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REF: 3284-18

RESIDENTIAL DEVELOPMENT
LAND OFF BROADGATE
WESTON HILLS
SPALDING
LINCS
PE12 6DQ

FOR

MRS C BODAL-HANSEN



PLANNING, DESIGN & ACCESS STATEMENT

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REF: 3284-18

RESIDENTIAL DEVELOPMENT
LAND OFF BROADGATE
WESTON HILLS
SPALDING
LINCS
PE12 6DQ

This application is to acquire Town and Country Planning (Outline) Permission for frontage residential development off Broadgate/Fengate Drove, Weston Hills for the benefit of Mrs C Bodal-Hansen.

The site, which amounts to 0.89 hectares, is the frontage of a large agricultural holding which fronts onto Broadgate and Fengate Drove. The application site is shown in red on the attached plans and adjoining land in the same ownership edged in blue.

Opposite the site and to the West are residential properties off Broadgate and the built environment of Weston Hills including depth developments off St Johns Road and Carisbrooke Way. The public foul sewer is available which serves the above developments.

A site specific Flood Risk Assessment has been carried out as the area is partially in Flood Zone 3 but predominately in Flood Zone 1 of the Environment Agency flood maps for Weston Hills (see appendix). Finished floor levels to be at 3.00 metres above O.D Newlyn with flood resilient construction incorporated up to 300mm above finished floor level.

As the current South Holland Local Plan is out of date and the council do not have a 5 year supply of housing, this application should be considered as a sustainable "windfall" site.

South Holland has experienced a longstanding shortfall in the delivery of dwellings and the most recent statement of housing and land supply (April 2016) has indicated that the planning authority can only identify 3.9 year supply in advance of the adoption of the South East Lincolnshire Local Plan. New housing applications should be considered in the context of the presumption in favour of sustainable development in accordance with Paragraph 49 of the National Planning Policy Framework (NPPF).

In the absence of a 5 year supply of housing land, Paragraph 14 of the NPPF applies and local planning authorities should grant Planning Permission unless:-
"Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the polices in this Framework taken as a whole"

This application demonstrates that the site is capable of being developed without detrimental impact on the character of the surrounding area and in the absence of any adverse impacts, Paragraph 14 of the NPPF indicates that Planning Permission should be granted. This application "mirrors" the current built environment/street scene of Broadgate.

The following section of the statement is as suggested by "The Commission for Architecture and the Built Environment" (CABE):-

USE

The proposal for frontage development "mirrors" the built environment of Broadgate, Weston Hills, the final design, layout and numbers of properties to be determined at Reserved Matters stage.

AMOUNT

To be agreed by Reserved Matters, if appropriate to Weston Hills affordable housing could be included.

LAYOUT

To be determined by Reserved Matters.

LANDSCAPING & BOUNDARY TREATMENT

The current site and area is bereft of any form of landscaping. A site specific comprehensive landscaping and tree planting scheme will enhance the approach to the village to be determined at Reserved Matters stage.

APPEARANCE

The indicative layout of frontage houses and bungalows to be finalised by Reserved Matters.

ACCESS

Access to the site will be by direct access off Broadgate or Fengate Drove, if required for site surface water drainage the frontage roadside drain could be retained, as a public footpath is opposite is not necessary for a new footpath thus retaining the rural frontage of the development. Access to and within the properties to comply with Part M of the Building Regulations – Access to All.

EXTERNAL MATERIALS

To be determined by Reserved Matters.

