Rochford District Councillors: Cllrs T G Cutmore, B T Hazlewood, Mrs J R Lumley, R Milne, Mrs C E Roe, Mrs L Shaw, D J

Sperring, C M Stanley, M J Steptoe and I H Ward.

Apologies: An apology was received from Cllr G J Ioannou.

Other Agencies: R Baranowski (Essex County Council Highways (ECCH)), M Cottage (ECCH), D Chapman,

(Delivery and Enforcement officer ECC), C Box (Anglian Water), J Glerum (AW), P Garvey,

Arcadis Consulting (UK) Ltd

Officers: S Scrutton (RDC Managing Director), R Tatton Bennett (RDC Principal Engineer), M Harwood-

White (RDC Assistant Director) and M Power (RDC Minutes)

Agenda Item	Key observations
Rawreth Brook,	The Forum received a presentation by Phil Garvey, Senior Civil Engineer, Arcadis Consulting (UK)
Rawreth Presentation	Ltd on the feasibility study of potential flood alleviation measures for Rawreth Brook.
	During discussion, the following was noted:
	There was concern that a diversion requiring a high embankment on the side of the bridge may result in flooding of Beeches Farm and the houses in Church Road. Arcadis advises that, from the results of the Environment Agency's hydraulic model provided to them, although the surface area around the bridge may be subject to flooding, the properties should not be affected.
	• It was confirmed that a costs analysis of the potential scheme had been undertaken; not a full economic benefits analysis. For a flood alleviation scheme to go ahead there is a need for economic benefit criteria to have been met. The scheme would not be classed as economically viable under an economic benefits analysis because the flooding would affect very few properties (fewer than 10 - in Church Road and Beeches Farm). Other sources of funding for a scheme could be identified. In their commission Arcadis had specifically not been asked to

assess benefits, only relative costs.

- During this first phase, the existing EA model designed to map flooding at Battlesbridge was
 used, rather than one designed specifically for this project, which meant that the model might
 not give the best representation of the Church Road area possible. If it were decided to progress
 to the next phase, Arcadis recommend that a model should be designed specifically for the
 Rawreth area. Arcadis noted that the model output did not support evidence of flood levels in
 Church Road and so, as a minimum, re-calibration of the model should be undertaken to
 improve flood estimation in the locality.
- The modelling showed that other options considered would not be adequate in dealing with the volume of water. Although the modelling could be improved, this is likely to change the indicated overall volumes of water causing flooding, rather than move indicated flooding from one area to another.
- As this is a wider problem, there would be merit in speaking to other Boroughs/Districts so that a strategic picture can be seen. The main issue with flooding in the Rawreth Brook catchment is the upstream runoff from the urbanised areas of Rayleigh and Wickford, which peaks at Church Road at approximately the same time from both Rawreth Brook and North Benfleet Brook.
- A Hullbridge Parish Councillor stated that the issue was compounded by the volume of water coming from Rayleigh and Wickford. The Brandy Hole/Dome is subject to flooding and the footpath has eroded – he will email photos. The matter will be looked into. (EA)
- There is limited capacity at the old EON site redevelopment at times of heavy rainfall and this needs to be examined the upstream storage will be looked at.
- RDC to discuss with ECC/EA potential projects and development and ascertain possible ways forward.

Minutes of meeting held on 2 October 2015	The Minutes of the meeting on 2 October 2015 were agreed as a correct record.
Completed Schemes	 Rectory Avenue, Hawkwell - work completed on 400 m section of ditch behind 46 properties in Rectory Avenue. Discussions needed with AW to put a maintenance programme in place regarding the screen/grille to the public surface water sewer. Bull Pub, Hockley – completed in January. The private landowner has dug out the ditch, which RDC has continued into Hockley Woods.
Pipeline Projects for Rochford (Hockley Project)	The Forum received a presentation by Dave Chapman, Essex County Council as Lead Local Flood Authority. ECC has a six year capital programme that coincides with the EA's medium term plan. The Hockley scheme is one project on the programme. The ECC document contains details of many potential sites within a framework of flooding risk: this is a live document and additional schemes can be added. The route of the proposed pipeline was shown. The scheme covers Greensward Academy playing fields, the nature reserve and the farm adjoining. Consultation with the school, Hockley Parish Council and local residents has commenced. Large areas of surface water are not being captured. Ditch systems will be introduced to capture surface water flows along the farmland and nature reserve to relieve the pressure on the piped system that runs under gardens of properties in Plumberow Avenue. The work is now out to tender and delivery is scheduled for this financial year. During discussion, the following was noted:

