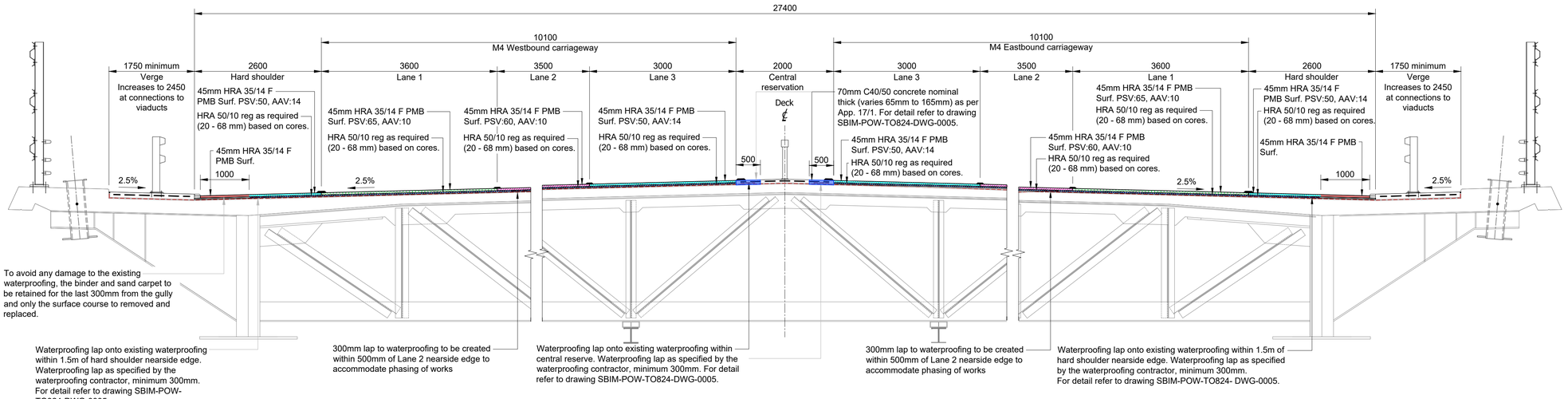
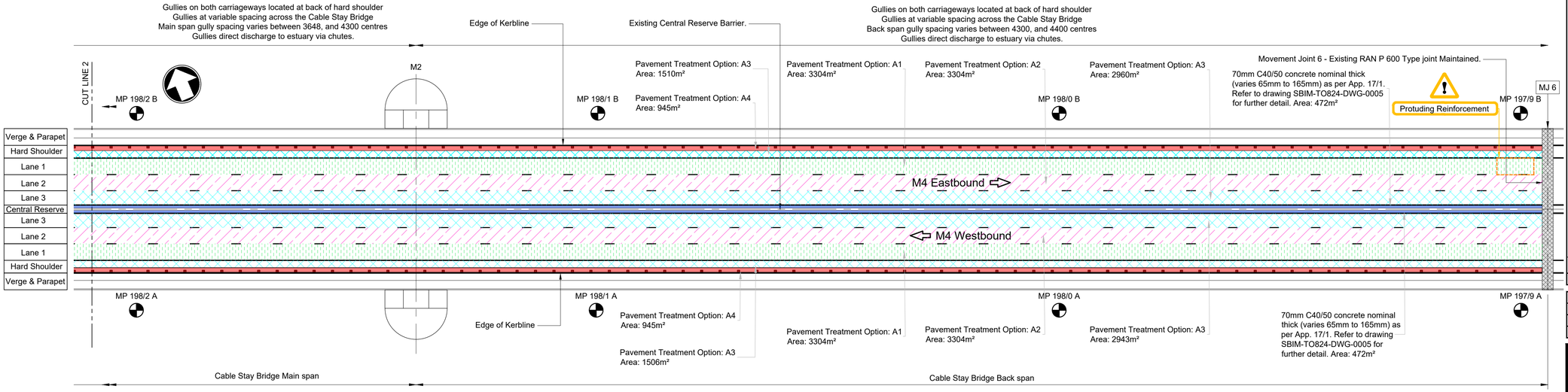
File ref - z:\z temporary prince of wales\drawings to be issued\sbim-pow-to824-dwg-0701 pavements ricardo.dwg

