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Chief Executive

AGENDA

Committee: **SCRUTINY**

Date and Time: **Tuesday 26th August 2014 at 7.30p.m.**

Venue: **Council Chamber**

Membership: **Councillors Blackwell (Chairman), Bayley, Cross, E.Egan, Mrs Goodwin, Ladzrie, Tucker and N.Watson.**

Cabinet Member attending **Councillor Howard**

Officers attending: **David Marchant – Chief Executive**
Trudie Bragg – Head of Environment
Ann Horgan – Scrutiny Officer

Enquiries: **Ann Horgan , Ext. 2413**

PART I

(Business to be taken in public)

1. Apologies

2. Members' Interests

3. Flooding Incidents in Castle Point

Following the recent major flooding incident on 20th July 2014 affecting Castle Point and in particular Canvey Island, the Chairman has requested that the Committee carries out a review of flooding in the Borough.

Over the past year a number of serious floods have been suffered both on Canvey Island and parts of the main land.

This first meeting will consider the incident on the 20.7.2014. Subsequent meetings are to be arranged to receive evidence from residents and the other agencies involved.

To assist the Committee, the reports presented to Council on 23.7.2014 and Cabinet on 20.8.2014 outlining the event and actions following the incident are attached.

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ORDINARY COUNCIL

23rd July 2014

Subject: Report on Major Flood Incident - Sunday 20th July 2014

1. Purpose of Report

The Mayor has agreed to consider this item as urgent business under Section 100B(4)(b) Local Government Act 1972 in order that the Council can be briefed on the major flood incident which affected the Borough on Sunday 20th July and subsequent action.

2. Links to Council's Priorities and Objectives

The report links to the Council priority Environment Civic Pride & Regeneration and Homes.

3. Recommendations

To note the report.

4. Report on Major Flood Incident - Sunday 20th July 2014

The Environment Agency confirmed that in excess of 60mm of rain fell in a short period of time during the early afternoon on Sunday 20th July.

Reports of serious flooding were being received by the Careline Service with requests for assistance.

The emergency services attended but it quickly became evident that this was a significant event and numerous houses had been affected by floodwater.

The worst areas of the Borough affected were on Canvey Island but property in Hadleigh was also affected. Some of the properties had been flooded by a similar incident in August 2013.

Numerous roads were closed during the incident either by the Police or the residents who were becoming concerned about the effects of passing traffic worsening the flooding damage to their property. The effect of these closures meant that access across the Island was very difficult for the emergency services and residents alike for the duration of the flood .

The worst affected areas on Canvey Island were:

- Winter Gardens area all the Avenues and all areas backing onto the dyke.
- Smallgains Area all roads coming off Smallgains Avenue
- Sydervelt Avenue
- Gafzelle Ave
- Maurice Road
- Hope Road

Over 300 calls were received by the Essex Fire and Rescue Service who attended the scene. Up to 60 houses are reported to have suffered internal flooding on Canvey Island and as many as 20 homes could have been inundated in Hadleigh. Details of mainland flooding being supplied by local Members who witnessed some incidents.

Efforts are currently in hand to establish the total number of properties affected but this could exceed 200 in total

Essex Police attended the scene and maintained a presence and control until late morning of 21st July when the incident changed from an emergency to normal business and preparations for a cleanup. Despite the severity of the incident and the number of properties affected Essex Police decided not to request the Council to open a rest centre or trigger Gold Command.

Two multi agency conference calls were conducted during the event and all Agencies have attended the incident and are dealing with matters under their control. The Council's Emergency Team has continued to operate and manage the Council's response to the flooding.

The Environment Agency (EA) attended the site to deal with one pump that had failed due to the effects of the storm at Croppenburg Way. The pump was not back in action for two hours. Others pumps are reported by the EA to have operated correctly. Many residents were blaming pump failure for the flooding.

Attached to this report is a briefing issued by the Environment Agency on the incident.

Reports suggest that some Anglian Water pumps were also affected by the lightning strike, but this has yet to be confirmed.

