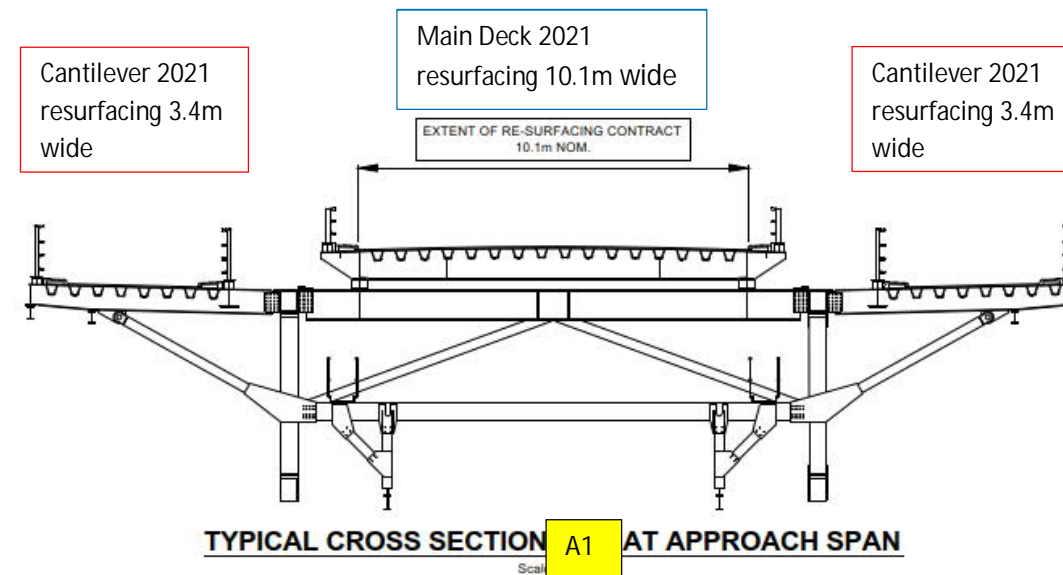
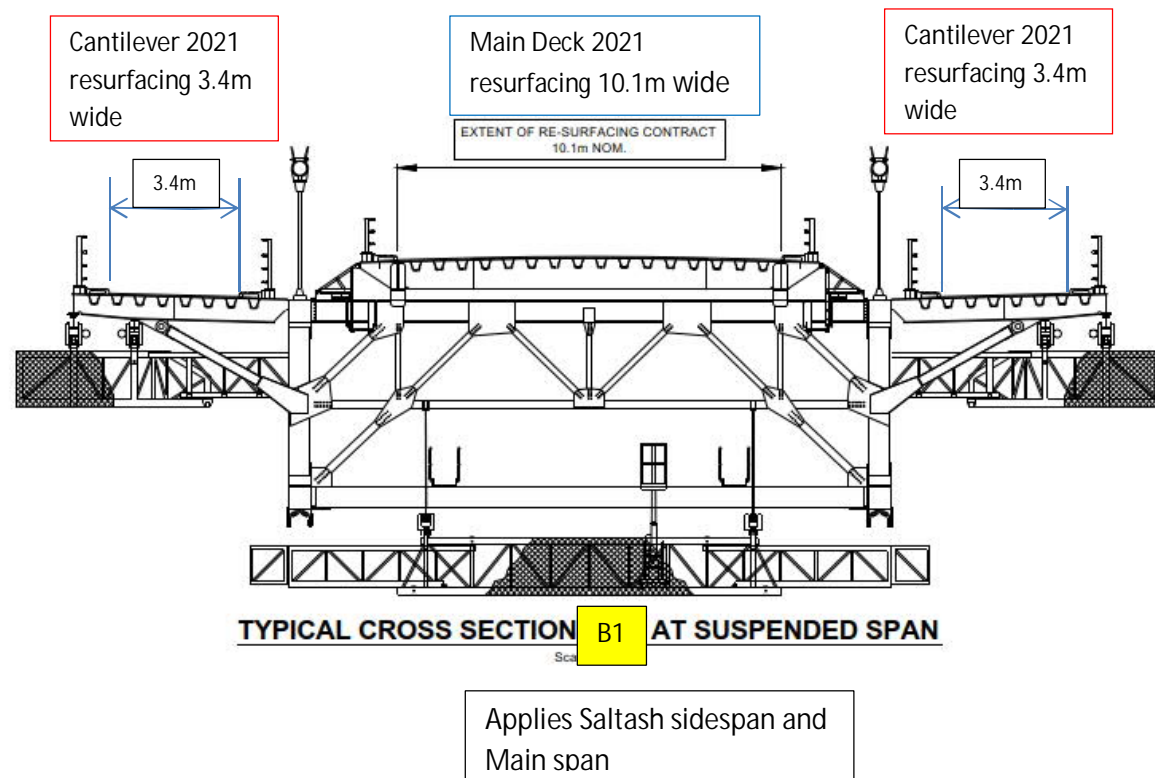
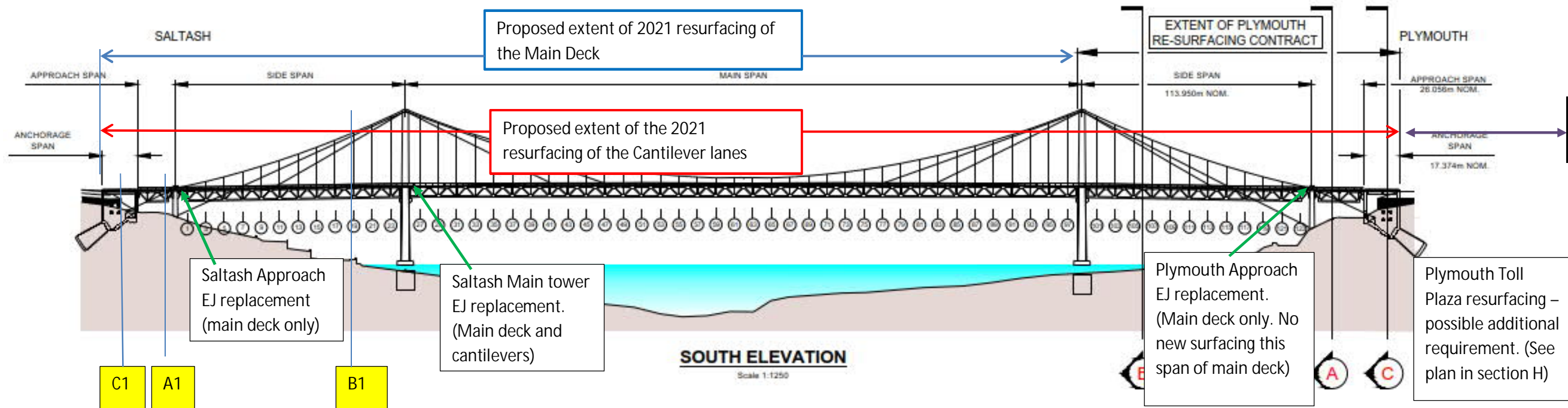


