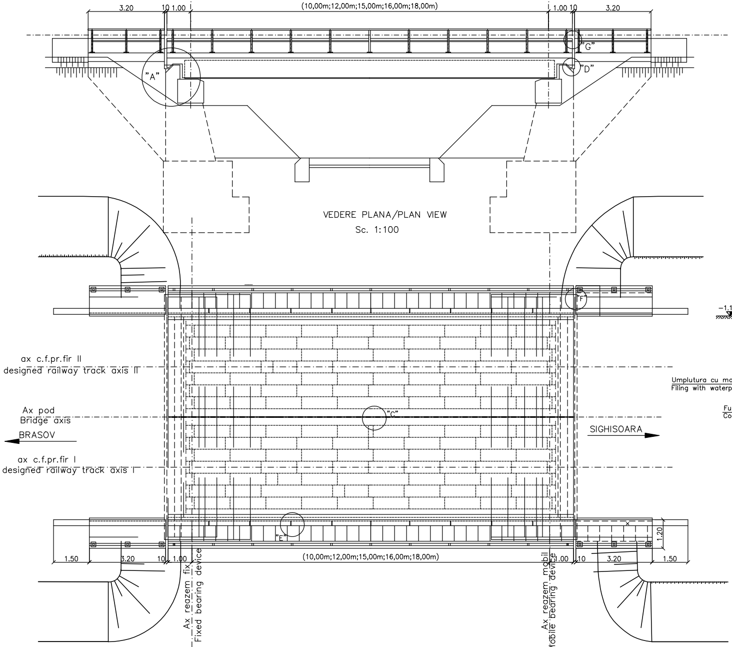
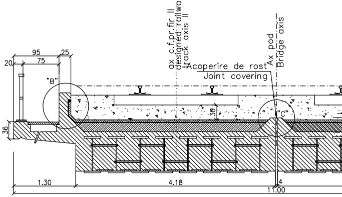
ELEVATIE/ELEVATION
sc. 1:100


3.20
10
1.00
(10,00m;12,00m;15,00m;16,00m;18,00m)
1.00
10
3.20
"A"
"G"
"D"
"F"
ax c.f.pr.fir II
designed railway track axis II
Ax pod
Bridge axis
BRASOV
"C"
SIGHISOARA
ax c.f.pr.fir I
designed railway track axis I
"E"
1.20
1.50
3.20
10
1.00
(10,00m;12,00m;15,00m;16,00m;18,00m)
1.00
10
3.20
1.50
Ax reazem fix
Fixed bearing device
Ax reazem mobil
Mobile bearing device

VEDERE PLANA/PLAN VIEW
Sc. 1:100

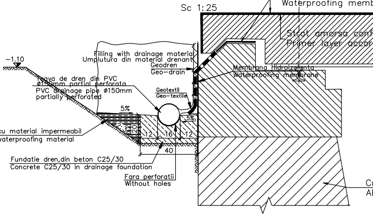
SECTIUNE TRANSVERSALA / CROSS
Sc. 1:50


95
25
20
75
"B"
36
ax c.f.pr.fir II
designed railway
track axis II
Acoperire de rost
Joint covering
Ax pod
Bridge axis
30
"C"
1.30
4.18
4
11.00

DETALIUL "A" / "A" DETAIL

ROST INTRE TERASAMENT SI CULEE

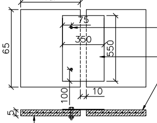
RAILWAY BED–ABUTMENT JOINT
Sc 1:25


Membrana hidroizola
Waterproofing memb
Strat amorsa conf
Primer layer accor
Filling with drainage material
Umplutura din material drenant
Geodren
Geo–drain
Membrana Hidroizolanta
Waterproofing membrane
-1.10
Teava de dren din PVC
ø150mm partial perforata
PVC drainage pipe ø150mm
partially perforated
Geotextil
Geo–textile
5%
5%
2:3
20
12
16
12
40
Umplutura cu material impermeabil
Filing with waterproofing material
Fundatie dren,din beton C25/30
Concrete C25/30 in drainage foundation
Fara perforatii
Without holes
Cu
Al

