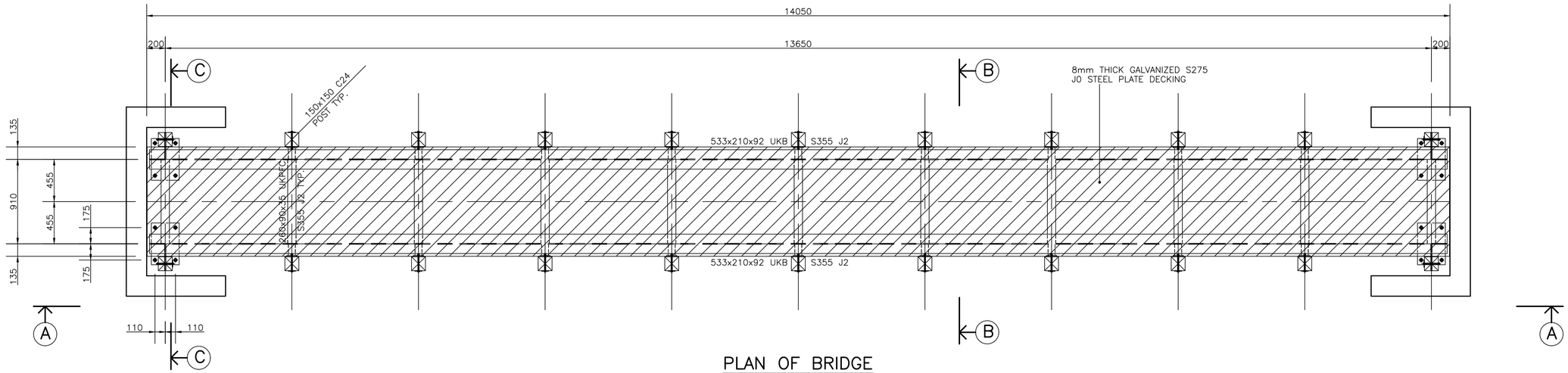
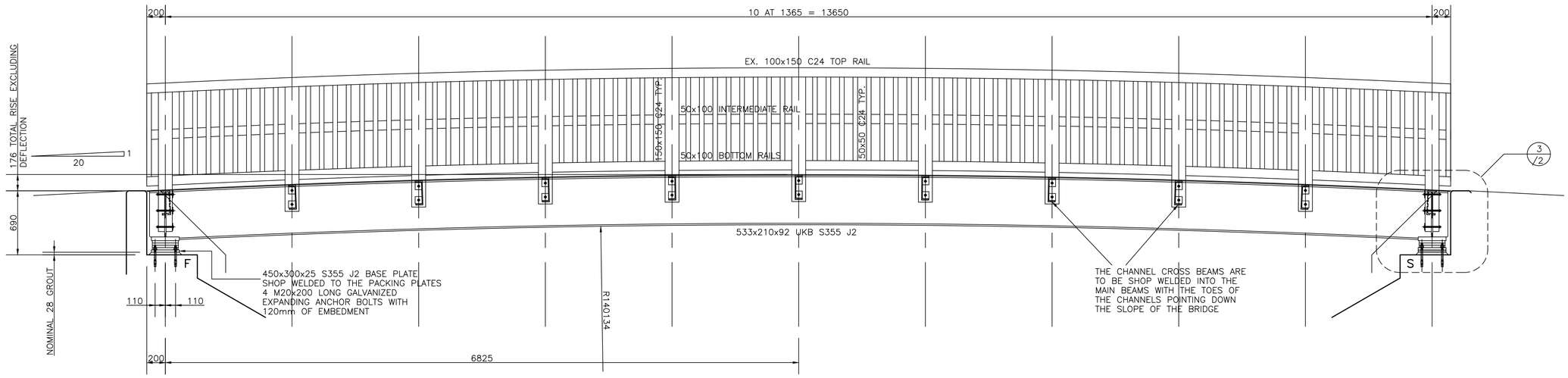
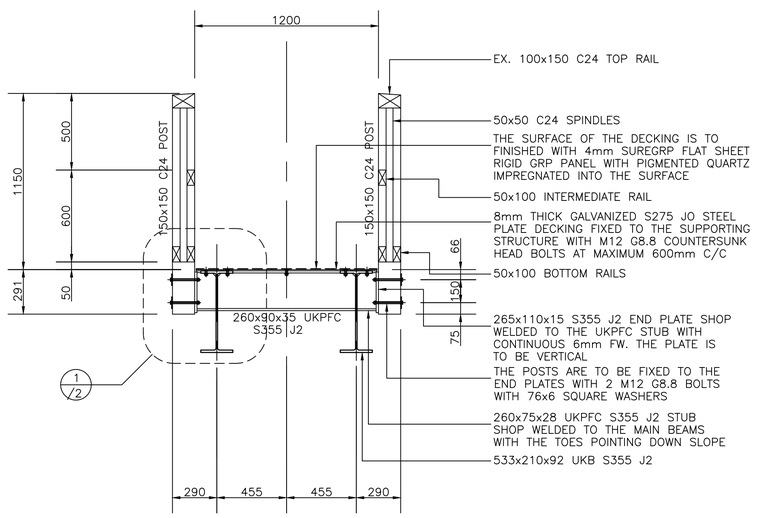


