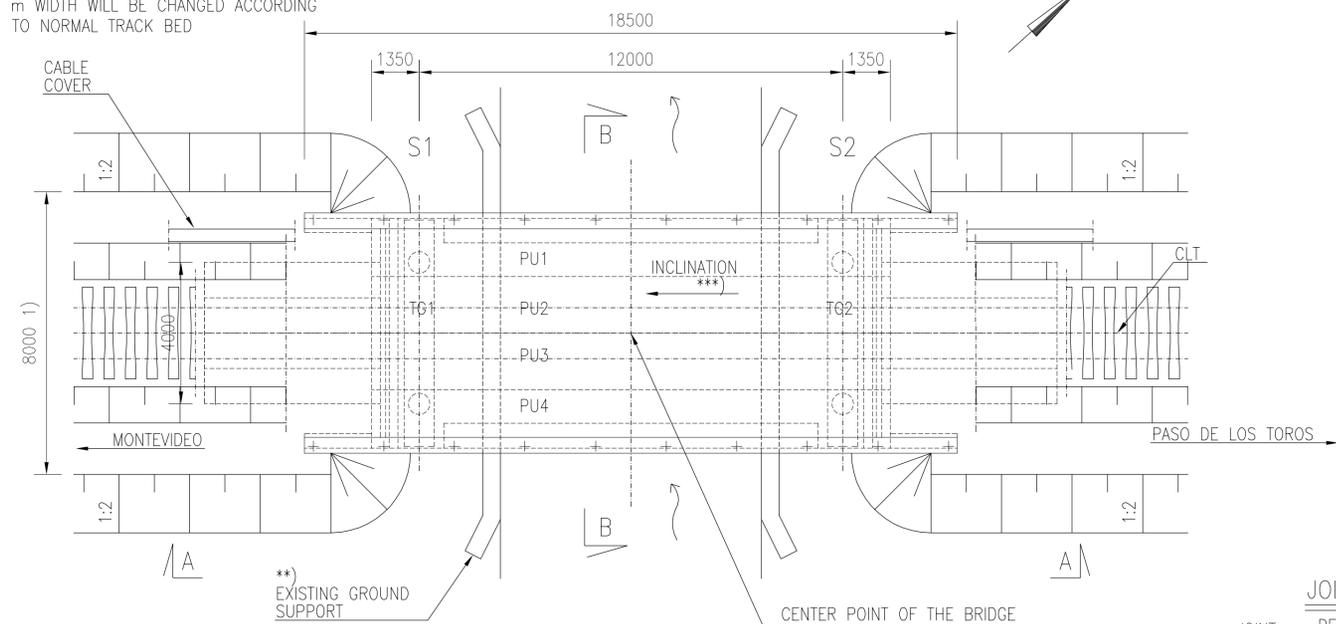


1) THE WIDTH OF THE TRACK BED 8.0 m IN THE END OF THE BRIDGE, AFTER 10 m WIDTH WILL BE CHANGED ACCORDING TO NORMAL TRACK BED

PREFABRICATED BRIDGE 12 m 1:100



\*\*\*) BRIDGE WILL BE BUILT MIN. 1 % INCLINATION ACCORDING TO VERTICAL GEOMETRY OF TRACK

PU = PRECAST UNIT  
TG = TRANSVERSE GIRDER

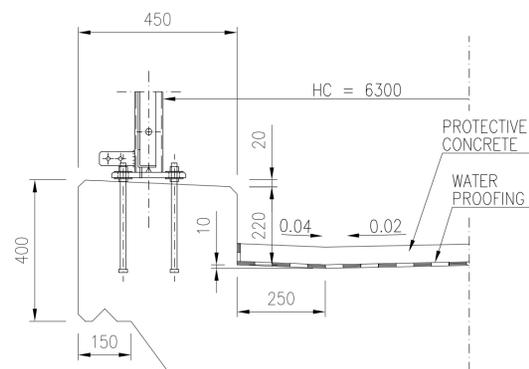
ESTIMATED AMOUNT OF CONCRETE  
PILES: 11 m<sup>3</sup>  
TRANSVERSE GIRDER: 13 m<sup>3</sup>  
SUPERSTRUCTURE: 99 m<sup>3</sup>

ESTIMATED REINFORCING STEEL  
PILES: 1200 kg  
TRANSVERSE GIRDER: 200 kg/m<sup>3</sup> (CONCRETE)  
SUPERSTRUCTURE: 170 kg/m<sup>3</sup> (CONCRETE)  
TRANSITION SLABS: 325 kg/m<sup>3</sup> (CONCRETE)