DETALIUL "F"/"F" DETAIL

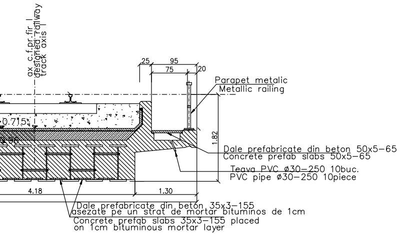
ROST INTRE DALELE DE TROTUAR LA CAPETELE SUPRAST

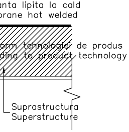
JOINT BETWEEN SIDEWALK SLABS AT SUPERSTRUCTURE
Sc. 1:20


var
75
350
550
65
100
10
5

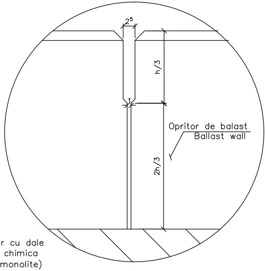
Dala de trotuar terminala pe suprastructura
Sidewalk end slab on superstructure

SECTION


ax c.f.pr.fir I
designed railway
track axis I
25
95
75
20
Parapet metalic
Metallic railing
0.715
1.82
Dale prefabricate din beton 50x5–65
Concrete prefab slabs 50x5–65
Teava PVC ø30–250 10buc.
PVC pipe ø30–250 10piece
4.18
1.30
Dale prefabricate din beton 35x3–155
asezate pe un strat de mortar bituminos de 1cm
Concrete prefab slabs 35x3–155 placed
on 1cm bituminous mortar layer


anta lipita la cald
brane hot welded
orm tehnologiei de produs
ding to product technology
Suprastructura
Superstructure

DETALIUL "E"/"E" DETAIL
ROST IN OPRITORUL DE BALAST
BALLAST WALL JOINT COVERING
Sc. 1:5

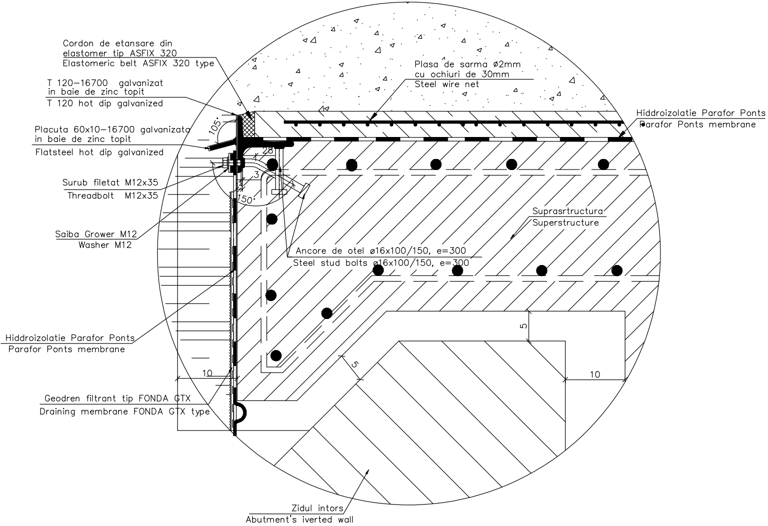

2⁵
h/3
1
2h/3
Opritor de balast
Ballast wall

ulee
butment

RUCTURII
ENDS

- Suruburi M12 pentru trotuar cu dale prefabricate(M12 concurare chimica pentru console de trotuar monolite)
- Tabla striata 350x5–550 Chequered plate
- Prima dala de trotuar pe culee First sidewalk slab on abutment

