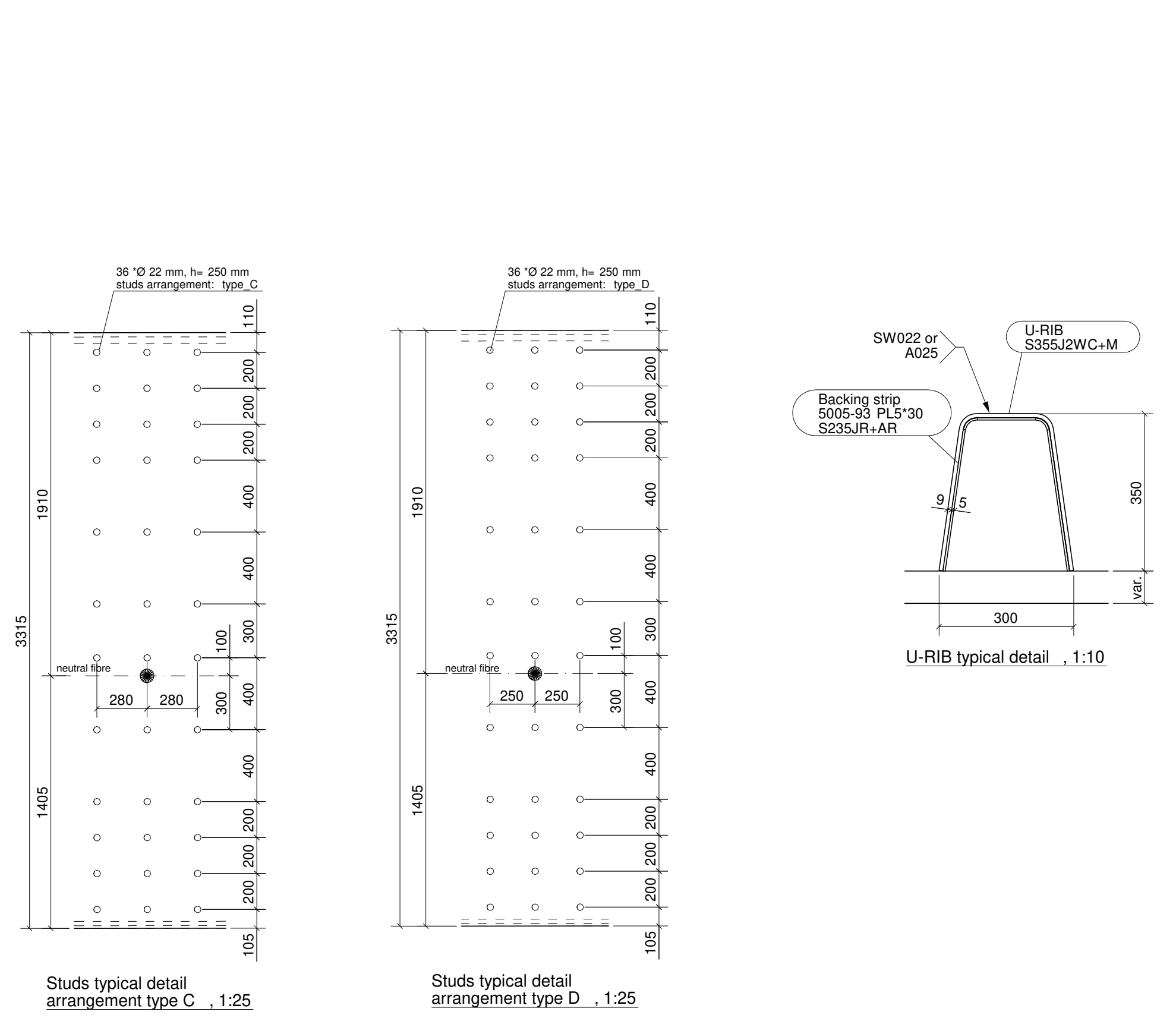