PROTECTIVE CONCRETE: 3 kg/m<sup>2</sup>

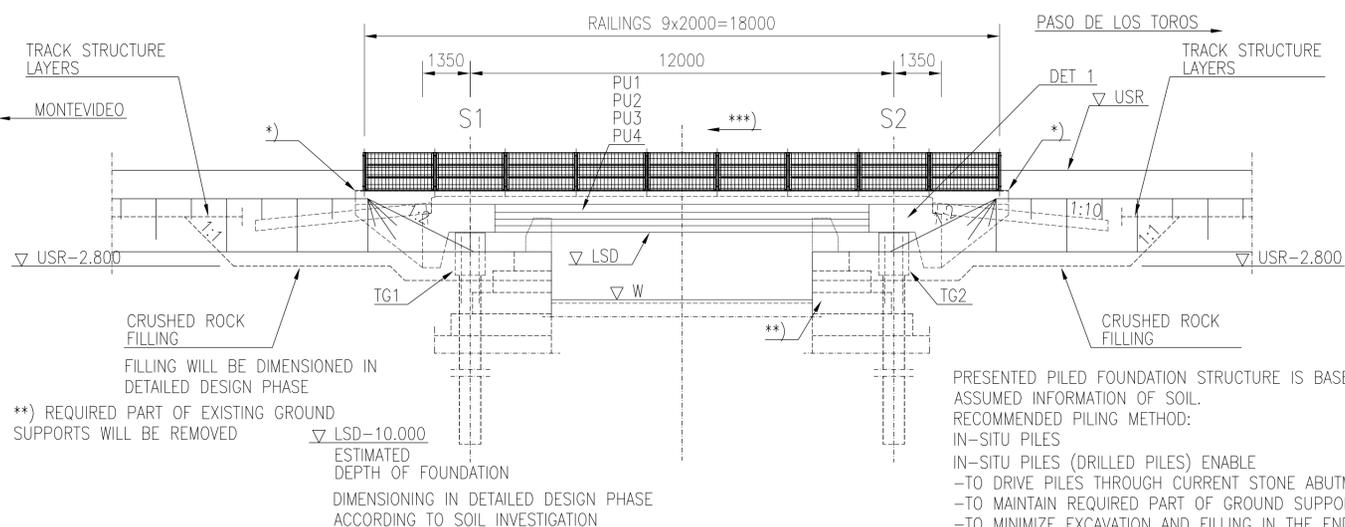
\*) THE LENGTH OF THE WING WALLS WILL BE VERIFIED IN DETAILED DESIGN PHASE OR BEFORE FABRICATION OF PRECAST UNITS

EDGE BEAM 1:10



A - A 1:100

SAFETY NET IN RAILS WILL BE MOUNTED IN BRIDGES WHICH CROSS STREET OR PEDESTRIAN WAY

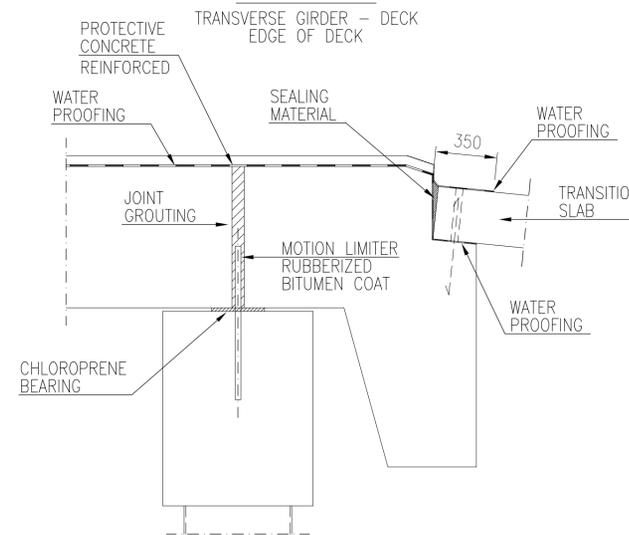


\*\*) REQUIRED PART OF EXISTING GROUND SUPPORTS WILL BE REMOVED

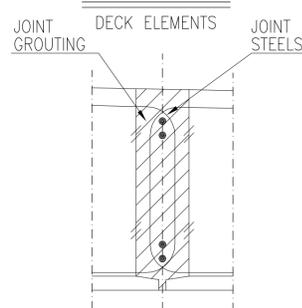
ESTIMATED DEPTH OF FOUNDATION DIMENSIONING IN DETAILED DESIGN PHASE ACCORDING TO SOIL INVESTIGATION

