

**Debenham flood risk management project & River Deben holistic water management “two stage channel” meeting minutes**

Thursday 28<sup>th</sup> August 2014

11am Debenham Community Centre, Gracechurch Street, Debenham

Present: Will Todd (WT) Paul Hunt (PH) Jane Burch (JB) Lady Deben (LD) Mrs V Lanchester (VL) Mr D Saddler-Bridge (DSB), Mr B Trafford (BT)

Apologies: Mr J Lawes, Mr L Stannard & Lord Deben

Actions are highlighted in yellow

**1. Welcome, introductions & apologies**

**2. Background to Debenham flood risk management project and Deben holistic water management project.** WT explained that the Debenham FRMP is a Suffolk Flood Risk Management Partnership project being led by SCC and EA. The village suffered in numerous historic floods. Central to the project has been improving our current understanding of flood risk in the village. We have been provided with very useful historical information and photos. Generally the extent of the flood risk area has increased throughout the village. The November 2013 public event was held to review early ideas. The preferred method of reducing risk based on feedback was the concept of storing water upstream of the village in times of flood, with the second preference being the creation a two stage channel downstream of the village to remove flood waters more quickly.

JB provided an overview of the Deben Holistic Water Management Project – covering water resources, environmental considerations and flood risk. The Debenham project is just one part of the wider catchment wide approach.

**3. Summary of the “two stage channel” concept.** The attached/enclosed diagram was discussed. WT explained that the concept would be to create a two stage channel – the current channel would take day to day flows, with a larger area of floodplain/channel to take flood flows. This idea has not been considered in any detail, as we only looking at the concepts at present and we want to seek views of landowners.

We have modelled a 12.5 channel either side of the centre of the river, from where the Deben and Cherry Tree watercourse join, to the downstream weir. This results in approximately a 44 cm reduction in flood levels in Low Road in a 1 in 20 year return period flood event (similar scale to the 1993 event).

This would reduce the flood risk to approximately 18 properties.

We would need to ensure the downstream flood risk is not increased as a result of any proposal. Early modelling suggests the peak flood level is reduced at Fen Street and there is plenty of natural floodplain storage further downstream to A1120.

This concept would also enable us to undertake environmental enhancement through the creation of in channel habitat and re-connection of the floodplain.

This would require over 20,000 cubic metres of material to be excavated and removed. A large proportion of the total earthwork costs would be to remove the subsoil and it would be much more cost effective if the soil could be re-used or sold to reduce costs.

#### **4. Discussions over two stage channel concept**

DSB raised the question of whether existing outfalls have been considered. BT mentioned the pipe under Thorpe Lane that discharges into the river. WT confirmed that at present we are only considering the concepts, but if plans were to progress with a two stage channel, outfalls would certainly need to be taken into account.

LD asked if the two stage channel would provide benefits to the north of the village. WT confirmed that it would only provide benefits to the southern part of the village, particularly the Low Road area. Other ideas such as upstream storage would offer benefits to the north of the village.

WT Confirmed that other ideas for reducing the flood risk in the village had been considered, but when modelled, had limited benefit or even worsened the flood risk.

LD asked if there have been other examples of a two stage channel, and photos of other similar projects would be very useful. PH confirmed that there are examples, but they can't be used in every location. **Paul – please can you find an example of a similar project we can send out with the draft minutes?**

JB Raised the point of how recent rainfall events have shown how it is important to have resilience in communities given the potential impacts of a changing climate.

VL raised concerns over bank erosion on her land and the fact she is losing land. JB confirmed that rivers will naturally want to erode but the two stage channel idea could allow water to spread out in higher flows.

BT suggested that ideally water should be stored upstream of the village. DSB confirmed that the river is normally dry for up to 8 months of the year. WT confirmed that one of the other ideas being looked into was the storage of water upstream. This could provide flood risk benefit through the whole village.

WT confirmed that under the Water Resources Act 1991, the Environment Agency is obliged to pay compensation to landowners for loss or damage to land and property that is directly caused by our works. The amount of compensation would be a matter for negotiation and would depend on the type of scheme involved.

