

Flood Risk Assessment

Proposed Replacement Dwelling at

27 Station Road,

Surfleet,

Lincolnshire

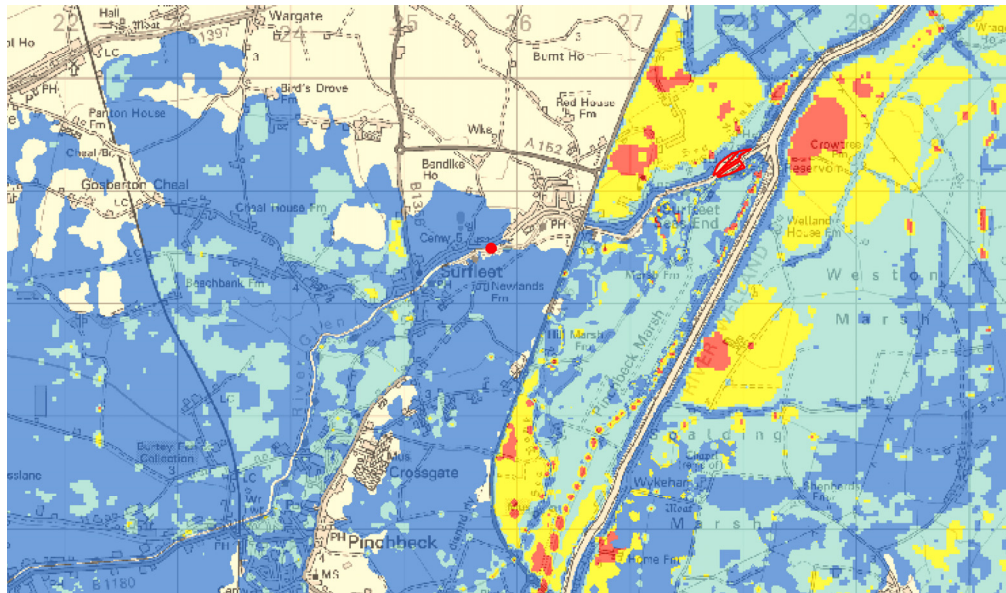
September 2016

Project No. RD. 3770

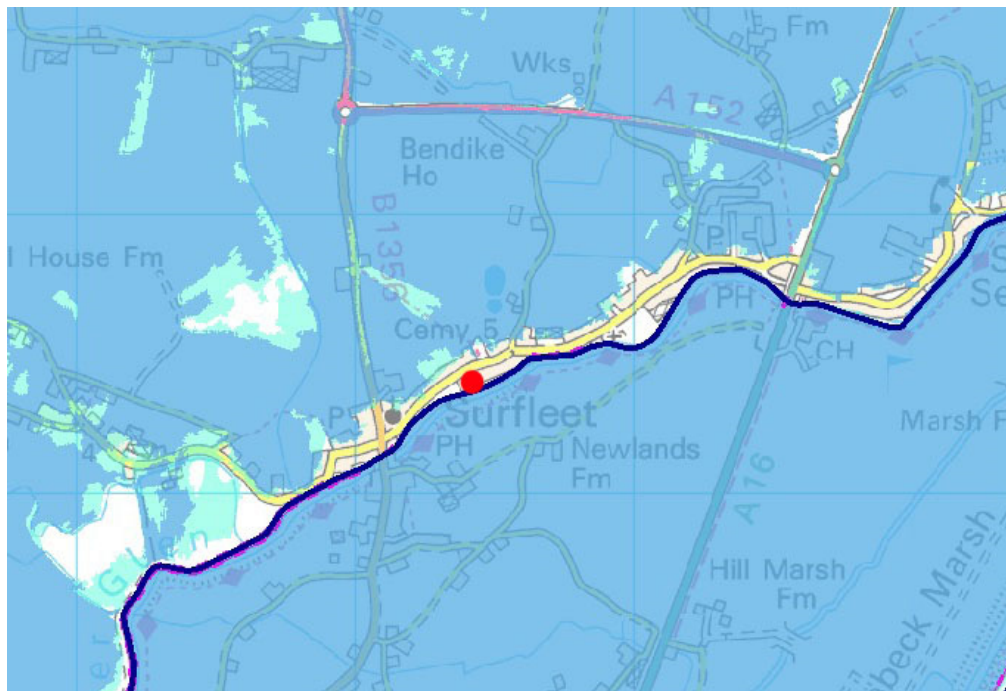


1. Location

- 1.1 The application site is situated at 27 Station Road, Surfleet, Lincolnshire.
- 1.2 Extract from the 2010 South Holland District Council Strategic Flood Risk Assessment, with the site shown as a red spot:



Extract from the Environment Agency Flood Map, with the site shown as a red spot:



2. Flood Zone

- 2.1 The sites fall within Flood Zone 3 according to the 2010 South Holland District Council Strategic Flood Risk Assessment.

3. Site Levels

- 3.1 The site lies at approximately 4.8m to ordnance datum and the site is generally level. The site abuts the River Glen to the South with a raised bank, which will be retained as part of the proposal.
- 3.2 The existing floor levels of the development site are approximately 150mm above existing ground level at 4.95m to ordnance datum.
- 3.3 According to the 2010 South Holland District Council Strategic Flood Risk Assessment the site has a potential flood level of 0 – 0.5m above existing ground levels.

4. Existing Flood Alleviation Measures

- 4.1 The main source of potential flooding comes from the overspill of tidal sea defences and the overspill of the River Glen defences.
- 4.2 We are advised by the Environment Agency that the sea defences along the section of coastline are designed to cater for a 1 in 200-year tidal event application site.

5. Potential Flooding Impact Assessment

- 5.1 Whilst the development falls within a potential flood risk area, it is nevertheless considered that flooding up to any significant depth is unlikely to reach this site as long as the current flood defences are maintained. Should flooding extend up to the site, the volume of water displaced by the development may increase slightly due to the increase in building footprint, however this will be offset by the use of permeable paving to drive areas. This will replace the existing non-permeable surface area therefore the development overall will therefore have no greater impact in terms of flood water displacement than it does currently.
- 5.2 Whilst the proposed development falls within a flood risk area, there is no historical evidence indicating that the site has flooded.
- 5.3 It is proposed that the detailed design and construction works should incorporate measures contained in DCLG publication 'Improving the Floor Performance of New Buildings' (2007), which would include the following: -
- Ground floor to be in oversite concrete and will be raised to 300mm above ground level to address potential flood risk levels.
 - Plaster finish to all masonry walls (Not dot and dab).
 - Insulation materials on both floor and walls to be impervious foam types.
 - uPVC windows and doors with sealed double glazed units.
 - Electrical fittings, wiring and consumer units at ground floor will be fixed above any potential flood level (as per Building Regulations Approved Documents).
 - Heating system and later installation to be wall mounted above the potential flood level. Associated pipe work will be by their native, resistant to any potential flooding.
- 5.4 It is intended that all occupants will be provided with information regarding the Environment Agency's Automated Flood Warning System. This will be in the form of the agency's information leaflet, which will be provided as part of the buildings handover documentation.
- 5.5 It will be recommended that the client subscribes to the Environment Agency's 'Warning Direct' flood warning messaging service.