



Frodsham Solar

CP22 Technical Note

April 2026



PINS Ref: EN010153

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**Planning Act 2008; and Infrastructure Planning (Applications:
Prescribed Forms and Procedure) Regulations Regulation 5(2)(g)**

Revision P01

Project:	Frodsham Solar	Scheme No:	14740
Subject:	Crossing Point 22 Design Note	Revision:	01
Client:	Frodsham Solar Limited	Date:	20/04/2026
Doc Ref:	14740- CP22 Technical Note-01		
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Crossing Point 22 Design Note

Waterco have submitted an updated design for Crossing Point 22 (CP22) which includes a 300mm freeboard from the base of the bridge steels to the 1% AEP plus 67% CC (higher central allowance) in-channel flood level (flood level of 4.76m AOD). The updated CP22 design is provided in Appendix A.

The updated CP22 design requires a modest 0.735m of ground raising on Weaver Lane immediately adjacent to the bridge deck. Ground levels will then slope down to existing Weaver Lane levels with the approach ramps set at a maximum 1 in 10 gradient. Figure 1 shows the indicative proposed profile of the Weaver Lane approach ramps which includes a calculation of the fill volumes required (total 31.168m³).

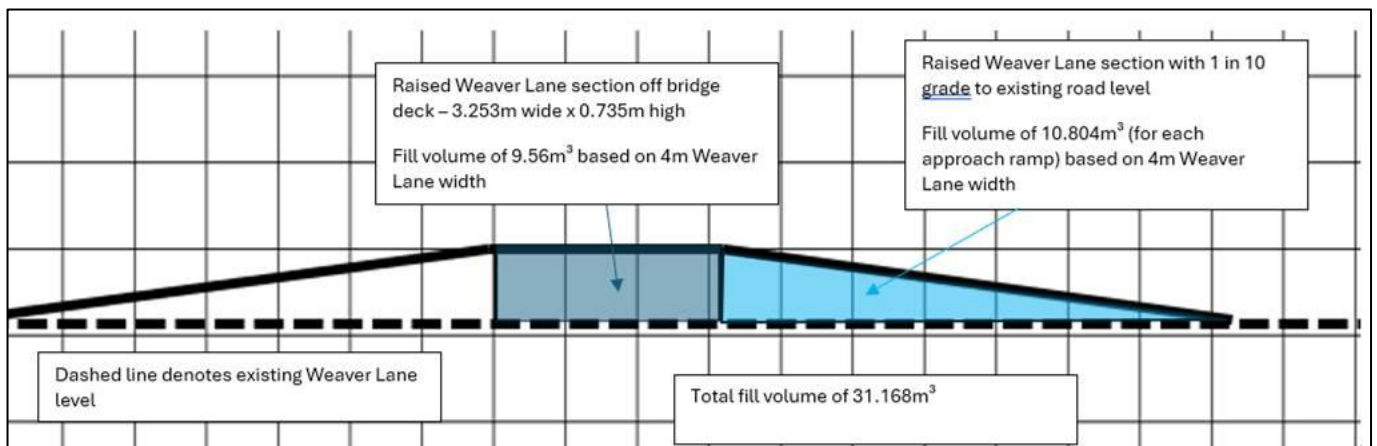


Figure 1 – CP22 Indicative Approach Ramp Detail

The impact on flood risk as a result of the fill volume is considered in the existing Waterco modelling. The current modelling approach to considering impact of the bridge crossings is as follows (following text taken from the modelling report addendum): ‘The proposed development scenario includes raising one 2D model cell (10mx10m grid) by 0.6m at the location of each watercourse crossing. This is a conservative estimate of the land raising associated with each of the watercourse crossings.’

