V2	
H	765.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DI
+250	CO/–

V4	
H	797
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DI
–50	CO/–

V6	
H	828
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DI
+250	CO/–

V8	
H	859.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–50	CO/–

V10	
H	891
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DI
+250	CO/–

V12	
H	922.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–50	CO/–

V14	
H	954
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DI
+250	CO/–

V16	
H	985.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–50	CO/–

V18	
H	017
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DI
+250	CO/–

V20	
H	048.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–50	CO/–

V22	
H	080
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DI
+250	CO/–

V24	
H	111.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–50	CO/–

V26	
H	143
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DI
+250	CO/–

V28	
H	174.5
–	–
–	–
–	–

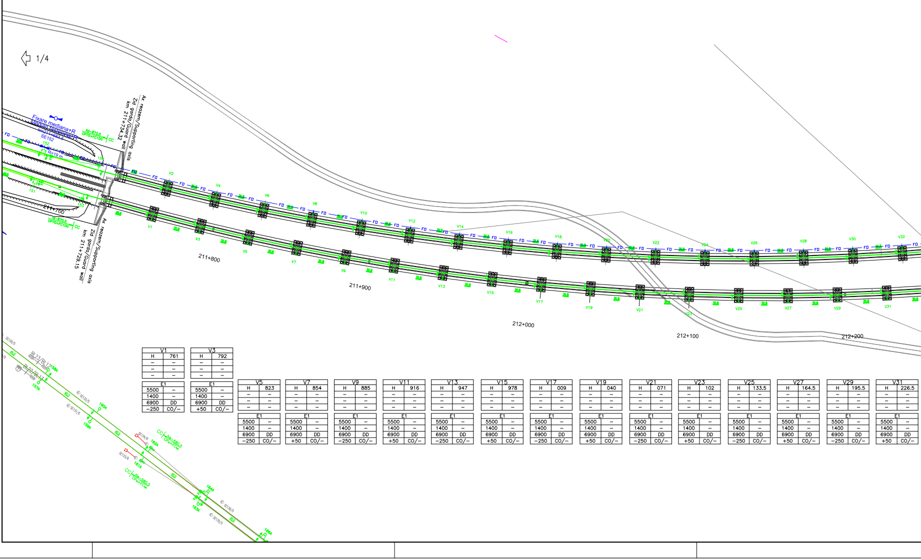
E1	
5500	–
1400	–
6900	DD
–50	CO/–

V30	
H	206
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DI
+250	CO/–

V32	
H	237.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–50	CO/–


1/4
Fixare mediana+R
Median fastening+R
km211+683.5
SE152
R=19 m
ld=872.5
CP70+FC100
CC
ls=870.5
CP70+FC100
CC
Ax reazem/Supporting axis
Zid garda/Guard wall
km 211+734.32
Ax reazem/Supporting axis
Zid garda/Guard wall
km 211+729.15
151
152
153
154
FD
V1
V2
V3
V4
V5
V6
V7
V8
V9
V10
V11
V12
V13
V14
V15
V16
V17
V18
V19
V20
V21
V22
V23
V24
V25
V26
V27
V28
V29
V30
V31
V32
211+700
211+800
211+900
212+000
212+100
212+200

