

Flood Risk Assessment

N/180/00076/21

Fieldholme

Crook Bank

Theddlethorpe

Mablethorpe

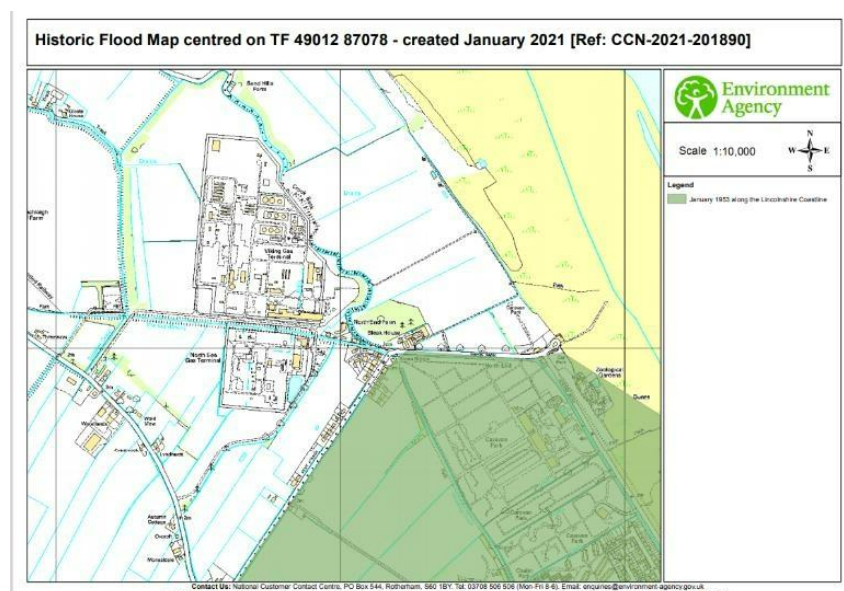
Lincolnshire

LN12 1QF

The site in question is located just north of the seaside town of Mablethorpe and situated just south of the gas works. In this report I will explain the measures taken in response to the information provided from the Environmental Agency to help mitigate the risks of flooding in the area and justify the development in question.

All the technical information used will be provided by the Environmental Agency this includes floor maps used and projected floor risks for the next 200 years.

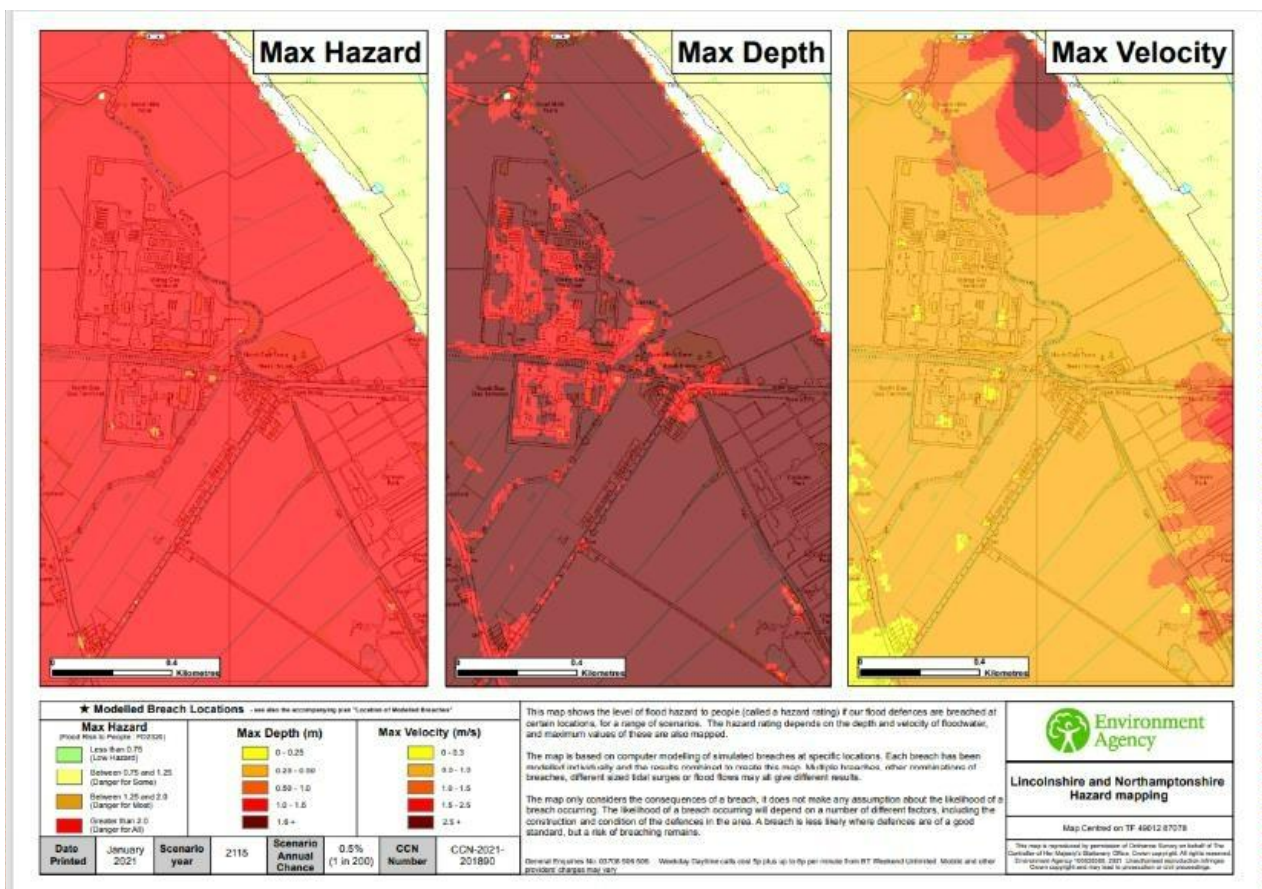
The site is located in a Zone 3 according to the flood risk map provided by the EA due to its location being close to the coast.



