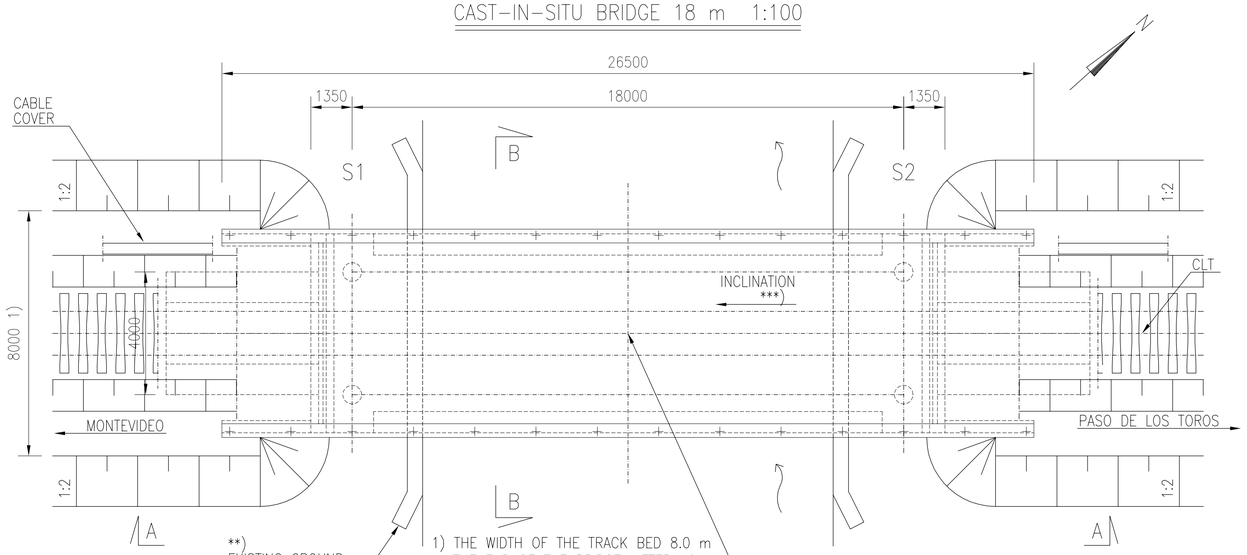
MVD -PdT | km -+- | -

CAST-IN-SITU BRIDGE 18 m
PRELIMINARY GENERAL DRAWING

CAST–IN–SITU BRIDGE 18 m 1:100



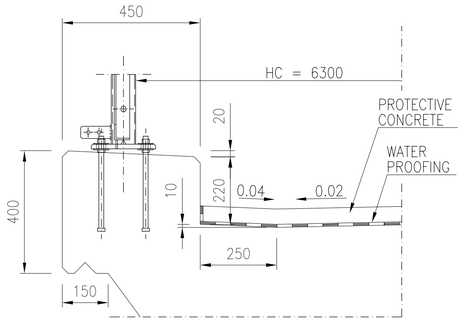
***) BRIDGE WILL BE BUILT MIN. 1 % INCLINATION ACCORDING TO VERTICAL GEOMETRY OF TRACK

ESTIMATED AMOUNT OF CONCRETE
PILES: 11 m3
SUPERSTRUCTURE: 198 m3

ESTIMATED REINFORCING STEEL
PILES: 1200 kg
SUPERSTRUCTURE: 140 kg/m3 (CONCRETE)
TRANSITION SLABS: 325 kg/m3 (CONCRETE)

