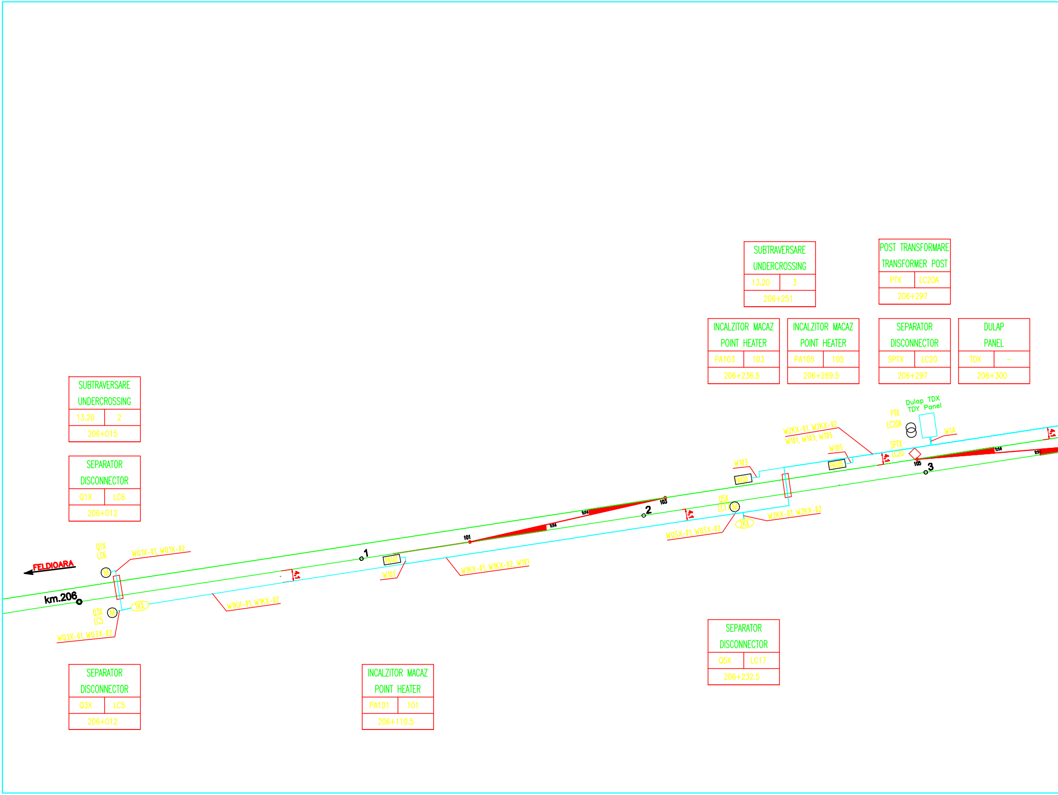
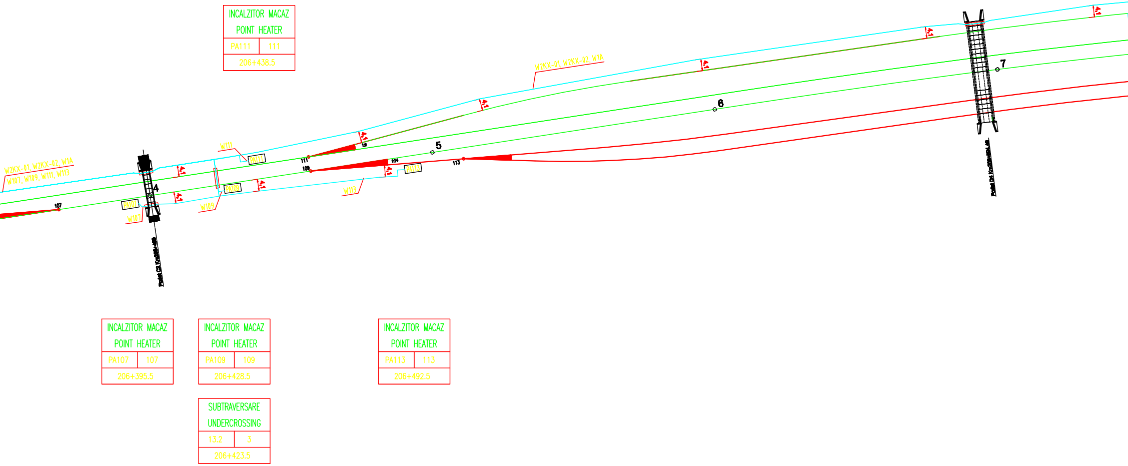
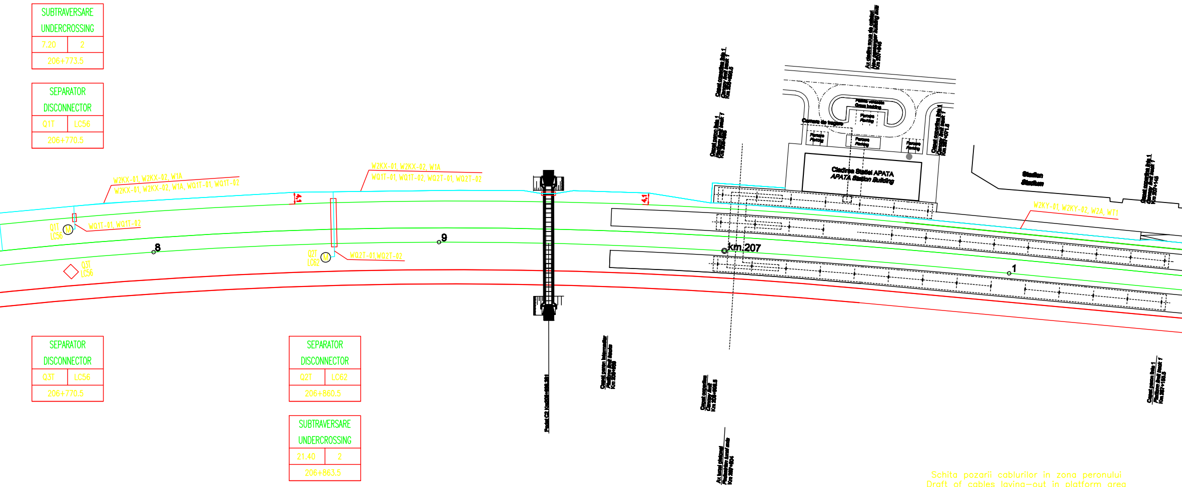
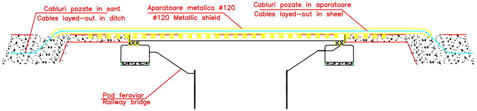

