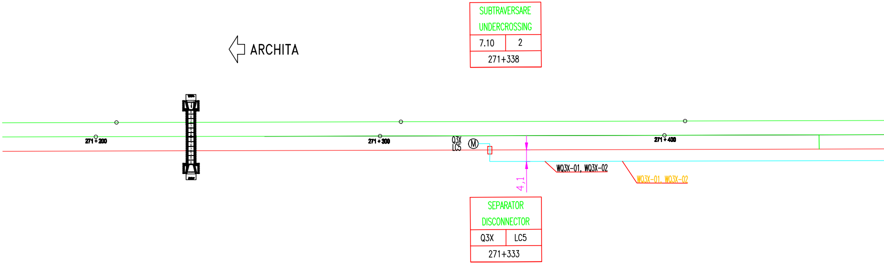
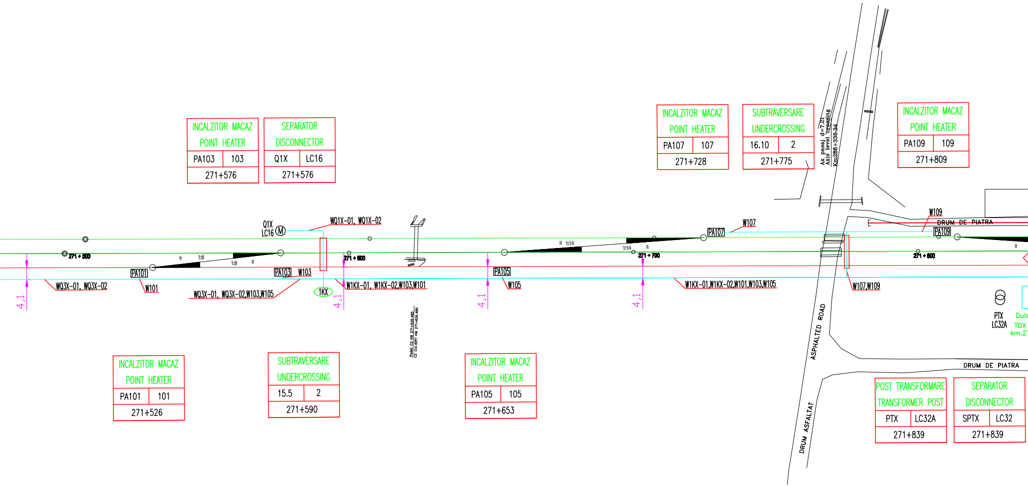
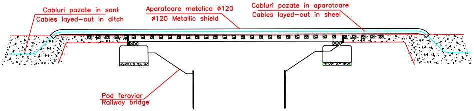
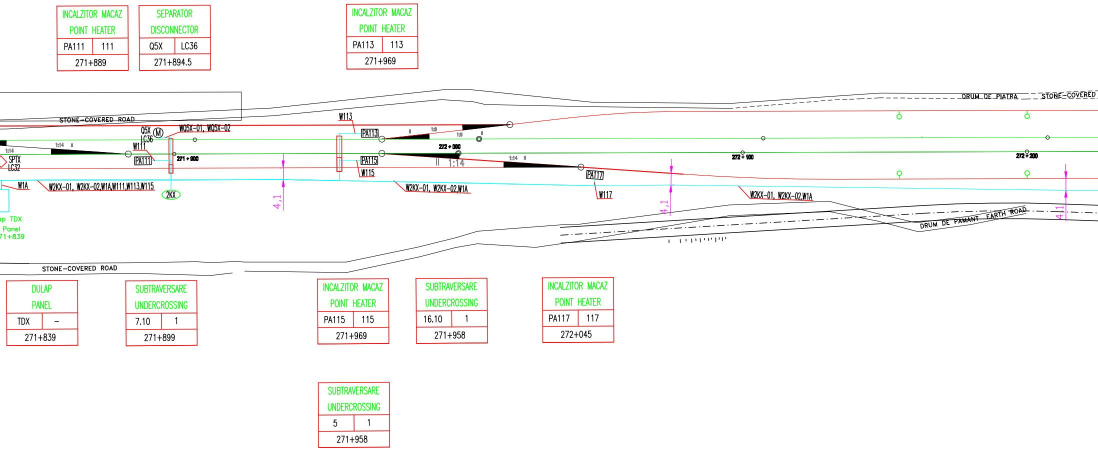