Tamar Bridge

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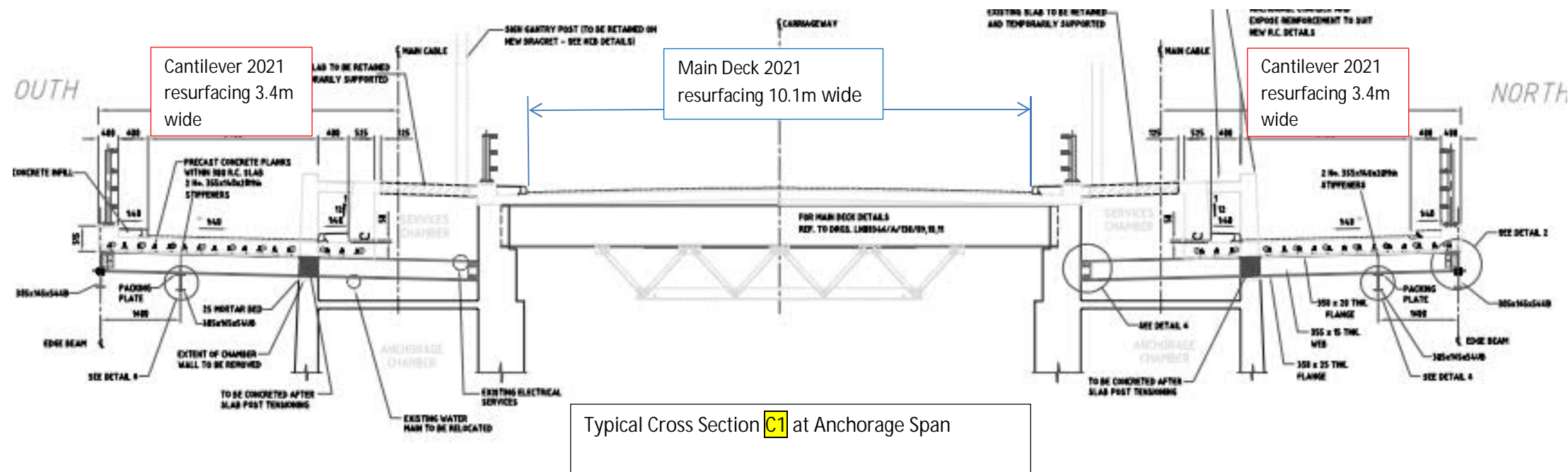
A - Extent of resurfacing operations proposed shown on structure drawings



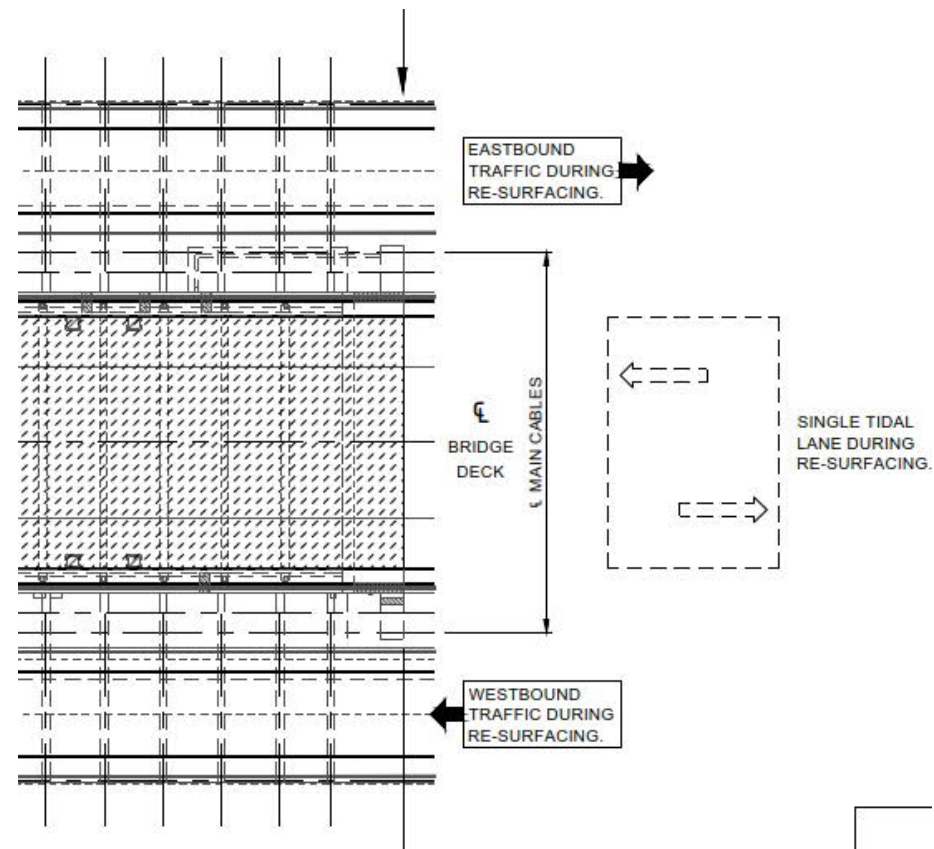
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B – Indicative lane constraints / TM

