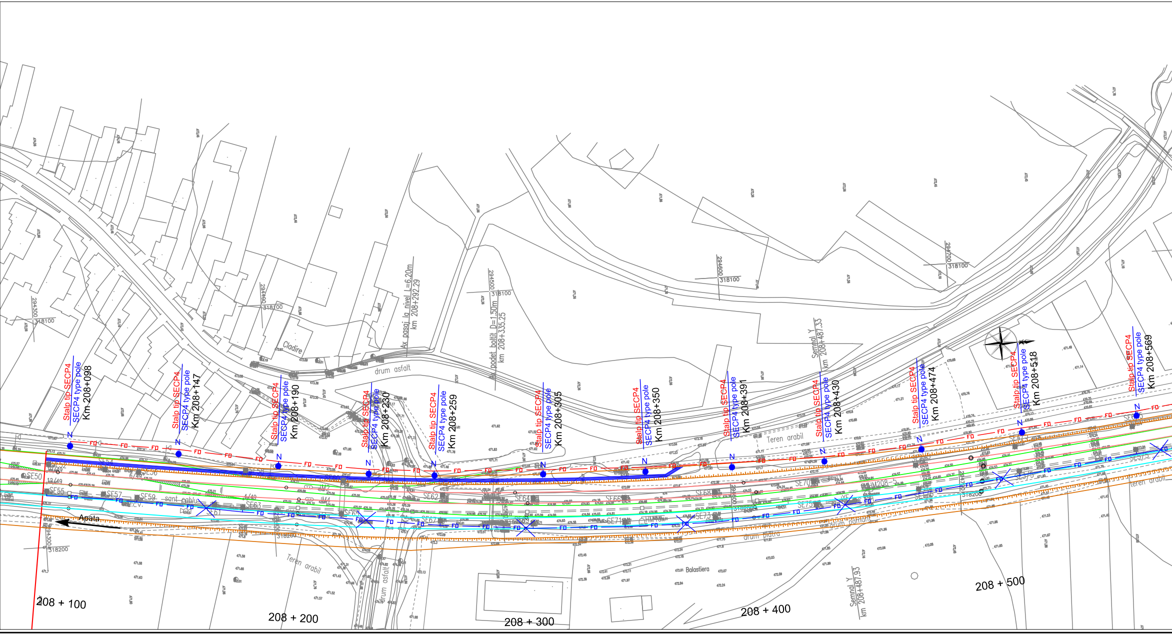
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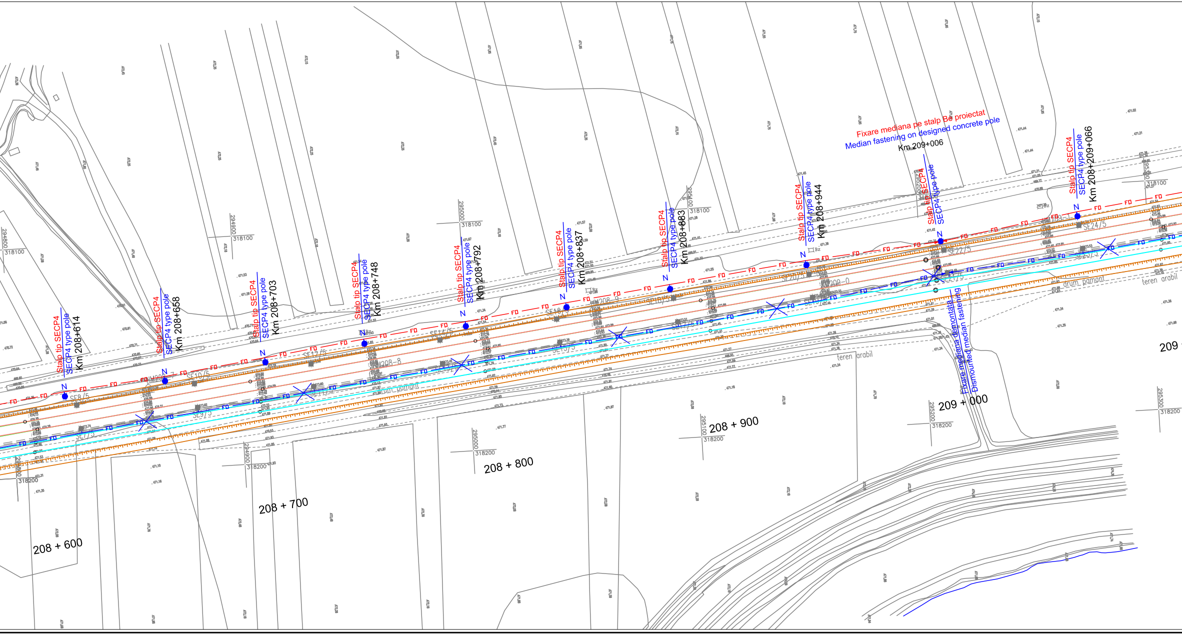
SECP4 type pole
Km 208+098
Stalp tip SECP4
SECP4 type pole
Km 208+147
Stalp tip SECP4
SECP4 type pole
Km 208+190
Stalp tip SECP4
SECP4 type pole
Km 208+230
Stalp tip SECP4
SECP4 type pole
Km 208+259
Stalp tip SECP4
SECP4 type pole
Km 208+305
Stalp tip SECP4
SECP4 type pole
Km 208+350
Stalp tip SECP4
SECP4 type pole
Km 208+391
Stalp tip SECP4
SECP4 type pole
Km 208+430
Stalp tip SECP4
SECP4 type pole
Km 208+474
Stalp tip SECP4
SECP4 type pole
Km 208+518
Stalp tip SECP4
SECP4 type pole
Km 208+569
N
FO
Cladire
drum asfalt
Ax pasaj la nivel L=6.20m
km 208+292.29
podet boltit D=1.50m
km 208+335.25
Semnal Y
km 208+487.33
Semnal Y
km 208+487.93
Teren arabil
drum pamant
drum piatra
Balastiera
