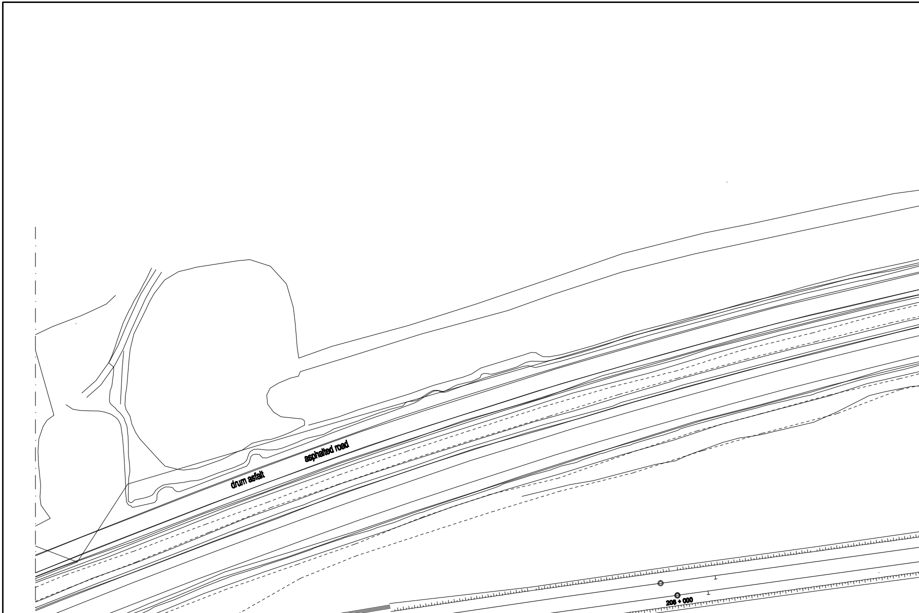
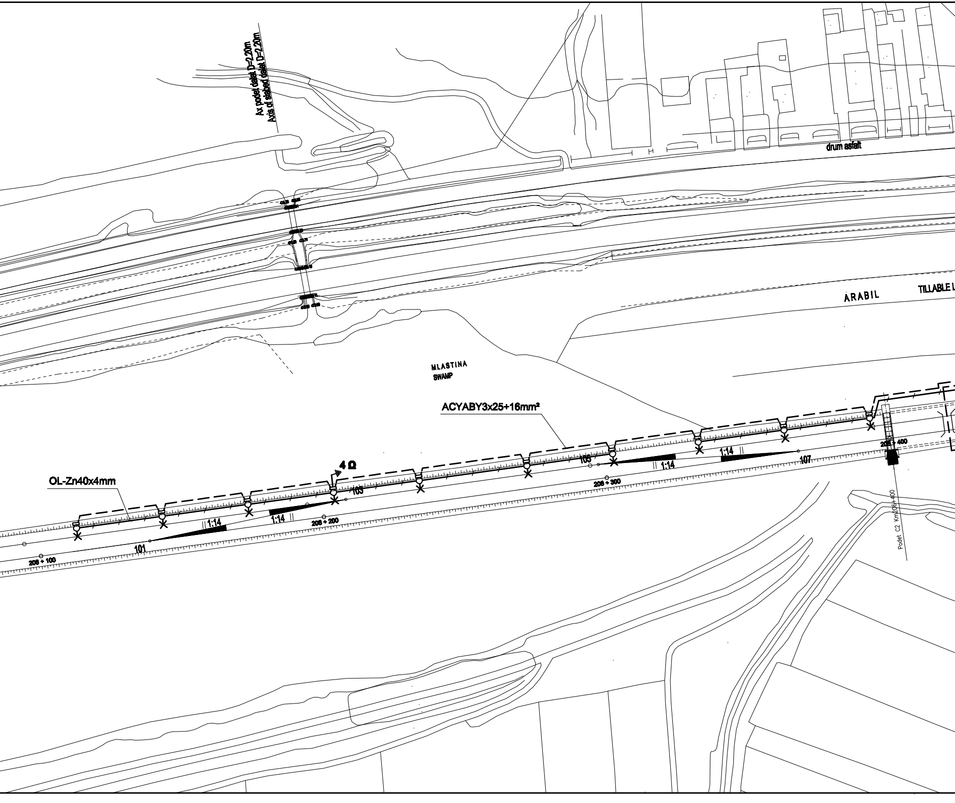