ARCHITA
SUBTRAVERSARE
UNDERCROSSING
7.10
2
271+338
271 + 200
271 + 300
271 + 400
Q3X
LC5
M
4,1
WQ3X-01, WQ3X-02
WQ3X-01, WQ3X-02
SEPARATOR
DISCONNECTOR
Q3X
LC5
271+333


INCALZITOR MACAZ
POINT HEATER
PA103 103
271+576
SEPARATOR
DISCONNECTOR
Q1X LC16
271+576
INCALZITOR MACAZ
POINT HEATER
PA107 107
271+728
SUBTRAVERSARE
UNDERCROSSING
16.10 2
271+775
Ax pasaj d=7.21
Axis level crossing
Km288+336.34
INCALZITOR MACAZ
POINT HEATER
PA109 109
271+809
Q1X
LC16
WQ1X-01, WQ1X-02
W107
PA107
W109
DRUM DE PIATRA
PA109
1:14
1:14
271 + 500
1:9
1:9
PA101
PA103
W103
271 + 600
PA105
271 + 700
271 + 800
WQ3X-01, WQ3X-02
W101
WQ3X-01, WQ3X-02,W103,W105
1KX
W1KX-01, W1KX-02,W103,W101
W105
W1KX-01,W1KX-02,W101,W103,W105
W107,W109
4,1
4,1
4,1
4,1
Podet C2 KM 271+626.485
C2 CULVERT KM 271+626.485
ASPHALTED ROAD
DRUM ASFALTAT
PTX
LC32A
Dul
TDX
km.27
DRUM DE PIATRA
INCALZITOR MACAZ
POINT HEATER
PA101 101
271+526
SUBTRAVERSARE
UNDERCROSSING
15.5 2
271+590
INCALZITOR MACAZ
POINT HEATER
PA105 105
271+653
POST TRANSFORMARE
TRANSFORMER POST
PTX LC32A
271+839
SEPARATOR
DISCONNECTOR
SPTX LC32
271+839

Pozarea cablurilor pe podul de la Km. 272+740.33, km. 273+111.22
Cables laying-out on bridge at Km. 272+740.33, km. 273+111.22


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

SUBTRAVERSARE UNDERCROSSING	
15.5	2
271+899	


STONE-COVERED ROAD
DRUM DE PIATRA
STONE-COVERED
Q5X
LC36
M
WQ5X-01, WQ5X-02
W111
PA111
1:14
SPTX
LC32
271 + 900
W1A
W2KX-01, W2KX-02,W1A,W111,W113,W115
2KX
4,1
ap TDX
Panel
71+839
W113
PA113
PA115
W115
1:9
1:9
272 + 000
1:14
1:14
PA117
W117
W2KX-01, W2KX-02,W1A
272 + 100
272 + 200
W2KX-01, W2KX-02,W1A
4,1
4,1
DRUM DE PAMANT EARTH ROAD
STONE-COVERED ROAD

INCALZITOR MACAZ POINT HEATER	
PA111	111
271+889	

SEPARATOR DISCONNECTOR	
Q5X	LC36
271+894.5	

INCALZITOR MACAZ POINT HEATER	
PA113	113
271+969	

DULAP PANEL	
TDX	–
271+839	

SUBTRAVERSARE UNDERCROSSING	
7.10	1
271+899	

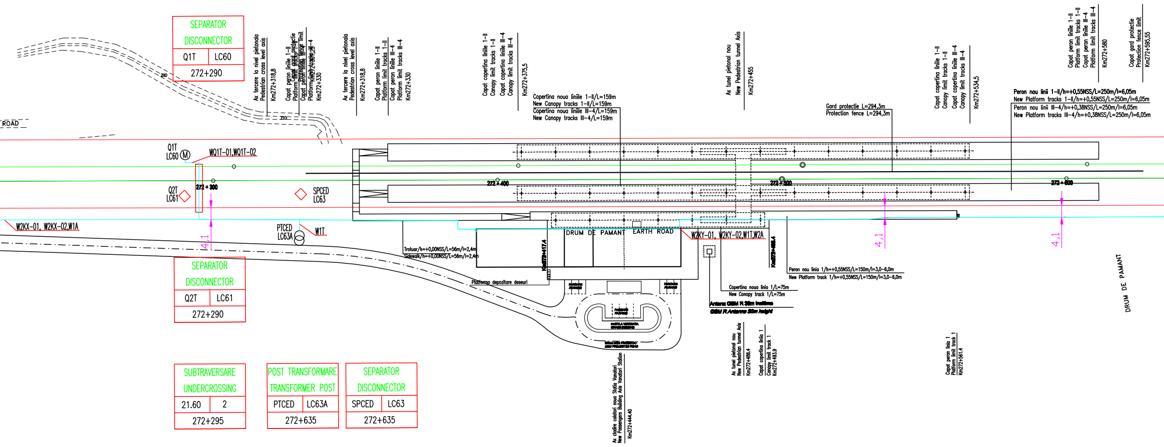
INCALZITOR MACAZ POINT HEATER	
PA115	115
271+969	

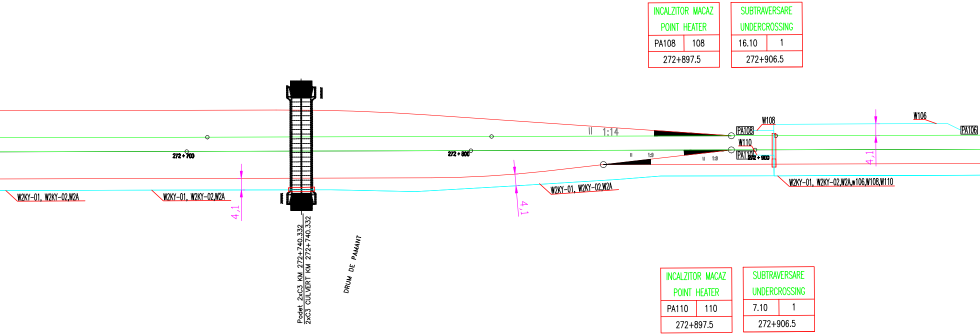
SUBTRAVERSARE UNDERCROSSING	
16.10	1
271+958	

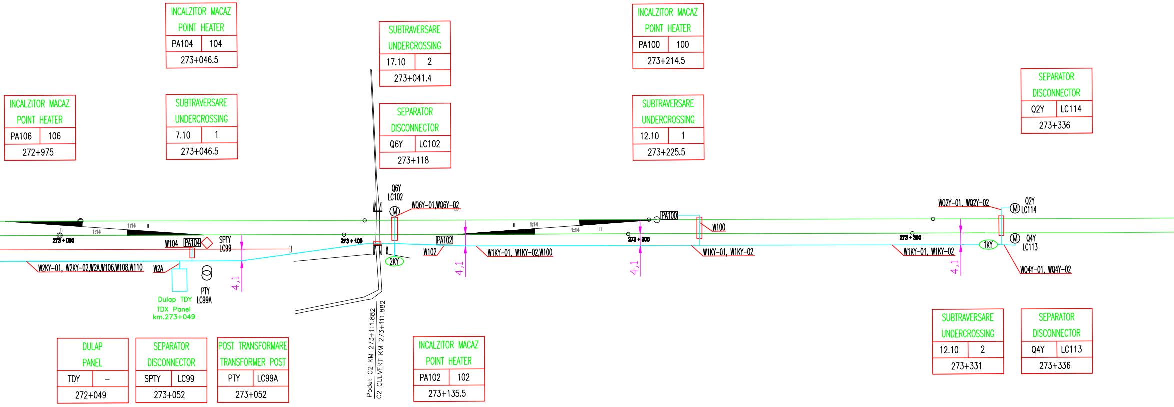
INCALZITOR MACAZ POINT HEATER	
PA117	117
272+045	

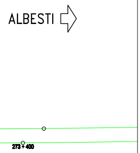
SUBTRAVERSARE UNDERCROSSING	
5	1
271+958	

