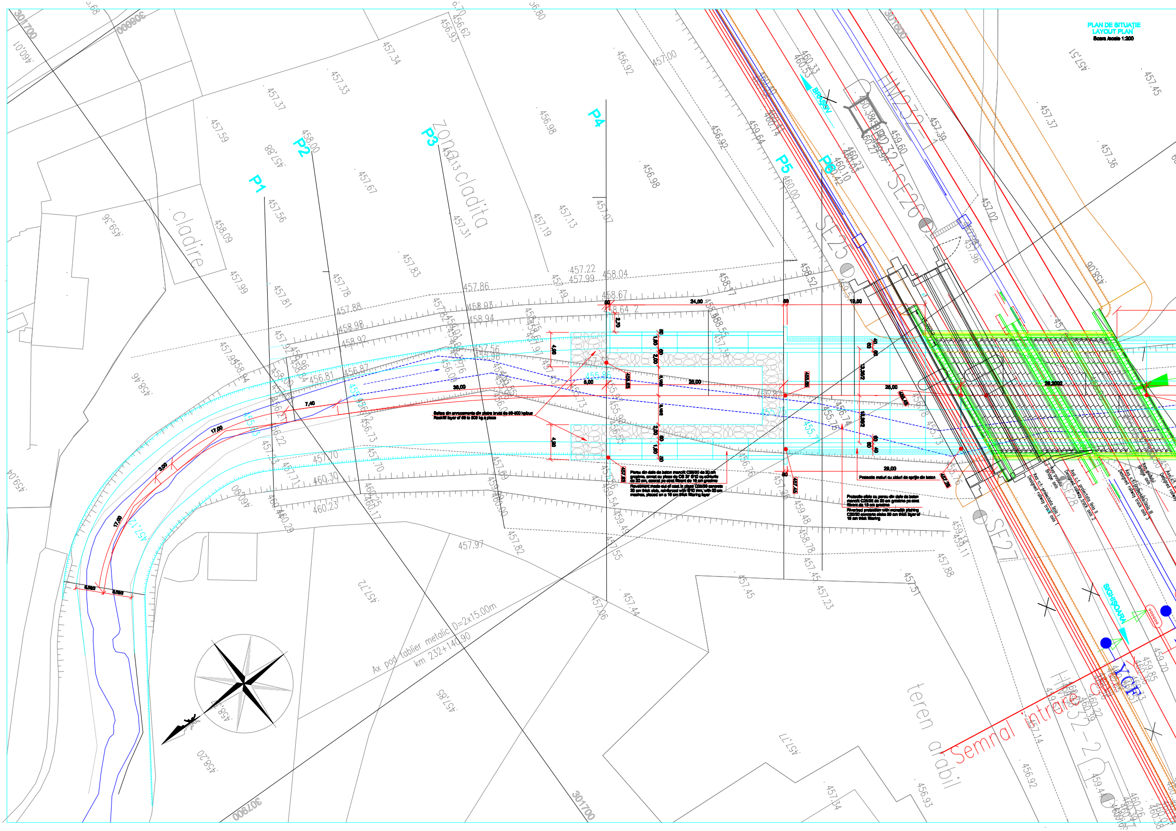
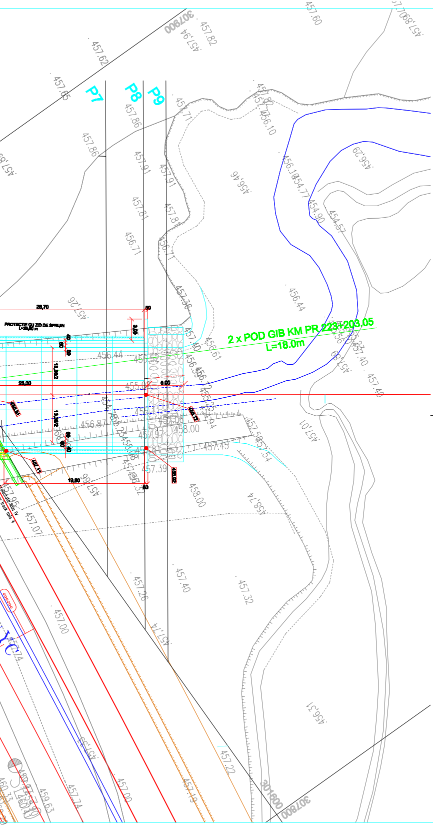
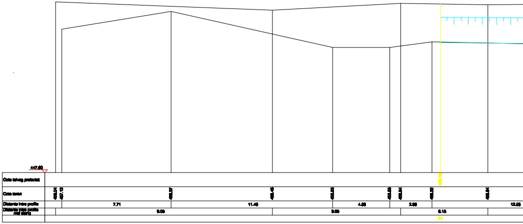