APPLICATION PLAN

3284-18-01	Location & Indicative Site Layout Plan

G R Merchant
February 2018

APPENDIX

LOCATION PLAN 1/2500

"GOOGLE" SITE PLANS & PHOTOGRAPHS

SOUTH EAST LINCOLNSHIRE LOCAL PLAN INSET MAP NO 67
WESTON HILLS- OTHER SERVICE CENTRE & SETTLEMENT

PUBLIC FOUL WATER SEWER RECORDS FOR WESTON HILLS

SITE SPECIFIC FLOOD RISK ASSESSMENT

GENERIC FLOOD RESILIENT CONSTRUCTION

LOCATION PLAN 1/2500



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LOCATION PLAN
1/2500

"GOOGLE" SITE PLANS & PHOTOGRAPHS

Google Maps



Imagery ©2018 Google, Map data ©2018 Google 200 m

Google Maps



Imagery ©2018 Google, Map data ©2018 Google 20 m


SITE
BROADGATE

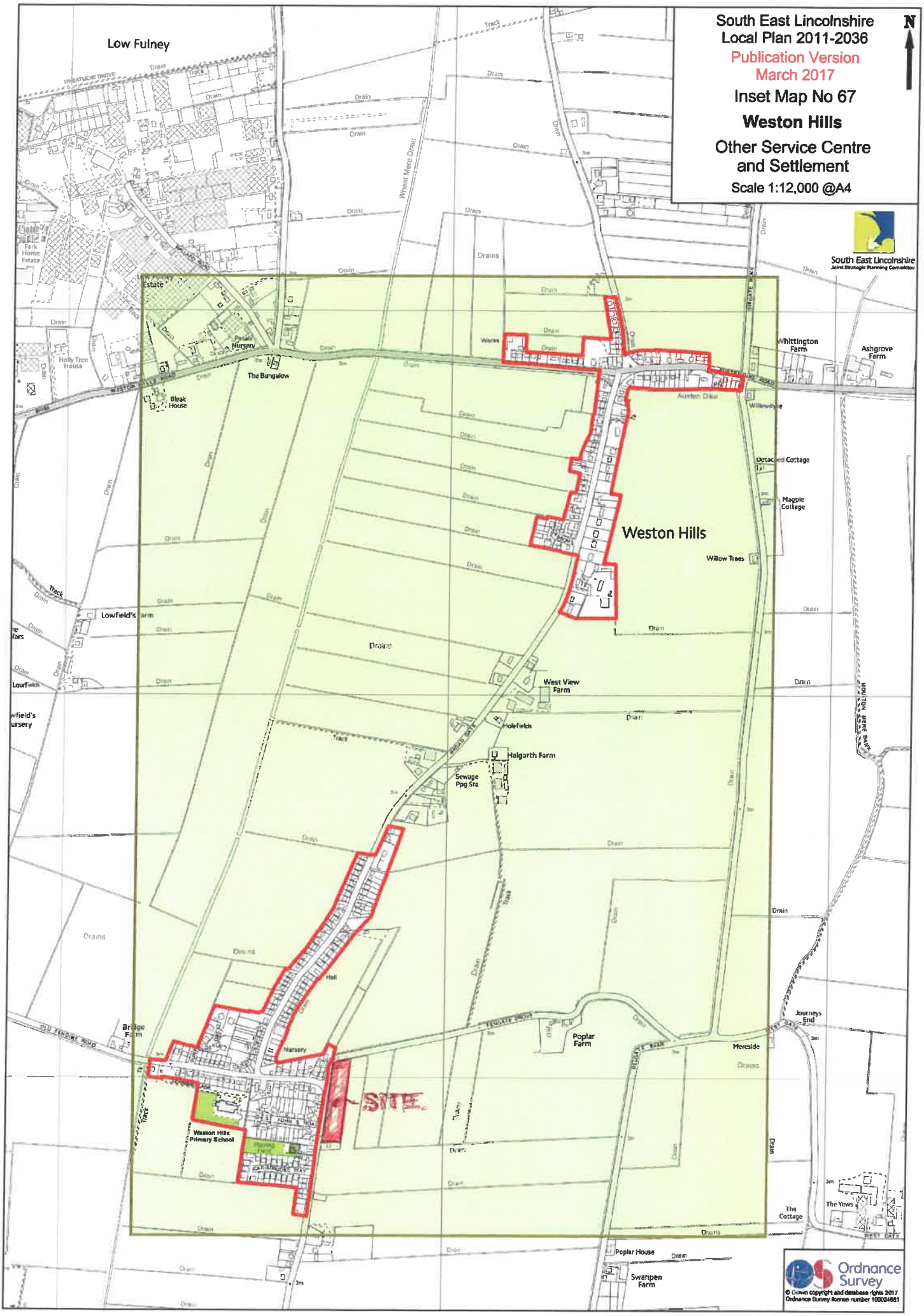

St JOHNS ROAD
SITE
BROADGATE


SITE.
FENGATE DROVE

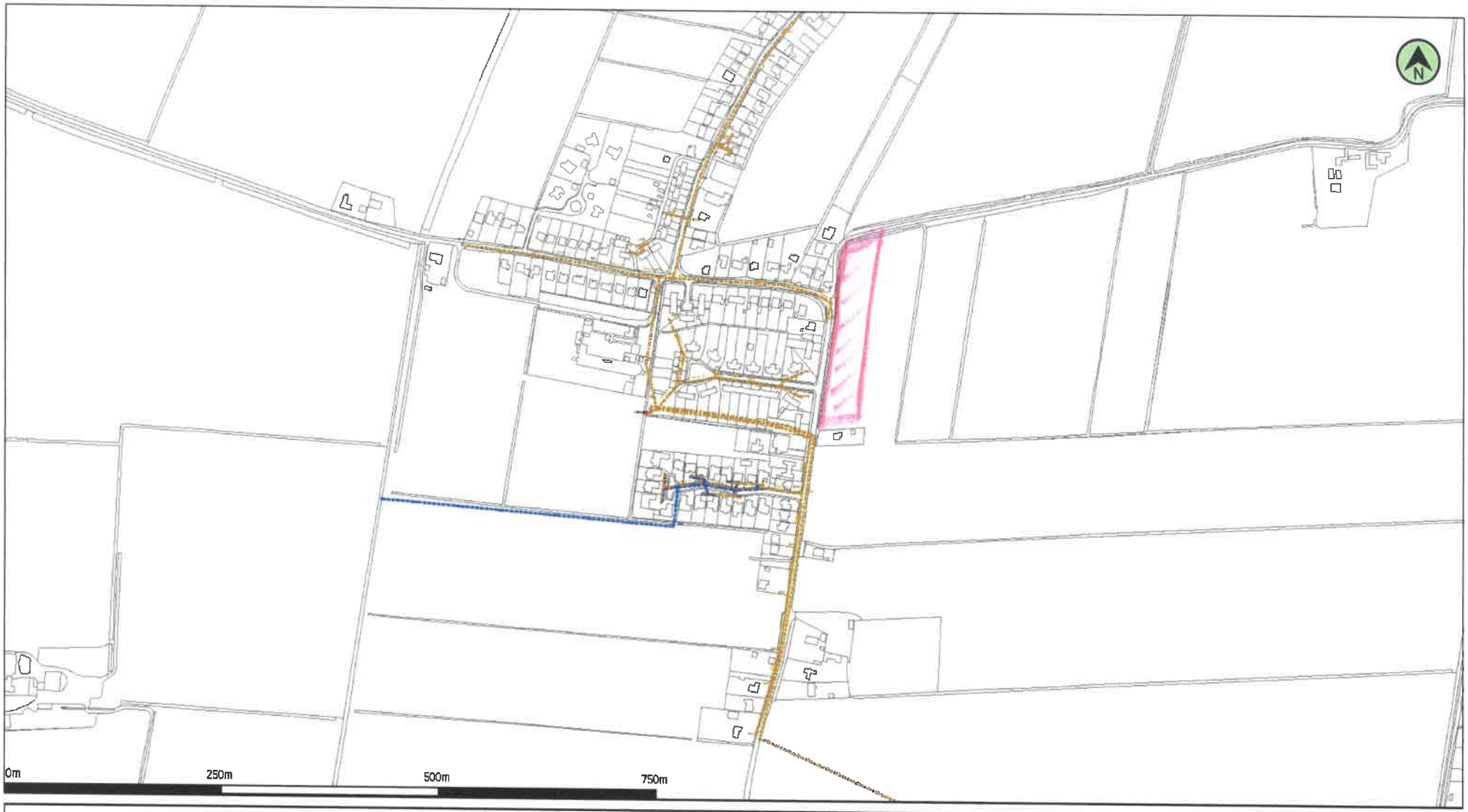

SITE
FENGATE
DROVE


SITE.
FENGATE DROVE

SOUTH EAST LINCOLNSHIRE LOCAL PLAN INSET MAP NO 67
WESTON HILLS – OTHER SERVICE CENTRE & SETTLEMENT


South East Lincolnshire
Local Plan 2011-2036
Publication Version
March 2017
Inset Map No 67
Weston Hills
Other Service Centre
and Settlement
Scale 1:12,000 @A4
N
South East Lincolnshire
Joint Strategic Planning Committee
Low Fulney
Weston Hills
SITE
Weston Hills Primary School
The Bungalow
Bleak House
Holly Tree House
Park Home Estate
Low Fulney Estate
Whittington Farm
Ashgrove Farm
Willow Trees
Magpie Cottage
Lowfield's Farm
West View Farm
Holefields
Halgarth Farm
Sewage Ppg Sta
Poplar Farm
Merseside
Journeys End
The Yews
The Cottage
Poplar House
Swanpen Farm
Bridge Farm
Nursery
Hall
Wheat Mere Drain
Ordnance Survey
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PUBLIC FOUL SEWER RECORDS FOR WESTON HILLS



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Date: 07/02/18 Scale: 1:6059 Map Centre: 527585,319855 Data updated: 04/01/18 Wastewater Plan A4

This plan is provided by Anglian Water pursuant its obligations under the Water Industry Act 1991 sections 198 or 199. It must be used in conjunction with any search results attached. The information on this plan is based on data currently recorded but position must be regarded as approximate. Service pipes, private sewers and drains are generally not shown. Users of this map are strongly advised to commission their own survey of the area shown on the plan before carrying out any works. The actual position of all apparatus MUST be established by trial holes. No liability whatsoever, including liability for negligence, is accepted by Anglian Water for any error or inaccuracy or omission, including the failure to accurately record, or record at all, the location of any water main, discharge pipe, sewer or disposal main or any item of apparatus. This information is valid for the date printed. This plan is produced by Anglian Water Services Limited (c) Crown copyright and database rights 2018 Ordnance Survey 100022432.This map is to be used for the purposes of viewing the location of Anglian Water plant only. Any other uses of the map data or further copies is not permitted. This notice is not intended to exclude or restrict liability for death or personal injury resulting from negligence.

