

Lead Local Flood Authority
Section 19 (Flood and Water Management Act
2010)
Flood Investigation Report

Report Title:

Langer Road

Felixstowe

Report Reference(s):

FW2019-0989

	Name	Date
Lead Officer:	Jason Skilton	
Created by:	Jason Skilton	8 th November 2019
Checked by:	Matt Hullis	28 th November 2019
RMA Review:		14 th November 2019
Approved by:	Sue Roper	2 nd December 2019
Date Published		12 th December 2019

1.0 Suffolk County Council as a Lead Local Flood Authority (LLFA) has determined that in accordance with criteria, it considered it necessary or appropriate to carry out an investigation into this flood event in accordance with Section 19 (1) of the Flood and Water Management Act 2010, and in accordance with Section 19 (2) of the Flood and Water Management Act 2010, to publish the results and notify the relevant risk management authorities (RMAs).

2.0 Reference/s: FW2019-0989

2.1 Location: Langer Road, Felixstowe

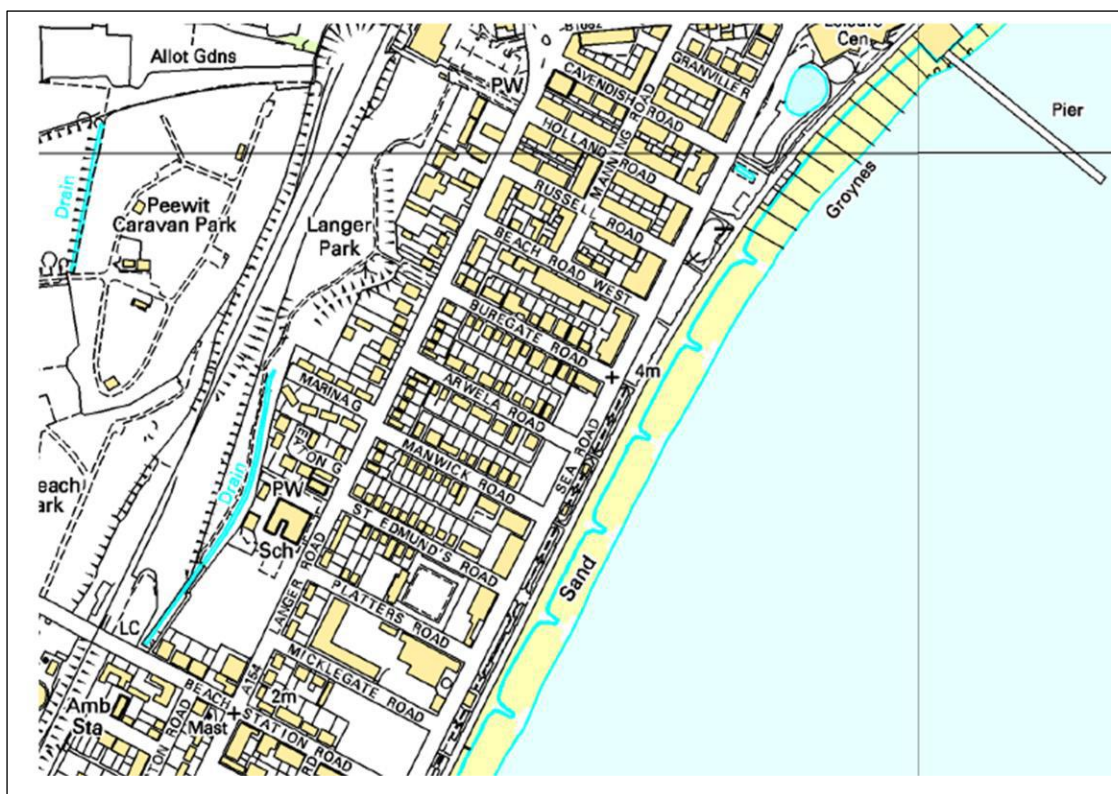
2.2 Flood Event Date: 6th October 2019

2.3 Reported to SCC Date: 7th October 2019

2.4 Investigation Commencement Date: 7th October 2019

2.5 Criteria for investigation:

Criteria for an investigation (as per Appendix D of the Suffolk Flood Risk Management Strategy):	✓/X
There was a risk to life as a result of flooding?	x
Internal flooding of one property (domestic or business) has been experienced on more than one occasion?	✓
Internal flooding of five properties has been experienced during one single flood incident	x
Where a major transport route was closed for more than 10 hours as a result of flooding	x
Critical infrastructure was affected by flooding	x
There is ambiguity surrounding the source or responsibility of a flood incident	x



2.6 OS Grid Reference: 629,352 233,383

2.7 Extent of flooding: It is indicated that 4 domestic properties flooded internally affecting the main living areas, garages and gardens. The public highway partially flooded for approx. 50m to an approx. depth 200mm. The Anglian Water surface water drainage system surcharged.

2.8 Effect of flooding: Properties internally flooded some above floor level and some below floor level in void under suspended floor.