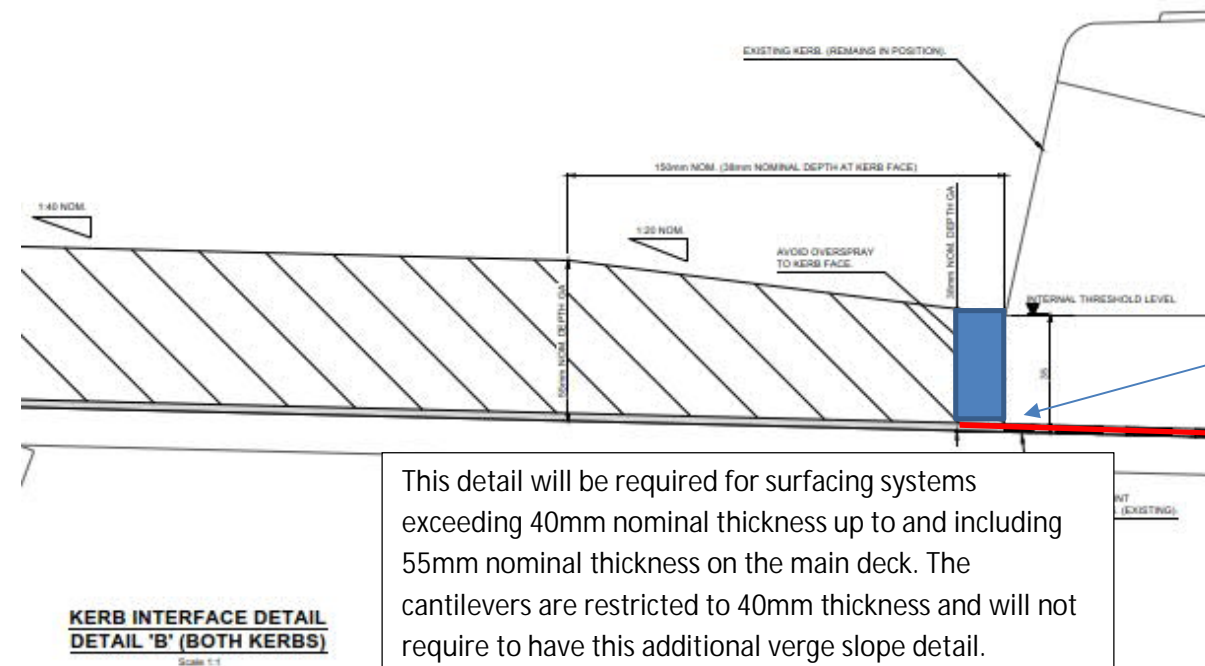
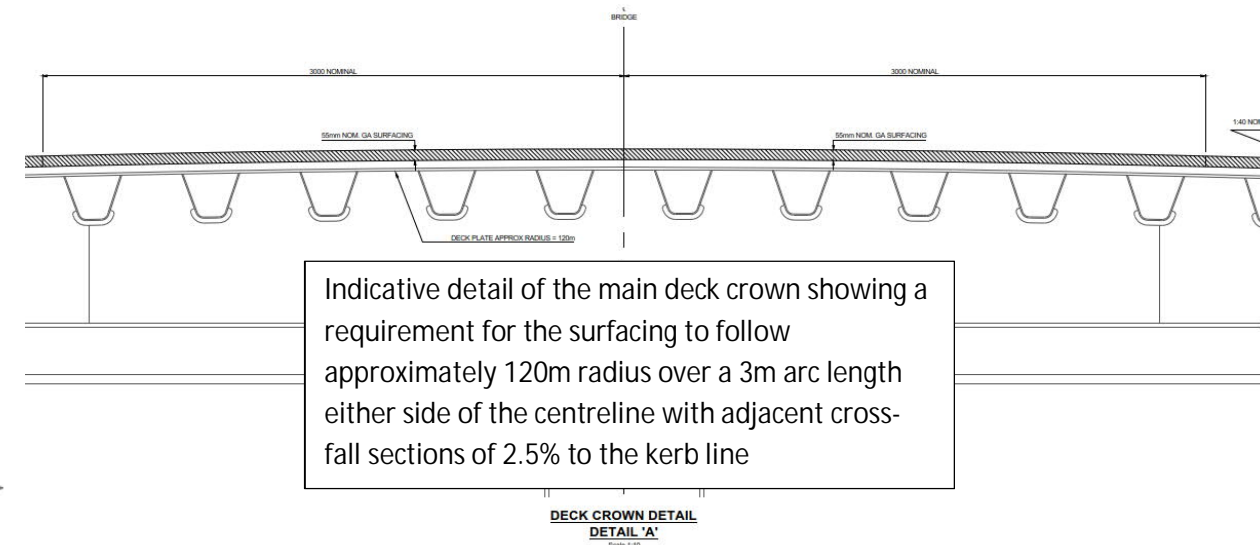
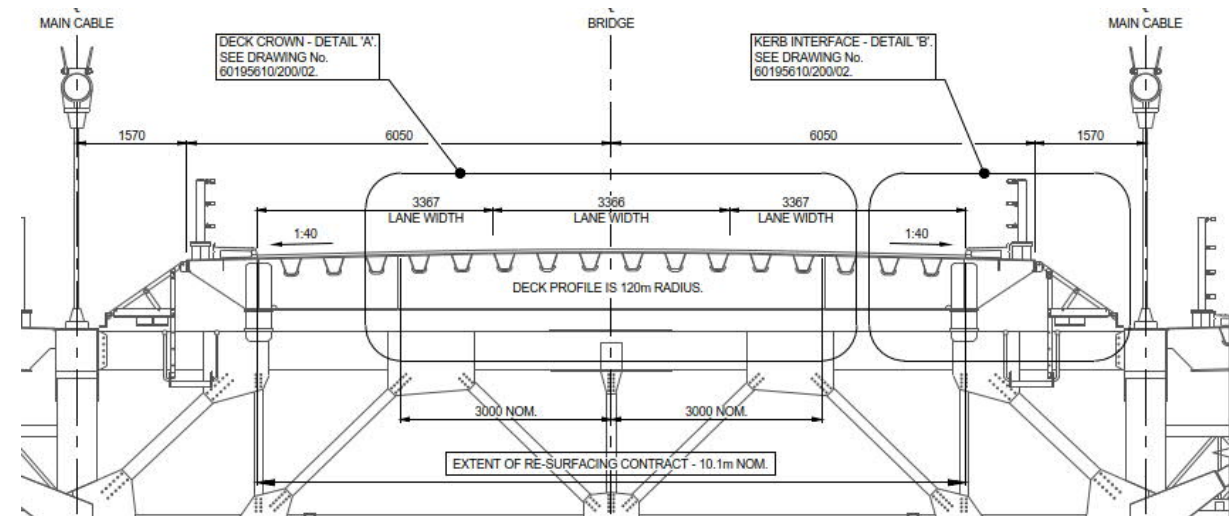