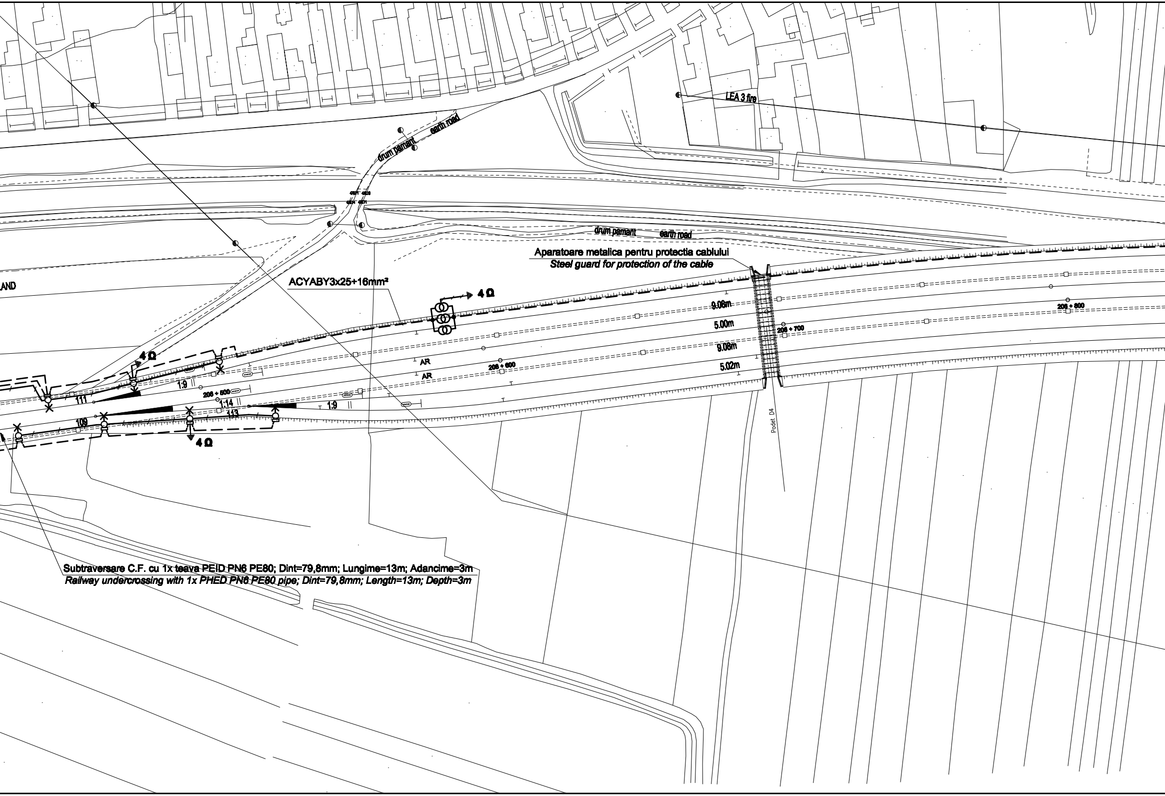
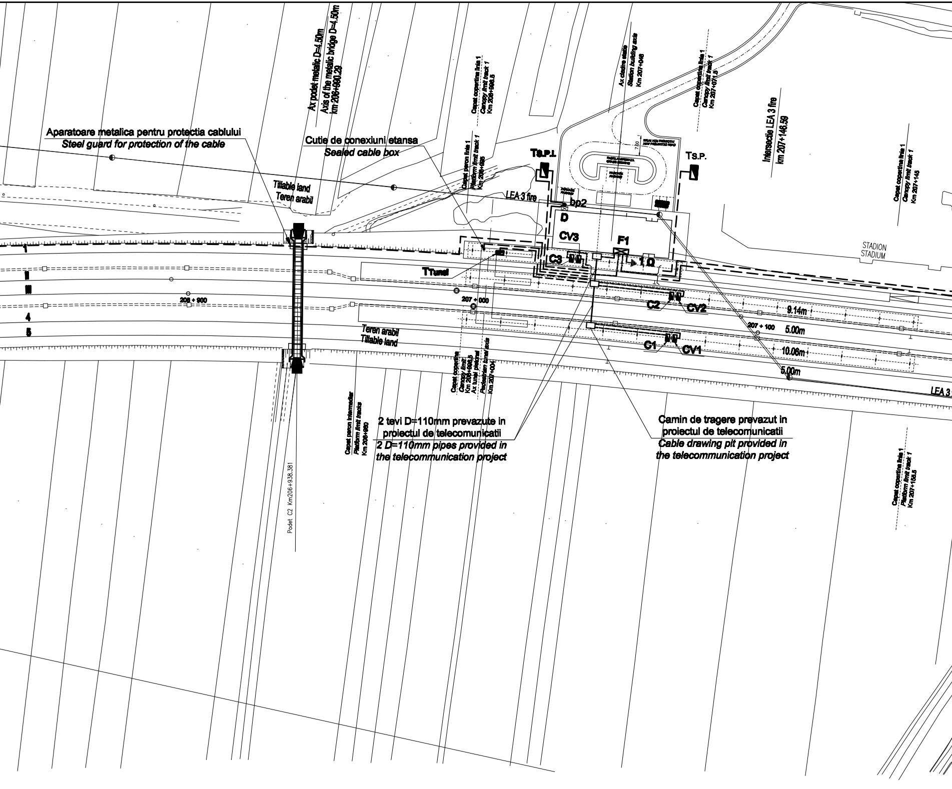

