

4 April 2019**Agenda Item: 8****REPORT OF THE SERVICE DIRECTOR, PLACE AND COMMUNITIES****UPDATE ON THE SOUTHWELL FLOOD MITIGATION SCHEME****Purpose of the Report**

1. To update Members on the progress made with the Southwell Flood Mitigation Scheme and outline the delivery timetable.

Information

2. Southwell is located in central Nottinghamshire, approximately 10 km west of Newark and is within the district of Newark and Sherwood with a population of approximately 7,000. Southwell has suffered from repeated flooding, which had a devastating effect on the community. Within recent history business and households have been severely disrupted by extensive flooding on the 25th June 2007 and again on the 23rd July 2013, with some 300 properties and businesses reporting internal and external flooding during the 2013 millennium event.
3. Nottinghamshire County Council (NCC) is a Lead Local Flood Authority (LLFA) and has powers and statutory duties to manage and co-ordinate local flood risk management activities. The County Council does this by working together with other organisations including the Environment Agency (EA), who manage flooding from generally larger rivers (known as Main Rivers, such as the River Trent), District, Borough, Parish and Town Councils, The Trent Valley Internal Drainage Board (TVIDB) and infrastructure/ utility providers, such as Severn Trent Water (STW) and the Highways Agency (HA).
4. This partnership work is overseen by a joint Strategic Flood Risk Management Board with Nottingham City Council that meets every six months.
5. Local flood risk means flooding from surface water (overland runoff), groundwater and smaller watercourses (known as Ordinary Watercourses) which in Southwell is primarily the Potwell Dyke.

Flood Investigations and Funding Mechanisms

6. The flooding of Southwell in 2013 led NCC as the LLFA to carry out a detailed investigation into the causes of the flooding and the possible ways of mitigating the risk of flooding to the community. Feasibility concluded in 2016 with a detailed report by AECOM comprising a Flood Study and Technical Appendix. Colleagues in Emergency Planning and Via during this time worked alongside the Southwell Flood Forum on the development of many practical resilience measures including the establishment of a Flood Warden scheme.
7. To take the recommendations of the AECOM report to the next stage, undertaking complex cost benefit analysis, extensive detailed modelling and outline designs to safeguard the

community Jeremy Ben Associates (JBA) were commissioned. This work concluded in December 2017 and was fundamental in supporting the submission of the Business Cases to the EA's Gateway Board, the National Project Approval Board (NPAB). During this time several community drop in sessions were held, presentations were made to community leaders and NCC Officers regularly attended the Southwell Flood Forum meetings.

8. On 24 April 2014 Transport and Highways Committee approved 3 bids to move forward for Flood Defence Grant in Aid funding (FDGiA) from central government, to form part of a 6-year national programme. Southwell was one of these bids and was successfully added to the indicative programme.
9. Subsequently in December 2017 two partnership scheme Business Cases were made to The Department for Environment, Food and Rural Affairs (DEFRA), one for Natural Flood Management (NFM) and the other a more traditional engineering proposal to construct new flood defences across both catchments of the town. NCC successfully negotiated the rigorous Environment Agency NPAB process and in February 2018 secured £4.4 million FDGiA for the engineering scheme and £350k of Local Levy funding for the NFM scheme.
10. As part of securing the FDGiA and Local Levy additional partnership contributions were sought and secured including £600k investment from the County Council £220k from Newark and Sherwood District Council, £120K Southwell Town Council, £25k Southwell Flood Forum, an additional £300k Local Levy for the flood mitigation scheme and £233k Renew and Repair grant community contributions from DEFRA.

