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Ref: 3303-18

**RESIDENTIAL DEVELOPMENT
ADJACENT 284 BROADGATE
WESTON HILLS
SPALDING
LINCS
PE12 6DA**

3 / 4 BEDROOM BUNGALOW & DETACHED TRIPLE GARAGE

FOR

MR & MRS G CONGREVE



PLANNING, DESIGN & ACCESS STATEMENT

**RESIDENTIAL DEVELOPMENT
ADJACENT 284 BROADGATE
WESTON HILLS
SPALDING
LINCS
PE12 6DA**

This application is to acquire Planning Permission for a single bungalow and detached triple garage for the benefit of Mr & Mrs G Congreve following refusal of H22-1287-16 by the South Holland District Council Planning Department and subsequent dismissal of appeal reference APP/A2525/W/17/3174609.

The main issues appear to be as follows:-

1. The character and appearance of the area
2. Effect of the proposal on the living conditions of the neighbouring properties
3. The Council's housing lack of a 5 year supply of deliverable dwellings
4. Sustainability of the site and its location within the rural village of Weston Hills
5. Effect of Flood Risk and over-looking

The original application H22-1287-16 was for Outline with all matters reserved and an indicative layout for 5 No dwellings. This reapplication is a full application for a single 3 / 4 bedroom bungalow with detached triple garage, which attempts to satisfy the previous refusal and dismissal.

1. The application for a single property replicates the host property 284 Broadgate and the adjacent development Sunfields Close, off Old Fendike Road.
2. The original application for indicatively 5 No properties could potentially generate at least 10 No extra vehicles which would have an impact on neighbouring properties. A single dwelling would lessen this impact together with the access roadway being upgraded with a tarmac surface – current access roadway is gravel surfaced.
3. Sustainability of the site has been achieved as Weston Hills is designated within the South East Lincolnshire Local Plan as an "Other Service Centre and Settlement" see inset map No 67 together with a bus service between Spalding and Wisbech (see appendix).

The refusal and dismissal decisions refer to the lack of the 5 year supply of deliverable housing sites which is relevant to all current applications!!

As the current South Holland Local Plan is out of date and the council do not have a 5 year supply of housing, this application should be considered as a sustainable "windfall" site.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 2.9 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 policies 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.

4. The effect of Flood Risk is a major issue within the LPA refusal and The Planning Inspectorate dismissal. The site specific Flood Risk Assessment by Geoff Beel Consultancy dated July 2016 stated:-

“Floor level of the new dwellings will be at a minimum of the 500mm above existing ground level with safe refuge at first floor level. Flood resilient construction will be incorporated up to 300mm above finished floor level.”

Note:- Finished floor level of bungalow to be at 3.30 metres above O D Newlyn – which is only 300mm above floor levels of frontage properties.

This can be easily achieved particularly with a single dwelling, the garage will not need to be raised 500mm above existing ground level and a safe refuge has been created at first floor level. The bungalow will be sited at least 26 metres from the frontage boundary and at least 42 metres away from frontage properties.

The site will be heavily landscaped and the paddock/orchard to the rear will also be landscaped.

APPLICATION PLANS

3303-18-01	Site & Location Plans
3303-18-02	Floor Plans & Elevations of Bungalow
3303-18-03	Floor Plans & Elevations of Triple Garage

SCHEDULE OF EXTERNAL MATERIALS

Walls – Crest Sapphire Red Stock

Roof – Sandtoft Cassius Clay Tiles

Joinery – Cream UPVC Windows (Grained)

G R Merchant

June 2018

APPENDIX

LOCATION PLAN 1/2500

“GOOGLE” PLANS & SITE PHOTOGRAPHS

**SOUTH EAST LINCOLNSHIRE LOCAL PLAN
INSET MAP NO 67 – WESTON HILLS**

REFUSAL NOTICE H22-1287-16

DISMISSAL NOTICE APP/A2525/ W/17/3174609

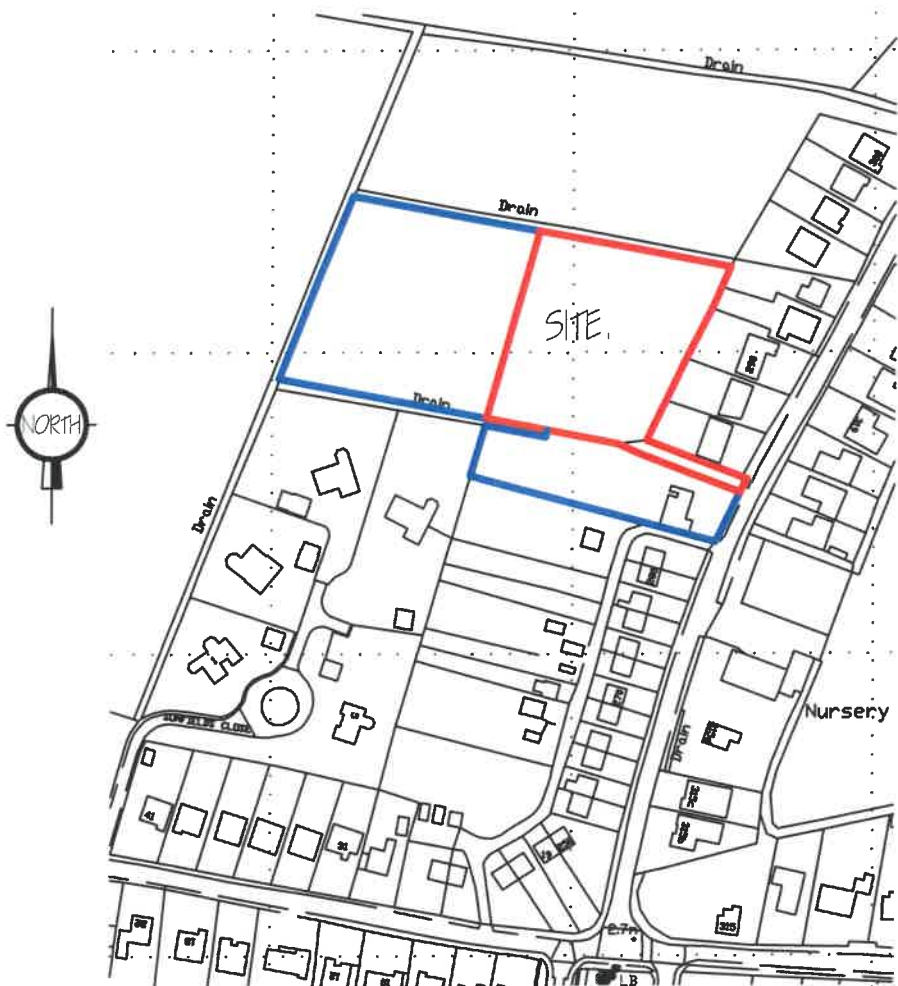
PRE-APPLICATION ENQUIRY APRIL 2018

BUS TIMETABLE

SITE SPECIFIC FLOOD RISK ASSESSMENT BY GEOFF BEEL CONSULTANCY

GENERIC FLOOD RESILIENT CONSTRUCTION METHODS

LOCATION PLAN 1/2500



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LOCATION PLAN
1:2500

"GOOGLE" PLANS & SITE PHOTOGRAPHS



Imagery ©2018 Google, Map data ©2018 Google 100 m

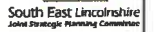




**SOUTH EAST LINCOLSHIRE LOCAL PLAN
INSET MAP NO 67 – WESTON HILLS**

Weston Hills

Weston Hills
Other Service Centre
and Settlement
Scale 1:12,000 @A4



Site



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Ordnance Survey licence number 100034881