Staţia Vânători/ Vânători Station


SEPARATOR
DISCONNECTOR
Q1T
LC60
272+290
ZID
ROAD
Ax tercere la nivel pietonala
Pedestrian cross level axis
Km272+318,8
Capat peron liniile 1–II
Platform limit tracks 1–II
Capat peron liniile III–4
Platform limit tracks III–4
Capat gard protectie
Protection fence limit
Km272+330
Ax tercere la nivel pietonala
Pedestrian cross level axis
Km272+318,8
Capat peron liniile 1–II
Platform limit tracks 1–II
Capat peron liniile III–4
Platform limit tracks III–4
Km272+330
Capat copertina liniile 1–II
Canopy limit tracks 1–II
Capat copertina liniile III–4
Canopy limit tracks III–4
Km272+375,5
Copertina noua liniile 1–II/L=159m
New Canopy tracks 1–II/L=159m
Copertina noua liniile III–4/L=159m
New Canopy tracks III–4/L=159m
Ax tunel pietonal nou
New Pedestrian tunnel Axis
Km272+455
Gard protectie L=294,3m
Protection fence L=294,3m
Capat copertina liniile 1–II
Canopy limit tracks 1–II
Capat copertina liniile III–4
Canopy limit tracks III–4
Km272+534,5
Capat peron liniile 1–II
Platform limit tracks 1–II
Capat peron liniile III–4
Platform limit tracks III–4
Km272+580
Capat gard protectie
Protection fence limit
Km272+595,55
Peron nou linii 1–II/h=+0,55NSS/L=250m/l=6,05m
New Platform tracks 1–II/h=+0,55NSS/L=250m/l=6,05m
Peron nou linii III–4/h=+0,38NSS/L=250m/l=6,05m
New Platform tracks III–4/h=+0,38NSS/L=250m/l=6,05m
Q1T
LC60
WQ1T-01,WQ1T-02
Q2T
LC61
272+300
SPCED
LC63
272+400
272+500
272+600
W2KX-01, W2KX-02,W1A
PTCED
LC63A
W1T
4,1
4,1
4,1
4,1
Trotuar/h=+0,00NSS/L=56m/l=2,4m
Sidewalk/h=+0,00NSS/L=56m/l=2,4m
Km272+417,4
DRUM DE PAMANT
EARTH ROAD
Platforma depozitare deseuri
W2KY-01, W2KY-02,W1T,W2A
Km272+486,4
Peron nou linia 1/h=+0,55NSS/L=150m/l=3,0–6,0m
New Platform track 1/h=+0,55NSS/L=150m/l=3,0–6,0m
Copertina noua linia 1/L=75m
New Canopy track 1/L=75m
Antena GSM R 30m inaltime
GSM R Antenna 30m height
DRUM DE PAMANT
SEPARATOR
DISCONNECTOR
Q2T
LC61
272+290
Ax cladire calatori noua Statia Vanatori
New Passengers Building Axis Vanatori Station
Km272+444.40
Ax tunel pietonal nou
New Pedestrian tunnel Axis
Km272+486.4
Capat copertina linia 1
Canopy limit track 1
Km272+493.9
Capat peron linia 1
Platform limit track 1
Km272+561.4
SUBTRAVERSARE
UNDERCROSSING
21.60
2
272+295
POST TRANSFORMARE
TRANSFORMER POST
PTCED
LC63A
272+635
SEPARATOR
DISCONNECTOR
SPCED
LC63
272+635


INCALZITOR MACAZ
POINT HEATER
PA108 108
272+897.5
SUBTRAVERSARE
UNDERCROSSING
16.10 1
272+906.5
W108
W106
PA108
PA106
1:14
W110
PA110
1:9
1:9
272 + 900
4,1
272 + 700
272 + 800
W2KY-01, W2KY-02,W2A
W2KY-01, W2KY-02,W2A
4,1
4,1
W2KY-01, W2KY-02,W2A
W2KY-01, W2KY-02,W2A,w106,W108,W110
Podet 2xC3 KM 272+740.332
2xC3 CULVERT KM 272+740.332
DRUM DE PAMANT
INCALZITOR MACAZ
POINT HEATER
PA110 110
272+897.5
SUBTRAVERSARE
UNDERCROSSING
7.10 1
272+906.5


