




Blakeney detailed design overview

This map shows the proposed locations of restoration sites (brushwood compartments) and the proposed new channel location. Suggested cross sections are shown before these are processed. The background imagery is the aerial photography as collected by Exo Environmental in October 2017. Plotted using the OSGB 1936 British National Grid.

Refer to the attached maps showing the sections of the channel in greater detail.

Legend

-  Training structure
-  Proposed channel 10m
-  Restoration sites (brushwood compartments)
-  Proposed cross sections for detailed design
 - 1 Opposite Blakeney Hotel
 - 2 Start of bridge over Bridge Creek
 - 3 End of bridge over Bridge Creek
 - 4 Cooke Posts

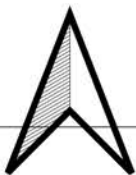
Produced by: David Miko

Date: 10/08/2020

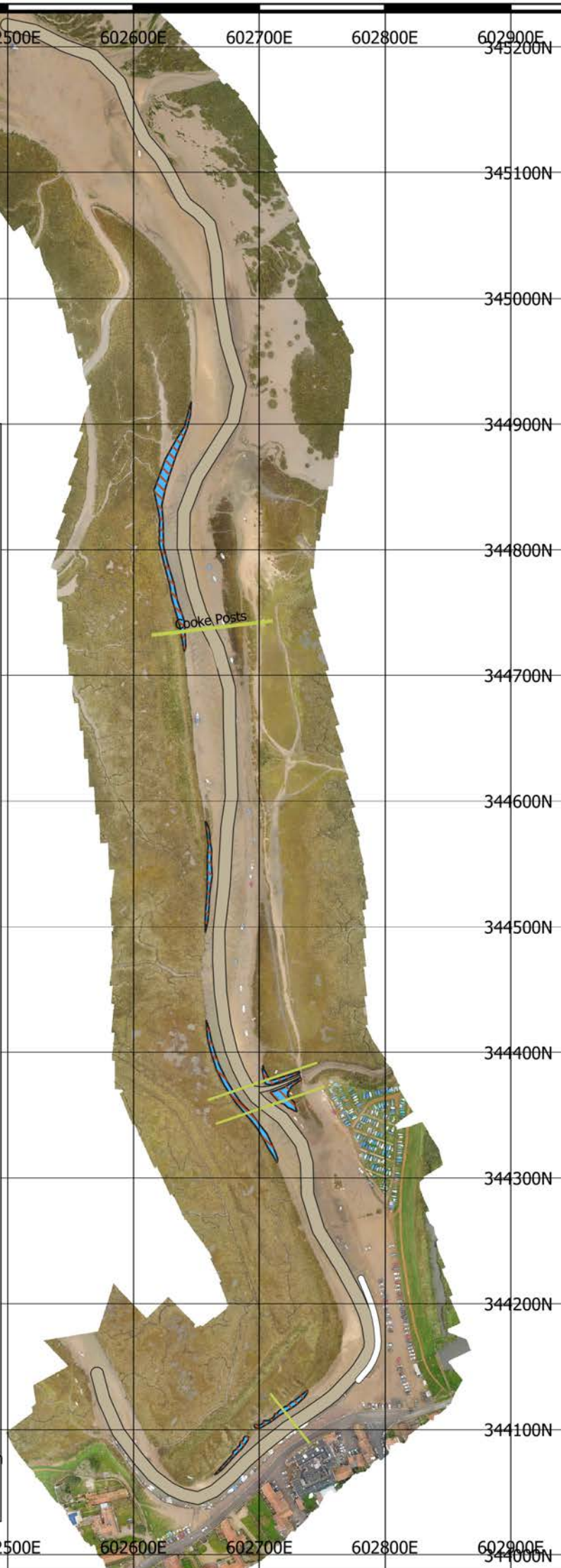
Version: 2.0

Authorised by: William Coulet

EXO Environmental

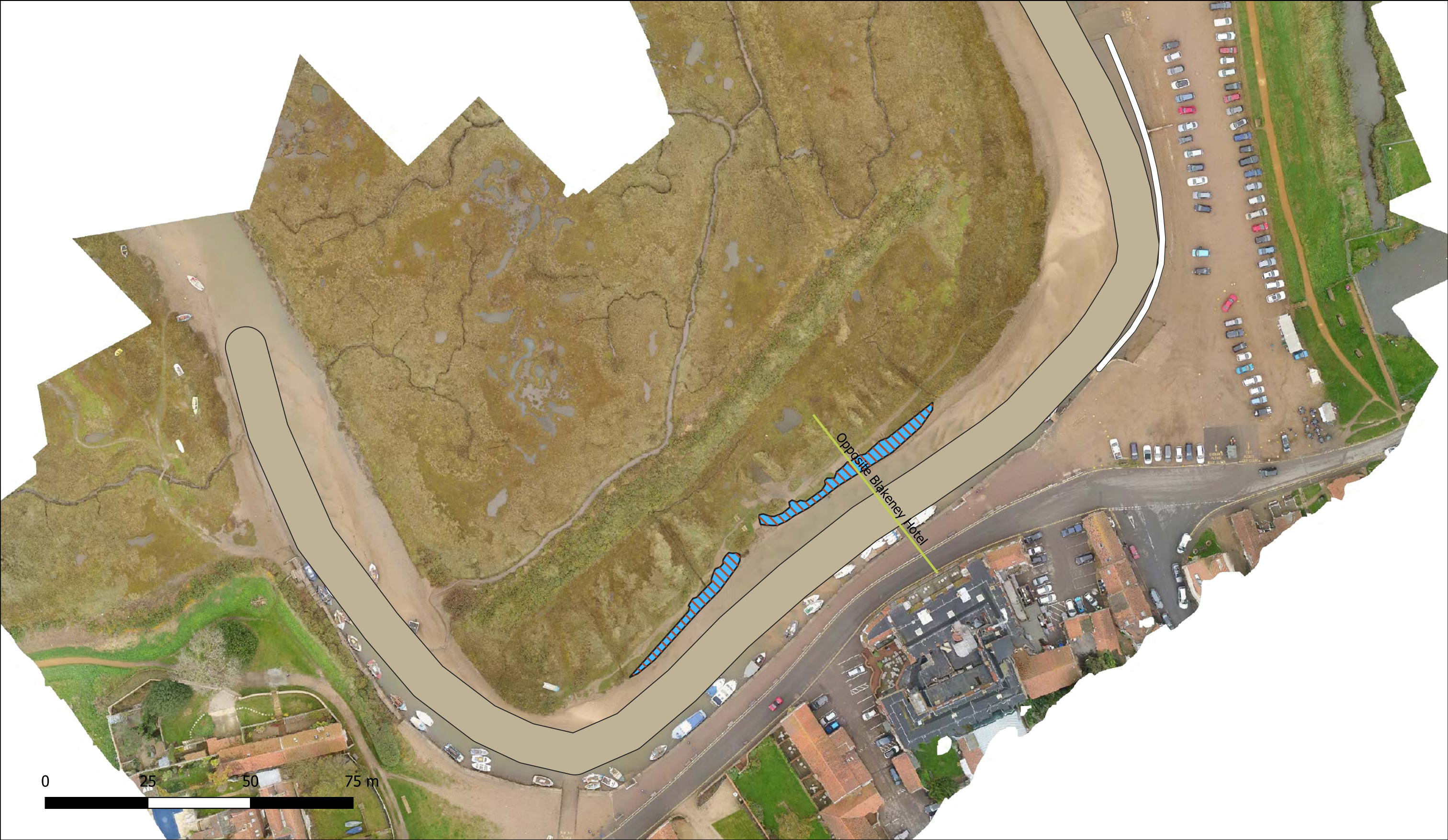


0 50 100 150 200 250 m



Quay detail

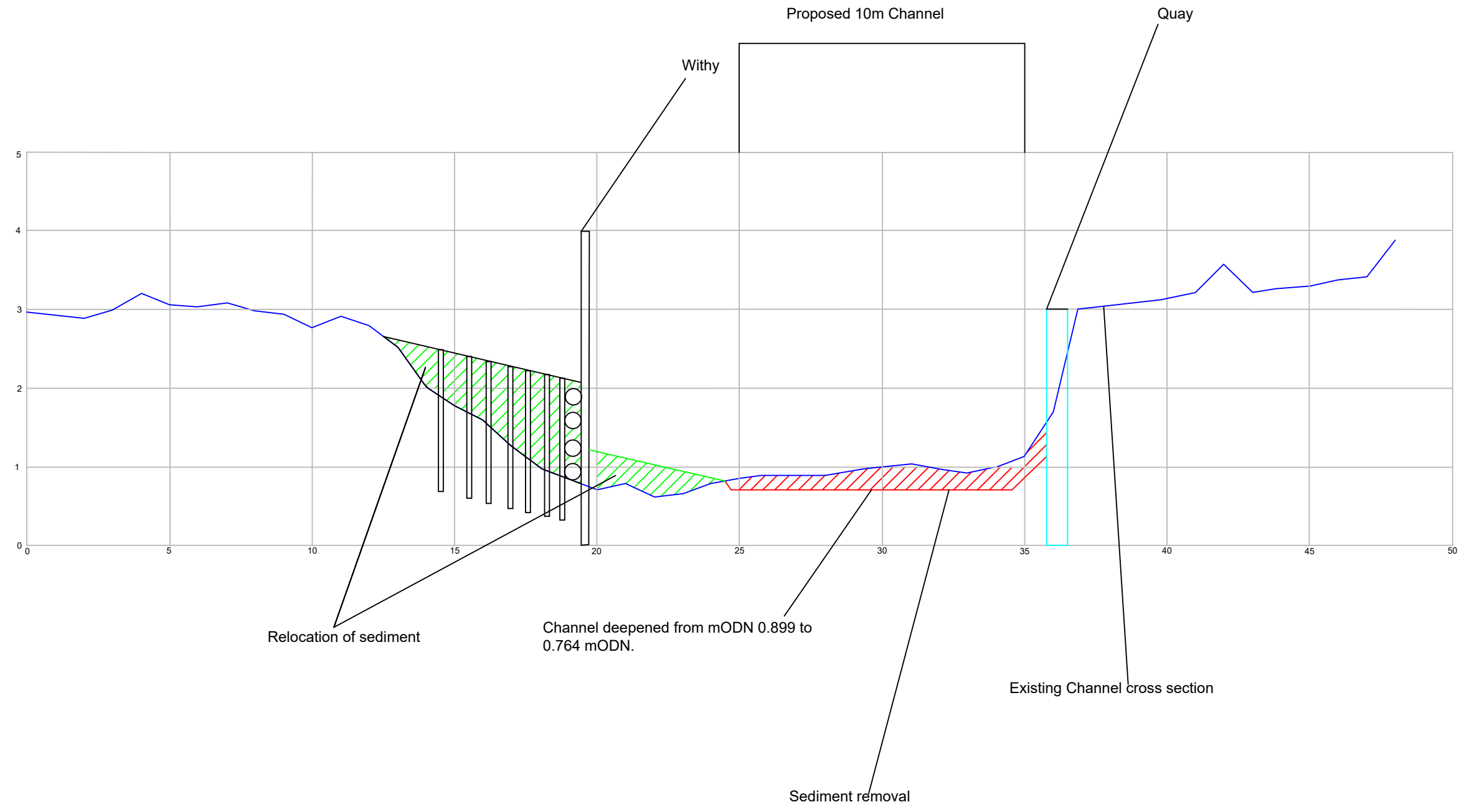
Blakeney detailed design



Opposite Blakeney Hotel sample drawing

Side view
visualisation of
brushwood fascine
retaining structures,
along cross section
'Opposite Blakeney
Hotel'.

Note: Position and
length of brushwood
structures subject to
change, dependent
on site conditions
and client
discussions.



