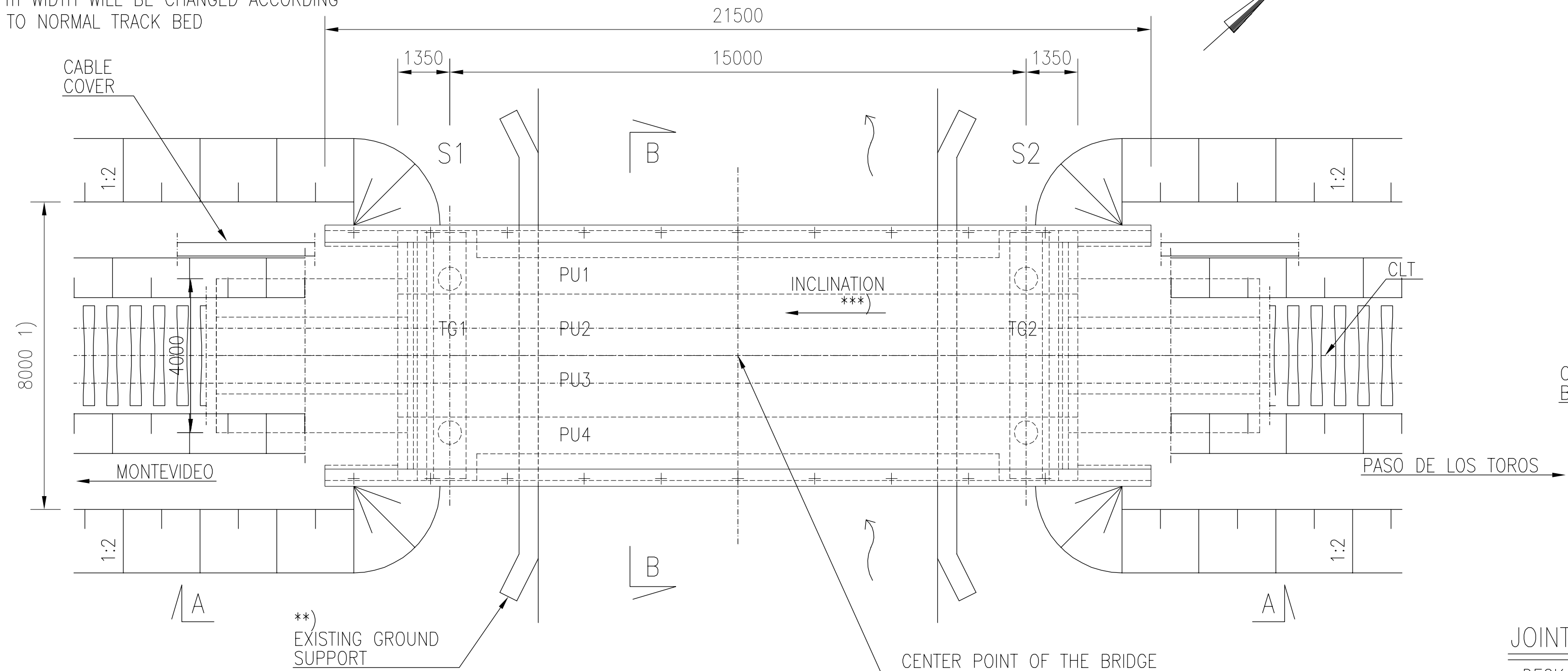


1) THE WIDTH OF THE TRACK BED 8.0 m
IN THE END OF THE BRIDGE, AFTER 10
m WIDTH WILL BE CHANGED ACCORDING
TO NORMAL TRACK BED

