



**Notice of a public
Decision Session - Executive Member for Environment
and Climate Change**

To: Councillor Widdowson (Executive Member)

Date: Wednesday, 12 August 2020

Time: 3.00pm

Venue: Remote Meeting

AGENDA

Notice to Members – Post Decision Calling In:

Members are reminded that, should they wish to call in any item* on this agenda, notice must be given to Democratic Services by **4:00pm on Friday, 14 August 2020.**

*With the exception of matters that have been the subject of a previous call in, require Full Council approval or are urgent, which are not subject to the call-in provisions. Any called in items will be considered by the Customer and Corporate Services Scrutiny Management Committee.

Written representations in respect of items on this agenda should be submitted to Democratic Services by **5.00pm on Monday, 10 August 2020.**

1. Declarations of Interest

At this point in the meeting, the Executive Member is asked to declare:

- any personal interests not included on the Register of Interests
- any prejudicial interests or
- any disclosable pecuniary interests

which they may have in respect of business on this agenda.

2. Minutes (Pages 1 - 8)

To approve and sign the minutes of the Decision Session, and the Joint Budget Decision Session with the Executive Members for Transport and Economy & Strategic Planning, held on 13 January 2020.

3. Public Participation

At this point in the meeting members of the public who have registered to speak can do so. Members of the public may speak on agenda items or on matters within the remit of the committee.

Please note that our registration deadlines have changed to 2 working days before the meeting, in order to facilitate the management of public participation at remote meetings. The deadline for registering at this meeting is 5:00pm on Monday, 10 August 2020.

To register to speak please contact Democratic Services, on the details at the foot of the agenda. You will then be advised on the procedures for dialling into the remote meeting.

Webcasting of Remote Public Meetings

Please note that, subject to available resources, this remote public meeting will be webcast including any registered public speakers who have given their permission. The remote public meeting can be viewed live and on demand at www.york.gov.uk/webcasts.

During coronavirus, we've made some changes to how we're running council meetings. See our coronavirus updates (www.york.gov.uk/COVIDDemocracy) for more information on meetings and decisions.

4. York February Flood Review (Pages 9 - 30)

This report provides a review of the responses to flooding in York following storms in February and early March 2020 and an update from the Environment Agency on progress with the York Flood Alleviation Scheme, and seeks the Executive Member's views on a range of recommendations.

5. Germany Beck Flood Scheme Update (Pages 31 - 42)

This report provides an update on the Germany Beck Flood Alleviation Scheme and asks the Executive Member to endorse the procurement and development of the detailed design stage of the scheme and the funding options to deliver the construction phase.

6. Urgent Business

Any other business which the Executive Member considers urgent under the Local Government Act 1972.

Democracy Officer:

Louise Cook

Tel - 01904 551031

Email - louise.cook@york.gov.uk

For more information about any of the following please contact the Democracy Officer responsible for servicing this meeting:

- Registering to speak
- Business of the meeting
- Any special arrangements
- Copies of reports and
- For receiving reports in other formats

Contact details are set out above.

This information can be provided in your own language.

我們也用您們的語言提供這個信息 (Cantonese)

এই তথ্য আপনার নিজের ভাষায় দেয়া যেতে পারে। (Bengali)

Ta informacja może być dostarczona w twoim własnym języku. (Polish)

Bu bilgiyi kendi dilinizde almanız mümkündür. (Turkish)

یہ معلومات آپ کی اپنی زبان (بولی) میں بھی مہیا کی جاسکتی ہیں۔ (Urdu)

 **(01904) 551550**

This page is intentionally left blank

City of York Council

Committee Minutes

Meeting	Decision Session - Executive Member for Environment and Climate Change
Date	13 January 2020
Present	Councillors Widdowson (Executive Member for Environment and Climate Change), D'Agorne (Executive Member for Transport) and Waller (Executive Member for Economy & Strategic Planning)

15. Declarations of Interest

The Executive Members were asked to declare, at this point in the meeting, any personal interests, not included on the Register of Interests, or any prejudicial or disclosable pecuniary interests they may have in respect of business on the agenda. None were declared.

16. Public Participation

It was reported that there had been three registrations to speak at the session under the Council's Public Participation Scheme.

All three speakers spoke on Agenda Item 3, Financial Strategy 2020/21 to 2024/25.

Janice Gray, a local resident, raised her concerns regarding the capital investment of £500K to improve the accessibility and sustainability of York Theatre Royal. She stated that the Theatre Royal had already received £6m in 2016 from various sources, including the Council, to fund a new roof and major improvements to access and she noted that other theatres within the city were self-funded. She also raised concerns regarding pot holes across the city and felt that the workmanship was poor that required better inspection and supervision of the contractors. She also felt that landlords of all student accommodation should pay council tax.

Brian Watson, a local resident, raised concerns regarding the budget consultation process. He questioned why the consultation papers made little reference to the process used

and highlighted some inconsistencies and questioned if any allowances had been made for the errors. He stated that the report also made no reference to the replies, 'slightly agree or disagree' and questioned the figures generated from the replies. He also queried why the Council were proposing to allocate £500k to York Theatre Royal.

Gwen Swinburn, a local resident, questioned why no budget cuts had been made to the departments within the three portfolio areas, especially when all other departments had received cuts. She felt that there were some inconsistencies on how the data had been presented and would have preferred a capital budget sheet for each portfolio area. She suggested that:

- Following the agreement at Full Council, all finalised budget proposals should then be presented at either Executive or a Decision Session.
- All key decisions relating to sums of £500k or more, including the budget proposed to York Theatre Royal, should be reported to and considered by Executive.
- Each growth proposal, within Annex 2 of the report, should be numbered.

She also felt that some proposals required further clarification, including the price contingency budget for Transport and Environment and Climate Change and the one off growth budget for Transport and Economy & Strategic Planning.

17. Financial Strategy 2020/21 to 2024/25

The Executive Members considered a report that provided background information for the overall Financial Strategy and presented the savings proposals and growth assumptions for Economy & Strategic Planning, Environment & Climate Change and Transport portfolios, for consideration by the Executive Members before finalisation of overall Financial Strategy, which would be presented to Executive on 13 February 2020.

The Finance Manager was in attendance to give an update. He highlighted the key assumptions for the overall Finance Strategy which were:

- A proposed basic council tax increase of 1.99 % in 2020/21. Any increase above this amount would require a referendum.

- In addition an increase of 2% in line with the government's social care precept, equating to additional income of £1.8m, which provides support for social care.
- Revenue savings of £4m in 2020/21.

He made reference to the specific examples of revenue investment and capital investment that supported the objectives outlined in the new Council Plan and the Executive Members noted that the revenue investment highlighted within paragraph 6 of the report, bullet point 7, should state £25k not £265k.

The Head of Finance confirmed that the price contingences within the portfolio areas for Transport and Environment and Climate Change were particularly related to the increases the Council were required to make to concessionary fares, street lighting, drainage levies and waste, including payments made to Yorwaste and in respect to Allerton Waste Recovery Park.

Each Executive Member considered the annexes to the report that highlighted the proposed growth and savings within their portfolio area and in answer to their questions it was confirmed that:

- The revenue and capital investment proposed to improve electric car charging within the city would support the maintenance of all charging points as usable and allow any faulty equipment to be replaced. It was confirmed that currently all charging points within the city were functioning.
- The Transport one off growth proposal, within Annex 2 of the report, should include a reference to other innovative trials, not just taxis or small vehicles.
- The additional staff resourced to clear a backlog of waiting lists for residents parking would be accommodated until March 2021 and the workload would be reviewed regularly.

The Executive Members thanked all Officers involved in producing the report and were delighted to see how committed City of York Council were to delivering the 2030 carbon neutral target. They agreed the budget proposals also showed commitment towards the Council Plan and to delivering what the residents were requesting.

Resolved:

- (i) That the feedback from consultation for Economy & Strategic Planning, Environment and Climate Change and Transport portfolios, as set out in Annex 3 to the report, be noted
- (ii) That the following be agreed for inclusion within the overall financial strategy to be presented to Executive on 13 February 2020:
 - a) The 2020/21 revenue savings proposals for Economy & Strategic Planning, Environment and Climate Change and Transport portfolios, as set out in Annex 1 to the report.
 - b) The 2020/21 revenue growth proposals for Economy & Strategic Planning, Environment and Climate Change and Transport portfolios, as set out in Annex 2 to the report, subject to the first point within the one off growth section being re-worded to read as follows:

To deliver a Transport Plan Refresh, including funding towards innovative trials such as the use of taxis and car share to enhance the York bus system.