SUBTRAVERSARE
UNDERCROSSING
13.20
3
206+251
POST TRANSFORMARE
TRANSFORMER POST
PTX
LC20A
206+297
INCALZITOR MACAZ
POINT HEATER
PA103
103
206+236.5
INCALZITOR MACAZ
POINT HEATER
PA105
105
206+269.5
SEPARATOR
DISCONNECTOR
SPTX
LC20
206+297
DULAP
PANEL
TDX
-
206+300
SUBTRAVERSARE
UNDERCROSSING
13.20
2
206+015
SEPARATOR
DISCONNECTOR
Q1X
LC6
206+012
FELDIOARA
km.206
Q1X
LC6
M
WQ1X-01, WQ1X-02
Q3X
LC5
M
1KX
WQ3X-01, WQ3X-02
W1KX-01, W1KX-02
4,1
1
PA101
W101
W1KX-01, W1KX-02, W101
101
1:14
1:14
2
103
4,1
WQ5X-01, WQ5X-02
Q5X
LC17
M
2KX
W2KX-01, W2KX-02
PA103
W103
W2KX-01, W2KX-02
W101, W103, W105
W105
PA105
4,1
SPTX
LC20
PTX
LC20A
Dulap TDX
TDY Panel
W1A
105
3
1:14
1:14
4,1
SEPARATOR
DISCONNECTOR
Q5X
LC17
206+232.5
SEPARATOR
DISCONNECTOR
Q3X
LC5
206+012
INCALZITOR MACAZ
POINT HEATER
PA101
101
206+110.5

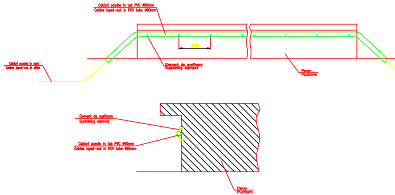

INCALZITOR MACAZ
POINT HEATER
PA111
111
206+438.5
W2KX-01, W2KX-02, W1A
W2KX-01, W2KX-02, W1A
W107, W109, W111, W113
W111
PA111
111
109
4.1
4.1
4.1
4.1
4.1
4.1
4.1
4.1
4.1
19
114
113
5
6
7
4
107
PA107
W107
PA109
W109
PA113
W113
INCALZITOR MACAZ
POINT HEATER
PA107
107
206+395.5
INCALZITOR MACAZ
POINT HEATER
PA109
109
206+428.5
INCALZITOR MACAZ
POINT HEATER
PA113
113
206+492.5
SUBTRAVERSARE
UNDERCROSSING
13.2
3
206+423.5

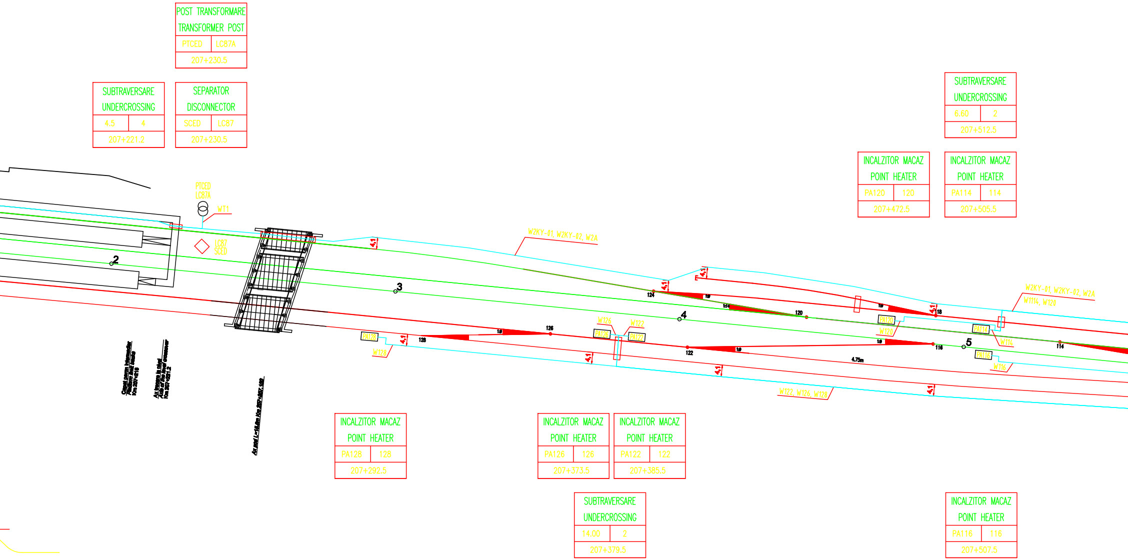

SUBTRAVERSARE
UNDERCROSSING
7.20
2
206+773.5
SEPARATOR
DISCONNECTOR
Q1T
LC56
206+770.5
W2KX-01, W2KX-02, W1A
W2KX-01, W2KX-02, W1A, W01T-01, W01T-02
W2KX-01, W2KX-02, W1A
W01T-01, W01T-02, W02T-01, W02T-02
4.1
4.1
Q1T
LC56
W01T-01, W01T-02
8
9
Q2T
LC62
W02T-01,W02T-02
Q3T
LC56
Cladirea Statiei APATA
APATA Station Building
Camera de tragere
Parcare
Parking
Statiei
km.207
1
W2KY-01, W2KY-02, W2A, WT1
SEPARATOR
DISCONNECTOR
Q3T
LC56
206+770.5
SEPARATOR
DISCONNECTOR
Q2T
LC62
206+860.5
SUBTRAVERSARE
UNDERCROSSING
21.40
2
206+863.5

Pozarea cablurilor pe podurile de la km 206+400, km 206+694.4, km 206+938.381, km 207+257.150
Cables laying-out on bridges at km 206+400, km 206+694.4, km 206+938.381, km 207+257.150


Cabluri pozate in sant
Cables layed-out in ditch
Aparatoare metalica ø120
ø120 Metallic shield
Cabluri pozate in aparatoare
Cables layed-out in sheel
Pod feroviar
Railway bridge

Schita pozarii cablurilor in zona peronului
Draft of cables laying-out in platform area
km. 206+995 ... km. 207+155.5


Cabluri pozate in tub PVC ø90mm
Cables layed-out in PCV tube ø90mm
3m
Cabluri pozate in sant
Cables layed-out in ditch
Element de sustinere
Sustaining element
Peron
PLatform
Element de sustinere
Sustaining element
Cabluri pozate in tub PVC ø90mm
Cables layed-out in PCV tube ø90mm
Peron
PLatform



PTCED
LC87A
WT1
LC87
SCED
2
3
4
5
4.1
W2KY-01, W2KY-02, W2A
W2KY-01, W2KY-02, W2A
W1114, W126
124
1:9
1:14
120
1:9
118
126
128
1:9
122
1:9
1:9
116
114
4.75m
PA128
W128
PA126
W126
PA122
W122
PA120
W120
PA114
W114
PA116
W116
W122, W126, W128
Capat peron intermediar
Platform end
Km 207+210
Ax trecere la nivel
Axis of the level crossing
Km 207+221.2
Ax pod L=16.8m Km 207+307.158