INCALZITOR MACAZ
POINT HEATER
PA104 | 104
273+046.5
SUBTRAVERSARE
UNDERCROSSING
17.10 | 2
273+041.4
INCALZITOR MACAZ
POINT HEATER
PA100 | 100
273+214.5
SEPARATOR
DISCONNECTOR
Q2Y | LC114
273+336
INCALZITOR MACAZ
POINT HEATER
PA106 | 106
272+975
SUBTRAVERSARE
UNDERCROSSING
7.10 | 1
273+046.5
SEPARATOR
DISCONNECTOR
Q6Y | LC102
273+118
SUBTRAVERSARE
UNDERCROSSING
12.10 | 1
273+225.5
Q6Y
LC102
WQ6Y-01,WQ6Y-02
WQ2Y-01, WQ2Y-02
Q2Y
LC114
M
1:14
1:14
1:14
1:14
PA100
W100
273 + 000
273 + 100
273 + 200
273 + 300
W104
PA104
SPTY
LC99
PA102
W102
W1KY-01, W1KY-02,W100
W1KY-01, W1KY-02
W1KY-01, W1KY-02
1KY
Q4Y
LC113
WQ4Y-01, WQ4Y-02
W2KY-01, W2KY-02,W2A,W106,W108,W110
W2A
2KY
4,1
4,1
4,1
4,1
PTY
LC99A
Dulap TDY
TDX Panel
km.273+049
Podet C2 KM 273+111.882
C2 CULVERT KM 273+111.882
DULAP
PANEL
TDY | –
272+049
SEPARATOR
DISCONNECTOR
SPTY | LC99
273+052
POST TRANSFORMARE
TRANSFORMER POST
PTY | LC99A
273+052
INCALZITOR MACAZ
POINT HEATER
PA102 | 102
273+135.5
SUBTRAVERSARE
UNDERCROSSING
12.10 | 2
273+331
SEPARATOR
DISCONNECTOR
Q4Y | LC113
273+336


