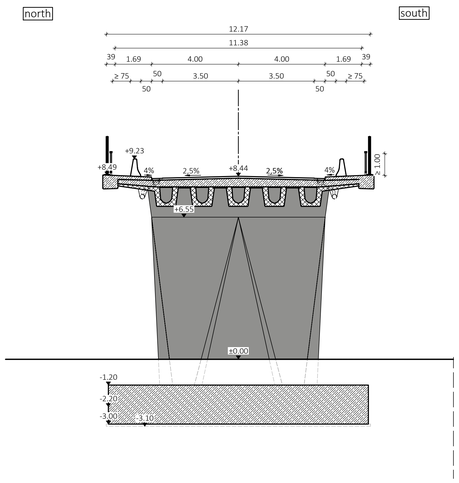
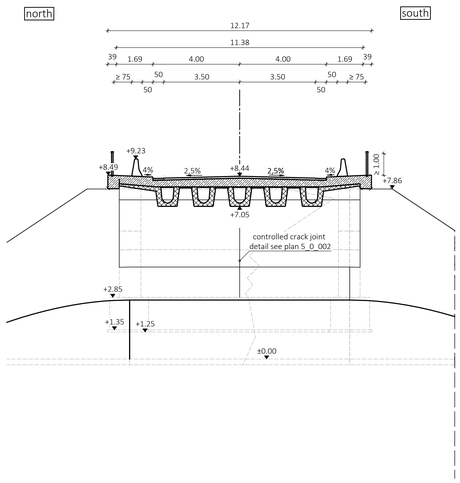
DO NOT SCALE FROM THIS DRAWING

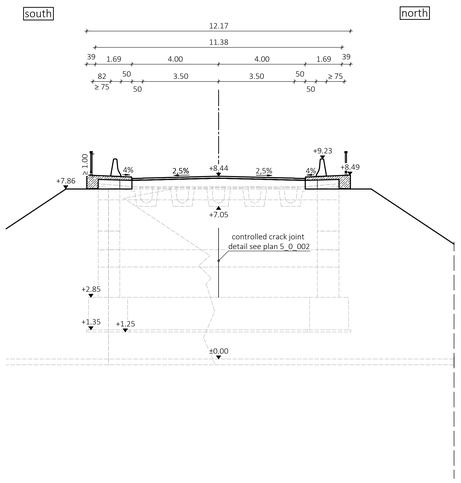
cross section B-B scale: 1:100
pier connection axis 30



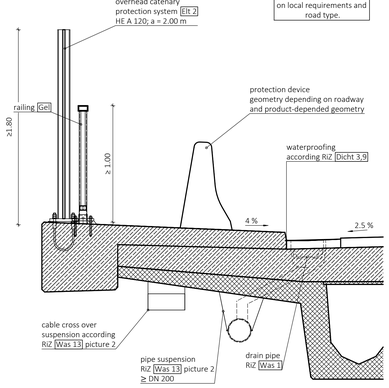
cross section C-C scale: 1:100
abutment front view axis 40



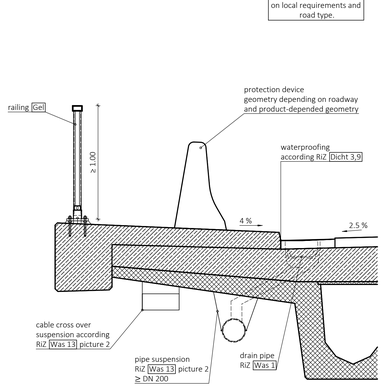
cross section D-D scale: 1:100
abutment rear view axis 40



detail C4_C scale: 1:20
edgebeam with overhead catenary protection system
main field

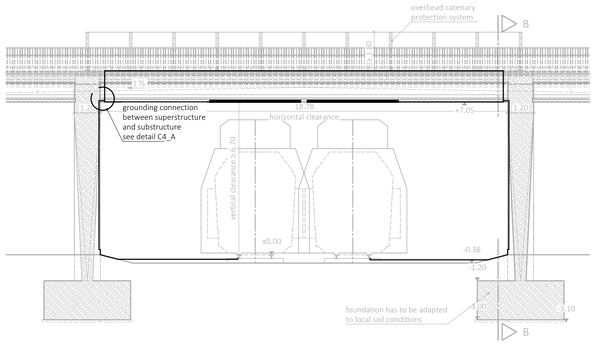


detail C4_B scale: 1:20
edgebeam without overhead catenary protection system
side fields

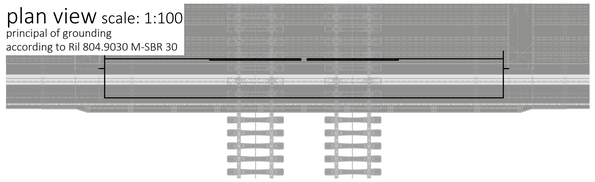


grounding

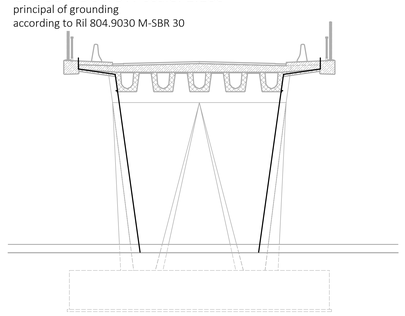
longnitudinal section scale: 1:100
principal of grounding
according to Ril 804.9030 M-SBR 30



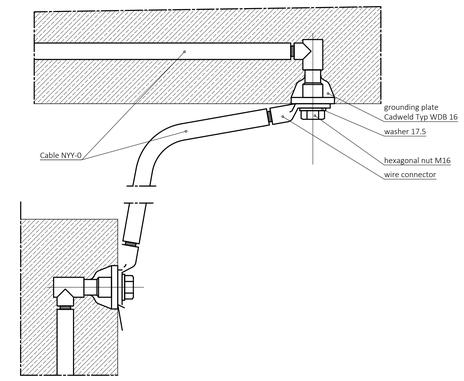
plan view scale: 1:100
principal of grounding
according to Ril 804.9030 M-SBR 30



cross section scale: 1:100
principal of grounding
according to Ril 804.9030 M-SBR 30



Detail C4_A scale: 1:2.5
grounding
according to Ril 804.9030 M-SBR 32



building material characteristic values

Following characteristic values for materials are **only minimum** Values due to exposure class[1]. Values can be higher for static proof.

bridge part:	concrete	exposure class	reinforcement	steel
abutment	C30/37	XC4, XD2, XF2, WA	B 500 B	——
wing wall	C30/37	XC4, XD2, XF2, WA	B 500 B	——
founding	C30/37	XC2, XD2, XF2, WA	B 500 B	——
drilling pile (optional)	C30/37	XC2, XD2, XF2, WA	B 500 B	——
piers/ pierwalls	C30/37	XC4, XD2, XF2, WA	B 500 B	——
edge beam	C30/37	XC4, XD1, XF2, WA	B 500 B	——
superstructure in-situ bridge parts	C30/37	XC4, XD1, XF2, WA	B 500 B	——
superstructure prefabricated elements	C30/37	XC4, XD1, XF2, WA	B 500 B prestressing strands[2]	——
railing	——	——	——	S355[3]
granular subbase	C12/15	X0, WA	——	——

[1] further information for assumptions in justification Report (Annex 4_0)
[2] approved prestressing strands according static requirements
[3] according design guideline Rail Baltica

Details for Road overpasses can be taken from RiZ drawings. RiZ stands for "Richtzeichnung" which are specification drawings by the German Federal Ministry of Transport, Building and Urban Development. For details please find the RiZ by downloading the pdf's on the following website: https://www.bast.de/DE/Ingenieurbau/Publikationen/Regelwerke/Entwurf/RIZ-ING.html?nn=613324

Was 1 ; Was 13	specification drawing for drainage systems
Dicht 3 ; Dicht 9	specification drawing for waterproofing
Elt 2	specification drawing for touch protection against contact with overhead cable
Kap 1	specification drawing for edge beams
Gel	specification drawing for railings

Legend
- reinforced concrete
- prefabricated concrete elements
- ballast
- backfill
- drainage concrete stones

This bridge is only an example. Geometry has to be adapted to local conditions.

General requirements acording design guidelines Rail Baltica

sustained operating speed	234 km/h
design speed for feight train	120 km/h
axle load	25 t
All requirements have to be compliant with Rail Baltica guidelines.	

load assumptions according road type differ for each bridge

REVISIONS

No	Date	Description	Originator	Checked	Verified

PROJECT

PROJECT RAIL BALTICA

SBS-Study Master Design

CLIENT
RB Rail AS
K. Valdemara 8-7
LV-1010 Riga
Latvia

Co-financed by the Connecting Europe Facility of the European Union

CONTRACTOR
RB Rail AS
K. Valdemara 8-7
LV-1010 Riga
Latvia

ENGINEER
XXXXX MARK KRONTAL PARTNER
MKP GmbH
info.hannover@marxkrontal.com
www.marxkrontal.com
Lilienweyerstraße 9+11
30175 Hannover
T +49 511 515154-0

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DRAWING TITLE
Case 4 - Road Overpass
cross sections
details

SHEET NUMBER:
SHEET NAME: 4_2_002_C4_Road Overpass_additional plan

REVISION