Job: Blakeney
Scale: 1:30 (A3 paper size) n.b. vertical axis not to scale
Draw Reference: Draft sample drawing 'Opposite Blakeney Hotel'
Drawer: Izaak Reeder

Client: BCCCT
Date: 21/08/2020
Revision Number: V01
Checked by: Wiliam Coulet

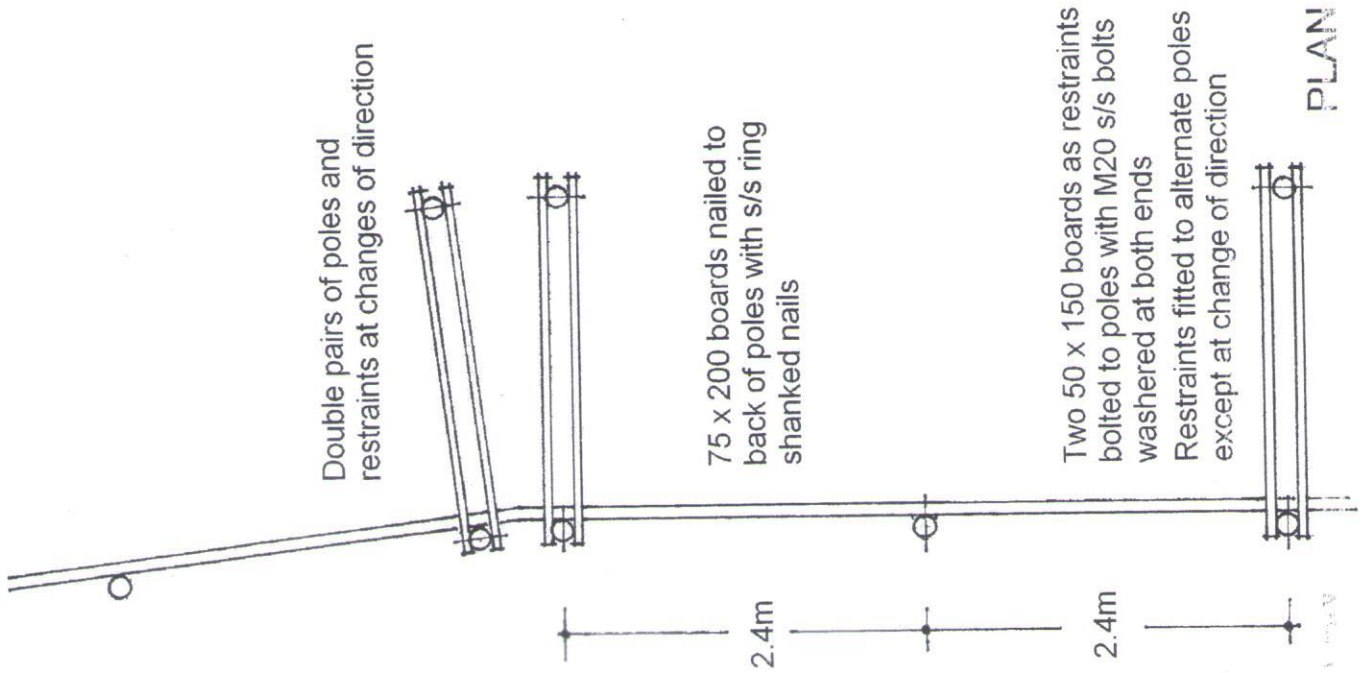


2 BLAKENEY PARISH COUNCIL

CARNSER STAGING DETAILS

Scale 1:50

(all timber to be vacuum/pressure treated with preservative)



7° off vertical



Back fill behind boards with crushed concrete sloped up to existing Carnser surface level, compacted in layers

