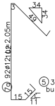
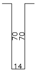
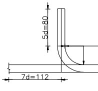

3
34
34
49
102
15
15
11
11
⑦a 92ø12 L=2.05m



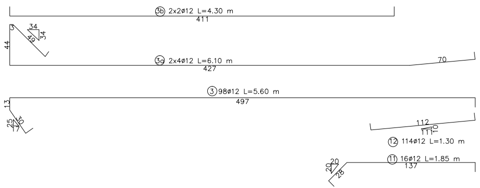
⑤ 385ø12 L=1.75
buc.55x7=385

DETALIU "a"
"a" DETAIL

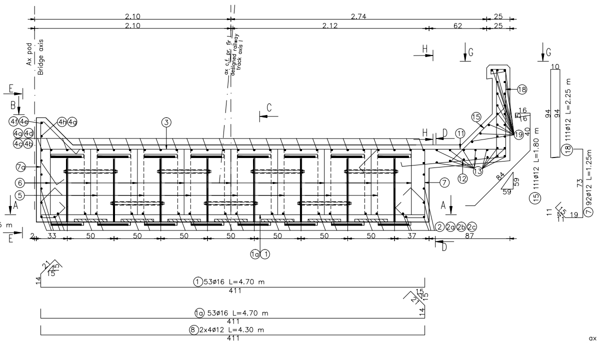


SECTIUNE TRANSVERSALA TABLIER POD
BRIDGE DECK CROSS SECTION

sc. 1:20

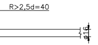


3b 2x2ø12 L=4.30 m
411
34
34
4g
44
3a 2x4ø12 L=6.10 m
427
70
3 98ø12 L=5.60 m
497
13
25
30
17
112
111
10
12 114ø12 L=1.30 m
11 16ø12 L=1.85 m
137
20
20
28



2.10
2.74
25
2.10
2.12
62
25
Ax pod
Bridge axis
ax c.f. pr. fir
designed railway
track axis I
H
G
G
E
B
C
4f 4e
4h 4g
4a 4d
4c 4b
3
7a
6
5
A
H D
11
15
18
19
16
6
10
40
94
94
10
111ø12 L=2.25 m
111ø12 L=1.80 m
12
13
7
84
59
59
A
18 92ø12 L=1.25m
73
7 92ø12
11
15
11
19
2 2a 2b 2c
33
50
50
50
50
50
50
50
37
87
D
1a 1
21
15
15
14
1 53ø16 L=4.70 m
411
15
21
15
14
1a 53ø16 L=4.70 m
411
8 2x4ø12 L=4.30 m
411

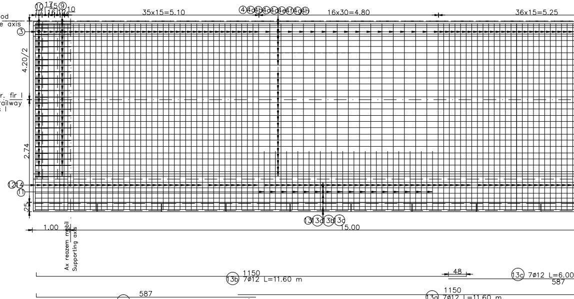
(STAS 10111/2-87)
(STAS 10111/2-87)
sc. 1:10



Beton: Concrete:	– C30/37 suprastructura/superstructure
Tipul grinzilor: Beams type:	– grinzi metalice sudate/steel welded girders
Otel pentru grinzi: Steel for the beams:	– (OL 37-EP) S275J$_3$G$_3$ (EN 10025/2004)
Armatura: Reinforcement:	– S355;S345
Strat de acoperire: Concrete cover	– min. 4cm expunere in aer/air exposed

SECTIUNE B-B
B-B SECTION

sc. 1:50



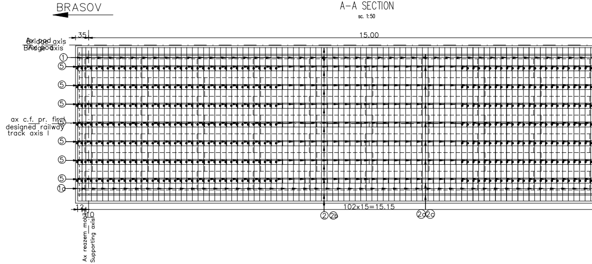
Ax pod
Bridge axis
ax c.f. pr. fir I
designed railway
track axis I
11 17 15 9
14 16 14 12 10
35x15=5.10
4a 4c 4b 4c 4d 4e 4f 4g 4h
16x30=4.80
36x15=5.25
3
4.20/2
2.74
12 14
1
25
13 13a 13b 13c
15.00
1.00
Ax reazem mobil
Supporting axis
1150
13b 7ø12 L=11.60 m
48
13c 7ø12 L=6.00
587
587
13 7ø12 L=6.00 m
48
1150
13a 7ø12 L=11.60 m
BRASOV

