2 Wharf Street
Sutton Bridge
Spalding
Lincs
PE12 9UF

Re- planning application for change of use of shop to bedroom
Ref NO H18-0497-15

Please find enclosed flood risk assessment as required.

Yours Sincerely
Mrs R.K. Hook

FLOOD RISK ASSESSMENT

DOMESTIC EXTENSION - Statement:

i. The site is within Flood Zone 3 - Grid Ref - TF 48130 21148

ii. The flood level is an average of 3.80m Above Ordnance Datum (AOD).

iii. There are three potential sources of flooding which the site could be at risk are :-

River Nene (tidal) :- The Tidal River Nene flows northerly direction 80m to the east of the subject site. There are no raised defence on the west side for 1.3km from Sutton Bridge. The crest level of this defence, at its lowest point, is 1.3km north of the bridge at 6.0 AOD. Beyond this point there an earth Bank.

The 1 in 200 years flood level is 6.21m AOD. A concrete defence wall exists for a length of 200m north of the old warehouse (now flats) opposite Wharf Street.

If the Nene tidal defences were overtopped the volume of water flowing over the flood bank would be relatively limited and would quickly drain to lower areas of the village.

It will enter the road drains and, if the local surface water system is not overwhelmed, will find its way into the Westmere watercourse.

Internal Drainage Board System:- South Holland Main drain is an IDB priority low level drain that flows from westerly direction and discharges into the River Nene, via gravity sluice doors, approximately 1.3km south of the site. The highest recorded flood level in the drain is approximately +1.22m AOD.

Westemere Drain is an IDB low level drain that flows from a westerly direction and discharges via Westmere pumping station into the River Nene approximately 2.1km north from the site. The highest recorded flood level in this drain , at New Road (approximately 700m upstream of the Pumping Station)is 1.17mAOD,This station was designed to cater for surface water run- off from a large amount of development at Sutton Bridge.

South Holland IDB says there have no records of any flooding around Sutton bridge caused by overtopping of its maintained infrastructure.

Local Surface water and drainage system.

Localised flooding from any combined seweage systems in the highways drains or on the site drainage network cannot be ruled out in extreme events. The risk of flooding would be very low.

iv. Existing floor levels are 3.80 AOD.

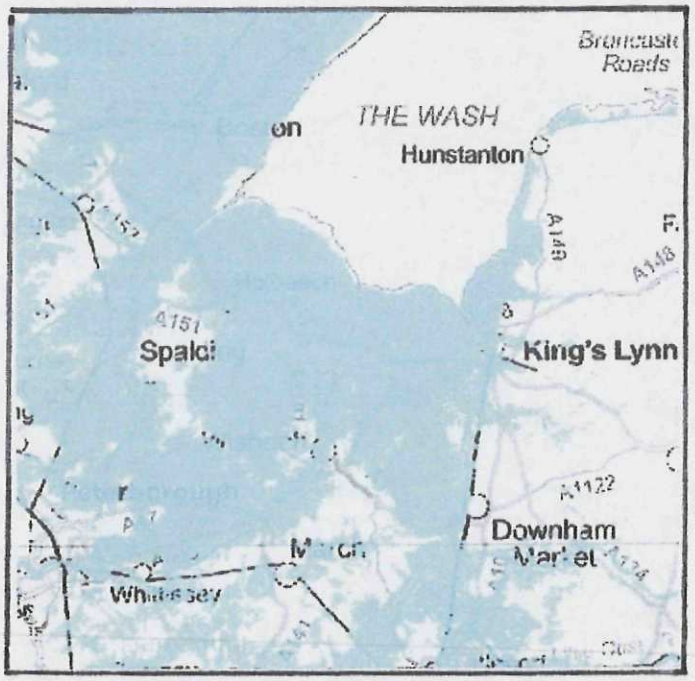
v. Extension levels will be the same as the existing house – 3.80m AOD .

FLOOD RISK ASSESSMENT

vi. Surface water will be discharged to the existing mains drainage arrangement as for the house.

vii. Probabilities and Trends of Flooding :- The probability of the site off 14 bridge road flooding with water from the Tidal River Nene and the IDB system is estimated to be significantly less than 1%(fluvial) and slightly greater than 0.5%(tidal) because of the standards of service provided by the existing flood defence systems.

The Probability of the site flooding from IDB system is low. Random blockages could, however, still cause flooding incidents. The risk of flooding of the site itself from these sources is minimal.

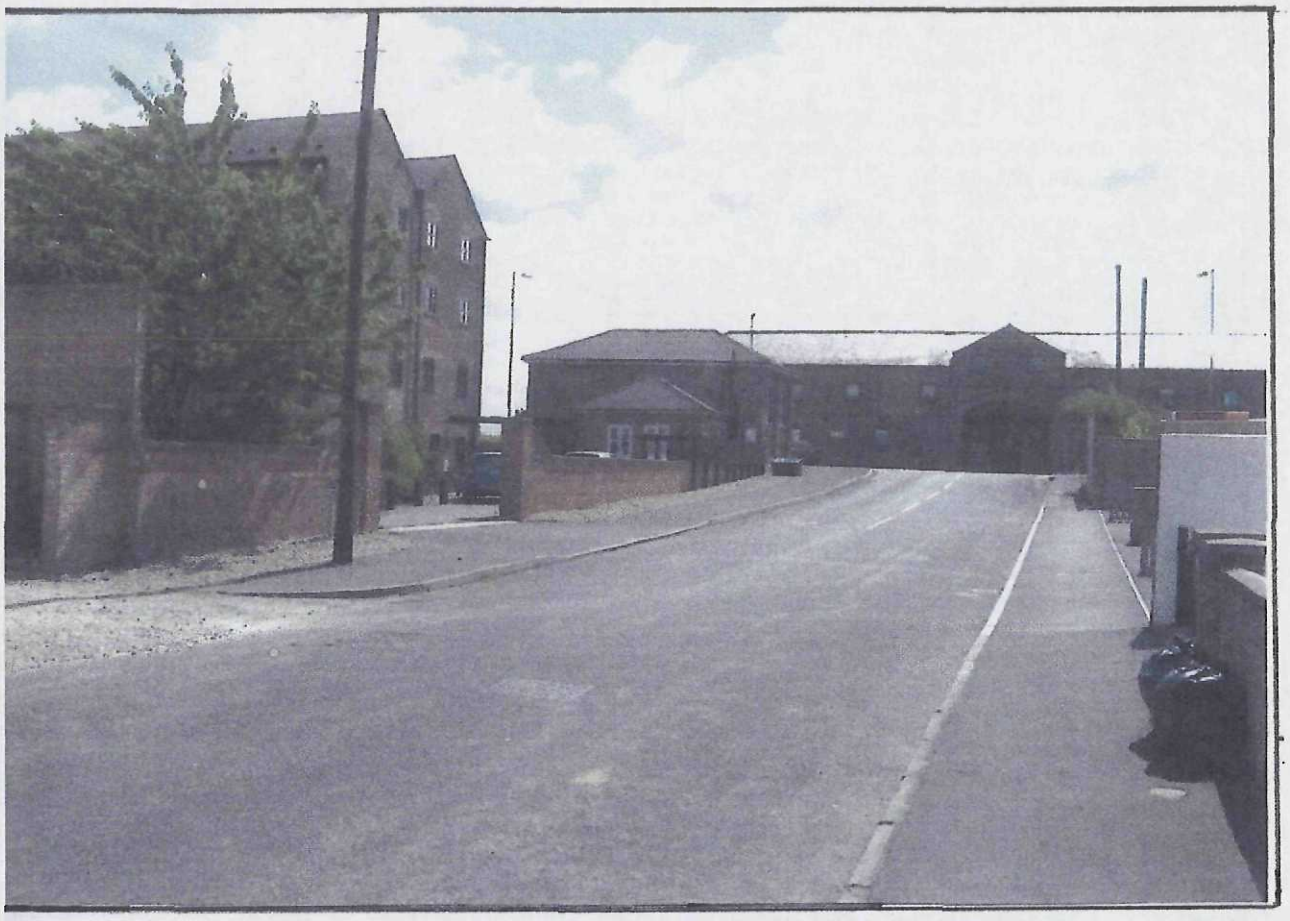




