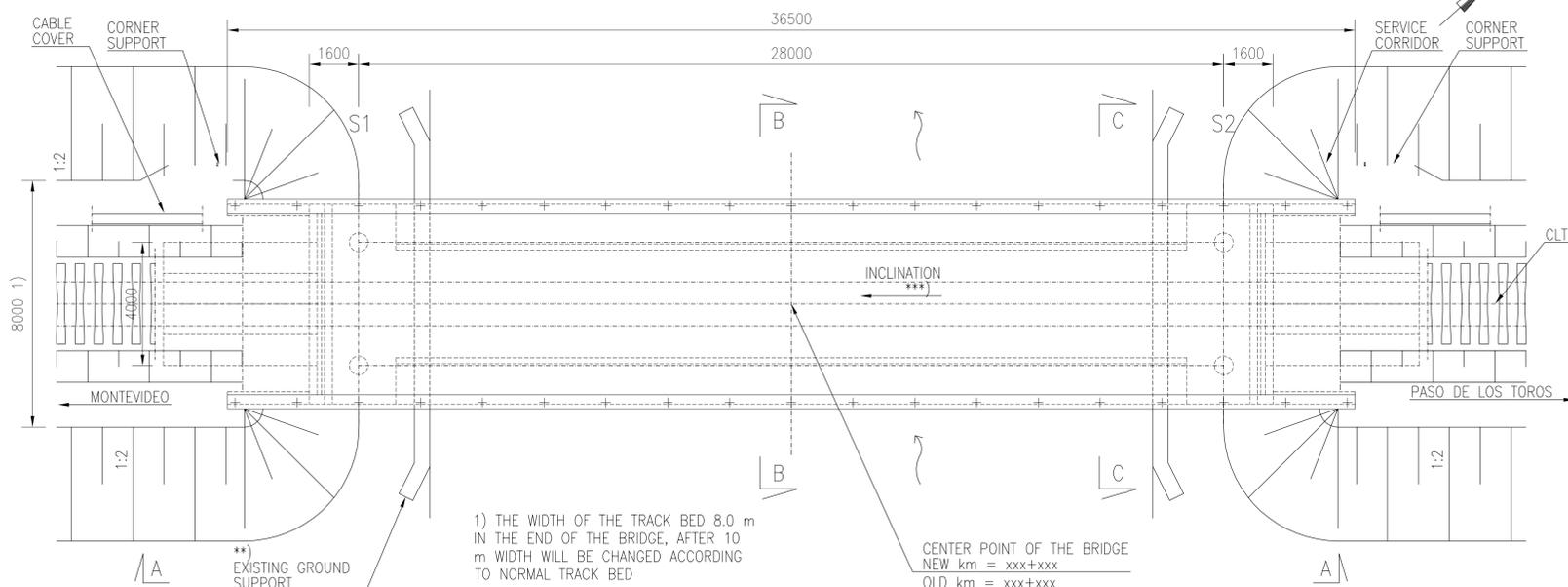


PRESTRESSED CONCRETE BRIDGE 28 m 1:100



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

CENTER POINT OF THE BRIDGE
NEW km = xxx+xxx
OLD km = xxx+xxx

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

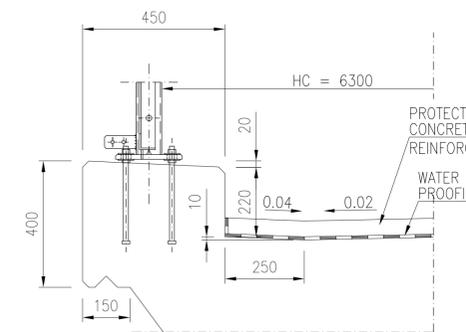
ESTIMATED AMOUNT OF CONCRETE
PILES: 11 m³
SUPERSTRUCTURE: 250 m³

ESTIMATED PRESTRESSING STEEL
SUPERSTRUCTURE: 23 kg/m³ (CONCRETE)

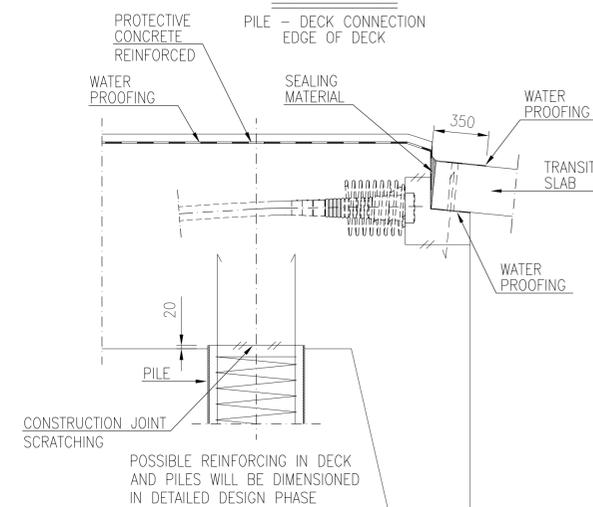
ESTIMATED REINFORCING STEEL
PILES: 1200 kg
SUPERSTRUCTURE: 90 kg/m³ (CONCRETE)
TRANSITION SLABS: 325 kg/m³ (CONCRETE)

PROTECTIVE CONCRETE: 3 kg/m²

EDGE BEAM 1:10



DET 1 1:20



CONCRETE: C35/45
C_{min}=40 mm

PRESTRESSING STEEL: St 1570 / 1770
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

