

**ST IVES, HEMINGFORDS AND FENTANTON
FLOOD ALLEVIATION SCHEME**

(Report by Head of Environment & Transport)

1. INTRODUCTION

- 1.1 Following the floods in Hemingford Grey in 1998 and 2001, the Environment Agency (the Agency) have completed a study into the possibility of improving the flood defences to this area.
- 1.2 The draft of this report has now been prepared and it has raised issues potentially outside of the Agency's remit where they are seeking support from the District Council.

2. RESULTS OF THE AGENCY'S STUDY:

- 2.1 The study showed that the present flood bank to the north of Hemingford has a defence standard of less than 1 in 20 years and that some 400 homes were at risk of flooding south of the river.
- 2.2 The Greenfields area of Fenstanton was shown to be at risk of flooding floods below the 1: 100 year return period standard.
- 2.3 The Victoria Terrace area floods due to combination of overtopping of the flood-bank, poor surface water drainage and high ground water table levels. The surface water cannot drain away at times of river flooding as it is below the river level and has to wait until river levels return to normal. A substantial number of properties in this area were flooded in 1998 and have been threatened in more recent flood events.
- 2.4 In addition, the study identified the potential risk to St Ives associated with any increase in river level. Some 900 properties are potentially at risk of flooding north of the river.

3. AGENCY PROPOSALS

- 3.1 The Agency propose to improve the existing flood bank to the south of the river in the vicinity of Hemingford to give a 1 in 100 years standard of protection. This flood bank will be extended to the east of Hemingford to protect the London Road area (of St Ives) and down to Greenfields. This will ensure that properties at all three locations are protected to the 1 in 100 years standard. These proposals are outlined in the plan (Annex A) accompanying this report.
- 3.2 Proposals for increasing the protection to St Ives by constructing defences north of the river also have been developed by the Agency.
- 3.3 Overall the scheme is estimated by the Agency to cost in the order of £4 millions and will protect some 1,300 homes. In view of the number of homes protected the scheme would qualify for grant support from central

government. Such government support is now allocated as an annual block grant to the Agency rather than on a scheme-by-scheme basis so it is not possible at this time to establish the level of grant funding that will be allocated to the scheme.

- 3.4 A feature of the scheme to the south of the river is a pumping station intended specifically to remove surface water and ground water infiltration from behind the improved flood bank. This would reduce the risk of flooding to the homes within the banks.
- 3.3 This pumping station would be located on land adjacent to Hemingford Road near Victoria Terrace. A better land drainage system would be provided around Victoria Terrace to get the flows to the pumping station and improvements would be needed to modify the land drainage system from the Greenfields area to also drain to the station.
- 3.4 The Agency have included the cost of the pumping station within the overall flood alleviation scheme. The cost of the pumping station and associated pumping main will be in the region of £400k but is understood not to be eligible for the grant funding referred to in paragraph 3.3 above.

4. FUNDING AND OPERATION OF THE PUMPING STATION

- 4.1 Although the Agency consider that it is sensible to include the pumping station within the proposed works for the St Ives and Hemingford Flood Alleviation Study, because the station's primary function is dealing with surface water, they are of the opinion that the future ownership, operation and maintenance should lie with the District Council.
- 4.2 In addition the Agency are seeking a 50% contribution towards the capital cost of this work from the District Council. As Anglian Water may also benefit from this new drainage arrangement, they could also be asked to contribute. This could make it a three way split.
- 4.3 As the water is mainly run off from fields in the catchment with only part from building or roads, it could be considered that the main flows are land drainage and not surface water. In this case it could be argued that the responsibility should remain with the Agency. The Agency also have experience of running land drainage pumps and have the necessary manpower.
- 4.4 The County Council could also be approached for a contribution as the high water levels result in the flooded and closure of public highways.

5. CONCLUSIONS

- 5.1 The Agency intend to improve the flood defences to keep the river flows out of the Hemingford area but the water that collects behind the defences could still cause flooding of the Victoria Terrace and Greenfields areas.
- 5.2 A pumping station is required to ensure that the protected areas do not flood. This will cost in the region of £400k. The Agency consider that this should be funded jointly by the Agency and this Council, with a possible contribution from Anglian Water. They also consider that the

station should become the ongoing responsibility of the Council, as it is taking mainly surface water.

- 5.3 It is clear that the pumping station is an essential component of the scheme to protect Victoria Terrace and Greefields. However, the risk arises as a consequence of flood flows in the main river, the responsibility of the Environment Agency, albeit that it is land drainage and surface water within the protected area that needs to be pumped.

6. RECOMMENDATION AND VIEWS SOUGHT

6.1 It is recommended that Cabinet:

- i) welcomes the proposed the flood defence work at the Hemingfords and St Ives;
- ii) notes the requirement for a pumping station to protect the properties in the Hemingfords; and

6.2 Cabinet's view are sought on the request from the Environment Agency in respect of –


- (a) a contribution of up to 50% of the £400k capital cost of pumping station at Victoria Terrace; and
- (b) the District Council assuming responsibility for the ongoing operation and maintenance of the pumping station.

BACKGROUND INFORMATION:

Letter from Environment Agency
Environment Agency Report

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ANNEX A: ENVIRONMENT AGENCY PROPOSALS SOUTH OF RIVER GREAT OUSE AT HEMINGFORDS

