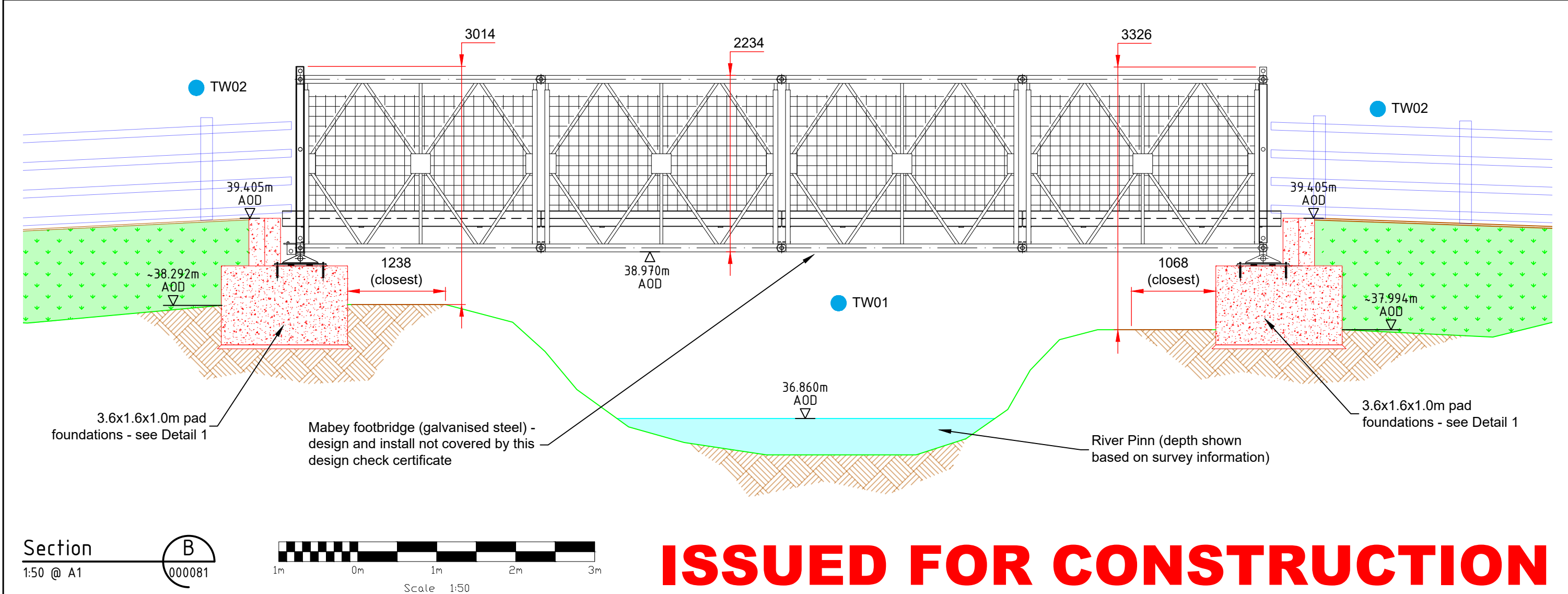
