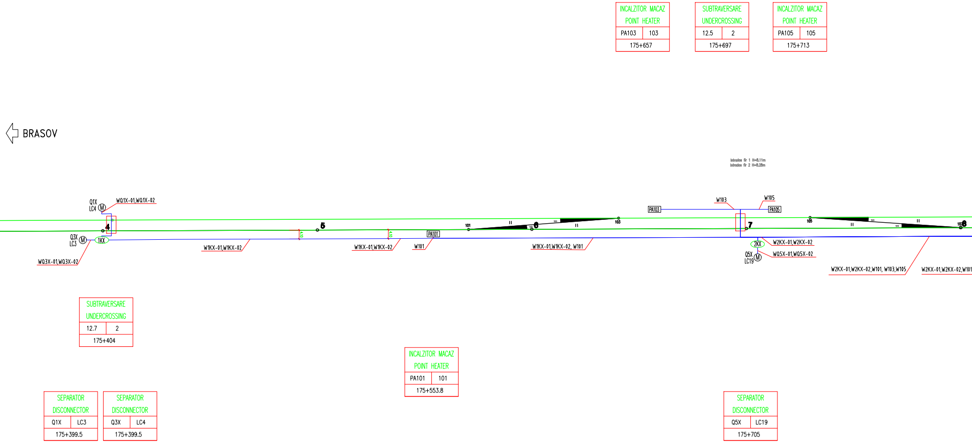

INCALZITOR MACAZ
POINT HEATER
PA103
103
175+657
SUBTRAVERSARE
UNDERCROSSING
12.5
2
175+697
INCALZITOR MACAZ
POINT HEATER
PA105
105
175+713
BRASOV
Intrados fir 1 H=8.11m
Intrados fir 2 H=8.28m
Q1X
LC4
M
WQ1X-01,WQ1X-02
4
5
101
6
103
PA103
W103
W105
PA105
7
105
107
8
Q3X
LC3
M
1KX
4.10
4.10
PA101
W1KX-01,W1KX-02
W1KX-01,W1KX-02
W101
W1KX-01,W1KX-02, W101
2KX
W2KX-01,W2KX-02
Q5X
LC19
M
WQ5X-01,WQ5X-02
W2KX-01,W2KX-02,W101, W103,W105
W2KX-01,W2KX-02,W101
WQ3X-01,WQ3X-02
SUBTRAVERSARE
UNDERCROSSING
12.7
2
175+404
INCALZITOR MACAZ
POINT HEATER
PA101
101
175+553.8
SEPARATOR
DISCONNECTOR
Q1X
LC3
175+399.5
SEPARATOR
DISCONNECTOR
Q3X
LC4
175+399.5
SEPARATOR
DISCONNECTOR
Q5X
LC19
175+705

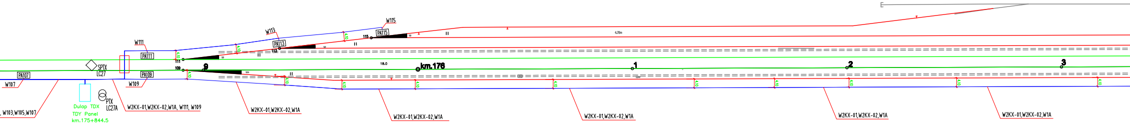
Statia STUPINI/ STUPINI Station

SUBTRAVERSARE	
UNDERCROSSING	
12.5	2
175+863	

INCALZITOR MACAZ	
POINT HEATER	
PA111	111
175+873.9	

INCALZITOR MACAZ	
POINT HEATER	
PA113	113
175+936	

INCALZITOR MACAZ	
POINT HEATER	
PA115	115
175+982	


W111
PA111
W113
PA113
W115
PA115
115
113
111
109
9
18.0
km.176
1
2
3
4.10
SPTX
LC27
PA107
W107
PA109
W109
PTX
LC27A
Dulap TDX
TDY Panel
km.175+844.5
, W103,W105,W107
W2KX-01,W2KX-02,W1A, W111, W109
W2KX-01,W2KX-02,W1A
W2KX-01,W2KX-02,W1A
W2KX-01,W2KX-02,W1A
W2KX-01,W2KX-02,W1A
W2KX-01,W2KX-02,W1A