Natural Flood Management (NFM)

11. The NFM element of the scheme will work with natural processes and involve techniques that aim to work with natural features and characteristics to manage the sources and pathways of flood waters to reduce flood risk.
12. NFM sustainable techniques can deliver additional benefits alongside flood protection; benefits to the environment, society and the economy. Receiving the level of funding we did for the Southwell NFM Project is rare with many similar projects from other Authorities being unsuccessful.
13. This sustainable approach to flood mitigation is expected to complement the harder engineering approach of the Southwell Flood Alleviation Scheme. Features such as ponds, bunds and trees are utilised to help store, absorb or slow down flood water. This project has provided funding for two Project Officers, one to work with Land Owners in the Rural Catchment to implement NFM and the other to work in the community to help, provide advice and educate on all matters of flood resilience. This builds on existing relationships with Land Owners to help implement more features in targeted areas across the rural catchment.

Scheme Delivery

14. Key Partners in the development, communication, implementation and delivery of the Southwell Flood Mitigation schemes are:
 - The Environment Agency, (EA)
 - Newark and Sherwood District Council, (NSDC)
 - The Southwell Flood Forum, (SFF)
 - Southwell Town Council, (STC)
 - Severn Trent Water, (STW)

- Southwell Minster, (SM)
- The Bramley, (TB)
- Trent Rivers Trust, (TRT)
- National Flood Forum, (NFF)
- Nottingham Trent University, (NTU)
- Via East Midlands Ltd. (Via EM)

15. The project has three specific focuses, firstly NFM elements which see our partners, the TRT, working with land owners in the upper rural catchment of Southwell to identify, design and construct NFM assets. The TRT have engaged with 10 landowners within the catchment. So far, 3 earth bunds, 6 storage ponds, 2 farm track water diversions and 17 leaky barriers have been installed. The project officer has also delivered training to the SFF Flood Wardens to enable them to use telemetric water level data during flood events. In the spring, engagement and negotiation will continue with 2 landowners with an aim to install further bunds and leaky barriers.
16. Secondly Community Flood Resilience measures, our partners the National Flood Forum(NFF) have identified five initial areas initially to progress, with the aim of increasing flood resilience knowledge in the Southwell Community.
17. These comprise of developing initiatives with existing groups and volunteers, such as recruitment, training and practice of road closures, development and application of new monitoring and evaluation tools for Southwell Flood Forum. Riparian Management, working with riparian owners to improve awareness and practical management of watercourses in Southwell. Working with estate agents, and perhaps other property professionals to improve the information and awareness of people moving in to the area. Working with schools to raise awareness of the need to involve people in managing their water and lastly raising awareness through attending events, running workshops and hosting drop in sessions.
18. Close working relations continue between the NFF and the SFF as they work together on raising flood awareness with youth groups in the town. The forums are aiming to work with the different Scout groups in Southwell to develop a 'Flood Awareness' badge with the intention of further developing a Bronze Duke of Edinburgh Award for older age groups.
19. The NFF is currently in talks with Lowes Wong infant and junior schools, as well as Holy Trinity C of E school, about the delivery of workshops to engage with pupils on what causes flooding. These workshops will include learning about the water cycle, making rain gauges, installation of weather stations, using sand boxes to demonstrate how water moves and the use of a Sustainable Drainage System (SUDS) models.
20. As a result of working with the local estate agents in the town, a 'Welcome to Southwell' leaflet has been designed and printed to be handed out to new residents that move into the town. The leaflet introduces the flood risk issues in Southwell in a positive way and provides links for further information and advice. The leaflet has also enabled working with 'Churches Together' to design a similar leaflet that can be included in their Starter Pack given to new residents. The Churches Together leaflet will include similar topics as the Estate Agent leaflet but will also aim to include topics that the Group feel are a priority, such as climate change and how this affects flooding issues in Southwell.
21. An Anniversary display was held last year to mark the fifth year since the major flood and all that had been achieved since the forming of the Southwell Flood Forum. This helped the NFF engage with residents of town and their concerns about flooding. This year a community event is planned for 3rd April. This is to showcase to the community what has been

happening with the FRAMES project during the past year and what projects are proposed for the year to come. Presentations will be given by NFF, TRT, NCC and SFF.