existing ground profile varies

Low water level

2.25m

Telegraph pole supports at 2.4m centres driven 1.8m min. into ground

SECTION

Bridge Creek detail v2

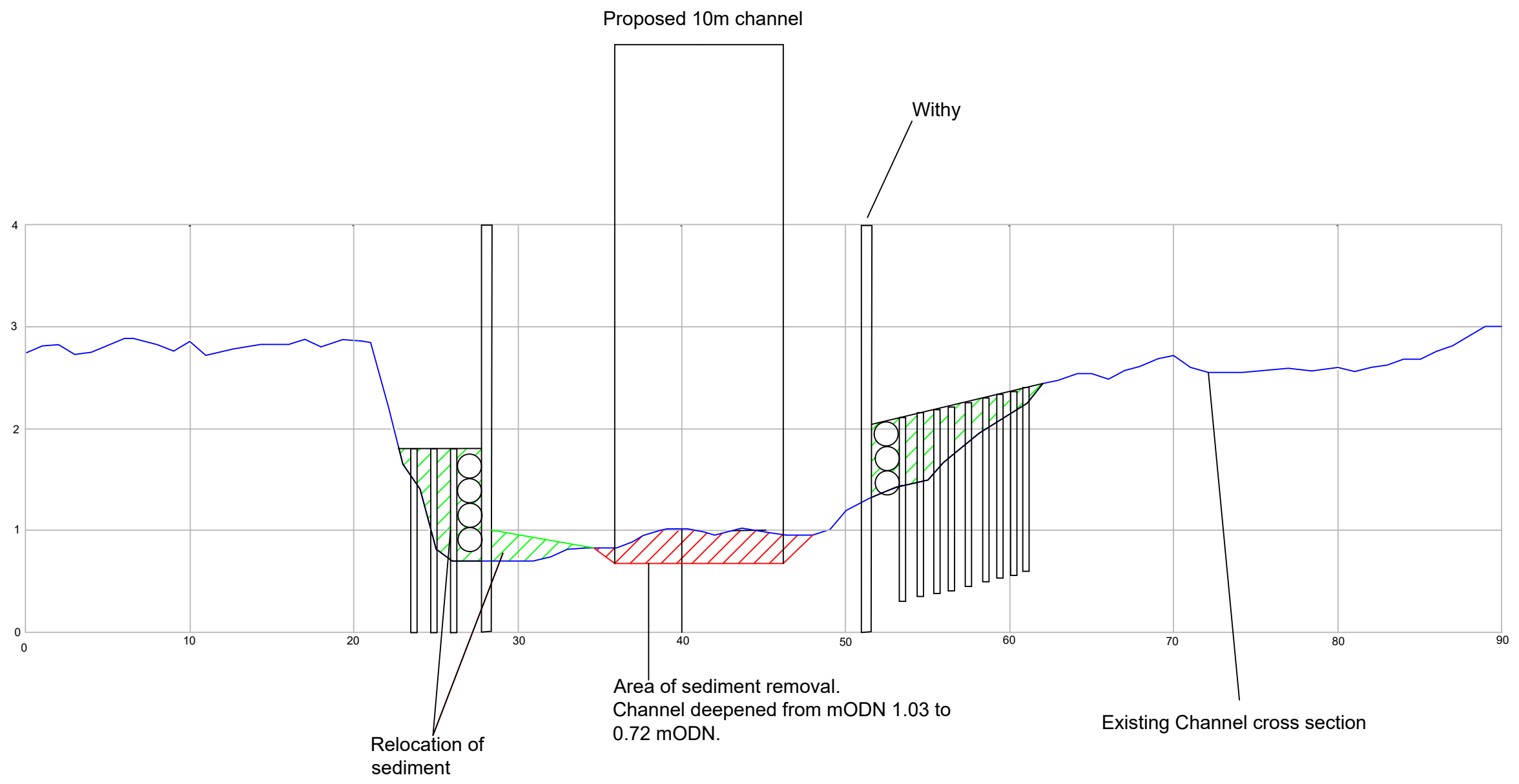
Blakeney detailed design



Start of Bridge Creek sample drawing

Side view
visualisation of
brushwood fascine
retaining structures,
along cross section
'Bridge creek
(START)'.

Note: Position and
length of brushwood
structures subject to
change, dependent
on site conditions
and client
discussions.



Job: Blakeney
Scale: 1:30 (A3 paper size) n.b. vertical axis not to scale
Draw Reference: Draft sample drawing of 'Bridge Creek (START)'.
Drawer: Izaak Reeder

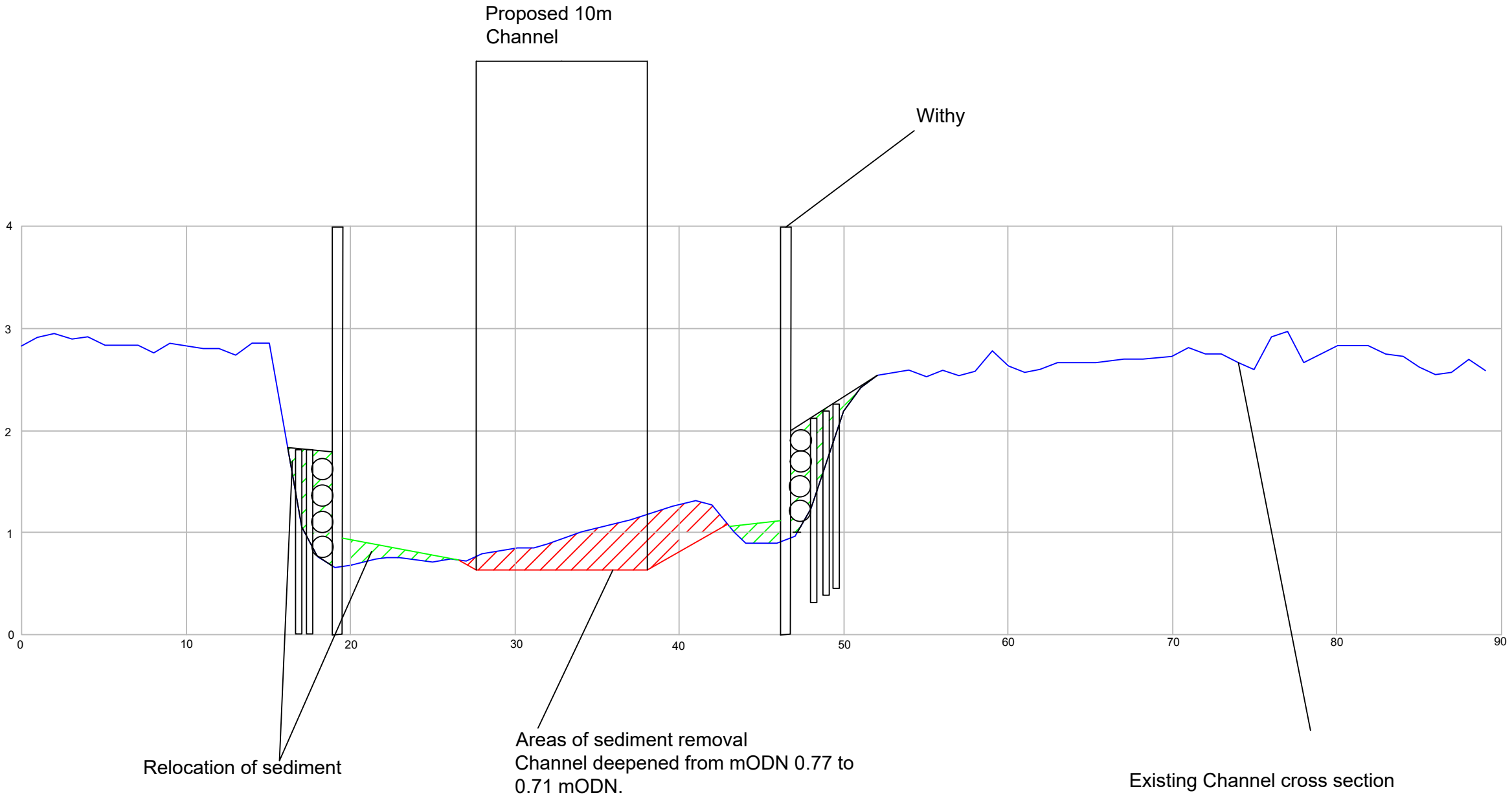
Client: BCCCT
Date: 21/08/2020
Revision Number: V01
Checked by: Wiliam Coulet



End of Bridge Creek sample drawing

Side view visualisation of brushwood fascine retaining structures, along cross section 'Bridge Creek (END)'.