WT asked if the land between the confluence of the two rivers and the downstream weir was currently used for grazing. This was confirmed. WT suggested that the wider channel created by the two stage channel could still be used for grazing, apart from when the river was in flood.

VL raised concerns that water flows from the land above Thorpe road onto the road and through road gullies onto her land and stables before entering the river. JB confirmed that if a two stage channel concept were to progress this could be an issue that is investigated further.

VL raised concerns that maintenance of the river channel was better in the past. WT confirmed that there is currently clearance work carried out twice a year in the village where there is greatest risk to people and property.

DSB asked whether in the Cross Green area consideration had been given to lowering the banks of the river. WT confirmed that this had been investigated as part of the modelling work. The removal of the natural embankments encircling the Cross Green floodplain allowed water from the Cherry Tree watercourse to enter the floodplain earlier, but resulted in lost floodplain storage as the River Deben flood wave propagated downstream and increased flooding as a result. This proposal was therefore not considered further.

#### **5. Have we identified the correct land owners?**

A map was circulated to those present to mark on their land ownership (copy attached/enclosed). The owner of a parcel of land to the west of Mrs Lanchester's and east of Mr & Mrs Trafford's was not known. VL will look at her documents and confirm the extent of her ownership.

Post meeting comment: If any of the group can recall the owner of the parcel of land, please let Will Todd know.

Please can i ask Mr Lawes and Mr & Mrs Durrell to confirm if i have correctly identified you land on this map?

DSB questioned if the area was still covered by the River Deben Internal Drainage Board. Following the meeting we can confirm that the River Deben up to the Cross Green area is within the East Suffolk Internal Drainage Board district, administered by the Water Management Alliance.

#### **6. Discussion around the two weirs in the channel**

WT explained that the removal of the weirs would only have small flood risk benefits, although they could have the ability to trap debris in flood conditions which may increase risk locally. However, there could be wider environmental benefits from their removal, including the ability for in-channel migration of species, as well as restoring the natural sediment regime.

VL confirmed the weirs had not been altered for approximately 20 years. There was a discussion over their original use, but this still appears to be a mystery. There was a discussion over ownership and it is likely that the riparian land owners own to the middle of the channel, therefore each riparian landowner is likely to own half of each weir.

JB asked if there were concerns over the removal of the weirs. There were no major concerns however it was agreed that it would be good to try and identify the original use for the weirs if possible. BT suggested that David Rose (Kenton) may have historical knowledge. **BT kindly offered to investigate this further.**

## **7. Any other business**

BT questioned why a 12.5m channel either side of the centre of the river has been considered. WT confirmed that this width is a starting point and has not been optimised to provide the greatest benefit, both in terms of flood risk and geomorphology. If progress were to be made with the “two stage channel” concept, other dimensions would be investigated.

PH re-iterated that spoil removal would be a large cost, so consideration of potential ways to re-use the material locally would be beneficial. Are there any farmers locally that would benefit from the soil?

DSB enquired about timings for funding. JB confirmed that the costs have been estimated and a bid put forward for funding in the next 6 years. The Government will provide a certain amount of funding however it will need to be supplemented by funding from other sources. This Partnership Funding approach means more schemes can progress if local funding is available. We therefore want to work with communities and partners to develop schemes that include funding from local sources.

WT confirmed we are starting to investigate potential sources of funding and the cost/benefit of a number of ways of reducing the flood risk in the village. At this stage there is no guarantee that the two stage channel option or indeed any other option would progress, or when any proposal that could be progressed can be delivered.

PH confirmed that contributions could include benefits-in-kind i.e. spoil storage or removal.

WT confirmed that the project would look to provide environmental enhancement through the creation of habitat and re-connection of the floodplain.

LD Raised concern over the future maintenance of a two stage channel. PH confirmed that the creation of wider banks could make access for maintenance easier, but the long term maintenance would certainly need to be considered in detail if any such proposal were to progress.

WT Thanked all for attending and their input. He confirmed draft minutes will be circulated by email and in hard copy.

Attached: "Two stage channel" concept diagram

Photos of upstream and downstream weirs

Land ownership map

Draft for comment