

**Broadland Flood Alleviation Project:
Planning Application for Flood Defence Works in
Compartment 17 – Postwick Marshes**
Report by Senior Waterways and Recreation Officer

Summary: This report provides members with a summary of Broadland Environmental Services Ltd (BESLs) planning application proposals for Compartment 17 (Postwick Marshes) on the true left bank of the River Yare between Postwick Grove and Ferry Lane Postwick immediately adjacent to the Broads Authority's 24-hour mooring at Postwick Wharf. The report also outlines officers' comment on the planning application upon which Members' comments are welcomed.

1 Background

- 1.1 Compartment 17 is located on the true left bank of the River Yare between the Postwick Grove and Ferry Lane Postwick which is immediately adjacent to the Broads Authority's 24-hour mooring at Postwick Wharf. Land in the compartment is protected by earth floodbank defences, concrete floodwalls and short lengths of steel sheet piling which provide erosion protection.
- 1.2 A planning application for flood defence works in Compartment 17 was submitted by the Environment agency in 2008 which proposed major flood defence works along the complete length of Compartment 17. This application was withdrawn as Natural England was uncertain about how the proposed works might impact on the undefended Yare Broads and Marshes SSSI which is situated upstream of Rockland Dyke. NE required the Broadland Flood Alleviation Project to carry out study work to assess how flood defence works would affect water levels and flooding patterns in the Yare Valley.
- 1.3 Since 2008 a number of emergency repair schemes have been carried out in the compartment to protect vulnerable banks. This work, which included the installation of plastic crest piling in the centre of the compartment to reduce the risk of catastrophic floodbank breach, did not provide a long term sustainable solution for the defence of Postwick Marshes.
- 1.4 BESL has recently carried out further surveys of the flood defences in Compartment 17 and has concluded that there is a need to carry out further works in the Compartment.

2 BESL's Planning Application for Compartment 19

- 3.1 BESL's proposals for Compartment 17 involve 317m of floodbank strengthening, 515m of floodbank rollback, 55m of work raising a concrete

wall and 440m of gabion basket installation. The location of these works is shown on the plans at Appendix 1.

- 3.2 The strengthening works amount to crest raising and widening of the existing bank and placement of material on its rear face. These works will have no impact on the navigation and will reduce the risk of the bank breaching during flood events.
- 3.3 Floodbank rollback will take place in the area of the previously installed crest piling and will involve the construction of a new bank on a slightly different alignment. These works accord with the standard flood defence solutions used by BESL elsewhere in the BFAP area and present officers with no concerns provided that appropriate conditions are placed on any planning permission granted requiring channel marking if necessary and erosion monitoring.
- 3.4 The installation of the proposed gabion basket does have the potential to impact on the navigation and while officers accept the proposed solution is appropriate it is suggested that a condition be placed on any planning permission granted for the scheme requiring appropriate channel marking to be installed to ensure that navigators are aware of the baskets. Additionally officers would recommend that a condition requiring the detail of the gabion design, including the height that they are set at and how they are filled should be placed on any planning permission granted.

4 Summary of Officers' Comments

- 4.1 Officers are confident that the floodbank works proposed by BESL will have minimal impact on the navigation. Officers therefore propose to raise no objections to the works set out in the planning application but to recommend that BESL be required to agree the details of the proposed gabion baskets, any channel marking required and erosion monitoring by planning condition.

5 Conclusions

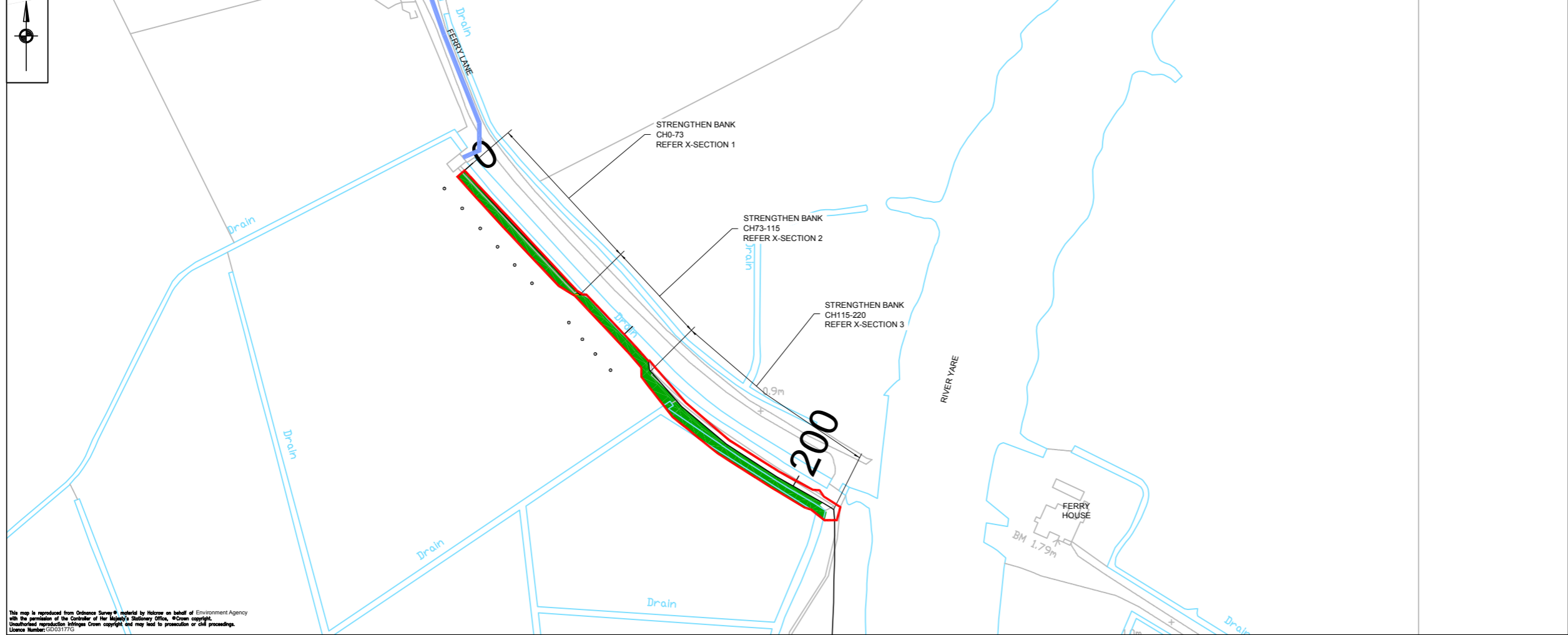
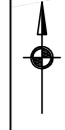
- 5.1 Members' comments on the report and officers' proposed response to the Consultation on the planning application are welcomed.

Background papers: Nil

Author: Adrian Clarke
Date of report: 14 February 2014

Broads Plan Objectives: CC3.4

Appendices: APPENDIX 1 – Compartment 17 detailed maps.