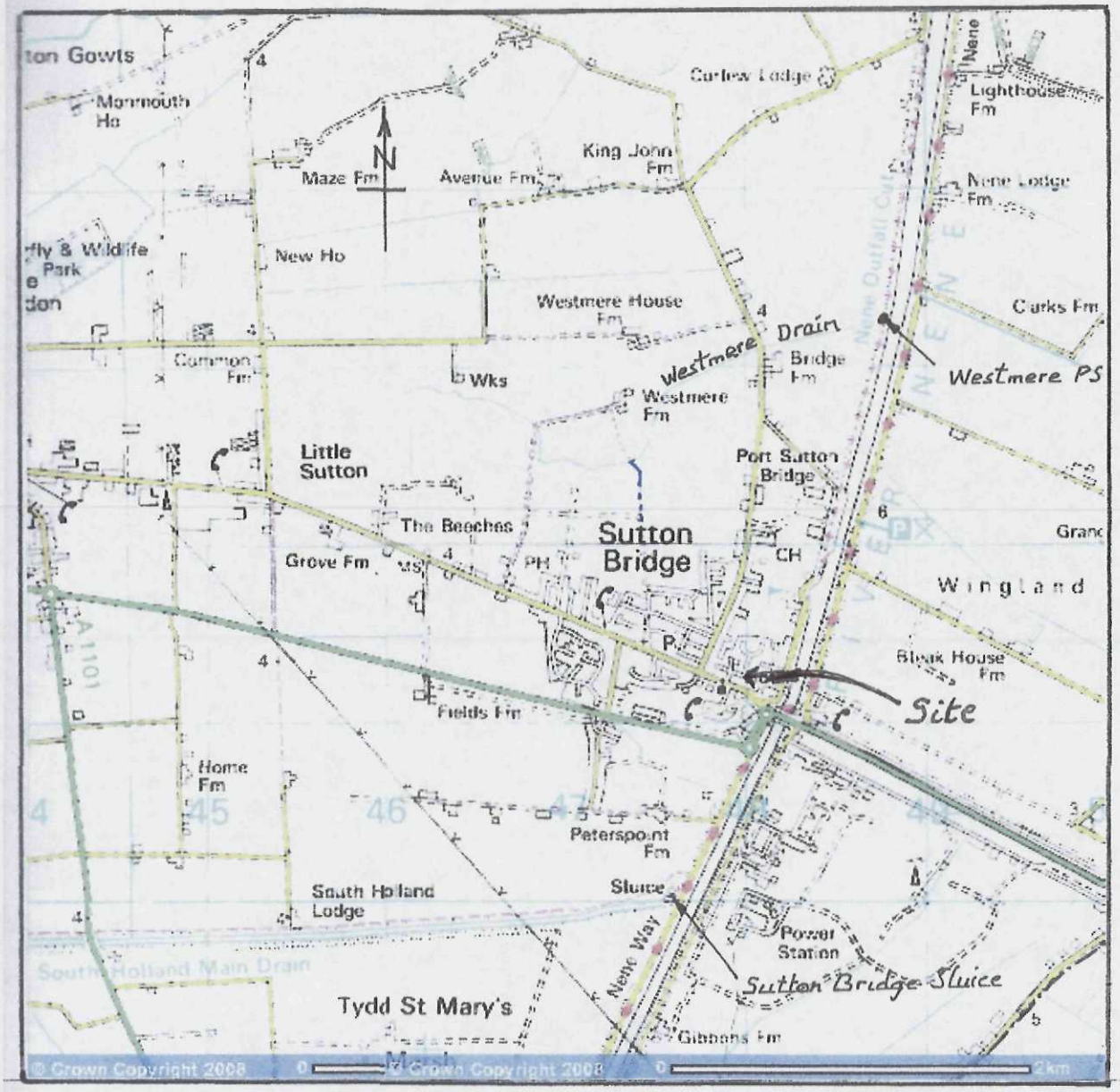
Environment Agency Indicative Floodplain Map



River Nene Tidal Floodwall along West Bank



View East along Wharf Street to New Flats on West Bank of Tidal River Nene



Location Plan