sant cablu
Apata
294300
318100
294400
318100
294500
318100
294600
318100
294700
318100
294300
318200
318200
SE50
SE55
SE57
SE59
SE61
SE62
SE63
SE64
SE66
SE68
SE70
SE71
SE73
SE75
208 + 100
208 + 200
208 + 300
208 + 400
208 + 500


Stalp tip SECP4
SECP4 type pole
Km 208+614
Stalp tip SECP4
SECP4 type pole
Km 208+658
Stalp tip SECP4
SECP4 type pole
Km 208+703
Stalp tip SECP4
SECP4 type pole
Km 208+748
Stalp tip SECP4
SECP4 type pole
Km 208+792
Stalp tip SECP4
SECP4 type pole
Km 208+837
Stalp tip SECP4
SECP4 type pole
Km 208+883
Stalp tip SECP4
SECP4 type pole
Km 208+944
Fixare mediana pe stalp Be proiectat
Median fastening on designed concrete pole
Km 209+006
Stalp tip SECP4
SECP4 type pole
Stalp tip SECP4
SECP4 type pole
Km 208+209+066
Fixare mediana demontata
Dismounted median fastening
N
FO
SE8/5
SE7/5
SE9/5
SE10/5
SE12/5
SE11/5
SE14/5
SE16/5
SE15/5
SE18/5
SE17/5
SE20/5
SE22/5
SE21/5
SE24/5
SE23/5
208-7
208-8
208-9
209-0
209-1
drum pamant
teren arabil
294800
318100
294900
318100
295000
318100
295100
318100
295200
318100
295300
318100
294800
318200
294900
318200
295000
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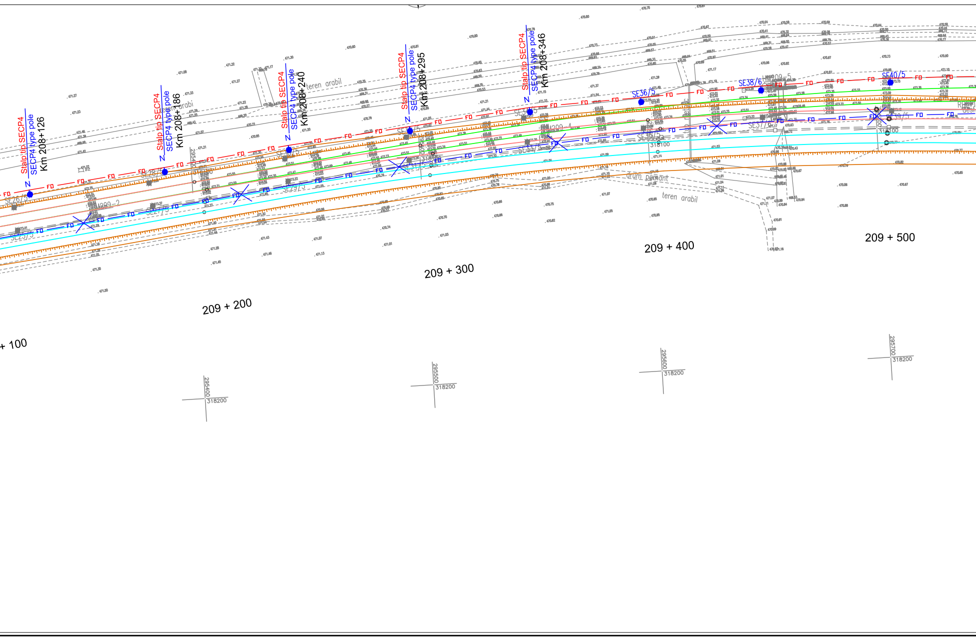
318200
208 + 600
208 + 700
208 + 800
208 + 900
209 + 000
209


Stalp tip SECP4
SECP4 type pole
Km 208+126
Stalp tip SECP4
SECP4 type pole
Km 208+186
Stalp tip SECP4
SECP4 type pole
Km 208+240
Stalp tip SECP4
SECP4 type pole
Km 208+295
Stalp tip SECP4
SECP4 type pole
Km 208+346
SE26/5
SE28/4
SE36/5
SE38/6
SE40/5
SE37/6
SE39/5
FO
teren arabil
teren arabil
drum pamant
teren arabil
+ 100
209 + 200
209 + 300
209 + 400
209 + 500
295400
318200
