

Meeting of:	Cabinet
Date of Meeting:	Monday, 25 January 2021
Relevant Scrutiny Committee:	Environment and Regeneration
Report Title:	Llanmaes Flood Alleviation Scheme
Purpose of Report:	To update Cabinet on progress implementing the Llanmaes flood alleviation scheme and obtain approval of the preferred scheme proposal
Report Owner:	Cabinet Member for Neighbourhood Services and Transport
Responsible Officer:	Miles Punter - Director of Environment and Housing
Elected Member and Officer Consultation:	<p>Accountant Environment and Housing Services</p> <p>Operational Manager, Accountancy</p> <p>Operational Manager, Property</p> <p>Legal Services (Committee Reports)</p> <p>Ward Members: Cllr Edward Williams, Cllr Gwyn John, Cllr Sally Hanks, & Cllr Jayne Norman</p>
Policy Framework:	This report is a matter for Executive decision by Cabinet
<p>Executive Summary:</p> <ul style="list-style-type: none"> • The scheme encompasses engineering works to reduce the risk of flooding to various properties within the village of Llanmaes to the South West of Cowbridge. • An attenuation structure on land South East of the village which forms part of the scheme has already been constructed as part of the Welsh Government's Northern Access Road (NAR) project and is now fully operational. • The Council appointed the Welsh Government's consultant for the NAR to carry out design works and modelling for the Llanmaes Village Flood Risk Management Scheme. The preferred scheme design currently comprises highway works and several flood storage bunds. • The consultant has identified a preferred scheme design comprising of ditches and bunds above the village to hold and convey water away from the village, in conjunction with reprofiling of the highway through the village to convey any residual flows away from properties. Any land impacted will be subject to appropriate negotiations. • Subject to planning approval of the final design and all other necessary consents and permissions it is anticipated that the construction phase will be able to commence in Summer 2021. 	

- Final funding approval is subject to a formal grant application to Welsh Government.

Recommendations

1. That the Cabinet notes the contents of the report and agrees the scheme proposed to deliver the Llanmaes Flood Alleviation Scheme subject to the necessary grant and internal capital funding being available.
2. That delegated authority is granted to the Director of Environment and Housing in consultation with the Cabinet Member for Neighbourhood Services and Transport and the Head of Finance to submit applications for and to accept, the grant funding necessary for this project from Welsh Government.
3. That delegated authority is granted to the Director of Environment and Housing in consultation with the Cabinet Member for Neighbourhood Services and Transport to seek any permissions that may be required in pursuance of the construction project.
4. That subject to the internal capital bid for 15% match funding of the total estimated scheme costs of £1,349k being accepted, the Capital Programme for this scheme be amended accordingly.

Reasons for Recommendations

1. To advise Cabinet of progress on this important project and obtain approval in principle of the proposed scheme aimed at reducing future flood risk in the village of Llanmaes.
2. To enable all the necessary grant funding to be acquired and used as promptly as possible.
3. To assist in ensuring the prompt progress of the scheme.
4. To update the Council's Capital Programme accordingly.

1. Background

- 1.1 The scheme encompasses the village of Llanmaes some 3.5 miles to the South West of Cowbridge. The land slopes from north to south, with the main drainage artery being the small unnamed stream through the village that discharges to the Llanmaes Brook, which runs along the southern boundary of the village.
- 1.2 The surface water catchment has been changed by the historic removal of hedges to create very large open fields for arable use. Surface water runoff therefore discharges quickly from these fields, sometimes into the roadways via gate entries, through hedges, or via footpaths and then into the village causing the flooding.
- 1.3 A Project Appraisal Report (PAR) to identify and develop a preferred scheme option was completed by consultants in 2012. However, a review of the hydraulic modelling identified the need for additional storage capacity and a re-appraisal was undertaken.