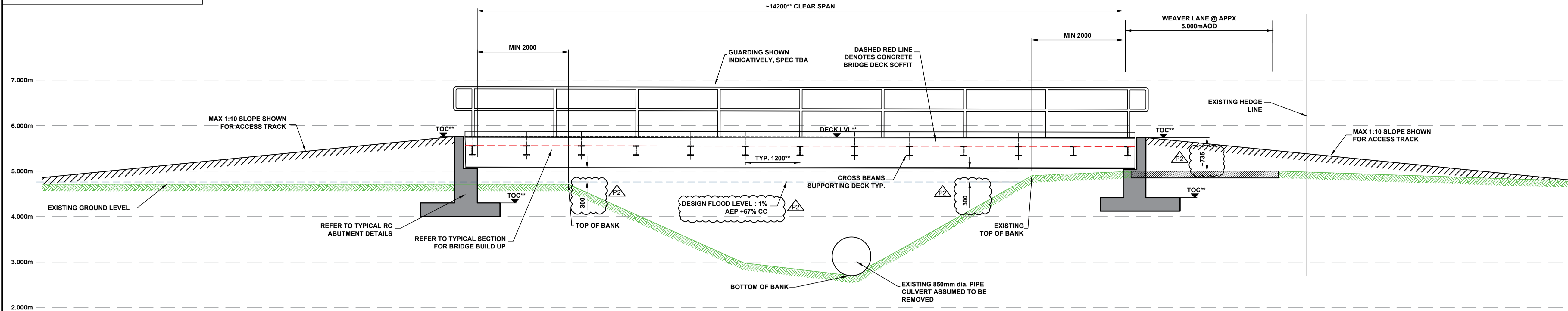
Therefore, the model already considers a 0.6m land raise over a 100m² area (equating to a volume of 60m³) at each bridge crossing. With the proposed ground raising totalling 31.168m³ (and the volume of raising on the opposite side of the bridge being approximately half of this, as only one approach ramp is needed), the model covers the amount of ground raising at CP22 and demonstrates no impact on flood risk elsewhere.

The Environment Agency have confirmed in an email dated 09/04/2026 that:

- This new bridge design for CP22 does not need to be decommissioned or culvert reinstated.
- The 300mm free board provided is acceptable.

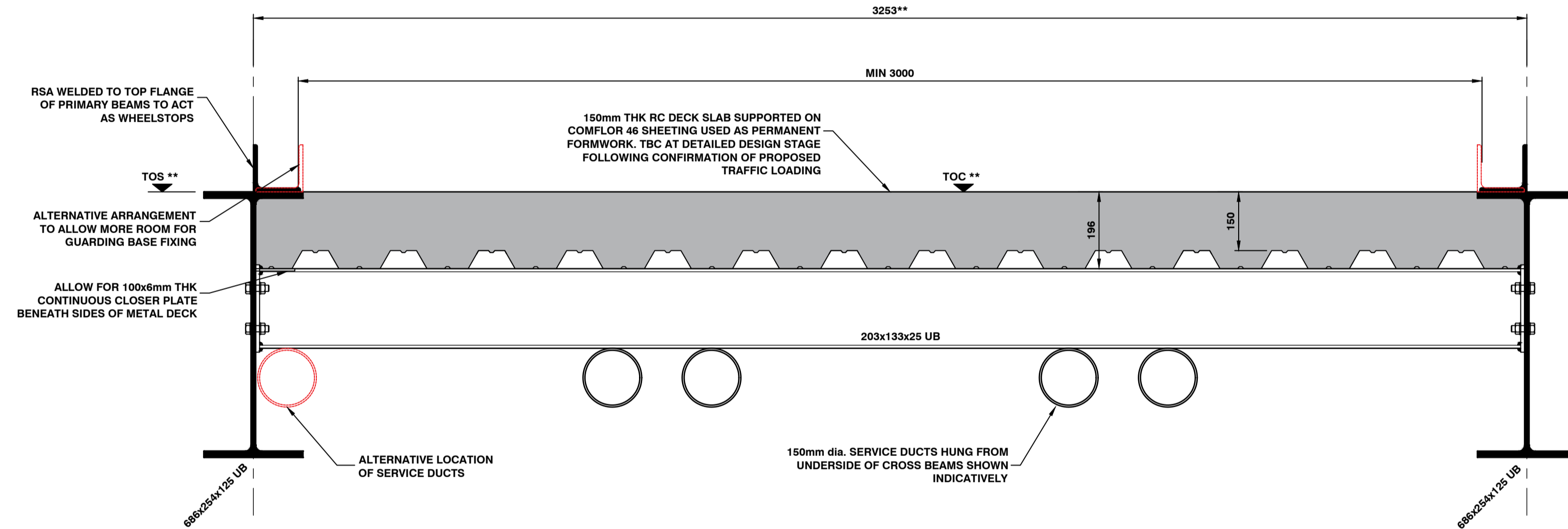
- On balance between the different sources of flood risk, the ground raising in this case is acceptable to ensure an appropriate freeboard for CP22. We agree that the loss in flood storage has been modelled and that this adequately demonstrates no increase in flood risk elsewhere.