POST TRANSFORMARE TRANSFORMER POST	
PTCED	LC87A
207+230.5	

SUBTRAVERSARE UNDERCROSSING	
4.5	4
207+221.2	

SEPARATOR DISCONNECTOR	
SCED	LC87
207+230.5	

SUBTRAVERSARE UNDERCROSSING	
6.60	2
207+512.5	

INCALZITOR MACAZ POINT HEATER	
PA120	120
207+472.5	

INCALZITOR MACAZ POINT HEATER	
PA114	114
207+505.5	

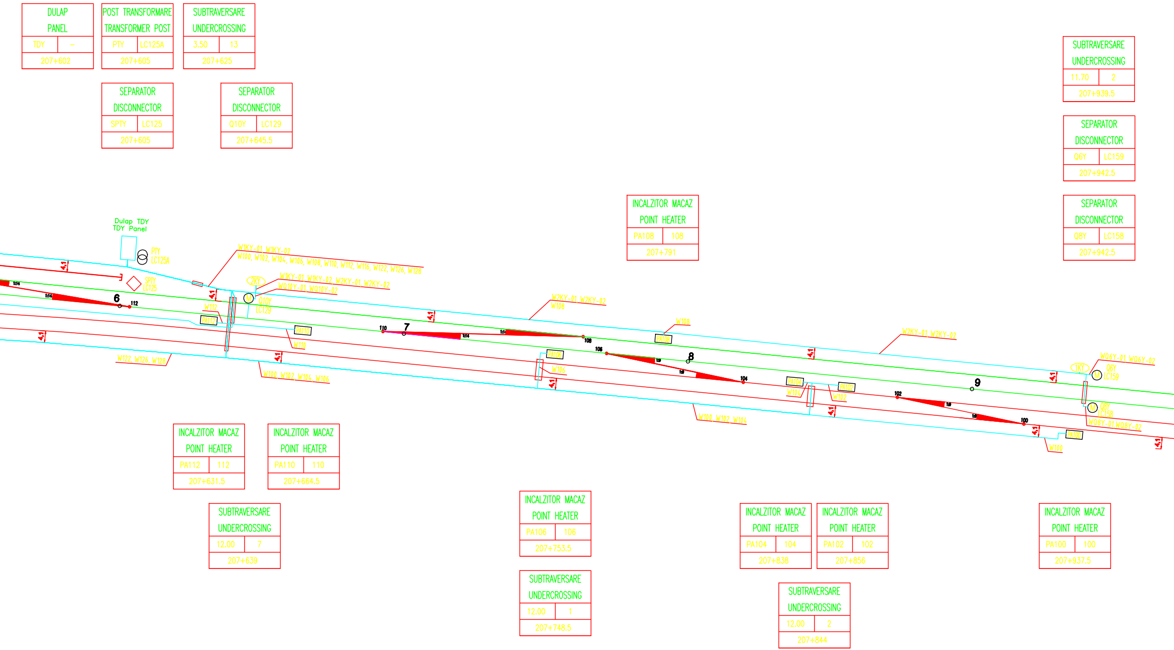
INCALZITOR MACAZ POINT HEATER	
PA128	128
207+292.5	

INCALZITOR MACAZ POINT HEATER	
PA126	126
207+373.5	

INCALZITOR MACAZ POINT HEATER	
PA122	122
207+385.5	

SUBTRAVERSARE UNDERCROSSING	
14.00	2
207+379.5	

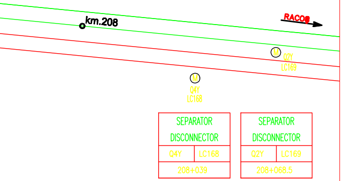
INCALZITOR MACAZ POINT HEATER	
PA116	116
207+507.5	



Dulap TDY
TDY Panel
PTY
LC125A
SPTY
LC125
W1KY-01, W1KY-02
W100, W102, W104, W106, W108, W110, W112, W116, W122, W126, W128
2KY
W1KY-01, W1KY-02, W2KY-01, W2KY-02
WQ10Y-01, WQ10Y-02
M
Q10Y
LC129
W112
PA112
PA110
W110
W122, W126, W128
W100, W102, W104, W106
4,1
1:14
6
112
110
7
1:14
1:14
108
W2KY-01, W2KY-02
W108
W108
PA108
106
1:9
8
1:9
104
PA106
W106
W100, W102, W104
PA104
W104
PA102
W102
W2KY-01, W2KY-02
102
1:9
9
1:9
100
1KY
WQ6Y-01, WQ6Y-02
M
Q6Y
LC159
M
Q8Y
LC158
WQ8Y-01,WQ8Y-02
PA100
W100

DULAP	PANEL	TDY	–	207+602
POST TRANSFORMARE	TRANSFORMER POST	PTY	LC125A	207+605
SUBTRAVERSARE	UNDERCROSSING	3.50	13	207+625
SEPARATOR	DISCONNECTOR	SPTY	LC125	207+605
SEPARATOR	DISCONNECTOR	Q10Y	LC129	207+645.5
INCALZITOR MACAZ	POINT HEATER	PA108	108	207+791
SUBTRAVERSARE	UNDERCROSSING	11.70	2	207+939.5
SEPARATOR	DISCONNECTOR	Q6Y	LC159	207+942.5
SEPARATOR	DISCONNECTOR	Q8Y	LC158	207+942.5
INCALZITOR MACAZ	POINT HEATER	PA112	112	207+631.5
INCALZITOR MACAZ	POINT HEATER	PA110	110	207+664.5
SUBTRAVERSARE	UNDERCROSSING	12.00	7	207+639
INCALZITOR MACAZ	POINT HEATER	PA106	106	207+753.5
SUBTRAVERSARE	UNDERCROSSING	12.00	1	207+748.5
INCALZITOR MACAZ	POINT HEATER	PA104	104	207+838
INCALZITOR MACAZ	POINT HEATER	PA102	102	207+856
SUBTRAVERSARE	UNDERCROSSING	12.00	2	207+844
INCALZITOR MACAZ	POINT HEATER	PA100	100	207+937.5