INCALZITOR MACAZ	
POINT HEATER	
PA107	107
175+816.3	

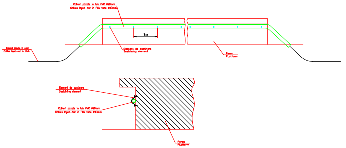
INCALZITOR MACAZ	
POINT HEATER	
PA109	109
175+873.9	

SEPARATOR	
DISCONNECTOR	
SPTX	LC27
175+844.5	

POST TRANSFORMARE	
TRANSFORMER POST	
PTX	LC27A
175+844.5	

DULAP	
PANEL	
TDX	–
175+844.5	

Schita pozarii cablurilor in zona peronului
Draft of cables laying-out in platform area
km. 176+429 ... km. 176+529


Cabluri pozate in tub PVC #90mm
Cables layed-out in PCV tube #90mm
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 #90mm
Cables layed-out in PCV tube #90mm
Peron
PLatform

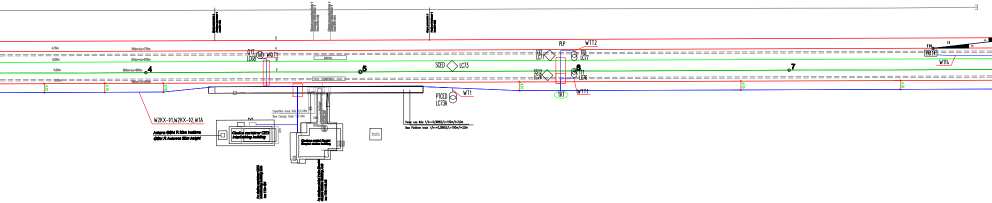
INCALZITOR MACAZ POINT HEATER	
PA114	114
176+769	

SEPARATOR DISCONNECTOR	
Q1T	LC68
176+453	

SUBTRAVERSARE UNDERCROSSING	
14.3	1
176+456	

SUBTRAVERSARE UNDERCROSSING	
6.7	1
176+593.5	

SUBTRAVERSARE UNDERCROSSING	
11.6	1
176+593.5	


5
4
4.75m
750m=Lu=775m
5.00m
915m=Lu=935m
5.00m
880m=Lu=880m
4
3.00m
880m=Lu=870m
4.10
4.10
4.10
Q1T
LC68
WQT1
peron
peron
5
W2KX-01,W2KX-02,W1A
Antena GSM R 20m inaltime
GSM R Antenna 20m height
Cladire container CED
Interlocking building
Copertina noua linia 1/L=8m
New Canopy track 1/L=8m
trotuar
Cladire statie Bogdan
Bogdan station building
trafo
SCED
LC73
PTCED
LC73A
WT1
Peron nou linia 1/h=+0,38NSS/L=100m/l=3,0m
New Platform track 1/h=+0,38NSS/L=100m/l=3,0m
PLP
WTT2
S12
LC77
TT2
LC77
SS12
LC76
6
TT1
LC76
1KT
WTT1
4.10
7
4.10
4.10
114
PA114
W114