V1	
H	761
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–250	CO/–

V3	
H	792
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
+50	CO/–

V5	
H	823
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–250	CO/–

V7	
H	854
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
+50	CO/–

V9	
H	885
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–250	CO/–

V11	
H	916
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
+50	CO/–

V13	
H	947
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–250	CO/–

V15	
H	978
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
+50	CO/–

V17	
H	009
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–250	CO/–

V19	
H	040
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
+50	CO/–

V21	
H	071
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–250	CO/–

V23	
H	102
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
+50	CO/–

V25	
H	133.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–250	CO/–

V27	
H	164.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
+50	CO/–

V29	
H	195.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
–250	CO/–

V31	
H	226.5
–	–
–	–
–	–

E1	
5500	–
1400	–
6900	DD
+50	CO/–

V34	
H	269
–	–
As	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

V36	
H	300.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–50	CO/–

V38	
H	320
–	–
As	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

V40	
H	363.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–50	CO/–

V42	
H	395.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

V44	
H	427
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–50	CO/–

V46	
H	458.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

V48	
H	490
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–50	CO/–

V50	
H	521.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

V52	
H	553
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–50	CO/–

V54	
H	585
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

V56	
H	616.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–50	CO/–

V58	
H	648
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

V60	
H	679.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–50	CO/–

V62	
H	711.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

V64	
H	743
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–50	CO/–

V66	
H	774.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

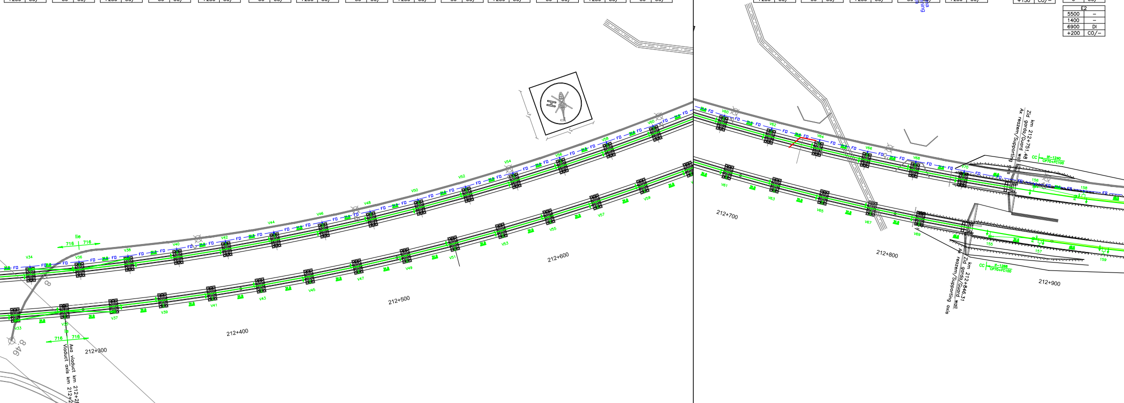
V68	
H	806.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–50	CO/–

Fixare mediana
Median fastening

V70	
H	838
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

156	
H	884
–	–
An	–
–	–
E1	
5500	–
1400	–
6900	DI
+150	CO/–

158	
H	916.5
–	–
–	–
–	–
E1	
6000	–
1300	–
7300	A
0	CO/–
E2	
5500	–
1400	–
6900	DI
+200	CO/–


V34
V36
V38
V40
V42
V44
V46
V48
V50
V52
V54
V56
V58
V60
V62
V64
V66
V68
V70
V33
V35
V37
V39
V41
V43
V45
V47
V49
V51
V53
V55
V57
V59
V61
V63
V65
V67
V69
155
156
157
158
159
FD
IIe
716
716
Ie
716
716
8.46
212+300
212+400
212+500
212+600
212+700
212+800
212+900
Axa viaduct km 212+28[illegible] (proiectat)
Viaduct axis km 212+28[illegible] (designed)
Zid garda/Guard wall km 212+751.48
Ax reazem/Supporting axis
Zid garda/Guard wall km 212+846.31
Ax reazem/Supporting axis
CC
IIf–1240
CP70+FC100
CC
If–1268
CP70+FC100

V33	
H	257.5
–	–
As	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

V35	
H	288.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
+50	CO/–

V37	
H	319.5
–	–
As	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

V39	
H	350.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
+50	CO/–

V41	
H	381.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

V43	
H	412.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
+50	CO/–

V45	
H	443.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

V47	
H	474.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
+50	CO/–

V49	
H	505.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

V51	
H	536.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
+50	CO/–

V53	
H	567.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

V55	
H	598.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
+50	CO/–

V57	
H	630
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

V59	
H	661
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
+50	CO/–

V61	
H	692
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

V63	
H	723
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
+50	CO/–

V65	
H	754
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

V67	
H	785
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
+50	CO/–

V69	
H	816
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
–250	CO/–

155	
H	861
–	–
An	–
–	–
E1	
5500	–
1400	–
6900	DD
–150	CO/–

157	
H	892.5
–	–
–	–
–	–
E1	
6000	–
1300	–
7300	A
0	CO/–
E2	
5500	–
1400	–
6900	DD
–200	CO/–

159	
H	933
–	–
–	–
–	–
E1	
5500	–
2000	–
7500	DD
–50	CO/–
E2	
5500	–
1300	–
6800	DD
–250	CO/–

160	
H	957.5
–	–
–	–
–	–
E1	
5500	–
1300	–
6800	DI
+50	CO/–
E2	
5500	–
2000	–
7500	DI
+250	CO/–

162	
H	998.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–
E2	
6000	–
1300	–
7300	A
+450	CO/–

164	
H	030.5
–	–
An	–
–	–
E1	
5500	–
1400	–
6900	DI
+50	CO/–

166	
H	076.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
+250	CO/–

168	
H	127
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DI
-150	CO/–

S6A	
–	199
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S8A	
–	219
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S2	
–	239
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S10	
–	319
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S12	
–	339
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S14	
–	359
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S22	
–	439
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S24	
–	459
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S26	
–	479
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S34	
–	559
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S36	
–	579
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S38	
–	599
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S2A	
–	163
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-100	CP/–

S4A	
–	181
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S4	
–	259
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S6	
–	279
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S8	
–	299
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S16	
–	379
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S18	
–	399
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

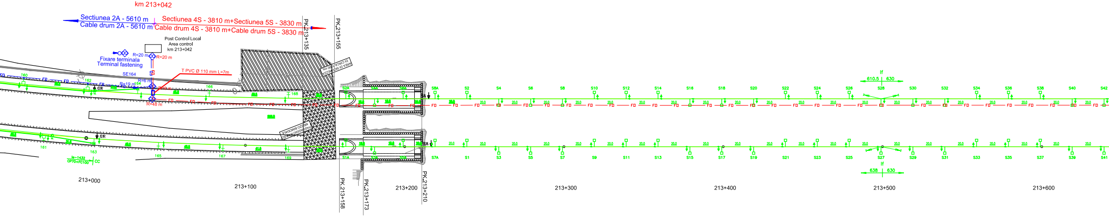
S20	
–	419
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S28	
–	499
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S30	
–	519
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S32	
–	539
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S40	
–	619
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–


km 213+042
Sectiunea 2A - 5610 m
Cable drum 2A - 5610 m
Sectiunea 4S - 3810 m+Sectiunea 5S - 3830 m
Cable drum 4S - 3810 m+Cable drum 5S - 3830 m
PK.213+135
PK.213+155
Post Control Local
Area control
km 213+042
Fixare terminala
Terminal fastening
R=20 m
R=20 m
T PVC Ø 110 mm L=7m
SE164
R=6 m
R=19 m
R=48 m
FO
160
162
164
166
168
161
163
165
167
169
SR
le=1432
CP70+FC100
CC
S2A
S4A
S6A
S8A
S1A
S3A
S5A
S7A
S2
S4
S6
S8
S10
S12
S14
S16
S18
S20
S22
S24
S26
S28
S30
S32
S34
S36
S38
S40
S42
S1
S3
S5
S7
S9
S11
S13
S15
S17
S19
S21
S23
S25
S27
S29
S31
S33
S35
S37
S39
S41
20.0
lf
610.5
630
638
630
PK.213+158
PK.213+173
PK.213+210
213+000
213+100
213+200
213+300
213+400
213+500
213+600

161	
H	973.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
-250	CO/–
E2	
6000	–
1300	–
6900	A
-450	CO/–

163	
H	005
–	–
An	–
–	–
E1	
5500	–
1400	–
6900	DD
-150	CO/–

165	
H	045.5
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
-200	CO/–

167	
H	086
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
-100	CO/–

169	
H	127
–	–
–	–
–	–
E1	
5500	–
1400	–
6900	DD
-200	CO/–

S1A	
–	163
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-100	CP/–

S3A	
–	181
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S3	
–	259
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S5	
–	279
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S7	
–	299
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S15	
–	379
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S17	
–	399
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S19	
–	419
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S27	
–	499
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S29	
–	519
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S31	
–	539
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S39	
–	619
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S5A	
–	199
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S7A	
–	219
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S1	
–	239
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S9	
–	319
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S11	
–	339
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S13	
–	359
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S21	
–	439
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S23	
–	459
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S25	
–	479
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S33	
–	559
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S35	
–	579
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-150	CP/–