Note: Position and length of brushwood structures subject to change, dependent on site conditions and client discussions.

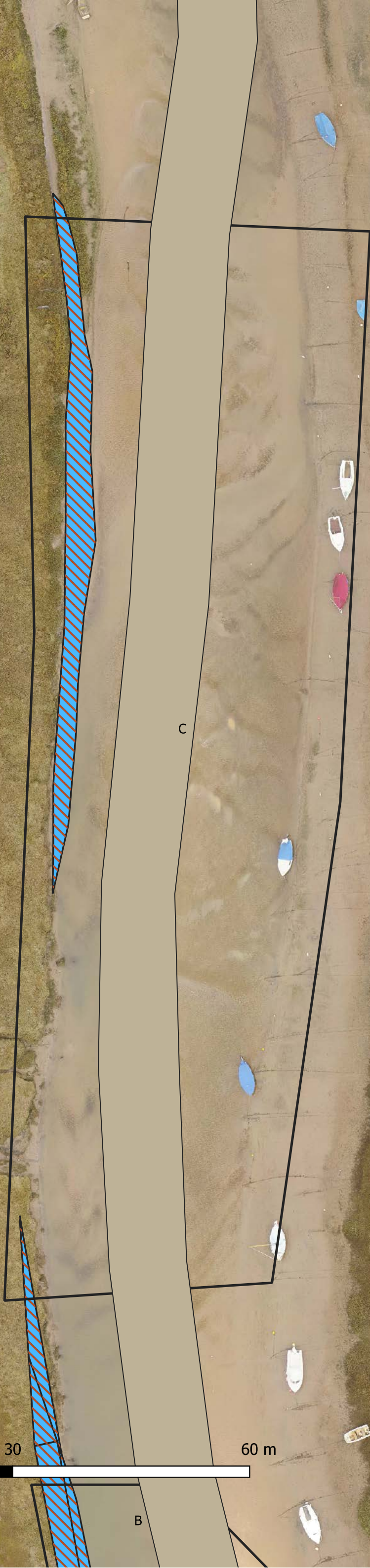


Job: Blakeney
Scale: 1:30 (A3 paper size) n.b. vertical axis not to scale
Draw Reference: Draft sample drawing 'Bridge Creek (END)'
Drawer: Izaak Reeder

