G.R. MERCHANT LTD
Architectural & Planning Consultants

4 Wrights Mews • 12A Park Road • Holbeach
Spalding • Lincolnshire • PE12 7EE
Telephone: 01406 490800
e-mail: gr.merchant@btconnect.com
www.grmerchantltd.co.uk

Our ref: 3578-19

H09-0779-20
CHANGE OF USE FROM GARAGE TO DWELLING
34 FEN ROAD, HOLBEACH
MR & MRS R GORDON

Please see Flood Risk Assessment attached which was sent in with application H09-0045-20 for the 4 No dwellings.

Finished floor levels to be at 300mm above ground level and all sleeping accommodation to be at first floor level only.

S L Darlow
September 2020

PROPOSED RESIDENTIAL DEVELOPMENT,34 FEN ROAD,HOLBEACH

FLOOD RISK ASSESSMENT.

The Site
Situated to the rear of No 34 and bounded by the South Holland River to the west (F38) Drainage Board managed and riparian drains to the north and south which discharge into F38.
The site levels are 2.8-3.0 AOD. F38 maintains a low water level approximately 2.4 m below site level.
The site falls within flood zone 3.

The Proposal
To build 3 dwellings off the existing private driveway.This driveway is of pervious material with water naturally seeping into the ground and then finding its way by natural means in to the riparian drains.
Private driveways will be of similar construction. Roofwater from the dwellings will be to soakaways.

Flood Risk
As mentioned earlier site water will find its way into F38 which is controlled by Little Holland pumping station from where it passes into Ogdens Drain (F53)and then into F42 which is then pumped into South Holland Main Drain and then by gravity into the tidal Nene.
These water courses are well managed and there is therefore NO risk of flooding.
The site is primarily in Zone 3 because of the danger of a flood event from the sea.
Peak Tidal levels are estimated by the EA at 6.01 ODN@ a1: 200 year event, some 3m above development site levels . However,defences are well managed and currently the EA offer the likelehood of overland flooding from the North Sea as a 1:150 year event.
Therefore the risk of tidal flooding is NOT an issue either.

Breach Scenario
Whilst the site is defended from tidal flooding but there is a risk of flooding from a breach.The EA coastal mapping shows flood depths of 0.25 m. could impact the application site when considering 2018 0.5% breach scenario .Furthermore, flood depths of 0.25-0.5 m. could impact parts of the site when considering the 2018 0.1% breach scenario. The minimum mitigation levels should therefore be informed by these identified flood depths.
The FFL for single storey dwellings for 2018 1% breach scenario will be set 500mm. above natural ground level and 2-storey dwellings 300mm. respectively.

Flood Resilient Techniques (in accordance with EA and Building Regs)
FFL will be set 300 mm. Or 500mm. above GL as above and DPC will be as high as practical . Floor DPM will be sealed with DPC in wall . No air bricks will be fitted. Water resilient skirting boards will be used. Non return valves will be fitted to all drains and water inlet and outlet pipes. Thresholds will be kept high above FFL except for wheelchair access at main entrance . Ground floors will be hard surfaces where practical with rugs in preferance to carpets.Doors and windows will be PVCU .All electrical equipment will be kept 1500 mm. above floor where practical.

Flood Evacuation Proceedures
Occupants to sign up for Floodline Warnings. Evacuation procedures to include either escaping to higher ground if adequate warning of flood given or alternatively going to higher floor and telephoning/e mailing help all in accordance with EA/Government guidelines.Keep all windows and doors shut and wait for help turning off electrics if water rising to dangerous levels.

Conclusion
The site is adequately protected and the development should be allowed.

HOWARD BAXTER DESIGN CONSULTANT AUGUST 2018