Reason: To ensure that stakeholders have the opportunity to feed into the budget process in advance of the finalisations of the Financial Strategy 2020/21 to 2024/25.

Cllr Widdowson, Executive Member
[The meeting started at 5.30 pm and finished at 5.55 pm].

Meeting	Decision Session - Executive Member for Environment and Climate Change [previously Executive Member for Environment]
Date	13 January 2020
Present	Councillor Widdowson

18. Declarations of Interest

The Executive Member confirmed that she had no personal interest not included on the Register of Interests, nor any prejudicial or discloseable pecuniary interests, to declare in the business on the agenda.

19. Minutes

Resolved: That the minutes of the Decision Session held on 11 November 2019 be approved and signed by the Executive Member as a correct record.

20. Public Participation

It was reported that there had been no registrations to speak at the session under the Council's Public Participation Scheme.

21. York 5 Year Flood Plan Update

The Executive Member considered a report that provided an update regarding the progress on the York Five Year Flood Plan since the last update, on 2 September 2019, including details of the work carried out by the Environment Agency.

The Flood Risk Manager was in attendance to provide an update and he confirmed that City of York Council had been awarded funding from the Environment Agency to lead and develop a property flood resilience pathfinder project across all Local Authorities in Yorkshire. The Executive Member noted that further progress updates would be provided at future Decision Sessions.

An officer from the Environment Agency was in attendance to give a further update on activities and within individual flood cells, where it was noted that:

- The flood wall on Leeman Road, along the front of Memorial Gardens, was now complete.
- The flood wall along North Street was now complete and the flood gates were being installed.
- The installation of two new specially designed flood gates under Lendal Bridge had been delayed and would now be fitted in September 2020.
- Work was due to restart at St Peters School in the spring.
- Clifton Ings Barrier Bank planning application was approved at the September 2019 Planning Committee and work would now begin in June 2020, potentially pushing the two year timescale into a third year. An advisory group had also been setup to better engage with the community. The Executive Member informed officers that St Nicks had significant experience within this area.
- A revised planning application for Clementhorpe was being produced and should be considered at Planning Committee in March 2020. The timeframe to complete the works should not be affected by the delay. The Executive Member confirmed she was visiting Rowntree Park with the Transport Policy Manager to explore the pedestrian access.
- Properties in New Walk had nearly all been visited by a Property Flood Resilience contractor and contact was still being made with those residents who had concerns. Officers confirmed they would be working with the suppliers to ensure the correct solutions were provided to each property.
- The plans for the Foss Storage Area had been submitted to both City of York Council and Ryedale District Council.
- The flood risk at South Beck had been removed from the programme due to there being no viable option and no history of flooding.
- The properties that were at very significant risk in Naburn would be offered support and property resilience.

Council officers expanded on the information provided in Annex 2 and during these updates, and in response to questions and concerns raised by the Executive Member, it was agreed that:

- The delays to the various timescales required further investigation, to ensure the programmes of work were delivered more resiliently.
- Communication with ward councillors, friends groups and residents required more consideration to ensure the engagements were better understood.
- CYC officers, the Environment Agency and the Stainability Director from Yorkshire Water should work collaboratively when considering a tree strategy.

The Executive Member noted that officers were developing a holistic scheme to better protect access into Fordlands Road, including the properties that were theoretically at risk. Work was also taking place on the A19 to site a pumping station and further appraisal work would be undertaken to create a business case. Officers agreed to keep the Executive Member updated.

Resolved: That the updated report, and the additional information provided at the session by the Environment Agency (EA) and council officers, be noted.

Reason: To confirm that the Executive Member was aware of the current position regarding progress on the 5 Year Flood Plan.

Cllr Widdowson, Executive Member
[The meeting started at 6.15 pm and finished at 6.37 pm].

This page is intentionally left blank



**Decision Session - Executive Member for
Environment and Climate Change****12 August 2020**

Report of the Director of Economy & Place

York February Flood Review**Summary**

1. February 2020 has been confirmed as the wettest on record, Storms Ciara, Dennis, Jorge and a fourth unnamed rainfall event led to significant river response as rain fell on already saturated ground.
2. Pennine rainfall raised levels in the River Ouse after each storm event leading to four significant river peak levels. Significant areas of the city centre and outlying villages were in flood alert and warning status for more than three weeks. Riverside access routes for pedestrians and cyclists were underwater for the majority of February.
3. All flood plans were enacted by City of York Council, Environment Agency and Yorkshire Water. The cities flood defences prevented flooding to around 1056 properties. Multiple storms and snow melt complicated forecasting and all partners deployed plans for defence exceedance in some locations based on reasonable worst case scenarios. Early operational actions would have mitigated further flooding if forecast levels were achieved.
4. Around 60 businesses are thought to have been directly or indirectly affected by the flooding. These are in riverside locations, with many having resilience measures in place. City of York Council worked with the West Yorkshire Combined Authority and Make it York to provide a grant to businesses for flood-incurred damage costs that were not covered by their insurance policy.
5. All partners responded effectively, however, a range of recommendations have been identified at paragraph 7.
6. The Environment Agency continue to develop plans for flood alleviation works across the city, quarterly update reports are brought to the Executive Member for the Environment and Climate Change Decision Session. The latest report is provided at Annex 2.

Recommendations

7. The Executive Member for the Environment and Climate Change is asked to note the report and the update at Annex 2, feedback is sought from the Executive Member on all content. A range of recommendations have been identified below:
- i. Emergency Response Procedures – co-location of internal officers worked well and should be reinforced in the flood plan, linkages to the York Flood Group should be reviewed.
 - ii. Emergency Response Procedures – further awareness sessions for key duty officers across agencies are to be considered to ensure awareness and understanding of their roles.
 - iii. Operational – acting early to deploy temporary measures was successful, this should be recognised and supported as best practice and all teams encouraged to act in this way.
 - iv. Operational – The flood resilience measures under consideration for Fulford are to be developed further and additional funding sought to enable their delivery.
 - v. Operational – Sandbags were deployed in accordance with risk and forecast, this worked as an effective use of resource but need to communicate this better to affected communities so they know what to expect.
 - vi. Warning and Informing – Forecast levels are included for Viking recorder on the .gov.uk website as part of a trial. This functionality is not available on all EA level gauges. The website includes a statement to refer to alerts and warnings for information. Better understanding is needed by all users of this service to explain its limitations. All communications should provide supporting information to explain this, Environment Agency are supportive of this and example text is provided at Annex 1.
 - vii. Communications and Media – The Single Version of The Truth worked well to prove a rolling update on the forecasts, escalation and impacts of the flooding. The consequences of River Ouse flooding are well known and responses rehearsed, messaging and communication can be developed in advance of flooding and built into the flood plan.
 - viii. Impact – Environment Agency led schemes in areas affected by the event are essential to provide future flood resilience, all involved are to commit to their effective and timely delivery.
 - ix. Impact – The funding available for flood signage updates should be informed by feedback from the event to ensure it is targeted effectively and has maximum impact.

- x. Impact – Council teams and partners support affected businesses wherever possible, businesses will be encouraged to ensure they are prepared for future flooding and business continuity planning takes this into account.

Background

8. Storms Ciara, Dennis, an unnamed rainfall event and Storm Jorge led to peak river levels on the River Ouse on the 11th, 17th, 24th February and 2nd March respectively. This has been the wettest February on record, with the most flood warnings issued in any one day across England. Rainfall fell on already saturated ground increasing the impacts.
9. Pennine rivers were predominantly affected with limited rainfall on the Foss, the Foss Barrier was operated throughout the event due to the high river levels on the Ouse but there were no issues in the majority of areas impacted in the Boxing Day 2015 flood event.
10. All partners have well developed flood plans and flood operations on the River Ouse facilitated by advance forecasting and flood alerts and warnings. All flood response plans were initiated.

Consultation

11. This report has been informed by a range of meetings and discussions amongst all partners and the Local Resilience Forum. Feedback has been obtained from councillors, direct communications with the council, flood groups, social media and door knocking during and after the event.

Options

12. The principal options open to the Executive Member for Environment and Climate Change are to comment on and review the recommendations in section 7.

Analysis

13. The River Ouse in York responded to rainfall on the catchments of the Rivers Swale, Ure and Nidd. The Flood Forecasting Centre, a collaboration between the Met Office and the Environment Agency, issue detail of forecasted weather and likely flood risk to all responders. CYC received 46 Flood Guidance Statements during the February event that evidenced a likelihood for an increased flood risk in York.
14. Flood Alerts and Warnings were issued by the Environment Agency as river levels rose these were updated, downgraded and re-issued as the situation changed with rising and falling river levels between each of the flood peaks. Alerts and warnings trigger actions in the CYC York Flood Plan, 55 individual alerts/warnings/updates/downgrades were received leading to a wide range of actions from CYC officers.