PLAN DE SITUAȚIE
LAYOUT PLAN

Scara /scale 1:200

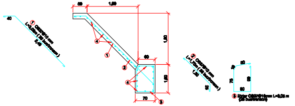
P1
P2
P3
P4
P5
P6
cladire
zona cladita
teren arabil
Semnal intrare
BRASOV
SIGHISOARA
HM232-1
HM232-2
SE25
SE26
SE27
SE28
Ax pod tablier metalic D=2x15.00m
km 232+140.90
Saltea din anrocamente din piatra bruta de 50-500 kg/buc
Rockfill layer of 50 to 500 kg a piece
Pereu din dale de beton monolit C25/30 de 20 cm grosime, armat cu plase de OB 37 Ø10 cu ochiurile de 20 cm, aşezat pe strat filtrant de 15 cm grosime
Revetment made out of cast in place C25/30 concrete 20 cm thick slab, reinforced with Ø10 mm, with 20 cm meshes, placed on a 15 cm thick filtering layer
Protectie maluri cu ziduri de sprijin din beton
Protectie albie cu pereu din dale de beton monolit C25/30 de 20 cm grosime pe strat filtrant de 15 cm grosime
Riverbed protection with monolith pitching C25/30 concrete slabs 20 cm thick layer of 15 cm thick filtering
Ax c.f. proiectata linia I
Designed railway track axis I
Ax c.f. proiectata linia II
Designed railway track axis 2
Ax c.f. proiectata linia III
Designed railway track axis 3
Ax pod
Bridge axis
301700
307900
308600
301600
36,00
26,00
24,60
19,60
26,00
29,00
7,40
17,00
17,00
3,00
4,00
4,00


P7
P8
P9
2 x POD GIB KM PR 223+203.05
L=18.0m
PROTECTIE CU ZID DE SPRIJIN L=28,80 m
28,70
26,00
19,60
6,00
13,36/2
307900
307800
457.62
457.65
457.86
457.91
457.81
456.71
457.82
457.94
457.60
456.10
456.44
456.29
456.46
454.77
454.90
454.57
457.40
457.01
457.07
457.00
457.26
457.32
457.74
457.22
458.00
458.74
456.31

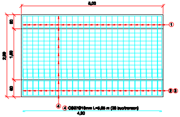

447.60
Cota talveg proiectat
Cota teren
Distante intre profile
Distante intre profile mal stang
7.71
11.40
4.88
2.98
12.83
9.05
9.05
6.15

DETALII ARMARE PROTECTIE H=1,80m
REINFORCEMENT PROTECTION DETAILS H=1,80m

Scara /scale 1:50


40
① OB37Ø10 mm L=3,05m (26 buc/tronson)
2,40
55
1,80
1,80
60
1,00
70
① ② ③ ④
② OB37Ø10 mm L=1,70m (26 buc/tronson)
1,30
③ Etrier OB37Ø10mm L=3,05 m (26 buc/tronson)
50
75
55
60

