

NOTES

- All dimensions are shown in mm, unless otherwise stated and levels are in metres to an arbitrary datum.
- This drawing is to be read in conjunction with all other drawings and standard documentation.
- C40/50 concrete mix (C18A-V) as per BS 8500-1:2006 for all precast units
- Chamfers around voussoirs to be 15mm and remainder of precast units to have chamfer of 25mm
- Surface finish on exposed faces of flexiarch units=F3
- Surface finish on top of FlexiArch unit and to base of cill = U2 Top surface of cill is also to be left roughened
- Nominal cover to Reinforcement 60mm + 5mm unless noted otherwise
- S/S Projected U bars to be cast into back of spandrel wall units to tie into backfill concrete.
- Bridge deck waterproofing and workmanship to comply with SHW Series 2003 and 2005.
- Steel floated (U4) finish required to top of C20/25 in-fill concrete to take waterproofing.
- SN Concrete with 1800kg/m<sup>3</sup> density can be achieved using a combination of cement, sand and a highly air-entrained chemical mixture. The following guideline mix can be used.

4-8 N strength (28 days)	
Concrete Sand (0/4)	1350 Kg
CEM I	250 Kg
Water	200 L
Foaming agent	5L per 6m <sup>3</sup> load (Larlrow FC or similar)
Hardened density in region of 1800Kg/m <sup>3</sup>	

- Concrete in-fill should be completed as per Macrete's Guidance Notes.
- Prior to any excavation, the contractor should consider propping the existing bridge to prevent movement during the works.
- Great care is required when excavating close to the existing foundation in order to prevent scour or loss of soil from below it. If this occurs concrete should be placed in any void formed.
- A series of plate bearing tests should be carried out during the foundation works to confirm the allowable bearing capacity of the soils.
- Non-Shrinkable cementitious grout of min 50N/mm<sup>2</sup> compressive strength to be used to fill the dowel holes and the gap between the cill units/spandrel walls and foundation. 24hrs to be allowed for grout to set before placement of arch units.
- All stainless steel to BS EN 10088-3 Grade 1.4436, EN Standard steel name 'X3CrNiMo17-13-3'

**FOR APPROVAL**

REVISION DETAILS	BY	DTE	AMENDMENT

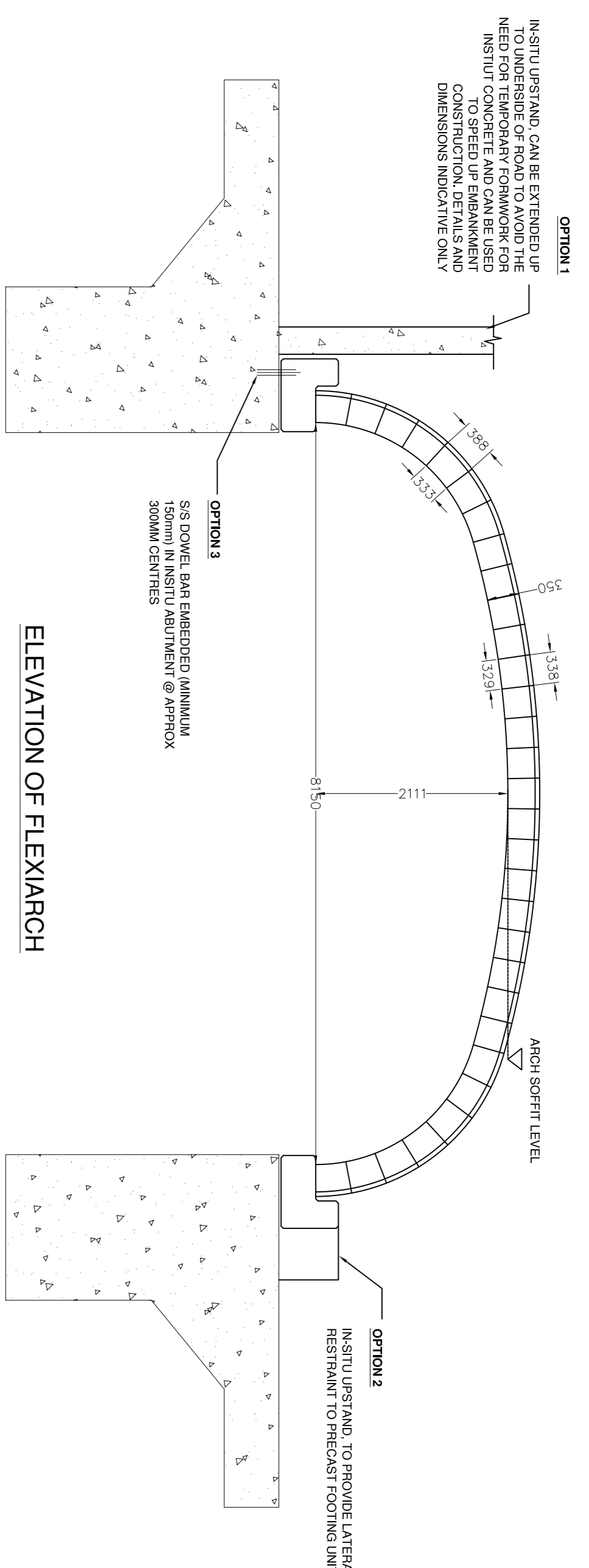
**MACRETE**  
Ireland Limited  
50 GERRAUGH ROAD  
TOOKERBRIDGE  
CO. ANTRIM B741 3SE  
TEL (028) 796 50471 FAX 50084

