

INSPECTION DEPARTMEN

Main tower expansion joint (South) only DATE. 27/ 28/07/11.

(BC06) REPORT No . 335. MAIN TOWER EXPANSION JOINTS (North only)

DATE: 27/07/11 to 28/07/11.

A visual inspection of the North main tower expansion joints was carried out on the above date, Information and current status as follows.

<u>Surface plates.</u>: The North main tower expansion joint surface plates remain in a satisfactory condition, anti- skid surfacing on plates showing signs of wear-down. All HRA. Surface Panels satisfactory with the exception SW 1. depression & surface breakdown evident. (This information has been recorded on carriageway inspection) (all surface plates monitored during weekly inspection of structure access platforms.) repairs carried out if required.

Expansion plate failsafe system. : All plate failsafe system trains remain in a satisfactory condition, with all fixings intact and secure and functioning correctly. (Regular monthly inspections carried out)

Structural steelwork. : All steelwork generally remains in a satisfactory condition.

<u>Structural fixings.</u>: All fixings remain intact and secure .Protective covering breakdown evident on bolt heads , medium to heavy corrosion evident at inspection.

<u>Pins & bushes . :</u> located in plate ends remain in- situ but in a continued state of wear / deterioration.

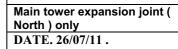
<u>**Pins & springs.**</u>: All springs and pins located on Rocker plates , and tongue plates replaced at all locations following installation of new plate failsafe system. All fixings remain in a satisfactory condition.

<u>Paintwork.</u> Generally in a satisfactory condition, considering location an exposure to weather elements. (IE. Rainwater)

Bridge Inspector .;

F:\E Engineering\E2 - Inspections\E2.1 Bridge\Joints\Main Tower Demag Expansion Joints\General Reports\General report No 335 North Main Tower Expansion Joint 26.07.11\North main tower expansion joint General report No 335. 28 07 11..doc





DIMENSION OF SPRING PRE-COMPRESSION						
NORTH EAST (MAINSPAN)	MEI	ME2	ME3	ME4	ME5	ME6
ROCKER PLT. SPRING COMPRESSION DIM.	138mm	I 38mm	I 37mm	139mm	I40mm	138mm
TONGUE PLT. SPRING /E COMPRESSION DIM.	72mm	71mm	71mm	70mm	72mm	70mm
TONGUE PLT. SPRING /W COMPRESSION DIM.	71mm	72mm	70mm	72mm	72mm	70mm
DIMENSION OF SPRING CHECK						
NORTH EAST(SIDESPAN)	SEI	SE2	SE3	SE4	SE5	SE6
ROCKER PLT. SPRING COMPRESSION DIM.	140mm	138mm	I 40mm	138mm	138mm	138mm
TONGUE PLT. SPRING /E COMPRESSION DIM.	69mm	68mm	70mm	67mm	67mm	67mm
TONGUE PLT. SPRING /W COMPRESSION DIM.	66mm	68mm	67mm	66mm	66mm	67mm

FORTH ROAD BRIDGE

DIMENSION OF SPRING PRE-COMPRESSION						
NORTH WEST(MAINSPAN)	MWI	MW2	MW3	MW4	MW5	MW6
ROCKER PLT. SPRING COMPRESSION DIM.	140mm	139mm	l 40mm	1 39 mm	1 39 mm	I 38mm
TONGUE PLT. SPRING /E COMPRESSION DIM.	70mm	71mm	70mm	72mm	68mm	71mm
TONGUE PLT. SPRING /W COMPRESSION DIM.	70mm	70mm	71mm	70mm	71mm	71mm
DIMENSION OF SPRING CHECK						
NORTH WEST(SIDESPAN)	SWI	SW2	SW3	SW4	SW5	SW6
ROCKER PLT. SPRING COMPRESSION DIM.	l 48mm	I40mm	l 40mm	138mm	1 39 mm	I 40mm
TONGUE PLT. SPRING /E COMPRESSION DIM.	73mm	75mm	75mm	75mm	76 mm	76 mm
TONGUE PLT. SPRING /W COMPRESSION DIM.	72mm	75mm	75mm	75mm	76mm	75mm

F:\E Engineering\E2 - Inspections\E2.1 Bridge\Joints\Main Tower Demag Expansion Joints\General Reports\General report No 335 North Main Tower Expansion Joint 26.07.11\North Main Tower Expansion Joint Spring Sizes.doc FORTH ROAD BRIDGE

INSPECTION DEPARTMENT

MONTHLY EXPANSION JOINT FAILSAFE SYSTEM. DATE: 27/07/11

Expansion Joint Failsafe System North main tower expansion joint.

NORTH WEST SIDE SPAN	ROCKER PLATE SPRINGS & PINS	FIXINGS	TONGUE PLATE SPRINGS & PINS
S.W. I	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.W. 2	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.W. 3	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.W. 4	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.W. 5	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.W. 6	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
NORTH EAST SIDE SPAN			
S.E. I	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.E. 2	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.E. 3	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.E. 4	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.E. 5	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
S.E. 6	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
NORTH WEST MAIN			
SPAN			
M.W. I	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.W. 2	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.W. 3	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.W. 4	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.W. 5	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.W. 6	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
NORTH EAST MAIN SPAN			
M.E. I	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.E. 2	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.E. 3	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.E. 4	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.E. 5	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
M.E. 6	SATISFACTORY	SATISFACTORY	IN LOCATION AND SATISFACTORY.
Signed by Inspector. :		G. Elliott	
Comments. :			

F:\E Engineering\E2 - Inspections\E2.1 Bridge\Joints\Main Tower Demag Expansion Joints\General Reports\General report No 335 North Main Tower Expansion Joint 26.07.11\Expansion Joint Failsafe System Monthly Inspections 26 07 11.doc