

**Construction and Maintenance Work Programme
Progress Report**
Report by Head of Construction and Maintenance

Summary: This report sets out the progress made in the delivery of the 2012/13 Construction and Maintenance Work Programme to date and updates members on changes to the programme.

1 Construction and Maintenance Programme 2012/13: Progress

- 1.1 The progress of the Construction and Maintenance work programme is described in this report. As agreed with members, a further detailed breakdown shows that up to the end of October 2012, 22,357 m³ of sediment has been removed from the Rivers and Broads, and the details of quantities and costs achieved so far are set out in Appendix 1. This represents 45% of the programmed target of 50,000m³.
- 1.2 Since the last committee report of 11 October 2012, work has continued on the Lower Bure. We have concentrated on removing large shoals, on bends between Mautby and the upstream end of the Bure Loop. Good volumes have been removed with 21,116m³ of sediment removed and placed into setback areas at Scaregap and Six Mile House.
- 1.3 Work has now started on the River Chet, between Hardley Flood and Nogdam End. This work is concentrating on the dredging within the middle of the channel to maintain navigation. We are still awaiting the final proposal for the flood defence solution along this section and until this is carried out we are unable to conduct a full scale dredging programme. We have reached agreement with a local landowner and the sediment is being sidecast onto the river bank. This has allowed us to deploy the surplus resource (sidecasting does not need the wherry or tug support) to assist with mobilisation of equipment for the mudpumping at Heigham Sound and will give us resource to carry out the additional piling work at Breydon towards the end of this winter.
- 1.4 Contractors have been carrying out the much needed works to the cardinal marker and channel markers on Breydon Water. The 'crooked' Cardinal marker has been replaced and the old one cut away, using divers, at bed level. Whilst the dive team was working on this marker post, additional, fully submerged posts were located. These posts, totalling three in number, have also been cut off at bed level. In addition to the cardinal marker the contractors have also installed extra channel markers to prevent vessels cutting the corner at the entrance to the lower Bure. These improvements

represented the highest priority works needed at Breydon. We will now start to plan the other works needed, paying attention to Dolphin removal and placement of de-masting mooring.

- 1.5 Island strengthening at Salhouse Broad has been progressing well with over a 1,000m³ of sediment being pumped into geo-textile tubes by the end of October, to form a retaining wall. The void created will now be filled to re-create reeded swamp and giving protection to the ties holding the moorings on the Bure side. This scheme is being funded by the Prisma project and has seen this innovative design created using a Dutch company called Beesk.

2 Maintenance Teams

- 2.1 Maintenance teams have continued to work to priorities set in the works programme and a selection of some of the projects they have been involved with are described within this report.
- 2.2 Hoveton Viaduct Mooring has had new safety ladders and safety chains fitted as well as a new information sign board.
- 2.3 Ranworth car park has new posts and rails fitted to the fencing and Ranworth marshes has seen trees removed.
- 2.4 Postwick 24 hour mooring has had a complete path upgrade, rotten capping replaced and new notice boards and new mooring signs installed.
- 2.5 Phase 1 of St Benets car park and footpath works is nearing completion with maintenance staff demobilising from site over the next week. This phase of the project has been a marked success and made excellent use of volunteers to help complete the works.

3 Dockyard Development

- 3.1 The development works, to build a new workshop with office accommodation above, is going well with the slipway refurbishment nearing completion and the foundations and floor slab in an advanced stage. The aim is to be out of the ground by late December to prevent any possible cold and frosty weather hindering construction.

4 Prisma

- 4.1 In the third week of November, officers attended the forth Prisma Project Partners meeting in Antwerp. Hosted by Waterway and Sea Canal, This three day visit had one day of progress reporting, where Prisma Project presentations were given to allow for partners to be updated on works being carried out. The Broads Authority had already presented the work at Duck Broad, so concentrated on the progress of the island strengthening at Salhouse. We also had very interesting site visit to Vollenbroek (the word means swamp) where Waterway and Sea Canal are reusing dredged

sediment from the River Scheldt to create a impermeable flood wall separating two wildlife zones, as part of the Sigma Flood defence plan. The third day was dedicated to a technical day where guest presenters offered other sediment re-use opportunities or techniques. It was a worthwhile three days, with the next meeting taking place in Rotterdam during the spring of 2013.

Background papers: Nil

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Appendices: APPENDIX 1 – Dredging progress April to October 2012/13

Dredging Progress April to October 2012/2013

APPENDIX 1

Project Title	Project Element	Active dredging duration (weeks) Actual Apr-Oct/ Planned	Volume Removed m ³		Actual project cost ¹ £ (Apr-Oct 2012)	Planned dredge cost (£ per m ³)	Planned annual project cost ¹ £
			Planned 2012-13	Actual (Apr-Oct 2012)			
Heigham Sound	Navigation Channel	0/20	12,000	0	73,969	12.50	150,000
<i>Comments – mudpumping due to start week beginning 26th November, 10,000m³ to setback, 2,000m³ to baskets</i>							
Lower Bure	Continuation from 2011/12 programme	25/24	20,000	21,343	171,716	6.95	139,000
<i>Comments – arisings into setbacks at Scaregap Farm & Six Mile House completed</i>							
Middle Bure	Island Strengthening at Salhouse Broad	4/18	12,000	1,014	45,766	16.66	200,000
<i>Comments – Started first week of October, Geotextile bags filled by mid November</i>							
River Chet	Hardley Flood to Nogdam End	0/12	6,000	0	1,110	(6.33)	115,600 (Revised to 38,000) ²
<i>Comments – Started first week of November, sediment being placed on foldings</i>							
TOTAL			50,000	22,357	292,561		527,000

¹ – total project costs includes staff time, BA plant time and budgetary expenditure

² – bankside disposal of arisings has reduced project costs significantly (1 crane, 1 tug and 2 staff plus £7,000 costs)