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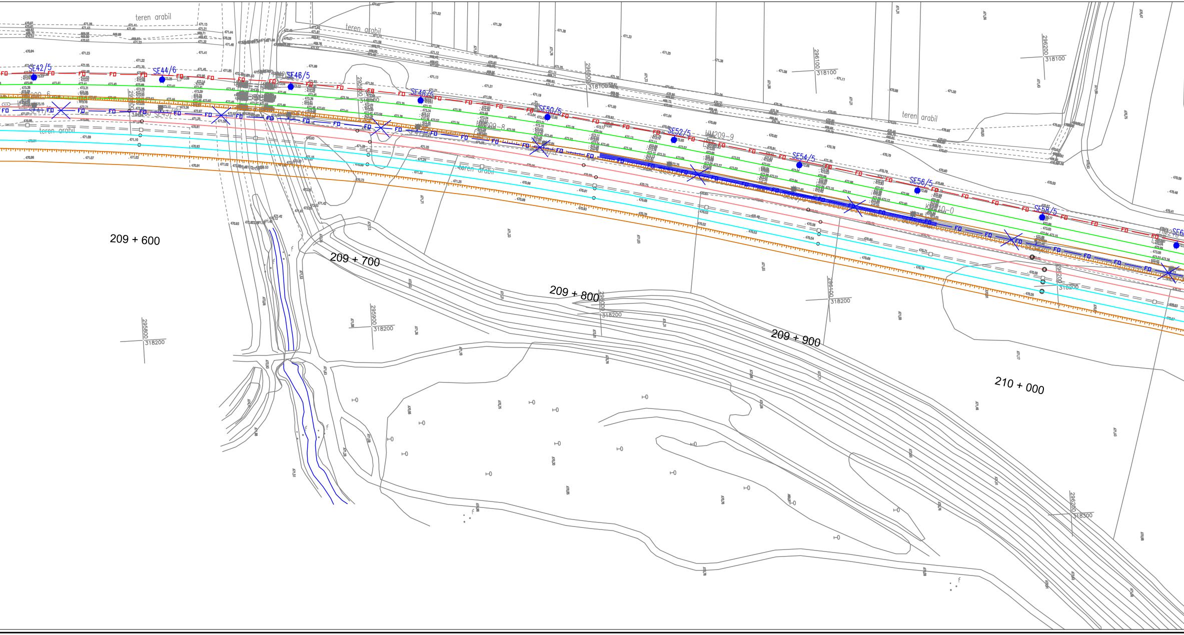
teren arabil
SE42/5
SE44/6
SE46/5
SE48/5
SE50/5
SE52/5
SE54/5
SE56/5
SE58/5
FO
HM209-9
KM210-0
209 + 600
209 + 700
209 + 800
209 + 900
210 + 000
295800
318200
295900
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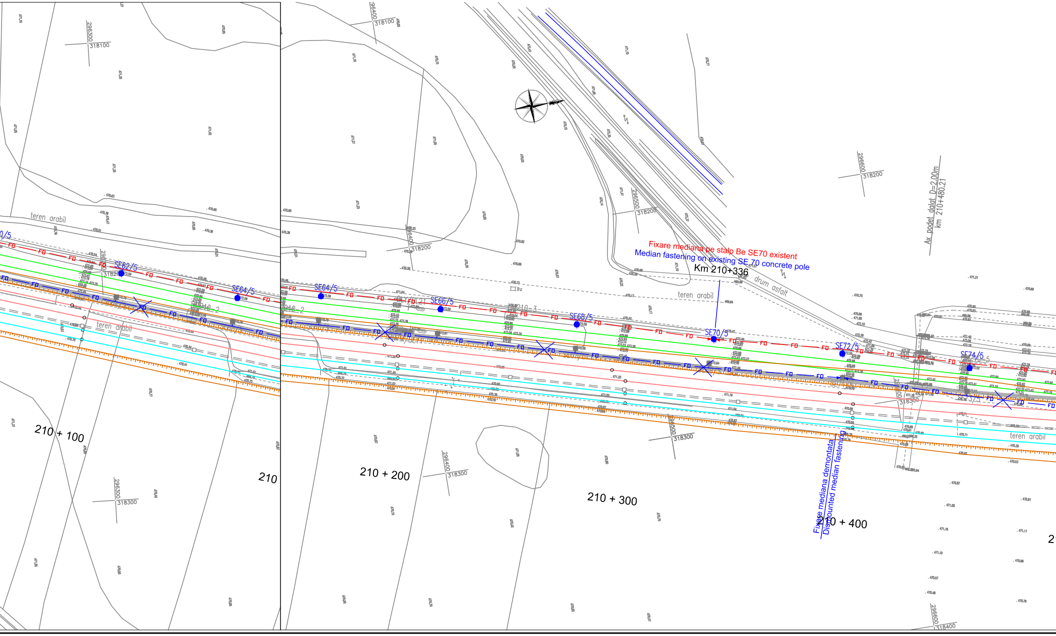
318300



Fixare mediana pe stalp Be SE70 existent
Median fastening on existing SE 70 concrete pole
Km 210+336
Fixare mediana demontata
Dismounted median fastening
Ax podet dalat D=2,00m
km 210+480.21
210 + 100
210 + 200
210 + 300
210 + 400
210
teren arabil
teren arabil
teren arabil
teren arabil
drum asfalt
SE62/5
SE64/5
SE64/5
SE66/5
SE68/5
SE70/5
SE72/5
SE74/5
FD
296300
318100
296400
318100
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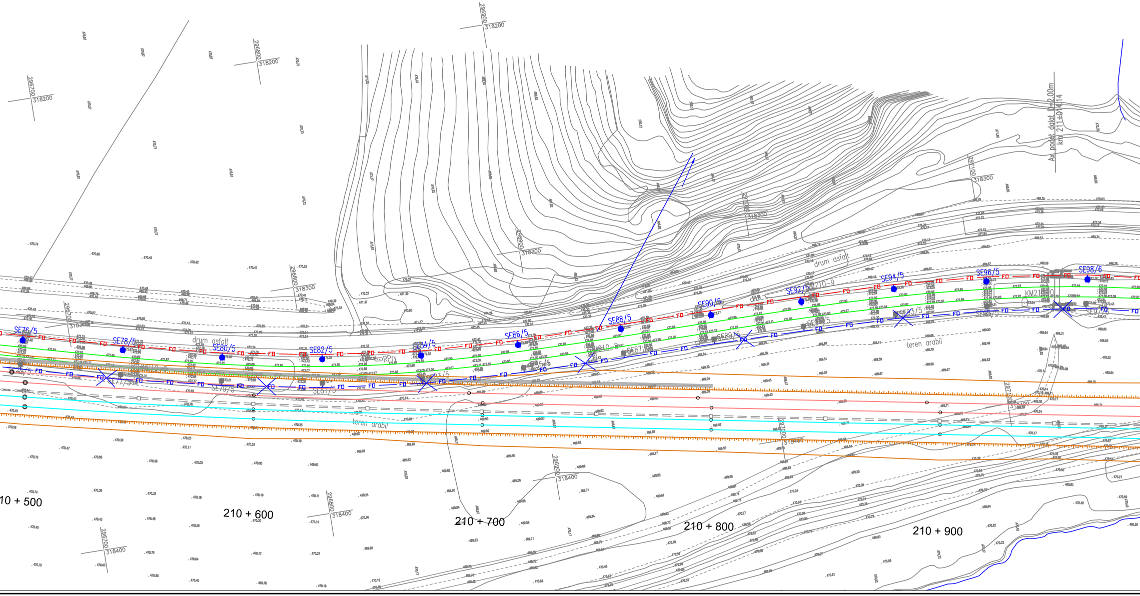
318400



296700 318200
296800 318200