S37	
–	599
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
-50	CP/–

S46	
–	679
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S48	
–	699
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S50	
–	719
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S58	
–	799
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S60	
–	819
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S62	
–	839
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S70	
–	919
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S72	
–	939
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S74	
–	959
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S76	
–	979
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S78	
–	998.5
–	–
–	–
–	–
E1	
–	–
–	–
–	A
−50	CP/–

S78A	
–	000
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S80	
–	018.5
–	–
–	–
–	–
E1	
–	–
–	–
–	A
−50	CP/–

S80A	
–	020
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S100	
–	219
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S102	
–	239
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S104	
–	259
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S42	
–	639
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S44	
–	659
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S52	
–	739
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S54	
–	759
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S56	
–	779
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S64	
–	859
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S66	
–	879
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S68	
–	899
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S82	
–	038.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S82A	
–	040
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S84	
–	058.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S84A	
–	060
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S86	
–	078.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S86A	
–	080
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S94	
–	159
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S96	
–	179
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S98	
–	199
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S106	
–	279
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S108	
–	299
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

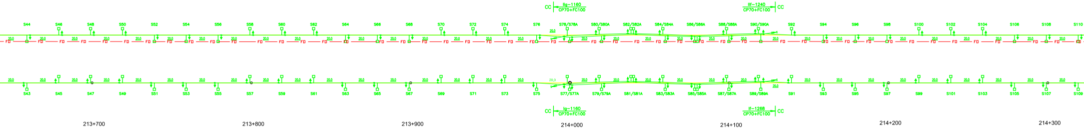
S88	
–	098.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S88A	
–	100
–	–
–	–
–	–
E1	
–	–
–	–
–	A
−50	CP/–

S90	
–	118.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S90A	
–	120
–	–
–	–
–	–
E1	
–	–
–	–
–	A
−50	CP/–

S92	
–	139
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–



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lg-1160
CP70+FC100
lf-1240
CP70+FC100
CC
S44
S46
S48
S50
S52
S54
S56
S58
S60
S62
S64
S66
S68
S70
S72
S74
S76
S78/S78A
S80/S80A
S82/S82A
S84/S84A
S86/S86A
S88/S88A
S90/S90A
S92
S94
S96
S98
S100
S102
S104
S106
S108
S110
FD
20.0
S43
S45
S47
S49
S51
S53
S55
S57
S59
S61
S63
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S67
S69
S71
S73
S75
S77/S77A
S79/S79A
S81/S81A
S83/S83A
S85/S85A
S87/S87A
S89/S89A
S91
S93
S95
S97
S99
S101
S103
S105
S107
S109
CC
lg-1160
CP70+FC100
lf-1266
CP70+FC100
CC
213+700
213+800
213+900
214+000
214+100
214+200
214+300

S75	
–	979
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S77	
–	998.5
–	–
–	–
–	–
E1	
–	–
–	–
–	A
−50	CP/–

S77A	
–	000
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S79	
–	018.5
–	–
–	–
–	–
E1	
–	–
–	–
–	A
−50	CP/–

S79A	
–	020
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S41	
	639
	–
	–
	–
E1	
	–
	–
	DD
50	CP/–

S43	
–	659
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S51	
–	739
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S53	
–	759
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S55	
–	779
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S63	
–	859
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S65	
–	879
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S67	
–	899
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S81	
–	038.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S81A	
–	040
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S83	
–	058.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S83A	
–	060
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S85	
–	078.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S85A	
–	080
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S99	
–	219
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S101	
–	239
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S103	
–	259
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S45	
–	679
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S47	
–	699
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S49	
–	719
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S57	
–	799
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S59	
–	819
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S61	
–	839
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S69	
–	919
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S71	
–	939
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S73	
–	959
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S87	
–	098.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S87A	
–	100
–	–
–	–
–	–
E1	
–	–
–	–
–	A
−50	CP/–

S89	
–	118.5
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

S89A	
–	120
–	–
–	–
–	–
E1	
–	–
–	–
–	A
−50	CP/–

S91	
–	139
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S93	
–	159
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S95	
–	179
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−150	CP/–

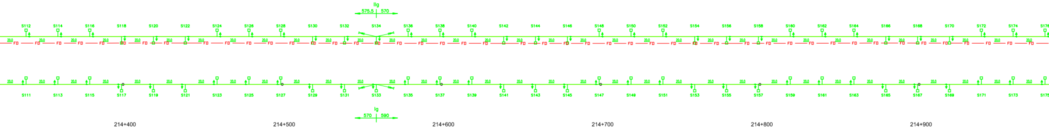
S97	
–	199
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S1105	
–	279
–	–
–	–
–	–
E1	
–	–
–	–
–	DD
−50	CP/–