- 1.4 A new preferred scheme option was subsequently identified with an attenuation structure on land South East of the village. It was necessary to coordinate the delivery of this scheme with the Welsh Government's Northern Access Road (NAR).
- 1.5 The Council subsequently appointed the Welsh Government's consultant for the NAR to carry out the wider design works and modelling for the Llanmaes Village Flood Risk Management Scheme.
- 1.6 The main attenuation structure and downstream culverts were completed by Welsh Government's contractor and was fully operational by the end of March 2019.
- 1.7 The modelling of the catchment and consultation between the scheme designers and National Resources Wales over the hydraulic modelling was completed early in 2019 which allowed detailed design on the main flood alleviation works in Llanmaes village to commence.

2. Key Issues for Consideration

- 2.1 The Covid-19 pandemic has significantly impacted on progression of the scheme during 2020.
- 2.2 The preferred scheme design within the village currently comprises significant highway works to amend levels, provide road humps and other physical measures to channel and convey flood water safely towards the Llanmaes Brook without detriment to the majority of properties previously affected by flooding. The scheme design also incorporates the provision of several flood storage bunds on third party land to the north and west of the village to capture and store rainfall thereby reducing the surface water flows into the village itself.
- 2.3 The scheme consultant previously identified an "optimisation" of the preferred scheme; adding additional works to divert flows above the village which in turn reduce the highway works required within the village. This "optimisation" also requires an increase in the flood storage capacity to the north of the village and the introduction of a swale feature together with targeted road surfacing to the West of the village to capture rainfall within the land and safely convey it directly towards the Llanmaes Brook.
- 2.4 The increase in flood storage capacity and associated ditch and bund features increased the land take required within third party land above the village. The flood capacity above the village is essential to the success of the final flood alleviation scheme as the works within the village alone cannot reduce risk of flooding to the required 1 in 100 year storm plus climate change standard.
- 2.5 Trial pitting was undertaken in September 2020 along the route of the main features and this in combination with feedback from affected landowners

resulted in realignment of the main ditch and further modifications to the scheme design.

- 2.6** The final proposed extent of the scheme works, including flood bunds and conveyance features to the north and west of the village requiring the negotiation of third party land is as shown on the Llanmaes FAS Proposal Plan at Appendix A. Any land take will be subject to appropriate land values and / or compensation costs to the relevant landowners. Land negotiations commenced in December 2019 with varying levels of engagement from the different landowners. The Covid-19 pandemic significantly impacted on liaison with the landowners further delaying progress. Cooke & Arkwright were appointed as land agents in December 2020 to progress landowner negotiations.
- 2.7** Full construction details were supplied to the Council by the scheme designer in December 2020 and these will be reviewed internally prior to issuing of the final detailed design work package in January 2021. Revised construction cost estimates have also been submitted and are also currently under review.
- 2.8** Planning approval is required for the scheme and NRW has advised that it will comment on the final design as a planning consultee. Subject to obtaining planning approval, progressing and resolving land take requirements as well as obtaining all other necessary consents and permissions it is anticipated that the construction phase for works within and above the village will be able to commence in Summer 2021, as per the programme in Appendix B. It is hoped that the land acquisitions can be agreed on a negotiated basis, but in the event that this is not possible a further report will be brought requesting authority to proceed to acquire the land via Compulsory Purchase Order which will have an impact on the commencement and delivery of the scheme.
- 2.9** Final funding approval for the construction phase works are subject to a formal grant application to Welsh Government. A capital bid has been submitted for the 15% match funding that the Council would need to fund.

3. How do proposals evidence the Five Ways of Working and contribute to our Well-being Objectives?

- 3.1** The proposals in this report will enable the Council to continue to work towards the Well-being Outcome W02, An Environmentally Responsible and Prosperous Wales and in particular contribute towards the Council's objective O4 of promoting sustainable development and protecting our environment.
- 3.2** The implementation of flood alleviation schemes contributes to the prevention agenda by reducing the likelihood of flooding incidents in specific locations / properties and reducing risk of harm to residents. It also balances short-term needs to provide immediate protection to life and property whilst contributing to the longer term well-being of individuals and families within a community.