15. Four distinct flood peaks were experienced in York, levels rose slowly ahead of the first peak and fell slowly during each subsequent peak, this was further exacerbated by snow melt and spring tides downstream, river levels remained high throughout the month. Peak levels (Viking Recorder in York) and reasonable worst case maximum forecasts are provided below. In all cases forecasts were amended as rainfall levels and response in the upper river catchments were known but early forecasts were used to ensure flood preparedness via operational measures and effective communications:

- Storm Ciara – Peak level 4.33m, reasonable worst case peak forecast of 4.5m
- Storm Dennis – Peak level 4.42m, reasonable worst case peak forecast of 5.2m
- Un-named rainfall – Peak level 4.47m, reasonable worst case peak forecast of 4.5m
- Storm Jorge – Peak level 3.38m, reasonable worst case peak forecast 4.1m

Emergency Response Procedures

16. All partners in the North Yorkshire Local Resilience Forum delivered flood response operations and communications actions in accordance with the flood warnings issued and forecasted peak river levels. All partners worked collaboratively, this was facilitated by 16 Flood Advisory Service multi agency teleconferences throughout the event.
17. Response levels across the North Yorkshire Local Resilience Forum were escalated to Tactical Command Group (Silver) levels on 7 occasions during the event with Strategic Commanders (Gold) meeting virtually on 2 occasions.
18. CYC Emergency Planning Duty Officers provide a 24 hour on call service, as forecast information was received from the various outlets responses were escalated in agreement with the on-call senior officer and all 24 hour duty rota's were agreed to provide Emergency Planning, Strategic and Tactical command resources in accordance with the forecasted levels through each flood peak. All aspects of the Multi-Agency Flood Plan were set in motion through this process.
19. CYC Internal flood group meetings were convened on 16 occasions during the event, the groups were used to provide input to internal partners on forecast levels, actions of external partners and to agree future actions to respond to forecasted peak river levels. Formal meetings were further supported by emails and messaging to pre-determined internal recipients to provide updates, focus and recommended plans for escalation.
20. Early adoption of the command and control structure within the council based on the forecasted impacts of Storm Ciara ensured that all relevant officers

shared information and situational awareness and allowed escalation when required.

21. Forecasts for Storm Dennis moved the duty team, including on-call communications officers and wider internal flood group membership, to initiate a formal co-location of CYC officers in the Transport Office at West Offices. Although only initiated for 36 hours it allowed all officers to work closely as the River Ouse peaked following Storm Dennis which was forecast to cause significant issues, co-location gave the best opportunity to respond effectively.
22. The York Flood Group which includes external partners was not convened due to the early adoption of the Tactical Command Group. The co-location of CYC officers helped in the delivery of local operations and close links were formed with key partners in the Environment Agency and Yorkshire Water.
23. Internal reviews have identified that communication between teams worked well and there was a speedy response from all relevant departments. Staff went above and beyond across the services. There was a real sense of sharing tasks and support based on skills and knowledge and not hierarchy. Silver and operational teams were calm and highly professional.
24. The need for further support of duty officers in some roles was identified with a reliance on some officers with a more direct operational and technical subject matter knowledge. Tactical and Strategic officers would benefit from opportunities to shadow others and develop knowledge through exercising.

Operational Response

25. CYC Highways operatives responded to the rising river levels following the impacts of Storm Ciara and deployed flood signage in a wide range of locations across the city in accordance with flood action plans. Almost 70 flood signs were deployed and a range of additional signage was provided to enhance the information provided as the flood event continued.
26. The November 2000 flood level of 5.4m is the largest on record, the city's formal raised flood defences – embankments and flood walls/gates – provide protection to, and above, these levels across the city. Current investment in the city is being used to improve this level of protection and manage climatic change uplifts. The Environment Agency operated all defences during this event providing protection to many communities.
27. A number of locations across the city benefit from temporary defences, City of York Council Highways operatives deployed floodgates, sandbags and pumps to communities in Peckitt Street, Tower Place, Clementhorpe and Bishopthorpe. All works are pre-determined in our flood plan and were issued in advance of peak river levels.
28. 200 one tonne sandbags and 25 pumps were utilised to construct the temporary defences. Further pumping operations were required to manage surface water on the highway at the A19 in Fulford. Recently constructed flood

resilience works ensured the carriageway was not directly flooded, this would have occurred on three occasions had the defences not been in place.

29. Further pumping operations were carried out at Fordlands Crescent in Fulford, local drainage via Tunnel Drain was compromised by high River Ouse levels over a prolonged period. Localised rainfall exacerbated the issue and CYC, with support from Yorkshire Water, had to take action to pump water emerging on the highway and prevent flooding of homes. A scheme is currently being developed, see paragraph 53.
30. Yorkshire Water assisted CYC in pumping operations at Bishopthorpe and led on response at Lendal Tower and Longfield Terrace. CYC assisted the Environment Agency in pumping provision at Naburn.
31. All partners operational teams worked closely together during the event, the Environment Agency initiated its York Exceedance Plan up to the maximum forecast levels, this placed temporary defences in locations across Skeldergate and Clementhorpe, operations teams from the council and the Environment Agency worked closely in this operation. The Hazel Court Operations Room was utilised as a coordination centre during the flood with a full rota of support officers identified to service all front line needs.
32. Around 1056 properties were protected by formal and informal defences in York through all flood peaks, A19 access was maintained which would have been flooded previously.
33. The early deployment of operational measures in advance of Storm Ciara was effective, decisions were taken after each subsequent forecast to leave temporary defences in place through the city. Whilst this caused some disruption in terms of access to limited parts of the city, i.e. Skeldergate, the decision was based on the most effective use of time and resources during a long protracted event.
34. Highways operatives were stretched to resource the ongoing maintenance and pumping operations linked with the temporary defences, this resource was also called upon to carry out highway gritting operations on a number of occasions during the month.
35. In addition to the 200 one tonne sandbags used to create temporary defences more than 6000 sandbags were deployed across the city. Council sandbag policy determines that priority is given to the construction of pre-determined temporary defences before individual sandbags are deployed to protect homes.
36. Sandbags were deployed in accordance with the likely impact from each forecasted peak level, this allowed an effective and risk based deployment of sandbags to locations where they would be needed. This did, however, cause some concerns with residents requesting sandbags in locations that were not likely to be affected and no bags were supplied in these circumstances.

Communications were used to explain the sandbag strategy but some concerns remained.

Warning and Informing, Communications and Media

37. The on-call Communications duty officer worked closely with the Emergency Planning team during the early stages of Storm Ciara (from the 6th February) and a wide range of early communications messages were developed including – river safety, driving through flood water, forecast information, how to obtain information on warnings and advice of what to do during and after floods.
38. A Single Version of The Truth (SVOTT) document was developed before the first flood peak detailing all aspects of the emerging incident – latest forecasts, likely impacts, operational actions and likely impacts on CYC directorates – i.e. car parks, schools etc. This was updated daily and distributed to all key internal departments, councillors, parish councillors, flood groups, the Local Resilience Forum and MPs.
39. The SVOTT was an effective way to communicate a wide range of information on the event to a varied and extensive audience. It required considerable work to develop in the early stages and daily input to review and re-publish. Like the York Flood Plan many of the activities included in the SVOTT are linked to staged increases in flood forecasts and much of the messaging could be prepared in advance.
40. The Council deployed a Gold Commander, this role was a single point of contact for member enquiries and took pressure off tactical and operational teams and a small group of elected members delivering media interviews gave continuity and consistency of message.
41. The Communications team prepared and facilitated communications activity across a wide range of broadcast, social and direct media messaging – daily updates to press releases, 98 press enquiries, 20 direct press articles, 526 press articles referencing York flooding and more than 250,000 social media engagements (viewed, liked, shared) from CYC posts.
42. Forecast details of potential levels of flooding are significant for communities in York. During this incident direct communication to residents was provided to explain the likely escalation and impact should flood defences be overwhelmed. Early forecasts have more uncertainty and clarity is gained once actual rainfall levels are known and upper river catchment response is observed. The balance between communicating more uncertain early forecast levels to support community flood preparedness and a more certain later forecast level that would better reflect the actual risk that communities face was questioned by all partners during the event.
43. Whilst we recognise that any forecast can only ever come with a degree of confidence there were issues with officers being given different data by the EA to the publically available data on the .gov website for the Viking Recorder.