SECTIUNE B-B
B-B SECTION

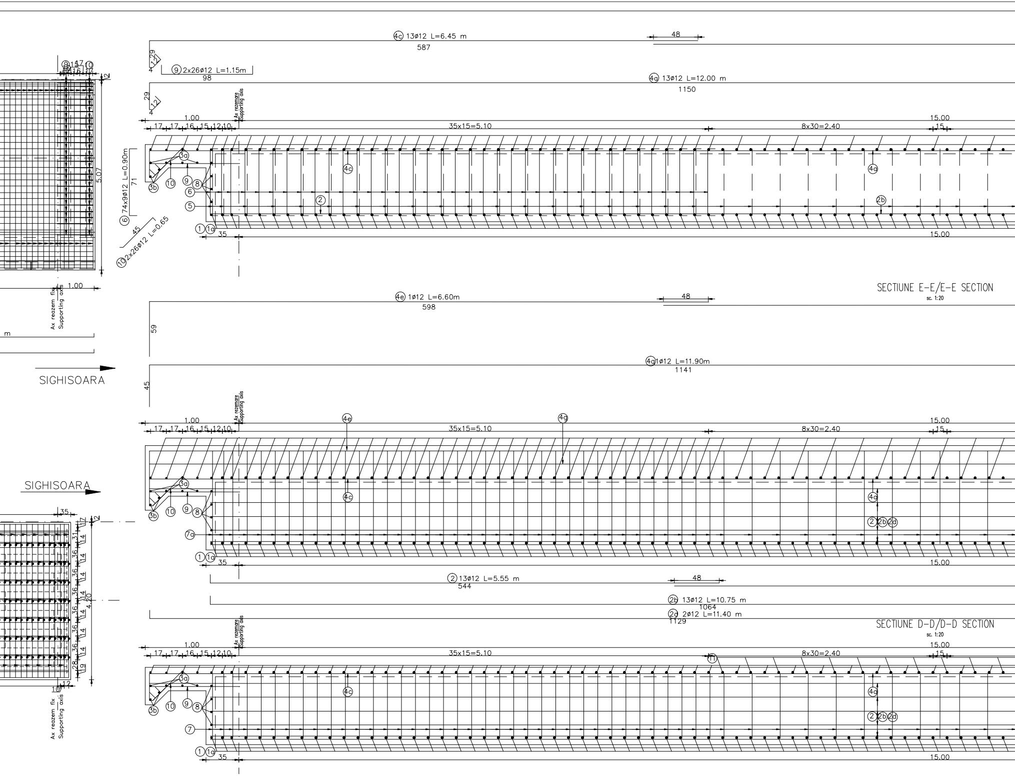
sc. 1:50

SECTIUNE A-A
A-A SECTION

sc. 1:50

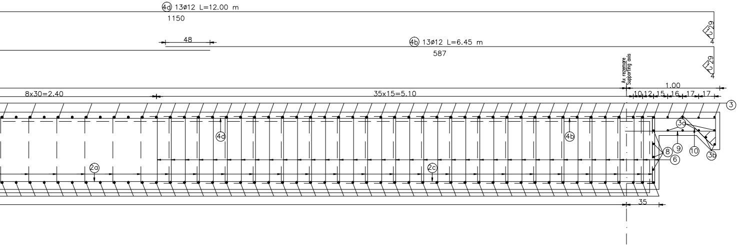


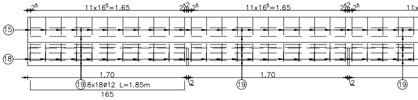
BRASOV
Ax pod
Bridge axis
35
15.00
1
5
5
5
5
5
5
5
1a
ax c.f. pr. fir I
designed railway
track axis I
12
10
102x15=15.15
2 2b
2a 2c
Ax reazem mobil
Supporting axis

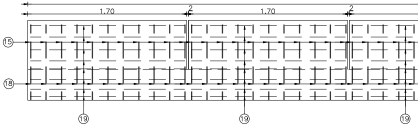

④c 13ø12 L=6.45 m
587
48
⑨ 2x26ø12 L=1.15m
98
④g 13ø12 L=12.00 m
1150
29
12
4
Ax rezemare Supporting axis
1.00
17 17 16 15 12 10
35x15=5.10
8x30=2.40
15.00
15
③a
③b
⑩
⑨
⑧
⑥
⑤
②
②b
④c
④g
① ①a
35
⑥ 74x9ø12 L=0.90m
71
45
⑩ 2x26ø12 L=0.65
5.07
1.00
Ax reazem fix Supporting axis
SIGHISOARA
④e 1ø12 L=6.60m
598
59
④g 1ø12 L=11.90m
1141
45
④e
⑦a
② ②b ②d
② 13ø12 L=5.55 m
544
②b 13ø12 L=10.75 m
1064
②d 2ø12 L=11.40 m
1129
⑪
⑦
35
17
2
31
14
36
4.20
28
19
10
12

