

Proposed Development at Church Farm Holiday Village, Pagham, PO21 4NR

FLOOD RISK ASSESSMENT.

Introduction.

It is proposed to construct a new Housekeeping Building on a site within the Church Farm Holiday Village, Pagham. The site is within the future tidal flood plain of Pagham Harbour. Any planning application needs to be accompanied, therefore, by a formal site-specific flood risk assessment, in accordance with the requirements of the Government's National Planning Policy Framework. This document fulfils that requirement.

The Site.

The site is within the extensive holiday village, which has an entrance off Church Lane. The site itself, some 19m x 10m, is close to the entrance and the entertainment complex. A full topographical survey is available with levels correct to Ordnance Datum. The tarmac area within which the new building will be constructed stands at a level of 3.6m above OD. The area is occupied at present by a compound and two containers.

The Proposals.

It is proposed to clear the site and erect a single-storey utility building with a concrete floor and cladded walls. The building will house a goods reception area and storage facilities. The finished floor level will be 150mm above ground level, at 3.75m above OD. The NPPF classification for this type of development is "less vulnerable" and the lifetime is taken to be 60 years.

Environment Agency and SFRA Information.

Current Environment Agency flood mapping indicates that the site is within the tidal flood plain of Pagham Harbour, but that the current flood risk is "low". The local Strategic Flood Risk Assessment states that the 1 in 200 year tidal extreme will reach a level of 4.1m in 100 years' time. The 1 in 200 year extreme will reach a level of 3.7m above OD by the end of the life of this development.

What This Means for the Development.

With a finished floor level at 3.75m above OD, the new housekeeping building will remain risk-free for the whole of its life. The grounds adjacent to the new building may already be susceptible to minor flooding, which will increase as climate change affects sea levels. See residual flood risk below.

Flood Resilience.

The NPPF requires that where a development takes place in flood risk areas, flood resilience measures should be considered. In this case, such measures should include a solid floor and high-level electrical infrastructure.

Other Sources of Flood Risk.

The NPPF requires that the whole range of flood risk sources are examined, as follow:-

- ***Flooding from the Sea.*** This is identified as the major flood risk to the development and is dealt with above.

- **Flooding from Rivers.** There may be a secondary risk from fluvial flooding via the main rivers above Pagham Harbour. The extent is not known at present, but it is unlikely to affect the conclusions.
- **Flooding from the Land.** The whole area is very low-lying, so flooding from the land cannot be ruled out. The risk is considered to be low.
- **Flooding from Surface Water.** Current EA mapping indicates that the highways at this end of the Village are susceptible to surface water flooding. See residual flood risk below.
- **Flooding from Sewers.** The Village has an established sewerage system which might surcharge during periods of heavy rainfall. The risk is low.
- **Flooding from Groundwater.** Groundwater levels here are likely to be closely related to tidal heights and artesian issue is not impossible.

Residual Flood Risk.

Residual flood risk for this development may be interpreted as the difficulty in access and egress during times of flood. The junctions of Church Lane, Sea Lane and Martlet Way, together with the main entrance to the Park may be flooded to depths of around 300mm to 500mm. The EA FD2320 matrix contains the following information in respect of hazard to pedestrians. Note the bold print, which is appropriate to this development.

<i>Water depth</i>	<i>Up to 250mm</i>	<i>250mm – 500mm</i>	<i>500mm– 2.50m</i>	<i>Over 2.5m</i>
<i>Hazard Rating</i>	<i>0.53 – 0.63</i>	<i>1.15 – 1.25</i>	<i>1.30 – 2.00</i>	<i>2.25+</i>
<i>Description</i>	<i>Low hazard, Caution only</i>	<i>Danger for some, children, elderly.</i>	<i>Danger for most, Av. pedestrian</i>	<i>Danger for all, incl. emergency personnel.</i>

It is not considered that this needs special management for this particular development, since the Holiday Park management will be aware of the general flood threat.

Conclusions.

The main conclusion of this assessment is that whilst the development is taking place within a flood risk area, the risks are understood and can be managed. Specifically:-

- The new Housekeeping Building has a floor level above the future 1 in 200 year tidal extreme.
- Flood resilience measures are recommended.
- Both access and egress is already susceptible to minor flooding. This will increase in the future due to climate change. The risk is already being managed.

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