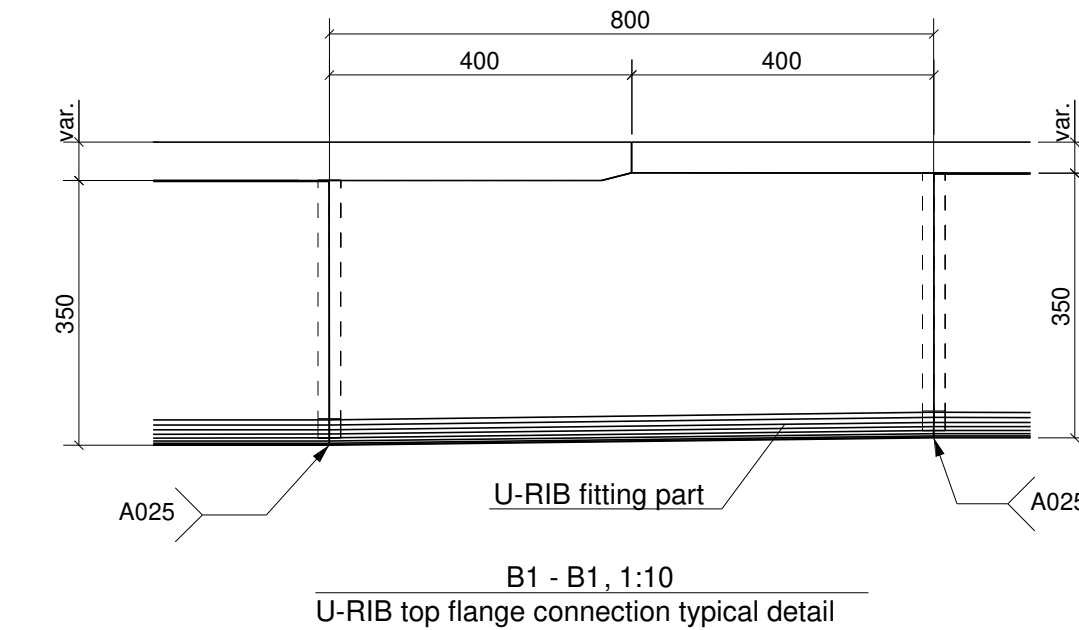
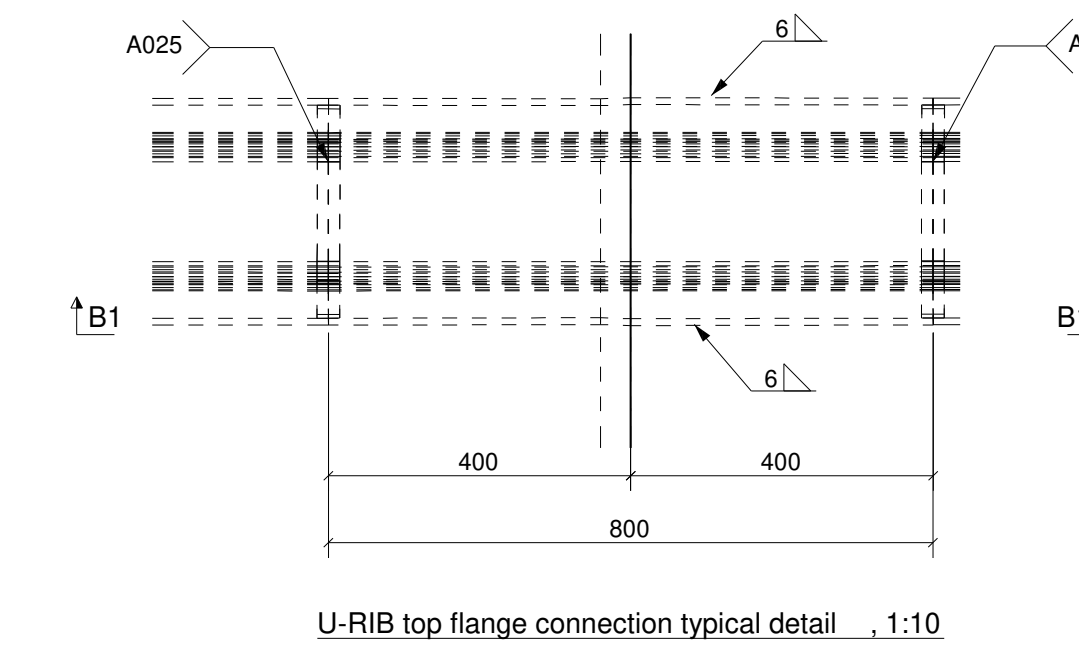