REFUSAL NOTICE H22-1287-16



Status Design
2 Edinburgh Walk
Holbeach
Spalding
Lincs
PE12 7AP

Council Offices
Priory Road
Spalding
Lincolnshire
PE11 2XE
Admin 01775 764723
DC Officers 01775 764703
facsimile 01775 762937
planningadvice@sholland.gov.uk
www.sholland.gov.uk

TOWN AND COUNTRY PLANNING ACT 1990 OUTLINE

Reference: H22-1287-16 **Date of Decision:** 8th March 2017
Applicant: Mr & Mrs G Congreve
284 Broadgate
Weston Hills
Spalding
Lincs
PE12 6DA
Location: Adjacent: 284 Broadgate Weston Hills Spalding
Description: Proposed residential development - erection of 3 houses and garages and 2 bungalows and garages

South Holland District Council hereby give notice that this application has been REFUSED for the above proposal for the following reason(s):

- 1 Although the proposal would help to provide the supply of housing required within the district the benefits of just 5 properties would be limited and are outweighed by other social and environmental factors such as the distance from local services, reliance upon the motor car and the development's effect upon the character and appearance of the rural area. The site is not therefore considered to be suitable for housing with particular regards to the principles of sustainable development and the protection of the rural character of the area. Also, the development would have a material effect upon the amenity of nearby residents. The proposal is therefore contrary to Policies SG1, SG2, SG4, HS7 and SG14 of the South Holland Local Plan and Paragraphs 7, 8, 14, 17, 49, 55 and 58 of the National Planning Policy Framework, 2012.

Moreover, the site has not been included within Weston Hills settlement boundary within the emerging South East Lincolnshire Local Plan due to conflict with the Plan's locational strategy. Consequently, the proposal, if permitted, would encourage further applications of a similar nature which would then be hard to resist and which would prejudice the

preparation of the emerging Local Plan, the aims and objectives of which are to achieve a five year supply of deliverable housing sites and ensure that new development is sustainable and protects the character and appearance of the countryside.

Notes:

The Local Planning Authority has acted positively and proactively in determining this application by assessing it against all material considerations, including national guidance, planning policies and representations that have been received during the public consultation exercise. However, the issues are so fundamental to the proposal, due to the harm which has been clearly identified within the reason for the refusal, that approval has not been possible.

This decision notice, the relevant accompanying report and the determined plans can be viewed online at <http://planning.sholland.gov.uk/OcellaWeb/planningSearch>

The determined plans are:

1:2500 location plan;

Dwg. no. 41316/01;

Dwg. no. SD16-045/1A;

Flood Risk Assessment by Geoff Beel Consultancy (ref GCB/Status Design) dated December 2016.



Paul Jackson
Place Manager
South Holland District Council

BUILDING REGULATIONS:

This decision refers only to planning permission as granted under the Town and Country Planning Act 1990. The works that you are proposing may also require Building Regulations and this planning permission does not give authority under Building Regulations to commence work. Please contact the Building Control section for further information on 01775 764557 or bcadmin@sholland.gov.uk

DISMISSAL NOTICE APP-A2525/W/17/3174609



Appeal Decision

Site visit made on 25 July 2017

by I Radcliffe BSc(Hons) MRTPI MCIEH DMS

an Inspector appointed by the Secretary of State for Communities and Local Government

Decision date: 30th August 2017

Appeal Ref: APP/A2525/W/17/3174609

Land adjacent to 284 Broadgate, Weston Hills, Spalding, Lincolnshire PE12 6DA

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
 - The appeal is made by Mr & Mrs G Congreve against the decision of South Holland District Council.
 - The application Ref H22-1287-16, dated 15 December 2016, was refused by notice dated 8 March 2017.
 - The development proposed is the residential development of 3 No. houses and garages, 2 No. bungalows and garages.
-

Decision

1. The appeal is dismissed.

Procedural matters

2. The application was submitted in outline, with only access to be determined at this stage. I have dealt with the appeal on that basis and I have taken the indicative plan that has been submitted into account only insofar as it is relevant to my consideration of the principle of the development on the appeal site.
3. The publication version of the South East Lincolnshire Local Plan (SELLP) was issued in March 2017. However, as it is unclear whether it has been subject to public consultation and it has not yet been examined I attach little weight to this plan and its policies.

Main Issues

4. The main issues in this appeal are;
 - whether the location of the proposed development would be in accordance with the development plan;
 - whether the proposal would comply with planning policy which seeks to steer development away from areas at the highest risk of flooding.
 - the accessibility of services and facilities;
 - the effect of the proposed development on the character and appearance of the area; and,
 - the effect of the proposed development on the living conditions of the occupiers of 284 and 286 Broadway with regard to noise and disturbance resulting from the use of the site access.
-

Reasons

Location of development

5. Applications for planning permission are determined in accordance with the development plan unless material considerations indicate otherwise. The National Planning Policy Framework ('the Framework') is an important material consideration. A core planning principle of the Framework is that decision taking should be plan led.
6. The development plan for the area includes the South Holland Local Plan (SHLP) which was adopted in 2006. In order to further sustainability objectives, and in the interests of protecting the countryside, policies SG1, SG2, SG3 and SG4 set a development strategy for South Holland. Among other things, proposals for residential development are to be assessed in accordance with the identified settlement hierarchy, which has Spalding at the top. Weston Hills is classified as an 'Other Rural Settlement' in the fourth tier and for planning policy purposes lies within the open countryside where new development is strictly controlled by policy HS7. The appeal site is not an allocated site and the proposal does not accord with the exceptions set out in policy HS7. The location of the proposed scheme would therefore be contrary to policies SG1, SG2, SG4 and HS7 of the SHLP.

Flood risk

7. The appeal site is located within Flood Zone 3 which is the zone with the highest probability of flooding, ignoring the presence of defences. In accordance with the Framework, where development is proposed within this zone a Sequential Test needs to be carried out. Its purpose is to demonstrate whether there are reasonably available sites appropriate for the proposed development in areas with a lower risk of flooding. No such test has been submitted.
8. In the view of the Council, there are reasonably available sites at a lower risk of flooding elsewhere within Weston Hills, and other parts of the District, that could accommodate the amount of residential development which could be built on the appeal site. In the absence of substantive evidence to the contrary, I have no reason to disagree with the Council's assessment.
9. The Environment Agency does not object to the proposed development subject to appropriate conditions. However, it is the function of the planning system, rather than the role of the Environment Agency, to determine if the Sequential Test has been passed. The absence of objection from the Environment Agency therefore does not alter my assessment of the proposal in relation to this issue.
10. For the reasons given above, I therefore find that the proposed development could be located in an area of lower flood risk. The proposed development is therefore contrary to the policy contained in paragraphs 100 and 101 of the Framework which seeks to minimise flood risk by directing development to areas at lowest risk.