0 100



Typical Section of Bridge Deck

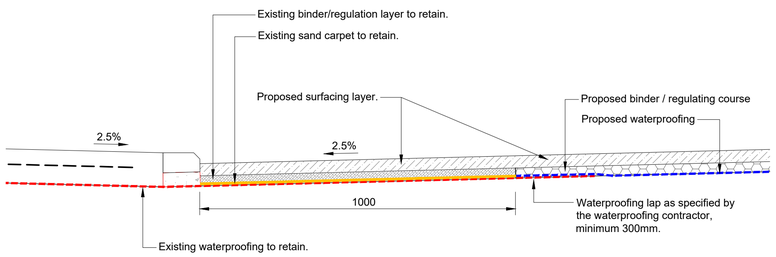
Scale 1:50



Plan on Main Deck

Scale 1:500

Note: Barriers and gullies not shown in this detail for clarity



Bridge Hardshoulder Typical Detail

Scale 1:10

Resurfacing area Number	Section	Carriageway Direction	Lane	Chainage (m) Start	Chainage (m) End	PSV	AAV	Layer course	Nominal Thickness (mm)
1	M4 PoW Cable Stay Bridge	Eastbound	HS - Hard Shoulder	0	948	50	14	Surface	45
2	M4 PoW Cable Stay Bridge	Eastbound	HS - Hard Shoulder	0	948	50	14	Surface, Regulating, Binder	55 - 113*
3	M4 PoW Cable Stay Bridge	Eastbound	CL1 - Lane 1	0	948	65	10	Surface, Regulating, Binder	55 - 113*
4	M4 PoW Cable Stay Bridge	Eastbound	CL2 - Lane 2	0	948	60	10	Surface, Regulating, Binder	55 - 113*
5	M4 PoW Cable Stay Bridge	Eastbound	CL3 - Lane 3	0	948	50	14	Surface, Regulating, Binder	55 - 113*
6	M4 PoW Cable Stay Bridge	Westbound	HS - Hard Shoulder	0	948	50	14	Surface	45
7	M4 PoW Cable Stay Bridge	Westbound	HS - Hard Shoulder	0	948	50	14	Surface, Regulating, Binder	55 - 113*
8	M4 PoW Cable Stay Bridge	Westbound	CL1 - Lane 1	0	948	65	10	Surface, Regulating, Binder	55 - 113*
9	M4 PoW Cable Stay Bridge	Westbound	CL2 - Lane 2	0	948	60	10	Surface, Regulating, Binder	55 - 113*
10	M4 PoW Cable Stay Bridge	Westbound	CL3 - Lane 3	0	948	50	14	Surface, Regulating, Binder	55 - 113*

*Surfacing depths vary over the length of the bridge deck. Refer to drawing note 13.

Pavement Schedule

Scale N/A

NOTES

1. Do not scale from this drawing.
2. DRAWING TO BE PRINTED IN COLOUR.
3. All dimensions are in millimeters unless otherwise stated.
4. Road Markings and Marker Post locations are shown indicatively.
5. This drawing is to be read in conjunction with the all drawings in the SBIM-POW-TO824 Series and all other relevant documents.
6. Measurements and locations of assets are as per As-Built information and should be checked for accuracy on site. Principal Contractor to ensure topographical survey is carried out to obtain existing levels prior to planing out.
7. Surfacing to be reinstated to match existing lines and levels.
8. All surfacing works are to be installed as specified in Appendix 7 of the Specification of works.
9. This drawing is to be read in conjunction with the relevant GPR data. The data shows that the thickness of the surfacing varies across the deck, therefore a regulating course is specified to allow the HRA to be laid at a nominal thickness of 45mm as specified in MCHW clause 943.2.
10. The void content of hte binder shall be no more than 4% as defined in CD358 clause 8.6.
11. Waterproofing laps required at locations between construction phases.
12. Phasing: The works are expected to be separated into the following phases:
    a) Westbound Lane 1 and Hard Shoulder
    b) Westbound Lane 2 and Lane 3
    c) Eastbound Lane 1 and Hard Shoulder
    d) Eastbound Lane 2 and Lane 3
13. The thickness of existing pavement is based on the historic and the most recent core surveys. Principal Contractor shall also refer to the GPR surveys and the heat maps provided in Appendix A of the PCI.

KEY:

M Main Tower

MJ Movement Joint

Option A1: 45mm HRA 35/14F Surf PMB 40/60 + HRA 50/10 PMB reg/bin as required (20-68 mm). **PSV: 65 AAV: 10**

Option A2: 45mm HRA 35/14F Surf PMB 40/60 + HRA 50/10 PMB reg/bin as required (20-68 mm).**PSV: 60 AAV: 10**

Option A3: 45mm HRA 35/14F Surf PMB 40/60 + HRA 50/10 PMB reg/bin as required (20-68 mm).**PSV: 50 AAV: 14**

Option A4: 45mm HRA 35/14F Surf PMB 40/60 **PSV: 50 AAV: 14**

70mm C40/50 concrete nominal thick (varies 65mm to 165mm) as per App. 17/1.

Locations of Protuding Reinforcement (Hazard HS-03). Refer to drawing SBIM-POW-TO824-DWG-0008 - Patch Repair Details.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey CDM Hazard Management Process).
Residual Design Hazards:
HS-01 - Striking Existing Utilities.
HS-02 - Temporary Instability of Bridge due to Concrete Removal.
HS-03 - Risk of injury from Protruding Reinforcement.
HS-04 - RA1 Procedure limitations.
HS-05 - Reduction in deck thickness due to Hydro Demolition.
HS-06 - Depth of Deck when Breaking-out Concrete.
HS-07 - Trafficking of the Deck following Treatment.

Rev	Revision details	Drwn	Chkd	Appd	Date
P01	For Tender	RN	SP	MB	12.04.24

Designed:	Amey	Date:	12.04.2024
Drawn:	Ricardo Nunes	Date:	12.04.2024
Checked:	Santosh Pandey	Date:	12.04.2024
Approved:	Mark Broome	Date:	12.04.2024

Amey
www.amey.co.uk

Client: national highways

Project Name
M4 Prince of Wales Bridge Resurfacing Strategy

Drawing Title
Prince of Wales Bridge Cable Stay Bridge - Proposed Surfacing (Sheet 2 of 2)

Original Drawing Size : A1	Scale : As Shown
Dimensions : Metres	

Drawing Status	Suitability
For Tender	S2

Drawing No	Rev
SBIM-POW-TO824-DWG-0702	P01