22. The NFF has been working on a project engaging with Riparian Owners, discussing with them what their issues and concerns are with owning a watercourse and helping them understand their 'rights and responsibilities' of watercourse ownership. The NFF held a consultation period throughout January and is continuing this by door-to-door surveying. The aim is to potentially form a volunteer Riparian Owner's Group and hold a Riparian Owners Information Open Day with relevant partners, whereby people can drop in and get some practical and legal advice on watercourse ownership and management.
23. Throughout the rainfall event evaluation and flooding episodes the Lowes Wong School has been highlighted as providing a potential opportunity to improve storage and runoff rates. As part of the 'Slowing the Flow' project an exciting opportunity to retro-fit a SUDS drainage design onto the site serving both the infant and junior schools has been explored. Negotiations have taken a considerable amount of time, resulting in both schools agreeing to the proposals.
24. Via EM have concluded the feasibility and final design for the Lowes Wong scheme is being agreed. In addition to protecting properties affected by flooding from the site we will work with the school to educate the children on this sustainable approach to water management and understanding of the environment. This work will complement a larger engineered flood alleviation scheme for Southwell. NCC are working in partnership with TRT and the NFF which has enabled an additional €163k European funding to be obtained from the FRAMES (Flood Resilient Areas by Multi-layer Safety Approach) project to match fund the successful NCC Local Levy bid.
25. In spring 2018 following the completion of the modelling by JBA for the larger capital scheme, Via EM were commissioned to take the project through design processes to delivery. Since commission Via EM has been working to develop the indicative design through technical feasibility stage. This has required completion of topographical surveys and production of micro drainage to inform the design process. Alongside liaison with land owners and stakeholders. The intention is to deliver three of the five capital schemes in Summer/Autumn 2019/20 and the other two by Summer/Autumn 2020/21 one of which will require planning approval and other statutory approvals July 2018 saw the inaugural meeting of the Southwell Project Board.
26. The function of the Project Board is to make executive decisions to ensure that the project remains on track. Presentations and status reports concerning progress are reviewed against the project plan. key risks and issues are reviewed and resolved, budgetary strategy is approved, benefits are defined and realized, and quality outputs are monitored.
27. Current members of the Board are:
 - Nottinghamshire County Council
 - Via East Midlands Ltd.
 - Environment Agency
 - Severn Trent Water
 - Newark and Sherwood District Council
 - Southwell Flood Forum
 - Trent Valley Internal Drainage Board
 - Southwell Town Council

Property Flood Resilience (PFR)

28. Following the conclusion of the hydraulic modelling for the two catchments of Southwell and the development of the options it became clear that a number of properties remained as showing at being of risk of flooding. For these vulnerable properties individual property level resilience measures are to be explored as the best solution. As a public-sector organisation NCC is able to utilise the Environment Agency's National Property Flood Resilience Framework for its own procurement needs. In December 2018 a new Framework became available and in January 2019 NCC issued an opportunity to tender to specialist contractors under lot 3 on the Framework. NCC are the first Local Authority to have navigated this procurement route for Lot 3 (survey, design and install PFR measures) since the launch of the Framework in December.
29. As the tenderer NCC asked contractors to determine what they considered suitable PFR measures for the 145 properties that had been highlighted by the modelling. It stipulated that the Contractor would be required to undertake independent surveys of each individual property to establish the suitability of the PFR measures, identify flooding routes into the property and propose PFR measures or other solutions to limit the water ingress, thus making the properties more flood resilient. They also are required to provide design management, supervision of other services as required and programme management from initiation to completion of the works ending in December 2019.
30. The Tender stated that the Contractor must undertake all customer engagement, survey, design, installation, and post installation customer service. NCC and Via East Midlands Ltd. will be on hand to attend the drop-in sessions however it is expected that the Contractor will arrange and lead these sessions. The contract on offer states that the first drop in session must be delivered by the end of April 2019. Following an invitation to tender and formal evaluation process further clarification is being sort on the award of the works. The Tender evaluation followed the structure in the framework with a 60/40 price/ quality split. The evaluation process was overseen by NCC Procurement team and signed off by the EA Business Procurement Team. The financial evaluation was a straight forward comparison whilst the quality evaluation was based on bespoke questions written by NCC covering areas such as:
- a. Company structure, ability and experience of staff.
 - b. experience working on similar size projects.
 - c. understanding the complexity of the catchment and variety of property types within it.
 - d. supply chain management.
 - e. Health and Safety management and compliance with CDM regulations.