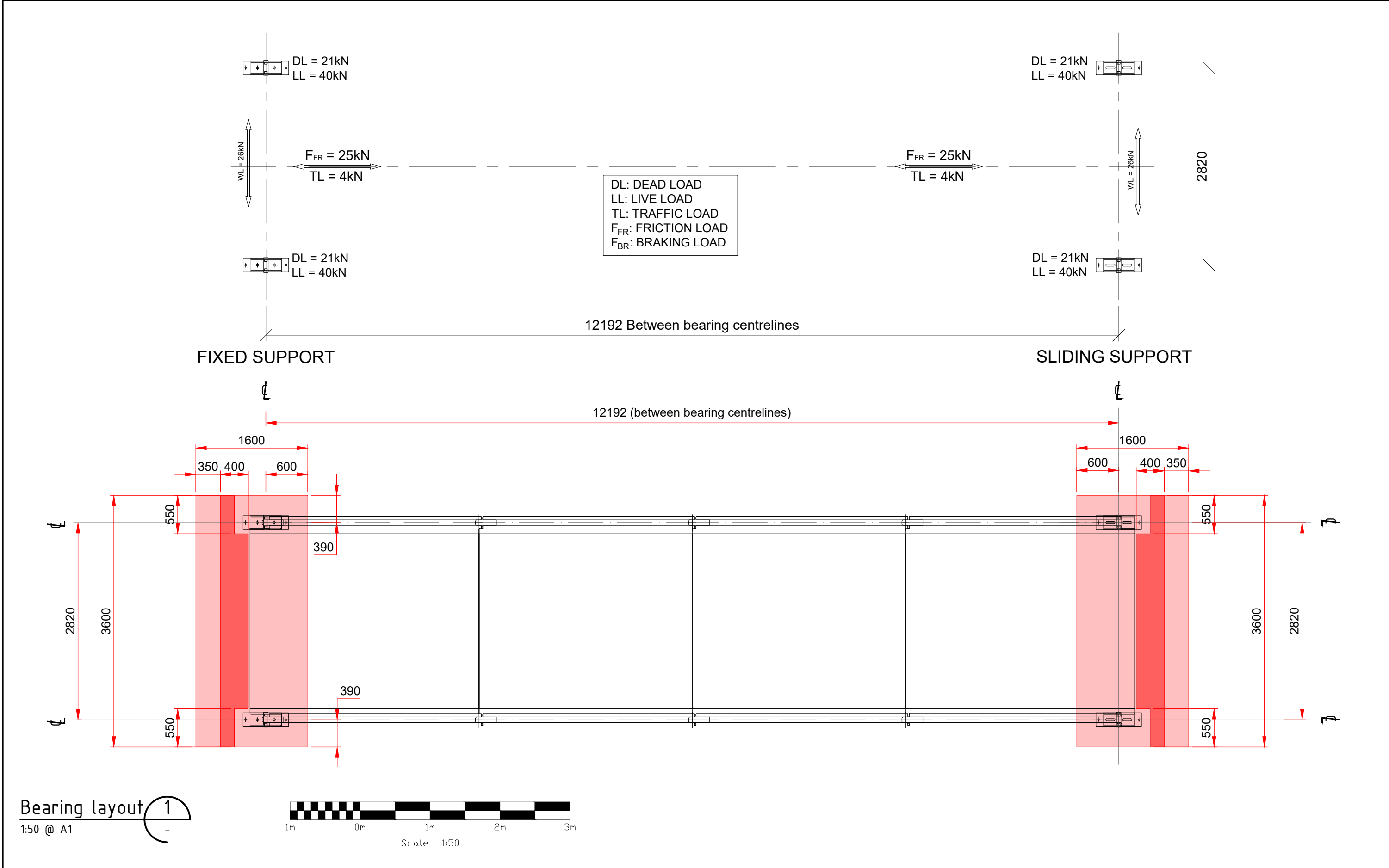
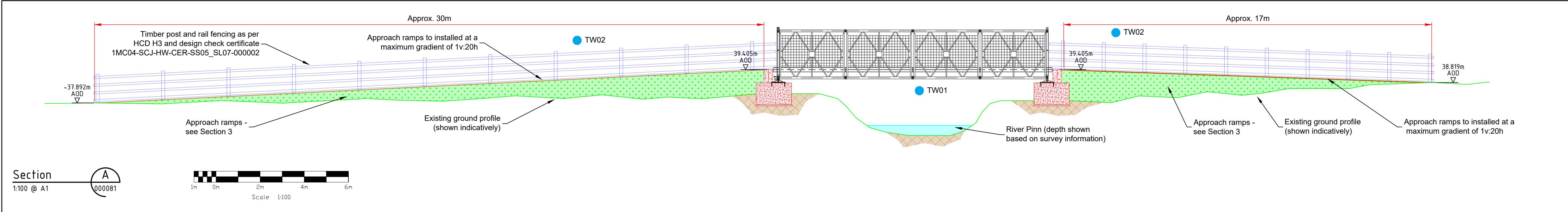