asphalted road
drum asfalt
206 + 000
205 + 900
205 + 800
BRAȘOV
(FELDIOARA)

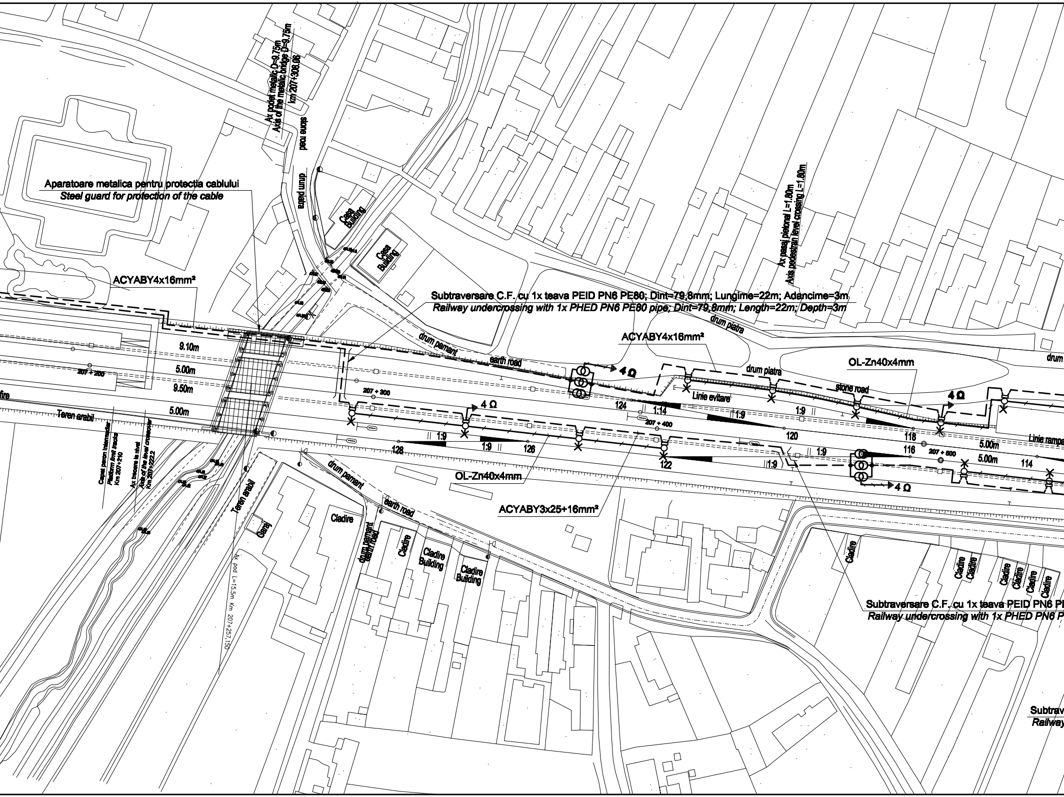

Ax podet dalat D=2.20m
Axis of slabed culvert D=2.20m
drum asfalt
ARABIL
TILLABLE L
MLASTINA
SWAMP
ACYABY3x25+16mm²
OL-Zn40x4mm
4 Ω
1:14
1:14
1:14
1:14
1:14
101
103
105
107
206 + 100
206 + 200
206 + 300
206 + 400
Podet C2 Km206+400

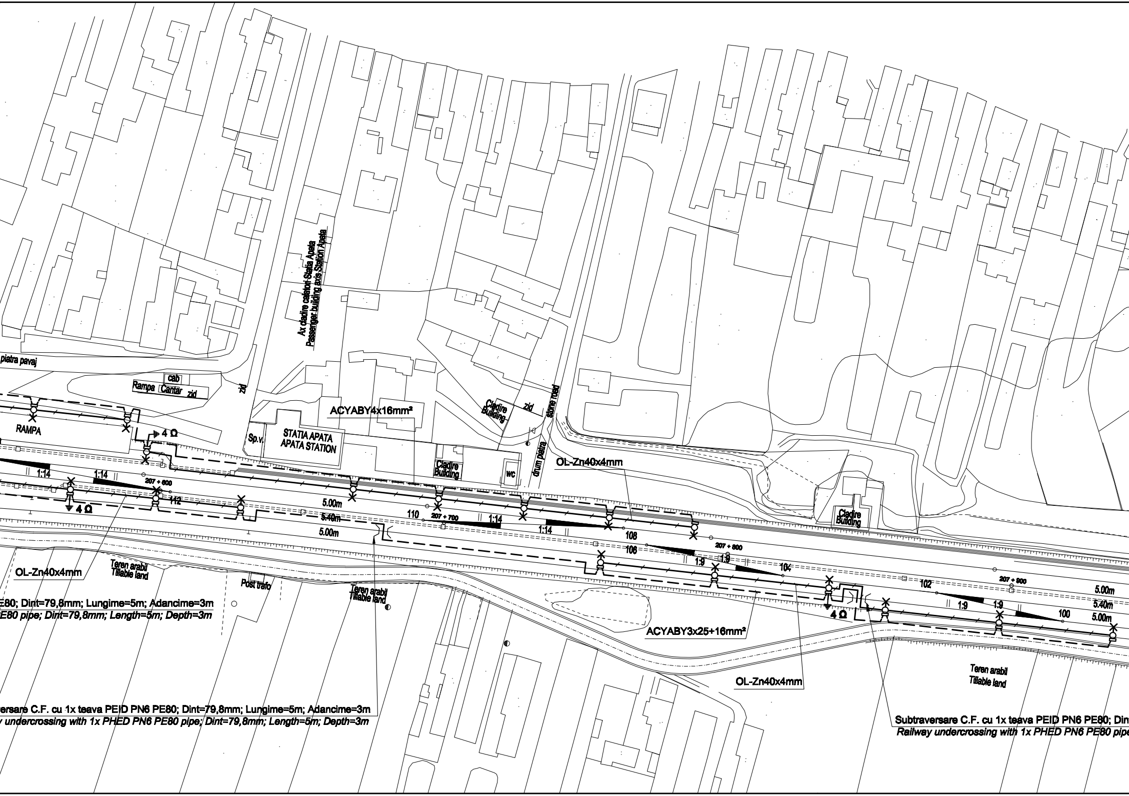

LEA 3 fire
drum pamant
earth road
drum pamant
earth road
LAND
ACYABY3x25+16mm²
4 Ω
4 Ω
4 Ω
9.08m
5.00m
9.08m
5.02m
AR
AR
206 + 800
206 + 700
206 + 600
206 + 500
1:9
1:14
1:9
111
109
113
Podet D4

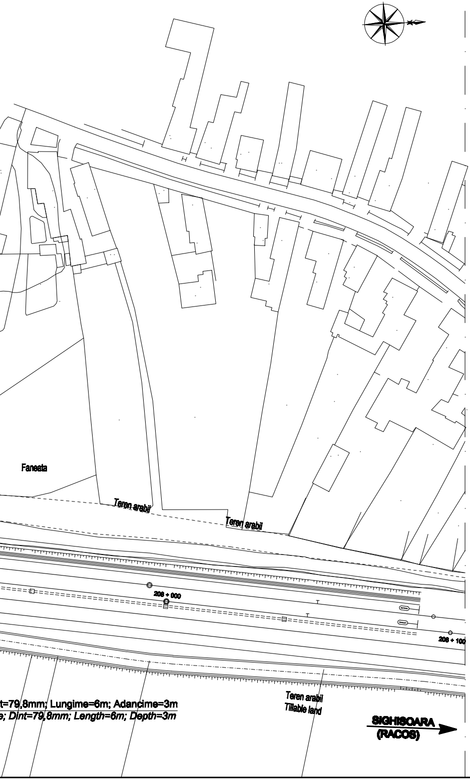
Aparatoare metalica pentru protectia cablului
Steel guard for protection of the cable

Subtraversare C.F. cu 1x teava PEID PN6 PE80; Dint=79,8mm; Lungime=13m; Adancime=3m
Railway undercrossing with 1x PHED PN6 PE80 pipe; Dint=79,8mm; Length=13m; Depth=3m


Aparatoare metalica pentru protectia cablului
Steel guard for protection of the cable
Cutie de conexiuni etansa
Sealed cable box
Ax podet metalic D=4.50m
Axis of the metalic bridge D=4.50m
km 206+960.29
Capat copertina linia 1
Canopy limit track 1
Km 206+996.5
Capat peron linia 1
Platform limit track 1
Km 206+985
Ax cladire statie
Station building axis
Km 207+048
Capat copertina linia 1
Canopy limit track 1
Km 207+071.5
Intersectie LEA 3 fire
km 207+146.59
Capat copertina linia 1
Canopy limit track 1
Km 207+145
Tillable land
Teren arabil
LEA 3 fire
bp2
D
TS.P.1
TS.P.
CV3
F1
C3
1 Ω
T Tunel
STADION
STADIUM
1
II
III
4
5
206 + 900
207 + 000
207 + 100
C2
CV2
9.14m
5.00m
10.06m
5.00m
C1
CV1
Teren arabil
Tillable land
LEA 3
Capat copertina
Canopy limit
Km 206+996.5
Ax tunel pietonal
Pedestrian tunnel axis
Km 207+004
Capat peron intermediar
Platform limit tracks
Km 206+980
Podet C2 Km206+938.381
2 tevi D=110mm prevazute in
proiectul de telecomunicatii
2 D=110mm pipes provided in
the telecommunication project
Camin de tragere prevazut in
proiectul de telecomunicatii
Cable drawing pit provided in
the telecommunication project
Capat copertina linia 1
Platform limit track 1
Km 207+155.5


Aparatoare metalica pentru protectia cablului
Steel guard for protection of the cable
Ax podet metalic D=0.75m
Axis of the metalic bridge D=0.75m
km 207+308.96
drum piatra
stone road
Casa
Building
Casa
Building
ACYABY4x16mm²
Subtraversare C.F. cu 1x teava PEID PN6 PE80; Dint=79,8mm; Lungime=22m; Adancime=3m
Railway undercrossing with 1x PHED PN6 PE80 pipe; Dint=79,8mm; Length=22m; Depth=3m
Ax pasaj pietonal L=1.60m
Axis pedestrian level crossing L=1.60m
drum piatra
drum pamant
earth road
ACYABY4x16mm²
4 Ω
drum piatra
stone road
OL-Zn40x4mm
4 Ω
Linie evitare
9.10m
5.00m
207 + 200
9.50m
5.00m
Teren arabil
207 + 300
4 Ω
124
1:14
207 + 400
1:9
1:9
120
118
116
207 + 500
5.00m
5.00m
114
Linie rampa
1:9
1:9
128
126
122
1:9
1:9
4 Ω
OL-Zn40x4mm
ACYABY3x25+16mm²
Capat peron intermediar
Platform limit tracks
Km 207+210
Ax trecere la nivel
Axis of the level crossover
Km 207+222.2
Teren arabil
Garaj
Ax pod L=15.5m Km 207+257.150
drum pamant
earth road
Cladire
drum pamant
earth road
Cladire
Cladire
Building
Cladire
Building
Cladire
Cladire
Cladire
Cladire
Cladire
Cladire
Cladire
Subtraversare C.F. cu 1x teava PEID PN6 P
Railway undercrossing with 1x PHED PN6 P
Subtrav
Railway


piatra pavaj
cab
Rampa Cantar zid
zid
RAMPA
4 Ω
Ax cladire calatori Statia Apata
Passenger building axis Station Apata
Sp.v.
STATIA APATA
APATA STATION
ACYABY4x16mm²
Cladire
Building
zid
stone road
drum piatra
Cladire
Building
wc
OL-Zn40x4mm
1:14
1:14
207 + 600
1:12
4 Ω
5.00m
5.40m
5.00m
110
207 + 700
1:14
1:14
108
106
207 + 800
1:9
1:9
104
Cladire
Building
102
207 + 900
5.00m
5.40m
5.00m
1:9
1:9
100
4 Ω
ACYABY3x25+16mm²
OL-Zn40x4mm
Teren arabil
Tillable land
Post trafo
Teren arabil
Tillable land
OL-Zn40x4mm
Teren arabil
Tillable land
E80; Dint=79,8mm; Lungime=5m; Adancime=3m
E80 pipe; Dint=79,8mm; Length=5m; Depth=3m
ersare C.F. cu 1x teava PEID PN6 PE80; Dint=79,8mm; Lungime=5m; Adancime=3m
y undercrossing with 1x PHED PN6 PE80 pipe; Dint=79,8mm; Length=5m; Depth=3m
Subtraversare C.F. cu 1x teava PEID PN6 PE80; Din
Railway undercrossing with 1x PHED PN6 PE80 pipe


Faneata
Teren arabil
Teren arabil
208 + 000
208 + 100
Teren arabil
Tillable land
t=79,8mm; Lungime=6m; Adancime=3m
e; DInt=79,8mm; Length=6m; Depth=3m
SIGHISOARA
(RACOS)

LEGENDA / *LEGEND:*

— — — — — — —	- Cablu de energie montat ingropat in sant pe pat de nisip *Power cable buried in trench on sand bed*
—·—·—·—·—	- Traseu grup cabluri *Route cable group*
— ═══════ —	- Subtraversare CF in tub de PEID PN6 PE 80 *Railway undercrossing in PHED PN6 PE 80 pipe*
⏚	- Priza de pamint *Earth grounding plate*
	- Linie electrica subterana pentru iluminat exterior cu stalpi de beton (250W) *Underground electric line for outdoor lighting with concrete poles (250W)*
	- Stalp de beton echipat cu corp de iluminat cu lampi cu vapori de mercur 250W, 230V, 50Hz, clasa I, IP54 *Concrete pole equipped with lighting unit with mercury vapours lamps 250W, 230V, 50Hz, class I, IP54*
×	- Corp de iluminat echipat cu lampi cu vapori de mercur 250W, 230V, 50Hz, clasa I, IP54 *Lighting unit equipped with mercur vapours lamps 250W, 230V, 50Hz, class I, IP54*
☒	- Firida cu borne izolate *Niche with insulated terminals*
4Ω	- Cutie cu transformatoare de separatie *Booster transformers box*
PEID PN6 PE80 *PEHD PN6 PE80*	- Teava de polietilena de inalta densitate *High-density polyethylene pipe*
• bp2	- Buton de pornire electropompa pentru stingerea incendiului montat in cutia capsulata pozitionata langa dulapul P.S.I. *Button for extinguishing the electric power installed in sealed box placed near the closet PSI*
☒ D	- Dulap dotari P.S.I. *Closet with Security and Fire Extinction accesories*
Ts.P. ◩	- Tablou electric pentru statie pompare *Electric board for pumping station*
Ts.P.I. ◩	- Tablou electric pentru statie pompare incendiu *Electric board for fire pumping station*
◩ C1, C2, C3	- Cutie etansa pentru copertina (alimentata din T.I.E.) *Sealed box for canopy (powered supply from TIE)*
◩ CV1, CV2, CV3	- Cutie etansa pentru copertina (alimentata din T.C.V.) *Sealed box for canopy (powered supply from TCV)*

JURNAL DE CABLURI
JOURNAL OF CABLES

NR. *NO.*	DE LA *FROM*	PANA LA *TO*	SIMBOL CABLU *CABLE SYMBOL*
1	Firida F1 *F1 niche*	ILUMINAT CAP X *LIGHTING OF X END*	ACYABY3x25+16mm^2
2	Firida F1 *F1 niche*	ILUMINAT CAP Y *LIGHTING OF Y END*	ACYABY3x25+16mm^2
3	Firida F1 *F1 niche*	ILUMINAT CAP Y *LIGHTING OF Y END*	ACYABY4x16mm^2
4	Firida F1 *F1 niche*	CUTIA C1 *C1 BOX*	CYABY 5x10mm^2 CSYABY14x1.5mm^2
5	Firida F1 *F1 niche*	CUTIA C2 *C2 BOX*	CYABY 5x10mm^2 CSYABY14x1.5mm^2
6	Firida F1 *F1 niche*	CUTIA C3 *C3 BOX*	CYABY 5x10mm^2 CSYABY14x1.5mm^2
7	Firida F1 *F1 niche*	T_{Tunel}	CYABY 5x6mm^2
8	Firida F1 *F1 niche*	$T_{S.P.}$	CYABY 5x6mm^2
9	Firida F1 *F1 niche*	$T_{S.P.I.}$	CYABY 5x4mm^2
10	Firida F1 *F1 niche*	bp2	CSYABY 3x1.5mm^2
11	bp2	$T_{S.P.I.}$	CSYABY 3x1.5mm^2
12	Firida F1 *F1 niche*	CUTIA CV1 *CV1 BOX*	CYABY 5x4mm^2 CSYABY5x1.5mm^2
13	Firida F1 *F1 niche*	CUTIA CV2 *CV2 BOX*	CYABY 5x4mm^2 CSYABY5x1.5mm^2
14	Firida F1 *F1 niche*	CUTIA CV3 *CV3 BOX*	CYABY 5x4mm^2 CSYABY5x1.5mm^2
15	Firida F1 *F1 niche*	ILUMINAT TUNEL PIETONAL *LIGHTING OF PEDESTRIAN TUNNEL*	CYABY 3x2.5mm^2

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 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 Date	Semnătură Signature
Aprobat Approved	Şef proiect Project manager	R. Liuzza	12.2011	
Aprobat Approved	Coordonator Secțiune 1 Section 1 Coordinator	C. Gambelli	12.2011	
Verificat Checked	Expert Verificator Checking Expert	G. Fioravanti	12.2011	

SUBCONTRACTANT / SUBCONTRACTOR

AREX COMPANY

Aprobat Approved	Responsabil Subconsultant Subconsultant Responsible	A.Stanciu - Dinulescu	12.2011	
Întocmit Elaborated	Proiectant Designer	D. Matei	12.2011	

Reabilitarea liniei de cale ferata Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația 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 :

Rețele electrice exterioare - Stația Apața;
Apata station - Outdoor electric networks

Codificare / Codification System	Scara / Scale 1:1000	LOT / LOT	Nr. / No 01 / 01

E A 5 1 0 1 C 0 9 L 7 I E 0 0 3 1 0 3 6 1

A3(297x2940)