CJS PLANNING & BUILDING SERVICES

Down Ampney, Well Hill, Clint Green, Yaxham, Dereham, Norfolk NR19 1RX

Reference: H02-0536-17
Proposal: Residential development - two detached houses
Location: 10 Peterborough Road Crowland Peterborough
Applicant: Amelio Homes Ltd

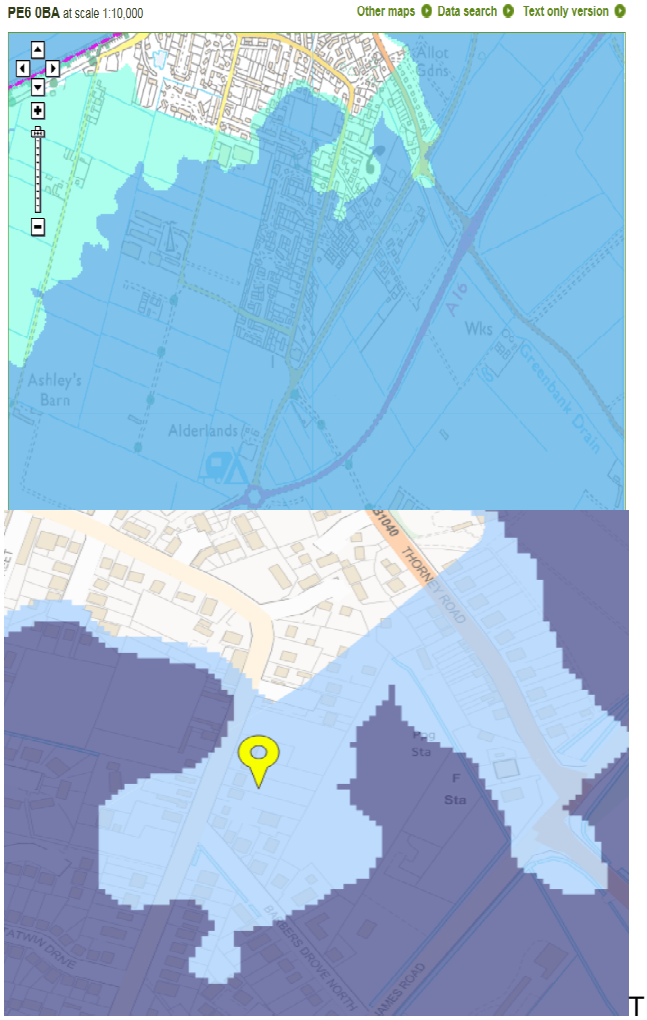
Flood Risk Assessment for 10 Peterborough Road Crowland PE6 0BA

Generally

The site is currently a single residence comprising a two storey 3 bedroom detached brick and tile house with attached garage.

Site comprises are large plot of similar scale to neighbouring properties that have had tandem (backland) development approved despite being in the same flood zone.

The site is within flood zone 2 as shown on the Environment Agency's Maps below



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The topography of the land and immediate vicinity is typically flat.

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The proposal

is for two detached 3 bedroom dwellings with parking and garden amenity as described in the application drawings.

The Potential Risk of Flooding

The site is to the east of the River Welland and is potentially at risk to a small degree from the failure of existing flood alleviation measures of the area which are comprised of floodwalls and raised embankments.
The main risk is from Welland with 1 in 100 year probability of flood although there is a 1 in 200 year chance of sea flooding.

There are tidal monitoring stations within the Haven that provide flood warnings. Existing sheet piling, concrete and masonry walls protect Crowland from flooding and in addition to these Welland as both hard and earth embankment defences.

The Environmental Agency takes responsibility for maintenance of sea and Welland defences and has a management strategy in on going progress since late 2003 which delivers sustainable flood management via technical, economical and socially proven solutions.

The height of the defences are sufficient to protect from against the 1 in 200 year flood event, but there is a considerable distance between the River Welland and the proposed site which would indicate that there is an extremely low (if at all) chance of flooding from this river.

Flooding from groundwater is also unlikely to present problems, as it would be abated by the existing infrastructure around the site or in effect run towards the lowest point of the site.

Flooding from sewers is also unlikely to be a problem as there is no evidence to suggest otherwise.

Observations and Recommendation

The River Welland has a current high tide 6.74m ODN and due to climate change this may increase slightly by the year 2115 (98 years)

As there would obviously be some flood risk by significant tidal surge from the potential Welland source (nothing significant is likely from other sources) it would be sensible advice for proposed ground floor levels to be above 6.74 ODN.

It is therefore recommended that as there is an extremely low 0.5% chance of flooding that

a). The proposed ground floors are 150mm higher than the existing ground level.
b). Electrical outlets and distribution boards to be at least 750mm above ground level.
c). The walls to the ground floor to be tanked to 750mm above ground floor level
d). The ground floor damp proof membrane should in all cases be continuous.