- 3.3** The scheme outlined in this report evidences the Well-being of Future Generations Act and its Five Ways of Working by ensuring that through good design and prioritising resources life in the Vale is improved over the longer term for residents and visitors to the area. The preventative treatments proposed assist in reducing flooding risk are designed not to cause detriment to others.
- 3.4** The process of developing this scheme has involved communication with the local community and other stakeholders such as National Resources Wales delivering on the involvement agenda.
- 3.5** The Well-being objectives identified above are considered to be fully compatible with the Council's corporate well-being goals and objectives contributing towards health and well-being of all members of society and playing a fundamental role protecting and enhancing the natural and built environment.

4. Resources and Legal Considerations

Financial

- 4.1** The Welsh Government has already grant funded 85% of the construction costs for the main flood storage area constructed as part of the NAR scheme.
- 4.2** The budget for the detailed design is provided by Welsh Government grant with 15% match funding from the Council's capital funds. The total approved grant funding for this element of the scheme is £293,264 with 15% match funding from the council which is £51,752 so a total approved budget of £345,016. Variation orders are in preparation for submission to Welsh Government for the remainder of the design and development phase of the expenditure to date, £109,890.23 has been towards the design work undertaken by AECOM. A further £81,623 consultancy input to the design and development phase, completing the detailed design construction pack, obtaining planning approval and procuring the construction phase, will be required from AECOM with £21,100.37 work currently being certified.
- 4.3** Any land acquisition or compensation payable to secure access to land will be subject to confirming approval from Welsh Government of 85% grant funding for this element of the scheme, and 15% match funding will be required (this is included in the capital bid mentioned below).
- 4.4** Funding for the construction phase works are subject to a future grant application to Welsh Government upon completion of procurement phase. A bid for 15% match funding internal capital monies was submitted in November 2020, based on a total estimated construction phase cost of £1,349k.

Employment

- 4.5** Consultants have been commissioned to undertake the design works and modelling on this project because either the technical skills required to do this work are not available or the resource is not available at the appropriate time within the Council.
- 4.6** The project management of this flood alleviation scheme is currently being carried out in-house by existing professional staff within the Environment team in Neighbourhood Services & Transport. This will be reviewed at construction phase.
- 4.7** Consultants have been commissioned to undertake the design works and modelling on this project because either the technical skills required to do this work are not available or the resource is not available at the appropriate time within the Council.
- 4.8** The project management of this flood alleviation scheme is currently being carried out in-house by existing professional staff within the Environment team in Neighbourhood Services & Transport. This will be reviewed at construction phase.
- 4.9** Specialist advice in terms of land negotiation and acquisition will be obtained from the professional staff in the Council's Estates team. External land agents have been commissioned by Estates to assist with the landowner negotiations to ensure that the Welsh Government and Council fiduciary requirements under section 123 of the Local Government Act 1972 are met.

Legal (Including Equalities)

- 4.10** The Council will be required to ensure that it there is compliance with all terms and conditions attached to WG grant funding.
- 4.11** The Llanmaes Brook is designated a main river and therefore, NRW is the body with jurisdiction to carry out and manage flood defence and drainage works on this watercourse. By virtue of section 165(5) of the Water Resources Act 1991, NRW may enter into an agreement with the Council authorising it to undertake works to a main river. At this time, it is not anticipated that works on main river will be required.
- 4.12** The Environment team will continue to liaise with the Council's Legal team on all legal matters.
- 4.13** It will be necessary for the Monitoring Officer/Head of Legal and Democratic Services to execute all documents necessary to complete the acquisition of the land in accordance with delegated authority obtained in Cabinet Minute number C92 dated 19th September 2019, at the appropriate time.

5. Background Papers

None.

Appendix A – Scheme design proposals



