# **Flood Investigation Report**

# Pilinge Road/Park Crescent, Stewartby

#### 1. Introduction:

#### 1.1. Background

The Flood and Water Management Act 2010, establishes unitary and upper tier authorities as Lead Local Flood Authorities (LLFAs). Section 19 of the Act gives LLFAs the duty to investigate a flood event when considered appropriate and to the extent it deems necessary. The LLFA will identify the relevant Risk Management Authority (RMA) and record any actions which have been taken or they are proposing to action in response to the flood event.

When an investigation is carried out under section 19 of the Act, the LLFA will publish the results of the investigation and notify any relevant risk management authorities.

#### 1.2. Risk Management Authority Responsibilities

Table 1.1 shows RMAs responsible for managing the flood risk from different sources that the BBC investigation procedure applies to.

Flood Source	Environment Agency	Lead Local Flood Authority	Drainage Authority	Water Company	Highway Authority
		Bedford Borough Council	Bedford IDB	Anglian Water	Bedford Borough Highways
Main River	✓				
Surface Water		✓			
Surface Water (on or coming off the highway)					✓
Sewer flooding				✓	
Ordinary Watercourse			✓		
Groundwater		✓			
Reservoirs	✓				

Owners of land adjoining, above or with a watercourse running through it are termed 'riparian owners' and have responsibilities to maintain and allow the free flow of water through their land. Further information on riparian owner rights and responsibilities can be found in the Environment Agency publication 'Living on the Edge' here.

# 2. Flood Incident, Extent and Impact:

Following heavy and continuous precipitation at the end of April 2012, flooding was reported to Anglian Water on 30<sup>th</sup> April 2012, following flooding from a manhole on the drive between 2 properties. Pilinge Road and Park Crescent experienced extensive flooding across the road and to the gardens and garages of a number of properties to an approximate depth of 200mm. The flood water was standing for a couple of days and threatened flooding 1 property internally. This event followed significant rainfall. 26.2mm of rainfall fell over 18 hours from late 28<sup>th</sup> to early 29<sup>th</sup>

April. This is over half of the average monthly rainfall for the area (long term average for April).

### 3. Likely Cause of Flood Incident

To understand the likely cause of the flood incidents, Bedford Borough Council, Highway Authority, Bedford Group of Drainage Boards (IDB) and Anglian Water worked together.

An Anglian Water surface water sewer runs from Pilinge Road through the rear gardens of Park Crescent and the school field, outfalling into a ditch to the rear of the school. This system appeared to become blocked causing the water to back up resulting in flooding at Pilinge Road/Park Crescent.

Anglian Water carried out investigation works by jetting the surface water sewer to identify or remove the blockage and using CCTV to visually identify the condition of the sewer. As a result of this investigation work it was determined that a 20 metre portion of the surface water sewer requires relining to maintain and repair the system and allow the free flow of water to the ditch.

The ditch downstream of the outfall was significantly overgrown and silted up possibly contributing to the reduced flow of water through the system. Therefore it was determined that the ditch and the surface water sewer were contributing to the backing up of water and subsequent flooding.

### 4. Responsible Risk Management Authority

It has been identified that the responsibility for the surface water sewer lies with Anglian Water. The responsibility to maintain the open ditch lies with a private landowner.

#### 5. Recommended Action

Table 5.1 highlights the recommended actions by Bedford Borough Council for the responsible RMA and a suggested timescale of responses required to confirm that the RMA is aware of the flood incident and is taking appropriate action.

Table 5.1: Recommended actions for the responsible authorities and timescale for a response required.

Responsible Authority	Action	Timescale for response required	
Anglian Water	Jet surface water sewer to maintain free flow	Complete	
Anglian Water	CCTV survey surface water sewer to investigate cause of blockage	Complete	
Anglian Water	Build new access chamber to existing surface water sewer and jet sewer and undertake CCTV survey	To be completed by end of May 2013	
Anglian Water	Reline portion of surface water sewer as identified by new CCTV survey	To be completed by end of August 2013	
Private landowner	Clear downstream ditch of debris and silt	Complete	

# 6. Next Steps

The next steps for the LLFA are to ensure the report is forwarded to the RMAs identified in table 5.1 and that these authorities are aware of their flood risk management responsibilities. The LLFA will follow up with the authorities to determine progress against the recommended actions.