S10	
–	
–	
–	
–	
E1	
–	
–	
–	
−150	

S112	–	339	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S114	–	359	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S116	–	379	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S124	–	459	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S126	–	479	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S128	–	499	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S136	–	579	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S138	–	599	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S140	–	619	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S148	–	699	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S150	–	719	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S152	–	739	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S160	–	819	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S162	–	839	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S164	–	859	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S172	–	939	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S174	–	959	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–

S110	–	319	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S118	–	399	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S120	–	419	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S122	–	439	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S130	–	519	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S132	–	539	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S134	–	559	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S142	–	639	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S144	–	659	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S146	–	679	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S154	–	759	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S156	–	779	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S158	–	799	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S166	–	879	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S168	–	899	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S170	–	919	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–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S167
S169
S171
S173
S175
Ig
570
590
214+400
214+500
214+600
214+700
214+800
214+900

S111	–	339	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S113	–	359	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S115	–	379	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S123	–	459	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S125	–	479	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S127	–	499	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S135	–	579	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S137	–	599	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
139	–	619	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S147	–	699	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S149	–	719	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S151	–	739	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S159	–	819	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S161	–	839	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S163	–	859	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S171	–	939	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S173	–	959	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S175	–	979	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–

07		299		–		–		–			–		–		DD		CP/–
S109	–	319	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S117	–	399	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S119	–	419	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S121	–	439	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S129	–	519	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S131	–	539	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S133	–	559	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S141	–	639	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S143	–	659	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S145	–	679	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S153	–	759	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S155	–	779	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S157	–	799	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S165	–	879	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–
S167	–	899	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-150	CP/–
S169	–	919	–	–	–	–	–	–	E1	–	–	–	–	–	DD	-50	CP/–

S176		S178		S180		S180A		S182		S182A	
–	979	–	999	–	018.5	–	020	–	038.5	–	040
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
E1		E1		E1		E1		E1		E1	
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	DD	–	DD	–	A	–	DD	–	A	–	DD
-50	CP/–	-50	CP/–	-50	CP/–	-150	CP/–	-50	CP/–	-50	CP/–

S202		S204		S206	
–	239	–	259	–	279
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

S214		S216		S218	
–	359	–	379	–	399
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

S226		S228	
–	479	–	499
–	–	–	–
–	–	–	–
–	–	–	–
E1		E1	
–	–	–	–
–	–	–	–
–	DD	–	DD
-50	CP/–	-150	CP/–

S184		S184A		S186		S186A		S188		S188A	
–	058.5	–	060	–	078.5	–	080	–	098.5	–	100
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
E1		E1		E1		E1		E1		E1	
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	DD	–	DD	–	DD	–	DD	–	DD	–	DD
-150	CP/–	-50	CP/–	-50	CP/–	-50	CP/–	-50	CP/–	-150	CP/–

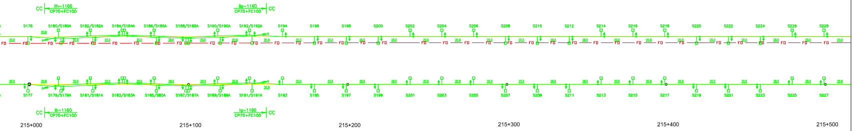
S208		S210		S212	
–	299	–	319	–	339
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

S220		S222		S224	
–	419	–	439	–	459
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

S190		S190A		S192		S192A		S194	
–	118.5	–	120	–	138.5	–	140	–	159
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
E1		E1		E1		E1		E1	
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	DD	–	A	–	DD	–	A	–	DD
-50	CP/–	-50	CP/–	-150	CP/–	-50	CP/–	-50	CP/–

S196		S198		S200	
–	179	–	199	–	219
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