Client: BCCCT
Date: 21/08/2020
Revision Number: V01
Checked by: William Coulet



Zone C



07-10-2021

B

Zone D

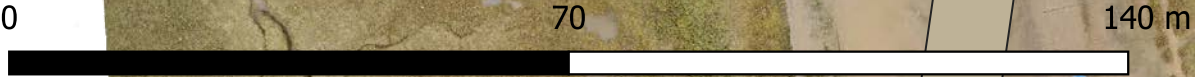


D

E

Cooke Posts

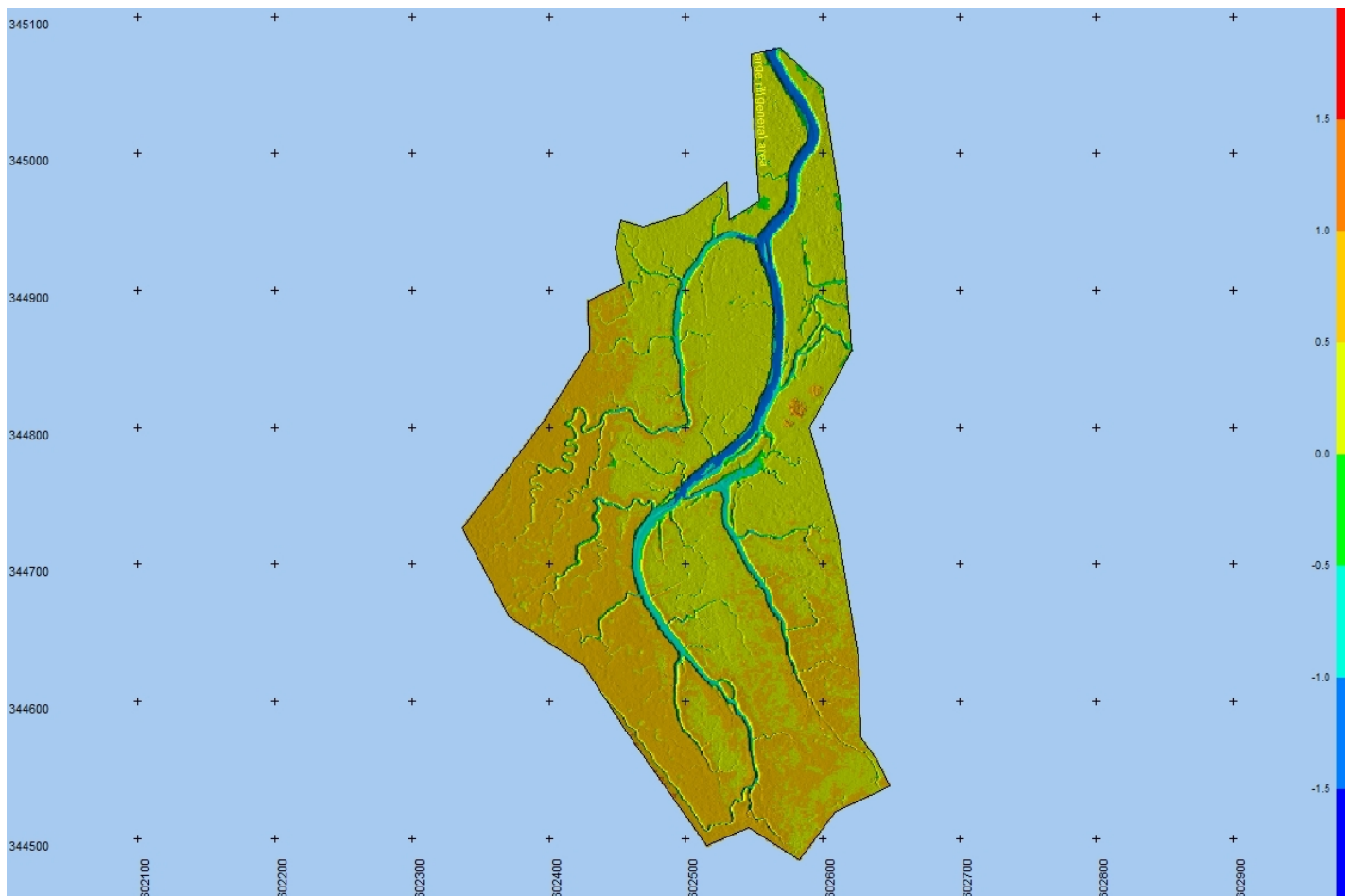
C



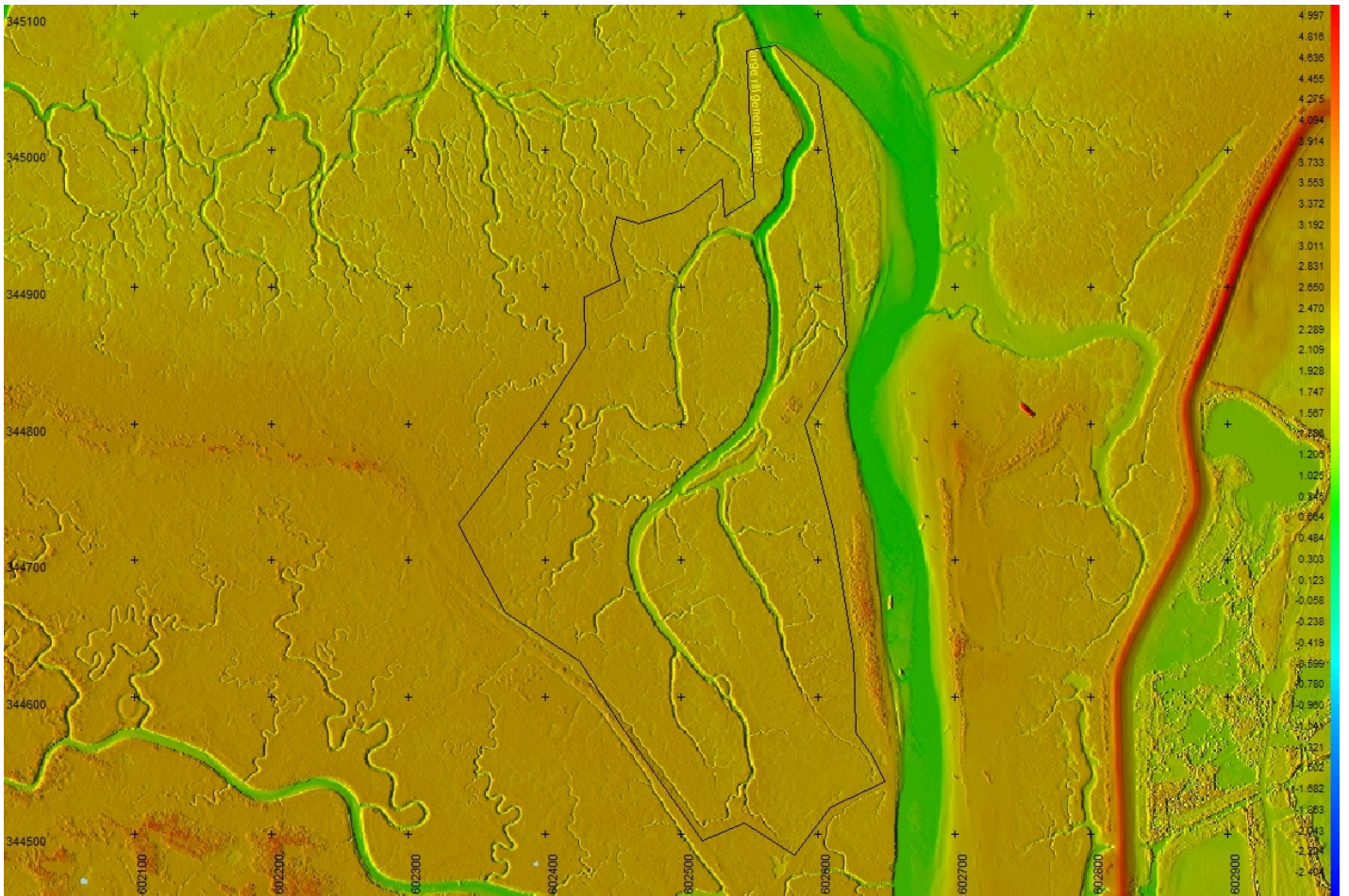
Grid model volume computation: Blakeney large rill volume calculation

Project	Blakeney
Generated	20/04/2020 17:02:22
Grid model	Blakeney large rill volume calculation
Clipping polygon	large rill general area
Area of clipping polygon	97246.57 m ²
Reference	Reference fixed level: 2.20 m
Reference offset	0.00 m
Reference Z Shift	0.00 m
Volume above	39195.83 m ³
Volume below	6538.43 m ³
Volume difference	32657.40 m ³
Area above	87272.35 m ² (89.74 %)
Area below	9974.22 m ² (10.26 %)
Area without data	0.00 m ² (0.00 %)
Area without reference	0.00 m ² (0.00 %)
Average layer thickness	0.34 m

Result:



Model:

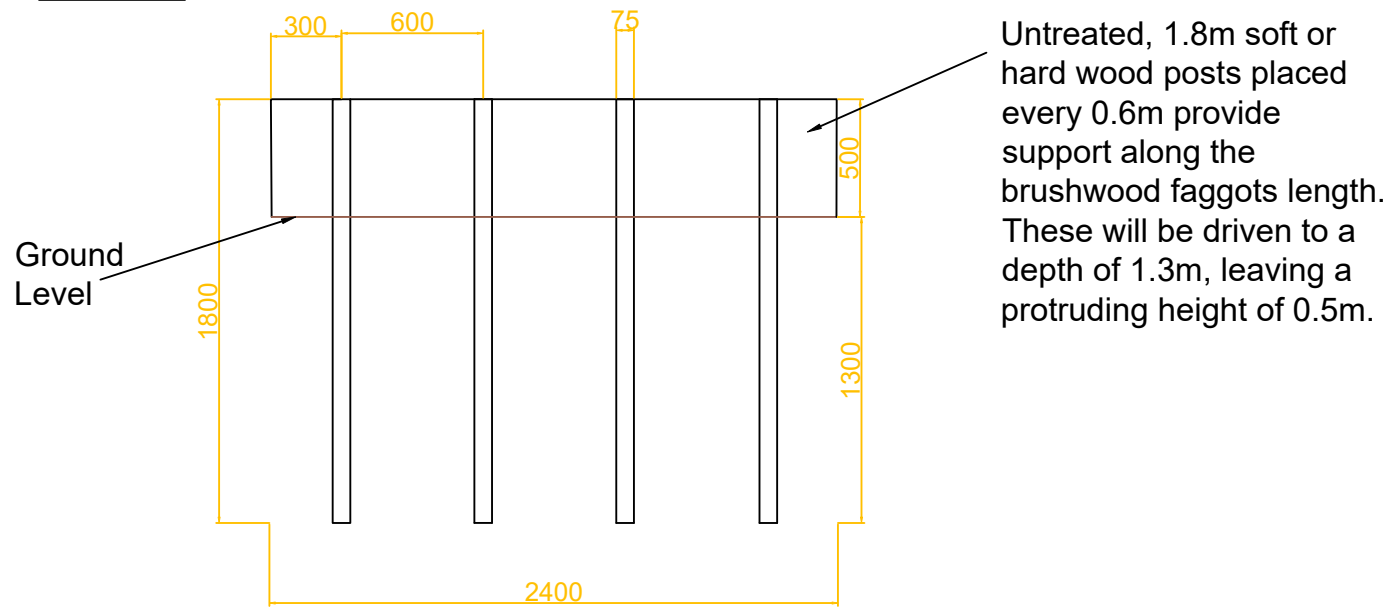


Brushwood Fascine

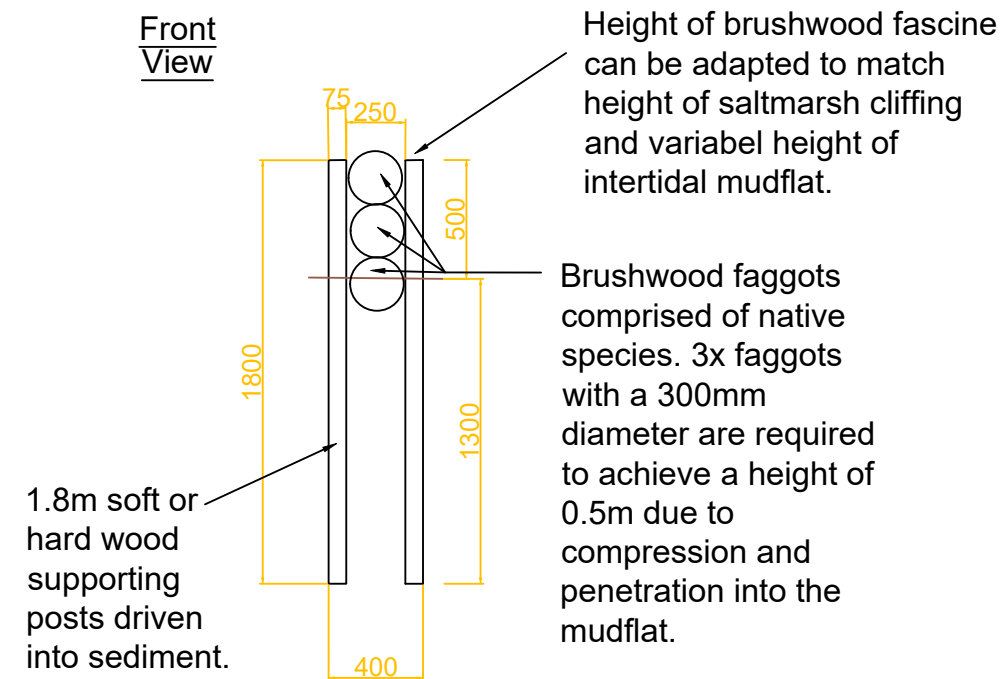
Details of Brushwood fascine retaining structure for use in the intertidal mudflat and saltmarsh restoration works

All measurements in (mm)