CABLE DESCRIPTION


km.208
RACOȘ
M
Q2Y
LC169
M
Q4Y
LC168
SEPARATOR
DISCONNECTOR
Q4Y
LC168
208+039
SEPARATOR
DISCONNECTOR
Q2Y
LC169
208+068.5

DISCONNECTORS REMOTE CONTROL

Nr. No	De la From	La To	Tip Type	ID	Lungime Length	Descriere Description
1	Tablou CDS DRC Panel	2KX	CYAbY 2x35 mm^2	W2KX-01	875	alimentare motor şi încălzire motor power-supply and heating
2	Tablou CDS DRC Panel	2KX	CSYEAbY 27x1,5 mm^2	W2KX-02	875	comandă şi semnalizare / comand and signaling
3	2KX	1KX	CYABY 2x35 mm^2	W1KX-01	250	alimentare motor şi încălzire motor power-supply and heating
4	2KX	1KX	CSYEAbY 27x1,5 mm^2	W1KX-02	250	comandă şi semnalizare / comand and signaling
5	2KX	Q5X	CYAbY 2x6 mm^2	WQ5X-01	20	alimentare şi încălzire Q5X power-supply and heating for disconnector Q5X
6	2KX	Q5X	CSYEAbY 12x1,5 mm^2	WQ5X-02	20	comandă şi semnalizare separator Q5X comand and signaling for disconnector Q5X
7	1KX	Q1X	CYAbY 2x6 mm^2	WQ1X-01	20	alimentare şi încălzire Q1X power-supply and heating for disconnector Q1X
8	1KX	Q1X	CSEYAbY 12x1,5 mm^2	WQ1X-02	20	comandă şi semnalizare separator Q1X comand and signaling for disconnector Q1X
9	1KX	Q3X	CYAbY 2x6 mm^2	WQ3X-01	20	alimentare şi încălzire Q3X power-supply and heating for disconnector Q3X
10	1KX	Q3X	CSYEAbY 12x1,5 mm^2	WQ3X-02	20	comandă şi semnalizare separator Q3X comand and signaling for disconnector Q3X
11	Tablou CDS DRC Panel	Q1T	CYAbY 2x10 mm^2	WQ1T-01	375	alimentare şi încălzire Q1T power-supply and heating for disconnector Q1T
12	Tablou CDS DRC Panel	Q1T	CSYEAbY 5x2.5 mm^2	WQ1T-02	375	comandă şi semnalizare separator Q1T comand and signaling for disconnector Q1T
13	Tablou CDS DRC Panel	Q2T	CYAbY 2x16 mm^2	WQ1T-01	275	alimentare şi încălzire Q2T power-supply and heating for disconnector Q2T
14	Tablou CDS DRC Panel	Q2T	CSYEAbY 21x1,5 mm^2	WQ1T-02	275	comandă şi semnalizare separator Q2T comand and signaling for disconnector Q2T
15	Tablou CDS DRC Panel	2KY	CYAbY 2x25 mm^2	W2KY-01	650	alimentare motor şi încălzire motor power-supply and heating
16	Tablou CDS DRC Panel	2KY	CSYEAbY 27x1,5 mm^2	W2KY-02	650	comandă şi semnalizare / comand and signaling
17	2KY	1KY	CYABY 2x25 mm^2	W1KY-01	400	alimentare motor şi încălzire motor power-supply and heating
18	2KY	1KY	CSYEAbY 21x1,5 mm^2	W1KY-02	400	comandă şi semnalizare / comand and signaling
19	1KY	Q6Y	CYAbY 2x6 mm^2	WQ6Y-01	20	alimentare şi încălzire Q6Y power-supply and heating for disconnector Q6Y
20	1KY	Q6Y	CSYEAbY 12x1,5 mm^2	WQ6Y-02	20	comandă şi semnalizare separator Q6Y comand and signaling for disconnector Q6Y
21	1KY	Q8Y	CYAbY 2x6 mm^2	WQ8Y-01	20	alimentare şi încălzire Q8Y power-supply and heating for disconnector Q8Y
22	1KY	Q8Y	CSYEAbY 12x1,5 mm^2	WQ8Y-02	20	comandă şi semnalizare separator Q8Y comand and signaling for disconnector Q8Y
23	2KY	Q10Y	CYAbY 2x6 mm^2	WQ10Y-01	20	alimentare şi încălzire Q8Y power-supply and heating for disconnector Q8Y
24	2KY	Q10Y	CSYEAbY 12x1,5 mm^2	WQ10Y-02	20	comandă şi semnalizare separator Q10Y comand and signaling for disconnector Q10Y
25	PT-CED	tablou CED/IS panel	CYAbY 3x120 mm^2	WT1	150	alimentare tablou distributie rezerva CED power supply distribution panel IS

POINT HEATERS

Nr. No.	De la From	La To	Tip cablu Cable type	Lungime Length
1	Panou CDS	TDX	CSYEAbY 12x1,5mmp	950
2	PTX	TDX	CYAbY 3x70mmp	150
3	TDX	PA101	CYAbY 2x25mmp	180
4	TDX	PA103	CYAbY 2x25mmp	100
5	TDX	PA105	CYAbY 2x25mmp	20
6	TDX	PA107	CYAbY 2x25mmp	100
7	TDX	PA109	CYAbY 2x25mmp	180
8	TDX	PA111	CYAbY 2x16mmp	170
9	TDX	PA113	CYAbY 2x25mmp	260
10	PA101	UT	MCGI 2x4mmp	10
11	PA101	UT	MCGI 2x4mmp	10
12	PA103	UT	MCGI 2x4mmp	10
13	PA103	UT	MCGI 2x4mmp	10
14	PA105	UT	MCGI 2x4mmp	10
15	PA105	UT	MCGI 2x4mmp	10
16	PA107	UT	MCGI 2x4mmp	10
17	PA107	UT	MCGI 2x4mmp	10
18	PA109	UT	MCGI 2x4mmp	10
19	PA109	UT	MCGI 2x4mmp	10
20	PA111	UT	MCGI 2x4mmp	10
21	PA111	UT	MCGI 2x4mmp	10
22	PA113	UT	MCGI 2x4mmp	20
23	PA113	UT	MCGI 2x4mmp	20
24	Panou CDS	TDY	CSYEAbY 12x1,5mmp	430
25	PTY	TDY	CYAbY 3x150mmp	150
26	TDY	PA100	CYAbY 2x25mmp	370
27	TDY	PA102	CYAbY 2x25mmp	310
28	TDY	PA104	CYAbY 2x25mmp	260
29	TDY	PA106	CYAbY 2x16mmp	200
30	TDY	PA108	CYAbY 2x25mmp	180
31	TDY	PA110	CYAbY 2x25mmp	120
32	TDY	PA112	CYAbY 2x25mmp	40
33	TDY	PA114	CYAbY 2x25mmp	100
34	TDY	PA116	CYAbY 2x16mmp	150
35	TDY	PA120	CYAbY 2x25mmp	190
36	TDY	PA122	CYAbY 2x25mmp	250
37	TDY	PA126	CYAbY 2x25mmp	290
38	TDY	PA128	CYAbY 2x25mmp	350
39	PA100	UT	MCGI 2x4mmp	10
40	PA100	UT	MCGI 2x4mmp	10
41	PA102	UT	MCGI 2x4mmp	10
42	PA102	UT	MCGI 2x4mmp	10
43	PA104	UT	MCGI 2x4mmp	10
44	PA104	UT	MCGI 2x4mmp	10
45	PA106	UT	MCGI 2x4mmp	10
46	PA106	UT	MCGI 2x4mmp	10
47	PA108	UT	MCGI 2x4mmp	10
48	PA108	UT	MCGI 2x4mmp	10
49	PA110	UT	MCGI 2x4mmp	10
50	PA110	UT	MCGI 2x4mmp	10
51	PA112	UT	MCGI 2x4mmp	10
52	PA112	UT	MCGI 2x4mmp	10
53	PA114	UT	MCGI 2x4mmp	10
54	PA114	UT	MCGI 2x4mmp	10
55	PA116	UT	MCGI 2x4mmp	10
56	PA116	UT	MCGI 2x4mmp	10
57	PA120	UT	MCGI 2x4mmp	10
58	PA120	UT	MCGI 2x4mmp	10
59	PA122	UT	MCGI 2x4mmp	10
60	PA122	UT	MCGI 2x4mmp	10
61	PA126	UT	MCGI 2x4mmp	10
62	PA126	UT	MCGI 2x4mmp	10
63	PA128	UT	MCGI 2x4mmp	10
64	PA128	UT	MCGI 2x4mmp	10
65	PTX	BJ1	CYABY 1x50mmp	60
66	PTY	BJ2	CYABY 1x50mmp	60

