

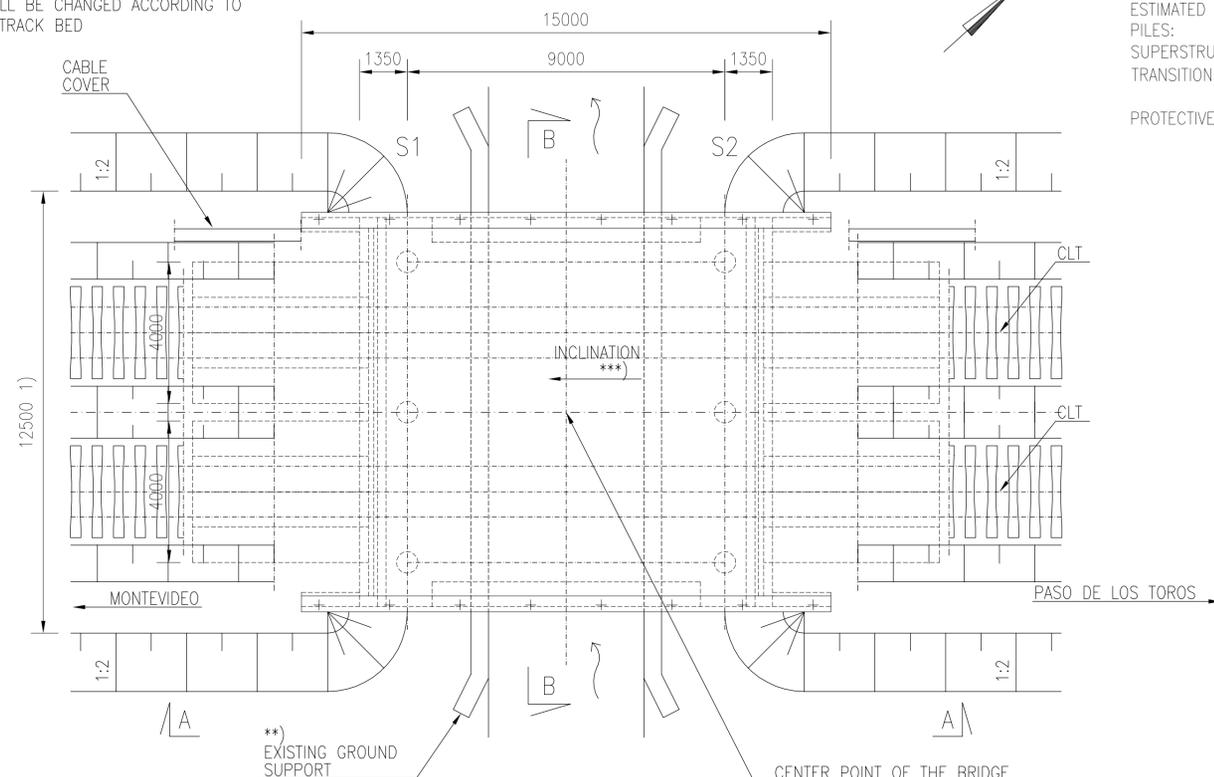
1) THE WIDTH OF THE TRACK BED 8.0 m  
IN THE END OF THE BRIDGE, AFTER 10 m  
WIDTH WILL BE CHANGED ACCORDING TO  
NORMAL TRACK BED

CAST-IN-SITU BRIDGE 2Tr 9 m 1:100

ESTIMATED AMOUNT OF CONCRETE  
PILES: 17 m<sup>3</sup>  
SUPERSTRUCTURE: 112 m<sup>3</sup>

ESTIMATED REINFORCING STEEL  
PILES: 1800 kg  
SUPERSTRUCTURE: 180 kg/m<sup>3</sup> (CONCRETE)  
TRANSITION SLABS: 325 kg/m<sup>3</sup> (CONCRETE)