*Precast concrete*

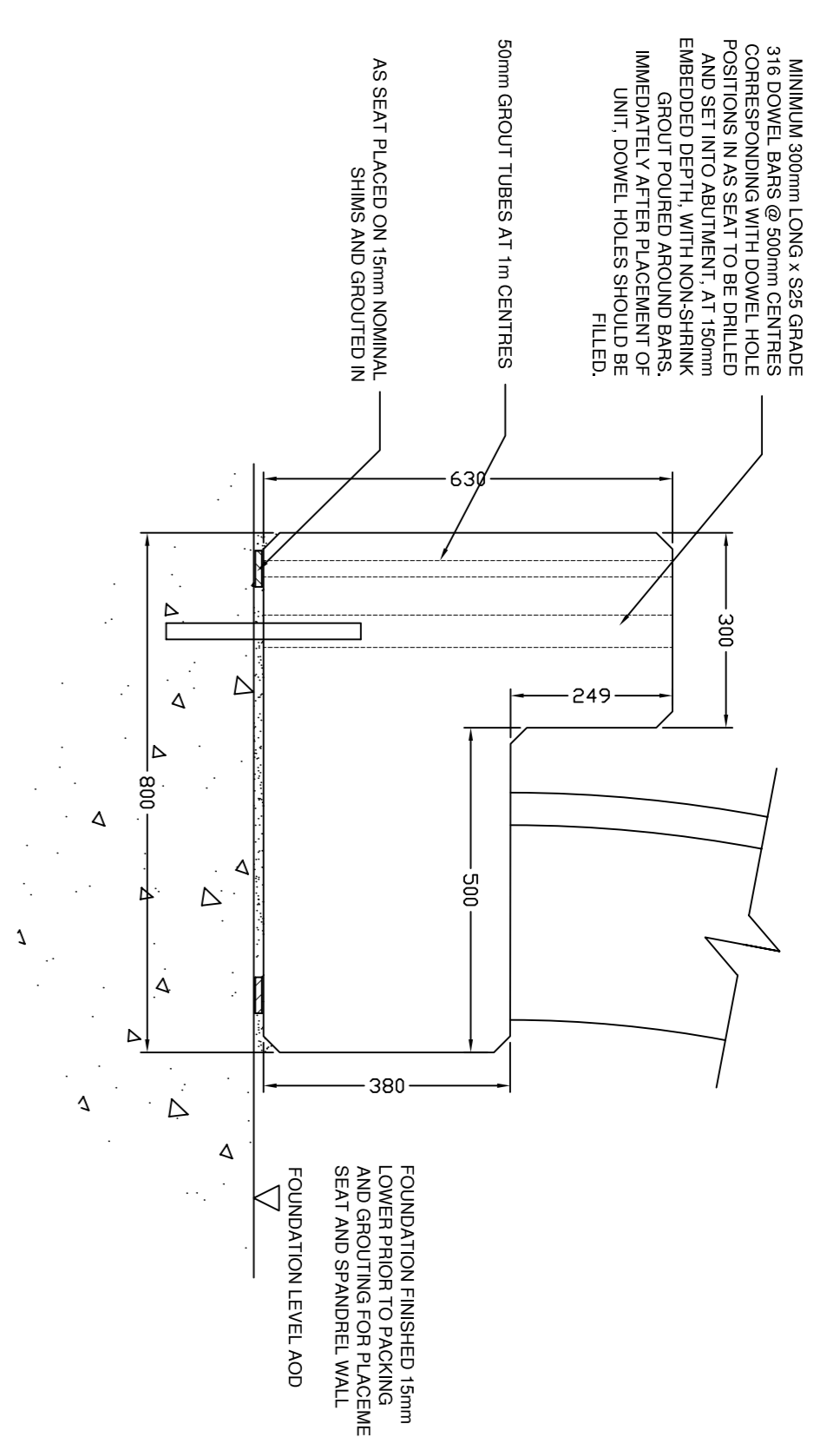
PROJECT: MELKSHAM LINK - ROAD BRIDGE, BERRFIELD

TITLE: DETAILS OF FLEXIARCH BRIDGE UNITS