296900 318200
297000 318300
297100 318300
296900 318300
296800 318300
296700 318300
Ax podet dalat D=2.00m
km 211+014.14
drum asfalt
drum asfalt
teren arabil
teren arabil
SE76/5
SE78/5
SE80/5
SE82/5
SE84/5
SE86/5
SE88/5
SE90/6
SE92/5
SE94/5
SE96/5
SE98/6
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RPry
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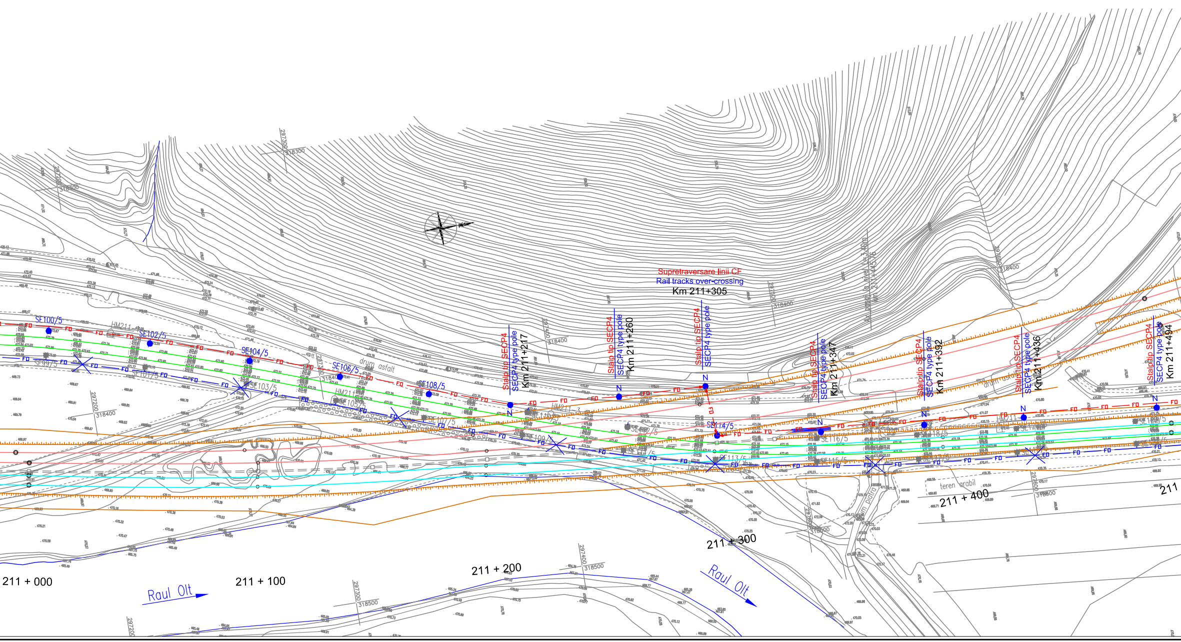
210 + 600
210 + 700
210 + 800
210 + 900


Supretraversare linii CF
Rail tracks over-crossing
Km 211+305
Stalp tip SECP4
SECP4 type pole
Km 211+217
Stalp tip SECP4
SECP4 type pole
Km 211+260
Stalp tip SECP4
SECP4 type pole
Stalp tip SECP4
SECP4 type pole
Km 211+347
Stalp tip SECP4
SECP4 type pole
Km 211+392
Stalp tip SECP4
SECP4 type pole
Km 211+436
Stalp tip SECP4
SECP4 type pole
Km 211+494
SE100/5
SE102/5
SE104/5