- Foul Sewer
- Surface Sewer
- Combined Sewer
- Final Effluent
- Rising Main*
- Private Sewer*
- Decommissioned Sewer*
- Outfall*
- Inlet*
- Manhole*
- Sewage Treatment Works
- Public Pumping Station
- Decomissioned Pumping Station

*(Colour denotes effluent type)

jfrancis@sholland.gov.uk

Extended Map

love every drop anglianwater

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert
2000	F	2.92	1.566	1.354
3000	F	3.06	0.751	2.309
4001	F	2.91	0.065	2.845
4002	F	2.9	-0.16	3.06
4003	F	2.945	-0.335	3.28
4004	F	-	-	-
4005	F	-	-	-
4006	F	-	-	-
4007	F	-	-	-
4008	F	-	-	-
4801	F	3.11	-1.19	4.3
4901	F	2.97	-0.85	3.82
5001	F	3.295	1.835	1.46
5002	F	2.9	0.077	2.823
5003	F	2.924	-0.243	3.167
5101	F	2.947	0.456	2.491
5102	F	2.942	0.332	2.61
5103	F	-	-	-
5104	F	-	-	-
5105	F	-	-	-
5106	F	-	-	-
5107	F	-	-	-
5201	F	3.145	0.794	2.351
5700	F	2.805	1.321	1.484
5701	F	2.946	1.599	1.347
5702	F	2.859	1.959	0.9
5801	F	3.11	1.27	1.84
5802	F	3.13	-	-
5803	F	3.13	1.4	1.73
5804	F	2.85	-0.86	3.71
5901	F	2.92	0.37	2.55
5902	F	-	-	-

Manhole Reference	Liquid Type	Cover Level	Invert Level	Depth to Invert
5903	F	3.13	2.15	0.98
5904	F	3.13	1.12	2.01
6201	F	3.095	1.312	1.783
6202	F	3.097	1.122	1.975
6401	F	3.08	1.72	1.36
6501	F	3.11	1.02	2.09
6502	F	3.13	1.32	1.81
6601	F	2.82	0.33	2.49
6602	F	3.01	0.64	2.37
6701	F	3.05	0.8	2.25
6702	F	2.839	0.874	1.965
6703	F	2.982	1.106	1.876
6801	F	3.02	-	-
6802	F	3.11	1.44	1.67
6803	F	3.09	2.06	1.03
6804	F	3.11	1.63	1.48
6805	F	3.07	2.15	0.92
6806	F	2.98	-0.49	3.47
6807	F	2.85	-0.29	3.14
6901	F	2.96	0.79	2.17
6902	F	2.88	1.05	1.83
6903	F	2.81	1.28	1.53
6904	F	2.74	1.58	1.16
2751	S	2.705	0.506	2.199
3751	S	2.74	0.803	1.937
4751	S	2.68	1.1	1.58
5751	S	2.807	1.713	1.094
5752	S	2.974	1.625	1.349
5753	S	2.808	1.533	1.275
5754	S	2.595	1.397	1.198
6751	S	2.908	1.806	1.102

SITE SPECIFIC FLOOD RISK ASSESSMENT

FLOOD RISK ASSESSMENT FOR PROPOSED RESIDENTIAL DEVELOPMENT AT BROADGATE, WESTON HILLS, SPALDING, LINCS.

FINAL REPORT

GEOFF BEEL CONSULTANCY

FEBRUARY 2018

GCB/MERCHANT

DISCLAIMER

This document has been prepared solely as a Flood Risk Assessment in support of a planning application for proposed Residential Development at land north of 273 Broadgate, Weston Hills, Spalding. Lincolnshire. "Geoff Beel Consultancy" accepts no responsibility or liability whatsoever for any use made of this document other than by the clients" Mrs C Bodal-Hansen" for the purposes it was originally commissioned and prepared. All comments and opinions made are based upon information available to "Geoff Beel Consultancy" during the necessary investigative process, and the conclusions and recommendations could therefore, differ in the event of material subsequently being found erroneous, incomplete or misleading. "Geoff Beel Consultancy" therefore, accepts no liability should this prove to be the case.

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8.0 IMPACTS OF FLOODING

9.0 RESIDUAL RISKS – EXTREME EVENTS

10.0 CONCLUSIONS AND RECOMMENDATIONS

Fig 1 - Indicative Location & Site Layout Plans – G R Merchant drg. no. 3284-18-01

Fig 2 - Environment Agency Flood Map for Planning

Fig 3 - South Holland District Council Strategic Flood Risk Assessment Residual Flood Depths – District 2016

Fig 4 - South Holland District Council Strategic Flood Risk Assessment Residual Flood Depths – District 2116

Fig 5 - South Holland Internal Drainage Board district plan

1.0 INTRODUCTION

1.1 An outline planning application is to be submitted by G R Merchant Ltd on behalf of Mrs C Bodal-Hansen for proposed residential development at land north of 273 Broadgate, Weston Hills, Spalding, Lincs.

1.2 A Flood Risk Assessment is required to accompany the planning application and meet the requirements and general principles contained in the Planning Practice Guidance to the National Planning Policy Framework (NPPF).

The site, as situated, is located partly within Flood Zones 1 & 3, of the Environment Agency's Flood Map for Planning. The latest Agency Flood Maps have been created as a tool to raise awareness of flood risk with the public and our partner organisations, such as Local Authorities, Emergency Services and Drainage Authorities. The Maps do not take into account any flood defences.

The site however is also shown in Flood Zone 1 of the South Holland District Council's Updated Strategic Flood Risk Assessment Residual Flood Depths in year 2016.

The site is also located in the South Holland IDB drainage district.

1.3 Geoff Beel Consultancy was appointed on 8th February 2018 to undertake a Flood Risk Assessment.

2.0 LOCATION

2.1 The development site is located at land north of 273 Broadgate, as far as Fengate Drove, Weston Hills. The National Grid Reference of the central point of the development is TF 27721993.

2.2 The position and extent of the site is shown on Fig 1 – Indicative Location & Site Layout Plans at the end of the document.

2.3 The site, located within the South Holland Internal Drainage Board district is shown partly within Flood Zones 1 & 3 as detailed on the Environment Agency Flood Map for Planning and in Flood Zone 1 of the Council's Updated Strategic Flood Risk Assessment Residual Flood Depth Maps in year 2016 as defended by the Agency's tidal defences and the Internal Drainage Board system.

3.0 THE SITE AND SEQUENTIAL TEST

3.1 The site is currently agricultural land.

3.2 The area of development is approximately 0.89 hectare.

3.3 The proposed site layout consists the construction of 10 two storey dwellings with garages.

3.4 The Sequential Test is met as the site is located in Flood Zone 1 of the Council's Updated Strategic Flood Risk Assessment Maps (2016) and protected against both the 1 in 100 year fluvial event and the 1 in 200 year tidal event.

4.0 EXISTING FLOOD ALLEVIATION MEASURES

4.1 The site is within a defended floodplain, as defined in Appendix 1 of the Environment Agency's 'Policy for the Protection of Floodplains' and is considered to be passive until such time as a flood greater than that for which the defences were designed occurs. The likelihood of flooding due to overtopping or failure of a flood defence embankment is considered to be small.

The development site with ground levels generally at 2.70m aOD is within the South Holland Internal Drainage Board and protected by the River Welland and Wash tidal defences to the Holbeach Marsh frontage with embankment levels of a minimum of 7.00m aOD.

4.2 The site and the surrounding land drains by gravity to the adjoining riparian drain alongside Broadgate and hence via other drains in the catchment to discharge into the South Holland Main Drain at the Wisemans Pumping Station.

4.3 The existing standard of drainage for the South Holland Internal Drainage Board is 1 in 50 years return period, compatible with the Department of the Environment, Food and Rural Affairs target level of service for rural drainage and flood defence works. Freeboard of 900mm is provided to the lowest land levels.

4.4 Current maintenance standards within the South Holland Internal Drainage Board and of the Environment Agency defences are generally very good.

During the operation and maintenance of its pumping stations, associated structures and channel systems, particularly those that could affect property, the Board seeks to maintain a general standard capable of providing flood protection to its district. A routine maintenance programme is in place to ensure that the Boards assets are commensurate with the standard of protection that is sought. However, bank slips, blocked culverts etc may occur from time to time and these matters are usually dealt with promptly.

5.0 POTENTIAL SOURCES OF FLOODING

5.1 Four potential sources of flooding have been identified as a result of this assessment:

a) local blockages to IDB main drain system.
b) storm return period of 1 in 50 years being exceeded
c) failure of Wisemans Pumping Station
d) overtopping and breaching of the River Welland defences

5.2 The probability of flooding from source a) is low due to the maintenance standards already achieved and managed by the IDB.

The probability of flooding from b) is also low due to the South Holland IDB main drain design standard incorporating a minimum 900mm freeboard to the lowest land level which provides adequate storage in events greater than 1 in 50 years.

Previous historic rainfall events of 1968 and 1978, estimated to be greater than 1 in 100 year events, caused no flooding to any residential properties at the time and the Boards policy is to provide a standard of drainage which satisfies NPPF requirements of a 1 in 100 year return period for fluvial protection inclusive of the effects of climate change and developments to the arterial system enables a flexible approach to be adopted and meet the criteria for "sustainable urban drainage".

5.3 Failure of Wisemans Pumping Station may occur due to long term mechanical breakdown or power supply being disrupted. However, in these circumstances, if conditions were such to put properties and land at risk of flooding, the Internal Drainage Board would take emergency action to maintain the drainage level of service by utilising temporary pumping equipment. The probability of such an occurrence is also considered to be low.

5.4 The flood embankments to the tidal River Welland defences provide a 1 in 200 year return period level of protection whilst upstream of Marsh Road Sluice, Spalding the protection is against the 1 in 100 year flood event.

The 1 in 200 year tidal event to the tidal River Welland and the Holbeach Marsh frontage inclusive of climate change to 2116 is estimated to be 7.20m aOD as against existing embankment levels of a minimum of 7.00m aOD.