Appendix A – CP22 Design

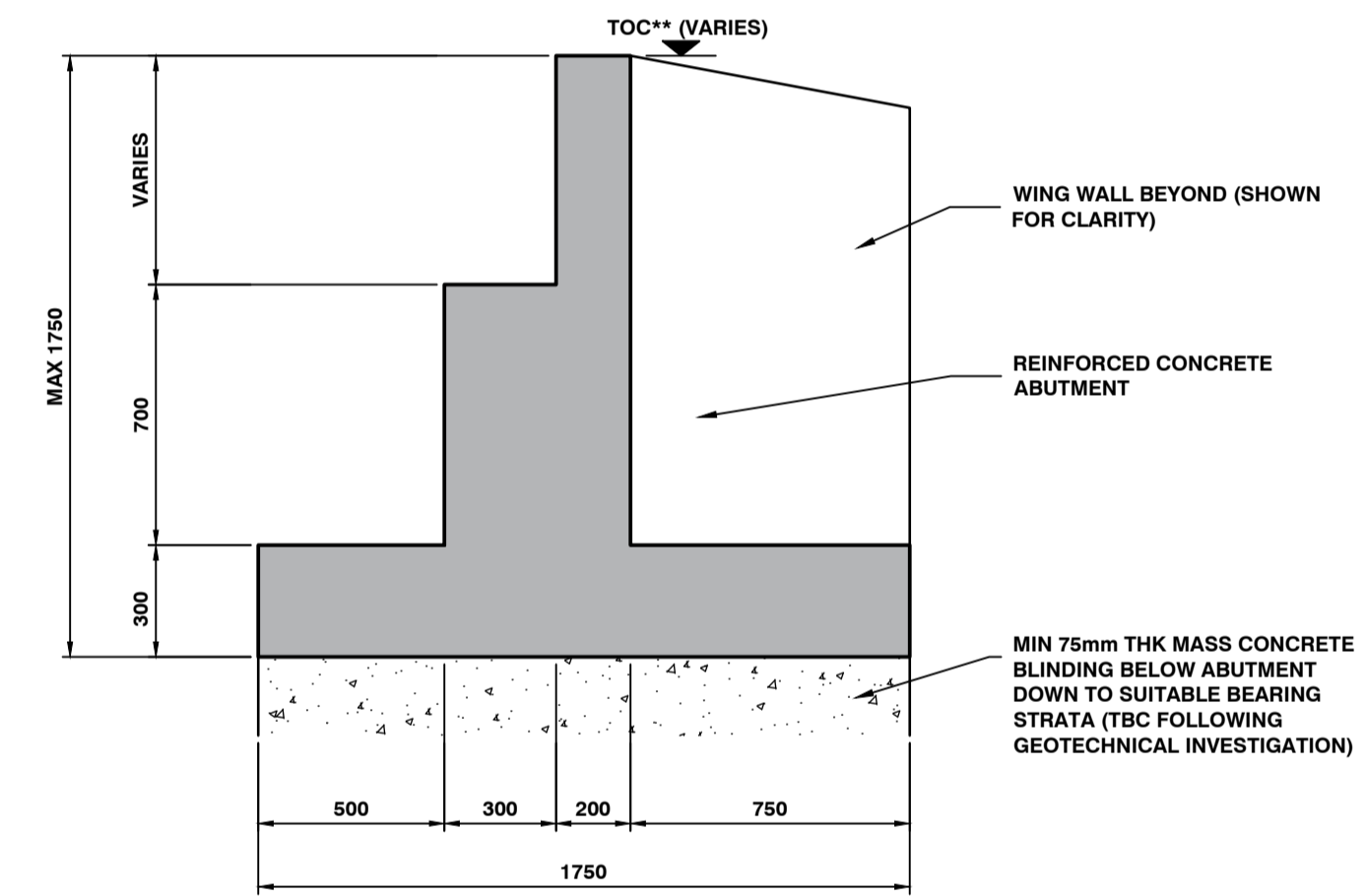


**CROSSING CP22 PROPOSED SECTION B-B
ALTERNATE ARRANGEMENT
1:50**

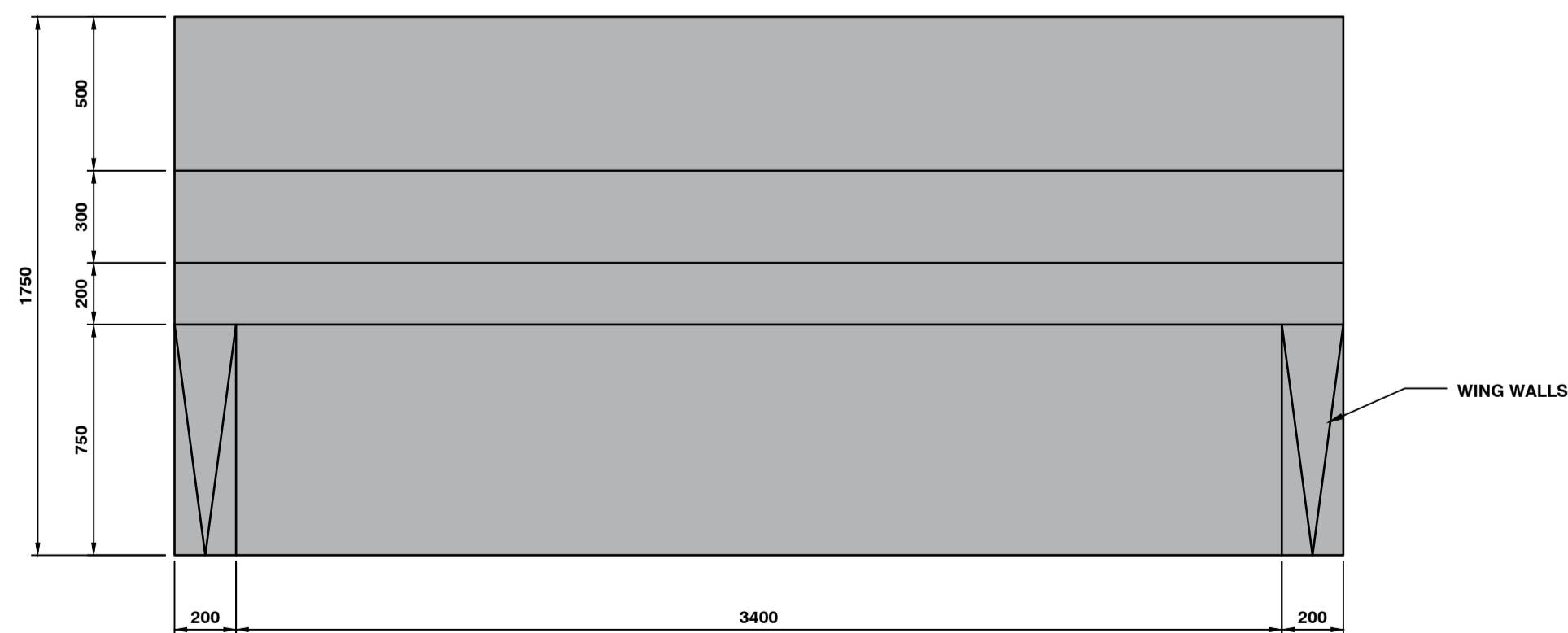
GUARDING OMITTED ON SECTION - FINAL DETAILS AND BASE FIXITY TO BE AGREED



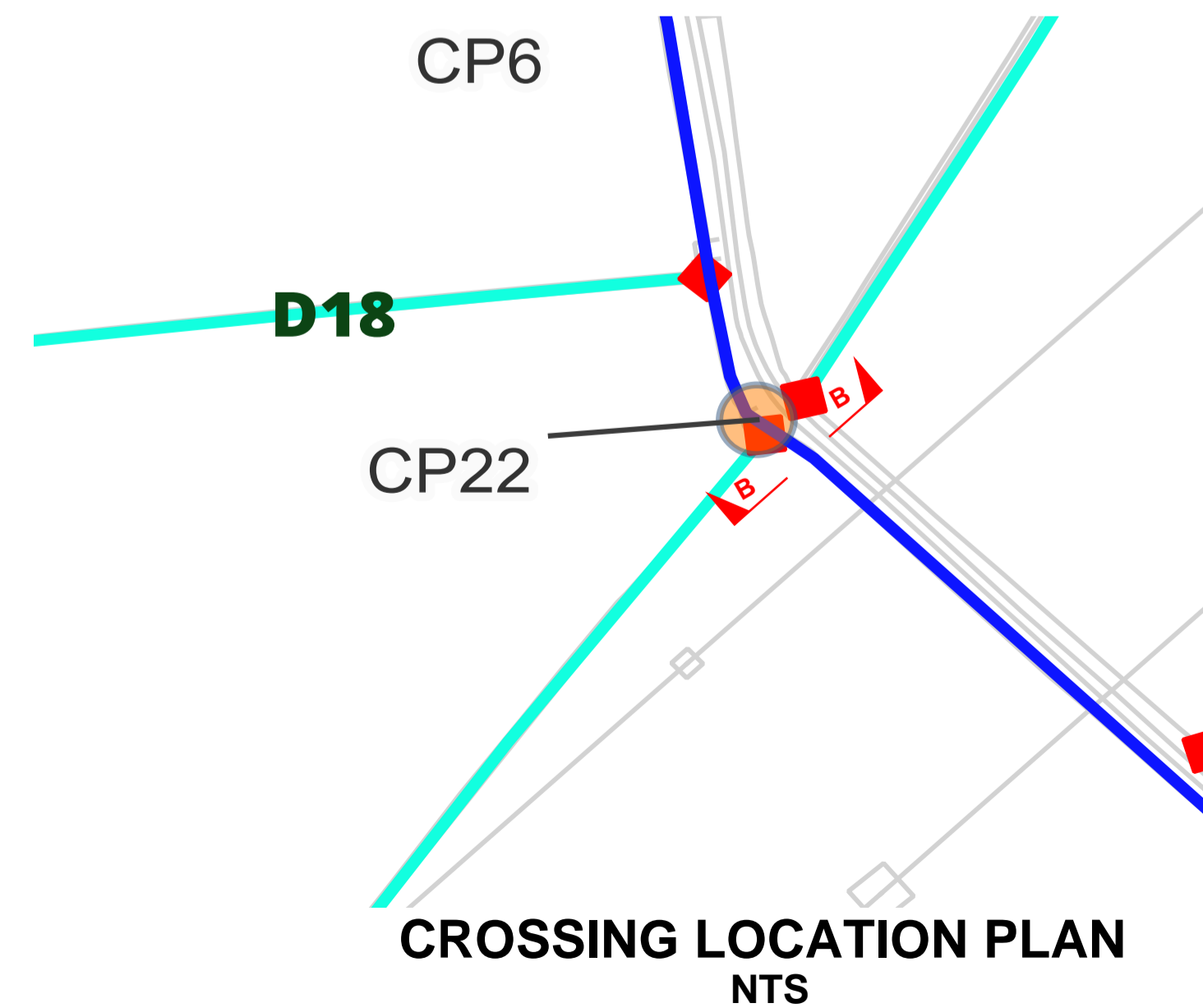
**TYP. BRIDGE SECTION
(CONCRETE OPTION)
1:10**



**TYP. RC ABUTMENT SECTION
1:20**



**TYP. RC ABUTMENT PLAN
1:20**



**CROSSING LOCATION PLAN
NTS**

NOTES:
ALL DIMENSIONS ARE IN MILLIMETRES U.N.O ON THE DRAWINGS. ALL LEVELS IN METRES.