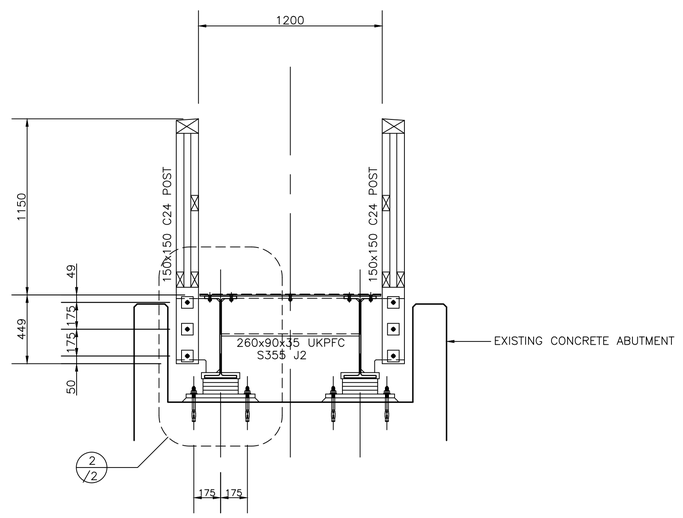
PLAN OF BRIDGE
Scale 1:25



TYPICAL SECTION A
Scale 1:25



TYPICAL SECTION B
Scale 1:20



TYPICAL SECTION C
Scale 1:20

NOTE
THE BRIDGE HAS BEEN DESIGNED TO SUPPORT THE FOLLOWING CHARACTERISTIC VARIABLE ACTIONS:–

MAIN BEAMS
PEDESTRIAN CROWD LOADING = 5.0 kN/m2

DECKING
CONCENTRATED LOAD 0.1 x 0.1 = 3.0 kN

HANDRAIL
HORIZONTAL UDL AT 1.15m ABOVE DECK = 1.4 kN/m

LEGEND
F = BEARING BOLTS IN NORMAL HOLES

S = BEARING BOLTS IN LONGITUDINALLY SLOTTED HOLES

NOTE
THE SELF WEIGHT OF THE BRIDGE INCLUDING THE HAND RAILS AND THE DECKING IS APPROXIMATELY 6.0 TONNES

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ENGINEERS DRAWINGS, DETAILS AND SPECIFICATIONS.
2. THIS DRAWING MUST NOT BE SCALED.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
4. ALL DIMENSIONS AND DETAILS MUST BE CHECKED ON SITE DURING THE COURSE OF THE WORKS.
5. ALL WORKS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH THE LATEST BRITISH STANDARDS.
6. ALL PROPRIETARY MATERIALS AND PRODUCTS ARE TO BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
7. ALL STRUCTURAL STEEL SECTIONS AND PLATES ARE TO BE FROM THE GRADE S355 SERIES IN ACCORDANCE WITH BS EN 10025–2:2004 UNLESS NOTED OTHERWISE. ALL HOLLOW SECTIONS ARE TO BE HOT–FINISHED GRADE S355 NH IN ACCORDANCE WITH BS EN 10210–1 AND 2:2006 UNLESS NOTED OTHERWISE. ALL STEEL PRODUCTS SHALL HAVE TYPE 3.1 INSPECTION CERTIFICATES TO EN 10204:2004.
8. ALL STEELWORK IS TO BE FABRICATED AND ERECTED IN ACCORDANCE WITH BS EN 1090–1:2009+A1:2011 AND BS EN 1090–2:2008+A1:2011.
9. ALL SURFACES ARE TO BE FINISHED SMOOTH AND ALL SHARP EDGES MUST BE REMOVED.
10. ALL NOTCHES IN WEBS AND FLANGES ARE TO HAVE A MINIMUM 10mm RADIUS AT RE–ENTRANT CORNERS.
11. ALL ORDINARY BOLT ASSEMBLIES ARE TO BE GRADE 8.8 IN ACCORDANCE WITH BS EN 15048–1:2007. ALL BOLTS ARE TO BE IN ACCORDANCE WITH BS EN ISO 4017:2011. ALL NUTS ARE TO BE IN ACCORDANCE WITH BS EN ISO 4032:2012 CLASS 10 AND ALL WASHERS ARE TO BE IN ACCORDANCE WITH BS EN ISO 7091:2000. ALL BOLT ASSEMBLIES ARE TO BE HOT DIP GALVANIZED IN ACCORDANCE WITH BS EN ISO 10684:2004.
12. ALL WELDING IS TO BE IN ACCORDANCE WITH BS EN 1011–1:2009 AND BS EN 1011–2:2001 UNLESS NOTED OTHERWISE. ALL WELDING IS TO BE UNDERTAKEN BY WELDERS WITH VALID CERTIFICATION IN ACCORDANCE WITH BS EN 287–1. ALL WELDS ARE TO BE CONTINUOUS 6mm LEG LENGTH FILLET WELDS UNLESS NOTED OTHERWISE. ALL BUTT WELDS ARE TO BE FULL STRENGTH WELDS.