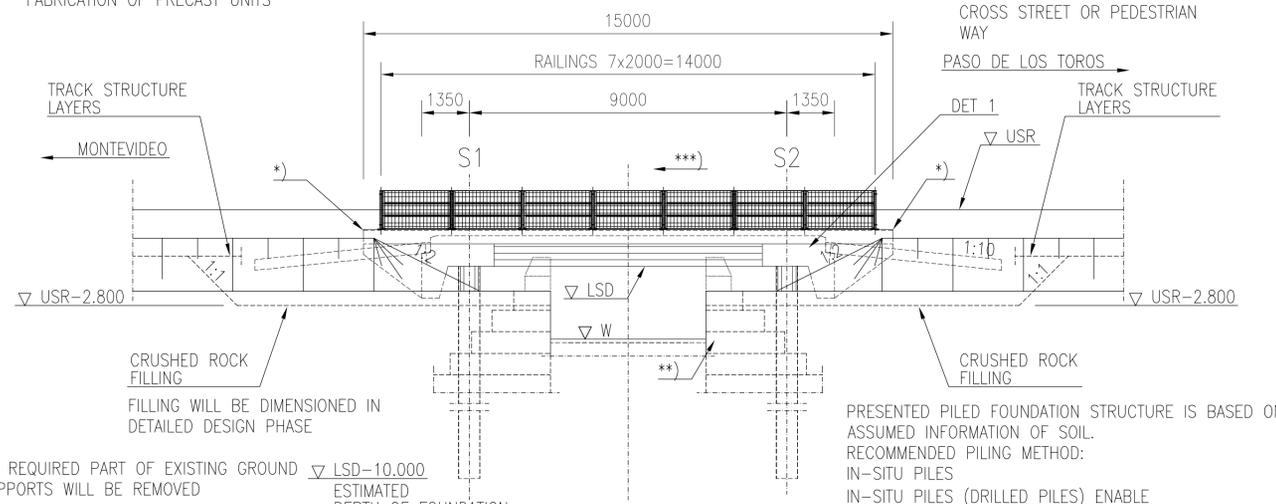
PROTECTIVE CONCRETE: 3 kg/m<sup>2</sup>



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

A - A 1:100

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

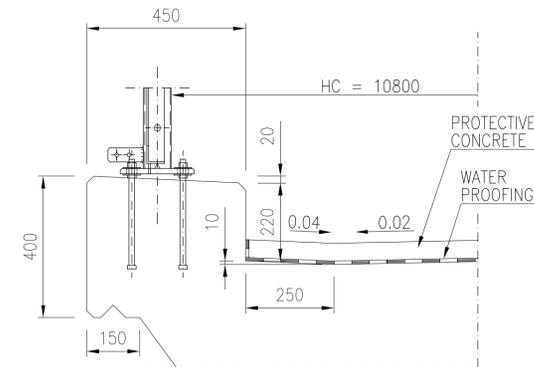


\*\*) REQUIRED PART OF EXISTING GROUND  $\nabla$  LSD-10,000  
SUPPORTS WILL BE REMOVED

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

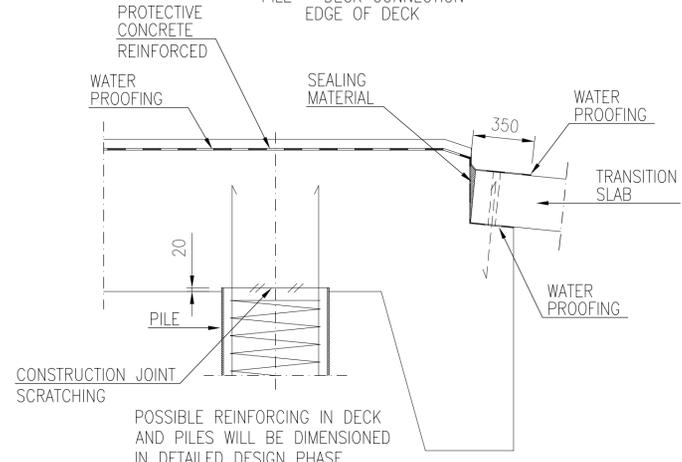
PRESENTED PILED FOUNDATION STRUCTURE IS BASED ON  
ASSUMED INFORMATION OF SOIL.  
RECOMMENDED PILING METHOD:  
IN-SITU PILES  
IN-SITU PILES (DRILLED PILES) ENABLE  
-TO DRIVE PILES THROUGH CURRENT STONE ABUTMENT  
-TO MAINTAIN REQUIRED PART OF GROUND SUPPORT  
-TO MINIMIZE EXCAVATION AND FILLING IN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