ECC Highways Services was not in attendance immediately but has been on site overnight and were dealing with reported incidents during the day. Inspectors were on site. Further information is being sought on the nature and location of any major problems.

Attempts were made to keep the street lighting on overnight in the affected areas and the ECC Cabinet Member indicated his support for the move. For some reason the Police request was made too late for the change to be made

on Sunday but this was in operation on Monday night for the whole of Canvey Island.

Pinnacle PSG has been requested to redirect their resources to cleaning up the areas affected by flooding. Debris and detritus left by the floods will be removed as soon as possible.

The Council is offering a free special collection service for any resident that wants to dispose of goods damaged by the flood. First Contact will be handling the enquiries and the details have been made available to the local press.

Anglian Water Authority has been in attendance and are disinfecting properties where they have been notified of internal flooding. This will continue until all properties have been dealt with.

Cleaning and disinfection of external areas that have suffered from foul water flooding is within their policy but it is low priority.

Council Housing officers visited the flood affected areas to ensure that any problems with council tenants were dealt with as soon as possible and the Council's maintenance contractor Kier and electrical contractor JP.Taylor are assisting with this work.

Further advice about whom and how to contact the emergency services has been updated on the front page of the Council's website.

Copies of all the current publicity material currently being used by the Emergency Resilience team are being distributed to all Members.

5. Proposals

High level discussions have already taken place with Essex Police, Environment Agency and ECC to assess the next steps once the immediate emergency response has subsided. Following discussions with the Leader and Cabinet Member for Flooding and Canvey Island a further multi agency meeting has been called by the Chief Executive and will take place on 28.7.2014.

Rebecca Harris MP has been briefed during the event. The Leader of the Council will deal in his report on proposed action to determine how the agencies involved can make the necessary investment in the area to prevent the major inundation of property from flood water happening again.

6. Corporate Implications

(a) Financial Implications

This has yet to be assessed.

(b) Legal Implications

In an emergency Castle Point Borough Council works with other agencies to support those affected and to help in their recovery as detailed in the Civil Contingencies Act 2004.

(c) Human Resources and Equality Implications

Council Officers together with the Councils' contractors have been diverted to assist with the cleanup operations as detailed in the report.

(d) IT and Asset Management Implications

A number of Council houses were flooded but action has been taken to assist the tenants and dry out the premises.

7. Timescale for implementation and Risk Factors

The report describes the Council's response to a flood incident .

8. Background Papers

None

Report Author:

David Marchant Chief Executive

Flooding on Canvey Island Sunday 20 July 2014

What happened on 20 July 2014?

The Environment Agency own and manage 13 pumps which are strategically positioned around Canvey Island which is below sea level and protected by sea defenses around the entire island. The pumps are operated 24 hours a day 7 days a week and are automatically triggered by a rise in water levels. The pumps lift the water from the drainage system over the substantial sea walls and into the Thames Estuary. Surface water flooding on Canvey occurs when intense rainfall overwhelms the local drains.

During the heavy rainfall on the afternoon of Sunday 20 July all pumps were operating normally until a power failure at around 3 pm. Almost immediately the emergency back-up generator came into operation to allow pumping to continue from a number of the interconnected coastal pumps (the pumps pumping water over the sea wall). We believe the remaining pumps came back in to operation approximately 12 minutes later when the power was restored. One pump did not start up for approximately 2 hours however it was served by neighboring pump whilst our staff carried out repairs. At the moment our understanding is that neither the power failure nor the pump needing repair impacted upon the ability of the pumps to take water off Canvey Island.

The extreme rainfall experienced was well beyond the capacity of the surface water drainage system on Canvey Island (a local non verified rain gauge report 75mm of rain). The volume of water was so great that the surface water drainage system was unable to transfer the water to the main rivers and the pumps.

The pumps have weed and debris screens which are regularly monitored and maintained. These pumps are generally gravity fed which means any surface water arising from rainfall makes its way under gravity to the 8 pumps on the internal system which move water through the main river system to the five inter-connected coastal pumps.

Should any of the pumps fail to operate then an alarm is immediately sent to our control room which is manned 24 hours a day and staff are then sent to investigate or make repairs as necessary as was the case on Sunday.