Accessibility

11. Weston Hills is a small settlement with a primary school and a nursery. The only other reference that has been made to services and facilities in the settlement is the village hall and a shop and post office that operate from it on certain days of the week. Although these facilities are within comfortable walking distance of the appeal site, it is clear that the range of services and

facilities available in the village are insufficient to meet the day to day needs of its residents.

12. Other settlements, such as Spalding, that offer a wide range of services and facilities are not within a reasonable walking or cycling distance of the appeal site and the bus service that passes through Weston Hills only does so twice a day. As a result, the appeal site is in a location that has poor accessibility to services and facilities and where future residents would be heavily reliant on a private car.
13. Paragraph 29 of the Framework identifies that the opportunities to maximise sustainable transport solutions varies from urban to rural areas. However, there are some locations, such as Weston Hills, where accessibility to services and facilities is so restricted that in order to actively manage patterns of growth, in accordance with a core planning principle of the Framework, development should be restricted.

Character and appearance

14. Weston Hills is characterised by linear development, with some development in depth where the roads that pass through the village meet. The appeal site is a green field that is enclosed on two sides by housing along Broadgate to the east and residential development in depth to the south. The proposed scheme in developing in depth land to the rear of Broadgate, no further to the west than existing development to the south, would complement and consolidate existing development. The loss of countryside to development that would result would not be readily apparent in public views from Broadgate and other public vantage points.
15. Taking all these matters into account, I therefore conclude that with the control that exists at reserved matters stage there is no reason why a well-designed residential scheme would not come forward that would complement the character and appearance of the area. Compliance with policy SG14 of the SHLP, which requires the protection of the character and appearance of a locality through high quality design that respects local design features, could therefore be achieved.

Living conditions

16. The access to the appeal site would pass between 284 and 286 Broadway. No 286 has a conservatory located next to the route of the proposed access. Subject to the access having a hard bound surface and the use of fencing, the passage of vehicles along the access would be quiet and infrequent enough not generate noise and disturbance that would harm the living conditions of the occupiers of Nos 284 and 286. As the rooms to the front of No 286 are separated from the side boundary by an intervening garage, vehicles turning into and out of the access would not result in noise and disturbance in other rooms of this property.
17. At No 286, the route of the proposed access would be screened from the conservatory by a dense hedge along the side boundary. A window serving a room in the side of the dwelling directly faces the proposed access. However, as this links to the conservatory, which has wide views of the rear garden, a boundary treatment that obscures the view from this secondary window would not harm the outlook from within No 286.
18. The proposed development would therefore result in acceptable living conditions for the occupiers of the properties adjacent to the proposed access.

It would therefore comply with policy SG14 of the SHLP which, amongst other matters, seeks to prevent such harm.

Other matters

19. Reference has been made to several decisions where planning permission has been granted in the District for housing schemes which, as with the appeal site, abut the proposed settlement development boundaries in the SELLP and which the appellant considers are in less accessible locations. However, it is an established principle that each application must be considered on its own merits. The decision makers in relation to the other decisions referred to exercised their judgement on the evidence in relation to those particular cases. I must similarly use my judgement in respect of the evidence before me. As a result, these decisions have not altered my assessment of the appeal proposal.

Overall Conclusions: The Planning Balance

20. The Framework sets out a presumption in favour of sustainable development. The policies of the Framework as a whole constitute the Government's view of what sustainable development means in practice. There are three dimensions to sustainable development: social, environmental and economic.
21. The appellant states that the Council has a housing land supply of 2.9 years. This has not been challenged by the Council. As a result, a significant undersupply of housing exists in the District.
22. In such circumstances, paragraph 49 of the Framework advises that policies relevant to housing land supply, such as policies SG1, SG2, SG4 and HS7 of the SHLP, are out of date. Consequently, in accordance with paragraph 14 of the Framework, which explains how the presumption in favour of sustainable development should be applied, planning permission should be granted subject to two exceptions. These are where specific policies in the Framework indicate that development should be restricted; or, where the adverse impacts of doing so would significantly and demonstrably outweigh the benefits when assessed against the policies in the Framework as a whole.
23. In terms of the first exception I have referred to, the appeal site is located within Flood Zone 3 which has the highest probability of flooding when there are reasonably available sites at a lower risk of flooding within Weston Hills and other parts of the District. The proposed development is therefore contrary to a specific policy of the Framework which, in seeking to minimise flood risk by directing development to areas at lowest risk, indicates that development should be restricted. As a consequence, the proposed scheme would not constitute a sustainable development.
24. Environmentally, the proposed development would not be readily visible from public vantage points and would consolidate the existing pattern of development. Acceptable living conditions would also be maintained for neighbours. However, the absence of harm is a matter of neutral weight, rather than positive weight that weigh in favour of the proposal.
25. The proposed scheme would make a small contribution towards addressing the notable shortfall in housing in the District and to a limited extent would help support the few local services that exist in the village. The scheme would generate some construction employment, although by its nature this benefit would be short lived. It would also, by increasing the local population, increase by a small amount the spending power of the local economy. The proposed development would therefore result in some social and economic benefits.

26. However, these material considerations in favour of the proposal are insufficient to outweigh the conflict that I have identified with a specific policy of the Framework that indicates that development should be restricted, its poor accessibility and conflict with the development plan, albeit by virtue of the lack of a 5 year housing land supply I attach only some weight to the policies of the SHLP cited in this decision. I therefore conclude that the appeal should be dismissed.

Ian Radcliffe

Inspector

PRE-APPLICATION ENQUIRY APRIL 2018



G R MERCHANT <grmerchant.arch.cons@gmail.com>

Planning Enquiry

1 message

G R MERCHANT <gr.merchant@btconnect.com>

24 April 2018 at 11:21

To: _planningadvice <planningadvice@sholland.gov.uk>

Dear Sir/Madam,

**RESIDENTIAL DEVELOPMENT
ADJACENT 284 BROADGATE, WESTON HILLS, PE12 6DA
MR & MRS G CONGREVE**

I have been approached by Mr & Mrs Congreve regarding their side garden/rear paddock which as you will appreciate has a degree of planning history associated with it, namely:-
H22-1287-16 refused 8th March 2017
APP/A2525/W/17/3174609 dismissed 30th August 2017

This proposal is for a single bungalow/chalet with a triple garage specifically for Mr & Mrs Congreve, with a large paddock/orchard rear garden.

This scenario of development has been accepted on two occasions that we have been involved with, namely:-
Mr M Ayres H09-0448-17 21st August 2017
Mr & Mrs P Breach H13-1137-17 26th February 2018

The reason for acceptance of these similar developments is effect on neighboring properties, Flood Risk issues which can easily be dealt with on such a large site and sustainability together with energy efficiency of the proposal, solar panels, ground source heat pumps, rainwater harvesting, high levels of insulation to all aspects of the building etc. This will also comply with Paragraph 55 of the National Planning Policy Framework (NPPF).