SE106/5
SE108/5
SE114/5
SE99/5
SE101/5
SE103/5
SE105/5
SE107/5
SE109/5
SE113/5
SE115/5
SE116/5
HM211
drum asfalt
teren arabil
drum piatra
Raul Olt
Raul Olt
211 + 000
211 + 100
211 + 200
211 + 300
211 + 400
211
297300
318300
297200
318300
297200
318400
297300
318400
297400
318400
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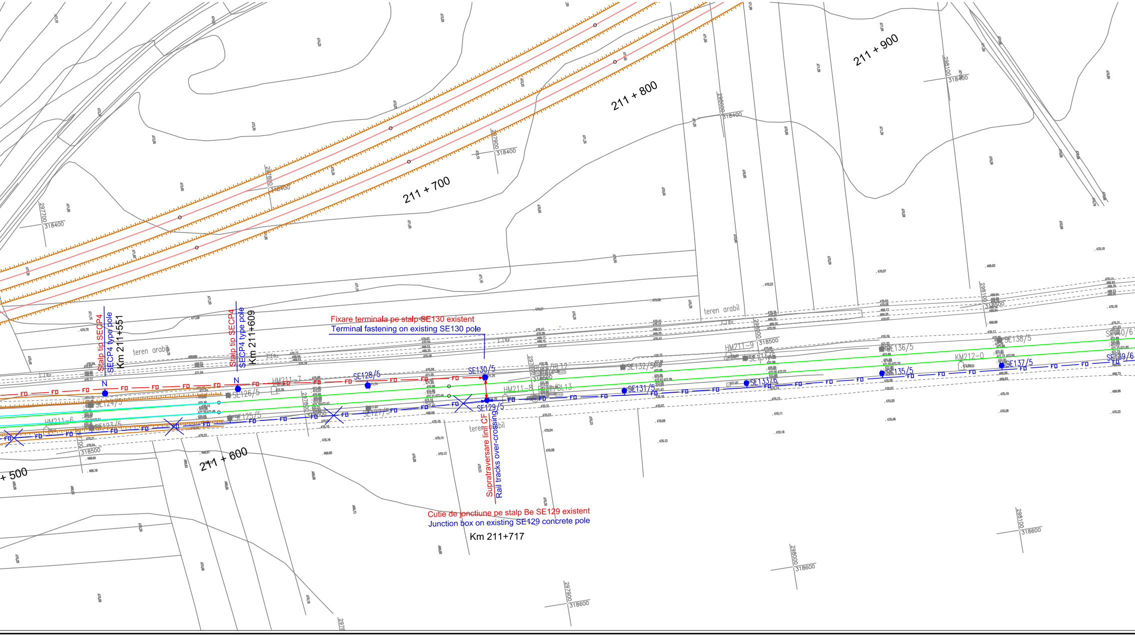
318600
297600
318600
FO
N


Fixare terminala pe stalp SE130 existent
Terminal fastening on existing SE130 pole
Stalp tip SECP4
SECP4 type pole
Km 211+551
Stalp tip SECP4
SECP4 type pole
Km 211+609
Supratraversare linii CF
Rail tracks over-crossing
Cutie de jonctiune pe stalp Be SE129 existent
Junction box on existing SE129 concrete pole
Km 211+717
+ 500
211 + 600
211 + 700
211 + 800
211 + 900
teren arabil
teren arabil
teren arabil
SE124/5
SE125/5
SE126/5