13. THE POSITION AND SIZE OF ANY HOLES OR FITTINGS REQUIRED ON THE STEELWORK TO ASSIST WITH THE ERECTION OR THE CONNECTION OF SAFETY NETS OR HARNESSES IS TO BE AGREED WITH THE ENGINEERS.
14. ALL STEELWORK IS TO BE BLAST CLEANED AFTER FABRICATION TO SA2.5 PREPARATION GRADE IN ACCORDANCE WITH BS EN ISO 8503–1:2012 WITH A SURFACE PROFILE IN THE RANGE OF 50 TO 75µm. WELDED AREAS ARE TO HAVE ALL FLUX AND SPATTER REMOVED. SURFACES ARE TO BE VACUUMED CLEAN PRIOR TO PAINTING.
15. ALL STEELWORK IS TO BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH BS EN ISO 1461:2009 WITH A MINIMUM COAT THICKNESS OF 85µm. ANY HANDLING OR ERECTION DAMAGE IS TO BE MADE GOOD. VENT HOLES ARE TO BE PROVIDED IN TUBULAR MEMBERS IN ACCORDANCE WITH THE GALVANIZERS ASSOCIATION RECOMMENDATIONS. ANY HOLES ARE TO BE POSITIONED TO ENSURE THE FREE DRAINING OF THE MEMBER.
16. ALL STEELWORK THAT IS IN CONTACT WITH TIMBER COMPONENTS IS TO BE ISOLATED WITH THE USE OF AN APPROVED DAMP PROOF COURSE MATERIAL FOR HORIZONTAL SITUATIONS AND HIGH BUILD BITUMINOUS PAINT TO A MINIMUM D.F.T. OF 200µm FOR VERTICAL SITUATIONS.
17. GROUT TO BRIDGE BEARING PLATES IS TO BE CONBEXTRA BB NON SHRINK CEMENTITIOUS GROUT BY FOSROC LTD OR EQUAL SIMILAR APPROVED. THE GROUT IS TO BE USED IN STRICT ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
18. ALL TIMBER WORKMANSHIP IS TO BE IN ACCORDANCE WITH BS EN 1995–1–1:2004+A1:2008. EUROCODE 5 DESIGN OF TIMBER STRUCTURES. GENERAL. COMMON RULES AND RULES FOR BUILDINGS AND THE UK NATIONAL ANNEX AND BS 8000–5:1990.
19. ALL SOLID TIMBER UNLESS NOTED OTHERWISE IS TO BE STRENGTH CLASS C24 IN ACCORDANCE WITH BS EN 14081–1:2005+A1:2011. TIMBER IS TO HAVE AN FSC CERTIFICATE.
20. ALL TIMBER IS TO BE PRESSURE TREATED WITH AN APPROVED PRESERVATIVE SUCH AS TANALITH E BY ARCH TIMBER PROTECTION OR SIMILAR APPROVED USED IN STRICT ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. ANY TIMBER THAT IS CUT, DRILLED OR SHAPED ON SITE IS TO BE RETREATED.

REV.	DESCRIPTION	CHKD.	DATE

RICHARD HERRMANN
ASSOCIATES LTD
THE OLD CHAPEL, FERRARS ROAD,
HUNTINGDON, CAMBRIDGESHIRE, PE29 3DH
01480 455179 RHACONSULT.CO.UK

CLIENT

PROJECT
REPLACEMENT FOOTBRIDGE
ALCONBURY BROOK

DRAWING TITLE
STRUCTURAL DETAILS OF 14.05m LONG BRIDGE SUPERSTRUCTURE

DRAWING ISSUE STATUS
PRELIMINARY ☐ INFORMATION ☐ APPROVAL ☐
TENDER ☐ CONSTRUCTION ☑ RECORD ☐

PRE–TENDER C.D.M. CHECK ☐ ISSUE TO H&S FILE ☐

DRAWN	CHKD.	APPRVD.
MAB	RH	RH

A1 SCALE 1:25 1:20
DATE 15.10.18

DRAWING No. L24.150/1
REVISION –