The application will be a full application, your informal opinion of our clients aspirations would be appreciated prior to making a formal Town & Country Planning Application with all the cost implications.

If you require any further information or clarification of the requirements please do not hesitate to contact me.

Yours faithfully
G R Merchant

G R Merchant Ltd
01406 490800

3 attachments

 **3303-18-01 (CONGREVE).pdf**
482K

 **3303-18-02 (CONGREVE).pdf**
832K

 **3303-18-03 (CONGREVE).pdf**
345K



G R MERCHANT <grmerchant.arch.cons@gmail.com>

Pre-Application Advice - PE-00170-18 G R Merchant Ltd on behalf of Mr & Mrs Congreve

1 message

planningadvice@sholland.gov.uk <planningadvice@sholland.gov.uk>
To: gr.merchant@btconnect.com

24 April 2018 at 11:49

ACKNOWLEDGEMENT OF PRELIMINARY ENQUIRY**REFERENCE:** PE-00170-18**PROPOSAL:** Proposed single bungalow/chalet with triple garage**LOCATION:** Side Garden/Rear Paddock 284 Broadgate Weston Hills
Spalding**APPLICANT:** G R Merchant Ltd on behalf of Mr & Mrs Congreve

We acknowledge the receipt of the above preliminary enquiry which has been recorded on our system and passed to a case officer to deal with.

If contacting us about this enquiry please quote the reference number given above.

Our preliminary enquiry system is currently free to use and we aim to deal with your request within 20 working days. However, priority is given to the processing and determination of formal planning applications. In busy times this may mean a longer than usual response time for this free preliminary advice service.

Yours faithfully

Richard Fidler

Development Manager

4/24/2018

Gmail - Pre-Application Advice - PE-00170-18 G R Merchant Ltd on behalf of Mr & Mrs Congreve

South Holland District Council

G R Merchant Ltd
Unit 4 Wrights Mews
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Admin 01775 764723
DC Officers 01775 764703
facsimile 01775 762937

planningadvice@sholland.gov.uk
www.sholland.gov.uk

26th April 2018

Dear Sir/Madam

PLANNING: PRE-APPLICATION ADVICE

Reference: PE-00170-18 Case Officer: David Grant
Location: Side Garden/Rear Paddock 284 Broadgate Weston Hills Spalding
Proposal: Proposed single bungalow/chalet with triple garage

Thank you for your enquiry. Every site is treated on its individual merits. The quoted application of H13-1137-17 is considered to be of minimal comparability to the case at hand. With regard to H09-0448-17 I declined to deal with this application as I remain of the opinion that the proposal constituted a detrimental backland in the open countryside. In my opinion that application should have been refused in accordance with local and national policy.

Unless you can demonstrate that you have addressed the reasons for refusal under application H22-1287-16 and the subsequent dismissed appeal, then the only recommendation can be one of refusal.

This planning advice is given in good faith but is an officer opinion only and therefore is not binding on any formal decision the Council may make following the receipt of a planning application.

BUILDING REGULATIONS

The works that you are proposing may also require Building Regulations and this informal advice or any subsequent planning permission does not give authority under Building Regulations to commence work. Please contact the Building Control section for further information on 01775 764557

Yours faithfully



David Grant, Planning Officer

BUS TIMETABLE



The information on this timetable is expected to be valid until at least 5th April 2017. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service Restrictions	NTh	Th	NTh
Wisbech, Horse Fair Bus Station (Bay 2)	—	1235	—
§ Wisbech, North End Hall & Ride (N-bound)	—	1236	—
§ Wisbech, adj Asda Superstore	—	1237	—
§ Wisbech, o/s Peckover School Hall & Ride	—	1238	—
§ Wisbech, Leverington Road Hall & Ride (W-bound)	—	1238	—
§ Leverington, nr Leverington Common	—	1240	—
§ Leverington, nr Foot Bridge	—	1240	—
§ Leverington, opp May's Lane	—	1241	—
§ Cheyney Bridge, nr Station Road	—	1243	—
§ Bellamy's Bridge, Garden Centre (N-bound)	—	1244	—
§ Church End, Elbow Lane Hall & Ride (W-bound)	—	1245	—
§ Church End, opp St John the Baptist's Church	—	1246	—
§ Parson Drove, nr Cella Farm	—	1246	—
§ Parson Drove, opp The Bank	—	1246	—
§ Murrow, opp Short Drove Hall & Ride	—	1251	—
Murrow, The Bell Inn (Stop os)	—	1255	—
§ Murrow, nr Short Drove Hall & Ride	—	1257	—
Parson Drove, nr Fen Road	—	1300	—
§ Throckenholt, adj Four Horseshoes	—	1306	—
Sutton St Edmund, adj St Edmund's Church	0915	1310	1310
§ Throckenholt, nr Four Horseshoes	0919	1314	1314
Throckenholt, adj Coronation Avenue	0920	1315	1315
Gedney Hill, opp Duke's Head	0930	1325	1325
§ Gedney Hill, opp Memorial Hall	0931	1326	1326
§ Gedney Hill, opp West Drove North	0932	1327	1327
§ Gedney Hill, adj New Fen Drove	0932	1327	1327
§ Holbeach Drove, opp St Polycarp's Church	0933	1328	1328
Holbeach Drove, adj Chapel Drove	0935	1330	1330
§ Whaplode Drove, Drove Road (NE-bound)	0937	1332	1332
§ Whaplode Drove, adj Post Office	0939	1334	1334
Whaplode Drove, opp Parsons Lane	0940	1335	1335
§ Whaplode Drove, opp Bus Shelter	0941	1336	1336
§ Moulton Eaugate, Snakehall Bridge (N-bound)	0950	1345	1345
§ Moulton Chapel, adj Cekhira Avenue	0953	1348	1348
Moulton Chapel, adj Church	0955	1350	1350
§ Weston Hills, opp Broadgate	0958	1353	1353
Weston Hills, opp Primary School	1000	1355	1355
§ Weston Hills, opp Village Hall	1001	1356	1356
Weston Hills, adj 524 Broadgate	1005	1400	1400
§ Low Fulney, opp Mallard Road	1007	1402	1402
Spalding, opp St Paul's Primary School	1010	1405	1405
§ Spalding, adj Queens Road	1011	1406	1406
§ Spalding, adj Ash Court	1011	1406	1406
§ Spalding, adj Oakley Drive	1012	1407	1407
§ Spalding, adj Health Centre	1012	1407	1407
§ Spalding, adj Greenrigg Gardens	1013	1408	1408
§ Spalding, adj Chappell Centre	1013	1408	1408
§ Spalding, opp Kings Road	1014	1409	1409
Spalding, Bus Station (Bay 7)	1015	1410	1410