Activity	Lane status	Arrangements / notifications
Main deck surfacing		
Off peak hours (23.00-7.00)	Main deck can be fully closed to traffic provided 1 EB and 1 WB lane available on the cantilevers	Subject to TB approval – reviewed daily
Peak hours (7.00 to 23.00)	One main deck lane to be available to supplement the cantilever lanes. The direction of the main deck lane will be “tidal” i.e. either EB or WB to suit traffic conditions	There can be several TM tidal changes in the morning and afternoon to suit prevailing traffic conditions. These will be determined by Tamar Crossings Control Room / Bridge Supervisor
Cantilever surfacing		
At all times	The affected cantilever will be closed and all other lanes will be open	Localised temp TM to suit plant movements will be permitted in consultation with TB control.

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C – Indicative surfacing profile and edge detail – main deck



This detail will be required for surfacing systems exceeding 40mm nominal thickness up to and including 55mm nominal thickness on the main deck. The cantilevers are restricted to 40mm thickness and will not require to have this additional verge slope detail.

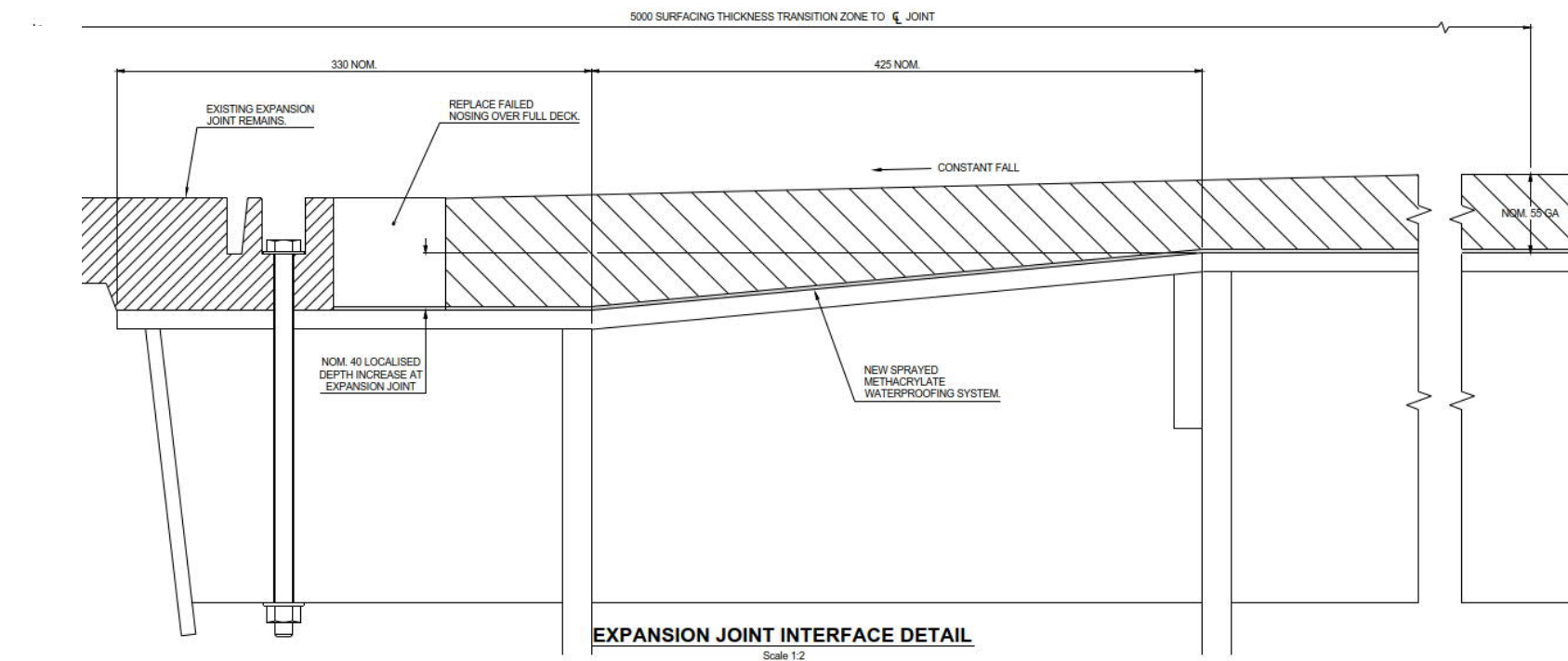
Temporary edge fill zone from 2019/20 works bitumen / 6mm tarmac combination(s) with sand separator over new waterproofing overlap.

New 2019/20 sprayed methyl methacrylate waterproofing extends 20mm lap into proposed resurfacing zone.

