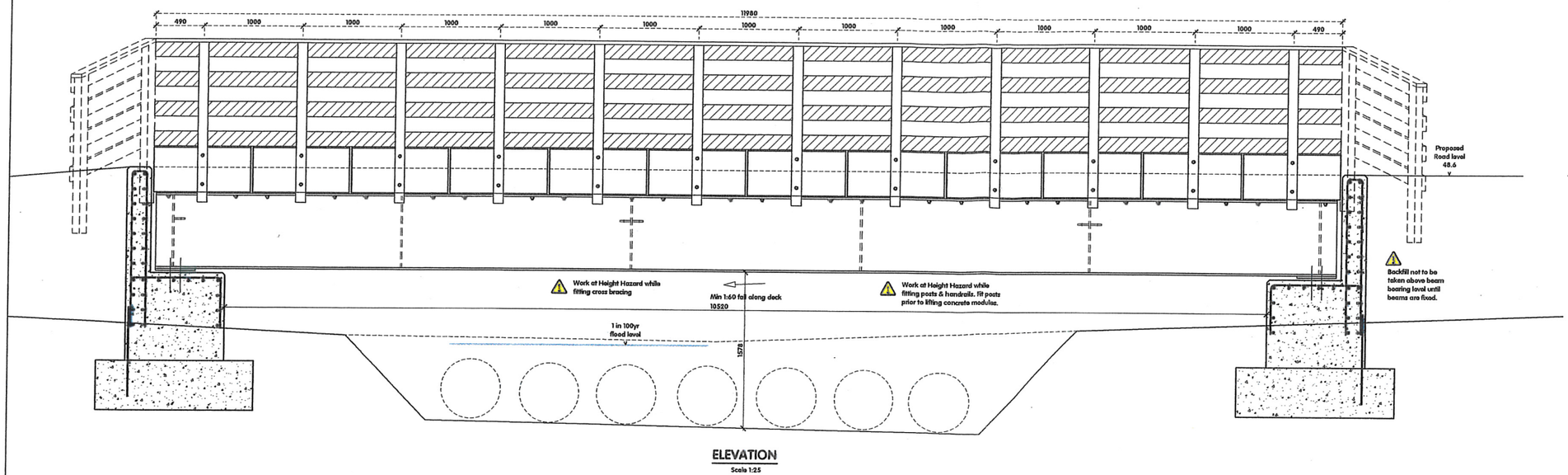
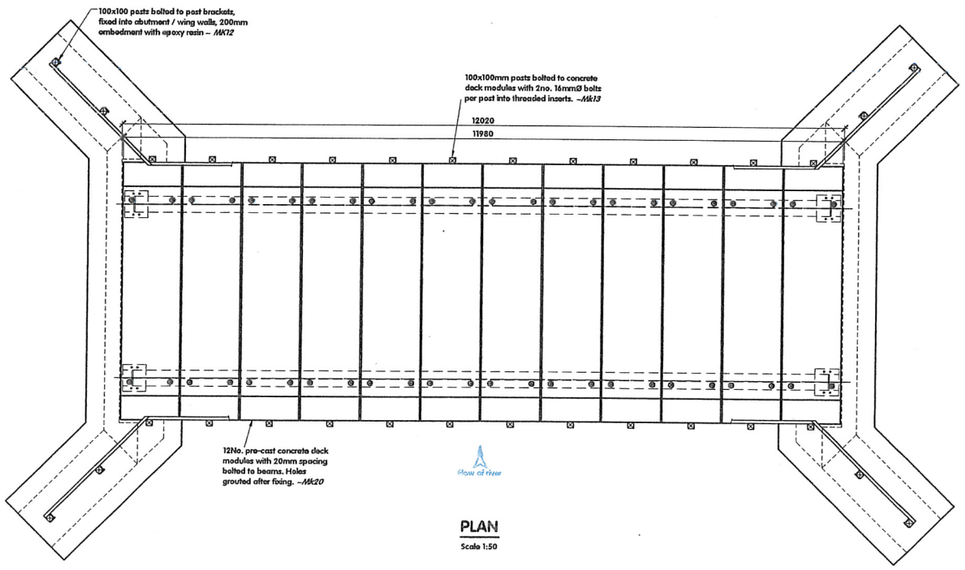
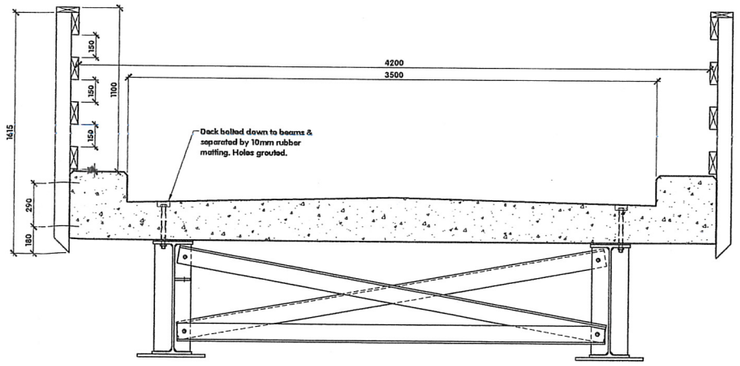