Saturdays

Sutton St Edmund, adj St Edmund's Church	0915	1310
§ Throckenholt, nr Four Horseshoes	0919	1314
Throckenholt, adj Coronation Avenue	0920	1315
Gedney Hill, opp Duke's Head	0930	1325
§ Gedney Hill, opp Memorial Hall	0931	1326
§ Gedney Hill, opp West Drove North	0932	1327
§ Gedney Hill, adj New Fen Drove	0932	1327
§ Holbeach Drove, opp St Polycarp's Church	0933	1328
Holbeach Drove, adj Chapel Drove	0935	1330
§ Whaplode Drove, Drove Road (NE-bound)	0937	1332
§ Whaplode Drove, adj Post Office	0939	1334
Whaplode Drove, opp Parsons Lane	0940	1335
§ Whaplode Drove, opp Bus Shelter	0941	1336
§ Moulton Eaugate, Snakehall Bridge (N-bound)	0950	1345
§ Moulton Chapel, adj Cekhira Avenue	0953	1348
Moulton Chapel, adj Church	0955	1350
§ Weston Hills, opp Broadgate	0958	1353
Weston Hills, opp Primary School	1000	1355
§ Weston Hills, opp Village Hall	1001	1356
Weston Hills, adj 524 Broadgate	1005	1400
§ Low Fulney, opp Mallard Road	1007	1402
Spalding, opp St Paul's Primary School	1010	1405
§ Spalding, adj Queens Road	1011	1406
§ Spalding, adj Ash Court	1011	1406
§ Spalding, adj Oakley Drive	1012	1407
§ Spalding, adj Health Centre	1012	1407
§ Spalding, adj Greenrigg Gardens	1013	1408
§ Spalding, adj Chappell Centre	1013	1408
§ Spalding, opp Kings Road	1014	1409
Spalding, Bus Station (Bay 7)	1015	1410

Service Restrictions: NTh - Not Thursdays
Th - Operates only on Thursdays

Notes: § - Time at this stop is indicative. You are advised to be at any stop several minutes before the times shown



49

Wisbech - Sutton St Edmund - Spalding

Stagecoach Norfolk (formerly Norfolk Green)

The information on this timetable is expected to be valid until at least 5th April 2017. Where we know of variations, before or after this date, then we show these at the top of each affected column in the table.

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Sundays

no service



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Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service Restrictions	Th	NTh
Spalding, Bus Station (Bay 7)	—	1210 1410
§ Spalding, adj Kings Road	—	1211 1411
§ Spalding, opp Chappell Centre	—	1211 1411
§ Spalding, opp Greenrigg Gardens	—	1212 1412
§ Spalding, opp Health Centre	—	1212 1412
§ Spalding, opp Oakley Drive	—	1213 1413
§ Spalding, opp Ash Court	—	1213 1413
§ Spalding, opp Queens Road	—	1214 1414
Spalding, adj St Paul's Primary School	—	1215 1415
§ Low Fulney, adj Mallard Road	—	1218 1418
Weston Hills, opp 524 Broadgate	—	1220 1420
§ Weston Hills, adj Village Hall	—	1222 1422
Weston Hills, adj Primary School	—	1225 1425
§ Weston Hills, adj Broadgate	—	1228 1428
Moulton Chapel, opp Church	—	1230 1430
§ Moulton Chapel, opp Cekhira Avenue	—	1231 1431
§ Moulton Eaugate, Snakehall Bridge (S-bound)	—	1234 1434
§ Whaplode Drive, opp Bus Shelter	—	1241 1441
Whaplode Drive, adj Parsons Lane	—	1245 1445
§ Whaplode Drive, opp Post Office	—	1245 1445
§ Whaplode Drive, Drove Road (SW-bound)	—	1247 1447
Holbeach Drive, opp Chapel Drove	0920	1250 1450
§ Holbeach Drive, adj St Polycarp's Church	0920	1250 1450
§ Gedney Hill, opp New Fen Drove	0921	1251 1451
§ Gedney Hill, adj West Drove North	0922	1252 1452
§ Gedney Hill, adj Memorial Hall	0923	1253 1453
Gedney Hill, adj Duke's Head	0925	1255 1455
Throckenholt, opp Coronation Avenue	0930	1305 —
§ Throckenholt, adj Four Horseshoes	0931	1306 —
Sutton St Edmund, opp St Edmund's Church	0940	1310 —
§ Throckenholt, opp Four Horseshoes	0944	— —
§ Parson Drove, opp Fen Road	0946	— —
§ Murrow, opp Short Drove Hall & Ride	0948	— —
Murrow, The Bell Inn (Stop os)	0950	— —
§ Murrow, nr Short Drove Hall & Ride	0952	— —
Parson Drove, nr The Bank	0955	— —
§ Parson Drove, opp Cella Farm	0956	— —
§ Church End, nr St John the Baptist's Church	0956	— —
§ Church End, nr Elbow Lane Hall & Ride	0957	— —
§ Bellamy's Bridge, Garden Centre (S-bound)	0959	— —
§ Cheyney Bridge, opp Station Road	1000	— —
§ Leverington, nr May's Lane	1002	— —
§ Leverington, opp Foot Bridge	1003	— —
§ Leverington, opp Leverington Common	1003	— —
§ Wisbech, Leverington Road Hall & Ride (E-bound)	1005	— —
§ Wisbech, opp Peckover School Hall & Ride	1005	— —
§ Wisbech, opp Asda Superstore	1006	— —
§ Wisbech, North End Hall & Ride (S-bound)	1007	— —
Wisbech, Horse Fair Bus Station (Bay 2)	1015	— —

Saturdays

Spalding, Bus Station (Bay 7)	1210 1410
§ Spalding, adj Kings Road	1211 1411
§ Spalding, opp Chappell Centre	1211 1411
§ Spalding, opp Greenrigg Gardens	1212 1412
§ Spalding, opp Health Centre	1212 1412
§ Spalding, opp Oakley Drive	1213 1413
§ Spalding, opp Ash Court	1213 1413
§ Spalding, opp Queens Road	1214 1414
Spalding, adj St Paul's Primary School	1215 1415
§ Low Fulney, adj Mallard Road	1218 1418
Weston Hills, opp 524 Broadgate	1220 1420
§ Weston Hills, adj Village Hall	1222 1422
Weston Hills, adj Primary School	1225 1425
§ Weston Hills, adj Broadgate	1228 1428
Moulton Chapel, opp Church	1230 1430
§ Moulton Chapel, opp Cekhira Avenue	1231 1431
§ Moulton Eaugate, Snakehall Bridge (S-bound)	1234 1434
§ Whaplode Drive, opp Bus Shelter	1241 1441
Whaplode Drive, adj Parsons Lane	1245 1445
§ Whaplode Drive, opp Post Office	1245 1445
§ Whaplode Drive, Drove Road (SW-bound)	1247 1447
Holbeach Drive, opp Chapel Drove	1250 1450
§ Holbeach Drive, adj St Polycarp's Church	1250 1450
§ Gedney Hill, opp New Fen Drove	1251 1451
§ Gedney Hill, adj West Drove North	1252 1452
§ Gedney Hill, adj Memorial Hall	1253 1453
Gedney Hill, adj Duke's Head	1255 1455
Throckenholt, opp Coronation Avenue	1305 —
§ Throckenholt, adj Four Horseshoes	1306 —
Sutton St Edmund, opp St Edmund's Church	1310 —

Service Restrictions: NTh - Not Thursdays
Th - Operates only on Thursdays

Notes: § - Time at this stop is indicative. You are advised to be at any stop several minutes before the times shown



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Spalding - Sutton St Edmund - Wisbech

Stagecoach Norfolk (formerly Norfolk Green)

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Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Sundays

no service



For times of the next departures from a particular stop you can use **traveline-txt** - by sending the SMS code to **84268**. Add the service number after the code if you just want a specific service - eg: **buctdgttd 60**. The return message from **traveline-txt** will show the next three departures, and it currently costs 25p plus any message sending charge. Departure times will be real-time predictions where available, or scheduled departure times if not.