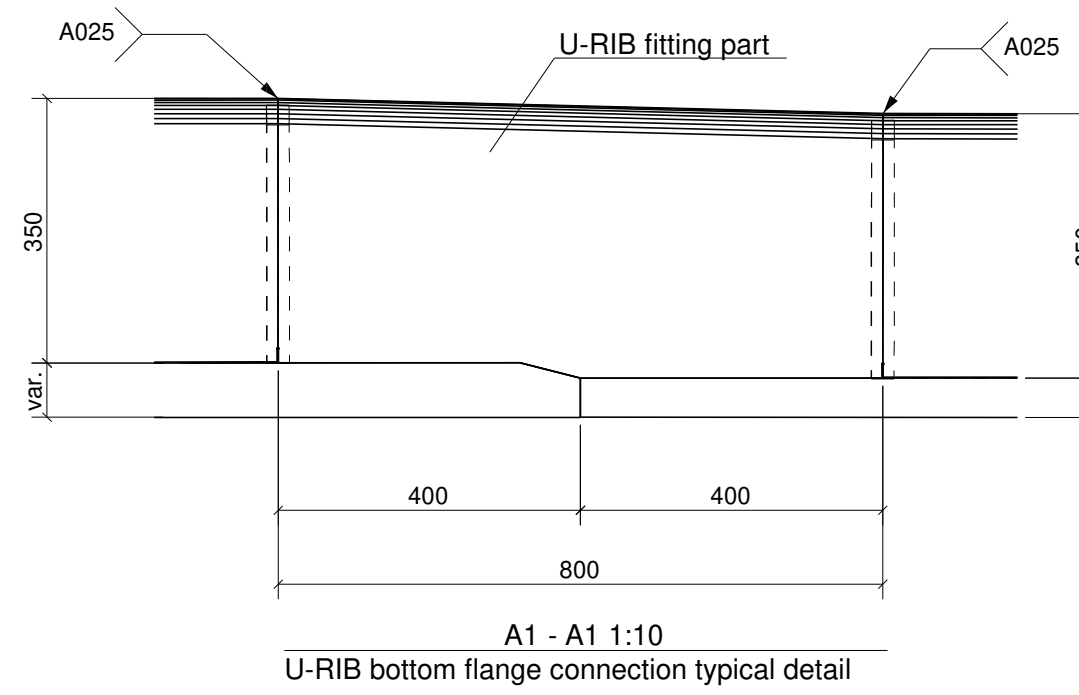