VEDERE IN PLAN PROTECTIE TALUZ
PLAN VIEW ENBAKMENT PROTECTION

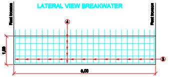

5,00
50
1,80
2,80
50
① ② ③ ④
④ OB37Ø10mm L=5,05 m (28 buc/tronson)
4,90

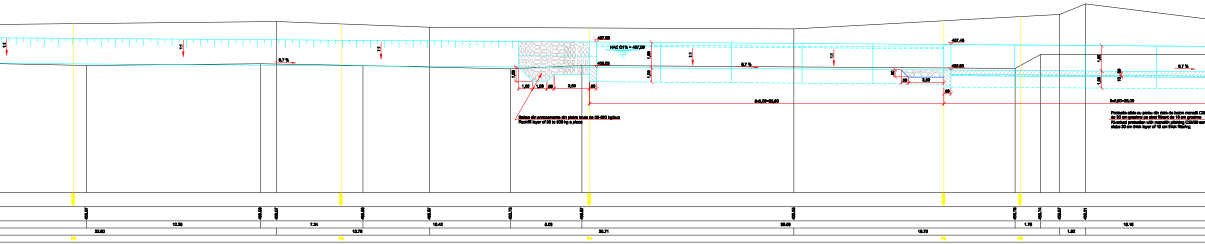
EXTRAS DE ARMATURA
pentru un tronson de 5,00 m H= 1,80m

SUMMARY REINFORCING BARS
for a 5,00 m long section H=1,80 m

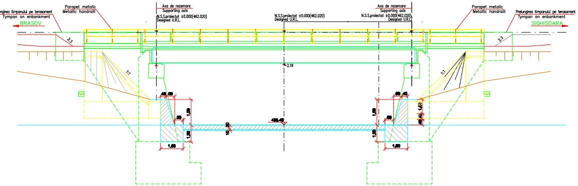
Marca	Ø	Nr.buc. elem.	Lungime unitara (m)	Lungime totala (m)
1	10	26	3,05	79,30
2	10	26	1,70	44,20
3	10	26	3,05	79,30
4	10	28	5,05	141,40
Total lungime/tronson(m)				344,20
Greutate unitara (kg/m)				0,617
Greutate totala (kg) (rot.)				212,38

VEDERE LATERALA PINTEN
LATERAL VIEW BREAKWATER

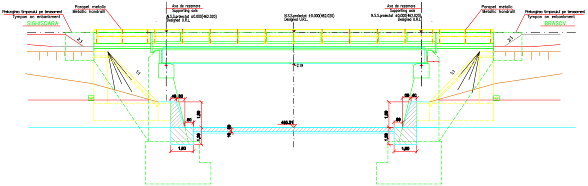

Rost tronson
Rost tronson
④
③
1,80
5,00


457,50
NAE Q1% = 457,09
456,03
457,45
455,85
1,00
1,00
2,50
0,7 %
1:1
Saltea din anrocamente din piatra bruta de 50-500 kg/buc
Rockfill layer of 50 to 500 kg a piece
B=5,60-25,05
Protectie albie cu pereu din dale de beton monolit C25
de 30 cm grosime pe strat filtrant de 10 cm grosime
Riverbed protection with monolith pitching C25/30 con
slabs 30 cm thick layer of 10 cm thick filtering
7.24
10.42
1.76
1.82
13.16
P2
P3
P4
P5
P6