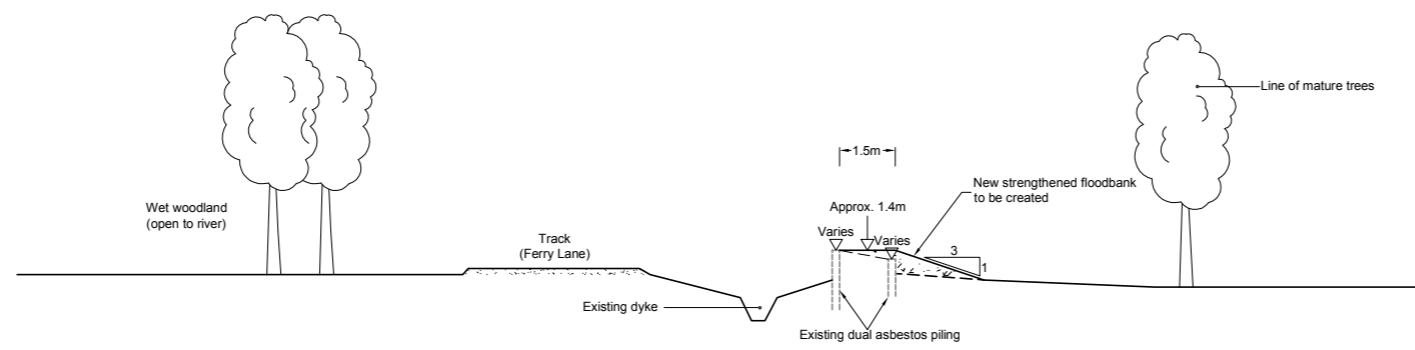


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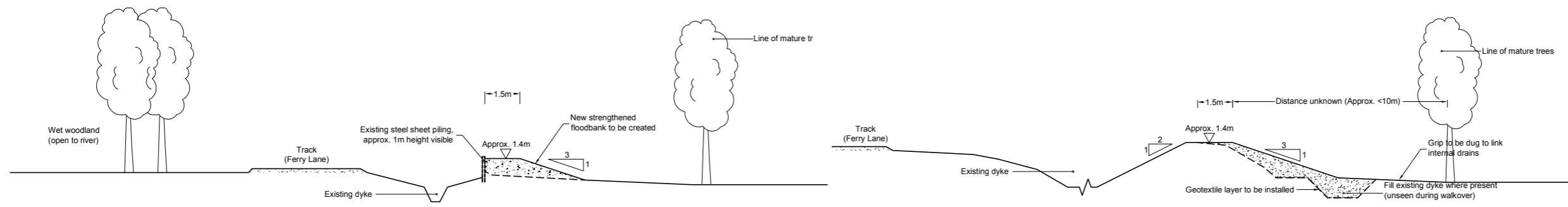
PLAN OF WORKS
SCALE 1:1000

- Key:**
- PROPOSED STRENGTHEN BANK
 - PLANNING BOUNDARY
 - LIGHT VEHICLES ONLY

- Notes:**
1. NO DIMENSIONS TO BE SCALED FROM THIS DRAWING.
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TYPICAL X-SECTION 1
STRENGTHEN BANK Ch0 - 73m
SCALE 1:100



TYPICAL X-SECTION 2
STRENGTHEN BANK Ch73 - 115m
SCALE 1:100

TYPICAL X-SECTION 3
STRENGTHEN BANK Ch115 - 220m
SCALE 1:100

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Project BROADLAND FLOOD ALLEVIATION PROJECT