2.9 History: Residents have shared records of flooding in this location since 2007. SCC has records of Highway flooding since 2011.

2.10 Flooding Source: Surface water and ground water.

2.11 Causes:

- Significant rainfall event.
- Exceedance of design capacity of surface water drainage system resulting in a surcharge onto Langer Road.
- The properties location within an area mapped as being at high risk of pluvial flooding.

2.12 Additional Information:

- Construction of the affected properties is circa 1920 their design makes them less resilient than post 1970 type properties, especially to groundwater issues.
- AWS fitted a high level outfall into the system in 2018 level to improve flow away from the area, but it was reported that the high level outfall did not see any flow during the event.
- 15 properties along Langer Road, Felixstowe have had Property Level (PLR) resilience measures installed as part of a Suffolk County Council FDGiA/Local Levy funded scheme in 2019. These measures include sump pumps, flood doors and gates etc that reduce the risk of internal flooding. The installed measures functioned well, with minor exceptions that are being remedied.
- Some homes experienced impacts resulting from high groundwater levels.

3.0 Risk Management Authority with Relevant Flood Risk Function

- Anglian Water
- Suffolk County Council
- East Suffolk District Council

3.1 Functions:

- Anglian Water (Surface water drainage maintenance & asset owner)
- Suffolk County Council (Public highway maintenance & asset owner)
- East Suffolk District Council (Riparian landowner)

4.0 Recommendations:

1. Suffolk County Council surface water drainage system maintenance regime to be reviewed.
2. Anglian Water Services public surface water sewer design capacity to be reviewed and, if required, agree enhanced maintenance regime (currently 2 cuts per annum) of watercourse owned by East Suffolk Council.
3. Suffolk County Council to complete post installation surveys of PLR measures and act on any "snagging" issues identified.

4.1 Recommended Actions:

Action	Responsible Authority	Timescale for response	Latest Progress Update for Actions
Suffolk County Council Highways to review maintenance schedules for drainage assets on	Suffolk County Council, Highways	Mar 2020	Gullies maintained on at least a 12 - month rotation

Langer Rd from Undercliff Rd West to Beach Station Rd including side roads			
Anglian Water to undertake further modelling of the system (with data sharing support from SCC) in order to evaluate and issue a detailed report of the surface water system and design capacity.	Anglian Water	June 2020	
If modelling determines there is an issue with maintenance of the East Suffolk Council watercourse, AW to agree appropriate new regime with the East Suffolk Council.	Anglian Water	Jul 2020	
SCC, via contractors to complete PLR installation surveys and snagging	Suffolk County Council, LLFA	Feb 2020	Majority completed awaiting final two installs.

5.0 Questions Received from Residents for Risk Management Authorities

5.1 Maintenance of Road Gullies – Answers by Suffolk County Council, Highway Authority

- How are gullies assessed for risk, what are the criteria for frequency of cleaning?
 - Cleaning frequency is designed to clean at the optimum time depending on how full they are when previously cleaned. The frequency is aligned to the recorded amounts of detritus in the gully when attended to. When recorded that the gully is less than 50% full, the frequency is set to an annual clean. When recorded that the gully is more than 50% full the frequency is set to a bi-annual clean. Any that are recorded at 100% full will have the cleansing regime re-set to a 6 monthly regime and monitored thereafter.
- What risk has been identified for gullies in Langer Road and adjacent side roads?
 - Risk of flooding depends upon the whole system working and having adequate capacity. Risk is not assigned to specific asset type such as gullies but to the area/location. Langer Road and the surrounding area are independently identified as areas of high flood risk.

3. Going by the schedule of gully cleaning what is the justification for cleaning less frequently, despite the frequency of flooding from these gullies.
 - There has been no 'down grading' of the cleansing regime, since 2014 they have been cleaned on an annual basis as they are regularly recorded at 50% full when being cleansed.
4. When will the highways dept acknowledge the need for more frequent maintenance and implement this. We were promised this prior to reorganisation of your department.
 - There is no evidence to suggest the issue in this location is due to the gullies as they have not been recorded as full or blocked recently. More frequent cleans would therefore not ease the potential for flooding. The data collected to date indicates that the current frequency is appropriate. Even when the gullies and pipes are free from all debris, when the amount of rain exceeds the capacity of the system, flooding will occur.
5. When were the gullies in adjacent road checked for root infiltration?
 - All gullies are not checked for root infiltration. When flooding is reported a reactive works to inspect and clean any blocked gully is undertaken. If this work fails to clear the issue any further works like root clearance are prioritised within the criteria the asset team has set.
6. Is there a schedule of inspections between cleaning to ensure they are not blocked?
 - Yes. Highway safety inspections are undertaken on a regular basis, if flooding is identified in line with the maintenance plan works will be commissioned. Furthermore, if the highways service receives a report of flooding the area will be assessed in line with the maintenance plan and work are again commissioned as required. This has recently occurred in Langer Road – Nov 2019 – no gullies were found to be blocked.