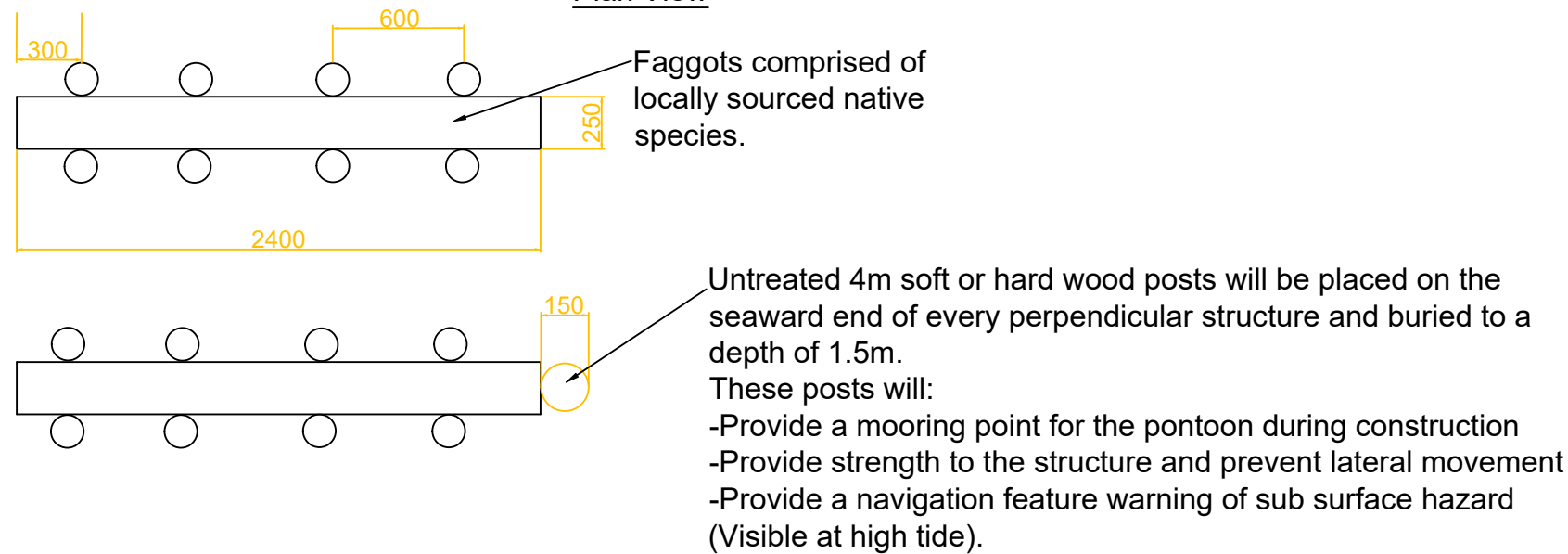
Side View



Front View



Plan View



Job: Blakeney
Scale: 1:10 (A3 paper size)
Draw Reference: Brushwood Fascine drawing
Drawer: Izaak Reeder

Client: BCCCT
Date: 21/08/2020
Revision Number: V02
Checked by: William Coulet and David Miko





Drawings and photos for B3CT exhibition 30/10/21		
No:	Title	Zones
1	Design overview	All
2	Quay detail	A
3	Opposite Blakeney Hotel	A
4	Carnser Staging Details	A
5	Bridge Creek detail	B
6	Bridge Creek Start Training Structure	B
7	Bridge Creek End Training Structure	B
8	Zone C detail	C
9	Zone D detail	D
10	Zone E Old Cut fill	E
11	Brushwood example details	A,B,C,D
12	Brushwood example photo	A,B,C,D

Blakeney Channel Coastal Community Team - B3CT

Public Exhibition for New Cut – 30/10/21

Introduction

This document is a summary of the engineering works that B3CT plan to carry out 2022/23 subject to obtaining the necessary consents from landowners and regulators.

It is based on minimising the impact on the natural environment whilst at the same time improving the navigation of New Cut. The purpose is to “work with nature” in order to provide a 10-metre-wide navigational channel within New Cut to lengthen the amount of time that leisure craft can use the channel at high tide.

The aim is to regrade the channel, removing the sand bars, but not digging a new deep channel, so as to increase the flow of the New Cut.

The main engineering principles are:

- To protect the channel banks where possible so to prevent further erosion of them to; reduce loss of ancient marshland and the eroded materials silting up New Cut
- To speed the flow of New Cut to encourage natural flushing of the channel
- No export of siltation from site – where materials are dredged, they will be;
 - relocated behind/in new brushwood frames or hard structures – see drawing/photo 11 & 12
 - used to fill rills/small channels in the Old Cut and on the western bank of New Cut to maximise the speed and energy of the tide when flooding and ebbing
 - moved with the aim of straightening New Cut to increase the tidal speed and ease its navigation by moving existing sand banks

The plan is to apply these principles in 5 zones of the Quay and New Cut as follows:

Zone A – Red House slipway to the public slipway on the Carnser

- Brushwood – on the northern bank opposite the Quay, from the east end of the Red House beach to the Carnser corner. This is to prevent erosion of this northern bank currently caused mainly when the flood tide is deflected from the Quay. A gap will be left in the brushwood frames and structures to allow the Greasy Pole to be provided still.
- A new timber quay heading on the Carnser corner, from the end of the existing concrete quay heading on the car park round to the first (public) slipway following the line of the original timber quay heading. Height 1 to 2 metres so that Juno can still be floated over in winter
- Silted material, mainly in front of the Blakeney Hotel, to be relocated elsewhere in New Cut

See plans – 2 to 4

Zone B – Bridge Creek

- Straighten the channel westwards, from the bridge over the creek, so it is perpendicular to the bridge
- At the Cut end of the straightened Bridge Creek place two curved brushwood frames (north and south of new channel) to direct the flow from Bridge Creek northwards

- Relocate silted material (mainly by the Sailing Club slipway) elsewhere in New Cut to brushwood frames and fill rills

See plans – 5 to 7

Zone C and D– North of Bridge Creek to top of the New Cut

- Construct brushwood frames on the western side of New Cut to protect that bank
- Relocate silted material elsewhere in New Cut to brushwood frames and fill rills
- Straighten the channel where possible to create a 10-metre-wide channel by relocating silt to other areas

See plans – 8 & 9

Zone E – Corner of New Cut

- Relocate silted material elsewhere within New Cut to brushwood frames and to fill the Old Cut

See plans - 10

Conclusion

The B3CT committee has arrived at this plan by; working with our consultants Exo Environmental, initial consultations with stakeholders, visiting other harbours with similar siltation problems. We consider this plan the best practical solution and compromise to deal with the siltation and navigational problems in the short to medium term.

We believe that this approach will minimise the impact for; the environment, boat users and mooring owners – though during engineering works there may be the need to move moorings or restrict navigation. The engineering will be completed during autumn to spring.

This design has rejected a number of engineering solutions as not being suited to New Cut, in particular – hard stone groynes, groynes or other structures protruding perpendicular into the channel, dredging and carting away the silt.

Next step

Depending on this public exhibition and any other consultations we will then move to obtaining the necessary statutory consents and approval from landowners.

B3CT has no funds currently. In order to obtain the necessary consents, then to carry out the engineering, we will need to raise fund raise from; public funding if available, seek donations, crowd funding or community fund raising.

Further information or contact

If you want further information or want to be kept informed, please email: info.b3ct@gmail.com

We hope to have copies of the drawings from the exhibition available – we will provide details in the Glaven Valley Magazine.

B3CT Survey

Please be sure to complete our questionnaire.