ELEVATION
Scale 1:25



PLAN
Scale 1:50



CROSS SECTION
Scale 1:20

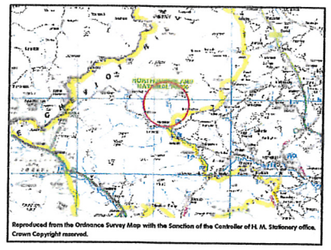
Timber Schedule - Refer to Note 6
Contractor to establish exact dimensions, lengths and quantities before cutting and treating, and to make allowance for cutting waste.

Part	Species	Grade	Finish	Treatment	Size (mm)	No.	Notes
Posts	Larch	SS	Sawn	Tanalith E	100x100 1615 long	32	45° cut one end & 2No holes drilled before treatment.
Top rails	Larch /sportwood	GS	Dressed	None	Ex 150x35 11980 long	2	Fix to a minimum of three posts.
Middle rails	Larch /sportwood	GS	Dressed	None	Ex 150x50 11980 long	8	Fix to a minimum of three posts.
Wingwall Top rails	Larch /sportwood	GS	Dressed	None	Ex 150x35 2400 long	4	Fix to a minimum of three posts.
Wingwall Middle rails	Larch /sportwood	GS	Dressed	None	Ex 150x50 2400 long	16	Fix to a minimum of three posts.

Inspection & Design Criteria

RESIDUAL HAZARDS	
Speed Limit	25km/h
Services	None
MAINTENANCE & INSPECTION	Category C Bridge
General Inspection	by Grade 3 Inspector every two years.
Principal Inspection	by Grade 3 Inspector every six years.
DESIGN CRITERIA	
Catchment Area	15.57km²
Bed Gradient	1 in 40
Flood Return Period	1 in 100 yrs
Load Capacity	Load Model 1 to BS EN 1991-2. This includes any Construction and Use vehicle allowed on the public road without restriction.
Design Life	50 years
Completion Date	--- 20--

A1 - DO NOT SCALE



LOCATION PLAN

NOTES:

1. This drawing is to be read in conjunction with the SPECIFICATION (published separately) and all relevant Engineers drawings.
2. All brand named products may be replaced with equal products subject to approval by the designer.
3. All dimensions are in millimetres unless stated otherwise.
4. Access to the site is by forest road constructed for all Construction and use vehicles.
5. CONCRETE in DECK: to comply with EN206:BS8500. Mix C32/40, S2 slump, 320kg/m³ cement and water cement ratio 0.55, 3.5% air entrainment, freeze-thaw resistant aggregate, 40mm cover. Surface finish, all hidden faces F1, visible faces F5.
6. CONCRETE in ABUTMENTS/WING WALLS: to comply with EN206:BS8500. Mix RC35, S2 slump, 280kg/m³ cement and water cement ratio 0.6, 3.5% air entrainment, freeze-thaw resistant aggregate, 40mm cover. Surface finish, all hidden faces F1, visible faces F5.
7. Steel reinforcement to BS 4449:2005. Min. cover to reinforcement to be 40mm, and bent in accordance with BS 8666:2005. Dowel bars to be stainless steel and in accordance with BS6744:2001. 20mm diameter ribbed bars with a yield strength of 500N/mm².
8. Ground bearing capacity to be assessed and approved by the Engineer.
9. Backfill to abutments to be free draining granular material. Backfill not to be taken above beam bearing level until beams are fixed.
10. Epoxy Resin for holding down bolts Kemfast R-KEM+ or equal and approved.
11. STRUCTURAL STEEL: manufactured to Execution Class 2, BS EN 1090-2. Steel beams, stiffener plates and diaphragm plates must be made from Grade S355 J0 steel. Base Plates may be made from S275 JO. All steel to BS EN 10 025. Welds to BS EN 1011-2:2001.
12. All beams, plates stiffeners, diaphragms, bolts & coach screws to be hot dip galvanised in accordance with BS EN ISO 1461:2009
13. TIMBER - All timber to be supplied with appropriate CE marking. Where specified holes to be drilled before treatment. All softwood except Larch heartwood to be treated with Tanalith-E preservative. Cuts and holes made on site to be treated with Ensole 3450. Handrail timbers must span at least 3 posts and joins on adjacent rails must not be on the same post. Allowance for cutting waste is the contractors responsibility.
14. Couch screws to be dipped in light oil before use.
15. Design speed limit on bridge to be 25km/h.
16. Should construction be delayed for more than 1 year from the date of issue, please contact Civil Eng Central Services, NRS for the latest drawing revision.
17. The new bridge is located at NT 918 101.

DESIGN BASED RESIDUAL HAZARDS
This symbol indicates that significant residual hazards exist and must be managed during the construction process.

Revision	Date	Changes	Drawn	Checked

Drawing Status: **CONSTRUCTION**

Client: **FORESTRY COMMISSION**

CIVIL ENGINEERING CENTRAL SERVICES

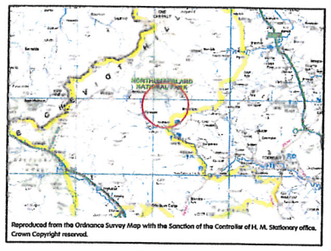
Forestry Commission
Northern Research Station
Roslin, Midlothian
EH25 9SY
Tel: 0300 067 5917 (M C)
Tel: 0300 067 5998 (G W)