3/4 ⇨


CC
IIh-1160
CP70+FC100
IIg-1160
CP70+FC100
CC
S178
S180/S180A
S182/S182A
S184/S184A
S186/S186A
S188/S188A
S190/S190A
S192/S192A
S194
S196
S198
S200
S202
S204
S206
S208
S210
S212
S214
S216
S218
S220
S222
S224
S226
S228
20.0
FO
S177
S179/S179A
S181/S181A
S183/S183A
S185/S85A
S187/S187A
S189/S189A
S191/S191A
S193
S195
S197
S199
S201
S203
S205
S207
S209
S211
S213
S215
S217
S219
S221
S223
S225
S227
CC
Ih-1160
CP70+FC100
Ig-1160
CP70+FC100
CC
215+000
215+100
215+200
215+300
215+400
215+500

S177		S179		S179A		S181		S181A	
–	999	–	018.5	–	020	–	038.5	–	040
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
E1		E1		E1		E1		E1	
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	DD	–	A	–	DD	–	A	–	DD
-50	CP/–	-50	CP/–	-150	CP/–	-50	CP/–	-50	CP/–

S183		S183A		S185		S185A		S187		S187A	
–	058.5	–	060	–	078.5	–	080	–	098.5	–	100
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
E1		E1		E1		E1		E1		E1	
–	–	–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–	–	–
–	DD	–	DD	–	DD	–	DD	–	DD	–	DD
-150	CP/–	-50	CP/–	-50	CP/–	-50	CP/–	-50	CP/–	-150	CP/–

S195		S197		S199	
–	179	–	199	–	219
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

S207		S209		S211	
–	298.5	–	318.5	–	338.5
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

S219		S221		S223	
–	419	–	439	–	459
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

S189		S189A		S191		S191A		S193	
–	118.5	–	120	–	138.5	–	140	–	159
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
E1		E1		E1		E1		E1	
–	–	–	–	–	–	–	–	–	–
–	–	–	–	–	–	–	–	–	–
–	DD	–	A	–	DD	–	A	–	DD
-50	CP/–	-50	CP/–	-150	CP/–	-50	CP/–	-50	CP/–

201		203		S205	
–	239	–	259	–	279
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

S213		S215		S217	
–	359	–	379	–	399
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
E1		E1		E1	
–	–	–	–	–	–
–	–	–	–	–	–
–	DD	–	DD	–	DD
-50	CP/–	-150	CP/–	-50	CP/–

S225		S227	
–	479	–	499
–	–	–	–
–	–	–	–
–	–	–	–
E1		E1	
–	–	–	–
–	–	–	–
–	DD	–	DD
-50	CP/–	-150	CP/–

LEGENDA
LEGEND

CTM	◈	Camereta cu mufa de jonctiune Handhole with junction box
CTM	◈	Camereta cu rezerva Handhole with cable reserve
CT	▣	Camera de tragere cu mufa de jonctiune Manhole with junction box
CT	▣	Camera de tragere cu rezerva Manhole with cable reserve
CTS	□	Camera de tragere speciala pentru subtraversare Special manhhole for undercrossing
	▶○◀	Fixare mediana Median fastening
	▶○◇	Fixare terminala Terminal fastening
	— FO —	Cablu cu fibre optice aerian Aerial optical fiber cable
	— FO —	Cablu cu fibre optice subteran Underground optical fiber cable
	—▭—	Teava PVC Φ 110 mm / canal metalic PVC pipe Φ 110 mm / metallic chanel
	— FO —	Cablu cu fibre optice special pentru tunel protejat in duct HDPE Φ 40 mm instalat in conductele pentru cabluri din tunel Special OF cable for tunnels proteated in HDPE duct Φ 40 mm installed in tunnel pipes

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

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		
Aprobat Approved	Coordonator Secţiune 1 Section 1 Coordinator	C. Gambelli		
Verificat Checked	Expert Verificator Checking Expert	Pino Amodio		

SUBCONTRACTANT / SUBCONTRACTOR

AREX COMPANY

Aprobat Approved	Responsabil Subcontractant Subcontractor Responsible	A. Stanciu - Dinulescu		
Întocmit Elaborated	Proiectant Designer	Gabriela Trifan	02.2012	

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 :

Interval - APATA-RACOS - Section
CABLU CU FIBRE OPTICE (Cablul 1)
Plan de situatie
FIBER OPTIC CABLE (cable 1)
Layout Plan

Codificare / Codification System	Scara / Scale 1:1000	LOT / LOT	Nr. / No 02 / 04

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