This is because the publically available information is a single source forecast used to illustrate a potential escalation of flood levels. Direct discussions between professional partners benefit from further interpretation of a number of likely scenarios by forecasters.

44. All partners prepared operations based on the reasonable worst case scenarios in the forecasts, this ensured we acted early and were prepared for the worst case impacts across the city. It is essential that we shared this information with our communities to support their own resilience planning.
45. Although the formal defences in York were not endangered by the forecast and actual levels during the event the temporary defences deployed in the Peckitt Street/Tower Place/Clementhorpe areas of the city defend to a level of 4.8m. They were therefore likely to be overwhelmed or extremely tested in the forecasted peak levels on three occasions.
46. The provision of direct and timely communications to residents in these areas was essential and two letter drops were carried out during the event to provide this information. The letters were compiled in agreement with the EA.
47. Communications officers worked closely with the Customer Service teams to set up call handling scripts and information for anyone contacting the Council directly. Customer Service teams worked with the Emergency Planning team during the event, out of hours call handling was escalated to a 24 hour customer advice service for a period when all teams co-located in West Offices.
48. Although the impacts of flooding and concerns over operational response, i.e. sandbags, have been reported to the council, many positive responses have been received across all media and direct contact channels acknowledging the clarity of flood communications and operational efforts of all officers.

Impact

49. Flood events of 4m + are significant for York, however, with a wide range of formal and temporary defences in place many communities were not impacted, approximately 1056 properties were protected during the event.
50. The main areas affected were Kings Staith, Tower Place, Queens Staith, riverside properties in Fulford, Naburn and Acaster Malbis. Properties in these locations were surrounded by flood waters. The vast majority of these properties have been affected in this way in past events and home and business owners have a range of property flood resilience measures in place.
51. Door knocking was carried out in several communities after the Storm Dennis peak to identify any impacts of flooding. However, provided individual property resilience measures proved to be effective it is likely that relatively few properties were directly affected during this event.

52. The impacts would have been greater if the resultant river levels were only 400mm higher, key temporary defence measures in the city would have been overwhelmed.
53. In Fulford the flood resilience measures on the A19 ensured it remained open during the full event, this would have not been possible before the works were completed. Fordlands Road was flooded on three occasions, off road vehicles provided access for residents in accordance with the York Flood Plan via the Yorkshire 4x4 Response volunteers. Road flooding in the Fordlands Crescent area was significant but interventions by CYC operatives and Yorkshire Water prevented property from flooding.
54. City of York Council have worked with the EA and Parish Council to develop an outline scheme that could provide protection for Fordlands Road, Fordlands Crescent and provide further resilience to the A19 measures. Further funding is required to deliver the scheme and options will be raised with the Executive Member in a separate paper.
55. Riverside footpaths and cycleways were severely affected throughout February, many commuters and visitors to the city will have been affected, communications have focussed on this. Public transport and direct vehicle access has been affected through road closures in Skeldergate, Naburn and Acaster Malbis.
56. The western access route to Millennium Bridge was flooded on three occasions during the event. Additional signage and barriers had to be deployed to close the route following reports of people walking and cycling through flood waters to access the bridge. Plans have been developed to raise the access to the bridge to make it more resilient to flooding. The area is to be used as the construction access route to the Environment Agency led flood alleviation scheme in Clementhorpe. The works to raise the access route will follow completion of the EA scheme.
57. Throughout the event messaging has focussed on York being a city that is still open for business. While the direct impact from flooding to many in riverside locations is clearly an issue, the vast majority of the city remained accessible. However, it is likely that visitor numbers reduced because of public perception of flooding in York - this has been observed in past events in the city.
58. Around 60 businesses are thought to have been directly or indirectly affected, many have resilience measures in place but trade may have been affected during this period, Kings Staith businesses, for example, were closed and inaccessible for a considerable period during the event. The Council's Public Protection Team visited all likely affected business properties to discuss impacts.
59. We worked with the West Yorkshire Combined Authority to provide a grant to businesses for flood-incurred damage costs that were not covered by their insurance policy. This funding was intended to enable flood-affected

businesses to replace critical operational equipment (e.g. white goods) and undertake urgent clean-up / repairs to allow trading to continue. Replacement of damaged stock also qualified. The Council worked with Make it York to administer the funding and support eligible businesses through the application process.

60. We also discussed issues with the payment of business rates with flood-affected businesses. Business rates are set nationally by the Government - the Council usually divides businesses' rates bill for the year into 10 instalments, but businesses can request to pay it over 12 months so that they pay slightly less each month.
61. The current programme of flood risk management investment by the Environment Agency includes potential schemes in areas affected during the event. A renewed focus on the need for all schemes to continue at pace has been communicated to all partners.

Recovery

62. A single Assistant Director was assigned as the lead for the recovery process, meetings of key internal officers commenced as river levels began to peak following Storm Jorge.
63. Initial discussions on recovery and clean up commenced after Storm Dennis, however, as further forecasts of continued high river levels were received it became clear that recovery and clean up would not be possible between each peak river level as many areas remained inaccessible.
64. Removal of sandbags, flood signage and pumps was carried out by Highways operatives following the event as was the clean-up of publically accessible areas and car parks. This work is essential to remove significant accumulations of river silts and mud to restore public realm back to an attractive and usable status. Where possible officers assisted in the clear up of private terraces and other areas around affected businesses.
65. A range off flood drop-in sessions was developed to gather information on the impacts of the event and how all partners can work together with communities and businesses to improve future resilience in the city. The events had to be cancelled due to COVID-19 restrictions. It is planned to gather such information through the ongoing consultations for the EA led flood alleviation schemes that cover all parts of the city affected in the February flood event.

Council Plan

66. Improved provision of flood defences supports a prosperous city for all through safer communities for residents, businesses and visitors, a wide range of consultation events will ensure this is in line with the needs and expectations of local communities.

Implications

67. **Financial** – The Environment Agency were awarded £45m following the Boxing Day 2015 floods to be directed towards key flood risk projects in the city. £600k of City of York Funding is available for works in Fulford, further funding is required to develop the scheme to protect Fordlands Road and Crescent. £200k of City of York Council funding has been allocated in 20/21 for improved flood signage and monitoring. The financial cost of the City of York Council response to and recovery from the February floods is c. £180k.
68. **Property** – Some CYC business property affected, working with tenants to resolve any issues.
69. Human Resources (HR) – No implications
- One Planet Council/Equalities – No implications
- Legal – No implications
- Crime and Disorder – No implications
- Information Technology (IT) – No implication

Risk Management

70. All risks are managed through pre-determined flood response plans by all partners, all risks identified during flood response are managed through the formal command and control procedures overseen by all partners and the Local Resilience Forum.

Contact Details

Author:

Steve Wragg

Flood Risk Manager

01904 553401

steve.wragg@york.gov.uk

Chief Officer Responsible for the report:

Neil Ferris

Director of Economy & Place

Report **Date** 17/06/20
Approved

Wards Affected:

All

For further information please contact the author of the report

Background Papers: None

Annexes:

Annex 1 Flood Forecasting Communications Information

Annex 2 Environment Agency Quarterly Update

Flood Forecasting Communications Information

In 2017 the EA successfully piloted the inclusion on the .GOV.UK website of forecast river and sea levels in a small number of communities. These communities found the information useful to help them manage their risk of flooding. One of the river level gauges that has this forecast functionality is Viking Recorder in the centre of York. The pilot is still in a test phase and is gathering feedback to improve the service.

It is recognised that the forecasts shown on the .GOV.UK website differs from the information provided to partners and through media to the public, as well as from the flood alerts and flood warnings issued. This is explained on the .GOV.UK website, and is because the forecasts displayed are the raw model output from the National Flood Forecasting System and do not contain any forecaster adjusted values or commentary. Forecasters have more technical information available and apply their expert judgement. This will sometimes result in a different level forecast to that reflected in the flood warnings.

The .GOV.UK website includes the following statement – forecasts contain uncertainty and can change frequently. For the latest information, always check for up to date flood warnings and alerts in your area.

Environment Agency flood alerts and flood warnings are issued to provide partners and the public the best information we have, and the actions to take. An Alert is not in itself an early warning of property flooding, however does indicate that the risk is increasing so communities should be prepared for the possibility of reaching Flood Warning levels. We try to also balance how we phrase our messaging to ensure that it is meaningful. For a large alert area such as the Upper Ouse, with over 7000 properties in it, not every community will have plans that rely on the gauge at Viking recorder, and it could be a significant distance from them – so we tend to tailor our Flood Warning messages to convey these details. Flood Warnings should be the cue to take action, as these are only issued when we have a good level of confidence that that area will experience property flooding.