Technical drawing of a U-RIB bottom flange connection detail. The drawing shows a cross-section of a ribbed metal plate (U-RIB) connected to a vertical support structure. The connection is made using two A205 bolts. The distance between the bolts is 800 units. The distance from the centerline of the bolts to the edge of the rib is 400 units. The drawing is labeled "U-RIB bottom flange connection typical detail" and "1:10".



1 - Steel Quality (EN 10025) :
Structural steel shall be S355W, unless otherwise specified in drawings,
the structural steel shall comply with the requirements of BS EN 10025-5

Item	Sub grade / plate thickness (mm)		
	Z2W+M	K2W+M	Z5W+M
Main girder bottom flange	58	72	936
Main girder bottom flange at support	87	108	150
Main girder upper flange	48	58	87
Main girder web	39	48	72
Diaphragm web	39	48	72
Diaphragm flange	48	58	87
Stiffener	48	58	87
Bearing plate	48	58	87

MAXIMAL PLATE THICKNESS [MM] ACCORDING TO THE STEEL SUBSTRATE

Weathering steel will have to comply with exposure condition of C3 category
No Z-quality applicable unless noted otherwise on the drawings.
Steelwork noted on drawings as Z25 in accordance to BS EN 10164:2018.

2 - Shear studs BS EN ISO13918 :

Unless noted on the drawing, all shear studs to be Type SD1 studs in accordance with BS EN ISO 13918:2008. Steel grade: S235J2 «C450:

- Slab-deck connection: diam 22mm
- Bearing anchor plates: diam 25mm

3 - Welds: _____

All welds shall be performed continuously around the complete perimeter unless noted otherwise.
Dimensions of fillet welds are minimum effective throat thickness unless noted otherwise.
All welding consumable to be compatible with the weathering steel grade
used refer to steelwork specifications for further requirements.

Welds according to weld catalogue workshop or worksite:
 1MC09-BBV-VBS-ST-DGA-NS04_NL10-003004: Weld catalogue Workshop
 1MC09-BBV-VBS-ST-DGA-NS04_NL10-003005: Weld catalogue Site

4 - Bolted assemblies :

All bolts shall be Grade 8.8 HR friction Grip Bolts according to BS EN 1090 and BS EN14399-10. (U.N.O.)
All faying surfaces where pre-loaded bolts are used shall achieve Class A in accordance with EN1090-2
Treatment: Weathering grade steel according to ASTM F3125/F3125M GRADE A32
8.8 preloaded TCB bolt assembly:

- 1x HRC bolt BS EN 14399-10
- 1x HRD nut -class 10 BS EN 14399-10
- 2x washers BS EN 14399-6

Bolts should be tightened according to the method statement for bolting up pre-loaded

5 - Execution class : EXC3 BS EN 1090-2:2008+A1:2011

6 - Tolerances according to BS EN1090-1 and BS EN1090-2

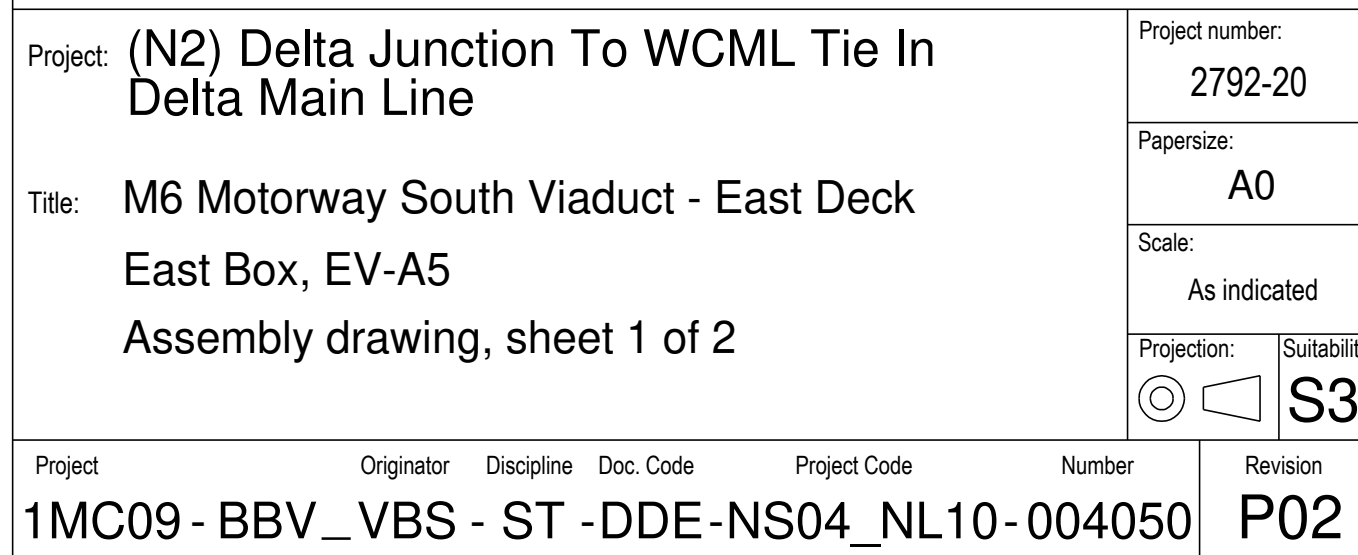
with additional requirements specified by Series1800: HS2-HS2-CV-SPE-000-011800.