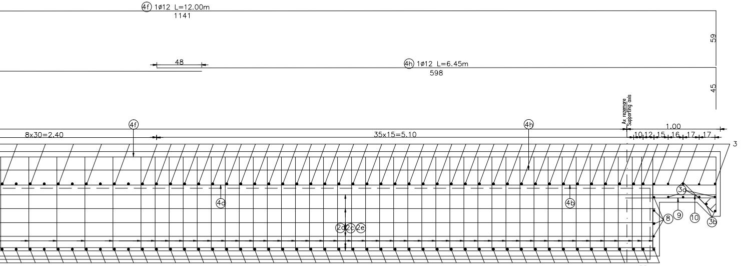
SECTIUNE E-E/E-E SECTION
sc. 1:20

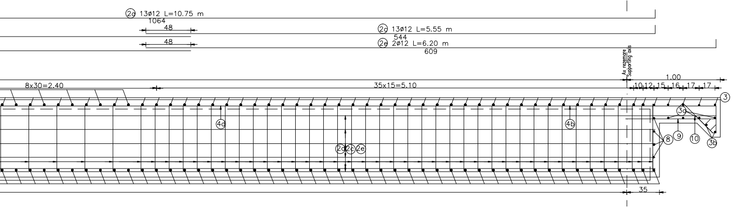
SECTIUNE D-D/D-D SECTION
sc. 1:20


4d 13ø12 L=12.00 m
1150
48
4b 13ø12 L=6.45 m
587
29
12
4
Ax rezemare
Supporting axis
8x30=2.40
35x15=5.10
1.00
10 12 15 16 17 17
3
3a
4a
4b
8
9
10
6
3b
2a
2c
35


2⁵
11x16⁵=1.65
2⁵2 2⁵
11x16⁵=1.65
2⁵2 2⁵
15
18
1.70
1.70
2
2
19
19 8x18ø12 L=1.85m
165
19
19


1.70
2
1.70
2
15
18
19
19
19


4f 1ø12 L=12.00m
1141
59
48
4h 1ø12 L=6.45m
598
45
Ax rezemare
Supporting axis
4f
4h
8x30=2.40
35x15=5.10
1.00
10 12 15 16 17 17
3
3a
4a
4b
2d 2c 2e
8
9
10
3b
35


2a 13ø12 L=10.75 m
1064
48
2c 13ø12 L=5.55 m
544
48
2e 2ø12 L=6.20 m
609
Ax rezemare
Supporting axis
8x30=2.40
35x15=5.10
1.00
10 12 15 16 17 17
3
3a
4a
4b
2d 2c 2e
8
9
10
3b
35

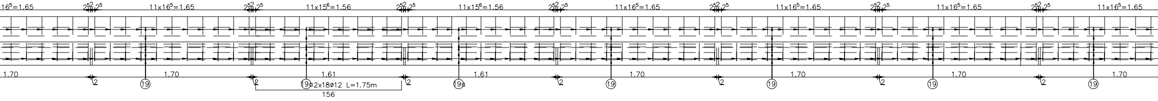
EXTRAS DE ARMATURA TABLIER
TABLE FOR REINFORCEMENTS FOR SINGLE RAIWAY DECK

Marca	Diametru	Lung./buc.[m]	Nr.buc.	S355	S345
				ø12	ø16
1	16	4.70	53		249.10
1a	16	4.70	53		249.10
2	12	5.55	13	72.15	
2a	12	10.75	13	139.75	
2b	12	10.75	13	139.75	
2c	12	5.55	13	72.15	
2d	12	11.40	2	22.80	
2e	12	6.20	2	12.40	
3	12	5.60	98	548.80	
3a	12	6.10	8	48.80	
3b	12	4.30	4	17.20	
4a	12	6.45	13	83.85	
4b	12	12.00	13	156.00	
4c	12	12.00	13	156.00	
4d	12	6.45	13	83.85	
4e	12	6.60	1	6.60	
4f	12	12.00	1	12.00	
4g	12	11.90	1	11.90	
4h	12	6.45	1	6.45	
5	12	1.75	385	673.75	
6	12	0.90	666	599.40	
7	12	1.25	92	115.00	
7a	12	2.05	92	188.60	
8	12	4.30	8	34.40	
9	12	1.15	52	59.80	
10	12	0.65	52	33.80	
11	12	1.85	16	29.60	
12	12	1.30	114	148.20	
13	12	6.00	7	42.00	
13a	12	11.60	7	81.20	
13b	12	11.60	7	81.20	
13c	12	6.00	7	42.00	
15	12	1.80	111	199.80	
18	12	2.25	111	249.75	
19	12	1.85	144	266.40	
19a	12	1.75	36	63.00	
Lungimi totale pe diametre			(m)	4498.35	498.20
Masa pe metru liniar			(kg/ml)	0.888	1.578
Masa pe diametre			(kg)	3993.70	786.40
Masa pe tip otel			(kg)	3993.70	786.40
Masa totala tablier			(kg)	4780.10	
Pierderi 5%			(kg)	239.01	
Masa totala tablier			(kg)	5050.00	