A number of these pumps are also interconnected so if one fails to operate the water can be drained to an adjacent pump. A number of interconnected pumps are served by a pump with an emergency generator which ensures the pump continues to operate should there be a power failure.

What did we do?

The thunderstorms over the weekend were forecast although specific locations were not. Our staff, both in the incident room and out in the field, were on duty to allow us to discharge our responsibilities. We contacted all of our professional partners before

the weekend to inform them of the potential flood risk and to allow them time to prepare to take any appropriate action. Our field staff were out removing debris from the screens on the intakes to the pumps. These screens prevent litter and debris dropped into the watercourse from damaging the pumps.

What investment has been made and maintenance has been done on Canvey Island?

Between 2005 and 2006 all Canvey pumping stations were refurbished and upgraded to increase their pumping capacity to a 1:200 year standard of protection (SoP). This SoP assumes that water can get to the pumps through surface water drainage systems. We invested £5.205m in this project.

Between 2008 and 2011 we invested £1.1m in refurbishing the Gravity Outfall Sluices on Canvey Island.

Between 2010 and 2012 we invested £90k in a programme of CCTV inspections of all of the culverted main rivers on Canvey Island. This work also included silt clearance and debris removal. We also shared the findings with Anglian Water to help them with their asset investment programme.

Our maintenance for 2013/14 included 655m of grass control on the dykes on Canvey including Hillhall Dyke and Charfleet Dyke. 44km of hand-cutting of weeds in various dykes around Canvey. We also completed significant weed clearance on Canvey Long Lake. This investment totalled £300k. Finally, we have also repaired all damage to the Canvey sea walls sustained during the December 2013 tidal surge.

What has happened since the floods in August 2013?

Canvey Island suffered extensive surface water flooding on 24th August 2013 following an intense summer rainstorm. 65mm rain fell in 24 hours, 25.6 mm of which fell in 90 minutes. This event had an estimated return period of 1:31years and at least 50 properties were affected by flooding. Our pumping stations alone pumped 262,000m³ of water from the Island - the equivalent to 105 Olympic size swimming pools.

The Essex Partnership and Strategic Overview (PSO) Team are working with both Essex County Council (ECC) and Anglian Water (AW) to develop a pilot Integrated Urban Drainage (IUD) model for Canvey Island. This will give a detailed representation of the drainage network on the island, merging the modelled sewer network with the modelled main river network along with the highway drainage system supplemented by LiDAR and topographic survey data.

The aims for this IUD model are to develop a fluvial flood zone outline, enhance ECC's understanding of surface water flood risk and to identify the performance of assets on Canvey Island that are currently designated main river and public sewer. We have agreed lengths of main river culvert on the Island which are best placed to remain with Anglian Water with the intent to de-main. This emphasises the need to better understand how this integrated drainage system performs up to the 1:30 year event.

Key questions and answers

What is the primary purpose of our pumps?

Canvey is a basin surrounded by the sea wall the pumps are for evacuating any water that settles within the basin out over the wall.

Did the pumps work on Canvey during the incident?

There was a power cut on Canvey at approximately 1508hrs. When the power returned all pumping stations were then operational. At 1612hrs the Croppenburg pumping station developed a fault and was out of action for a period of two hours before it was restored to full capacity. However, during this time the pumping station at Leigh Beck which has its own generator continued to work throughout. This pumping station is inter-connected with the neighbouring pumping stations and therefore provides support when needed.

Had the power-outage continued we can connect emergency generators to all the pumping stations. Emergency generators are stored on Canvey Island next to a number of the pumping stations.

The total reduction in pumping capacity throughout this 12 hour period was no more than 6%.

Did the short power outage have any impact in increasing flooding?