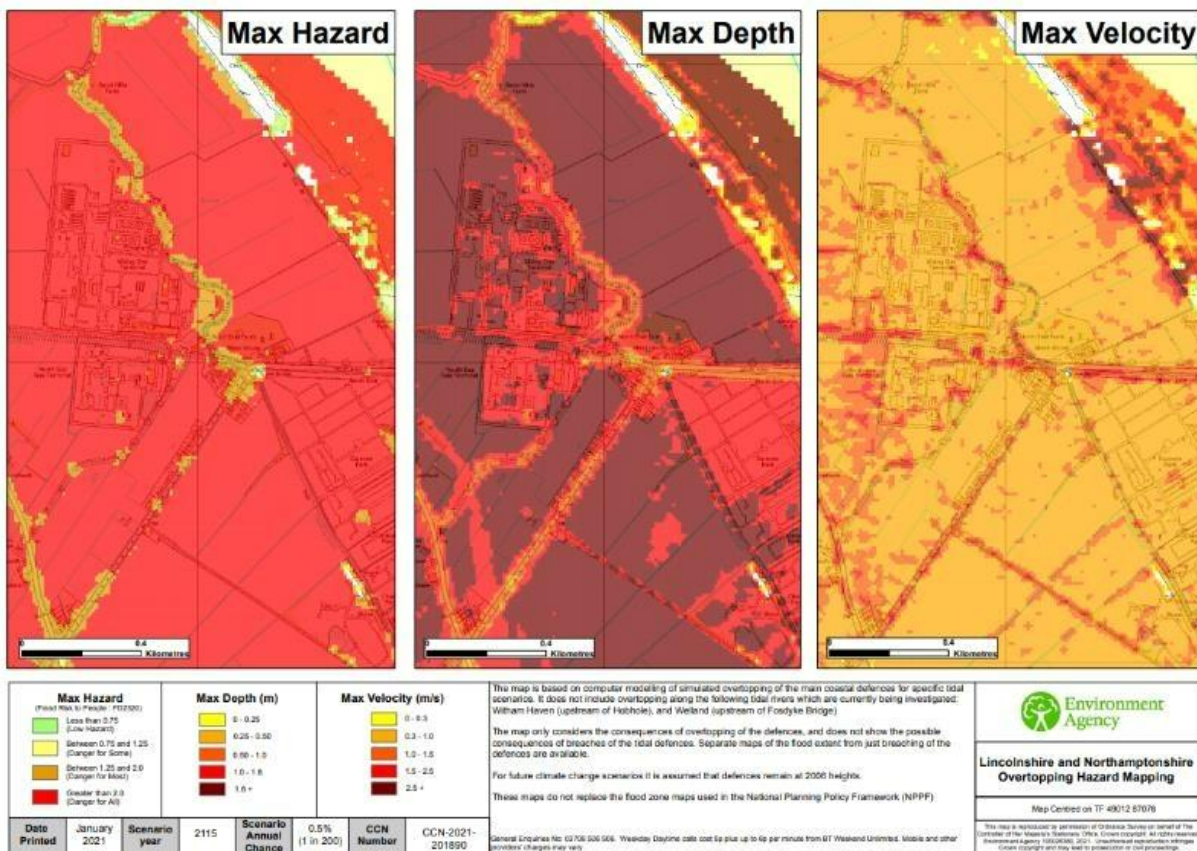
The map inserted above shows the area effected by the last historic flood in the area, this indicates that the site in question is located just outside of this area and was not affected by the floods in the January of 1953.

The flood map provided by the EA is provided on the basis that no flood defences have been implemented. There are currently two forms of flood defence in the area this consist of concrete floodwalls and a natural sand dune which are supplemented by beach nourishment to maintain foreshore levels. The defences are in good condition and reduce the risk of flooding at the defence to a 0.5% in 200-year chance of occurring in any year. The Environmental Agency regularly inspect these defences to ensure any potential defects are identified.

The map below indicates the hazard rating for the area in question.



This map has been modelled to simulate the unlikely event of a breach in the defences, the risk of this breach occurring is reduced since the defences are kept in good condition and well maintained. The site is in an area of high risk if this were to happen.



The map inserted above indicates the risks of any overtopping of the main costal defences, this map only indicates the risks if the current defences stay at the same height and are not extended/improved at any point after 2006 which will mitigate the effect of climate change and may be altered to sufficiently overcome this risk in the future.

For the new development, all surface water will be disposed of via an existing dike that sits on the east side of the site, failing this soakaway crates will be installed on the site to help with the surface water drainage, also the demolition of the existing asbestos roof area will help reduce the surface water speed coming off this roof area, the site is also currently a residential property at the rear.



To help mitigate the risks of flooding inside the proposed development the FFL of the existing barn is already +0.759m above ground level, to help reduce the risk of this further we will be increasing the FFL to +1.359 above finished ground level, this would put the FFL an extra 144mm above the already increased road level.

We have removed any downstairs sleeping accommodation and placed all bedrooms on the first floor to reduce flooding into any sleeping areas. Having the FFL at this height will ensure that the floor level will be greater than the static caravans located south of the site

The highest flood level recorded withing a 30-mile radius is 5.12m and ordnance datum levels for the specified site are ranging from -1.1/-1.2 in a 10km radius. And we will be putting our FFL at +1.359 over ground level.