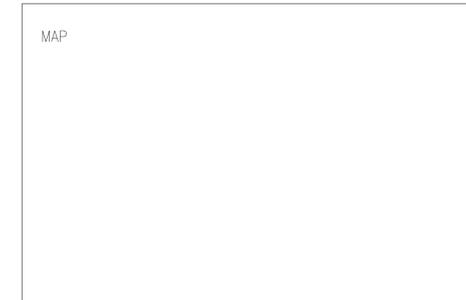
CONSTRUCTIONAL STEEL: S355 J2, HOT-DIP ZINC COATED

RAILING / FENCE: h = 1.1 m
S355J2H
HORIZONTAL LINE LOAD 1.0 KN/m
VERTICAL POINT LOAD 1.0 KN

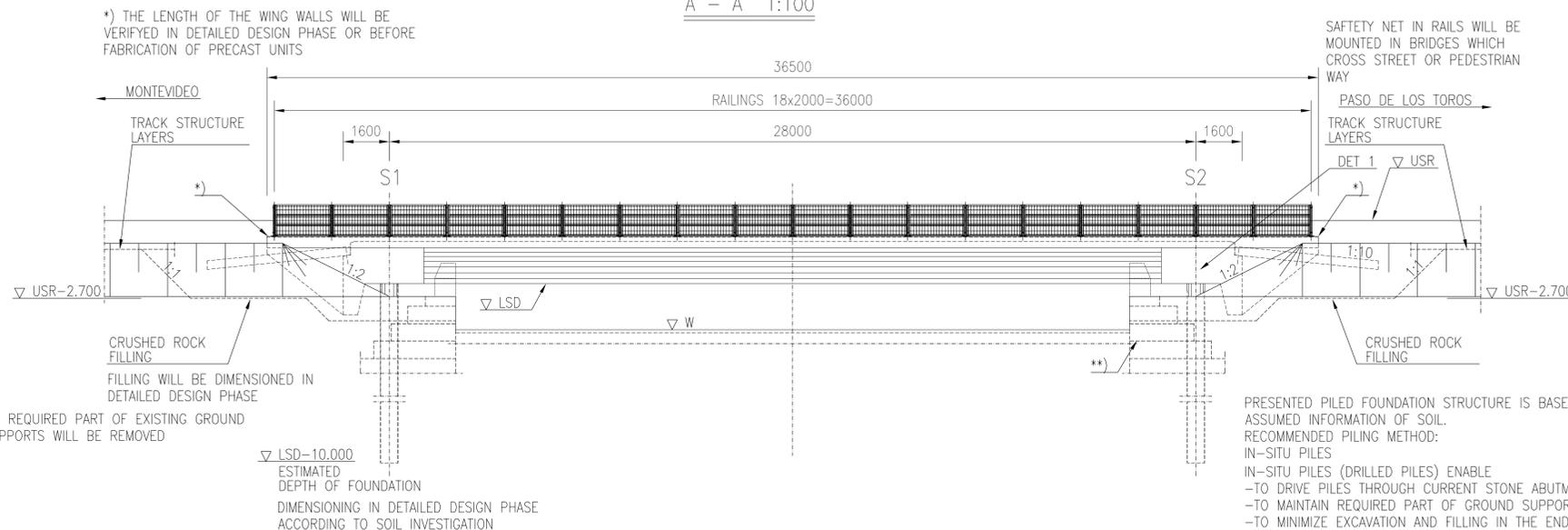
SURFACE STRUCTURE: WATER PROOFING MATERIAL 10 mm
PROTECTIVE CONCRETE 50 mm
BALLAST 550 mm

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



A - A 1:100



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

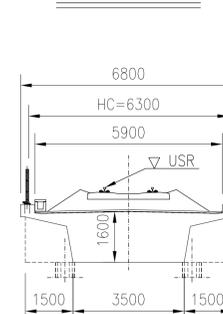
SAFETY NET IN RAILS WILL BE MOUNTED IN BRIDGES WHICH CROSS STREET OR PEDESTRIAN WAY

** REQUIRED PART OF EXISTING GROUND SUPPORTS WILL BE REMOVED

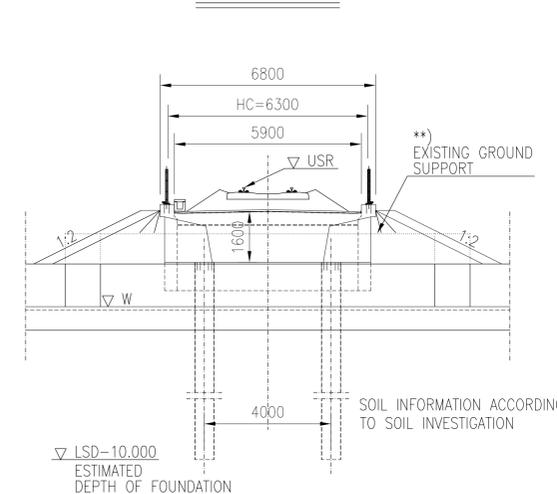
ESTIMATED DEPTH OF FOUNDATION DIMENSIONING IN DETAILED DESIGN PHASE ACCORDING TO SOIL INVESTIGATION

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

B - B 1:100



C - C 1:100



BRIDGE TYPE	PRESTRESSED CONCRETE BRIDGE
	CANTILEVER PLATE
SPANS	1.60 m + 28.00 m + 1.60 m
HORIZONTAL CLEAR SPAN	—
VERTICAL CLEARANCE	—
HORIZONTAL CLEARANCE	6.30 m

VERSION
23.10.2017

Revision	Explanation	Date	Designer	Date	Acceptor
Customer	Project		Railway Project		
		MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS Design phase: Pre-engineering, Phase 2 Content: Prestressed concrete bridge 28 m Preliminary general drawing Km+km +-+			
Supplier			Loading: LM71-25 Coordinate and elevation reference system: WGS 84 UTM 21 Railway line:		
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
Cust. acc.	-	-	RB	-	1