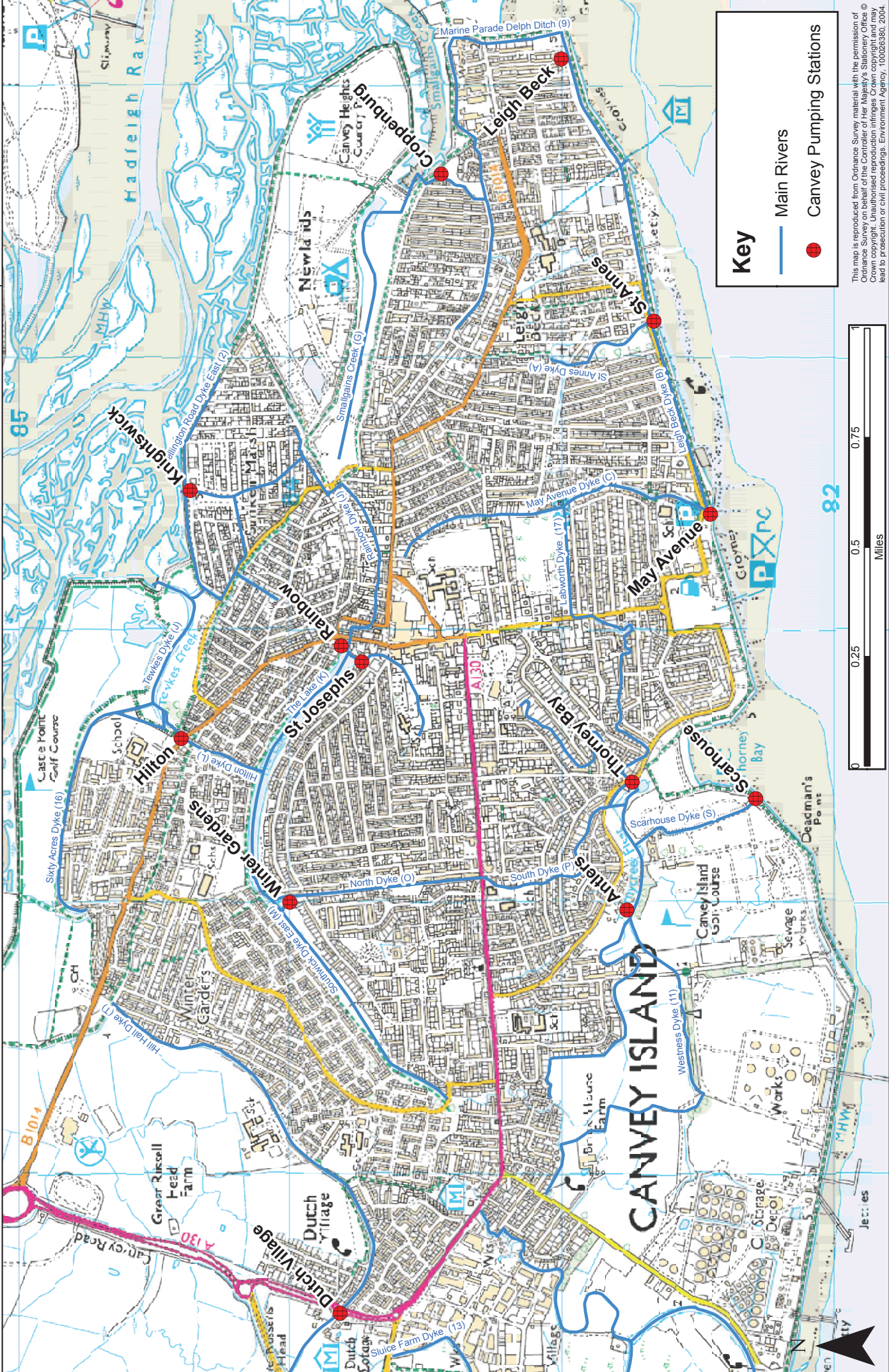
We are investigating the operation of the pumps however at this stage we think it is unlikely the outage increased flooding.

How many properties flooded?

We have varying reports from the emergency services which suggest 40 to 60 but other local reports suggest up to 200 properties.

21.07.14 Version 1

Canvey Island Pumping Stations



CABINET

20th August 2014

Subject: Major Flooding Incident 20th July 2014

Cabinet Member: Councillor Howard - Canvey Island, Floods and water Management

1. Purpose of Report

To inform the Cabinet of the response of the Council following the major flooding incident on Sunday 20th July 2014.