ALBESTI
273+400

POINT HEATERS

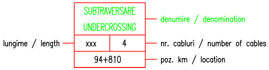
Nr. No	De la From	La To	Tip Type	ID	Lungime Length [m]	Descriere Description
1	Panoul DRC	TDX	CSYAbY 12x1,5 mm^2	W1A	850	comandă şi semnalizare / comand and signaling
2	PTx	TDX	CYAbY 3x95 mm^2	WTDX	150	alimentare tablou distributie TDX power-supply for distribution box TDX
3	TDX	macaz / point 101	CYAbY 2x25 mm^2	W101	330	alimentare macaz 101 / power-supply for point 101
4	TDX	macaz / point 103	CYAbY 2x25 mm^2	W103	290	alimentare macaz 103 / power-supply for point 103
5	TDX	macaz / point 105	CYAbY 2x25 mm^2	W105	200	alimentare macaz 105 / power-supply for point 105
6	TDX	macaz / point 107	CYAbY 2x25 mm^2	W107	150	alimentare macaz 107 / power-supply for point 107
7	TDX	macaz / point 109	CYAbY 2x25 mm^2	W109	70	alimentare macaz 109 / power-supply for point 109
8	TDX	macaz / point 111	CYAbY 2x25 mm^2	W111	60	alimentare macaz 111 / power-supply for point 111
9	TDX	macaz / point 113	CYAbY 2x16 mm^2	W113	180	alimentare macaz 113 / power-supply for point 113
10	TDX	macaz / point 115	CYAbY 2x25 mm^2	W115	170	alimentare macaz 115 / power-supply for point 115
11	TDX	macaz / point 117	CYAbY 2x25 mm^2	W117	230	alimentare macaz 117 / power-supply for point 117
12	macaz / point 101	UT	MCGI 2X4		10	alimentare macaz 101 / power-supply for point 101
13	macaz / point 101	UT	MCGI 2X4		10	alimentare macaz 101 / power-supply for point 101
14	macaz / point 103	UT	MCGI 2X4		10	alimentare macaz 103 / power-supply for point 103
15	macaz / point 103	UT	MCGI 2X4		10	alimentare macaz 103 / power-supply for point 103
16	macaz / point 105	UT	MCGI 2X4		10	alimentare macaz 105 / power-supply for point 105
17	macaz / point 105	UT	MCGI 2X4		10	alimentare macaz 105 / power-supply for point 105
18	macaz / point 107	UT	MCGI 2X4		10	alimentare macaz 107 / power-supply for point 107
19	macaz / point 107	UT	MCGI 2X4		10	alimentare macaz 107 / power-supply for point 107
20	macaz / point 109	UT	MCGI 2X4		10	alimentare macaz 109 / power-supply for point 109
21	macaz / point 109	UT	MCGI 2X4		10	alimentare macaz 109 / power-supply for point 109
22	macaz / point 111	UT	MCGI 2X4		10	alimentare macaz 111 / power-supply for point 111
23	macaz / point 111	UT	MCGI 2X4		10	alimentare macaz 111 / power-supply for point 111
24	macaz / point 113	UT	MCGI 2X4		10	alimentare macaz 113 / power-supply for point 113
25	macaz / point 113	UT	MCGI 2X4		10	alimentare macaz 113 / power-supply for point 113
26	macaz / point 115	UT	MCGI 2X4		10	alimentare macaz 115 / power-supply for point 115
27	macaz / point 115	UT	MCGI 2X4		10	alimentare macaz 115 / power-supply for point 115
28	macaz / point 117	UT	MCGI 2X4		10	alimentare macaz 117 / power-supply for point 117
29	macaz / point 117	UT	MCGI 2X4		10	alimentare macaz 117 / power-supply for point 117
30	Panoul DRC	TDY	CSYAbY 12x1,5 mm^2	W2A	520	comandă şi semnalizare / comand and signaling
31	PTy	TDY	CYAbY 3x70 mm^2	WTDY	150	alimentare tablou distributie TDY power-supply for distribution box TDY
32	TDY	macaz / point 100	CYAbY 2x25 mm^2	W100	190	alimentare macaz 100 / power-supply for point 100
33	TDY	macaz / point 102	CYAbY 2x25 mm^2	W102	110	alimentare macaz 102 / power-supply for point 102
34	TDY	macaz / point 104	CYAbY 2x25 mm^2	W104	30	alimentare macaz 104 / power-supply for point 104
35	TDY	macaz / point 106	CYAbY 2x25mm^2	W106	100	alimentare macaz 106 / power-supply for point 106
36	TDY	macaz / point 108	CYAbY 2x16mm^2	W108	180	alimentare macaz 108 / power-supply for point 108
37	TDY	macaz / point 110	CYAbY 2x25 mm^2	W110	270	alimentare macaz 110 / power-supply for point 110
38	macaz / point 100	UT	MCGI 2X4		10	alimentare macaz 100 / power-supply for point 100
39	macaz / point 100	UT	MCGI 2X4		10	alimentare macaz 100 / power-supply for point 100
40	macaz / point 102	UT	MCGI 2X4		10	alimentare macaz 102 / power-supply for point 102
41	macaz / point 102	UT	MCGI 2X4		10	alimentare macaz 102 / power-supply for point 102
42	macaz / point 104	UT	MCGI 2X4		10	alimentare macaz 104 / power-supply for point 104
43	macaz / point 104	UT	MCGI 2X4		10	alimentare macaz 104 / power-supply for point 104
44	macaz / point 106	UT	MCGI 2X4		10	alimentare macaz 106 / power-supply for point 106
45	macaz / point 106	UT	MCGI 2X4		10	alimentare macaz 106 / power-supply for point 106
46	macaz / point 108	UT	MCGI 2X4		10	alimentare macaz 108 / power-supply for point 108
47	macaz / point 108	UT	MCGI 2X4		10	alimentare macaz 108 / power-supply for point 108
48	macaz / point 110	UT	MCGI 2X4		10	alimentare macaz 110 / power-supply for point 110
49	macaz / point 110	UT	MCGI 2X4		10	alimentare macaz 110 / power-supply for point 110
50	PTX	BJ1	CYABY 1X50 mm2		60	circuit de retur/retur circuit
51	PTY	BJ2	CYABY 1X50 mm2		60	circuit de retur/retur circuit