You can also get the same information by using the SMS code at www.nextbuses.mobi (only normal browsing charges apply) or through several iPhone or Android apps that offer access to **NextBuses**.

NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
CMBDMGTP	Wisbech, Horse Fair Bus Station (Bay 2)	Horse Fair	0500FWISH013
-	Wisbech, North End Hall & Ride (N-bound)	North End	0500FWISH038
CMBDMJDJ	Wisbech, adj Asda Superstore	North End	0500FWISH031
-	Wisbech, o/s Peckover School Hall & Ride	Leverington Road	0500FWISH050
-	Wisbech, Leverington Road Hall & Ride (W-bound)	Leverington Road	0500FLEVE028
CMBDJTFJ	Leverington, nr Leverington Common	Dowgate Road	0500FLEVE016
CMBDJTWP	Leverington, nr Foot Bridge	Leverington Common	0500FLEVE025
CMBDJTPA	Leverington, opp May's Lane	Leverington Common	0500FLEVE012
CMBDJTJD	Cheyney Bridge, nr Station Road	Leverington Common	0500FGORE001
CMBGDTMP	Bellamy's Bridge, Garden Centre (N-bound)	High Side	0500FPARS012
-	Church End, Elbow Lane Hall & Ride (W-bound)	Main Road	0500FPARS004
CMBDMAWG	Church End, opp St John the Baptist's Church	Main Road	0500FPARS006
CMBDMAWT	Parson Drive, nr Cella Farm	Main Road	0500FPARS011
CMBDMAWM	Parson Drive, opp The Bank	Main Road	0500FPARS008
-	Murrow, opp Short Drove Hall & Ride	Murrow Bank	0500FPARS003
CMBDMJTM	Murrow, The Bell Inn (Stop os)	Front Road	0500FWISM022
-	Murrow, nr Short Drove Hall & Ride	Murrow Bank	0500FPARS002
CMBDMAWJ	Parson Drive, nr Fen Road	Murrow Bank	0500FPARS007
lindmdjm	Throckenholt, adj Four Horseshoes	Broadgate Road	2700LTHP4508
lindmtp	Sutton St Edmund, adj St Edmund's Church	Broadgate Road	2700LSSE6684
lindmtp	Throckenholt, nr Four Horseshoes	Broadgate Road	270000009705
linapamw	Throckenholt, adj Coronation Avenue	B1166	2700LTPB1997
linagmpt	Gedney Hill, opp Duke's Head	Highstock Lane	2700LGHDH858
lindpawd	Gedney Hill, opp Memorial Hall	Hillgate	270000009708
lindpawj	Gedney Hill, opp West Drove North	Lincoln Avenue	270000009710
lindpawm	Gedney Hill, adj New Fen Drove	Long Lane	270000009711
lindpawt	Holbeach Drove, opp St Polycarp's Church	Long Lane	270000009713
lingawag	Holbeach Drove, adj Chapel Drove	Drove Road	2700LHDB6273
lindtat	Whaplode Drove, Drove Road (NE-bound)	Broadgate	270000009719
lingawad	Whaplode Drove, adj Post Office	Broadgate	2700LWDP6272
lindtaj	Whaplode Drove, opp Parsons Lane	Broadgate	270000009716
lindjmaw	Whaplode Drove, opp Bus Shelter	Farrow Road	2700LWDF4230
lindtyt	Moulton Eaugate, Snakehall Bridge (N-bound)	Eaugate Road	270000009733
lindtjp	Moulton Chapel, adj Cekhira Avenue	Roman Road	2700LMCC4357
lindtjd	Moulton Chapel, adj Church	Roman Road	270000009736
lindtmw	Weston Hills, opp Broadgate	Moulton Chapel Road	270000009748
lindtmj	Weston Hills, opp Primary School	Broadgate	270000009745
lindtmd	Weston Hills, opp Village Hall	Broadgate	270000009743
linajagd	Weston Hills, adj 524 Broadgate	Broadgate	2700LWHC1082
lindgmt	Low Fulney, opp Mallard Road	Weston Hills Road	270000009888
linadjm	Spalding, opp St Paul's Primary School	Queens Road	270000009143
linadtpm	Spalding, adj Queens Road	Holbeach Road	2700LLFP0524
lindadg	Spalding, adj Ash Court	Holbeach Road	270000009470
lindgmd	Spalding, adj Oakley Drive	West Elloe Avenue	270000009884
linajgm	Spalding, adj Health Centre	West Elloe Avenue	2700LWSE1065
linagtmp	Spalding, adj Greenrigg Gardens	West Elloe Avenue	270002700751
lindgmj	Spalding, adj Chappell Centre	Pinchbeck Road	270000009886
linagtpg	Spalding, opp Kings Road	Pinchbeck Road	270002700748
linawpjp	Spalding, Bus Station (Bay 7)	Winfrey Avenue	270002701886