SUBTRAVERSARE UNDERCROSSING	
8	2
176+470.7	

SEPARATOR DISCONNECTOR	
SCED	LC73
176+453	

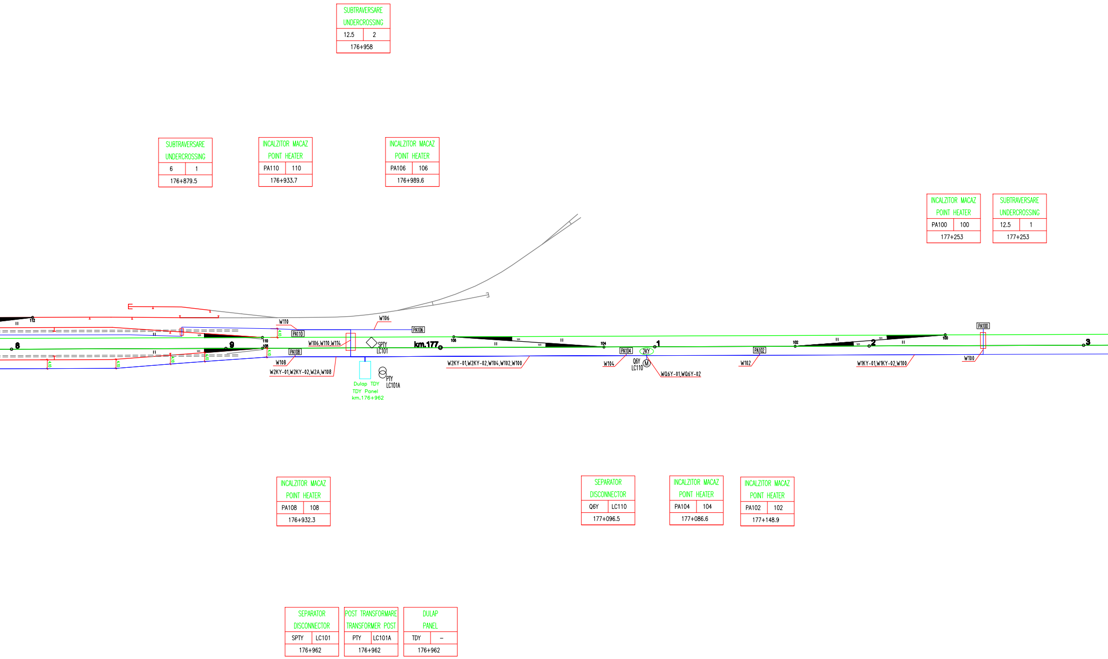
POST TRANSFORMARE TRANSFORMER POST	
PTCED	LC73A
176+453	

SEPARATOR DISCONNECTOR	
S12	LC77
176+588	

POST TRANSFORMARE TRANSFORMER POST	
TT2	LC77
176+588	

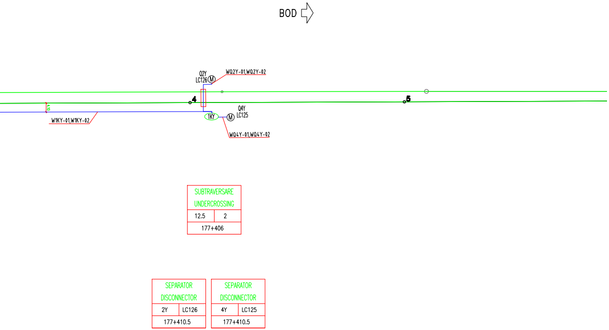
SEPARATOR DISCONNECTOR	
SS12	LC76
176+588	

POST TRANSFORMARE TRANSFORMER POST	
TT1	LC76
176+588	


SUBTRAVERSARE
UNDERCROSSING
12.5 2
176+958
SUBTRAVERSARE
UNDERCROSSING
6 1
176+879.5
INCALZITOR MACAZ
POINT HEATER
PA110 110
176+933.7
INCALZITOR MACAZ
POINT HEATER
PA106 106
176+989.6
INCALZITOR MACAZ
POINT HEATER
PA100 100
177+253
SUBTRAVERSARE
UNDERCROSSING
12.5 1
177+253
112
W110
W106
PA110
PA106
110
108
8
9
4.10
W106,W110,W114
SPTY
LC101
km.177
106
104
1
102
2
100
3
PA100
PA108
W108
W2KY-01,W2KY-02,W2A,W108
Dulap TDY
TDY Panel
km.176+962
PTY
LC101A
W2KY-01,W2KY-02,W104,W102,W100
PA104
2KY
W104
Q6Y
LC110
M
WQ6Y-01,WQ6Y-02
PA102
W102
W1KY-01,W1KY-02,W100
W100
INCALZITOR MACAZ
POINT HEATER
PA108 108
176+932.3
SEPARATOR
DISCONNECTOR
Q6Y LC110
177+096.5
INCALZITOR MACAZ
POINT HEATER
PA104 104
177+086.6
INCALZITOR MACAZ
POINT HEATER
PA102 102
177+148.9
SEPARATOR
DISCONNECTOR
SPTY LC101
176+962
POST TRANSFORMARE
TRANSFORMER POST
PTY LC101A
176+962
DULAP
PANEL
TDY –
176+962

CABLE

DISCONNECTORS REMOTE CONTROL

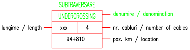

BOD
Q2Y
LC126
M
WQ2Y-01,WQ2Y-02
4
5
4.10
W1KY-01,W1KY-02
1KY
M
Q4Y
LC125
WQ4Y-01,WQ4Y-02
SUBTRAVERSARE
UNDERCROSSING
12.5
2
177+406
SEPARATOR
DISCONNECTOR
2Y
LC126
177+410.5
SEPARATOR
DISCONNECTOR
4Y
LC125
177+410.5