The forecast functionality on the gov.uk website is provided to provide additional information. However, these forecast levels are raw data and

may not be the same as those we use in communications with professional partners and the public.

Annex 2- Environment Agency Quarterly Update

York Flood Alleviation Scheme

June 2020

Update for Executive Decision Session

This is an update of the progress made over the last six months on the flood alleviation work in York. In this update we have provided:

1. Summary of city wide flood alleviation activities
2. Next steps
3. Key concerns
4. Programme information table
5. Map of the York Five Year Plan flood cell outlines

1. Summary of city wide flood alleviation activities

The way we work and interact with others has changed significantly since our last update, as it has for people worldwide. Our offices have largely been closed with teams dispersed as we come to terms with working from home. Also, we have temporarily closed our community hub in the centre of York. This however does not mean that work in York and progress on our schemes has stopped. We have put measures in place to allow construction and preparatory work to continue where necessary. We continue to engage with our stakeholders and are reaching out to the local community. We have increased the frequency of our city wide newsletters, we have posted updates to affected residents, we are producing better signage for our sites and we are holding interactive online engagement events. In addition, we are in the process of conducting an overhaul of our webpages. These changes will make viewing this information a more user friendly and a more widely accessible experience.

B4: We have completed our work to raise the height of the North Street flood defence. This includes the replacement of each of the flood gates including a new wider gate to allow better flow for pedestrians into North Street gardens. The gates have been subjected to wet testing which identified a small amount of leakage. Minor adjustments were made to address these leaks. Since then we experienced the wettest February since records began with peak river levels at the Viking recorder reaching 9.47m AOD. During this time the gates performed well with only minimal seepage which remained within tolerable limits. To complete this flood cell

and increase the level of protection to properties in this area we still need to replace the flood gate under Lendal arch which is programmed for this September.

B7: For Skeldergate and Queen's Staith we have instructed Aecom to conduct an Options Appraisal Report. The report is now finalised and informs that PFR is the preferred option for better protecting properties in this area. Due to the implications of the coronavirus pandemic we did face initial delays in communicating with the community and the obvious restrictions on not being able to hold a traditional drop-in event. We have sent invitations out to join us for a virtual online public meeting which will be held via zoom on Thursday 18th June at 1830. There is the opportunity for anyone who wishes to ask a question on slido.com before, during and after the meeting using the event code #k184. Once we have held this meeting and reviewed any feedback we are looking to hold similar events for other areas across the city starting with Museum gardens.

B8: We are pleased with the outcome of the CYC online planning committee meeting where our application to better protect Clementhorpe properties was unanimously approved. We are working with CYC to discharge all the planning conditions this summer in preparation to starting on site this Autumn.

B10: We are investing £13 million of government funding to improve flood defences in the Clifton and Rawcliffe area and better protect 140 properties from flooding. In July 2020 we will start upgrading the Clifton Ings with our contractor BAM Nutall. This work will include raising and extending the barrier bank whilst also widening its footprint to improve stability. This work will take place over two spring/summer seasons. During this time, there will be periods when public access to Rawcliffe Meadows is limited. We have worked with CYC to overcome technical issues including obtaining physical signatures during a time of lockdown. We appreciate how CYC have taken a flexible approach to solving these problems.

B11: Last summer, our contractors started work on raising and extending the existing flood embankment in St Peter's School Fields. This work was paused for the wet winter months and has now restarted. This connects to a flood wall and gates in the gardens of Almerly Terrace which will be raised with glass panels this Summer. During this time, access to the riverside footpath along the Terrace will be restricted and a diversion put in place.

B12: We are proposing to raise the existing flood defences between Scarborough Bridge and Museum Gardens. This will include raising the flood wall and gates in the gardens of Earlsborough Terrace and the Marygate flood wall. We will install demountable panels on top of the detracting flood gate on Marygate and store these in a container attached to the dry side of the wall. We also plan to raise the embankment in Museum Gardens and extend it to meet higher ground. It is inevitable that this will cause disruption to the gardens and some trees and vegetation will need to be removed before we start work on site. We are working closely with York Museums Trust to minimise the impact of construction and agree

a landscape plan for the area. We are aiming to submit a planning application for this work to City of York Council early this summer. If planning permission is granted, we plan to start work on Earlsborough Terrace in Spring 2021, and in Museum Gardens in August 2021.

C1: We submitted our planning application for the Bishopthorpe flood alleviation scheme to City of York Council in December 2019. The CYC planning decision has been delayed, and whilst disappointing, we understand that the planning team need to make sure that all issues are resolved and that residents get an opportunity to comment on the latest plans.

Foss Barrier: Due to the ongoing pandemic, installation of the new gate at the Foss Barrier is likely to be postponed until next year. Meanwhile we are working to ensure that we have enough trained and competent staff to maintain and operate the Foss Barrier once it is fully completed.

St George's Field Car Park: We are in discussions with CYC to establish working relationship to ensure the floodwall raising around St George's Car Park takes place at same time as the multi-story Car Park construction. Jacobs, our contractors, have provided outline drawings of the wall raising and strengthening requirements which have been shared with CYC. Further trial pits are required to understand the underground details of the existing wall and what if any impact this work will have on the car park design.

F4/F5: We are investigating whether it is feasible to create a new channel for Osbaldwick Beck through St Nick's nature reserve. We have completed ground investigations at the reserve and are now in the process of detailed design ahead of submitting a planning application in Autumn this year.

Foss Flood Storage Area: We are planning on investing £14m to construct a flood storage area on the River Foss north-east of Strensall to better protect almost 500 properties from flooding. We have submitted a planning application to City of York Council and Ryedale District Council. We are currently in discussions with Natural England to find a resolution to their objection to our planning application. If we are unable to resolve these issues quickly then due to other constraints, including relocation of Water Voles, the project may suffer up to 12 month delay to starting construction.

PFR: Implementation of our Property Flood Resilience (PFR) scheme in York has not progressed as smoothly as we planned. We have conducted a thorough review of product suitability, costs, maintenance and installation methods. We have developed a Product Directory and a Frequently Asked Questions (FAQ's) document and are providing a monthly progress summary to the residents. Unfortunately, due to the coronavirus outbreak, we had to cancel the demonstration event at a local venue which was designed so that homeowners could view and interact with the products they have been recommended. Instead we have been communicating with our residents through letters, emails, telephone and video calls

to address any concerns or questions and progress the scheme as swiftly as possible.

Next steps

- We are planning on starting work on four additional sites this Summer/Autumn, these are:
 - Clementhorpe (B8) – To reduce the risk of flooding to 148 properties we have planning permission to install a new bi-fold floodgate, build flood walls and embankments, some road raising and an underground cut-off to prevent flood water from bypassing our defences by seeping through the ground. This scheme is estimated to cost £8 million.
 - Clifton and Rawcliffe (B10) - To reduce the risk of flooding to 140 properties we have planning permission to raise the height and extend the embankment whilst also widening its footprint to improve stability and install a new pumping station. This scheme is estimated to cost £12 million.
 - Bishopthorpe (C1) - To reduce the risk of flooding to 117 properties we are proposing to build a new flood wall complete with a flood gate. This scheme is estimated to cost £2 million.
 - Foss Storage Area (F8, F10 and F11) - To reduce the risk of flooding to around 490 properties we are proposing to build a flood storage area. This scheme is estimated to cost £13 million.
- We are developing our Property Flood Resilience process. We are preparing to roll out PFR to other areas of the city, where eligible residents can benefit from up to £7,500 of bespoke measures to better protect their home from flooding.
- We continue to develop our long-term plan which looks at the catchment as a whole. We are investigating what impacts can be had on river flows through the city through upstream storage areas and 'Natural Flood Management'.

2. Key concerns

Clay procurement

We are currently unable to procure the necessary quantity of clay of the right consistency to meet our requirements. Our contractors are pursuing every avenue to source the required materials to proceed with the programme.

Trees

Our tree strategy states that:

- Where possible, we will adapt the design of each scheme to avoid removing trees or minimise the number which need to be removed. This will be our first priority.