bcia British Construction Industry Awards 2011 WINNER

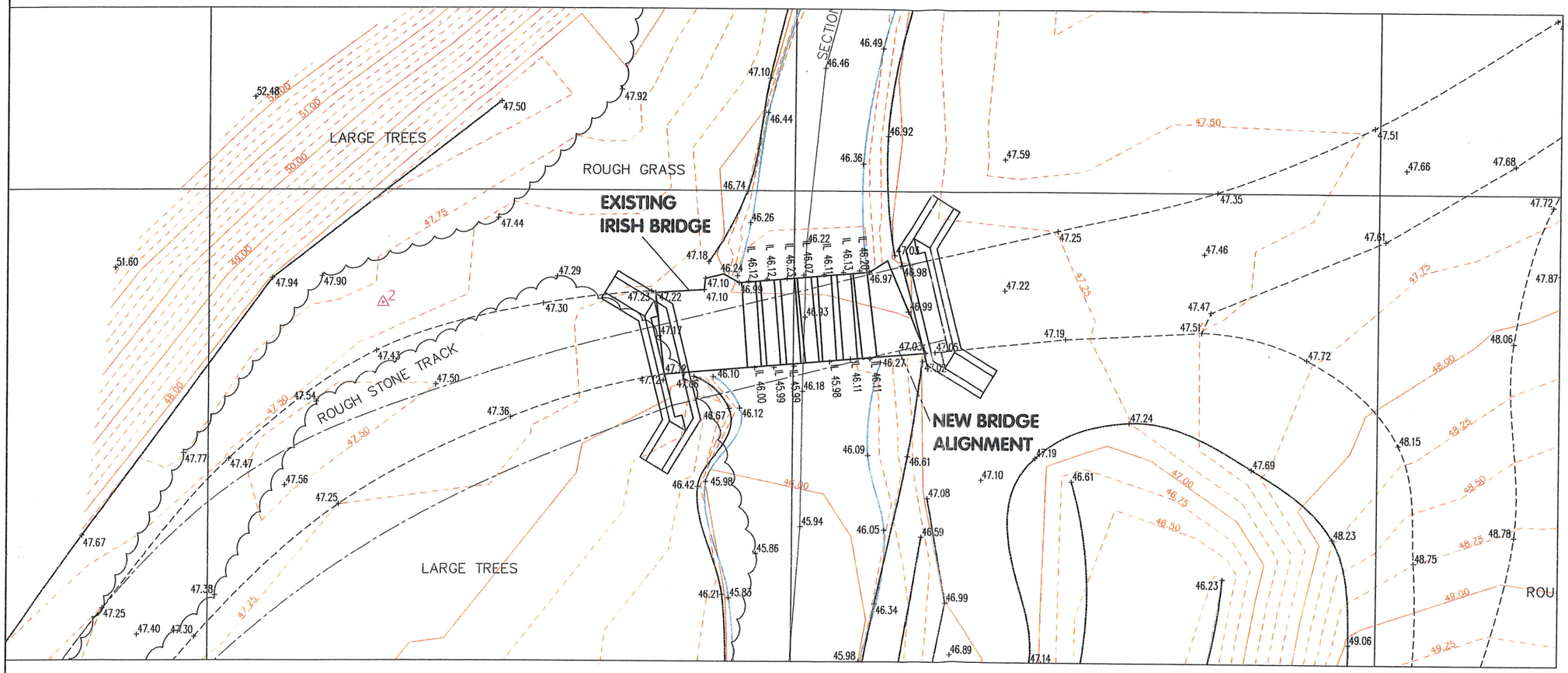
Job Title:
YOKE BURN
NORTHUMBERLAND
NORTH ENGLAND FOREST DISTRICT

Drawing Title:
44T ROAD BRIDGE
10.5m CLEAR SPAN
GENERAL LAYOUT & DETAILS

Drawn: MC	Job No: CECS/1421	Date: 19th August 2014	
Checked: Graeme White	Scales: 1:100; 1:50; 1:20; 1:10; 1:5		
Drawing No: CECS/1421/01	Revision: 09		



LOCATION PLAN



DESIGN BASED RESIDUAL HAZARDS
This symbol indicates that significant residual hazards exist and must be managed during the construction process.

Revision	Date	Changes	Drawn	Checked

Drawing Status:
CONSTRUCTION

Client:
FORESTRY COMMISSION

CIVIL ENGINEERING CENTRAL SERVICES

Forestry Commission
Northern Research Station
Roslin, Midlothian
EH25 9SY
Tel: 0300 067 5917 (M C)
Tel: 0300 067 5998 (G W)

bcia british construction industry awards 2004 2011 WINNER

Job Title:
YOKE BURN
NORTHUMBERLAND
NORTH ENGLAND FOREST DISTRICT

Drawing Title:
44T ROAD BRIDGE
10.5m CLEAR SPAN
SURVEY & LOCATION DETAILS

Drawn:	Job No:	Date:
MC	CECS/1421	14th Oct 2014
Checked: Graeme White	Scales: 1:100; 1:50; 1:20; 1:10; 1:5	
Drawing No: CECS/1421/05		Revision: -

A1 - DO NOT SCALE