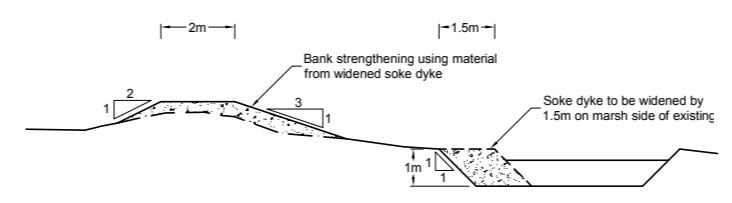
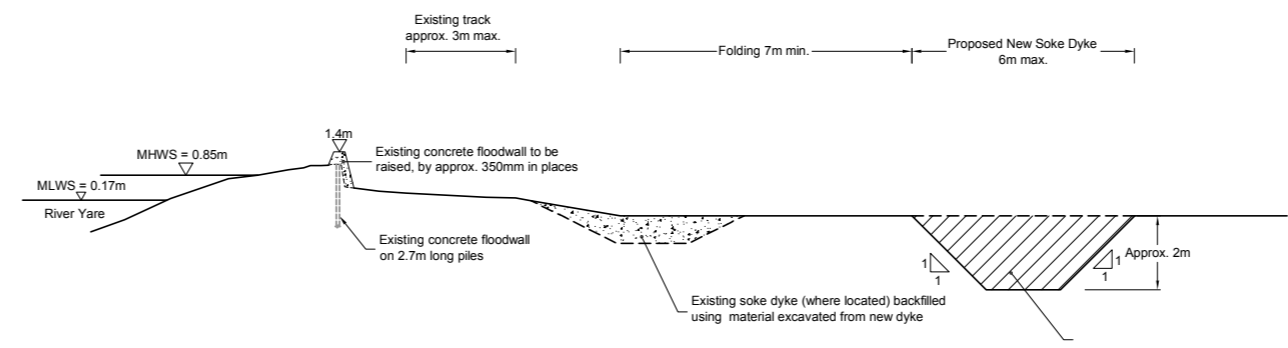
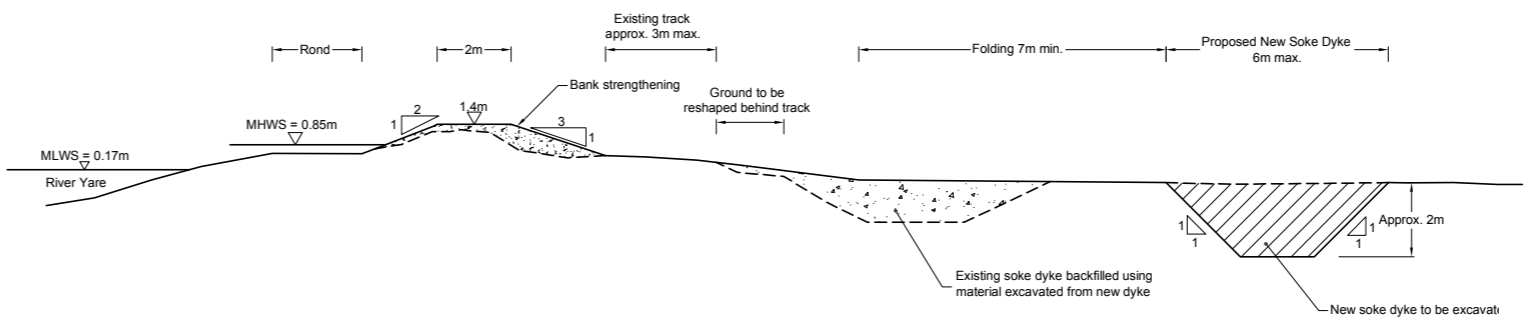