PREFABRICATED BRIDGE 15 m 1:100



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

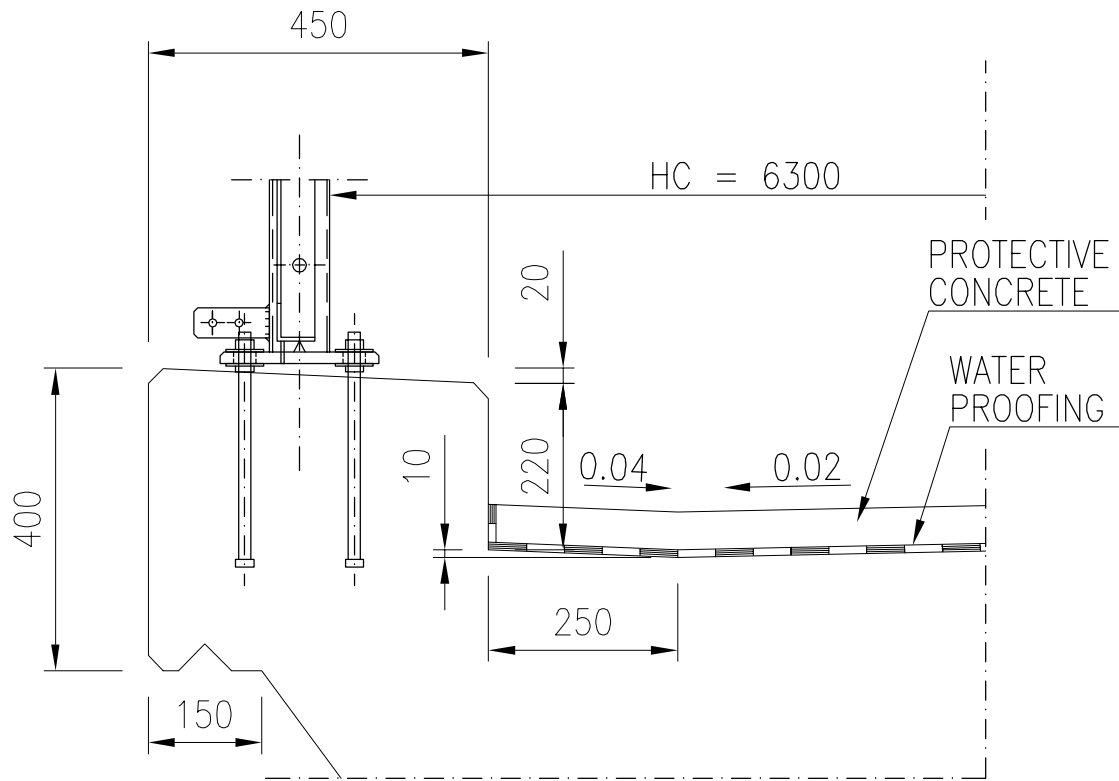
PU = PRECAST UNIT
TG = TRANSVERSE GIRDER

ESTIMATED AMOUNT OF CONCRETE
PILES: 11 m³
TRANSVERSE GIRDER: 14 m³
SUPERSTRUCTURE: 137 m³

ESTIMATED REINFORCING STEEL
PILES: 1200 kg
TRANSVERSE GIRDER: 200 kg/m³ (CONCRETE)
SUPERSTRUCTURE: 140 kg/m³ (CONCRETE)
TRANSITION SLABS: 325 kg/m³ (CONCRETE)

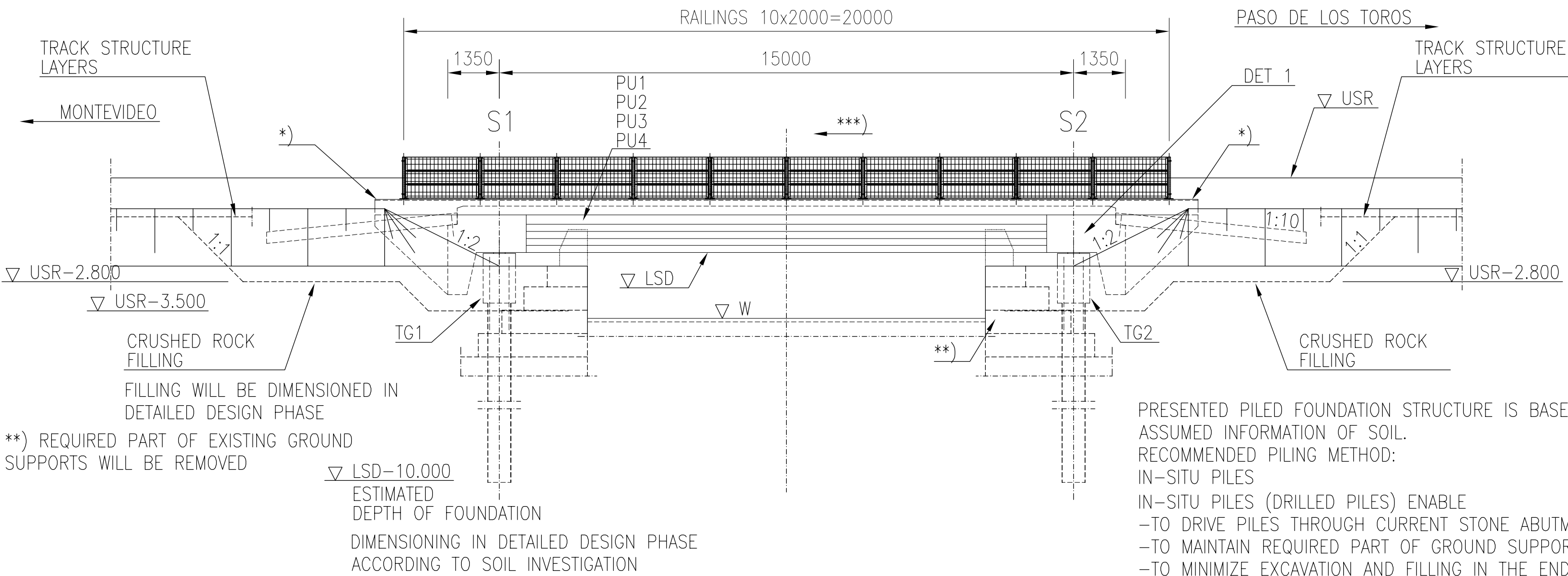
PROTECTIVE CONCRETE: 3 kg/m²

EDGE BEAM 1:10



A - A 1:100

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

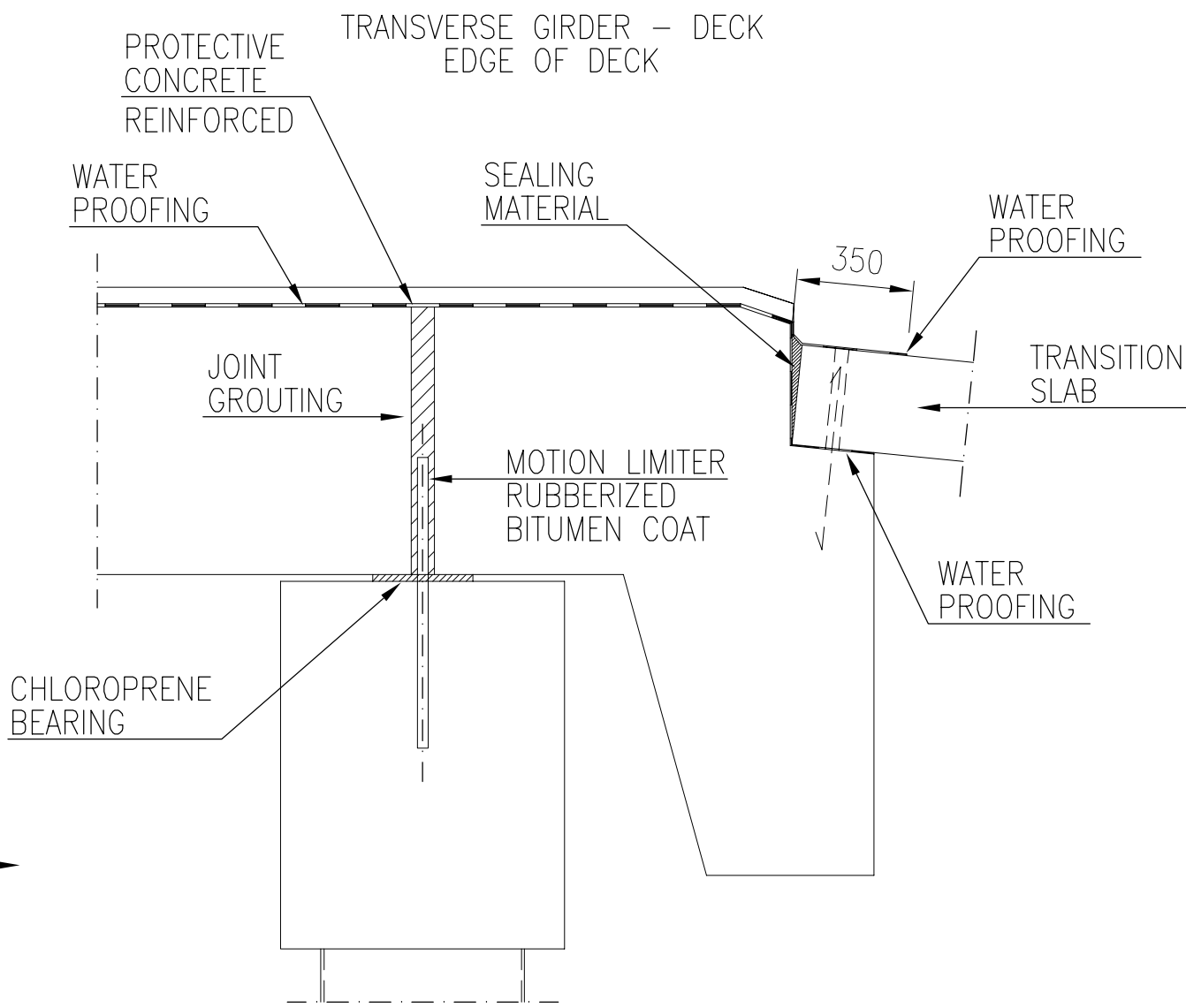


**) REQUIRED PART OF EXISTING GROUND
SUPPORTS WILL BE REMOVED

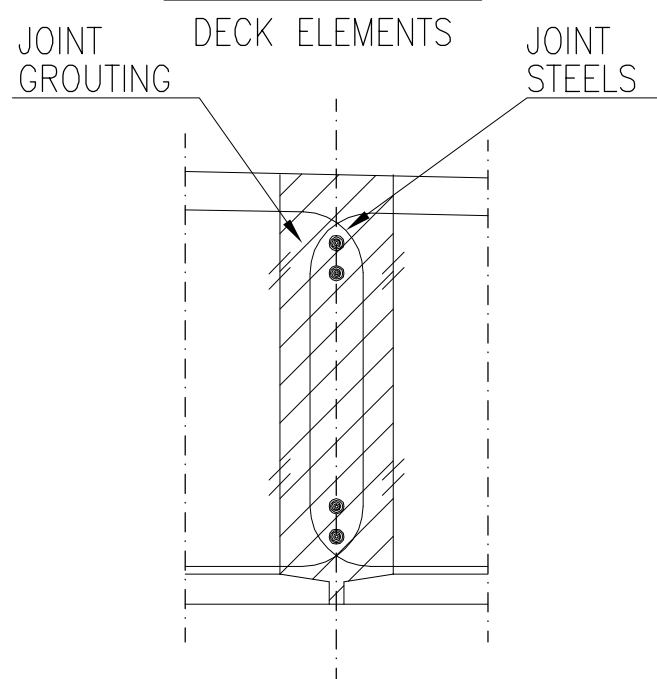
ESTIMATED
DEPTH OF FOUNDATION
DIMENSIONING IN DETAILED DESIGN PHASE
ACCORDING TO SOIL INVESTIGATION