DETALIUL "D"/"D" DETAIL
CAPAT DE SUPRASTRUCTURA/SUPERSTRUCTURE END
SECTIUNE a–a/a–a SECTION
Sc. 1:5

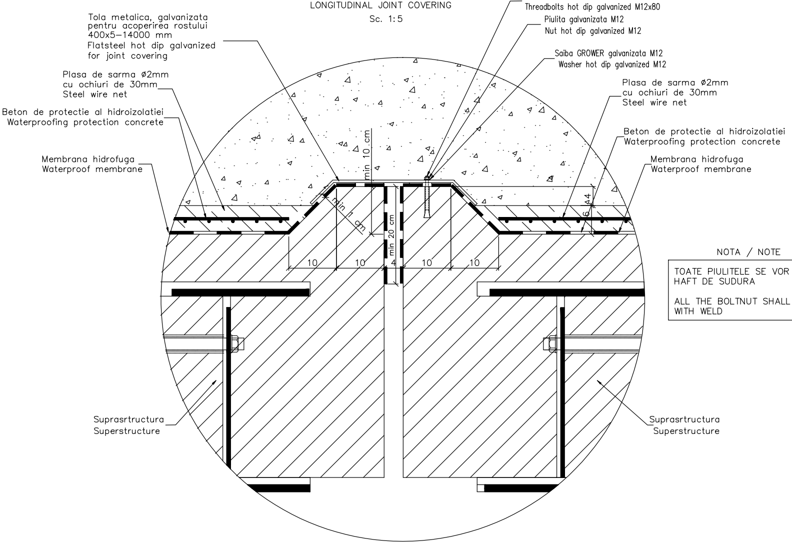

Cordon de etansare din
elastomer tip ASFIX 320
Elastomeric belt ASFIX 320 type
T 120–16700 galvanizat
in baie de zinc topit
T 120 hot dip galvanized
Placuta 60x10–16700 galvanizata
in baie de zinc topit
Flatsteel hot dip galvanized
Surub filetat M12x35
Threadbolt M12x35
Saiba Grower M12
Washer M12
Hiddroizolatie Parafor Ponts
Parafor Ponts membrane
Geodren filtrant tip FONDA GTX
Draining membrane FONDA GTX type
105°
28
4
3
3
150°
10
Plasa de sarma ø2mm
cu ochiuri de 30mm
Steel wire net
Hiddroizolatie Parafor Ponts
Parafor Ponts membrane
Suprasrtructura
Superstructure
Ancore de otel ø16x100/150, e=300
Steel stud bolts ø16x100/150, e=300
5
5
10
Zidul intors
Abutment's iverted wall

DETALIUL "C"/"C" DETAIL

ACOPERIRE DE ROST LONGITUDINAL

LONGITUDINAL JOINT COVERING

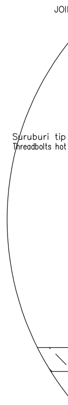
Sc. 1:5


Suruburi tip CONEXPAND galvanizate M12x80 la 0.5 m
Threadbolts hot dip galvanized M12x80
Piulita galvanizata M12
Nut hot dip galvanized M12
Saiba GROWER galvanizata M12
Washer hot dip galvanized M12
Tola metalica, galvanizata pentru acoperirea rostului 400x5–14000 mm
Flatsteel hot dip galvanized for joint covering
Plasa de sarma ø2mm cu ochiuri de 30mm
Steel wire net
Beton de protectie al hidroizolatiei
Waterproofing protection concrete
Membrana hidrofuga
Waterproof membrane
Plasa de sarma ø2mm cu ochiuri de 30mm
Steel wire net
Beton de protectie al hidroizolatiei
Waterproofing protection concrete
Membrana hidrofuga
Waterproof membrane
min 10 cm
min 1 cm
min 20 cm
10
10
4
10
10
4
6
Suprasrtructura
Superstructure
Suprasrtructura
Superstructure

