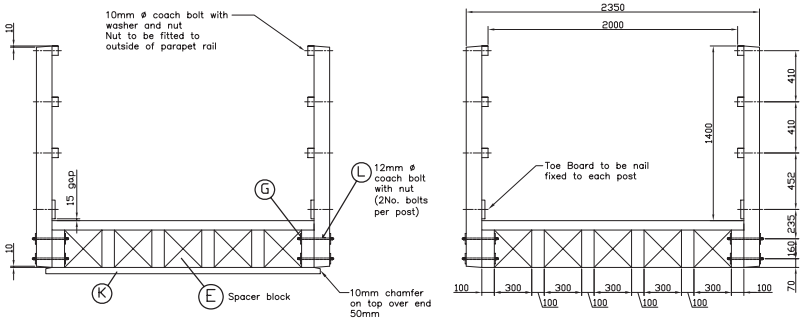
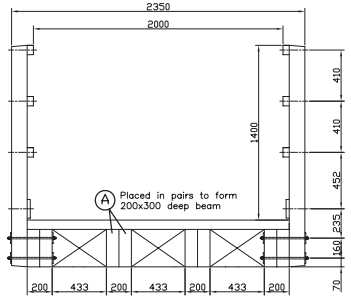
BRIDGE TYPE B – 4B/1.4



SECTION A–A
Scale 1:20

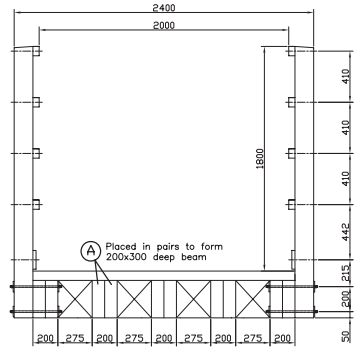
SECTION B–B
Scale 1:20

BRIDGE TYPE B – 6B/1.4



SECTION B–B
Scale 1:20

BRIDGE TYPE B – 8B/1.8



SECTION B–B
Scale 1:20

NOTES

GENERAL

1. All dimensions in millimetres unless otherwise stated

CONSTRUCTION SEQUENCE

2. Deck and end planks (items C & J) are not to be installed until all tie bars (item F) have been tightened

TIMBER

3. Nail holes to be pre–drilled where shown (items C & J) to prevent timber splitting, however use of nail gun is acceptable if proven satisfactory

4. Cutting List section sizes for items B & D are finished sizes

5. All timber to be treated with wood preservative in accordance with B.S. 8417, based on "Timber in fresh water", Penetration Class P9 for BS EN 335–1 hazard class 4 and 30 year Desired Service Life

6. Exposed faces of any timber cut on site to be brush treated with wood preservative to maintain the integrity of the treatment – See Note 5

HARDWARE

7. All hardware to be galvanized to BS EN ISO 1461 or zinc plated as specified by Rights of Way

8. All bolts/ threaded bars to be Grade 4.6 (except Item L to be Grade 8.8) to B.S. 3692. Nyloc anti–vandal nuts to be used at locations specified by Rights of Way.

9. Nails to deck planks (item C) to be ordinary round wire 5 diameter x 125 length. All other nails to be ordinary round wire 4 diameter x 75 length.

FOUNDATIONS

10. Ground beams to be minimum 250x2300x150 deep

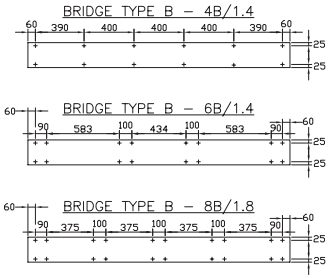
11. Ground beams to comprise either
(a) standardized prescribed concrete ST2 (cast insitu or precast) with 3 No. 12 diameter mild steel reinforcement bars at mid depth
or
(b) treated hardwood "railway sleeper" or similar

12. Foundation designed for following maximum allowable ground bearing pressures:

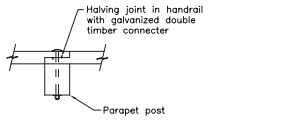
50 kN/m for Type B – 4B/1.4
75 kN/m² for Type B – 6B/1.4
100 kN/m² for Type B – 8B/1.8

These are satisfactory for most soils. If the ground is very soft or there is any doubt over the suitability of the foundation, advice should be sought from the Engineer