There is a low risk during such an event for wave and wind action to cause overtopping and/or breaching of the first line defences. However, the site is further protected by second line defences with embankment levels of 6.00m aOD. Any overtopping/breaching of the defences would not affect the development site as shown on the South Holland Updated Strategic Flood Risk Assessment Flood Zone Maps in year 2116.

Similarly, the River Welland and Crowland Cowbit Washes are located 2.50kms south west of the site and provide protection against the 1 in 100 year plus climate change fluvial flood event.

5.5 Finished floor level of the dwellings has been raised 300mm above Broadgate carriageway level.

Flood resilient construction will be incorporated up to a minimum level of 300mm above finished floor level with sleeping accommodation and safe refuge at first floor level.

5.6 The Environment Agency has recently published The Wash Shoreline Management Plan 2 from Gibraltar Point to Old Hunstanton. The summary of the plan between Gibraltar Point and Wolferton Creek is as follows:-

The intent of management for this Policy Development Zone (PDZ) is to sustain flood defence for the communities and their hinterland on the low-lying areas around The Wash. This includes an increase of management as needed to sustain the current level of flood risk in the face of climate change.

5.7 Surface water drainage from the development site will be to soakaways designed to BRE365 requirements and Building Regulations approval.

It may be necessary to carry out drain improvements to the riparian drain alongside Broadgate before constructing access culverts for the development.

6.0 EXTENT OF KNOWN FLOODING

6.1 During the preparation of this assessment, no evidence was discovered of the site being flooded or of any adjoining properties.

7.0 PROBABILITIES AND TRENDS OF FLOODING

7.1 The probability of this development flooding from localised drainage systems is very low.

7.2 The probability of the site flooding with water from any South Holland IDB main drain is less than 1% because of the standards of the existing flood defence systems, storage within existing drainage channels and the location of the site.

7.3 The probability of the site flooding with tidal waters from any main river system is less than 1% because of the standards of the existing flood defences and the location of the site.

7.4 If under very extreme events, levels of floodwater from the South Holland IDB main drains or arterial systems rose to such an extent that the site was affected, the situation would not be sudden. It is very probable that sufficient time would be available to take precautionary actions to limit the extent and potential impact of flooding.

7.5 The water levels in the drainage channels will tend to rise as a result of the impacts of climate change. However the existing systems and defences together with the proposed floor levels at 300mm above Broadgate carriageway level will be appropriate for the design life of the development (i.e. 100 years). Safe refuge and sleeping accommodation is available at first floor level.

8.0 IMPACTS OF FLOODING

8.1 No significant impacts of flooding are anticipated.

8.2 Floor levels of the development will 300mm above Broadgate carriageway level, which together with the flood resilient construction and proposed soakaway drainage system will offer additional protection against impacts arising from any extreme short duration, localised events.

8.3 The general location of the site within the catchment is such that if flooding occurred from any of the South Holland IDB main drain systems, then probably 2 to 3 days warning time would be available.

8.3 No displacement of water from the site will affect any adjoining properties as a soakaway drainage system to BRE365 design requirements will be installed to each property. Drain improvements may be necessary to the riparian drain alongside Broadgate prior to constructing access culverts for the development.

8.5 The developer should ensure that the eventual occupiers of the properties are sufficiently aware of the risk of flooding, and the standard of the existing defences. The Environment Agency provides a Flood Warning Service which includes Flood Warning Codes and uses direct warning methods where the risks and impacts of flooding are high. Indirect warnings are provided to all flood risk areas, even those at low risk of flooding. The main method is media broadcasts via local radio and also by television.

In addition to direct and indirect flood warnings, the Environment Agency operates a 24 hour a day Floodline Service providing advice and information on flooding, contact tel no: 0345 988 1188 and the occupiers of the new development should register with the Floodline Direct Warnings Service to receive future flood warnings.

9.0 RESIDUAL RISK – EXTREME EVENTS

9.1 The residual risk from extreme events is very low on this site, because of its location, within the South Holland IDB area and its location 6.00kms from The Wash and River Welland tidal defences with secondary defences between the marsh frontage and the site. Also being 2.50kms from the River Welland fluvial defences and the Crowland & Cowbit Washes.

9.2 The site is within Flood Zone 1 as a result of existing defences according to NPPF classification with a very low risk of flooding due to the current standards of drainage and flood defence and land levels. The site is not located within a Functional Flood Plain of any 'main river' or 'main drain' The Environment Agency Flood Map for Planning has been produced irrespective of existing flood defences and standards of protection.

9.3 South Holland District Council in conjunction with the Environment Agency and the local IDB's within the Council area have carried out an Updated Strategic Flood Risk Assessment (2016) of the whole District by appointed Consulting Engineers.

The Updated Strategic Flood Risk Assessment (2016) has produced more definitive Flood Risk Maps similar to those published by the Environment Agency and at the same time has analysed flood return periods of all tidal and fluvial defences to account for the effects of climate change.

Breach scenarios of embankments failing and/or being overtopped have also been carried out to establish Flood Risk Zones. As a result of the Strategic Flood Risk Assessment (2016) the site is shown to be unaffected by floodwaters on the Residual Flood Depths Maps in year 2116.

10.0 CONCLUSIONS AND RECOMMENDATIONS

10.1 As a result of the assessment, the following conclusions have been reached:-

- The proposed development is in a Defended Floodplain. It is located in the Passive Floodplain of the tidal and fluvial River Welland defences and the South Holland IDB protected by defences to both the 1 in 100 year and 1 in 200 year return period events.

- The site is in Flood Zone 1 as protected by existing defences the actual risk of site flooding from any Environment Agency river system is very low (less than 0.5%).

- Although the site is located within an Internal Drainage District with a minimum standard of drainage of 1 in 50 years, this accords with Defra guidelines for rural development. Freeboard to design water level of 900mm to lowest land level is available for events greater than 1 in 50 years providing further storage within the drainage channels.

- On site rainwater from the development will be discharged via soakaway drainage to BRE365 design requirements. Drain improvements may be necessary to the riparian drain alongside Broadgate.