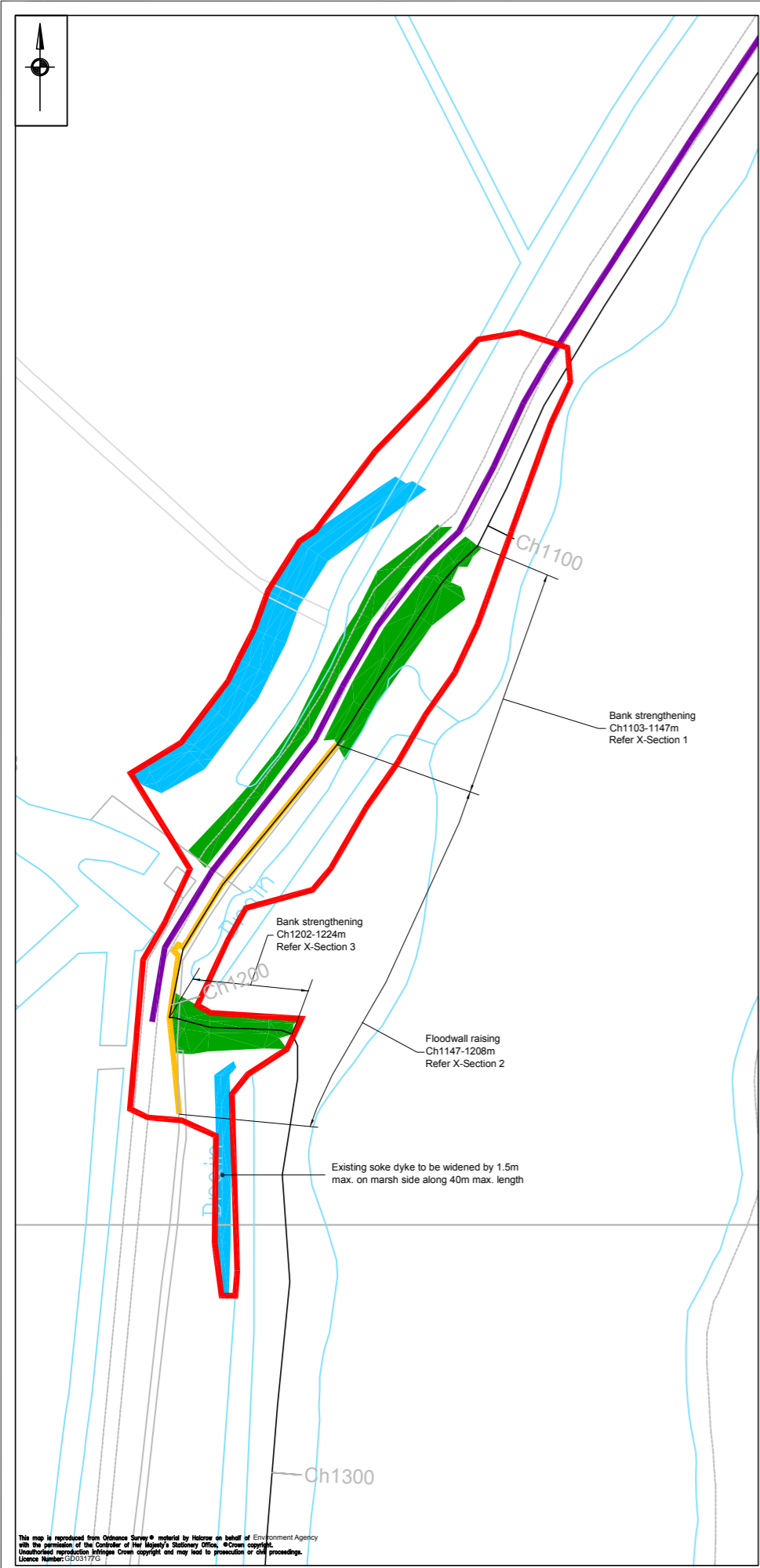
Drawing COMPARTMENT 17
RIVER YARE
POSTWICK MARSHES
DETAILED PLAN AND SECTIONS
SHEET 1 OF 3