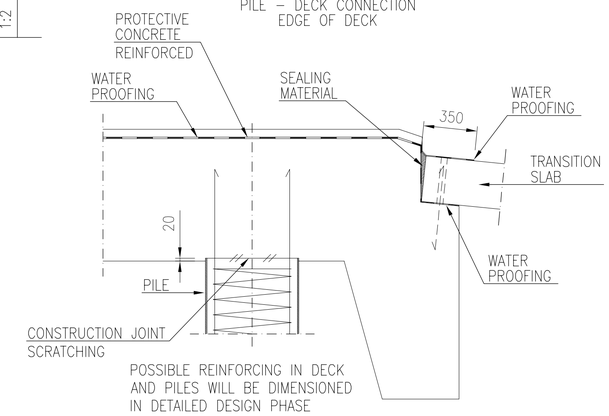
PROTECTIVE CONCRETE: 3 kg/m2

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

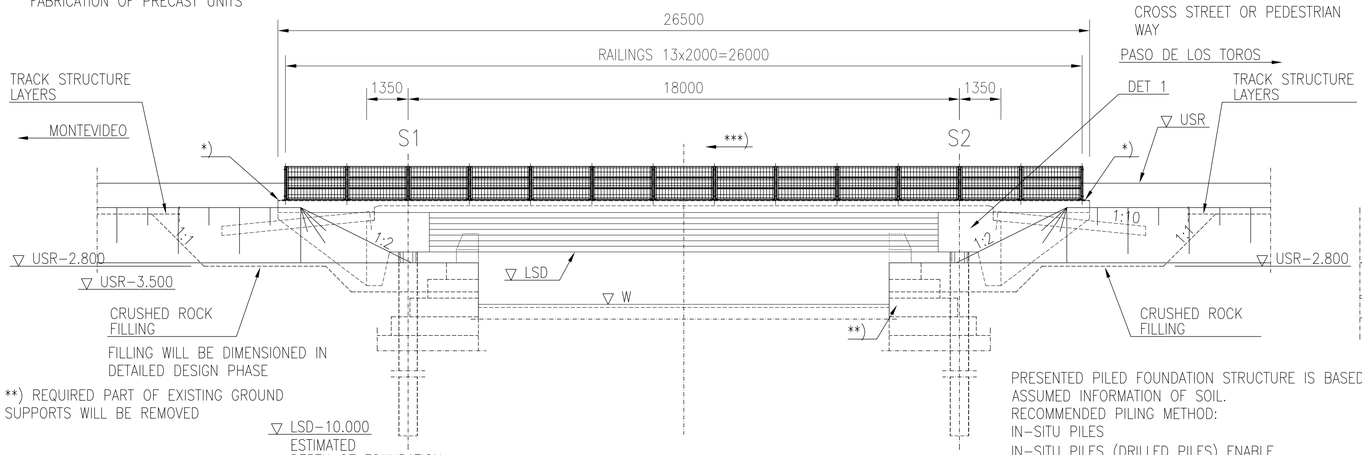
CONCRETE:	C35/45 Cmin=40 mm
REINFORCING STEEL: REINFORCING MESH:	B500B B500K
PILES / FOUNDATION:	DRILLED PILES D610x14,2 S355J2H
TRANSITION SLABS:	PREFABRICATED TRANSITION SLABS 2 x 4 x 1.0 m x 5,0 m OR CAST IN SITU 2 x 4,0 m x 5,0 m CONCRETE C35/45
CONSTRUCTIONAL STEEL:	S355 J2, HOT–DIP ZINC COATED
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

A – A 1:100

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



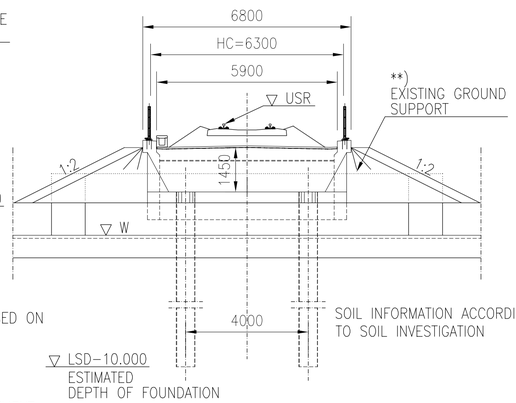
**) REQUIRED PART OF EXISTING GROUND SUPPORTS WILL BE REMOVED

DIMENSIONING IN DETAILED DESIGN PHASE ACCORDING TO SOIL INVESTIGATION

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

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



SOIL INFORMATION ACCORDING TO SOIL INVESTIGATION

BRIDGETYPE	REINFORCED CONCRETE BRIDGE CANTILEVER PLATE
SPANS	1.35 m + 18.00 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: MINISTERIO DE TRANSPORTE Y OBRAS PÚBLICAS
Supplier: VR TRACK

Project: Railway Project
Design phase: Pre-engineering, Phase 2
Content: Cast-in-situ bridge 18 m
Preliminary general drawing
Km+m -+-

Drawer	23.10.2017	Ilkka Tiiro
Designer	23.10.2017	Ilkka Tiiro
Supervisor	23.10.2017	Reima Niklander
Accept.	-	-
Cust. acc	-	-

Loading: LM71-25
Coordinate and elevation reference system: WGS 84 UTM 21
Railway line:
Archive | Type | Number | Rev. | Sheet: RB | - | - | 1