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SMS Code	Stop Name	Street	ATCO Code
linawpjp	Spalding, Bus Station (Bay 7)	Winfrey Avenue	270002701886
linagtpd	Spalding, adj Kings Road	Pinchbeck Road	270002700390
linjgdmf	Spalding, opp Chappell Centre	Pinchbeck Road	270000009887
linagtpa	Spalding, opp Greenrigg Gardens	West Elloe Avenue	270002700750
linjgdma	Spalding, opp Health Centre	West Elloe Avenue	270000009883
linjgdmw	Spalding, opp Oakley Drive	West Elloe Avenue	270000009885
lingdpwm	Spalding, opp Ash Court	Holbeach Road	2700LLFW6612
linjdada	Spalding, opp Queens Road	Holbeach Road	270000009469
linadpdm	Spalding, adj St Paul's Primary School	Queens Road	2700LSQR0416
linjgdmw	Low Fulney, adj Mallard Road	Austendike Road	270000009889
linjdtma	Weston Hills, opp 524 Broadgate	Broadgate	270000009742
linjdtmg	Weston Hills, adj Village Hall	Broadgate	270000009744
linjdtjt	Weston Hills, adj Primary School	Broadgate	2700LWHP4358
linjdtpa	Weston Hills, adj Broadgate	Moulton Chapel Road	270000009749
linajtpj	Moulton Chapel, opp Church	Roman Road	2700LMCC1415
linjdtjm	Moulton Chapel, opp Cekhira Avenue	Roman Road	270000009738
linjdtgw	Moulton Eaugate, Snakehall Bridge (S-bound)	Eaugate Road	270000009734
linjdmaw	Whaplode Drive, opp Bus Shelter	Farrow Road	2700LWDF4230
linagjmp	Whaplode Drive, adj Parsons Lane	Broadgate	2700LWDC0782
linjdtam	Whaplode Drive, opp Post Office	Broadgate	270000009717
linjdtap	Whaplode Drive, Drove Road (SW-bound)	Broadgate	270000009718
linjdtad	Holbeach Drive, opp Chapel Drive	Drove Road	270000009714
linamtwd	Holbeach Drive, adj St Polycarp's Church	Long Lane	2700LHDC1871
linjdpwp	Gedney Hill, opp New Fen Drove	Long Lane	270000009712
linjdpwg	Gedney Hill, adj West Drove North	Lincoln Avenue	270000009709
linagjwa	Gedney Hill, adj Memorial Hall	Hillgate	2700LGHHM809
linjdpwa	Gedney Hill, adj Duke's Head	Highstock Lane	270000009707
linjdpw	Throckenholt, opp Coronation Avenue	B1166	270000009706
linmdjdm	Throckenholt, adj Four Horseshoes	Broadgate Road	2700LTHP4508
linagpat	Sutton St Edmund, opp St Edmund's Church	Broadgate Road	2700LSSE3912
linjtpjt	Throckenholt, opp Four Horseshoes	Broadgate Road	270000014505
CMBDMAWD	Parson Drove, opp Fen Road	Murrow Bank	0500FPARS005
-	Murrow, opp Short Drove Hall & Ride	Murrow Bank	0500FPARS003
CMBDMJTM	Murrow, The Bell Inn (Stop os)	Front Road	0500FWISM022
-	Murrow, nr Short Drove Hall & Ride	Murrow Bank	0500FPARS002
CMBDMAWA	Parson Drove, nr The Bank	Main Road	0500FPARS001
CMBGJMPD	Parson Drove, opp Cella Farm	Main Road	0500FPARS015
CMBDMAWP	Church End, nr St John the Baptist's Church	Main Road	0500FPARS009
-	Church End, nr Elbow Lane Hall & Ride	Main Road	0500FPARS014
CMBGDTMT	Bellamy's Bridge, Garden Centre (S-bound)	High Side	0500FPARS013
CMBDJTJG	Cheyney Bridge, opp Station Road	Leverington Common	0500FGORE002
CMBDJTPT	Leverington, nr May's Lane	Leverington Common	0500FLEVE018
CMBDJTPW	Leverington, opp Foot Bridge	Leverington Common	0500FLEVE019
CMBDJTPM	Leverington, opp Leverington Common	Dowgate Road	0500FLEVE017
-	Wisbech, Leverington Road Hall & Ride (E-bound)	Leverington Road	0500FLEVE002
-	Wisbech, opp Peckover School Hall & Ride	Leverington Road	0500FWISH051
CMBDMJAT	Wisbech, opp Asda Superstore	North End	0500FWISH027
-	Wisbech, North End Hall & Ride (S-bound)	North End	0500FWISH039
CMBDMGTP	Wisbech, Horse Fair Bus Station (Bay 2)	Horse Fair	0500FWISH013

SITE SPECIFIC FLOOD RISK ASSESSMENT BY GEOFF BEEL CONSULTANCY

**FLOOD RISK ASSESSMENT FOR
PROPOSED RESIDENTIAL DEVELOPMENT
AT 284 BROADGATE, WESTON HILLS,
SPALDING, LINCS.**

FINAL REPORT

GEOFF BEEL CONSULTANCY

DECEMBER 2016

GCB/STATUS DESIGN

DISCLAIMER

This document has been prepared solely as a Flood Risk Assessment in support of a planning application for proposed Residential Development at land adjacent to 284 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 "Mr & Mrs G Congreve" 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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- 2.0 LOCATION**
- 3.0 THE SITE AND SEQUENTIAL TEST**
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- 6.0 EXTENT OF KNOWN FLOODING**
- 7.0 PROBABILITIES AND TRENDS OF FLOODING**
- 8.0 IMPACTS OF FLOODING**
- 9.0 RESIDUAL RISKS – EXTREME EVENTS**
- 10.0 CONCLUSIONS AND RECOMMENDATIONS**

Fig 1 - Location Plan – Promap

Fig 2 - Site Layout Plan – Status Design drg. no. SAD16-045/1

Fig 3 - Environment Agency Flood Zone Map

**Fig 4 - South Holland District Council Strategic Flood Risk
Assessment (2010) Residual Flood Depths – District 2115**

Fig 5 - South Holland Internal Drainage Board district plan

1.0 INTRODUCTION

- 1.1 An outline planning application is to be submitted by Status Design on behalf of Mr & Mrs Congreve for proposed residential development at land adjacent to 284 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 within Flood Zone 3, of the Environment Agency's Flood Zone Maps. 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 3 of the South Holland District Council's Strategic Flood Risk Assessment Maps (2010) – Residual Flood Depths in year 2110.

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

- 1.3 Geoff Beel Consultancy was appointed on 1st December 2016 to undertake a Flood Risk Assessment.

2.0 LOCATION

- 2.1 The development site is located at land adjacent to 284 Broadgate, Weston Hills. The National Grid Reference of the central point of the development is TF 27502020.

- 2.2 The position and extent of the site is shown on Fig 1 - Location Plan at the end of the document.

- 2.3 The site, located within the South Holland Internal Drainage Board district is shown within Flood Zone 3 as detailed on both the Environment Agency and the Council's Strategic Flood Risk Assessment Maps (2010) Residual Flood Depths in year 2110 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 0.21 hectare.
- 3.3 The proposed site layout consists the construction of 5 dwelling off shared access from Broadgate.
- 3.4 The Sequential Test will require to be carried out by the local authority but the site maybe developed as protected against the 1 in 100 year fluvial event and the 1 in 200 year tidal event.

Flood mitigation measures will be incorporated into the development proposals.

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 within the South Holland Internal Drainage Board is 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 nearby IDB main drain north of the site and hence via other drains in the Wisemans 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 Wash and 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 Wash and River Welland defences provide a 1 in 200 year return period level of protection.

The 1 in 200 year tidal event to the tidal River Welland and the Holbeach Marsh frontage inclusive of climate change to 2115 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 would therefore not reach the development site.

Similarly, the River Welland and Crowland Cowbit Washes are located 3.00kms south west of the site and provide protection against the 1 in 100 year plus climate change fluvial flood event. However, breaching of the Crowland Bank could affect the site with between 0.00-0.50m of floodwaters. Finished floor level has been raised 500mm above existing ground level with flood resilient construction incorporated up to a minimum level of 300mm above finished floor level. Safe refuge is provided at first floor level of all the proposed dwellings.

- 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.

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 a minimum of 500mm above existing ground level with 300mm of flood resilient construction above finished floor level will be appropriate for the design life of the development (i.e. 100 years). Safe refuge 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 be a minimum of 500mm above existing ground 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.
- 8.4** No displacement of water from the site will affect any adjoining properties as a soakaway drainage system to BRE365 design requirements will be installed.