Drawn by: L. MERSEY **Date:** 17/12/13
Checked by: A. RICHARDSON **Date:** 19/12/13
Approved by: K. MARSH **Date:** 19/12/13

Drawing No. WNCPOS/420/003 **Revision** 0

Drawing Scale: AS SHOWN AT A1

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- Key:**
- PROPOSED BANK STRENGTHENING
 - PROPOSED NEW SOKE DYKE
 - FLOODWALL RAISING
 - PLANNING APPLICATION BOUNDARY
 - ACCESS TRACK

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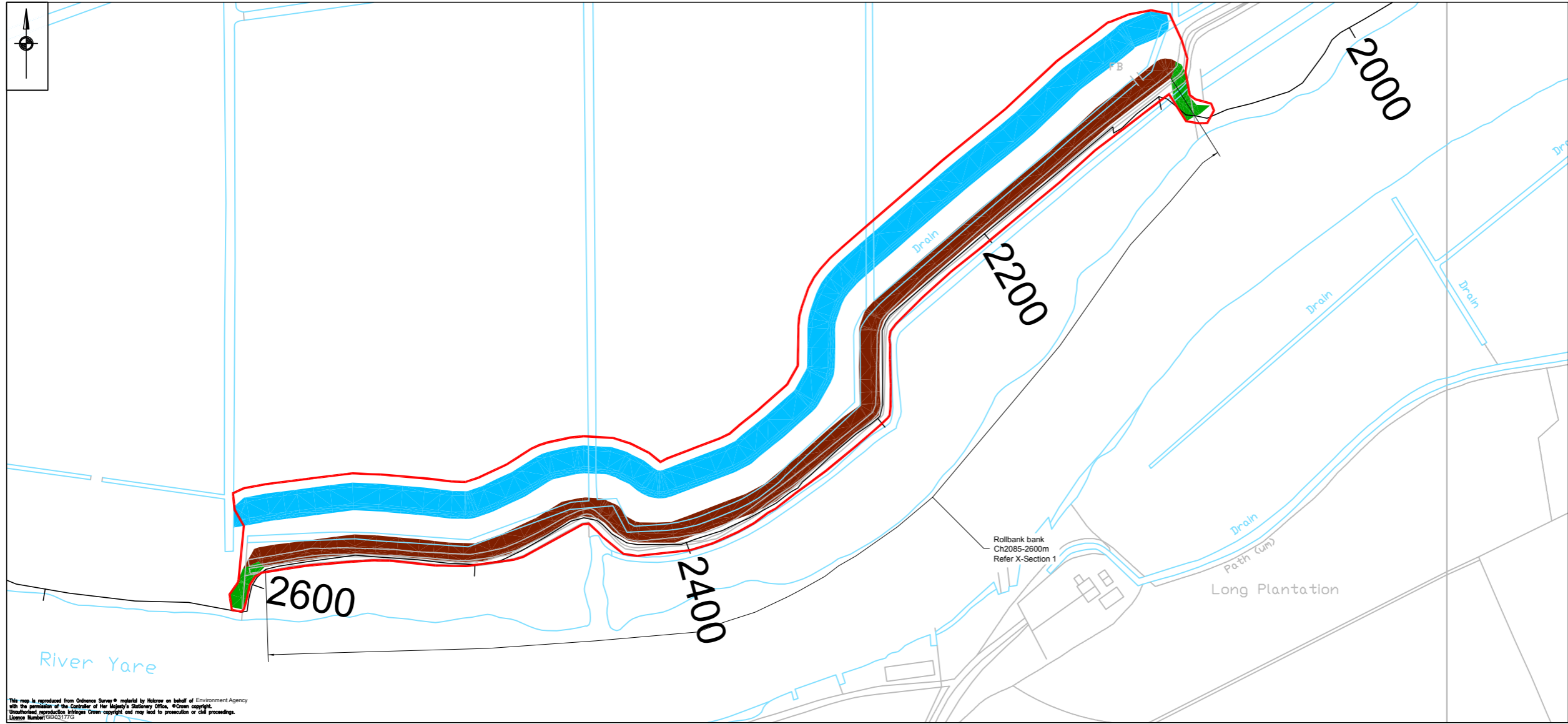
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RIVER YARE
POSTWICK MARSHES
DETAILED PLAN AND SECTIONS
SHEET 2 OF 3

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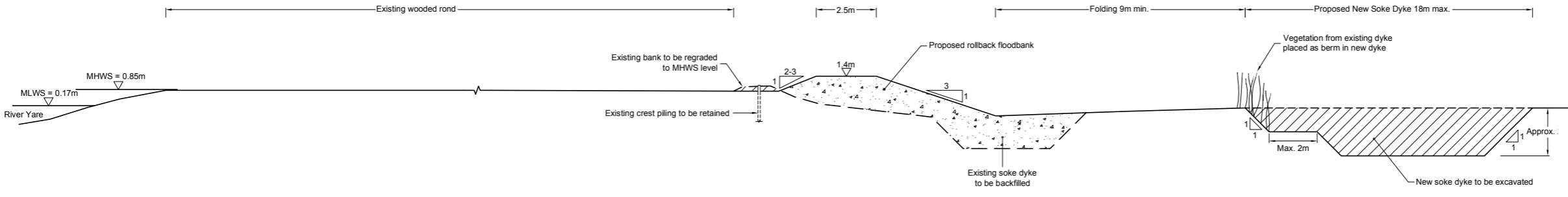
PLAN OF WORKS
SCALE 1:1000