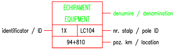
Nr. No	De la From	La To	Tip Type	ID	Lungime Leght [m]	Descriere Description
1	Tablou CDS DRC Panel	2KX	CYAbY 2x35 mm^2	W2KX-01	800	alimentare motor şi încălzire motor power-supply and heating
2	Tablou CDS DRC Panel	2KX	CSYAbY 27x1,5 mm^2	W2KX-02	800	comandă şi semnalizare / comand and signaling
3	2KX	1KX	CYABY 2x35 mm^2	W1KX-01	350	alimentare motor şi încălzire motor power-supply and heating
4	2KX	1KX	CSYAbY 27x1,5 mm^2	W1KX-02	350	comandă şi semnalizare / comand and signaling
5	1KX	Q1X	CYAbY 2x6 mm^2	WQ1X-01	20	alimentare şi încălzire Q1X power-supply and heating for disconnector Q1X
6	1KX	Q1X	CSYAbY 12x1,5 mm^2	WQ1X-02	20	comandă şi semnalizare separator Q1X comand and signaling for disconnector Q1X
7	1KX	Q3X	CYAbY 2x6 mm^2	WQ3X-01	15	alimentare şi încălzire Q3X power-supply and heating for disconnector Q3X
8	1KX	Q3X	CSYAbY 12x1,5 mm^2	WQ3X-02	15	comandă şi semnalizare separator Q3X comand and signaling for disconnector Q3X
9	2KX	Q5X	CYAbY 2x6 mm^2	WQ5X-01	15	alimentare şi încălzire Q5X power-supply and heating for disconnector Q5X
10	2KX	Q5X	CSYAbY 12x1,5 mm^2	WQ5X-02	15	comandă şi semnalizare separator Q5X comand and signaling for disconnector Q5X
11	PT-CED	tablou CED/IS panel	CYAbY 3x120 mm^2	WT1	250	alimentare tablou distributie rezerva CED power supply distribution panel IS
12	Tablou CDS DRC Panel	Q1T	CSYAbY 12x1,5 mm^2	WQ1T-02	50	comandă şi semnalizare separator Q1T comand and signaling for disconnector Q1T
13	Tablou CDS DRC Panel	Q1T	CYAbY 2x10 mm^2	WQ1T-01	50	alimentare şi încălzire Q1T power-supply and heating for disconnector Q1T
14	Tablou CDS DRC Panel	TT1	CSYAbY 12x1,5 mm^2	WTT1	100	comandă şi semnalizare separator Q2T comand and signaling for disconnector Q2T
15	Tablou CDS DRC Panel	TT2	CYAbY 2x10 mm^2	WTT2	100	alimentare şi încălzire Q2T power-supply and heating for disconnector Q2T
16	Tablou CDS DRC Panel	1KT	CYAbY 2x25 mm^2	W1KT-01	100	alimentare motor şi încălzire motor power-supply and heating
17	Tablou CDS DRC Panel	1KT	CSYAbY 27x1,5 mm^2	W1KT-02	100	comandă şi semnalizare / comand and signaling
18	1KT	SS12	CYABY 2x6 mm^2	WSS12-01	25	alimentare motor şi încălzire motor power-supply and heating
19	1KT	SS12	CSYAbY 12x1,5 mm^2	WSS12-02	25	comandă şi semnalizare / comand and signaling
20	1KT	S12	CYABY 2x6 mm^2	WS12-01	20	alimentare motor şi încălzire motor power-supply and heating
21	1KT	S12	CSYAbY 12x1,5 mm^2	WS12-02	20	comandă şi semnalizare / comand and signaling
22	Tablou CDS DRC Panel	2KY	CYAbY 2x16 mm^2	W2KY-01	600	alimentare motor şi încălzire motor power-supply and heating
23	Tablou CDS DRC Panel	2KY	CSYAbY 27x1,5 mm^2	W2KY-02	600	comandă şi semnalizare / comand and signaling
24	2KY	1KY	CYABY 2x6 mm^2	W1KY-01	350	alimentare motor şi încălzire motor power-supply and heating
25	2KY	1KY	CYABY 12x1,5 mm^2	W1KY-02	350	alimentare motor şi încălzire motor power-supply and heating
26	1KY	Q2Y	CYAbY 2x6 mm^2	WQ2Y-01	20	alimentare şi încălzire Q2Y power-supply and heating for disconnector Q2Y
27	1KY	Q2Y	CSYAbY 12x1,5 mm^2	WQ2Y-02	20	comandă şi semnalizare separator Q2Y comand and signaling for disconnector Q2Y
28	1KY	Q4Y	CYAbY 2x6 mm^2	WQ4Y-01	15	alimentare şi încălzire Q4Y power-supply and heating for disconnector Q4Y
29	1KY	Q4Y	CSYAbY 12x1,5 mm^2	WQ4Y-02	15	comandă şi semnalizare separator Q4Y comand and signaling for disconnector Q4Y
30	2KY	Q6Y	CYAbY 2x6 mm^2	WQ6Y-01	20	alimentare şi încălzire Q6Y power-supply and heating for disconnector Q6Y
31	2KY	Q6Y	CSYAbY 12x1,5 mm^2	WQ6Y-02	20	comandă şi semnalizare separator Q6Y comand and signaling for disconnector Q6Y
32	TT1	BJ1	CYAbY 1x50 mm^2	WBJ1	30	Circuit retur/Retur circuit
33	TT2	BJ2	CYAbY 1x50 mm^2	WBJ2	30	Circuit retur/Retur circuit

