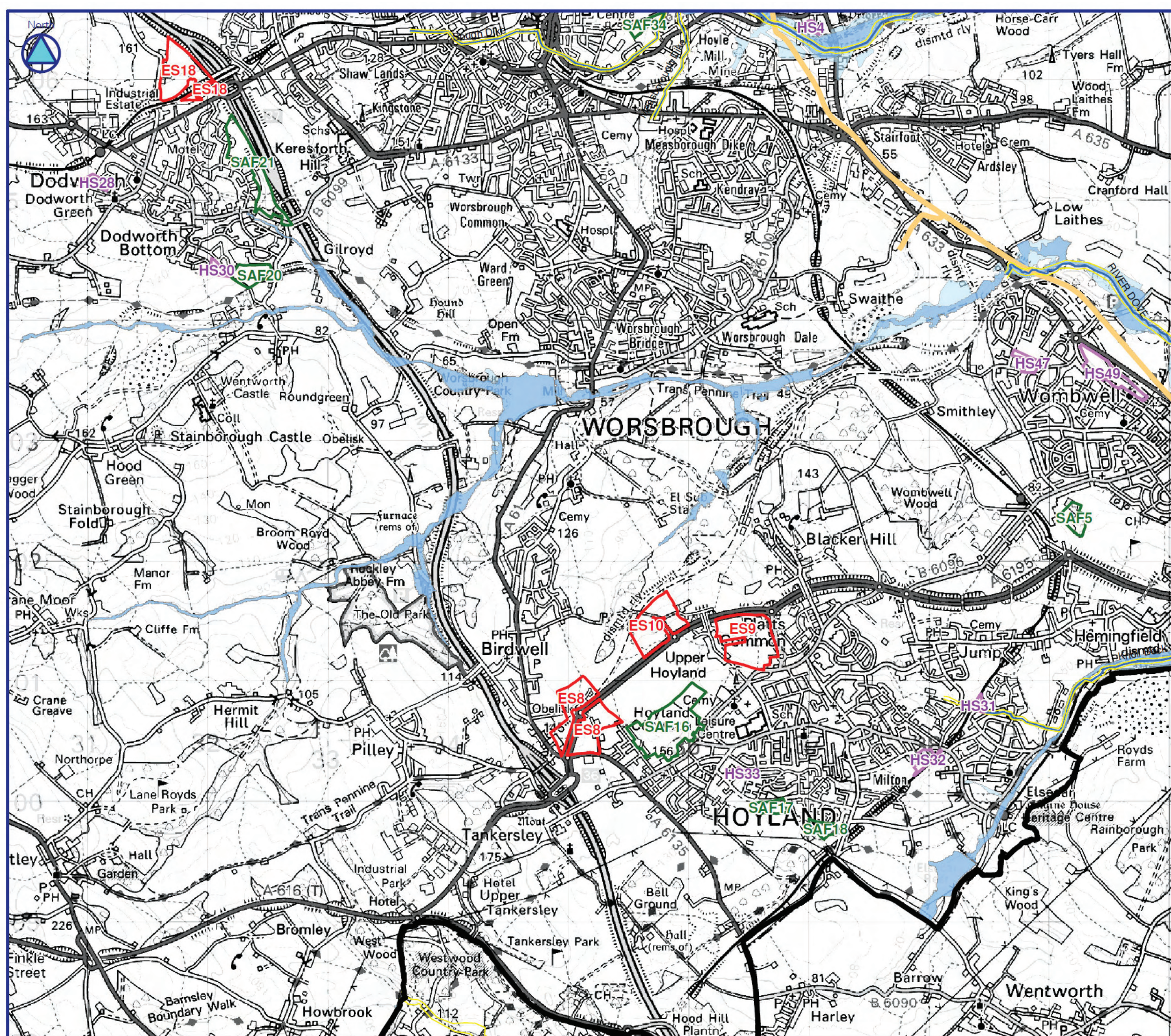
TO ORDNANCE SURVEY GRID AND DATUM
(OSTN02 by GPS FIXED AT RS3037, SF=1.00000000).
Semi-permanent Stations established.
Full Traverse not carried out.
For legend, CAD files, layer control, or further information
please contact Remap Surveys.

Environment Agency Flood Map

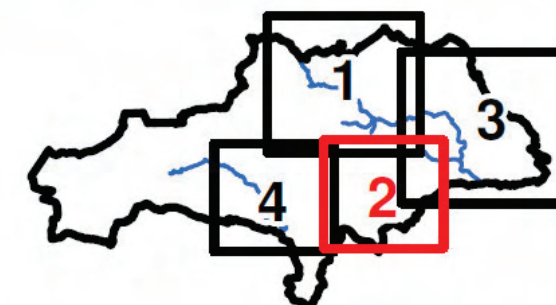
Shortwood Business Park, Hoyland



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



KEYPLAN



1:30,809

LEGEND

- Barnsley MBC Boundary
- Defence
- Main River
- Possible route of restored canal
- Flood Zone 3
- Flood Zone 2

Proposed Development Sites

- Employment Sites
- Housing Sites
- UDP Sites
- Safeguarded Land

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MAP A - 2

PROPOSED DEVELOPMENT SITES
AND FLOOD ZONES