Flood Risk Assessment

PROPOSED TEMPORARY MOBILE HOME

THREE ACRE (WILD ACRE)

BAULKINS DROVE

SUTTON ST JAMES

Flood Risk and history of flooding

The site is not situated near any water course, streams, rivers.

There is a drain to the north of the site. Flood Zone 3 - land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year

The proposed mobile home will be set 1000mm above the approved dwelling and garage. The mobile home is to be situated while the bungalow is to be constructed, the applicant has taken ill and as such has not been viable for him to continue the build at the moment.

Temporary mobile homes are permitted to be used while the building is under construction, lease see location plan for reference.

Planning approval requires a Flood Risk Assessment to be approved by the Environment Agency and meet the requirements and general principles contained in the Planning Practice Guidance to the National Planning Policy Framework (NPPF). The site is shown within Flood Zone 3 of the Environment Agency 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 partner organisations such as Local Authorities, Emergency Services and Drainage Authorities. The Maps do not take into account any flood defences.

The Sequential Test and Exception Test will require to be applied but the development may be permitted as the site already has planning approval in place.

Flood prevention, alleviation measures and flood risk management

The probability of flooding from local blockages to proposed soakaway drainage is low due to proposed soakaway drainage being designed to BRE 365 requirements and Building Regulations approval.

The probability of flooding from local blockages to existing IDB main drain system is also low due to the maintenance standards already achieved and managed by the IDB.

The probability of flooding from storm return period of 1 in 50 years being exceeded to IDB system is also low due to the North Level 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.

Failure of the local Pumping Station may occur due to long term mechanical breakdown or power supply being disrupted., However, in the circumstance, 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.

More recent studies by the Environment Agency have concluded a design water level for the 1 in 200 year tidal event as 4.47m aOD. Taking into account, sea level rise during the next 100 years at recommended contingency allowances of NPPF, the predicted 1 in 200 year tide level would have risen to 6.91m aOD.

No significant impacts of flooding are anticipated due to the existing standards of tidal defence, however a precautionary approach has been adopted to protect against the remote possibility of a tidal breach occurring to the River Nene tidal embankment.

During the preparation of this assessment, no evidence was discovered of the site being flooded. The probability of this development flooding from localised drainage systems is very low. The IDB main drain systems provides adequate standard of protection for up to 1 in 50 years return period plus freeboard to lowest land levels. The probability of the site flooding with water from the tidal River Nene, main river is less than 0.5%. If the trend of climate change anticipated to occur continues over the next 100 years, the defences are more than adequate to sustain the 1 in 200 year standard of protection. If under very extreme events, levels of floodwater from main river 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. The water levels in the drainage channels will also tend to rise as a result of the impacts of climate change. However the existing systems and defences together with the proposed replacement dwelling finished floor level 1.00m above ground level with a further 300mm of flood resilient construction above finished floor level will be appropriate for the design life of the development (i.e. 100 years).

The developer will ensure that the eventual occupiers of the temp mobile home is sufficiently aware of the risk of flooding and the standard of 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.

The occupiers of the dwelling should register with the Environment Agency's Flood line Direct Warnings Service to receive any future flood warnings. Although within Flood Zone 3 according to NPPF classification, the site actually has a 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

Conclusion

The proposed development is not in a Functional Floodplain. It is in a Passive Floodplain of the tidal River Nene and the North Level IDB. Although the site is in Flood Zone 3 with the actual risk of the site flooding from tidal main river being very low, less than 0.5%.

Although the site is located within North Level 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. Floor level of the proposed temp mobile will be 1.00m above ground level with a further 300mm of flood resilient construction incorporated above the finished floor level.

A flood warning and evacuation plan will be prepared in conjunction with the Fenland District Council Emergency Planning Officer.

No development will be permitted within 9.00m of any IDB main drain of the site without prior Land Drainage Byelaw Consent approval from the North Level Internal Drainage Board.