EDGE BEAM 1:10



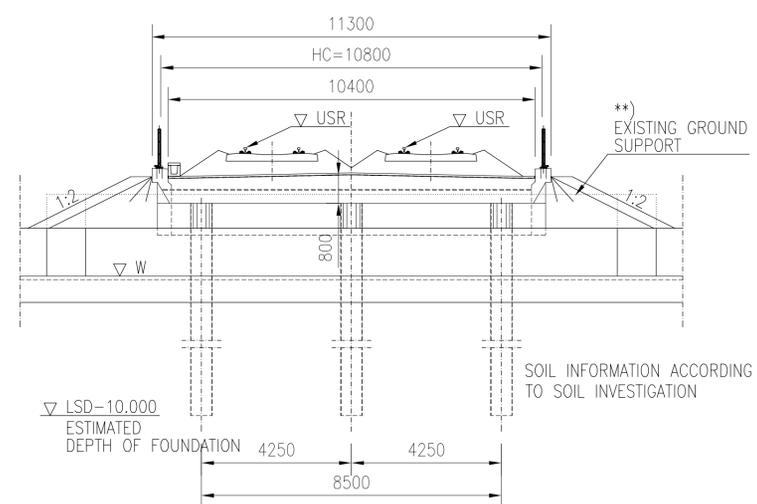
DET 1 1:20

PILE - DECK CONNECTION  
EDGE OF DECK



POSSIBLE REINFORCING IN DECK  
AND PILES WILL BE DIMENSIONED  
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 2 x 4 x 1.0 m x 5,0 m  
OR CAST IN SITU 2 x 2 x 4,0 m x 5,0 m  
CONCRETE C35/45

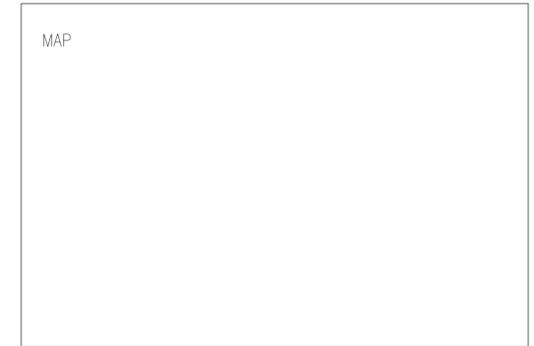
CONSTRUCTIONAL STEEL: S355 J2, HOT-DIP ZINC COATED

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



BRIDGE TYPE	REINFORCED CONCRETE BRIDGE
	CANTILEVER PLATE
SPANS	1.35 m + 9.00 m + 1.35 m
HORIZONTAL CLEAR SPAN	—
VERTICAL CLEARANCE	—
HORIZONTAL CLEARANCE	10.80 m

VERSION  
23.10.2017

Revision	Explanation	Date	Designer	Date	Acceptor
Customer	Project				
 <b>MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS</b>		Railway Project			
Supplier		Pre-engineering, Phase 2			
		Cast-in-situ bridge 9 m Double track Preliminary general drawing Km+m +-+			
Drawer	23.10.2017	Ilkka Tiito	Loading	LM71-25	
Designer	23.10.2017	Ilkka Tiito	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