- 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 7.00kms from The Wash and River Welland tidal defences with secondary defences between the marsh frontage and the site. Also being 2.00kms from the River Welland fluvial defences and the Crowland & Cowbit washes.
- 9.2 The site is within defended Flood Zone 3 as a result of existing defences according to NPPF classification, the site actually has 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 Zone Maps have 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 a Strategic Flood Risk Assessment (2010) of the whole District by appointed Consulting Engineers.

The Strategic Flood Risk Assessment (2010) has produced more definitive Flood Risk Maps than 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.

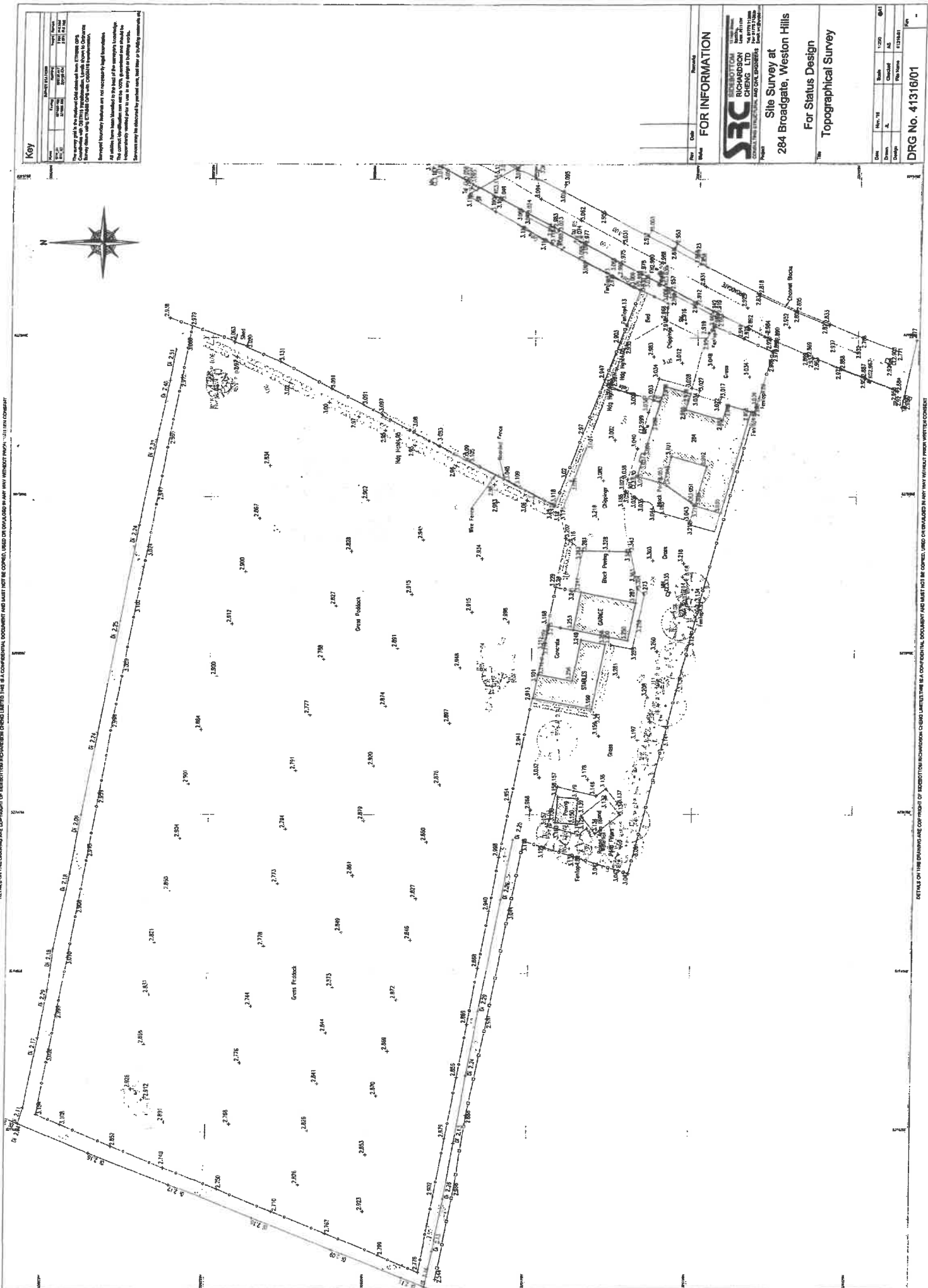
Breach scenarios of embankments failing and/or being overtopped have also been carried out to establish Flood Risk Zones. As a result of the Strategic Flood Risk Assessment (2010) the site could be affected by between 0.00 – 0.50m of floodwaters as a result of a breach to the Crowland Bank on the Residual Flood Depths Map in year 2110.

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 Wash defences and 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 a defended Flood Zone 3 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.
- Floor level of the new dwellings will be at a minimum of 500mm above existing ground level with safe refuge at first floor level. Flood resilient construction will be incorporated up to 300mm above finished floor level.

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Key

Symbol	Description
[Symbol]	Survey Station
[Symbol]	Spot Height
[Symbol]	Contour Line
[Symbol]	Boundary Line
[Symbol]	Proposed Road
[Symbol]	Proposed Building
[Symbol]	Proposed Fencing
[Symbol]	Proposed Drainage
[Symbol]	Proposed Utilities

The survey was carried out in accordance with the requirements of the Engineering Council's Code of Practice for Surveying. The survey was carried out on the 1st of October 2001. The survey was carried out by the following personnel: [List of personnel]. The survey was carried out by the following equipment: [List of equipment]. The survey was carried out by the following methods: [List of methods]. The survey was carried out by the following procedures: [List of procedures]. The survey was carried out by the following standards: [List of standards]. The survey was carried out by the following codes of practice: [List of codes of practice]. The survey was carried out by the following regulations: [List of regulations]. The survey was carried out by the following acts: [List of acts]. The survey was carried out by the following orders: [List of orders]. The survey was carried out by the following rules: [List of rules]. The survey was carried out by the following by-laws: [List of by-laws]. The survey was carried out by the following ordinances: [List of ordinances]. The survey was carried out by the following decrees: [List of decrees]. The survey was carried out by the following edicts: [List of edicts]. The survey was carried out by the following proclamations: [List of proclamations]. The survey was carried out by the following edicts: [List of edicts]. The survey was carried out by the following proclamations: [List of proclamations]. The survey was carried out by the following edicts: [List of edicts]. The survey was carried out by the following proclamations: [List of proclamations].

FOR INFORMATION

SAC ENGINEERING
RICHARDSON
CHENG LTD
284 Broadgate, Weston Hills
For Status Design
Topographical Survey

Date: 1/10/01
Scale: 1:500
Drawn: A
Checked: AS
Date: 1/10/01
DRG No. 41318/01

Site Survey at
284 Broadgate, Weston Hills
For Status Design
Topographical Survey

Date	1/10/01	Scale	1:500	Drawn	A	Checked	AS	Date	1/10/01
Drawn	A	Checked	AS	Date	1/10/01	DRG No.	41318/01		

GENERIC FLOOD RESILIENT CONSTRUCTION METHODS

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 flood events.