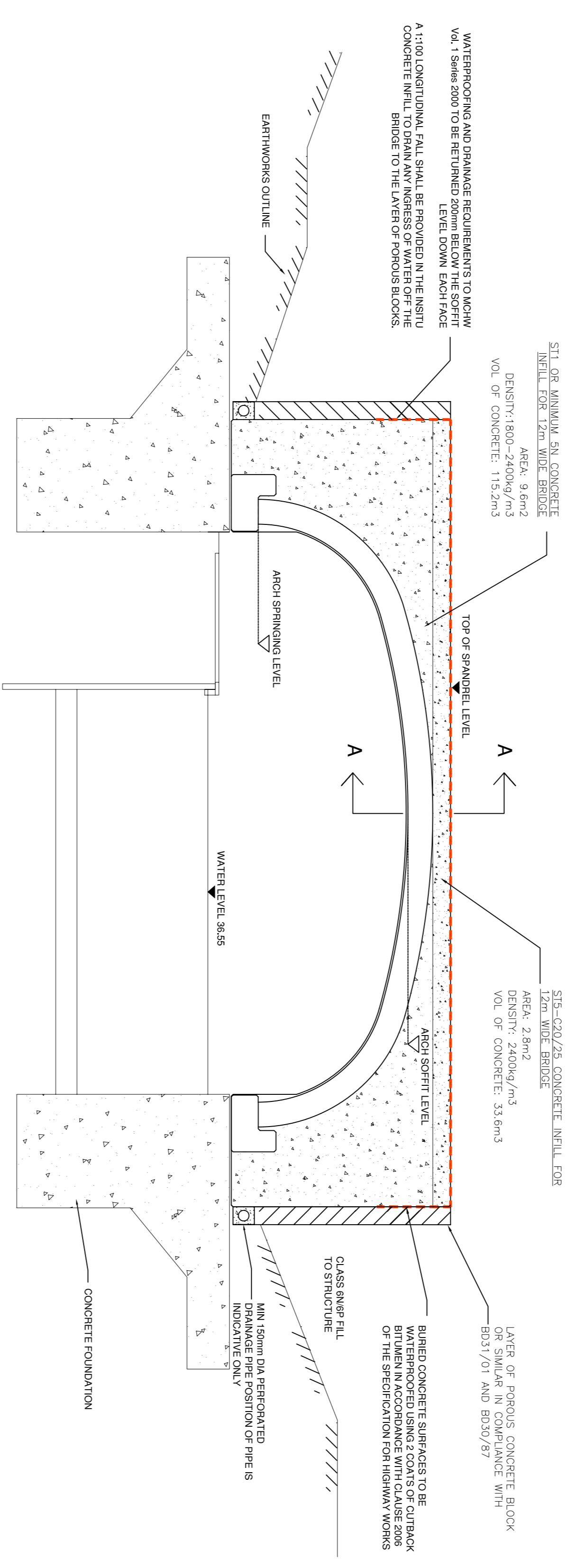
SCALE: @A1 1/50 UN.O.	DATE: 09/02/12	DRAWN: DMC	CHECKED: -
DRAWING NO. MACRETE/MELKSHAM LINK/01			REVISION NO. -