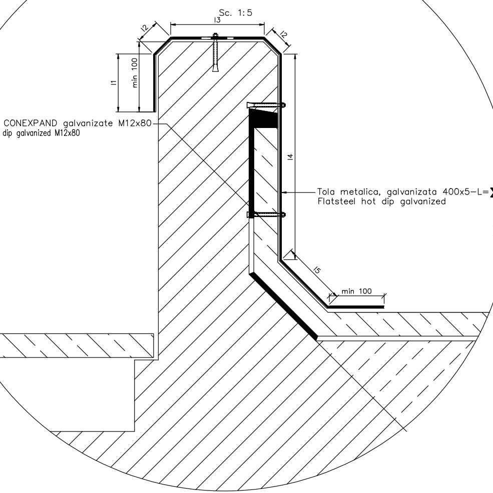
NOTA / NOTE

TOATE PIULITELE SE VOR BLOCA CU UN HAFT DE SUDURA

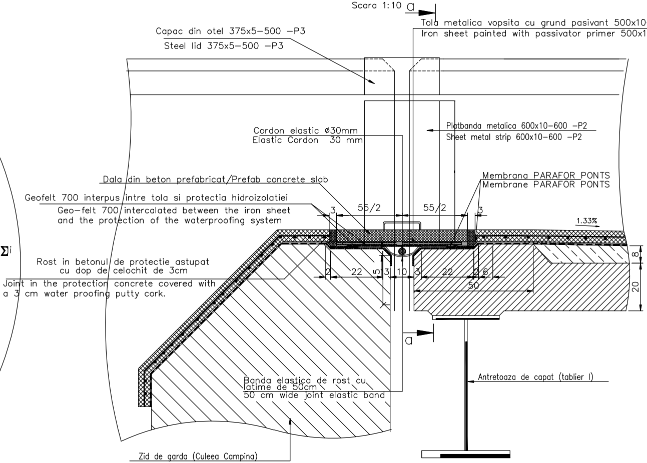
ALL THE BOLTNUT SHALL BE BLOCKED WITH WELD


JOI
Suruburi tip
Threadbolts hot

DETALIUL "G"/"G" DETAIL
ACOPERIREA ROSTULUI SUPRASTRUCTURA–CULEE LA OPRITORII DE BALAST
NT COVERING BETWEEN BALLAST STOPPING DEVICES SUPERSTRUCTURE–ABUTMENT

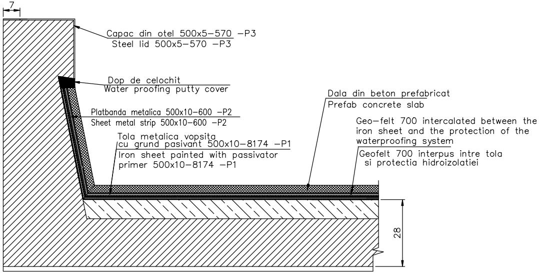

Sc. 1:5
l3
l2
l2
l1
min 100
CONEXPAND galvanizate M12x80
dip galvanized M12x80
l4
Tola metalica, galvanizata 400x5–L=∑i
Flatsteel hot dip galvanized
l5
min 100

DETALIU ACOPERIRE DE ROST INTRE TABLIER SI CULEE
DETAIL: JOINT COVERING BETWEEN THEN DECK AND ABUTMENT
Scara 1:10

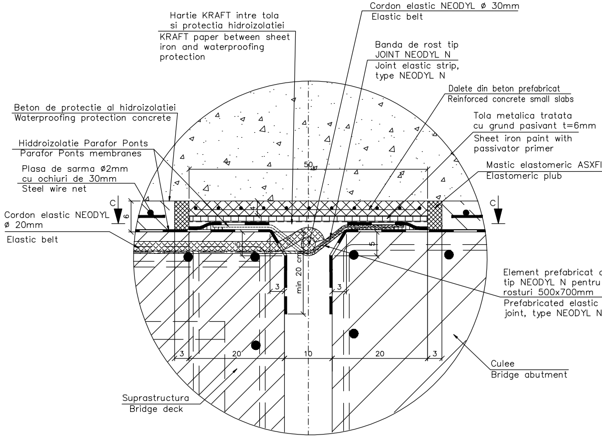

a
Tola metalica vopsita cu grund pasivant 500x10
Iron sheet painted with passivator primer 500x1
Capac din otel 375x5–500 –P3
Steel lid 375x5–500 –P3
Cordon elastic ø30mm
Elastic Cordon 30 mm
Platbanda metalica 600x10–600 –P2
Sheet metal strip 600x10–600 –P2
Dala din beton prefabricat/Prefab concrete slab
Membrana PARAFOR PONTS
Membrane PARAFOR PONTS
Geofelt 700 interpus intre tola si protectia hidroizolatiei
Geo–felt 700 intercalated between the iron sheet
and the protection of the waterproofing system
3
55/2
55/2
3
1.33%
Rost in betonul de protectie astupat
cu dop de celochit de 3cm
Joint in the protection concrete covered with
a 3 cm water proofing putty cork.
2
22
5
3
10
3
22
2
6
50
8
20
a
Antretoaza de capat (tablier I)
Banda elastica de rost cu latime de 50cm
50 cm wide joint elastic band
Zid de garda (Culeea Campina)

