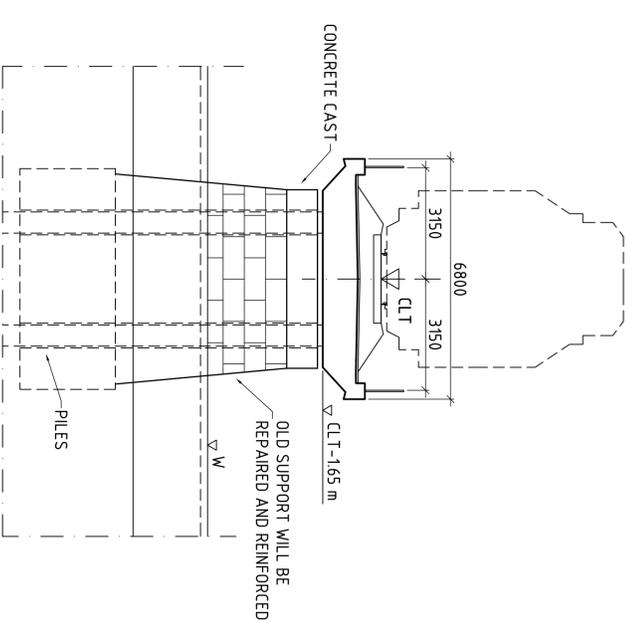
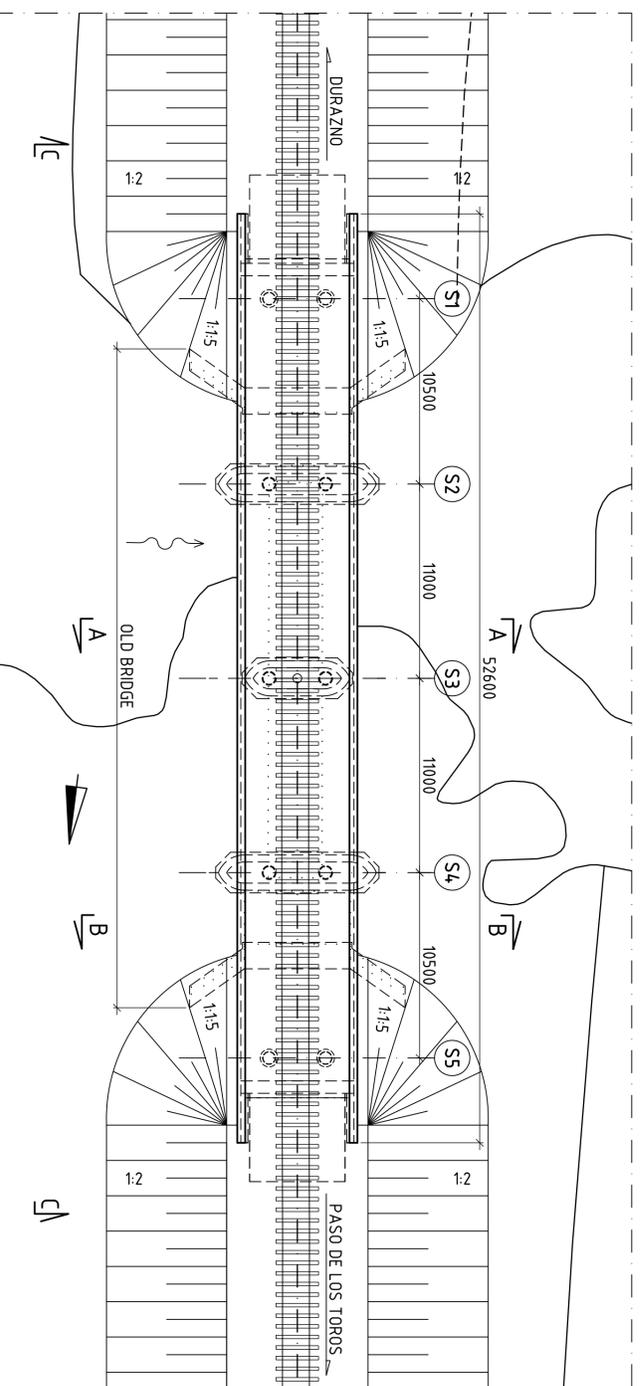


