



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION					
<p>IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DEFINED ON THIS DRAWING, NOTE THE FOLLOWING SIGNIFICANT RESIDUAL RISKS:</p> <p>CONSTRUCTION</p> <p>WORK AT HEIGHT, HIGH WINDS AND LIMITED WORKING SPACE. SITE DRILLING</p> <p>MAINTENANCE/CLEANING</p> <p>WORK AT HEIGHT, HIGH WINDS AND LIMITED WORKING SPACE.</p> <p>NONE</p> <p>DEMOLITION/DISMANTLING</p> <p>WORK AT HEIGHT, HIGH WINDS AND LIMITED WORKING SPACE.</p>					
C	P	FOR CHECK	06/09	DRT	
C		FOR CONSTRUCTION	06/09	SHU	
D		CLARIFICATION ON WASHERS & CONNECTING LINK ADDED			
		NOTE REGARDING ANCHORAGES BEING HANDLED			
		SPACE IN CONNECTING LINK INCREASED			
		BOLT B LENGTH INCREASED			
C		S.H.E. BOX UPDATED	02/07/09		
B		NOTE 6 AMENDED, SECTION A-A AMENDED	15/06/09	DRT	SHU
A		No. OF ANCHORAGES AMENDED			
A		FIRST ISSUE	04/06/09	DRT	SHU
	Rev	Description	By	Date	Chk'd/Auth
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©					
Client					
Project					
FORTH ROAD BRIDGE JOINT REPLACEMENT					
Title					
DETAIL OF RESTRAINT TO PLATE TRAIN					
FAILSAFE MEASURES					
Sheet Size Original Scale					
A1	As Shown	Designed/Drawn GV	Checked DRT	Authorised SHU	
C	Drawing Number	Date 05/09	Date 04/08/09	Date 04/08/09	Rev
		505754/13/14/101			
		D			

EACH BOLT TO HAVE 1 SLOTTED NUT, GRADE 8, 1 SPLIT PIN, 2 NYLON WASHERS 3mm THICK/37mm OD AND 1 NYLON BUSH (SEE DETAIL)

EACH SCREEN TO HAVE 2 STANDARD PLAIN WASHERS HARDNESS CLASS 200 HV, 1 STANDARD NUT, GRADE 8, 1 SLOTTED NUT, GRADE 8 AND 1 SPLIT PIN.

NYLON BUSH (NYLON 66)	BOLT TYPE B	HEXAGON SOCKET COUNTERSUNK HEAD SCREW TYPE B
(TO FIT ONTO BOLT TYPE B)	(M20x75, Grade 8.8 TO BS3692)	(M24x150, Grade 8.8 TO EN ISO 10642)
<u>240 No. Req'd</u>	<u>480 No. Req'd</u>	<u>336 No. Req'd</u>
(Scale 1:2)	(Scale 1:2)	(Scale 1:2)

NYLON WASHER 3mm THICK  
960 No. Reqd  
(Scale 1:2)

(Scale 1:2)

EACH BOLT TO HAVE 1 SLOTTED NUT, GRADE 8, 1 SPLIT PIN, 2 NYLON WASHERS 3mm THICKx37mm OD AND 1 NYLON BUSH (SEE DETAIL)

BOLT TYPE B	HEXAGON SOCKET COUNTERSUNK HEAD SCREW TYPE B
Grade 8.8 TO BS3692	(M2x150, Grade 8.8 TO EN ISO 10642)
<u>480 No. Req'd.</u>	<u>356 No. Req'd.</u>
(Scale 1:2)	(Scale 1:2)

(Scale 1:2)

EACH SCREW TO HAVE 2 STANDARD PLAIN WASHERS HARDNESS CLASS 200 HV,  
1 STANDARD NUT, GRADE B, 1 SLOTTED NUT, GRADE B AND 1 SPLIT PIN.

NYLON WASHER 3mm THICK

NYLON BUSH (NYLON 66)  
(TO FIT ONTO BOLT TYPE B)  
240 No. Reqd

BOLT TYPE B  
Grade 8.8 TO BS3692)  
480 No. Reqd

ON SOCKET COUNTERSUNK HEAD SCREW  
(M24x150, Grade 8.8 TO EN ISO 10642)  
356 No. Reqd.

36 No. Reqd.

CREW TYPE B  
10642)

NYLON WASHER 3mm THICK  
960 No. Reqd  
(Scale 1:2)

(Scale 1:2)

(Scale 1:2)

CLASS 200 HW

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FORTH ESTUARY TRANSPORT AUTHORITY

# FORTH ROAD BRIDGE JOINT REPLACEMENT

## FAILSAFE MEASURES

### DETAIL OF RESTRAINT TO PLATE TRAIN

Sheet Size <b>A1</b>	Original Scale <b>As Shown</b>	Designed/Drawn <b>GV</b>	Checked <b>DRT</b>	Authorised <b>SHJ</b>
		Date <b>05/09</b>	Date <b>04/06/09</b>	Date <b>04/06/09</b>

NOTE: 1 No. connecting link is whole component as drawn