13. Foundation to be set back from top of bank. If the banks are steep, advice should be sought from the Engineer

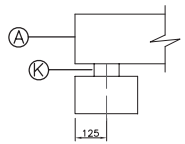


POSITION OF PRE–DRILLED HOLES FOR NAILS (ITEMS C & J)
Scale 1:20

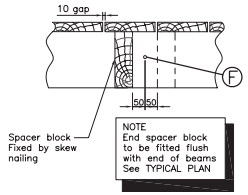


PERMITTED JOINT FOR PARAPET RAIL LENGTHS OVER 6M
Scale 1:10

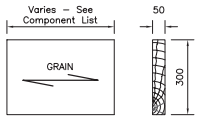
COMMON DETAILS



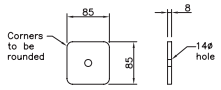
BEARING TIMBER DETAIL
Scale 1:10



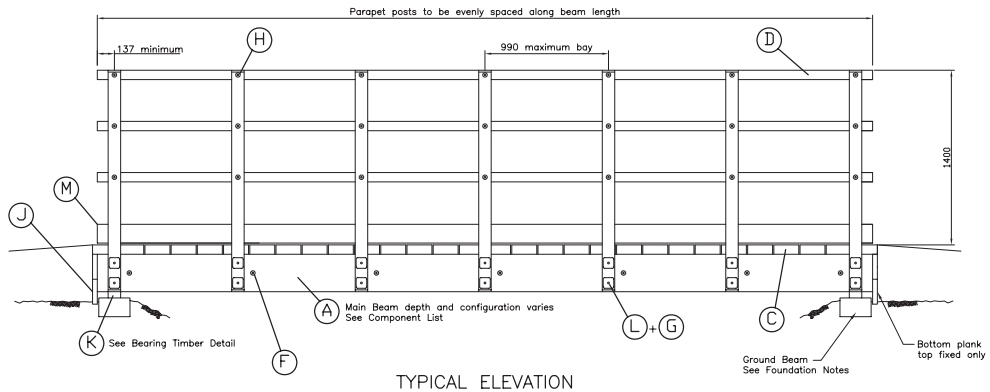
SECTION C–C
Not to Scale



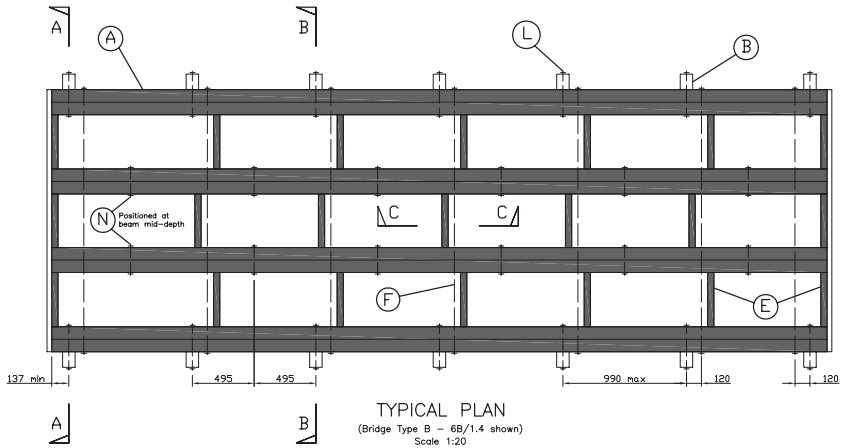
SPACER BLOCK (ITEM E)
Scale 1:10



WASHER PLATE (ITEM G)
Scale 1:5



TYPICAL ELEVATION
(Bridge Type B – 6B/1.4 shown)
Scale 1:20



TYPICAL PLAN
(Bridge Type B – 6B/1.4 shown)
Scale 1:20

Component list		Specification	CUTTING LIST FOR BRIDGE TYPE (NUMBERS OF BAYS/PARAPET HEIGHT)		
			B – 4B/1.4	B – 6B/1.4	B – 8B/1.8
A	Main Beams	Timber (grade as shown)	6No. 4204x300x100 (C16)	8No. 6184x300x100 (C16)	10No. 8164x300x100 (C24)
B	Parapet Posts	Timber (grade as shown) No wane permitted at bearing areas	10No. 1775x125x100 (C24)	14No. 1775x125x100 (C24)	18No. 2175x150x100 (C16)
C	Deck Planks	C16 Timber Nail holes to be pre–drilled	21No. 2100x200x75	30No. 2100x200x75	40No. 2100x200x75
D	Parapet Rails	C16 Timber	6No. 4204x75x50	6No. 6184x75x50	8No. 8164x75x50
E	Spacer Blocks	C16 Timber	25No. 300x300x50	21No. 433x300x50	36No. 275x300x50
F	Tie Bar	M12 galvanized threaded bar 2170mm long with nuts and flat washers	5No. required	7No. required	9No. required
G	Washer Plate	Galvanized steel plate 85x85x8 with 14ø clearance hole	40No. required	56No. required	72No. required
H	M10 Coach Bolt	M10 galvanized coach bolt with flat washer and nut	30No. 200 long	42No. 200 long	72No. 225 long
J	End Planks	C16 Timber Nail holes to be pre–drilled	4No. 2100x200x38	4No. 2100x200x38	4No. 2100x200x38
K	Bearing Timber	C16 Timber 10mm chamfer on top over end 50mm	2No. 2200x100x50	2No. 2200x100x50	2No. 2200x100x50
L	M12 Coach Bolt	M12 galvanised coach bolt (grade 8.8) with nut	20No. 250 long	28No. 350 long	36No. 375 long
M	Toe Board	C16 Timber	2No. 4204x150x25	2No. 6184x150x25	2No. 8164x150x25
N	M10 Coach Bolt (for inner beams placed in pairs)	M10 galvanized coach bolt with flat washer and nut	Not Applicable	12No. 225 long	24No. 225 long

DESCRIPTION	REV.	DATE	INT.
REVISION(S)			

Suffolk County Council
Director of Environment & Transport
Endeavour House
8 Russell Road
Ipswich
IP1 2BX

SUFFOLK TRANSPORT & ENVIRONMENT PARTNERSHIP

PROJECT TITLE
STANDARD FOOTBRIDGES

DRAWING TITLE
BRIDLEWAY BRIDGE TYPES 4, 6 & 8

ORIGINATOR	CHECKER	DESIGNER	REVIEWER
NJC	TAB	NJC	DCS

SCALE(S) ORIGINAL SIZE A1: AS SHOWN
DATE: FEBRUARY 2005
DRAWING NUMBER: 2810/201
REVISION: