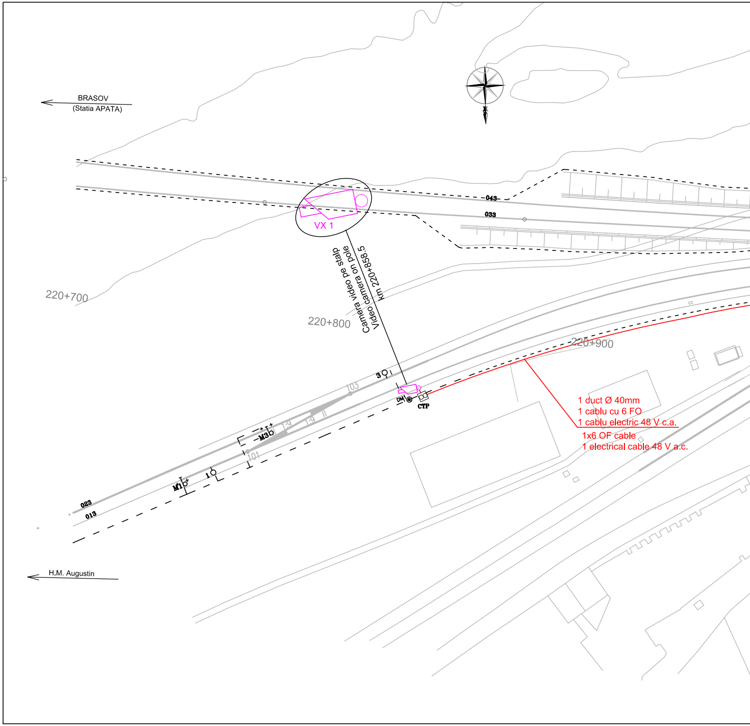
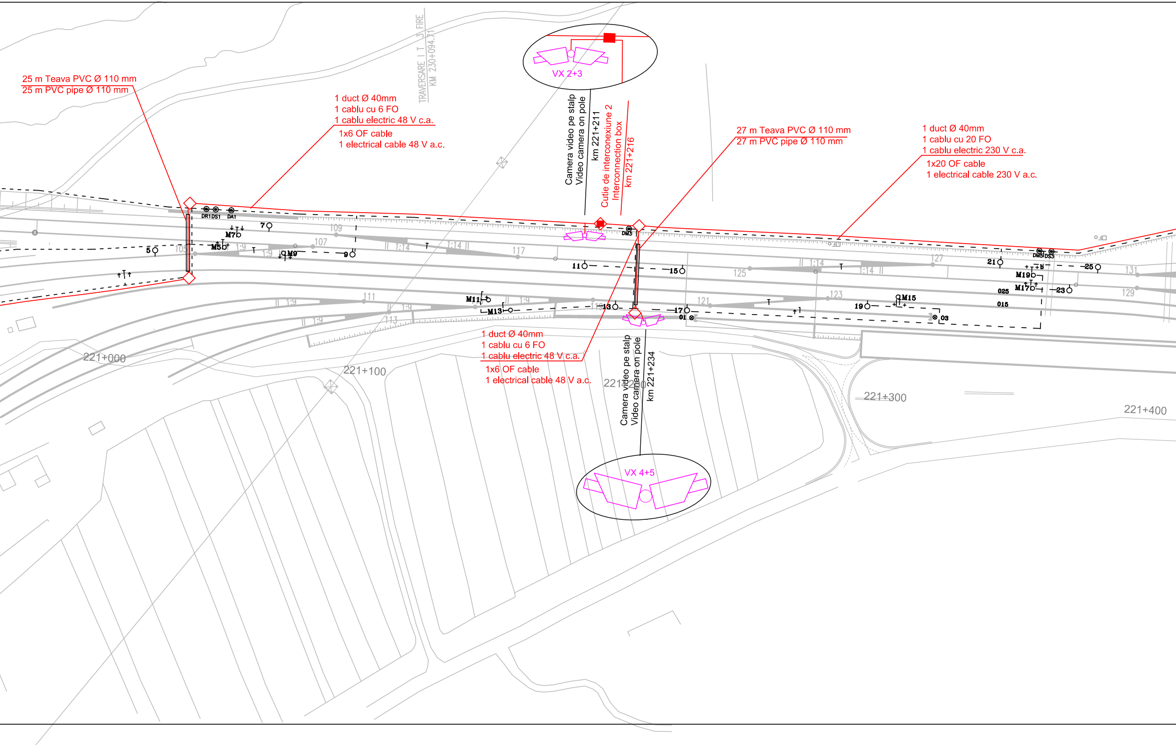

BRASOV
(Statia APATA)
H.M. Augustin
220+700
220+800
220+900
VX 1
Camera video pe stalp
Video camera on pole
km 220+858.5
043
033
023
013
3
1
M1
M3
101
103
DM1
CTP
1 duct Ø 40mm
1 cablu cu 6 FO
1 cablu electric 48 V c.a.
1x6 OF cable
1 electrical cable 48 V a.c.


TRAVERSARE LT 3 FIRE
KM 230+094.71
VX 2+3
VX 4+5
DR1 DS1
DA1
DM3
DM5 DS3
M7
M5
M9
M11
M13
M15
M17
M19
5
7
9
11
13
15
17
19
21
23
25
01
03
015
025
105
107
109
111
113
117
119
121
123
125
127
129
131
1:9
1:14
221+000
221+100
221+200
221+300
221+400

25 m Teava PVC Ø 110 mm
25 m PVC pipe Ø 110 mm

1 duct Ø 40mm
1 cablu cu 6 FO
1 cablu electric 48 V c.a.
1x6 OF cable
1 electrical cable 48 V a.c.

Camera video pe stalp
Video camera on pole
km 221+211

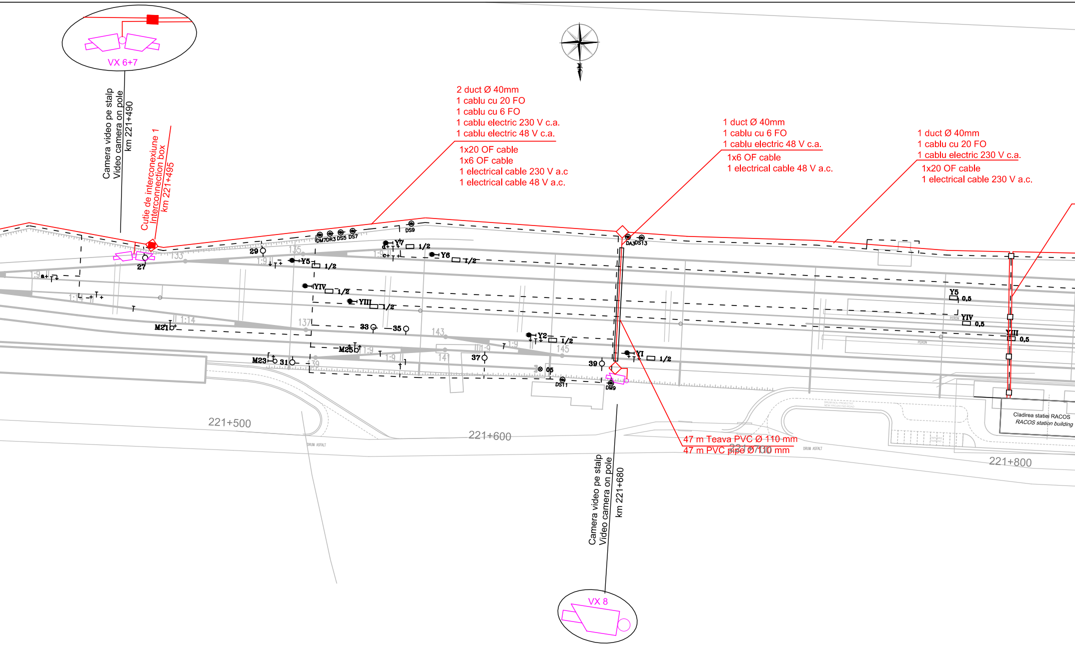
Cutie de interconexiune 2
Interconnection box
km 221+216

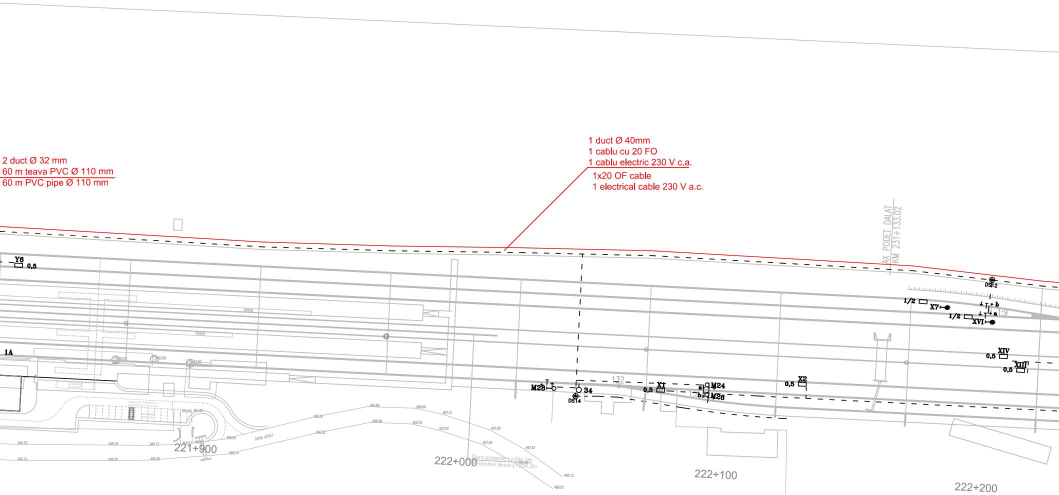
27 m Teava PVC Ø 110 mm
27 m PVC pipe Ø 110 mm

1 duct Ø 40mm
1 cablu cu 20 FO
1 cablu electric 230 V c.a.
1x20 OF cable
1 electrical cable 230 V a.c.

1 duct Ø 40mm
1 cablu cu 6 FO
1 cablu electric 48 V c.a.
1x6 OF cable
1 electrical cable 48 V a.c.

Camera video pe stalp
Video camera on pole
km 221+234

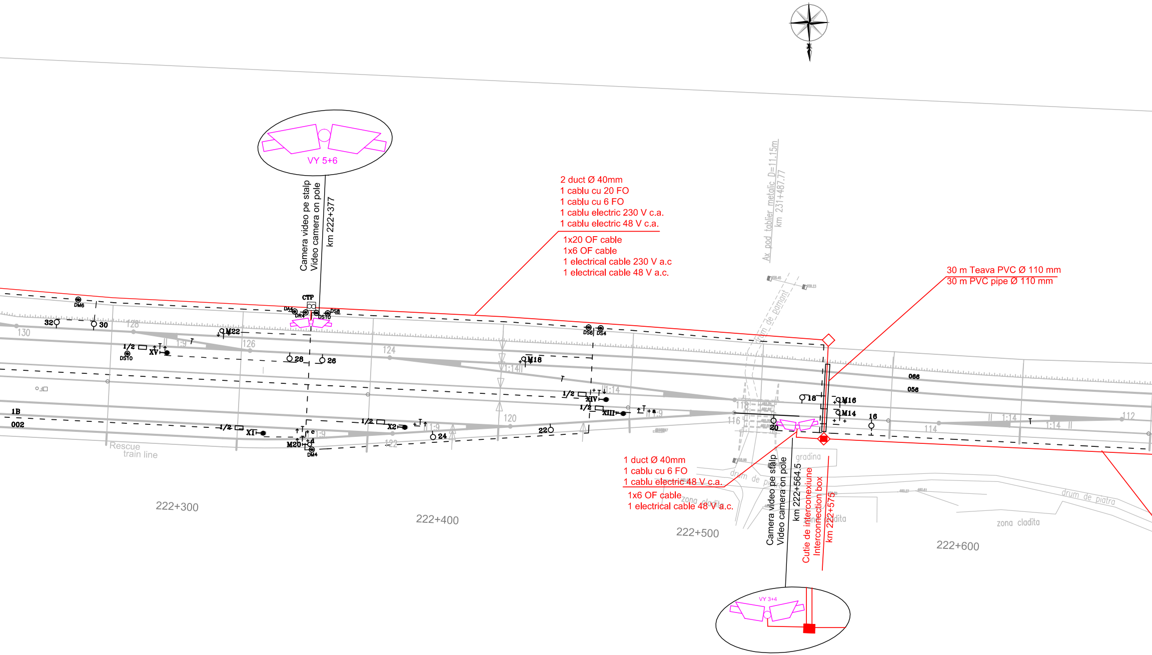

VX 6+7
Camera video pe stalp
Video camera on pole
km 221+490
Cutie de interconexiune 1
Interconnection box
km 221+495
2 duct Ø 40mm
1 cablu cu 20 FO
1 cablu cu 6 FO
1 cablu electric 230 V c.a.
1 cablu electric 48 V c.a.
1x20 OF cable
1x6 OF cable
1 electrical cable 230 V a.c
1 electrical cable 48 V a.c.
1 duct Ø 40mm
1 cablu cu 6 FO
1 cablu electric 48 V c.a.
1x6 OF cable
1 electrical cable 48 V a.c.
1 duct Ø 40mm
1 cablu cu 20 FO
1 cablu electric 230 V c.a.
1x20 OF cable
1 electrical cable 230 V a.c.
DM7
DR3
DS5
DS7
DS9
DA3
DS13
DS11
DM9
Y7
Y6
Y5
YIV
YIII
Y2
YI
YII
1/2
0,5
29
27
31
33
35
37
39
05
M21
M23
M25
133
135
137
139
141
143
145
1:9
1:14
221+500
221+600
221+700
221+800
DRUM ASFALT
DRUM NOU PROIECTAT
NEW PROJECTED ROAD
PARCARE
PARKING
PERON
47 m Teava PVC Ø 110 mm
47 m PVC pipe Ø 110 mm
Cladirea statiei RACOS
RACOS station building
Camera video pe stalp
Video camera on pole
km 221+680
VX 8