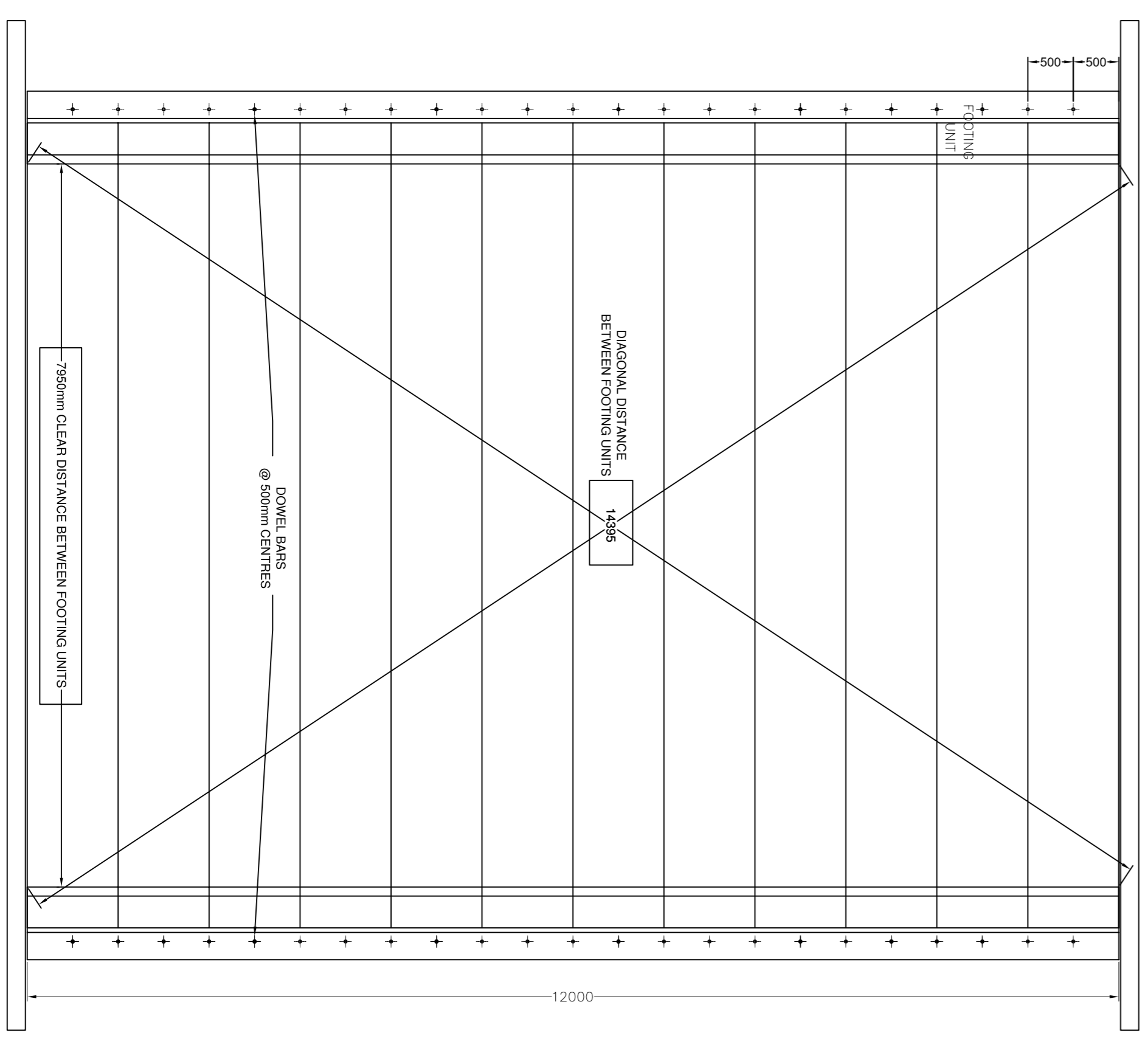
ELEVATION OF FLEXIARCH



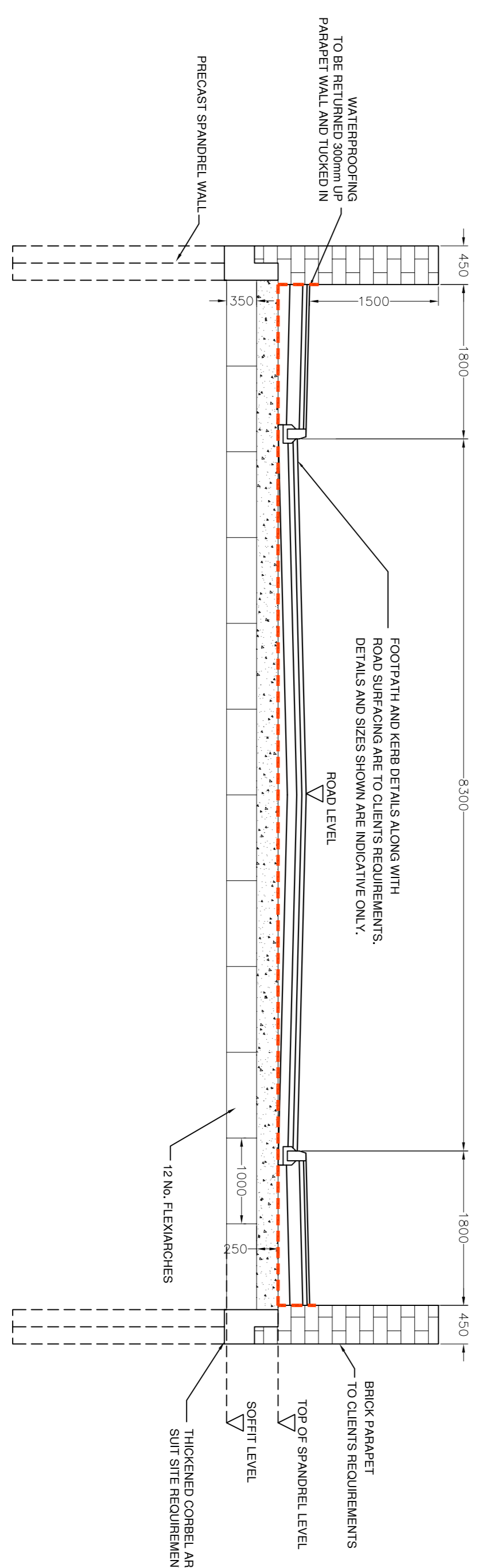
ARCH SPRINGING SEAT (AS SEAT) 1:10  
3m WIDE UNIT



END SECTION OF BRIDGE SHOWING CONCRETE INFILL DETAILS



PLAN ON FLEXIARCH BRIDGE



SECTION A-A THROUGH CENTRE OF BRIDGE