- Where removing trees is essential for the completion of flood defence work and cannot be avoided, we will plant replacements. For every tree lost as a result of our work, we will plant five new ones.
- We will, where possible, plant replacement trees on or near to sites of loss.
- We will work with City of York Council, the Woodland Trust and other organisations to find the best sites for tree planting around the city and surrounding areas.
- Where possible, we will choose sites for tree planting that deliver multiple benefits, rather than simply replacing trees felled. Other benefits include maintaining or creating new habitats, linking areas through ecological corridors, and improving the health and wellbeing of local residents.
- We will protect any trees that stand close to our construction sites or routes. We will use specialised protective material to better disperse weight of passing vehicles over tree roots and specialised equipment which is able to delicately expose tree roots that we can then avoid damaging when piling.

Despite this there is raising concern over the number of trees we will unavoidably need to remove and in particular rare species such as the True service tree within Museum Gardens. We are currently investigating all options for Museum Gardens and will be discussing further with partners at our Advisory Group in March with further workshops planned in April with stakeholders.

3. Programme Information Table

Flood Cell	Estimated total cost (£k)	Full Business Case	Planning Permission	Construction Start and est. period	No. of properties better protected
B4 - Scarborough to Ouse Bridge (Right Bank)	2,321	Approved by Large Projects Review Group (LPRG) Apr 2019	Planning application was Approved March 2019	New Lendal Arch gate planned install Sep - Oct	39
B7 - Queen's Staith and Skeldergate	291	Approved by LPRG Apr 2019	Not required	TBC	50
B8 - Clementhorpe South Bank	8,079	Approved by LPRG Jun 2019 Approved by LPRG Aug 2019	Planning application was Approved June 2020	Planned Autumn 2020 12 months	135
B9 - Fulford	CYC to lead on delivery and funding				
B10 - Clifton & Rawcliffe	12,428	Approved by LPRG Jan 2020.	Planning application was Approved Sep 2019	Planned Autumn 2020 2 construction seasons	140
B11 - Coppins Farm to Scarborough Bridge (Left Bank)	3,664	Approved by LPRG May 2019	Planning application was Approved March 2020	July 2019 – ST Peters School field 2 construction seasons	156
B12 - Scarborough Bridge to Lendal Bridge (Left Bank)	1,672	Approved by LPRG May 2019	Planned submission Summer 2020	Planned Jun 2021 3 months	57

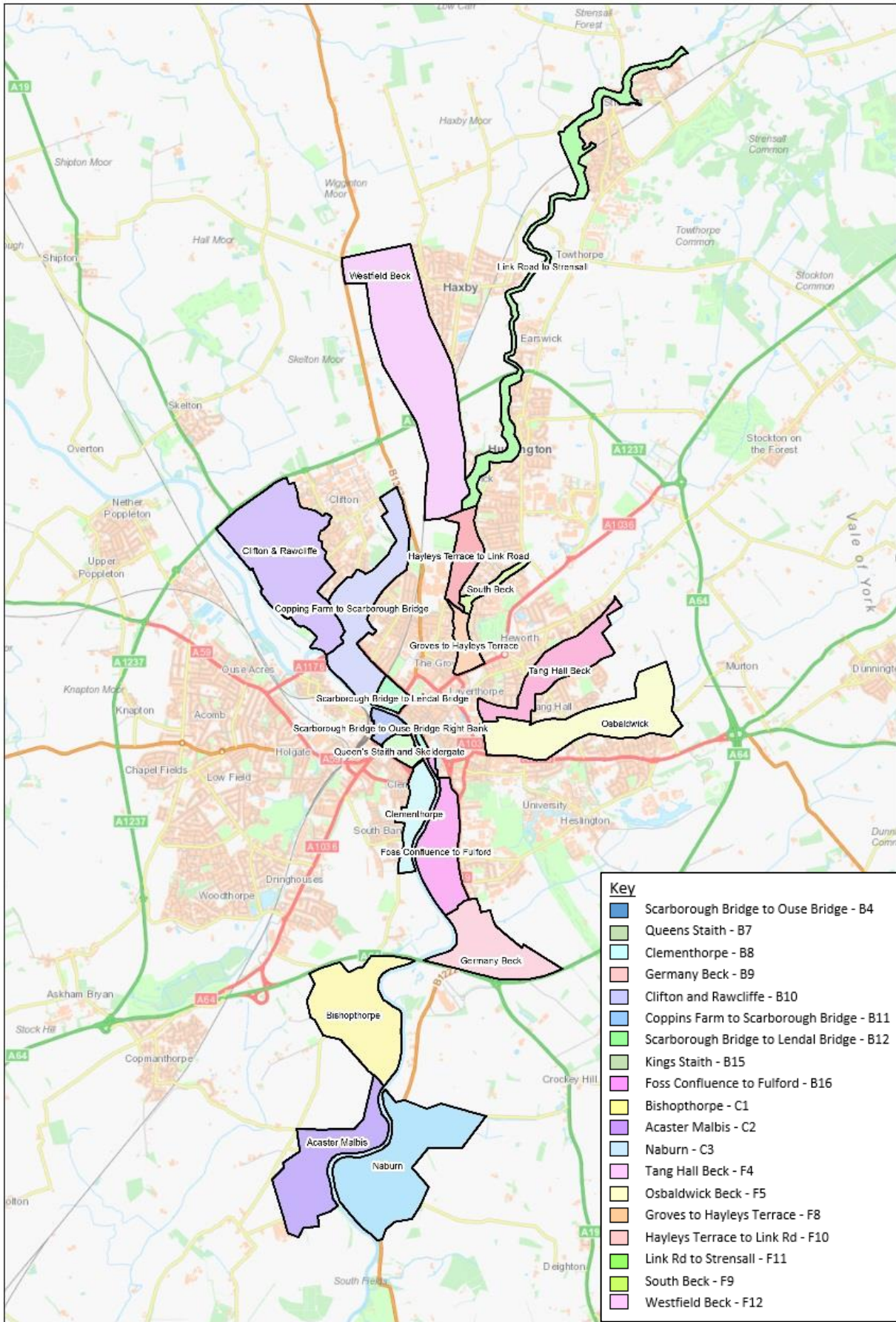
B15 - King's Staith to Skeldergate Bridge	If PFR: 405	If PFR: Approved by LPRG Aug 2019	Not required	If PFR: Property surveys planned 2020 followed by installation	24
B16 - New Walk	750	Approved by LPRG Aug 2019	Not required	Installation start ASAP	55
C1 - Bishopthorpe	2,300	Planned submission Aug 2020	Planning application submitted Dec 2019. Planning Committee TBC	Planned Oct 2020 9 months	117
C2 - Acaster Malbis	226	Approved by LPRG Aug 2019	Not required	TBC	14
C3 - Naburn	627	Approved by LPRG Aug 2019	Not required	TBC	51
F4 - Tang Hall Beck F5 - Osbaldwick Beck	8,200	Planned submission Aug 2020	TBC	Planned Spring 2021	263
F8 - Groves to Haley's Terrace F10 - Haley's Terrace to Link Road F11 - Link Road to Ring Road	13,640	Planned submission Apr 2020	Planning application submitted Dec 2019. Planning Committee TBC both Ryedale and CYC	TBC 18 months	490
F12 - Westfield Beck	3,533	Planned submission April 2021	TBC	TBC	56

Key

Confirmed

Planned/expected

4. Map of the York Five Year Plan Flood Cell Outlines





**Decision Session - Executive Member for
Environment and Climate Change****12 August 2020**

Report of the Director of Economy & Place

Germany Beck Flood Scheme Update**Summary**

1. Significant highway flooding occurred in Fulford during the 2015 flood event, further flooding occurred during February 2020 with flooding of properties avoided through operational interventions.
2. City of York Council (CYC) have taken the lead in the development of a flood alleviation scheme in Fulford as it has the potential to deliver wider benefits than property and business protection alone. Consultants working on the wider Environment Agency (EA) led programme have developed a range of options that would better maintain a dry access to the Fordlands community, protect properties in this location and enhance the existing flood protection works on the A19.
3. The options appraisal report has identified a preferred option that isolates high river levels in the River Ouse from Germany Beck and Tunnel Drain, a pumping station would maintain lower river levels in these watercourse protecting the local roads and properties from flooding.
4. The design, construction and whole life maintenance costs of the preferred solution are £4.9m. £0.3m flood defence grant funding is available if the scheme is approved. Current CYC funding of £0.6m is available for works at this location. It is recommended that some of this funding is used to progress the next stage of project appraisal.
5. £1.5m of wider CYC funding is available to contribute to the delivery of wider benefits from the EA led programme, a significant proportion of this could be targeted to the scheme alongside other available CYC funding, it is recommended that this is considered by the Council Executive.