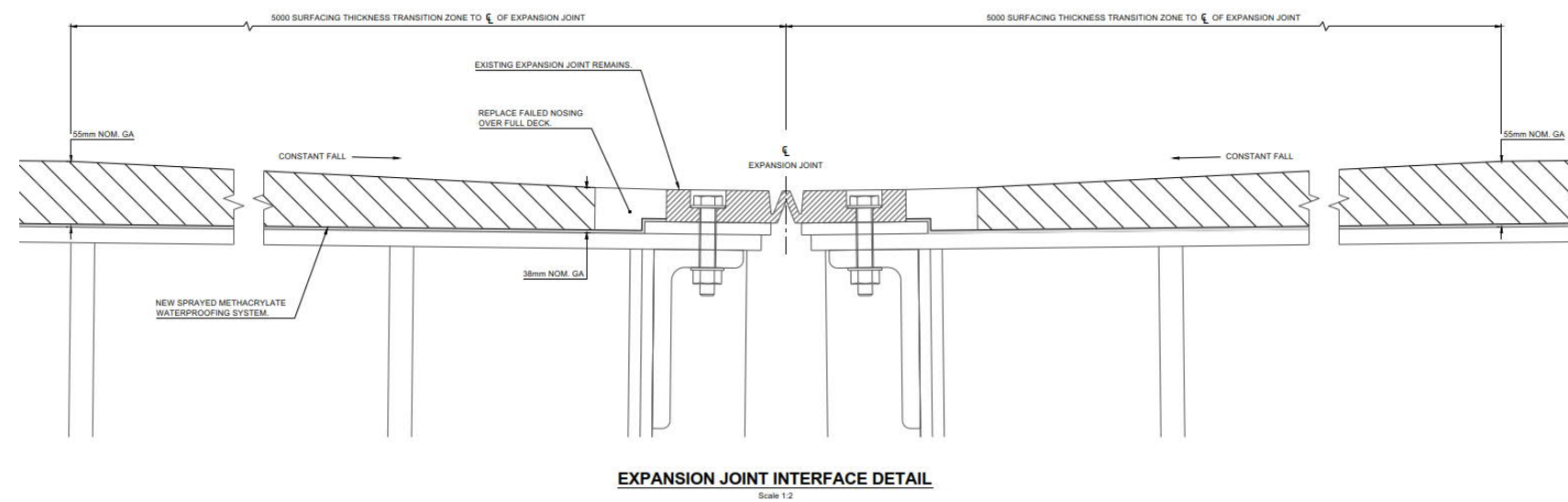
Tamar Bridge

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D – Indicative detail of surfacing profile at expansion joints (typical)



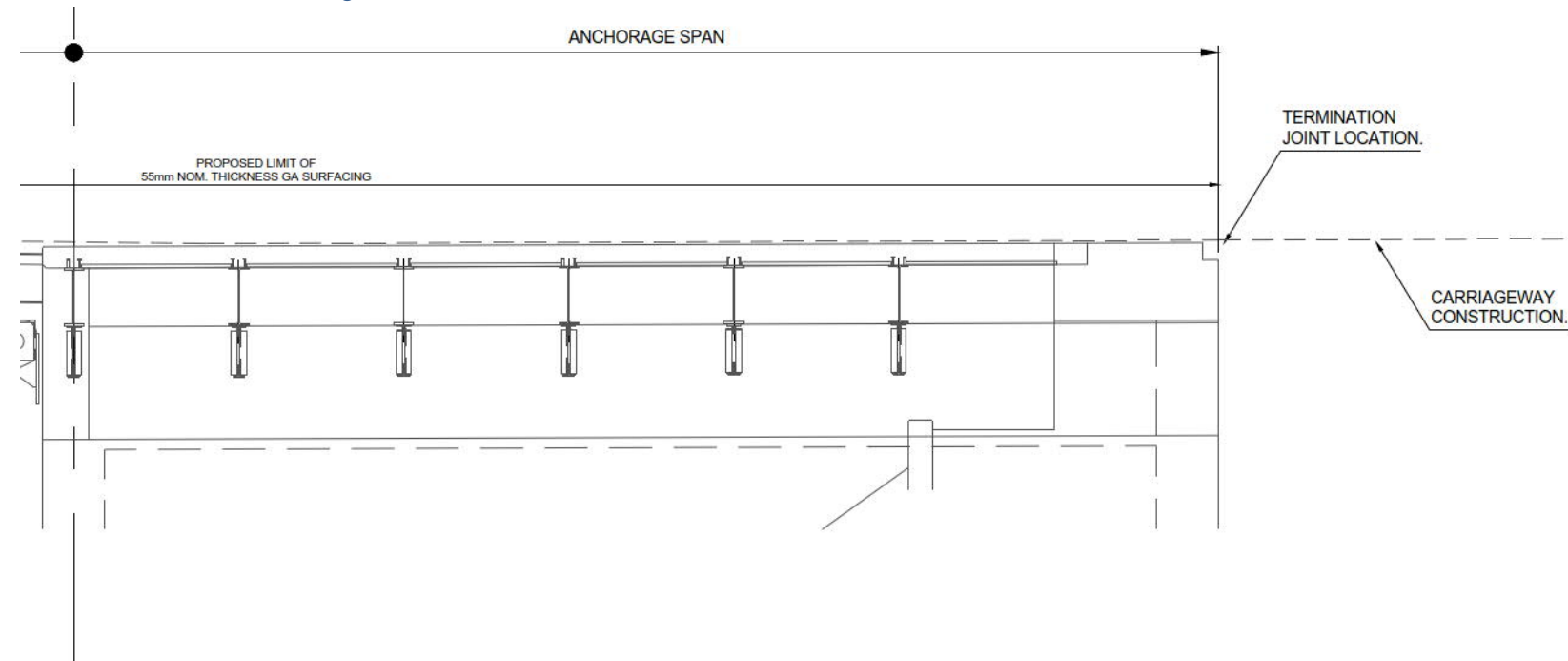
Indicative details of surfacing taper adjacent to expansion joints. Typically based on a 5m transition either side of the joint.



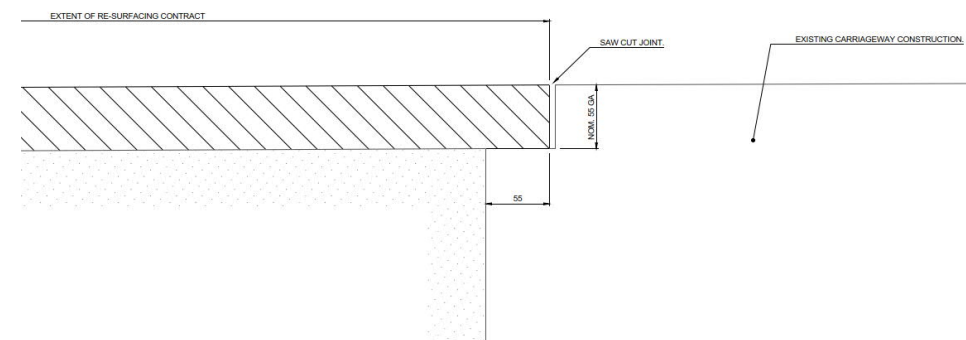
Tamar Bridge

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E – Indicative surfacing end termination detail