- Floor level of the dwellings will be 300mm above Broadgate carriageway level with safe refuge and sleeping accommodation at first floor level. Flood resilient construction will be incorporated up to 300mm above finished floor level.

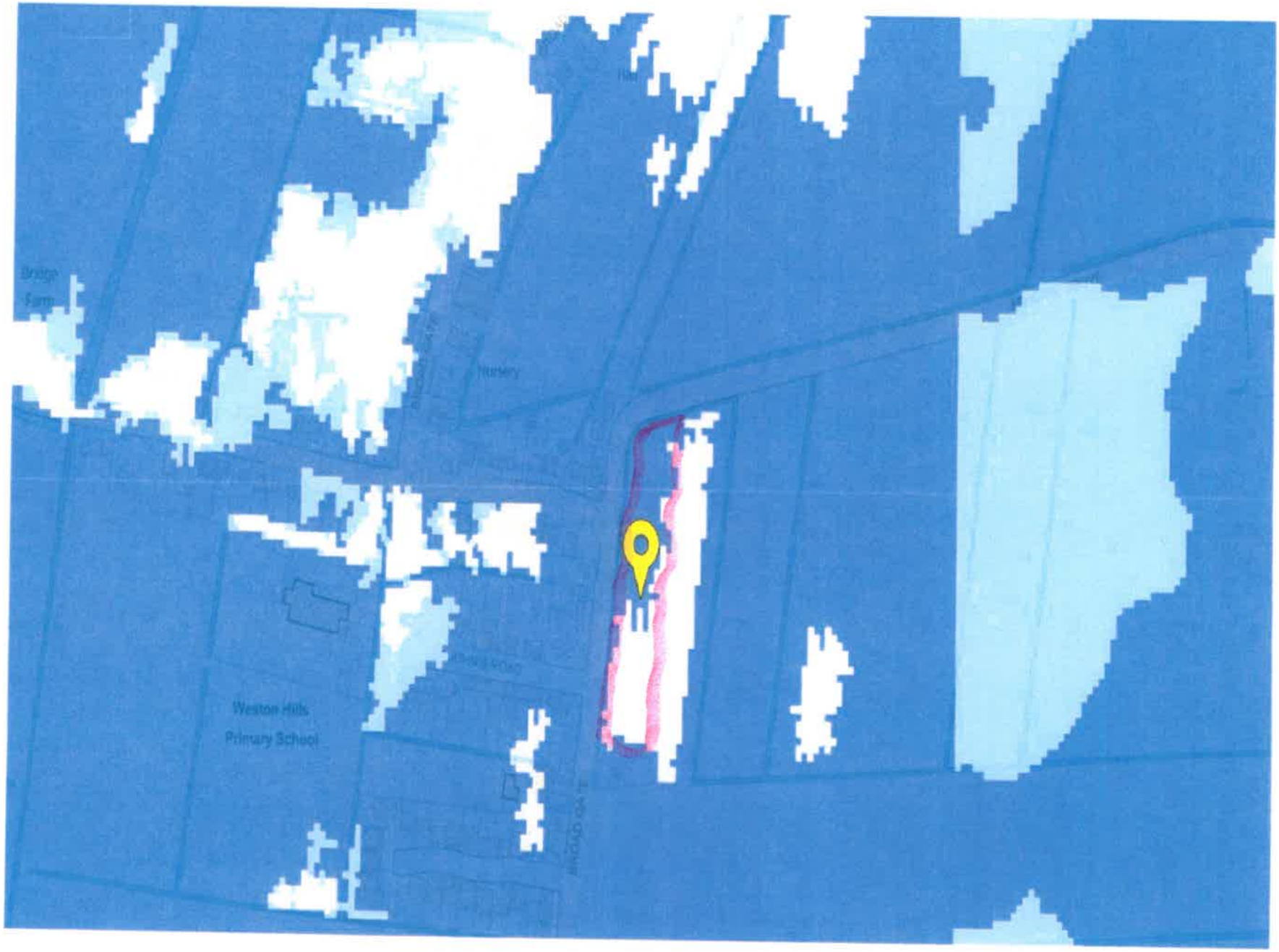
- Land Drainage Byelaw Consent will be required from the South Holland IDB for the construction of access culverts to the development over the riparian drain alongside Broadgate.