ALL SETTING OUT AND LEVELS SHOWN ARE FOR THE PURPOSE OF DISCUSSION AND APPROVAL BY THE RELEVANT PARTIES.
PRELIMINARY STEEL MEMBER SIZES SHOWN ARE BASED ON A MAX VEHICLE WEIGHT OF 44t.
CONCRETE DECK SHOWN ON DRAWING. ALTERNATIVE STEEL (OPEN MESH GRATING) DECK COULD BE USED SUBJECT TO AGREEMENT WITH RELEVANT PARTIES. ADDITIONAL STEELWORK MAY BE REQUIRED TO PROVIDE SUFFICIENT VERTICAL SUPPORT TO DECK AND LATERAL STIFFNESS TO BRIDGE DECK STRUCTURE.
REFER TO TECHNICAL NOTE 14740-WCD-XX-XX-TN-S-001 FOR COMMENT ON INTEGRITY OF STRUCTURE SUBJECT TO HYDRAULIC (AND OTHER ASSOCIATED) ACTIONS FOR THE 0.5% AEP TIDAL FLOOD EVENT.
ABUTMENTS SET BACK MIN 2m FROM TOP OF EXISTING BANK AND MIN 300mm FREEBOARD ABOVE 1% AEP PLUS 67% CC FLOOD LEVEL PROVIDED.

REV	DATE	DESCRIPTION	BY	CHK	APP
P02	01/04/26	FLOOD LVL AND BRIDGE AMENDED (SEE REVISION CLOUDS)	SW	JS	JS

REVISIONS

CLIENT

Frodsham Solar Ltd

PROJECT

Frodsham Solar

TITLE

Proposed Alternative
Crossing CP22
Elevation & Sections



DRAWN SW CHECKED JS PASSED JS

DATE 23/03/26 CLIENT'S REF.

SCALE AT A1 As Shown AUTOCAD REF.

DRAWING No. 14740-WCD-XX-XX-SK-S-006 REVISION P02