PRESENTED PILED FOUNDATION STRUCTURE IS BASED ON ASSUMED INFORMATION OF SOIL. RECOMMENDED PILING METHOD: IN-SITU PILES  
IN-SITU PILES (DRILLED PILES) ENABLE  
-TO DRIVE PILES THROUGH CURRENT STONE ABUTMENT  
-TO MAINTAIN REQUIRED PART OF GROUND SUPPORT  
-TO MINIMIZE EXCAVATION AND FILLING IN THE END OF THE BRIDGE  
-TO SHORTEN THE NEEDED CONSTRUCTION TIME

DET 1 1:20

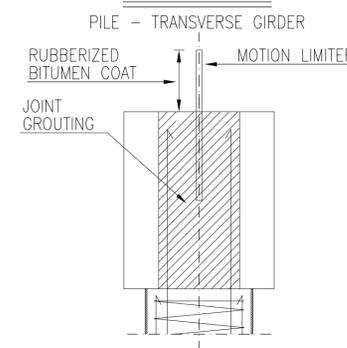


JOINTS 1:10



ELEMENTS ARE JOINED TOGETHER TO STRENGTHEN THE DECK STRUCTURE  
REINFORCING STEELS IN JOINTS WILL BE DEFINED IN DETAIL DESIGN PHASE

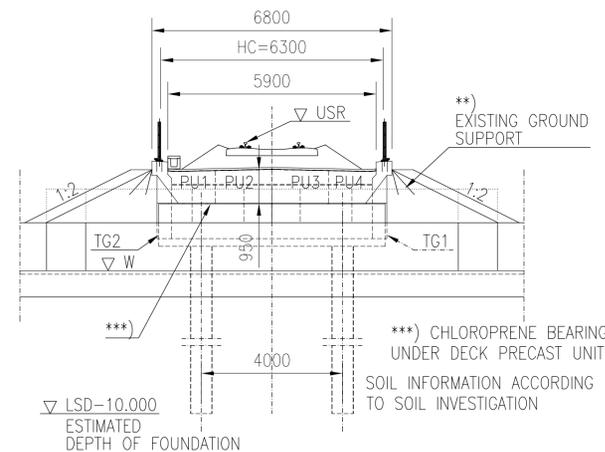
JOINTS 1:20



POSSIBLE REINFORCING WILL BE DIMENSIONED IN DETAILED DESIGN PHASE

SUPPORTING FOR TRANSVERSE GIRDER DURING ASSEMBLY WILL BE DEFINED IN DETAILED DESIGN PHASE

B - B 1:100



CONCRETE: C35/45  
Cmin=40 mm

REINFORCING STEEL: B500B  
REINFORCING MESH: B500K

PILES / FOUNDATION: DRILLED PILES D610x14,2 S355J2H

TRANSITION SLABS: PREFABRICATED TRANSITION SLABS  
2 x 4 x 1.0 m x 5,0 m  
OR CAST IN SITU 2 x 4,0 m x 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

FILLING: REQUIREMENTS ACCORDING TO TRACK INTERMEDIATE LAYER

CLT = CENTER LINE of the TRACK  
HC = HORIZONTAL CLEARANCE  
LSD = LOWER SURFACE of the DECK  
USR = UPPER SURFACE of the RAIL

MAP

BRIDGE TYPE	PREFABRICATED BRIDGE
SPANS	1.35 m + 12.00 m + 1.35 m
HORIZONTAL CLEAR SPAN	—
VERTICAL CLEARANCE	—
HORIZONTAL CLEARANCE	6.30 m

VERSION  
23.10.2017

Revision	Explanation	Date	Designer	Date	Acceptor
Customer	Project				
 <b>MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS</b>		Railway Project			
		Design phase Pre-engineering, Phase 2			
Supplier		Content			
		Prefabricated bridge 12 m Preliminary general drawing Km+m +-+			
		Supplier			
Drawer	23.10.2017	Ilkka Tiuro	Loading		LM71-25
Designer	23.10.2017	Ilkka Tiuro	Coordinate and elevation reference system		WGS 84 UTM 21
Supervisor	23.10.2017	Reima Niklander	Railway line		
Accept.	-	-	Archive	Type	Number
Cost. acc.	-	-			Rev. Sheet
			RB	-	1