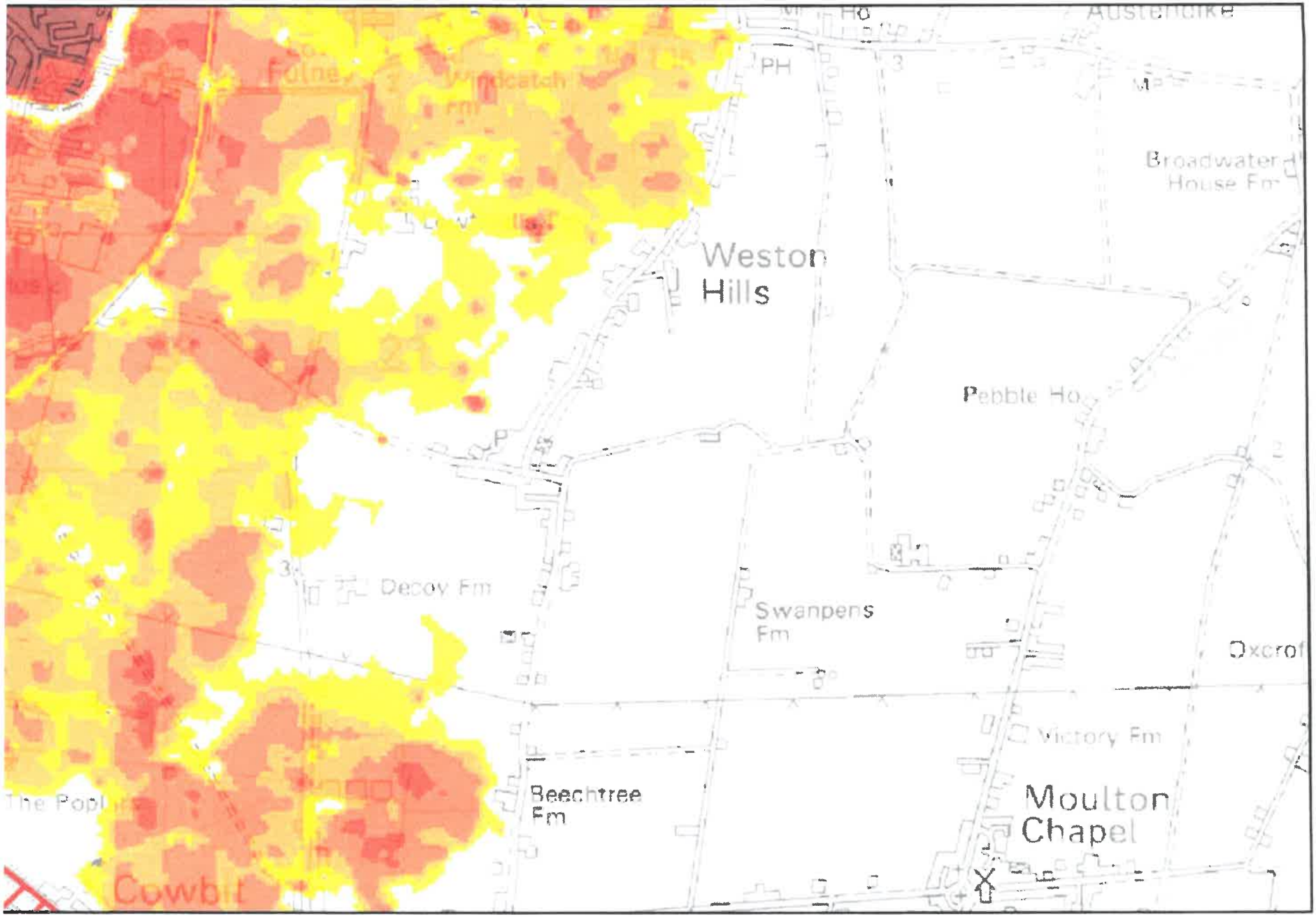


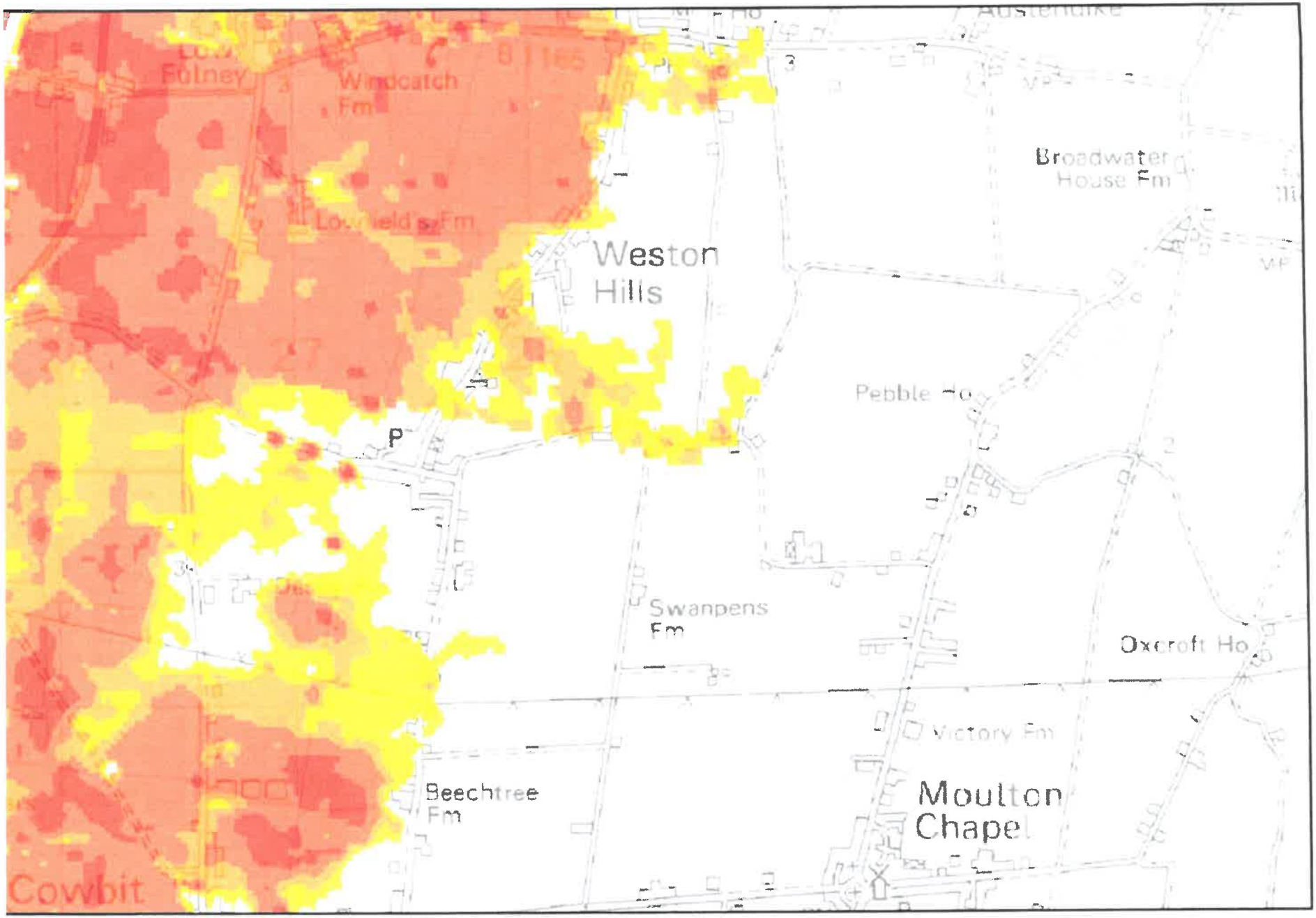
G. R. MERCHANT LTD.
KING JAMES HOUSE
ARCHITECTURAL, STRUCTURAL AND LAND DRAINAGE CONSULTANTS