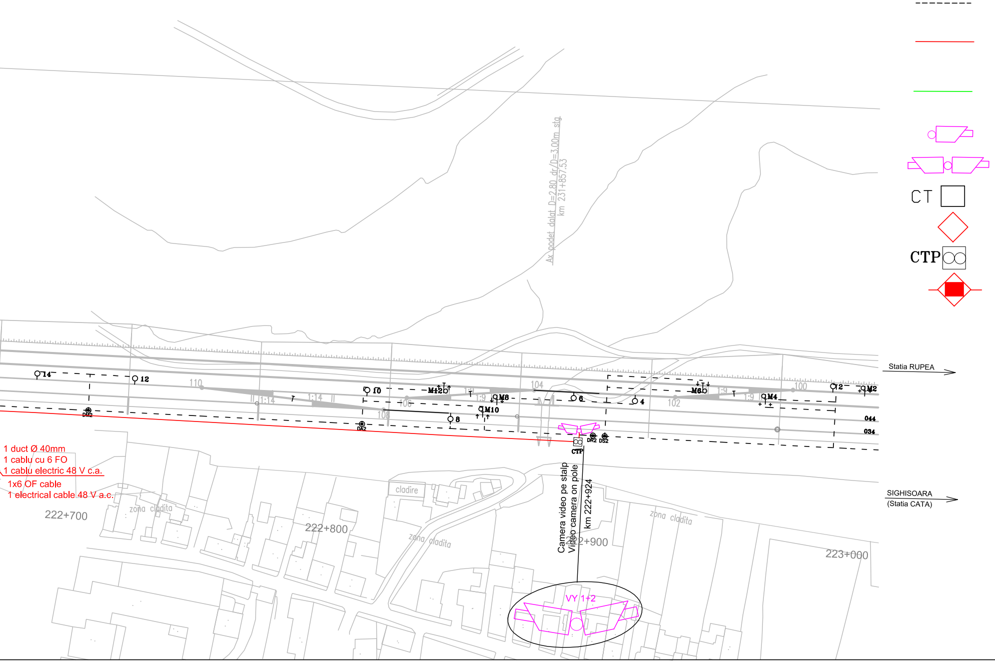


2 duct Ø 32 mm
60 m teava PVC Ø 110 mm
60 m PVC pipe Ø 110 mm

1 duct Ø 40mm
1 cablu cu 20 FO
1 cablu electric 230 V c.a.
1x20 OF cable
1 electrical cable 230 V a.c.

Y6
0,5
1A
PERON
PERON
464.72
463.59
463.80
PARCARE
PARKING
DRUM NOU PROIECTAT
NEW PROJECTED ROAD
464.63
464.60
466.70
466.39
466.17
465.97
221+900
466.74
466.50
466.25
466.06
466.14
DRUM ASFALT
466.39
466.32
466.69
466.49
466.99
466.76
467.21
467.02
467.58
467.40
467.87
222+000
Gard protectie L=294,3m
Protection fence L=294,3m
468.12
468.02
M28
34
DS14
132
0,5
X1
a
b
M24
M26
0,5
X2
222+100
AX PODET DALAT
KM 231+133.02
DS12
1/2
X7
b
a
1:9
1/2
XVI
0,5
XIV
0,5
XIII
222+200


VY 5+6
Camera video pe stalp
Video camera on pole
km 222+377
2 duct Ø 40mm
1 cablu cu 20 FO
1 cablu cu 6 FO
1 cablu electric 230 V c.a.
1 cablu electric 48 V c.a.
1x20 OF cable
1x6 OF cable
1 electrical cable 230 V a.c
1 electrical cable 48 V a.c.
Ax pod tablier metalic D=11.15m
km 231+487.77
drum de pamant
30 m Teava PVC Ø 110 mm
30 m PVC pipe Ø 110 mm
CTP
DM6
DS10
DS8
DS6
DS4
DM4
32
30
130
128
126
124
120
122
118
116
114
112
M22
M18
M16
M14
M20
XV
XIV
XIII
XI
X2
1/2
1:9
1:14
28
26
24
22
20
18
16
066
056
1B
002
Rescue
train line
1 duct Ø 40mm
1 cablu cu 6 FO
1 cablu electric 48 V c.a.
1x6 OF cable
1 electrical cable 48 V a.c.
Camera video pe stalp
Video camera on pole
km 222+564.5
Cutie de interconexiune
Interconnection box
km 222+575
gradina
drum de piatra
zona cladita
VY 3+4
222+300
222+400
222+500
222+600


CT
CTP
Ax podet dalat D=2.80 dr/D=3.00m stg
km 231+857.53
Statia RUPEA
SIGHISOARA
(Statia CATA)
14
12
10
M12
M8
M10
8
6
4
M6
M4
2
M2
DM2
DA2
DR2
DS2
CTP
110
1:14
1:14
108
106
1:9
104
1:9
102
1:9
100
044
034
1 duct Ø 40mm
1 cablu cu 6 FO
1 cablu electric 48 V c.a.
1x6 OF cable
1 electrical cable 48 V a.c.
222+700
222+800
222+900
223+000
zona cladita
cladire
zona cladita
zona cladita
Camera video pe stalp
Video camera on pole
km 222+924
VY 1+2

**LEGENDA - LEGEND**

Trasa cablurilor de semnalizare
Trace of the signalling cables

Trasa cablurilor pentru supravegherea video în şanţ comun cu cablurile de semnalizare
Trace of the surveillance cables in the same trench with the signalling cables

Trasa cablurilor pentru supravegherea video în şanţ separat de cablurile de semnalizare
Trace of the surveillance cables in a different trench from the signalling cables

Cameră video montată pe stâlp
Video camera mounted on pole

Două camere video montate pe stâlp
Two video camera mounted on pole

Cameră de tragere
Mainhole

Cameretă de beton
Handhole

Cameretă din plastic
Plastic handhole

Cutie de interconectare instalată într-o cameretă
Interconnection box in a handhole

**NOTE - NOTES**

1. Pentru racordarea camerelor video se folosesc cabluri cu fibre optice pentru transmisia semnalului şi comenzilor şi cabluri electrice pentru alimentare.