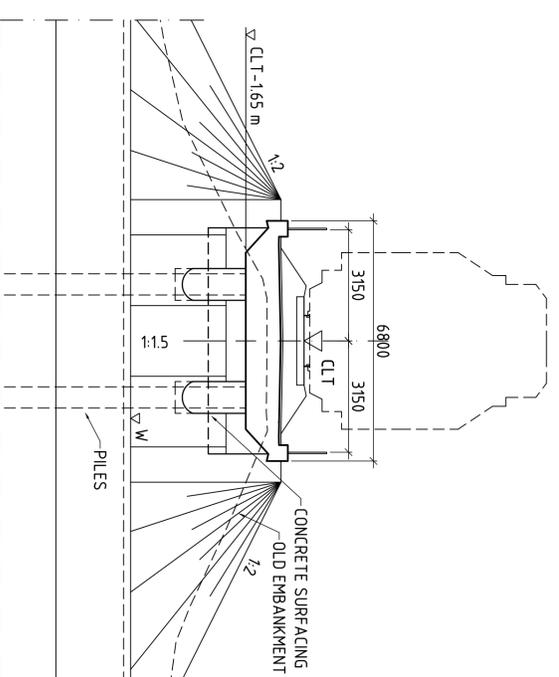
PROFILE C-C 1:200



CROSS SECTION A-A 1:100

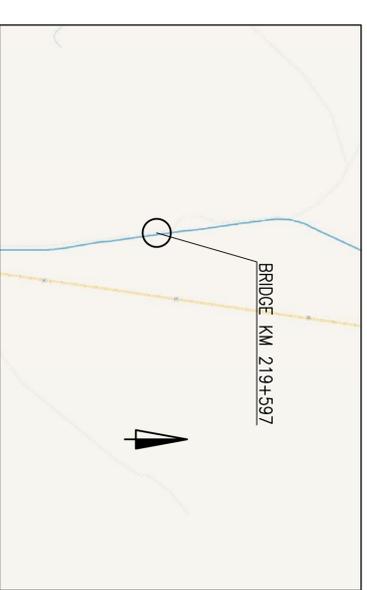


LAYOUT 1:200



CROSS SECTION B-B 1:100

- CONCRETE: C40/50,  $C_{min}=40$  mm
- REINFORCING STEEL: B500B
- PILES / FOUNDATION: PILES, FOUNDATIONS AND FILLINGS WILL BE DIMENSIONED IN DETAILED DESIGN PHASE. OLD SUPPORTS WILL BE EXAMINED IN DETAILED DESIGN PHASE.
- TRANSITION SLABS: PREFABRICATED TRANSITION SLABS 5.0 m OR CAST IN SITU 5.0 m CONCRETE C35/45
- CONSTRUCTIONAL STEEL: S355 J2, HOT-DIP ZINC COATED
- RAILING / FENCE:  $h = 1.1$  m S355J2H HORIZONTAL LINE LOAD 1.0 kN/m VERTICAL POINT LOAD 1.0 kN
- SURFACE STRUCTURE: WATER PROOFING MATERIAL 10 mm PROTECTIVE CONCRETE 50 mm BALLAST 550 mm
- GENERAL INSTRUCTIONS:
  - CLT = CENTER LINE of the TRACK
  - HC = HORIZONTAL CLEARANCE
  - LSD = LOWER SURFACE of the DECK
  - USR = UPPER SURFACE of the RAIL
- ESTIMATED CONCRETE SUBSTRUCTURE: 85 m<sup>3</sup> SUPERSTRUCTURE: 305 m<sup>3</sup>
- TRANSITION SLABS: 20 m<sup>3</sup>
- ESTIMATED REINFORCING STEEL SUBSTRUCTURE: 9000 kg SUPERSTRUCTURE: 48500 kg
- RAILING 104 m



BRIDGE TYPE	CONTINUOUS CONCRETE GIRDER BRIDGE
SPANS	(2.0) + 10.5 + 11.0 + 11.0 + 10.5 + (2.0) m
HORIZONTAL CLEAR SPAN	-
VERTICAL CLEARANCE	-

VERSION 15.12.2017

Revision	Explanation	Date	Designer	Date	Approver
Customer	Project Railway Project				
		Content: Villasboas south railway bridge Preliminary general drawing Km+m 219+597			
Supplier					
Drawn	15.12.2017	Tomá Wasserman	15.12.2017	Tomá Wasserman	LW/1-25
Designer	15.12.2017	Tomá Wasserman	15.12.2017	Rafaela Müllerhölzer	WGS 04.01/11.21
Supervisor	15.12.2017	Rafaela Müllerhölzer			
Accepted					
Cost Acc.					