VEDERE AMONTE
UPSTREAM VIEW

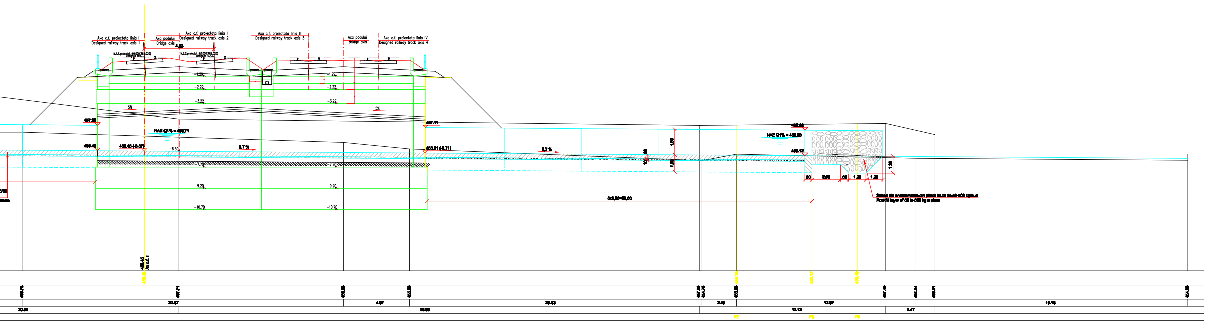

Prelungirea timpanului pe terasament
Tympan on enbankment
BRASOV
Parapet metalic
Metallic handraill
Axa de rezemare
Supporting axis
N.S.S.proiectat ±0.000(462.020)
Designed U.R.L.
N.S.S.proiectat ±0.000(462.020)
Designed U.R.L.
N.S.S.proiectat ±0.000(462.020)
Designed U.R.L.
Axa de rezemare
Supporting axis
Parapet metalic
Metallic handraill
Prelungirea timpanului pe terasament
Tympan on enbankment
SIGHISOARA
2:3
1:1
2.19
1,60
1,60
2:3

VEDERE AVAL
DOWNSTREAM VIEW

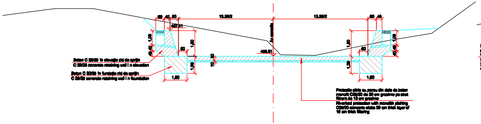

Prelungirea timpanului pe terasament
Tympan on enbankment
SIGHISOARA
Parapet metalic
Metallic handraill
Axa de rezemare
Supporting axis
N.S.S.proiectat ±0.000(462.020)
Designed U.R.L.
N.S.S.proiectat ±0.000(462.020)
Designed U.R.L.
N.S.S.proiectat ±0.000(462.020)
Designed U.R.L.
Axa de rezemare
Supporting axis
Parapet metalic
Metallic handraill
Prelungirea timpanului pe terasament
Tympan on enbankment
BRASOV
2:3
1:1
2.19
1,60
1,60
2:3

SECŢIUNE LONGITUDINALĂ A-A
A-A LONGITUDINAL SECTION

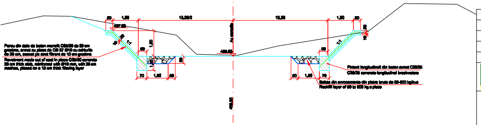
Scara /scale 1:100


Axa c.f. proiectata linia I
Designed railway track axis 1
Axa podului
Bridge axis
Axa c.f. proiectata linia II
Designed railway track axis 2
Axa c.f. proiectata linia III
Designed railway track axis 3
Axa podului
Bridge axis
Axa c.f. proiectata linia IV
Designed railway track axis 4
4,88
N.S.S.proiectat ±0,000(462,020)
Designed (UKL)
-1.29
-2.22
-3.22
5%
5%
457.28
457.11
NAE Q1% = 456,71
456.46
456.45 (-6.57)
-6.59
0,7 %
456.21 (-6.71)
-7.70
-9.20
-10.70
0,7 %
NAE Q1% = 456,29
456.12
1,30
1,20
80
2,60
1,20
1,20
L=5,00÷25,00
Saltea din anrocamente din piatra bruta de 50-500 kg/buc
Rockfill layer of 50 to 500 kg a piece
Ax c.f. 1
22.57
4.57
20.63
2.43
12.57
19.19
30.86
26.69
13.13
2.47

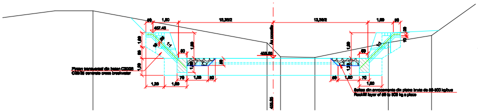
SECTIUNE TRANSVERSALA PROTECTIE MALURI CU ZIDURI DE SPRIJIN
CROSS SECTION WITH RETAINING WALLS PROTECTING BANKS