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- Key:**
- PROPOSED ROLLED BACK BANK
 - PROPOSED STRENGTHEN BANK
 - PROPOSED NEW SOKE DYKE
 - PLANNING APPLICATION BOUNDARY

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TYPICAL X-SECTION 1
ROLLBACK BANK Ch2085 - 2600m
SCALE 1:100

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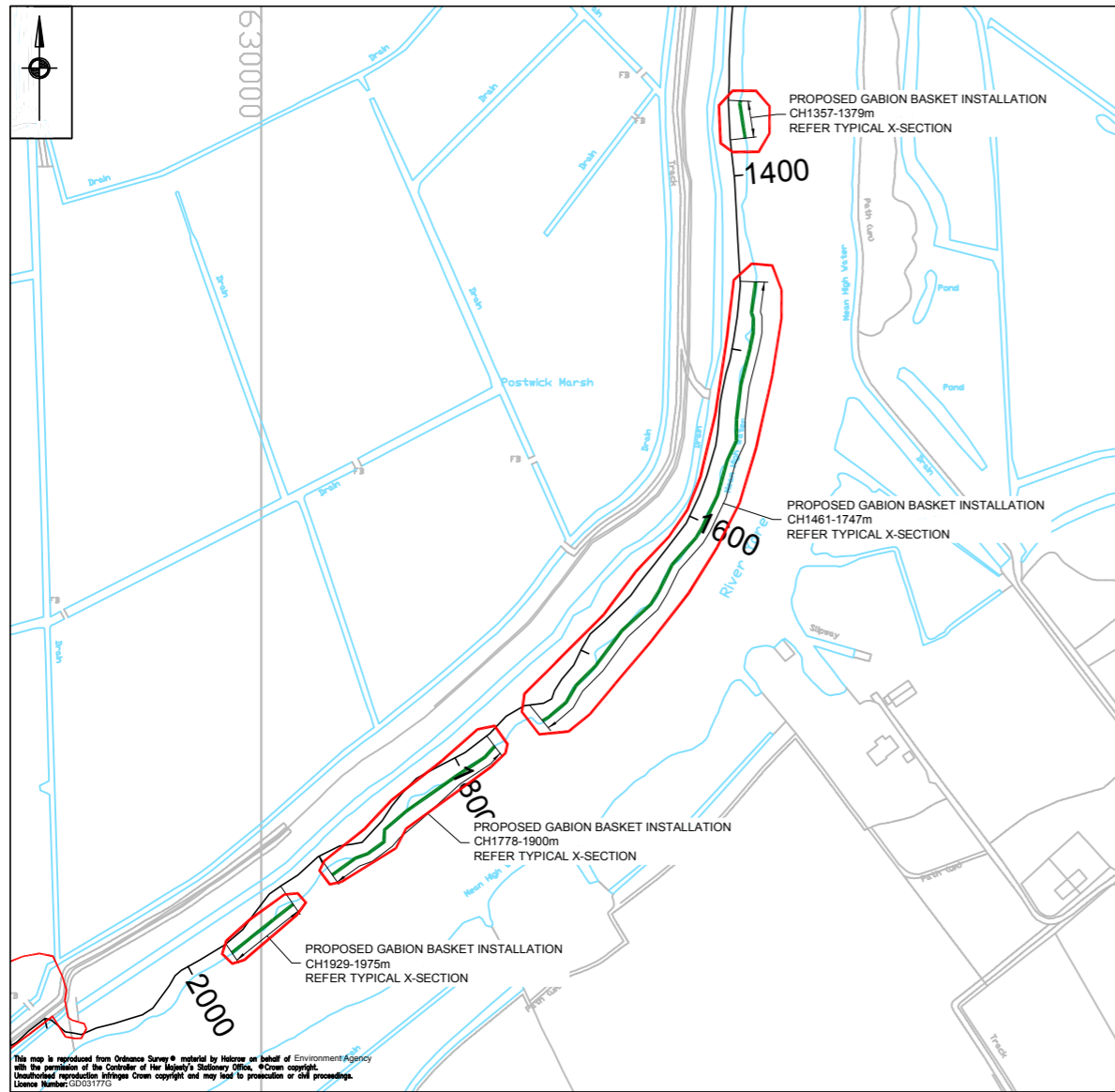
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RIVER YARE
POSTWICK MARSHES
DETAILED PLAN AND SECTIONS
SHEET 3 OF 3