2. Links to the Council's Priorities and Objectives

This report is linked to the Council's aim for the delivery of the Council's priorities and objectives regarding the Environment.

3. Recommendations

The Cabinet is requested to note and endorse the actions taken.

4. Background

Cabinet is well briefed of the impact on the Borough and its residents, both Canvey Island and mainland, of the flooding event of the 20th July 2014. The Environment Agency has confirmed that parts of Borough particularly Canvey Island received up to 100mm of rainfall during the storm, 75mm of which fell in one hour.

A storm of this intensity has unique characteristics and has a return period of in excess of 1 in 300 years which is beyond the design capacity of modern drainage systems.

To give some context to the scale of the event the Environment Agency have said that over one million cubic metres of water fell on Canvey Island during the storm which is sufficient water to fill Wembley Stadium. The Council estimates that up to 500 properties across the Borough were affected.

5. Proposals

As reported to the Council on 23rd July 2014 the Council is working closely with the Environment Agency, Anglian Water and Essex County Council to ensure that action is taken to improve infrastructure, particularly on Canvey Island.

As the lead local flood management authority, Essex County Council are preparing a Section 19 report which will examine the events of the day and consider what further actions will be necessary. The report will be a public document.

The Secretary of State for the Environment, Liz Truss, visited the area on Friday 25th July 2014 and met with representatives of the Environment Agency, Castle Point Borough Council and Rebecca Harris MP. During the visit the Secretary of State indicated that she will be reviewing what actions have been taken by the various agencies involved.

The Chief Scientific Advisor, Sir Mark Walport has been appointed to investigate the flooding event and the Council will be actively supporting his work with evidence. The Chief Executive has written to the Cabinet Office seeking a timetable and a copy of the remit that Sir Mark will be working to.

On Monday 28th July 2014 the Chief Executive coordinated a multi agency meeting where all the stakeholders involved in flood risk management and operational matters gathered to discuss the major flood incident.

It was agreed that any evidence should be coordinated by the Borough Council and sent to Essex County Council in their lead flood risk management role providing important information to support the preparation of the Section 19 report.

The Head of Environment together with other officers have collated a large amount of data including evidence passed to them by residents and Councillors about the flooding incident. The Council has also been able to obtain numerous photographs and a copy of the video taken by Essex Police during the event which has contributed greatly to the understanding of the events as they occurred on that day. The evidence was sent to Essex County Council on Friday 8th August 2014 and this will continue to be updated as more evidence is received.

Further meetings of the multi agency group are planned following the publication of the Section 19 report by the Essex County Council.

Details of a further flooding event that occurred during the evening of Friday 8th August 2014 are being collated and will be sent to Essex County Council.

The Chairman of Scrutiny Cllr Blackwell has requested that his Committee conduct a review of flooding as a priority and the first meeting is due to take place on Tuesday 26th August 2014.

Member will note that at report item 8(a) later on the agenda the Cabinet is to consider proposals to approve a Council Tax Discount scheme to assist

residents whose properties were flooded as a result of the exceptional rainfall on 20th July 2014.

6. Corporate Implications

There are limited corporate implications for the Council, as the Essex County Council are the Lead local flood risk management authority.

The Borough Council does have powers under the Land Drainage Act and the Council may be required to utilise these permissive powers following publication of the report by Essex County Council.

At this stage the extent and consequences are unknown.

a. Financial implications

Subject to the outcomes of the Section 19 report the Council may be required to utilise its powers and financial resources under the Land Drainage Act.

At this stage the extent and consequences are unknown.

Report item 8(a) later on the agenda the Cabinet containing proposals to approve a Council Tax Discount scheme includes an assessment of the financial implications of the scheme.

b. Legal implications

There are none, except that the resources and knowledge of CPBC staff will be available to all the agencies to resolve questions of ownership of assets should it arise.

c. Human resources and equality implications

There are none

d. Timescale for implementation and risk factors

These are set out in the report

7. Background Papers: Report to Council 23.7.2014

Report Author:

Chief Executive, David Marchant