	 AW have extended the existing pipework within the nature reserve and constructed a new headwall. This work was carried out by AW as part of their responsibility to maintain the piped system. The proposed scheme will replace the existing ditch and piped system that runs around the boundary of the Greensward Academy playing fields by installing a new French drain to intercept and convey surface water flows. The new system will connect into the open ditches within the nature reserve. AW has extended the culvert and survey area: AW will be contacted in this respect. The proposed additional ditch will complement the existing ditch. Maintenance of the ditches is the responsibility of landowners and is key in this area: water course enforcement is an option if required. Additional sites can be included in the Programme via RDC. Maintenance issues should be reported to ECC Highways Maintenance. Cllr Stanley requested further information.
	Essex County Council Highways (ECCH)
Warwick Close/Warwick Road	Resurfacing of Warwick Close has been removed from the capital maintenance programme. ECCH advised that an additional gully would be put alongside the existing the gully in Warwick Road. Cllr Roe advised that the drain opposite Warwick Close appeared to be dropping: this would be inspected.
Laburnum Way, Rayleigh	ECC working on the redesign of the culvert. A feasibility study had been undertaken by the ECC design team to determine the most economical way of resolving the situation. The ditch and willow trees had been included in the feasibility study: the ditch is privately owned; flood protection can be offered to the properties as a preventative measure. The ECC Flood team would be examining the modelling analysis to determine a way forward. The Rochford Local Highways Panel has asked ECC for more information on the third

	option (as opposed to the ECC preferred option (Option 2)).
	A Member reported that flooding three weeks' previously had affected two properties. An update would be provided (RTB).
London Hill Rayleigh	Flooding at junction of Station Road A site visit had revealed a blocked gulley: the area has now been jetted and is clear. COMPLETED
High Road, Hockley	ECCH capacity of existing surface water systems. ECCH has adjusted the gulleys and AW has cleared the drains – the area is now clear, but regular maintenance needs to be undertaken. The capacity of the surface water drainage is insufficient and during heavy rainfall, water runs down the road, pools and enters the property. It was requested that options for alleviating the problem be explored. (ECCH)
Eastwood Rise, Rayleigh	ECCH clearance of gullies and channel serving the surfaced carriageway Concern was expressed that surface water is not being correctly channelled to the gulleys. Currently, this is not an adopted highway. However, a letter from ECC stating that the road will be adopted has been forwarded to the ECC Legal team and ECC is working towards adoption of the road, but with no timescale agreed as yet. S Scrutton to contact the Director for Highways and Transportation at ECC to expedite. The road from the Southend boundary has been adopted. An update on flooding of the Eastwood Road by Wyvale Garden Centre would be provided. (ECCH)
High Street, Rayleigh	ECCH flooding on pedestrian area adjacent water trough. The pipes have now been cleared but prone to blocking and there is an ongoing maintenance issue. Blockages have been reported regularly over the past 12 months.
	There is flooding on the pedestrian area by Holy Trinity Church, Rayleigh. The drain outside the 'Feather in the Nest' shop, Rayleigh floods onto the carriageway. (ECCH)