   The video cameras from poles will be connected with fiber optic cables and electrical cables.

2. Cablurile cu fibre optice vor avea capacitatea de 20 de fibre între sala de echipamente Tc şi cutia de interconectare şi de 6 fibre între cutia de interconectare şi camerele video.

   The fiber optic cables will have 20 fibers from telecommunication equipment room up to the interconnection box, and 6 fibers between the interconnection box and the video cameras.

3. Alimentarea electrică pe cablu se va face la 230 V c.a. între sala de echipamente Tc şi cutia de interconectare şi la 48 V c.a. între cutia de interconectare şi camerele video.

   The power suplly on cables will use 230 V a.c. from telecommunication equipment room up to the interconnection box and 48 V a.c. between the interconnection box and the video cameras.

4. In general cablurile pentru supravegherea video a zonelor de macaze se vor instala în şanţ comun cu cablurile de semnalizare.

   Generally the cables for video surveillance will be installed in the same trench with the signalling cables.

5. La cablurile cu fibre optice se vor lăsa rezerve de câte 6 m în camerele de tragere, în camerete şi în cameretele de plastic.

   On fiber optic cables will be mounted 6 m as reserves of cable in each mainhole, handhole and plastic handhole.

6. Cablurile de alimentare se vor introduce numai în camerele de targere şi în cameretele cu cutii de interconectare. Rezervele de cablu se vor face lângă fiecare cameretă şi cameretă de plastic.

   The power supply cables will enter only in mainholes and in handholes with interconnection box. The reserves of cables will be made near each handhole and plastic handhole.

7. Camerele video pentru supravegherea zonelor de macaze X şi Y sunt notate cu VX, respectiv VY.

   The video cameras for X and Y turn-out areas surveillance are noted with VX, respectiv VY.

| Indice<br>Index | Data<br>Date | Modificare<br>Modification/Revision | Proiectant<br>Designer | Aprobat Consultant<br>Approved Consultant | Aprobat CFR<br>Approved CFR |
|---|---|---|---|---|---|
| D | | | | | |
| C | | | | | |
| B | | | | | |
| A | | | | | |

**GUVERNUL ROMANIEI**
**ROMANIAN GOVERNMENT**

**PROIECT FINANŢAT DE UNIUNEA EUROPEANĂ**
**EUROPEAN UNION FINANCED PROJECT**

CFR

**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<br>Date | Semnătură<br>Signature |
|---|---|---|---|---|
| Aprobat<br>Approved | Şef proiect<br>Project manager | R. Liuzza | | |
| Aprobat<br>Approved | Coordonator Secţiune 1<br>Section 1 Coordinator | C. Gambelli | | |
| Verificat<br>Checked | Expert Cheie<br>Key Expert | P. Amodio | | |

**SUBCONTRACTANT / SUBCONTRACTOR**

AREX COMPANY

| | | | | |
|---|---|---|---|---|
| Aprobat<br>Approved | Responsabil Subconsultant<br>Subconsultant Responsible | A. Stanciu - Dinulescu | 12.2011 | |
| Întocmit<br>Elaborated | Proiectant<br>Designer | Trifan Gabriela | 12.2011 | |

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:
P.Th. / T.D.

Denumire desen / Drawing Title :

**Plan de situatie Statia - RACOS - Station Layout plan**

**Instalatia de supraveghere video a zonelor de macaze**
**Video Surveillance System for X and Y turn-outs areas**

| Codificare / Codification System | Scara / Scale<br>1/1000 | LOT / LOT | Nr. / No<br>01 / 01 |
|---|---|---|---|

E A 5 1 | 0 1 | E | 1 1 | L 7 | S E | 0 4 | 3 | 7 | 0 0 3 | 1