6. Additional 'booster' funding is available for the EA to deliver the wider flood programme in York, this funding is being considered to support wider CYC funding in the delivery of the project.

Recommendations

7. The Executive Member for the Environment and Climate Change is asked to note the contents of the report, agree to the development of the next stage of appraisal as detailed in paragraphs 31 & 32 and recommend that the funding needs are taken to the Council Executive for further consideration.

Background

8. Following the development and publication of the York Five Year Plan (<https://www.gov.uk/government/publications/york-5-year-flood-plan>) the EA have developed the Defra Strategic Outline Business Case and financial approvals have been sought and obtained from Defra. Detailed businesses cases are being developed for 19 flood cells across the city.
9. The EA continue to work closely with CYC on all aspects of the York Five Year Plan. Due to the multiple benefits that are achievable in the Fulford area, CYC are leading in the development of flood alleviation works of the York programme.
10. The work to date on the Germany Beck Flood Alleviation Scheme has been developed for CYC by Aecom consultants as part of their work across the wider EA programme.

Consultation

11. Public consultation on the potential scheme have been held with members of the parish council on several occasions over the last 18 months, a scheme update and question and answer session was held on the 24th June via Zoom. Views from the local community were considered through the delivery of the flood resilience works on the A19.

Options

12. The principal option open to the Executive Member for Environment and Climate Change is to comment on and review the work undertaken to date, endorse the procurement and development of the detailed design stage of the project and the funding options to deliver the construction phase of the project.

Analysis

13. Flooding in the Fulford area is a consequence of high flood levels on the River Ouse preventing the effective drainage of Germany Beck and its tributary Tunnel Drain. An overview of the way in which flooding occurs is detailed in Annex 1.
14. Flooding of properties in the Fordlands community occurred in 2000 and has been managed through pumping operations in 2012, 2015 and February 2020. This flooding is caused by the inability of Tunnel Drain to flow when flood levels are high in the River Ouse and Germany Beck.
15. Significant road flooding occurs to Fordlands Road in large flood events, 2000, 2012, 2015, 2020 and a number of more minor events have left the Fordlands community isolated by access from motor vehicles often for many days at a time. No properties are affected in this location but residents have to rely on emergency access via boat or 4x4 vehicle during these times severely affecting the community's ability to safely and easily carry out daily commuting and other tasks.
16. The A19 Fulford Road is a major arterial route in and out of the city, the road has flooded with the same frequency as the Fordlands Road flooding causing significant impact on many 1000's of resident, commuter and tourist journeys. A scheme to increase the resilience of the A19 to flooding was delivered by the contractors completing the access road to the Germany Beck housing development. CYC Flood Risk Management engineers worked closely with the developers to ensure an effective scheme could be developed alongside the needs of the access road.
17. A section of walls, berms, flood gates and associated drainage adaptations have delivered a scheme that was able to prevent flooding of the A19 in the February 2020 event.
18. Consultants working on the York flood scheme have developed a detailed assessment of the flooding in the Fulford area supported by flood modelling and hydraulic analysis across a range of flood scenarios and potential options to reduce the impact of future flooding.
19. Like all of the schemes being developed in York the options appraisal report has utilised the national Flood and Coastal Erosion Risk Management – Appraisal Guidance methodology used by flood risk management authorities in England to appraise schemes and allocate funding. The EA have previously carried out a city wide initial assessment of all potential schemes which determined a high level

approach to ensure all schemes fit the needs of the wider funding programme and its evaluation criteria to ensure they technically, environmentally and financially deliver the best outcomes for the city.

20. The need to reduce the impact of flooding to not only property but also Fordlands Road has been strongly factored into the choice of options for a potential scheme. The preferred option outlined in Annex 1 has been developed to ensure that flood flows on the River Ouse are isolated from Germany Beck and Tunnel Drain and a small pumping station will then pass forward any flows in these watercourses maintaining levels that would not endanger housing or reach a high enough level to flood Fordlands Road.
21. In addition to this, the scheme would add further resilience to the A19 works, this solution currently requires additional pumping to manage localised drainage during flood events, the potential scheme would also incorporate this.
22. The report has shown that this option is technically viable and that with close consultation with the community the construction phase and long term physical, visual, heritage and amenity impacts are not significant and that the option could be taken forward to detailed design. All relevant permissions and approvals would be required to ensure the works are designed and delivered appropriately.
23. Defra provides funding via the EA to flood alleviation schemes following the rules of the Partnership Funding calculator. The report has utilised the hydraulic modelling to identify the cost of flooding to properties and infrastructure into the future with an assessment of the impacts of climate change. An assessment has also been made as to the likely costs of construction and future maintenance needs of the preferred option.
24. The funding calculator utilises information on the benefits of flooding that are avoided in future events from the proposed scheme and calculates the funding that could be provided from the agreed national flood funding programme to support the scheme. All schemes receive some allocation of funding based on their effectiveness to deliver flood risk improvements even if 100% funding cannot be justified.
25. The Germany Beck flood scheme will protect 43 properties from current flood risks and the impacts of climate change for the 1 in 100 year flood – or one that has a 1% chance of occurring in any one year, both Fordlands Road and the A19 will be defended from future floods of this level. Whole life costs will be £4.871m.

26. All calculations in the Options Appraisal Report include an assessment of additional cost to reflect the lower level of detail that projects such as this have in the earlier stages of appraisal. Uncertainty and risk of additional costs could arise as more detailed ground investigations, surveys and design of the built infrastructure commence. The additional cost, or optimism bias, is included to cover all likely worst case scenarios that could occur during the delivery of the project – i.e. unforeseen ground conditions that are only understood when more survey information is obtained that could require a more complex, and likely costly, construction method to be used.
27. Treasury guidance is used to assign differing levels of optimism bias across all parts of the project – between 30 and 60% in increased costs at this stage of appraisal – these percentage uplifts are reduced, or removed, as more certainty is achieved through the delivery of further survey or design. This may well lead to a scheme delivery cost that is considerably less than that indicated in paragraph 25, this will be continually reassessed as the project continues.
28. Under the partnership funding calculator the scheme qualifies for £0.329m in direct flood defence grant in aid funding, CYC have allocated £0.5m in funding for works to increase the resilience of Fordlands Road and an additional £0.1m of funding is available as a consequence of the Germany Beck housing planning process to contribute to the works.
29. £1.5m of further funding has been identified by CYC to contribute to the wider flood alleviation schemes across the city, a re-distribution of funding from this allocation is recommended to support the Germany Beck scheme.
30. The funding allocation to the EA flood scheme programme in York consists of direct flood defence grant in aid funding allocated in accordance with the partnership funding calculator and a further element of 'booster' funding provided by Government to manage the impacts of future flooding across the city. Any scheme utilising the booster funding is assessed in accordance with the wider processes detailed in paragraph 19, however, this funding can be targeted based on local need providing all schemes are cost beneficial and deliver the evaluation criterion needs of the cities wider flood programme. At the time of writing booster funding has been allocated across a range of projects but the EA are considering how some of this funding can be targeted towards the Germany Beck scheme.

31. Recent flood events and public consultation sessions have underlined the desire for the scheme to be delivered and preferably within a short timeframe. Although risk still exists over the availability of whole life funding for the project, discussions over the source of possible funding for project delivery are positive. Existing funding could allow the scheme to be developed through to a detailed design and all permissions including planning approval to be sought. The financial uncertainty surrounding the detailed design and construction costs would be better understood and the funding needed for the construction phase of the project would potentially be less than is currently estimated.
32. Estimates of the costs required for the delivery of a fully designed scheme and construction phase delivery plan are currently being sought by the project team and will be reported at the Decision Session.

Council Plan

33. Improved provision of flood defences supports a prosperous city for all through safer communities for residents, businesses and visitors. A wide range of consultation events will ensure this is in line with the needs and expectations of local communities.

Implications

34. **Financial** – Consultants working for CYC have identified £0.33m of funding is available through Defra Partnership Funding allocations, a further £0.6m of CYC funding is available through funding allocated to the protection of Fordlands Road and S106 funding. For appraisal purposes, the whole life costs of the scheme are £4.871m. Additional flood scheme contribution funding of £1.5m is available to support the delivery of wider benefits through the EA led programme. This funding was approved following the budget setting round of the 19/20 financial year.
35. Further 'booster' funding is allocated directly to the EA, the additional funding of £45m allocated to the delivery of improved flood defences in York contains a significant amount of booster funding. This funding has been allocated across a range of projects, the needs of the Germany Beck flood alleviation scheme are being considered for a potential allocation.
36. Costs for the delivery of the detailed design, planning submission and construction phase costs are currently being developed by the project consultants, this is expected to be well within the scope of the existing project finances and will be reported further at the Decision Session.