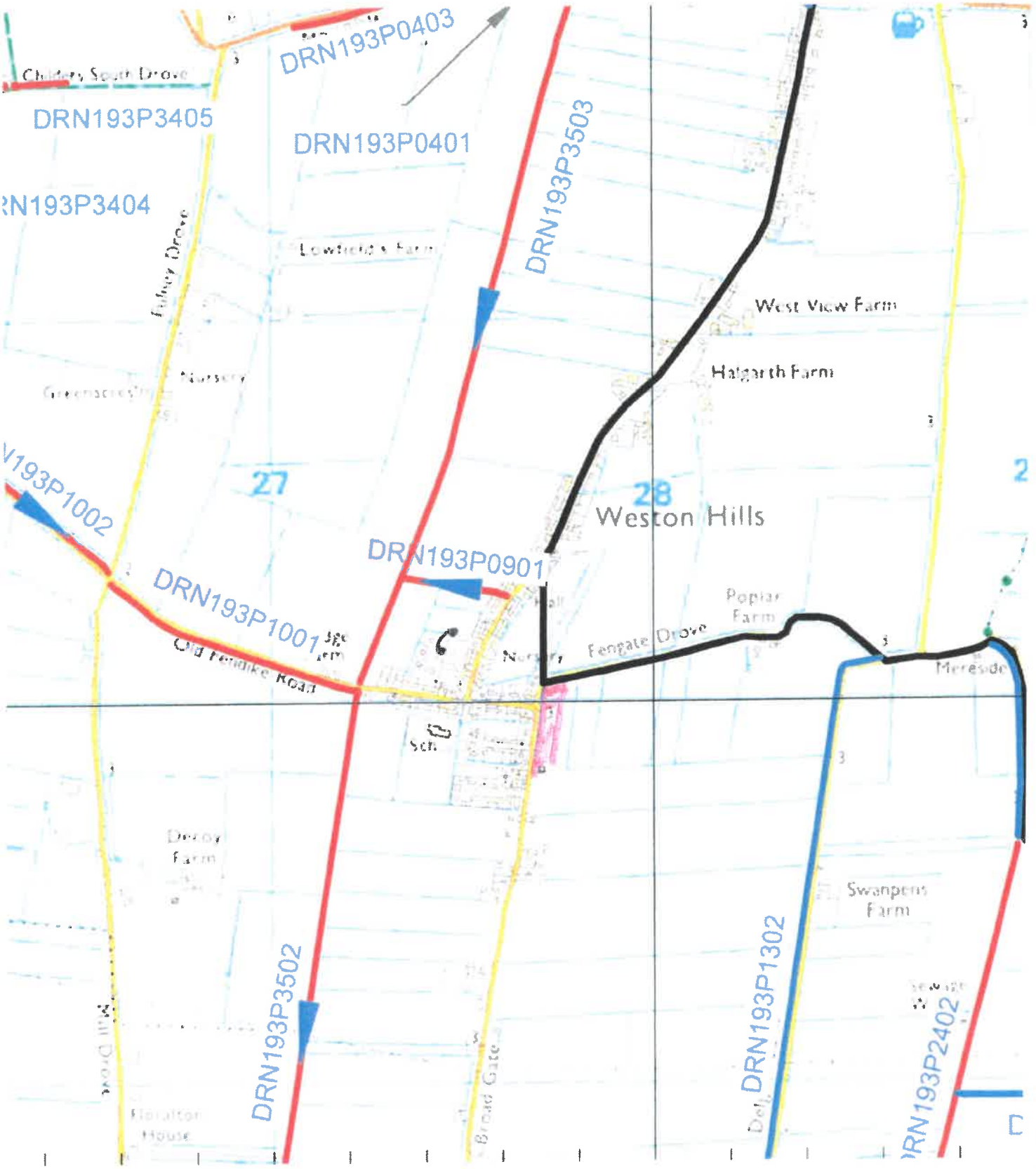
DO NOT SCALE FROM THIS DRAWING


Bridge Farm
Nursery
Weston Hills Primary School

2016


Austendike
PH
Broadwater House Fm
Weston Hills
Pebble Ho
Decoy Fm
Swanpens Fm
Oxcroft
Victory Fm
Beechtree Fm
Moulton Chapel
Cowbit


Folney
Windcatch Fm
Broadwater House Fm
Weston Hills
Pebble Ho
Swanpens Fm
Oxcroft Ho
Victory Fm
Beechtree Fm
Moulton Chapel
Cowbit


DRN193P0403
DRN193P3405
DRN193P0401
DRN193P3503
DRN193P3404
West View Farm
Halgarth Farm
DRN193P1002
27
28
Weston Hills
DRN193P0901
DRN193P1001
Old Fenpike Road
Poplar Farm
Fengate Drove
Meresde
Swanpans Farm
DRN193P3502
DRN193P1302
DRN193P2402

GENERIC FLOOD RESILIENT CONSTRUCTION

FLOOD RESILIENT CONSTRUCTION

The following measures are to be taken in an attempt to satisfy this condition as suggested in the Communities and Local Government document "Improving the Flood Performance of New Buildings" – May 2007.

- Any flood waters to be diverted around the building, where possible, to where the gardens are lower.
- Ground floors to be constructed with ground bearing type concrete slab (at least 100mm thick) on well consolidated hard-core, the DPM is to be sealed with the DPC, the insulation is to be Celotex, or similar approved, closed cell type and be positioned over the ground floor bearing slab with sand and cement render topping.
- All sub-structure walling to be constructed from red engineering bricks, up to DPC level, the remainder of the external facing bricks up to 300mm above DPC to be either red engineering or pressed, not handmade bricks. The cavity insulation up to 300mm above DPC is to be partial fill Celotex, or similar closed cell type insulation secured to the internal wall.
- Avoid the use of plasterboard and gypsum plaster to lower part of internal walls and use water resistant lime and cement render or painted blockwork.
- All external doors to be of a good quality not susceptible to moisture and have good seals for water tightness.
- Treated and sealed timber or UPVC skirting's and architraves.
- Ensure all kitchen areas, particularly behind units, to be sealed to prevent passage of water.
- Arrange for all service circuits to be routed at a first floor level if practical and sockets, boilers and cookers to be a minimum 300mm above floor level.
- Occupants of the property to register with the Environment Agency automated early warning system of potential floor events.