Drawn by: L. MERSEY Date: 17/12/13
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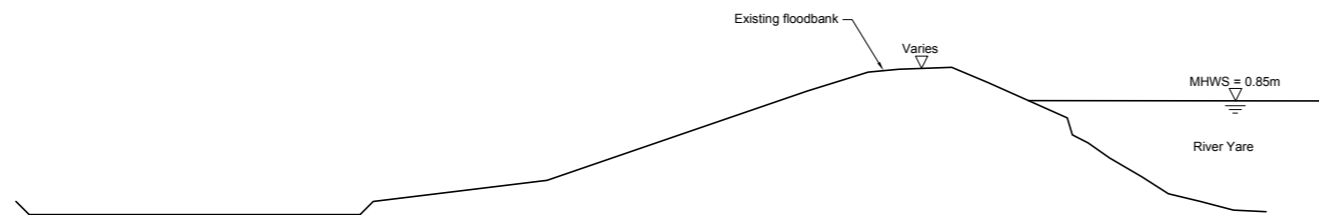
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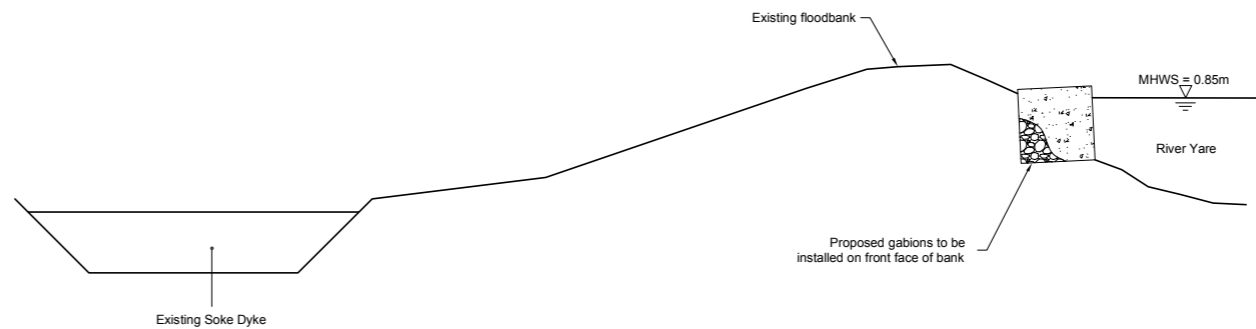
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 Drawing Scale: AS SHOWN AT A1



PLAN OF WORKS
SCALE 1:2000



TYPICAL EXISTING RIVER SECTION
SCALE 1:50



TYPICAL PROPOSED RIVER SECTION
SCALE 1:50

Key:

- PLANNING APPLICATION BOUNDARY
- PROPOSED GABION BASKET E.P. INSTALLATION

Notes:

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Project
BROADLAND FLOOD ALLEVIATION PROJECT

Drawing
COMPARTMENT 17
RIVER YARE
PROPOSED GABION BASKET
EROSION PROTECTION WORKS

Drawn by: L. MERSEY Date: 19/12/13
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Approved by: - Date: -

Drawing No. **WNCPOS/400/006** Revision **0**

Drawing Scale: AS SHOWN AT A1

Drawing No. WNCPOS/400/006 Rev. 0 Date: 19/12/2013
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Project: Broadland Flood Alleviation Project
Drawing Title: COMPARTMENT 17 RIVER YARE PROPOSED GABION BASKET EROSION PROTECTION WORKS
Author: L. Mersey
Checked: A. Richardson
Approved: -
Date: 19/12/2013 - 01:12:01