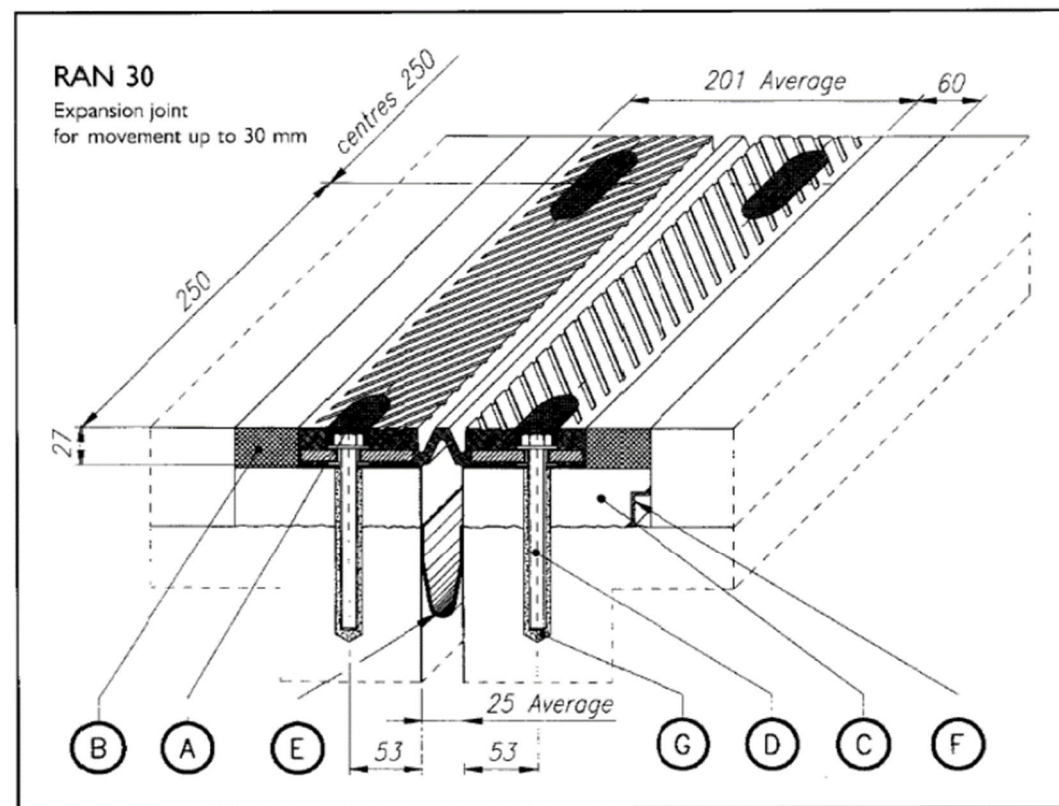
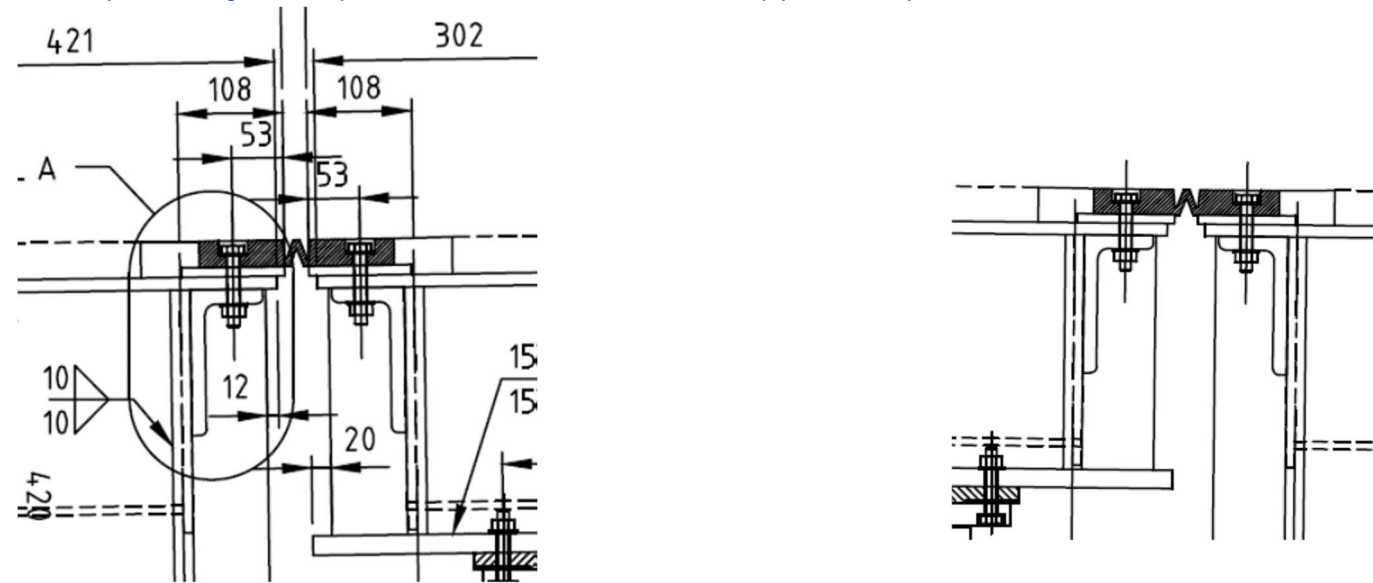
Typical termination joint detail against adjoining carriageway construction behind the anchorage spans. As drawn for Plymouth, Saltash similar.