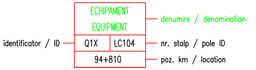
CABLE DESCRIPTION

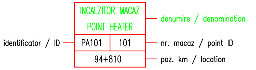
Nr. No	De la From	La To
1	Tablou CDS DRC Panel	2KX
2	Tablou CDS DRC Panel	2KX
3	2KX	1KX
4	2KX	1KX
5	1KX	Q1X
6	1KX	Q1X
7	1KX	Q3X
8	1KX	Q3X
9	2KX	Q5X
10	2KX	Q5X
11	PT-CED	tablou CED/IS panel
12	Tablou CDS DRC Panel	Q1T
13	Tablou CDS DRC Panel	Q1T
14	Tablou CDS DRC Panel	2KY
15	Tablou CDS DRC Panel	2KY
16	2KY	1KY
17	2KY	1KY
18	1KY	Q2Y
19	1KY	Q2Y
20	1KY	Q4Y
21	1KY	Q4Y
22	2KY	Q6Y
23	2KY	Q6Y

DISCONNECTORS REMOTE CONTROL

Tip Type	Lungime Length(m)	ID	Descriere Description
CYAbY 2x35 mm^2	700	W2KX-01	alimentare motor şi încălzire motor power-supply and heating
CSYAbY 27x1,5 mm^2	700	W2KX-02	comandă şi semnalizare / comand and signaling
CYAbY 2x35 mm^2	130	W1KX-01	alimentare şi încălzire 1KX power-supply and heating for disconnector 1KX
CSYAbY 21x1,5 mm^2	130	W1KX-02	comandă şi semnalizare separator 1KX comand and signaling for disconnector 1KX
CYAbY 2x6 mm^2	20	WQ1X-01	alimentare şi încălzire Q1X power-supply and heating for disconnector Q1X
CSYAbY 12x1,5 mm^2	20	WQ1X-02	comandă şi semnalizare separator Q1X comand and signaling for disconnector Q1X
CYAbY 2x6 mm^2	240	WQ3X-01	alimentare şi încălzire Q3X power-supply and heating for disconnector Q3X
CSYAbY 12x1,5 mm^2	240	WQ3X-02	comandă şi semnalizare separator Q3X comand and signaling for disconnector Q3X
CYAbY 2x6 mm^2	15	WQ5X-01	alimentare şi încălzire Q5X power-supply and heating for disconnector Q5X
CSYAbY 12x1,5 mm^2	15	WQ5X-02	comandă şi semnalizare separator Q5X comand and signaling for disconnector Q5X
CYAbY 3x50 mm^2	20	WT1	alimentare tablou distributie rezerva CED power supply distribution panel IS
CSYAbY 12x1,5 mm^2	120	WQ1T-02	comandă şi semnalizare separator comand and signaling for disconnector
CYAbY 2x10 mm^2	120	WQ1T-01	alimentare şi încălzire power-supply and heating for disconnector
CYAbY 2x35 mm^2	650	W2KY-01	alimentare şi încălzire 2KY power-supply and heating for disconnector2KY
CSYAbY 27x1,5 mm^2	650	W2KY-02	comandă şi semnalizare separator2KY comand and signaling for disconnector 2KY
CYAbY 2x35 mm^2	310	W1KY-01	alimentare şi încălzire power-supply and heating for disconnector
CSYAbY 21x1,5 mm^2	310	W1KY-02	comandă şi semnalizare separator comand and signaling for disconnector
CYAbY 2x6 mm^2	20	WQ2Y-01	alimentare şi încălzire Q2Y power-supply and heating for disconnector Q2Y
CSYAbY 12x1,5 mm^2	20	WQ2Y-02	comandă şi semnalizare separator Q2Y comand and signaling for disconnector Q2Y
CYAbY 2x6 mm^2	15	WQ4Y-01	alimentare şi încălzire Q4Y power-supply and heating for disconnector Q4Y
CSYAbY 12x1,5 mm^2	15	WQ4Y-02	comandă şi semnalizare separator Q4Y comand and signaling for disconnector Q4Y
CYAbY 2x6 mm^2	20	WQ6Y-01	alimentare şi încălzire Q6Y power-supply and heating for disconnector Q6Y
CSYAbY 12x1,5 mm^2	20	WQ6Y-02	comandă şi semnalizare separator Q6Y comand and signaling for disconnector Q6Y


SUBTRAVERSARE
UNDERCROSSING
denumire / denomination
lungime / length
xxx
4
nr. cabluri / number of cables
94+810
poz. km / location


ECHIPAMENT
EQUIPMENT
denumire / denomination
identificator / ID
Q1X
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 in tub de PVC	▭	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. 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 VÂNĂTORI / VÂNĂTORI 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 17 DX EG 00 9 5 005 0

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