# 1 Purpose

1.1 To provide an update on the actions taken to prevent a recurrence of events that occurred at The Willows Estate during the flooding events in February 2014

#### 2 Background

- 2.1 The Willows Estate is a housing estate to the West of Aylesbury. It is bound by the A418 Oxford Road, Ellen Road and the Stoke Brook. The Stoke Brook is a key feature of the Estate and is an open watercourse throughout. The Brook is classed as 'Main River' by the Environment Agency (EA), who are responsible for managing flooding from the Brook. AVDC have riparian owner responsibilities for the east bank of the Brook abutting the Willows Estate.
- 2.2 December 2013, The Willows Estate experienced a number of flooding incidents and although no properties were affected, car parking areas across the Estate became inundated with surface water. It is believed that this was due to the heavy rainfall experienced, ground water reserves being at full capacity and lack of maintenance to the existing surface water drainage system.
- 2.3 7 February 2014, the South East of England suffered from extreme rainfall with major flood incidents declared across the country. The Willows was once again affected and 80 properties suffered from internal flooding.
- 2.4 Following this and governed by the Flood and Water Management Act (2010) Buckinghamshire County Council (BCC) was legally bound to produce a Section 19 Flood Investigation Report, which was eventually published 30<sup>th</sup> April 2014.
- 2.5 As a response to the flooding events across the country, Central Government promised funding for those residents affected. This came in two streams:
  - a) Council Tax/Business Rate Rebates for the time residents were out of their homes or businesses.
  - b) 'Repair and Renewal Grant' (RRG); this is a maximum of £5000 to each flooded property to help improve their resilience to future flood events.

#### 3 Repair and Renewal Grant

- 3.1 Central government started to produce information about the RRG scheme shortly after David Cameron announced additional funding would be available to help 'stop' flooding. The information that was sent to local authorities was, at first vague and prone to change over the following weeks.
- 3.2 The RRG gives each homeowner that suffered internal flooding a maximum of £5,000 to improve the resilience of their homes. From this, £500 can be used towards studies and or flood risk reports. Due to 80 properties flooding it allowed us to spend a maximum of £40k on feasibility work.

- 3.3 It was agreed with Central Government that the money could be pooled and put towards a community scheme if this was deemed as more cost effective as was the case with the Willows Estate.
- 3.4 The original date for the RRG funding to close was 31st March 2015, however due to multiple Authorities writing to the Secretary of State (including ourselves) it was extended to 30th June 2015.

### 4 Feasibility Study

- 4.1 AVDC approached our partner authorities, BCC, EA, Transport for Buckinghamshire (TfB) and Thames Water Utilities Limited, on 9<sup>th</sup> June 2014 and asked if they would be interested in working cooperatively. BCC requested at the first partner meeting that the scope of the works should be extended to include the whole of the upper catchment of the Stoke Brook. This raised the original estimate for the feasibility study from £16,000 to over £27,000. The study works were stalled for a number of weeks due to these additional costs, as we tried to get match funding from the partner Authorities but to no avail.
- 4.2 With cooperation of HS2 Ltd and the EA's modelling team, we have managed to reduce the financial burden of the study by reducing the required topographical surveys. However, as our consultants do not hold the base data of this information they have to allow for any slight inaccuracies that may have occurred by others.
- 4.3 The affected homeowners were sent a letter from AVDC to see if they would be interested in this approach of a community based scheme. During this time we held a multi-agency Flood Surgery which allowed residents the opportunity to talk about the flood event and how we could all move forward. The outcome of this surgery was that 67 out of 80 residents agreed that their RRG could be pooled, allowing £33,500 to be used for the feasibility study work.
- 4.4 We agreed a scope and Hydro Consultancy was commissioned to carry out the study. They constructed a computer model of the flooding scenarios using the complex mix of surface water and fluvial flows that caused the February flood event. From this model, 3 options have been determined that would help reduce the flood risk to the Willows Estate. One option (as agreed by the steering group) would then be developed into the preliminary design stage. The cost of this model and report was £12,250.
- 4.5 For the model to be as accurate as possible some additional topographical survey data was required including threshold levels of those houses adjacent to the open space. We approached Global Surveys to undertake the work and they completed the survey the week commencing 20<sup>th</sup> January 2015. The cost of the topographic surveys was £4,650.
- 4.6 Due to the tight time constraints we asked for one of the options to be in the form of temporary defences. However to ensure that there is a future plan for the Willows that will reduce flood risk in the long term without the risk of temporary defences not being deployed in time, we asked Hydro Consultancy to develop a long term flood alleviation scheme to preliminary design stage. This was for an additional £2,750.
- 4.7 We have been presented with a final report. In the report there are three options; 1 Temporary defences, 2 Temporary defences with some capital works, 3 A long term capital scheme.

4.8 To ensure The Willows Estate could make the most out of the RRG money, temporary defences were the chosen solution.

### 5 Temporary Defences and the Future

- 5.1 The temporary defences are to be stored at TfB's Rabans Lane Depot.
- The defences will only be deployed when there is predicted heavy rainfall along with a raised water level in the brook. The formal triggers are still being set by BCC. When a formal warning is released AVDC, EA, BCC along with the resident group will be notified via text and email.
- 5.3 The residents will deploy the temporary defences, which are simply rolled out along the length of the brook. TfB will deploy and maintain the pumps during the flood event.
- 5.4 The feasibility report has produced a long term capital scheme that can be commenced with a small amount of detailed design if funding is available at a later date.
- 5.5 The latest HS2 plans show that the land to the West of the Stoke Brook may be set aside for mitigation works from the major infrastructure scheme and AVDC are in talks with HS2 Ltd to find the best solution for the Willows Estate. The outcome with HS2 Ltd may mean the capital scheme developed within the feasibility study is made redundant.

### 6 Community Launch Event for The Willows

- 6.1 To help promote the use of temporary defences and to show how the resident's RRG money had been spent, the steering group arranged a launch event on 12 September 2015. The event was well attended with nearly 100 residents attending.
- The launch event gave the group an opportunity to explain how the defences work and the ease of them being deployed.

# 7 Resource implications

7.1 None

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Background Documents Names of Background documents