Community Engagement

30. A Communication Strategy has been agreed between the partners and is assisting in the delivery of the complex elements of this diverse scheme. Having a strong community input and sharing their knowledge, insight and ideas has been invaluable to the development of the mitigation measures and will continue to be so. Social media is being used to provide information and key messages to a wider audience and we are actively looking at the best and ways to deliver messages to the local community and partners. The agreed objectives of the Communications Plan are to:

- Inform stakeholders of the Southwell Flood Alleviation Scheme progress;
- Inform stakeholders of the progress with the NFM scheme;
- Communicate the scheme benefits to all stakeholders at every opportunity to ensure the scheme is widely welcomed;
- Manage stakeholder expectations;
- Gain high interest and attendance at drop in sessions
- Secure positive media coverage with lead stories in the local media and interviews with broadcast media;
- Ensure relevant residents are aware of the information and opportunities available to them;
- Ensure residents are aware of each partners involvement in the scheme;
- To effectively utilise all available NCC and partner communication channels to support the scheme;
- Minimise queries/complaints from residents/ customers.

Summary

31. We have witnessed and have experience of how flooding devastates communities and Southwell has suffered repeated, extensive flooding. The combination of engineering measures, NFM, self-resilience and individual property protection will help safeguard the community from future incidents. The most vulnerable in the community will be our priority. NCC will continue to work closely with Via EM and partners to develop scheme options and keep the lines of communication open to all.

32. The Authority have adopted a multifaceted approach with soft and hard measures to help minimise the risk to the community of Southwell in-line with Nottinghamshire County Councils Flood Risk Management Strategy.

Other Options Considered

33. To do minimum works which would leave the community at a significant risk of future flooding.

34. To commencing alternative procurement and delivery process which would have added a substantial amount of time and moved the project outside the window of opportunity to secure DEFRA funds.

Reason/s for Recommendation/s

35. The recommendations are designed to ensure the most effective route towards identification of a cost-effective flood mitigation proposal is followed.

Statutory and Policy Implications

36. The County Council has a number of statutory duties and powers under the Flood and Water Management Act 2010 and the Flood Risk Regulations 2009 including duties to manage and co-ordinate local flood risk management activities.

37. This report has been compiled after consideration of implications in respect of crime and disorder, data protection and information governance, finance, human resources, human rights, the NHS Constitution (public health services), the public sector equality duty, safeguarding of children and adults at risk, service users, smarter working, sustainability and

the environment and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

Financial Implications

38. The costs of these schemes will be contained within existing budgets and externally secured funds.

Implications for Sustainability and the Environment

39. It is anticipated that the recommendations will ultimately result in delivery of a sustainable projects that reduce flood risk across the county whilst also reducing the negative impacts the flooding has on the environment.

RECOMMENDATION

1) That Members consider whether there are any actions they require in relation to the issues contained within the report.

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Constitutional Comments [CEH 26/02/2019]

40. The recommendation falls within the remit of Communities and Place Committee under its terms of reference.

Financial Comments [GB 26/02/2019]

41. The Southwell Flood Mitigation Schemes were approved into the capital programme as part of the 2019/20 Annual Budget Report to Full Council on 28th February 2019'.

Background Papers and Published Documents

Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.

- None

Electoral Division(s) and Member(s) Affected

- Southwell