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F – Expansion joint replacement (minor) Saltash Approach span

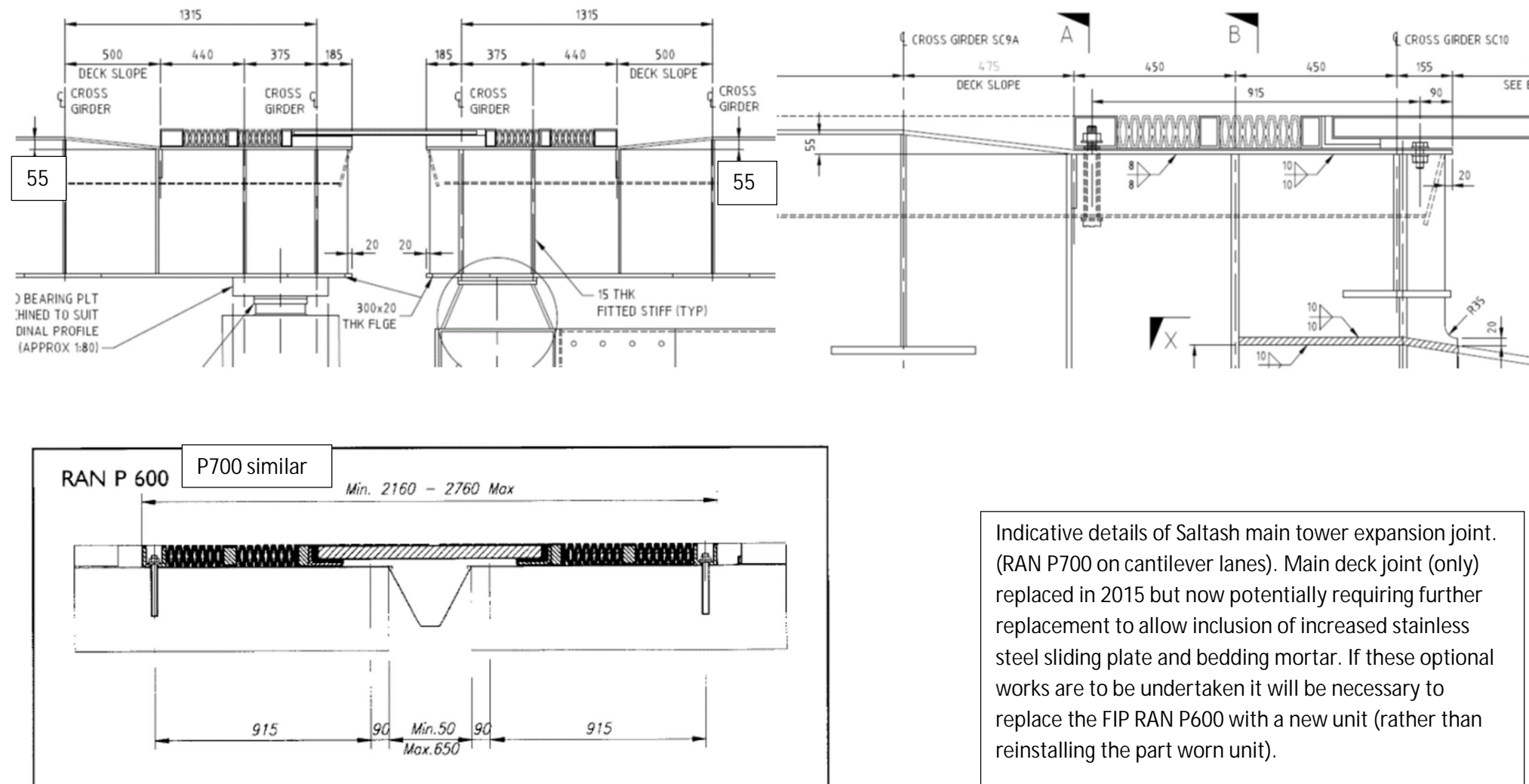


Indicative details of Saltash and Plymouth main deck approach span expansion joint details. Indicative existing joint type FIP RAN 30

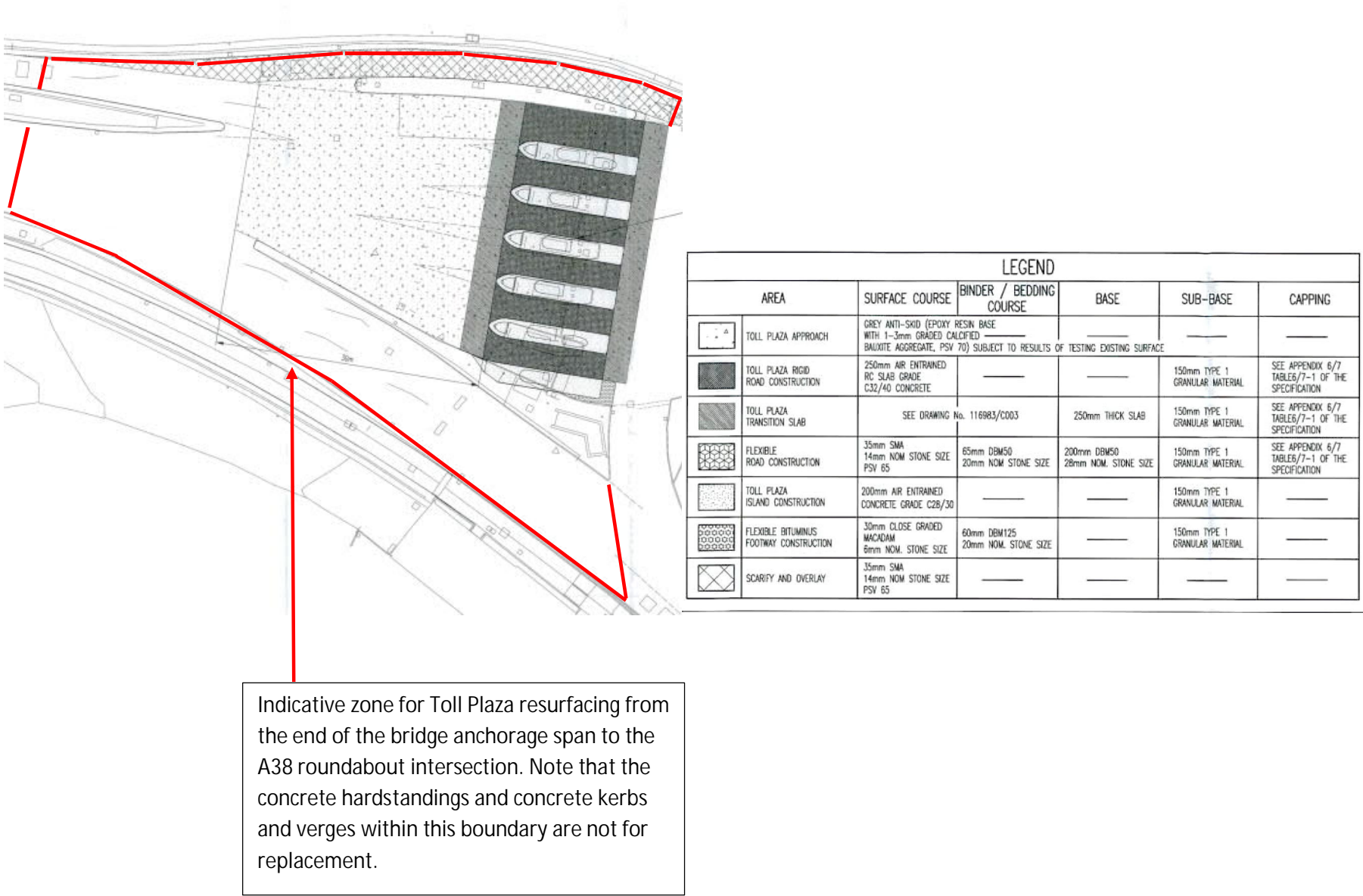
Tamar Bridge

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G – Indicative details of Saltash Main Tower EJ



H - Toll Plaza resurfacing



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The following tabulation gives the indicative areas for resurfacing based on information contained within the historical record drawings. The Contractor will be responsible for determining exact quantities.

SURFACING AREAS					
	East cantilever	Main deck	West cantilever	Drawing refs	Comments
Saltash Anchorage					
Deck length (see comment)		17374		130_09	outer face of transition slab to outer face conc deck
Deck width mm	3400	10100	3400	130_02	
Expansion joint width mm		NA			
Total Area (m ²)	59.07	175.48	59.07		293.62 m ²
Saltash Approach					
Deck length (see comment)		18745		140_01,03	outer face conc deck to centreline exp joint
Deck width	3400	10100	3400	140_02	
Saltash Side Tower Expansion joint width mm		320		220_10	
Total Area (m ²)	63.19	187.71	63.19		314.09 m ²
Saltash Side					
Deck length (see comment)		113918		150_01	c/c expansion joints
Deck width	3400	10100	3400	160_04,05,06	
Saltash Main Tower Expansion joint width mm		2388		220_04	
Total Area (m ²)	382.72	1136.90	382.72		1902.33 m ²
Main Span					
Deck length (see comment)		335280		1131471 TIF	c/c expansion joints
Deck width	3400	10100	3400	160_04,05,06	
Plymouth Main Tower Expansion joint width mm		370		220_07	
Total Area (m ²)	1135.26	3372.40	1135.26		5642.93 m ²
Plymouth Side					
Deck length (see comment)		113995		170_01	c/c expansion joints
Deck width	3400	10100	3400	160_04,05,06	
Plymouth Side Tower Expansion joint width mm		320		220_10	
Total Area (m ²)	386.41	1136.90	386.41		772.82 m ²
Plymouth Approach					
Deck length (see comment)		25598		180_01,03	centreline exp joint to outer face conc deck
Deck width	3400	10100	3400	180_02	
Joint width		NA			
Total Area (m ²)	86.49	256.92	86.49		172.98 m ²
Plymouth Anchorage					
Deck length (see comment)		17374		190_09	outer face conc deck to outer face of transition slab
Deck width	3400	10100	3400	190_02	
Joint width		NA			
Total Area (m ²)	59.07	175.48	59.07		118.14 m ²
Total					9216.91 m ²

Assumptions:		
1	Deck widths taken as distance from internal faces of kerb units	
2		
References:		
P:\UKLON06-T\Projects\Structures - Tamar Road Bridge Technical Consultancy Support Contract\H&S FILE\FaberMaunsell AS BUILTS Apr03\AS BUILTS		
1	Drawing List	100_03
2	Saltash Anchorage_Cantilever Cross Section and details_sht 1of 3	130_02
3	Saltash Anchorage_Main Deck_General Arrangement	130_09
4	Saltash Approach Span - General Arrangement - New Truss	140_01
5	Saltash Approach Span_General Arrangement_Section	140_02
6	Saltash Approach Span_General Arrangement_Plan	140_03
7	Saltash Side Span_Plan	150_01
8	Main Span_Plan	160_01
9	Suspended spans - Main deck cross section	160_04
10	Suspended spans - Cantilever cross section - Sheet 1	160_05
11	Suspended spans - Cantilever cross section - Sheet 2	160_06
12	Plymouth Side Span_Plan	170_01
13	Plymouth Approach Span - General Arrangement - New Truss	180_01
14	Plymouth Approach Span_General Arrangement_Section	180_02
15	Plymouth Approach Span_General Arrangement_Plan	180_03
16	Plymouth Anchorage_Cantilever Cross Section and details_sht 1of 3	190_02
17	Plymouth Anchorage_Main Deck_General Arrangement	190_09
18	Expansion Joints - GA of main deck at Saltash Main Tower	220_04
19	Expansion Joints - GA of main deck at Plymouth Main Tower	220_07
20	Expansion Joints - Approach Spans - Sections & Details	220_10

P:\UKLON06-T\Projects\Structures - Tamar Road Bridge Technical Consultancy Support Contract\H&S FILE\Hyder Original As-Built Drawings 1998

21	Existing General Arrangement	1131471 TIF
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Summary (Bridge deck)

Total area for 2020 bridge deck resurfacing (approx.) = 9220m²

Approximate surfacing volume at 40mm thickness = 369m³

Approximate 40mm surfacing weight at 2.3t / m³ = 850t

Approximate surfacing volume at 55mm thickness = 507m³

Approximate 50mm surfacing weight at 2.3t / m³ = 1166t

Summary (Toll Plaza)

Approximate surfacing area for replacement - In the region of 2000m² – see indicative plan

Likely depth of replacement system = 35mm SMA / equiv wearing course, + 65mm binder = total 100mm depth of replacement.

Approximate surfacing volume = 200m³

Approximate weight at 2.3t /m³ = 460t