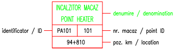
DESCRIPTION

POINT HEATERS

	De la From	La To	Tip Type	ID	Lungime Length(m	Descriere Description
1	IDM	TDX	CSYAbY 12x1,5 mm^2	W1A	750	comandă şi semnalizare / comand and signaling
2	PTx	TDX	CYAbY 3x95 mm^2	WTDX	150	alimentare tablou distributie TDX power-supply for distribution box TDX
3	TDX	macaz / point 101	CYAbY 2x35 mm^2	W101	290	alimentare macaz 101 / power-supply for point 101
4	TDX	macaz / point 103	CYAbY 2x25 mm2	W103	230	alimentare macaz 103 / power-supply for point 103
5	TDX	macaz / point 105	CYAbY 2x25 mm2	W105	140	alimentare macaz 105 / power-supply for point 105
6	TDX	macaz / point 107	CYAbY 2x25 mm2	W107	60	alimentare macaz 107 / power-supply for point 107
7	TDX	macaz / point 109	CYAbY 2x25 mm2	W109	60	alimentare macaz 109 / power-supply for point 109
8	TDX	macaz / point 111	CYAbY 2x16 mm^2	W111	70	alimentare macaz 111 / power-supply for point 111
9	TDX	macaz / point 113	CYAbY 2x16 mm^2	W113	130	alimentare macaz 113 / power-supply for point 113
10	TDX	macaz / point 115	CYAbY 2x16 mm^2	W115	180	alimentare macaz 115 / power-supply for point 115
11	IDM	TDY	CSYAbY 12x1,5 mm^2	W2A	450	comandă şi semnalizare / comand and signaling
12	Pty	TDY	CYAbY 3x95 mm^2	WTDY	150	alimentare tablou distributie TDY power-supply for distribution box TDY
13	TDY	macaz / point 100	CYAbY 2x35 mm2	W100	300	alimentare macaz 100 / power-supply for point 100
14	TDY	macaz / point 102	CYAbY 2x25 mm2	W102	220	alimentare macaz 102 / power-supply for point 102
15	TDY	macaz / point 104	CYAbY 2x25 mm2	W104	130	alimentare macaz 104 / power-supply for point 104
16	TDY	macaz / point 106	CYAbY 2x25 mm2	W106	70	alimentare macaz 106 / power-supply for point 106
17	TDY	macaz / point 108	CYAbY 2x25 mm2	W108	60	alimentare macaz 108 / power-supply for point 108
18	TDY	macaz / point 110	CYAbY 2x25 mm2	W110	70	alimentare macaz 110 / power-supply for point 110
19	TDY	macaz / point 114	CYAbY 2x25 mm2	W114	230	alimentare macaz 114 / power-supply for point 114


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
Subtraversare c.f. in tub de PVC	▭	Rail undercrossing in PVC tube
Cutie distributie	1K	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	4Y 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
ROMANIAN GOVERNMENT

PROIECT FINANŢAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

CLIENT / CLIENT

CFR

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	11.2011	
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli	11.2011	
Verificat Checked	Expert Verificator Checking Expert	G. Buffarini	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 Stupini/ Stupini railway station
Plan trasee cabluri exterioare / Plan for outdoor cable routes

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

EA51 01 E 03 DX EG 00 2 5 005 0

420X3123