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



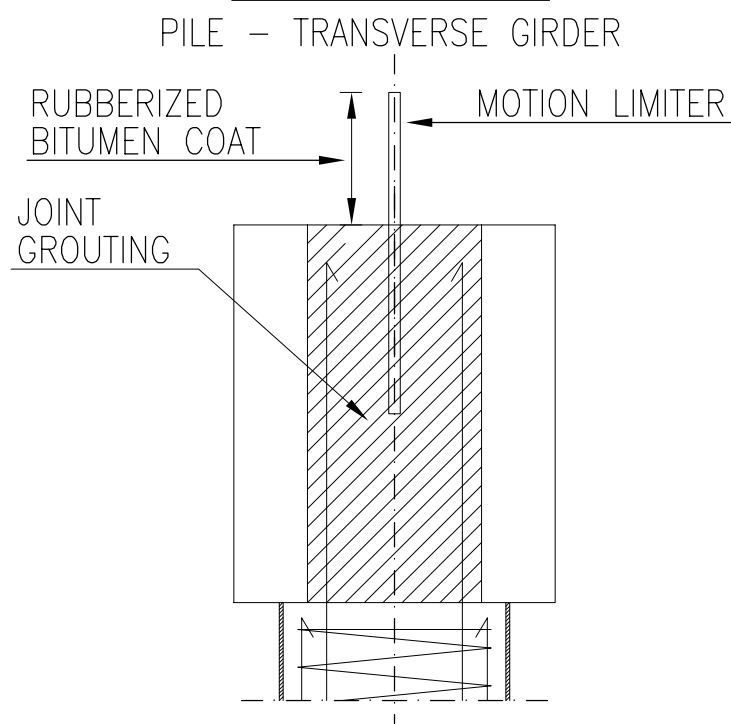
JOINTS 1:10



ELEMENTS ARE JOINED TOGETHER TO
STRENGTHEN THE DECK STRUCTURE

REINFORCING STEELS IN JOINTS WILL
BE DEFINED IN DETAIL DESIGN PHASE

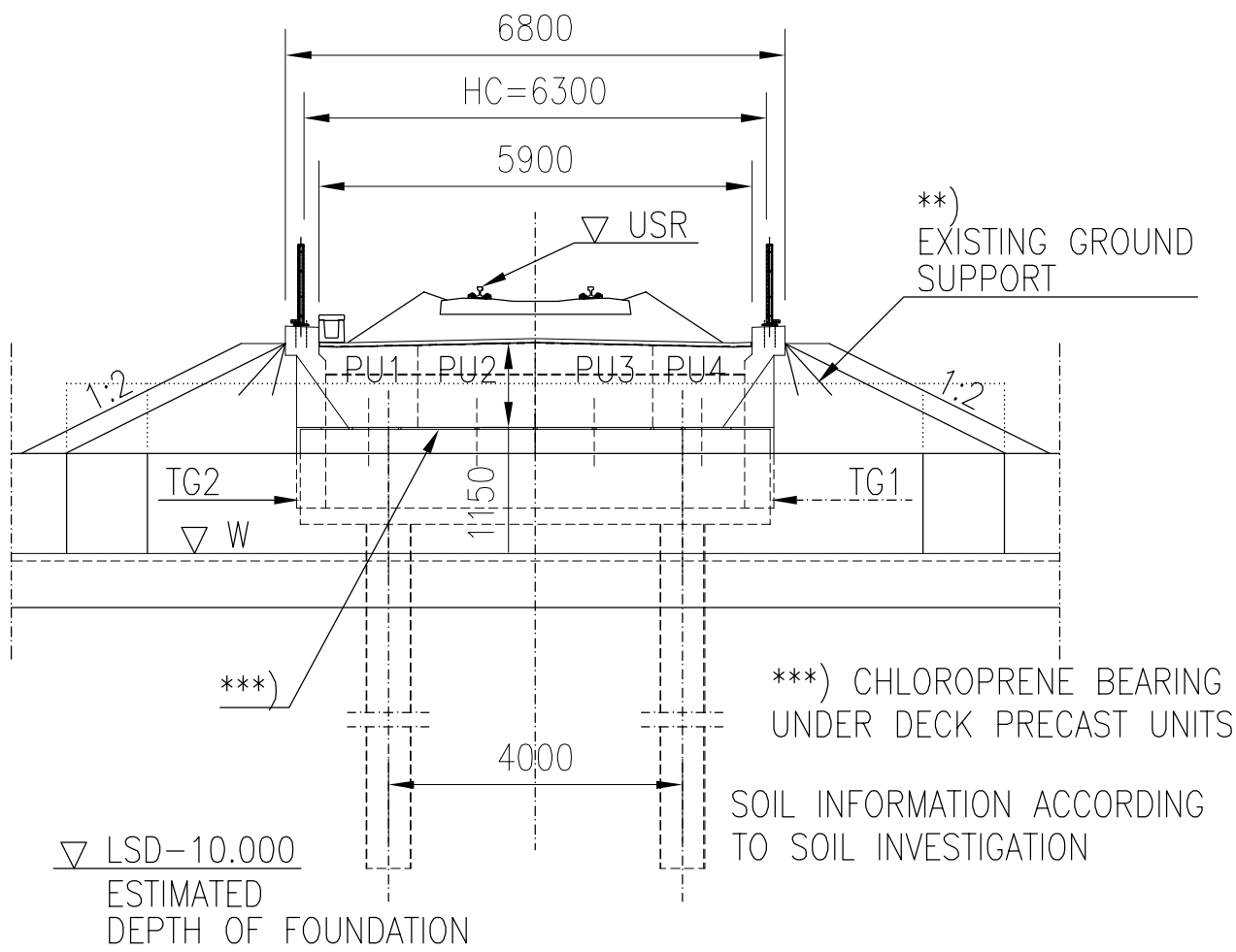
JOINTS 1:20



POSSIBLE REINFORCING WILL BE
DIMENSIONED IN DETAILED DESIGN
PHASE

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

B - B 1:100



**) CHLOROPRENE BEARING
UNDER DECK PRECAST UNITS

SOIL INFORMATION ACCORDING
TO SOIL INVESTIGATION

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

BRIDGETYPE	PREFABRICATED BRIDGE
SPANS	1.35 m + 15.00 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			Project		
			Railway Project		
Supplier			Design phase		
			Pre-engineering, Phase 2		
			Content		
			Prefabricated bridge 15 m Preliminary general drawing Km+m +-+		
Drawer	23.10.2017	Ilkka Tiiri	Loading	LM71-25	
Designer	23.10.2017	Ilkka Tiiri	Coordinate and elevation reference system	WGS 84 UTM 21	
Supervisor	23.10.2017	Reima Niklander	Railway line		
Accept.	-	-	Archive	Type	Number
Cust. acc.	-	-	Rev.	Sheet	
			RB	-	1