-8275 -P1
0-8275 -P1

SECTIUNE a–a
a–a SECTION
Scara 1:10


7
Capac din otel 500x5–570 –P3
Steel lid 500x5–570 –P3
Dop de celochit
Water proofing putty cover
Platbanda metalica 500x10–600 –P2
Sheet metal strip 500x10–600 –P2
Tola metalica vopsita cu grund pasivant 500x10–8174 –P1
Iron sheet painted with passivator primer 500x10–8174 –P1
Dala din beton prefabricat
Prefab concrete slab
Geo–felt 700 intercalated between the iron sheet and the protection of the waterproofing system
Geofelt 700 interpus intre tola si protectia hidroizolatiei
28

(DETALIUL "D"/"D" DETAIL)
SECTIUNE b–b/b–b SECTION
INTERSECTIE DE ROSTURI DE DILATARE/JOINTS COVERING INTERSECTION
Sc. 1:5


Hartie KRAFT intre tola si protectia hidroizolatiei
KRAFT paper between sheet iron and waterproofing protection
Cordon elastic NEODYL ø 30mm
Elastic belt
Banda de rost tip JOINT NEODYL N
Joint elastic strip, type NEODYL N
Dalete din beton prefabricat
Reinforced concrete small slabs
Tola metalica tratata cu grund pasivant t=6mm
Sheet iron paint with passivator primer
Mastic elastomeric ASXFI
Elastomeric plub
Beton de protectie al hidroizolatiei
Waterproofing protection concrete
Hiddroizolatie Parafor Ponts
Parafor Ponts membranes
Plasa de sarma ø2mm cu ochiuri de 30mm
Steel wire net
Cordon elastic NEODYL ø 20mm
Elastic belt
C
C
6
50
5
5
3
3
min 20 cm
3
20
10
20
3
Element prefabricat c tip NEODYL N pentru rosturi 500x700mm
Prefabricated elastic joint, type NEODYL N
Culee
Bridge abutment
Suprastructura
Bridge deck

x

din banda de rost,
intersectie de

strip for cross

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D					
C					
B					
A					
Indice **Index**	**Data** **Date**	**Modificare** **Modification/Revision**	**Proiectant** **Designer**	**Aprobat Consultant** **Approved Consultant**	**Aprobat CFR** **Approved CFR**

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EURO
EUROPEAN UNION FINANCED PR

CLIENT / CLIENT

C.N.C.F. "C.F.R." - S.A.

ITALFERR
GRUPPO FERROVIE DELLO STATO
Joint Venture leader

Scott Wilson

OBERMEYER
PLANEN + BERATEN GmbH

TECNIC
Consulting Engineers

CONSULTANT / CONSULTANT

			Data **Date**	**Semnătură** **Signature**
Aprobat **Approved**	**Şef proiect** **Project manager**	**R. Liuzza**		
Aprobat **Approved**	**Coordonator Secțiune 1** **Section 1 Coordinator**	**C. Gambelli**		
Verificat **Checked**	**Expert Cheie** **Checking Expert**	**V. Kallidromitis**		

SUBCONTRACTANT / SUBCONTRACTOR

AREX COMPANY

Aprobat **Approved**	**Responsabil Subconsultant** **Subconsultant Responsible**	**A.Stanciu - Dinulescu**	**02.2012**	
Întocmit **Elaborated**	**Proiectant** **Designer**	**Dinu Andreea**	**02.2012**	

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulaţia trenurilor cu viteza maximă de 160 km/h,
Tronsonul : Braşov - Sighişoara
Rehabilitation of the railway line Braşov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h,
Section : Braşov - Sighişoara

Proiect/Project
2004/RO/16/P/PA/003

Faza / Phase:
D.E. / E.D.

Denumire desen / Drawing Title :

SISTEME DE HIDROIZOLATII SI SISTEME DE ACOPERIRE ROSTURI
WATERPROOFING SYSTEM AND JOINT SYSTEM

Codificare / Codification System	**Scara / Scale** **1:20;1:5;1:25;1:50**	**LOT / LOT**	**Nr. / No** **01 / 01**

E A 5 1 | 0 1 | E | 0 0 | Q K | P V | 0 0 | 0 | 0 | 0 0 3 | 0