Footpath 5 Little Wakering	ECC public rights of way vegetation clearance and remove rising from the adjacent ditch. Vegetation cut by the landowner has been pushed into the ditch, causing an issue. The ECC PROW team are aware. The volunteering scheme could be employed in this location. The resident's details to be passed to Cllr Steptoe.
Daly's Road j/w Ashingdon Road, Rochford	Highways drainage problem. There may be a capacity issue - a site visit would be arranged to have the carriageway jetted. AW has a water main in the vicinity and would be contacted regarding the issue. (The site is difficult to access.) A resident has reported that there are two blocked drains in Daly's Road, one by the entrance to the
	shops and one near the roundabout. Cllr Shaw to forward photos to ECCH. Anglian Water Authority (AWA)
Flood Park Magnolia Public Open Space	Clearance of flood park to restore original capacity. The ditch has been cleared (RDC/ECC). The next phase will be to get the flood park dug out (AW). AW reported that an initial clearance around the outlying area will be arranged to ensure water can drain away – it can then be seen if there are ongoing issues.
	Anglian Water/ECCH
92 Trinity Road, Rayleigh	 Property flooding from highway AW reported that the driveway of no 92 is lower than the road and, in heavy rain, water runs down the highway and floods the driveway, which is on the bend. CCTV surveys of the water pipe will be undertaken by AW, and ECCH will examine a nearby highway gulley to see if it can be enlarged. ECCH to liaise with AW. RTB has met with the resident on site.
	Grove Road, Rayleigh (running from Trinity Road) has insufficient capacity and houses are

	flooded as a result. New pumping facilities had been promised to help to clear but AW advise that this has been put back to 2020/21. There is an issue with the ditch at the rear of the properties on the RDC Grove Road playing field, which will be looked at.
	Rochford District Council (RDC)
Nobles Green ditch	RDC maintenance works regarding vegetation clearance.
	Last year RDC undertook vegetation clearance on the culvert section by the residential properties. In view of the fact that there are 176 properties affected, it was asked if maintenance could be undertaken on an annual basis. Continued blockage of the culvert could result in major flooding of the houses. As there is no registered landowner, there was concern that if RDC starts regular maintenance, responsibility for any major repair that is required could fall on the Council. The RDC Portfolio Holder for Environment to discuss with officers.
	Environmental Agency/Private Landowners
Fairmead, Rayleigh	Rawreth Brook maintenance
	EA have advised that they will be clearing vegetation each side of the bank, one metre up from the ditch, behind Fairmead. The remainder is the responsibility of the landowner, Sanctuary Housing. Residents reported that after even a short period of rain, the level rose quickly. The catchment is heavily urbanised; levels increase quickly and come down quickly.
	Residents from nos 6, 7 and 8 Fairmead had photos showing the overgrown vegetation; when the vegetation is cut down it is not cleared out of the ditch. Cllr Ward and RTB would contact the EA and Sanctuary Housing, the landowner, about their maintenance regime. The EA would consider a restructuring so that in heavy rain flows both culverts are in use and the flow of water is speeded up.

	Private Landowners
Nelson Road, Rayleigh	Private landowners open ditch need maintenance
	Houses back on to the farm's fields and the landowner is not maintaining the ditch. The landowner will be contacted – enforcement is an option if necessary.
Hawkwell Brook	Vegetation clearance.
	The contractor has cleared the section of the brook that runs through Clements Hall Leisure Centre and it is now flowing well. COMPLETED
The Bull, Main Road, Hockley	Blocked ditch restricting highway drainage.
Any other business	Mr & Mrs Wood, Grove Road. Water runs off the Eastwood Road and onto Grove Road. There is a very low pavement step. ECCH to inspect the upstand further along Eastwood Road. Rayleigh Town Council is in consultation with Southend Borough Council on this. It may be an option to use the flooding area in Lower Wyburns
	It was requested that future Flood Forum papers be sent to Rawreth Action Flood Group.
	Marina Avenue, Rayleigh – maintenance of highways gulleys. RTB to visit the site. There is an issue whereby the Travellers Joy pub disposing kitchen fats blocks highways gulleys.
	Sweyne School and Sweyne Park. This could be considered as a flood alleviation scheme and information brought to the next meeting.
	The footpath by the Crouch Caravan Park is narrow and has eroded underneath. This is a public footpath and the landowner has a duty of care to make sure the land is safe. Hullbridge Parish

	Council. ECC has to ensure the public footpath is accessible.
	Riverside walk (Boston Avenue end) - the ditch is overgrown and clogged with willow tree roots. RTB to establish who has responsibility for maintenance of the ditch.
Date of next meeting	The next meeting of the Flood Forum will be Wednesday 19 October at 11 am in the Council Chamber, Civic Suite, Rayleigh.

The meeting started at 11 am and ended at 12.35 pm.