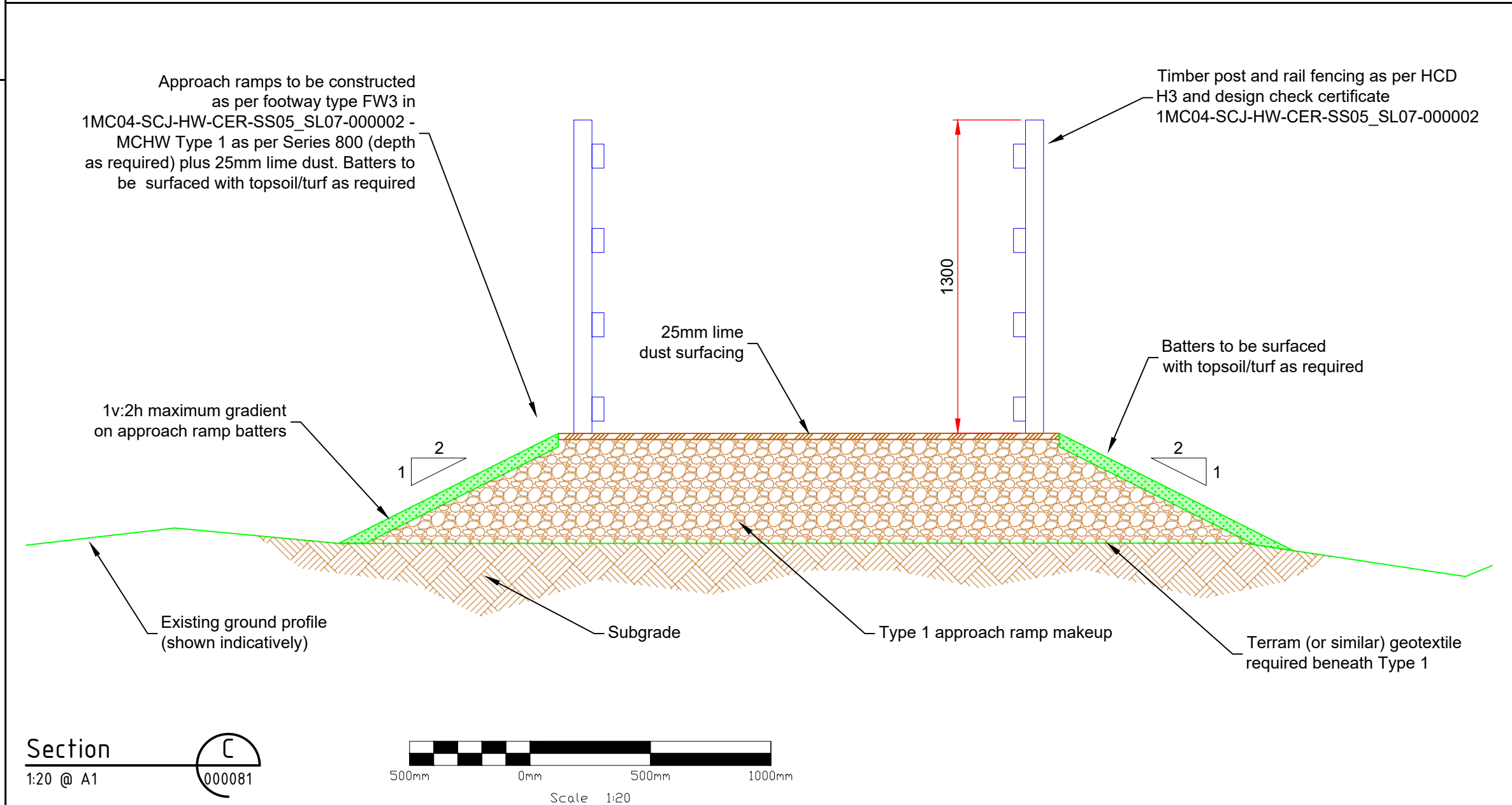