TOTAL POD (2 TABLIERE): 2 x5050.00kg=10100.0kg
TOTAL BRIDGE (2 DECKS): 2 x5050.00kg=10100.0kg

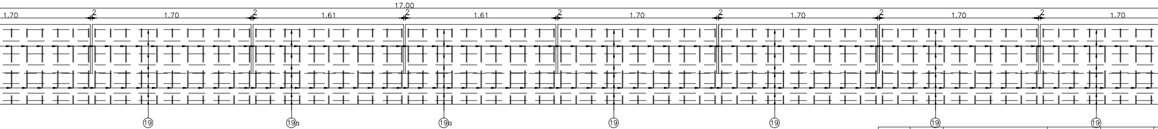
VEDERE G-G/VIEW G-G

sc. 1:20


165=1.65
2525
11x165=1.65
2525
11x156=1.56
2525
11x156=1.56
2525
11x165=1.65
2525
11x165=1.65
2525
11x165=1.65
2525
11x165=1.65
1.70
2
1.70
2
1.61
2
1.61
2
1.70
2
1.70
2
1.70
2
1.70
19
19
19a
2x18ø12 L=1.75m
156
19a
19
19
19
19

VEDERE H-H/VIEW H-H

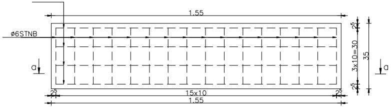
sc. 1:20


17.00
1.70
2
1.70
2
1.61
2
1.61
2
1.70
2
1.70
2
1.70
2
1.70
19
19a
19a
19
19
19
19

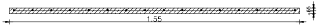
DALE PREFABRICATE DIN BETON
CONCRETE PREFAB SLABS REINFORCED

sc. 1:10

(7x10buc.=70buc/tablier-7x10piece=70piece/deck)


ø6STNB
ø6STNB
1.55
a
a
25
3x10=30
35
25
25
15x10
25
1.55

SECTIUNE a-a/a-a SECTION



EXTRAS DE ARMATURA STNB PENTRU UN TABLIER DE CALE FERATA SIMPLA
TABLE FOR REINFORCEMENTS STNB FOR SINGLE YRAK RAIWAY DECK

TIP ARMATURA TYEPE REINFOCEMENT	Nr. BUC. No. PIECE	kg/m	m/buc. m/piece	kg
STNB 6 G.Q.283	70	0.222	11.00	175.00

TOTAL POD (2 TABLIERE): 2 x 175.00kg=350.0kg
TOTAL BRIDGE (2 DECKS): 2 x 175.00kg=350.0kg

NOTA/NOTE

Pentru mentinerea pozitiei corecte in timpul betonarii, se vor monta distantieri minim 4buc./m^2. Distantierii trebuie legati cu sarma de carcasa de armatura.

In order to maintain the correct position during concreting, minimum 4pcs./m^2 distance pieces shall be mounted. The distance pieces shall be connected to the reinforcing framework, using wire.

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

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EU
EUROPEAN UNION FINANCED

CLIENT / CLIENT

C.N.C.F. "C.

ITALFERR
GRUPPO FERROVIE DELLO STATO
Joint Venture leader

Scott Wilson

OBERMEYER
PLANEN + BERATEN GmbH

CONSULTANT / CONSULTANT

			Data Date
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

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A.Stanciu - Dinulescu	01.2012
Întocmit Elaborated	Proiectant Designer	Dinu Andreea	01.2012

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

Denumire desen / Drawing Title :

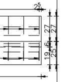
INTERVAL / SECTION APATA – RACOS
POD Km.209+649,912 /PLAN ARMARE SUPRASTRUCTURA
BRIDGE Km.209+649,912/SUPERSTRUCTURE REINFORCEMENT PLA

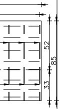
Codificare / Codification System

Scara / Scale 1:20

LOT / LOT

EA51 01 E 10 BC PV 01 8 3


2⁵
27
27
19
6
25



Aprobat CFR
Approved CFR

RC
PI

F.R." - S.A.

ECNIC
onsulting Engineers

Semnătură
Signature

roiect/Project
04/RO/16/P/PA/003

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

TABLIER 1(3)
N DECK 1(3)

Nr. / No
01 / 01

0 1 2 0