Descriere Description
comanda si semnalizare/control and signalling
alimentare / power supply
alimentare / power supply
alimentare / power supply
alimentare / power supply
alimentare / power supply
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comanda si semnalizare/control and signalling
alimentare / power supply
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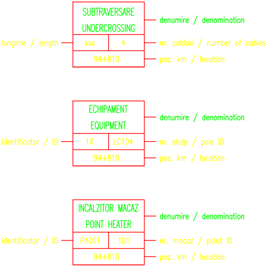
alimentare / power supply
alimentare / power supply
circuit de retur/ retur circuit
circuit de retur/ retur circuit


SUBTRAVERSARE
UNDERCROSSING
denumire / denomination
lungime / length
xxx
4
nr. cabluri / number of cables
94+810
poz. km / location
ECHIPAMENT
EQUIPMENT
denumire / denomination
identificator / ID
1X
LC104
nr. stalp / pole ID
94+810
poz. km / location
INCALZITOR MACAZ
POINT HEATER
denumire / denomination
identificator / ID
PA101
101
nr. macaz / point ID
94+810
poz. km / location

Legenda/Legend:

Cabluri	—	Cables
	▭	Rail undercrossing in PVC tube
Cutie distributie	1KX	Distribution box
Dispozitiv electric	Ⓜ	Eletrical operating device
Dispozitiv manual	◇	Manual operating device
Post transformare	⚭	Transformer post
Cutie aparataj	PA106	Equipment box
Cod identificare cablu	W101, W103.......	Cable ID
Numar separator si stalpul pe care este montat	Q4Y LC180	Disconnector number and pole on which is mounted

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

GUVERNUL ROMANIEI
MANIAN GOVERNMENT

PROIECT FINANŢAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

CFR

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

CLIENT / CLIENT

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	11.2011	
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli	11.2011	
Verificat Checked	Expert Verificator Checking Expert	G. Bulfarini	11.2011	

SUBCONTRACTANT / SUBCONTRACTOR

AREX COMPANY

Aprobat Approved	Responsabil Subcontractant Subcontractor Responsible	A.Stanciu - Dinulescu	11.2011	
Întocmit Elaborated	Proiectant Designer	M. Priporeanu	11.2011	

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:
D.E. / E.D.

Denumire desen / Drawing Title :

Staţia c.f APAŢA/ APAŢA railway station
Plan trasee cabluri exterioare / Plan for outdoor cable routes

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

E A 5 1 | 0 1 | E | 0 9 | D X | E G | 0 0 | 5 | 5 | 0 0 5 | 0

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