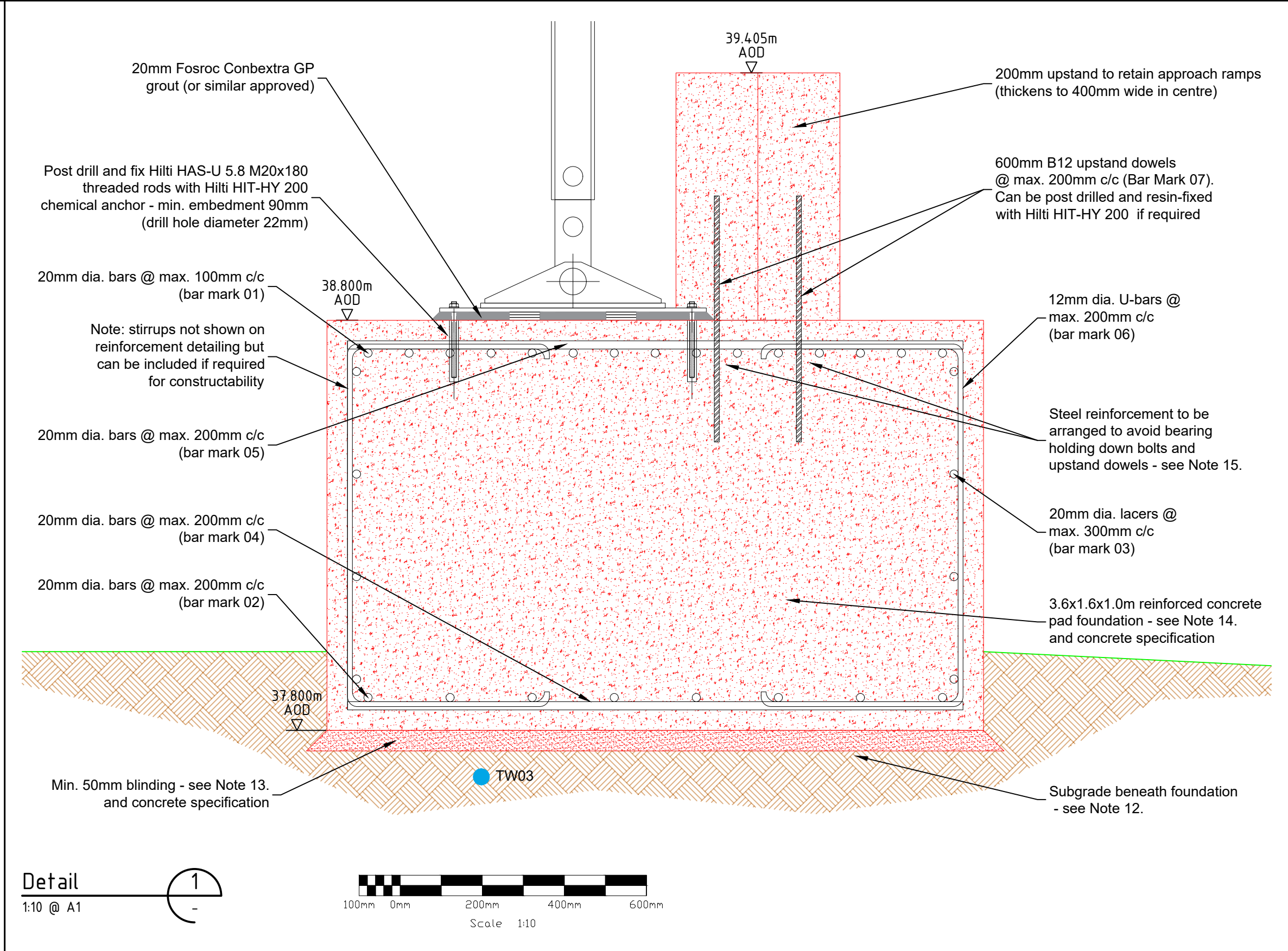