7 - Fabrication
Reference temperature 20°C

Bottom flange in contact with bearing tapered plates to be machined to give full contact bearing. Machining with removal of bottom flange material up to 10mm is allowed to achieve the required flatness.

8 - Annotations -

Client: **Balfour Beatty VINCI** Working in partnership with **HS2**



2) Delta Junction To WCML Tie In

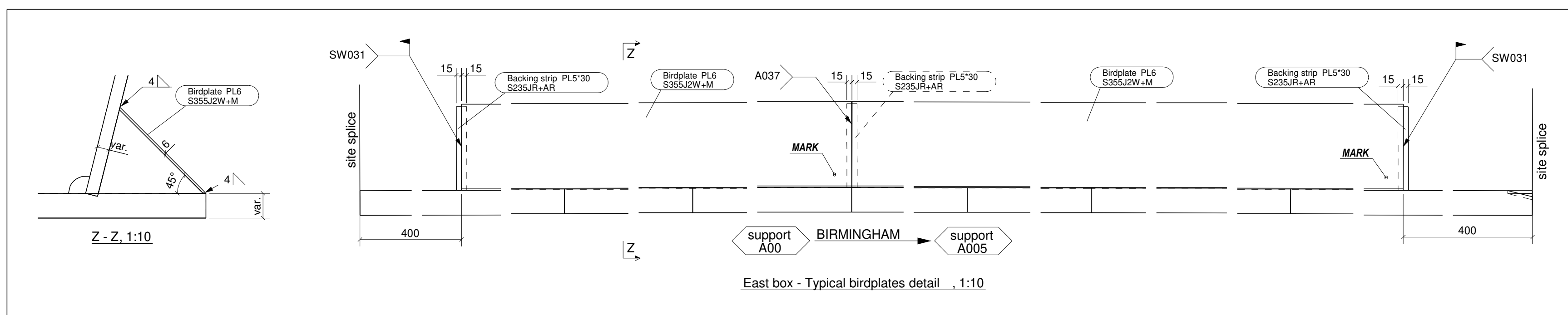
Zone		Drawn	Checked	Approved
Delta Main Line		MBO	LDP	TSU
Drawing Title		Date	Scale	Size
M6 Motorway South Viaduct - East Deck		11/10/23	As Indicated	A0
East Box, EV-A5		Deliverable	Gate	Suitability
Assembly drawing, sheet 1 of 2		Yes (TIDP)	DD	S3
		Drawing No.	Rev.	
		1MC09-BBV_VBS_ST-DTE-NS04_NL10-004050-S3		P02

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Official

Creator/Originator
Balfour Beatty VINCI

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P02	Fit for Review and Comment	MBO	LDP	TSDU	11/10/23	11/10/23	
P01	Fit for Review and Comment	MZL	LDP	TSDU	04/09/23	04/09/23	
Rev	Description	Drawn	Checked	Approved	Cust App	Scale with caution as distortion can occur.	

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Table Structures