37. The costs to progress are anticipated to be up to £200k and this can be funded from the £500k Fordlands Road capital budget in the capital programme. There is a potential that as a result of the further work undertaken it would mean that the scheme is ultimately not progressed. If this were the case it would be necessary to class these costs as abortive and written back to revenue. It is likely that the majority of those costs could be offset from contributions and therefore not creating a significant financial liability.
38. **Property** – The preferred pumping station site lies within the boundary of CYC owned land under the management of the Fulford Parish Council. Discussions over the way in which the scheme can be delivered to support all users’ needs for this site will be essential.
39. Human Resources (HR) – No implications
- One Planet Council/Equalities – No implications
- Legal – No implications
- Crime and Disorder – No implications
- Information Technology (IT) – No implication

Risk Management

40. No known risks are identified at this time, detailed risk management work will be developed as the business case and detailed design works commence.

Contact Details

Author:

Steve Wragg
Flood Risk Manager
Highways
01904 553401
steve.wragg@york.gov.uk

Chief Officer Responsible for the report:

Neil Ferris
Director of Economy & Place

Report **Date** 04/08/20
Approved

Wards Affected: Fulford

Background Papers: None

Annexes:

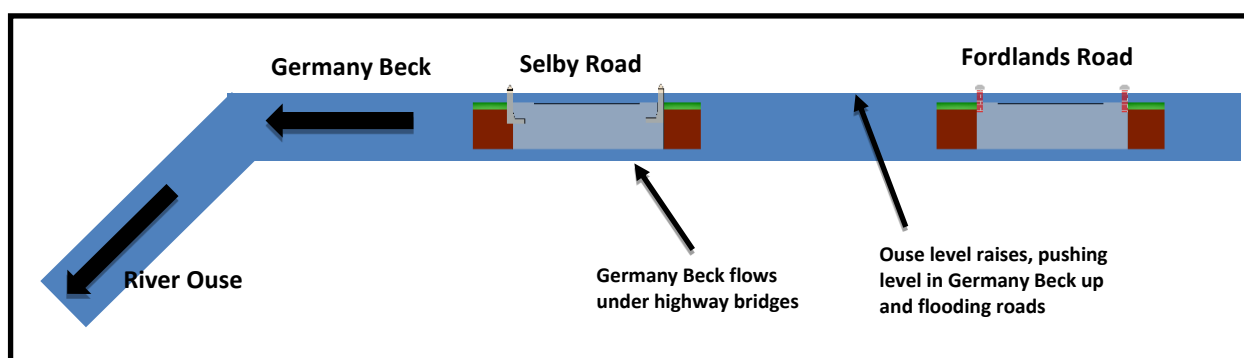
Annex 1 - Germany Beck Flood Alleviation Scheme Overview

Germany Beck Flood Alleviation Scheme Overview

The Fulford area surrounding Germany Beck has historically flooded following significant rainfall. River Ouse flood levels block the drainage from Germany Beck raising levels upstream.

The A19 and Fordlands Road are directly affected during flood events – as seen in 2020, 2015, 2012 and 2000.

The below diagram illustrates the way in which flood levels on Germany Beck affect highways in this location.

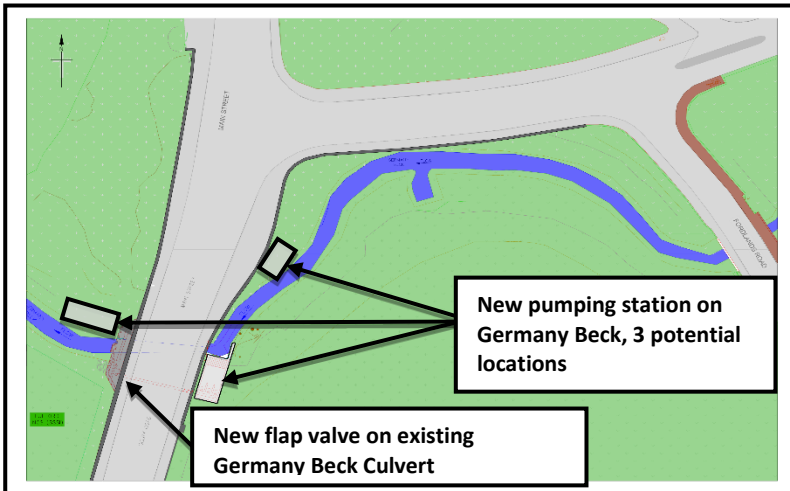


A smaller stream, Tunnel Drain, is piped below the Fordlands Road community and drains into Germany Beck by the Selby Road bridge. Significant rainfall and raised River Ouse and Germany Beck levels can increase the flood risk to a number of properties in the community. Emergency response procedures have been carried out to minimise this risk in a number of flood events, most recently in February 2020.

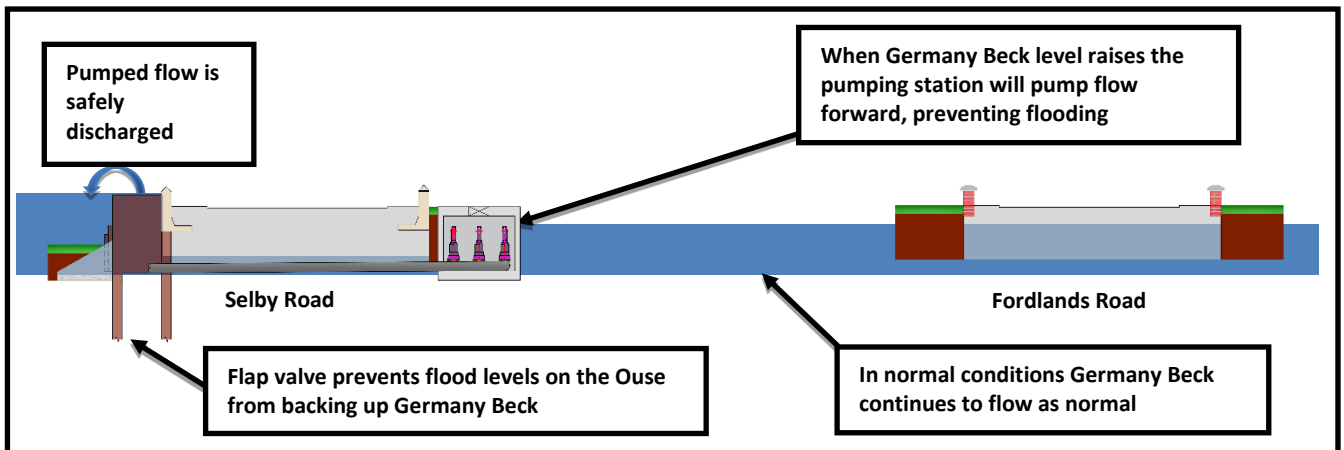
Recent works on the A19 have improved the roads resilience to flooding, this enabled the road to remain open to traffic during the recent flood event. City of York Council have awarded funding to enable similar works to be undertaken on Fordlands Road.

The Environment Agency led flood alleviation works across the city following the Boxing Day 2015 flooding have looked at all parts of the city to assess the current and future flood risk and works are currently being developed in key locations.

Discussions around the wider flood defence programme have identified the possibility to design and deliver a wider scheme to add flood resilience to Fordlands Road, the at risk community it serves as well as reinforcing the existing measures on the A19. Further funding is required to develop and deliver the wider scheme.



CYC have worked with consultants working across the city wide programme of interventions and have a high level design for a pumping station that would allow Germany Beck to drain effectively even when flood levels are high on the River Ouse. Pumping would maintain low levels in the beck and Tunnel Drain as



shown in the below diagram.

Future Work

The project consultants have finalised the Options Appraisal Report that identifies funding needs and options. Work will be required to secure funding and procure the project team for the next stage of the project and, depending on approvals and award of further funding, the detailed design and delivery stages will follow.

The below is provided as an indicative programme. The current working restrictions relating to Covid-19 may influence the programme and consultations. If necessary, it will be revised at a later date:

June 2020	- Finalisation of the Options Appraisal Report
Summer 20	- Procurement and funding options decision
August/Sept	- Consultation with community to feed into business case development
October	- Business case and funding bids
Autumn/Winter	- Detailed design of final scheme, construction methodology and approvals
Spring 2021	- Construction commences, subject to funding

This page is intentionally left blank