ISSUED FOR CONSTRUCTION



HS2 Asset ID
HS2-000001360-River Pinn Underbridge

Suitability
S0

Certificate reference:
1MC04-SCJ-EN-CER-SS05_SL07-000132 Rev. C01

The revision and design stage shown on this drawing is only applicable when accompanied by the above approved or completed certificate document

Safety Health and Environmental Information

In addition to the hazards and risks normally associated with the types of work detailed in this drawing, Please note the following risks and information

Notes below are key potential Health and Safety and Environmental risks associated with the works.

Construction		
● TW01	Water interface - risk of drowning	
● TW02	Falls from height on approach ramps	
Maintenance		
● TW01	Water interface - risk of drowning	
● TW02	Falls from height on approach ramps	
Operation		
● TW02	Falls from height on approach ramps	
● TW03	Ground failure beneath foundations	
Demolition	No risk identified on this drawing	
Environmental	No risk identified on drawing	

Risks here are not exhaustive. Refer to CDM Risk Register Ref:
1MC04-SCJ-EN-RIA-SS05_SL07-000057 C01

These notes assume the use of experienced and competent contractors to carry out the work using an approved safe method of working.

Key to Health and Safety Symbols
● Indicates a residual risk requiring a compulsory action
ⓘ Indicates a residual risk for information
⊘ Indicates a residual risk requiring a prohibitive action
⚠ Indicates a residual risk as a warning

Notes:

- All levels are in metres (m) A.O.D. U.N.O.
- All dimensions are in millimetres (mm) U.N.O.
- All coordinates are in HS2P1+14 Snake Grid
- Dimensions are not to be scaled from the drawing
- This drawing is to be read in conjunction with 1MC04-SCJ-EN-SKE-SS05_SL07-000081
- Design and install of the proprietary footbridge is not covered by this design check certificate - bridge details have been shown and the foundation design has been undertaken in line with Mabey drawing "569EH-06-B GA with Reactions 12.192m x 2.5m RFB.pdf"
- Costain IHE takes no responsibility for the suitability of the Mabey product for the intended loading - it must be installed and used in line with the manufacturer's guidance, and the Temporary Works Coordinator must ensure it has been designed for appropriate loading scenarios
- Design**
- The unfactored design loading for the footbridge foundations has been taken as provided by Mabey on drawing "569EH-06-B GA with Reactions 12.192m x 2.5m RFB.pdf" - see bearing layout
- Geotechnical information has been considered from GIR 1MC04-SCJ-GT-REP-SS05_SL07-000004 P01 and "RML 6462 - HS2 Cophall Cutting diversion West Ruislip.pdf"
- The footbridge is suitable for pedestrian loading only in line with the Mabey drawing above
- Setting out of the proposed footbridge bearings has been detailed in line with the Mabey drawing above. Dimensions should be verified by the TWC/Construction team prior to construction of the bridge
- Construction**
- The subgrade beneath each of the proposed foundations must be Plate Bearing Tested prior to construction commencing, using a 600mm diameter plate. The tests must be carried out to a pressure of 150kPa, with a settlement of less than 10mm achieved
- Visqueen or other suitable membrane must be laid beneath blinding concrete
- Concrete is to be minimum grade C32/40 with a maximum 20mm aggregate size. Concrete is to have reached full strength prior to loading
- Cover to reinforcement is to be 50mm
- Grout (Fosroc Conbextra GP or similar) is to have a minimum compressive strength of 15MPa
- Hilti chemical anchors and resin products are to be installed in line with the manufacturer's guidance

					HS2 accepts no responsibility for any circumstances which arise from the reproduction of this document after alteration, amendment or abbreviation or if it is issued in part or issued incompletely in any way.
					© Crown Copyright and database right 2018. All rights reserved. Ordnance Survey Licence number 100049190
C02	Issued For Construction	05.01.21	05.01.21	05.01.21	© Crown Copyright material is reproduced with the permission of Land Registry under delegated authority from the Controller of HMSO.
C01	Issued For Construction	LB	EG	JB	This material was last updated on 2018 and may not be copied, distributed, sold or published without the formal permission of Land Registry. Only an official copy of a title plan or register obtained from the Land Registry may be used for legal or other official purposes.
P01	First Issue for comments	LB	EG	JB	
Rev	Description	Drawn	Checked	Con App	HS2 App

Legends/Notes/Reference models:
Concrete specification:
Reinforced concrete as per HS2-HS2-CV-SPE-000-011700 - SCEW Series 1700 Structural Concrete
Grade: C40/50
Execution class: XC3 / XF4
Cover: 50mm
Reinforcement shall be grade B500B in accordance with BS4449:2015 + A3:2016.
Reinforcement shall be bent in accordance BS8666:2015.
Blinding concrete to be 50mm GEN1 / ST2

Foundation reinforcement bar schedule:									
Bar mark	Type & size	Total no. of bars	Length of each bar + mm	Shape code	A* mm	B* mm	C* mm	D* mm	E/R* mm
01	B20	16	3500	00	3500				
02	B20	8	3500	00	3500				
03	B20	8	3500	00	3500				
04	B20	18	1500	00	1500				
05	B20	18	1500	00	1500				
06	B12	36	1825	Z1	480	900	480		
07	B12	32	600	00	600				
This schedule conforms to BS 8666:2005									
* Specified in multiples of 5mm + Specified in multiples of 25mm									

HS2

Registered in England Registration No. 06791686
Registered office: 2 Snow Hill, Queensway, Birmingham, B4 6GA

Creator/Originator
Skanska - Costain - Strabag JV

Zone	River Pinn Underbridge		
Design Stage	Construction		
Drawing Title	River Pinn Underbridge General Temporary Works Drawing River Pinn Footbridge Foundations Sections and Details		

Project/Contract	HS2 MWCC SCS		
Discipline/Function	Engineering		
Drawn	LB	Checked	EG
Date	05.01.21	Scale	AS SHOWN
Drawing No.	1MC04-SCJ-EN-SKE-SS05_SL07-000082		Rev.
			C02