13,38/2
13,38/2
457.41
1,60
1,60
1,60
1,60
80
10, 30
456.81
Ax canal
Beton C 25/30 în elevaţie zid de sprijin
C 25/30 concrete retaining wall in elevation
Beton C 20/25 în fundaţie zid de sprijin
C 20/25 concrete retaining wall in foundation
Protecţie albie cu pereu din dale de beton monolit C25/30 de 30 cm grosime pe strat filtrant de 10 cm grosime
Riverbed protection with monolith pitching C25/30 concrete slabs 30 cm thick layer of 10 cm thick filtering

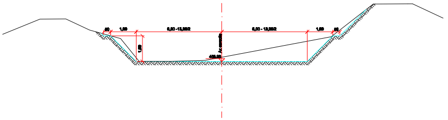
SECTIUNE TRANSVERSALA PROTECTIE MALURI AMONTE CU PEREU DIN BETON
CROSS SECTION UPSTREAM BANKS PITCHING PROTECTION OF CONCRETE


80
1,60
13,38/2
13,38
1,60
80
457.65
1:1
1:1
1,60
456.63
Ax canal
70
1,60
80
80
1,60
70
Pereu din dale de beton monolit C25/30 de 20 cm grosime, armat cu plasa de OB 37 Ø10 cu ochiuri de 20 cm, aşezat pe strat filtrant de 10 cm grosime
Revetment made out of cast in place C25/30 concrete 20 cm thick slab, reinforced with Ø10 mm, with 20 cm meshes, placed on a 10 cm thick filtering layer
Pinteni longitudinali din beton armat C25/30
C25/30 concrete longitudinal breakwaters
Saltea din anrocamente din piatra bruta de 50-500 kg/buc
Rockfill layer of 50 to 500 kg a piece

SECTIUNE TRANSVERSALA RACORDARE PINTEN ZIDURI DE SPRIJIN CU PEREU PROTECTIE AMONTE
CROSS SECTION CONNECTION WITH PITCHING SPUR RETAINING WALLS UPSTREAM PROTECTION


80
1,60
13,38/2
13,38/2
1,60
80
457.45
1:1
1:1
456.66
Ax canal
Pinten transversal din beton C20/25
C20/25 concrete cross breakwater
1,20
1,60
70
1,60
80
80
1,60
70
1,60
Saltea din anrocamente din piatra bruta de 50-500 kg/buc
Rockfill layer of 50 to 500 kg a piece

SECTIUNE TRANSVERSALA CALIBRARE ALBIE AMONTE
UPSTREAM RIVERBED CROSS SECTION CALIBRATION


80
1,60
6,00 - 13,38/2
6,00 - 13,38/2
1,60
80
1,60
456.96
Ax canal

Indice Index	Data Date	Modificare Modification/Revision	Proiectant Designer	Aprobat Consultant Approved Consultant	Aprobat CFR Approved CFR
D					
C					
B					
A	11.2011	Revizia 1	Popescu Anca Raluca		

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANTAT DE UNIUNEA EUROPEANA
EUROPEAN UNION FINANCED PROJECT

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	Semnătura Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza		
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli		
Verificat Checked	Expert Cheie Checking Expert	V. Kallidromitis		VK

SUBCONTRACTANT / SUBCONTRACTOR

AREX COMPANY

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A. Dinulescu Stanciu		
Intocmit Elaborated	Proiectant Designer	Popescu Anca-Raluca	25.10.2011	

Reabilitarea liniei de cale ferata Brasov – 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:
P.Th. / P.Th

Denumire desen / Drawing Title :

STAŢIA RACOŞ / RACOŞ STATION
PROTECŢIE POD C.F. KM. 223+283.05
DETALII DE EXECUŢIE
223+283.05 KM RAILWAY BRIDGE PROTECTION
DETAILS FOR EXECUTION

Codificare / Codification System	Scara / Scale 1:500	LOT / LOT	Nr. / No 01 / 01

EA51 01 E 11 BA AP 01 4 3 003 1