SE127/5
SE128/5
SE129/5
SE130/5
SE131/5
SE132/5
SE133/6
SE134/5
SE135/5
SE136/5
SE137/5
SE138/5
SE139/6
HM211-6
HM211-7
HM211-8
HM211-9
KM212-0
FO
N
N
297700 318400
297800 318400
297900 318400
298000 318400
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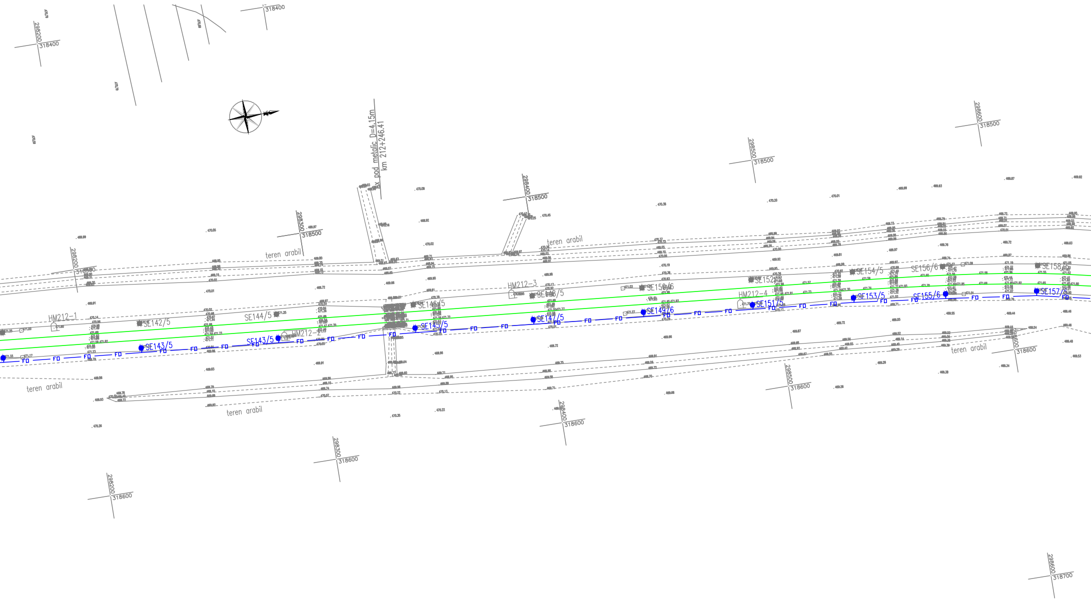
298100 318600


Ax pod metalic D=4.15m
km 212+246.41
teren arabil
teren arabil
teren arabil
teren arabil
teren arabil
HM212-1
HM212-2
HM212-3
HM212-4
SE142/5
SE143/5
SE143/5
SE144/5
SE145/5
SE146/5
SE147/5
SE148/5
SE149/6
SE150/6
SE151/5
SE152
SE153/5
SE154/5
SE155/6
SE156/6
SE157/5
SE158/6
FO
298200
318400
318400
298300
318500
298400
318500
298500
318500
298600
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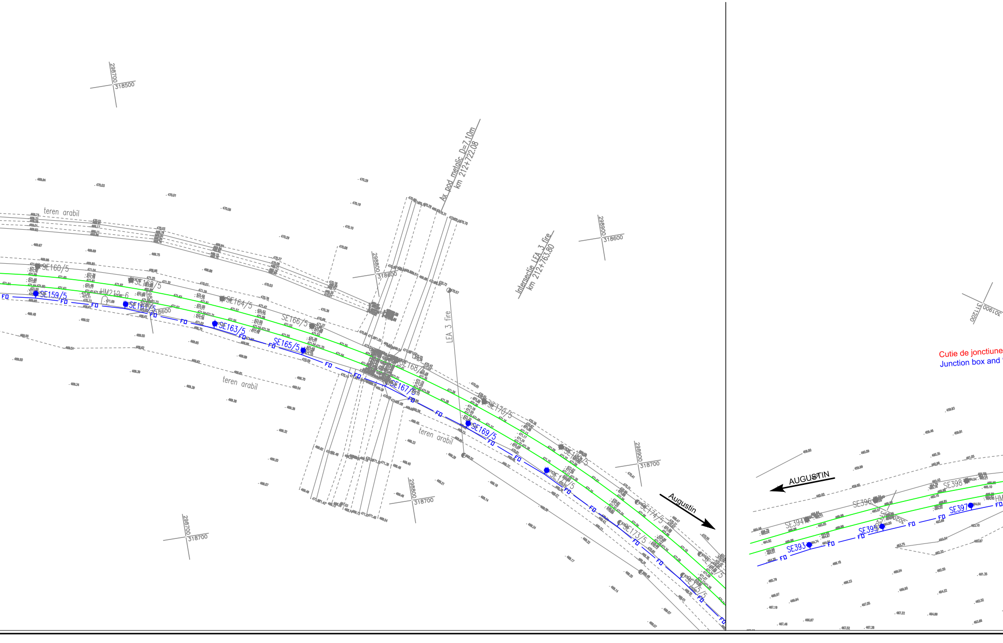
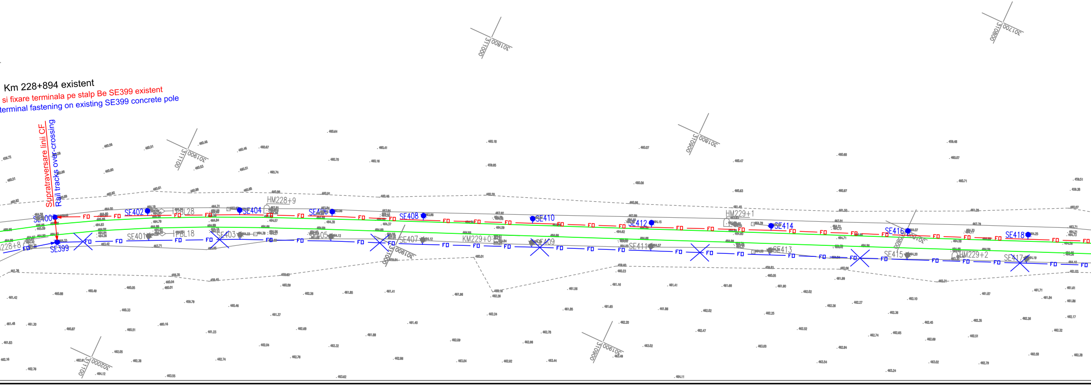

298700
318500
teren arabil
SE160/5
SE162/5
SE159/5
HM212.6
SE161/5
298800
318600
SE163/5
SE164/5
SE165/5
SE166/5
SE167/5
SE168/5
SE169/5
SE170/5
SE171/5
SE172/5
SE173/5
SE174/5
SE175/5
SE176/5
teren arabil
teren arabil
FO
Ax pod metalic D=7.10m
km 212+722.08
LEA 3 fire
Intersectie LEA 3 fire
km 212+763.80
298900
318600
298800
318600
298900
318700
298800
318700
298700
318700
Augustin
301900
317200
Cutie de jonctiune
Junction box and
AUGUSTIN
SE393
SE394
SE395
SE396
SE397
SE398
HM


Km 228+894 existent
si fixare terminala pe stalp Be SE399 existent
terminal fastening on existing SE399 concrete pole
Supratraversare linii CF
Rail tracks over-crossing
SE400
SE399
228+8
SE402
SE401
PBL28
PBL18
SE404
SE403
HM228+9
SE406
SE405
SE408
SE407
KM229+0
SE410
SE409
SE412
SE411
HM229+1
SE414
SE413
SE416
SE415
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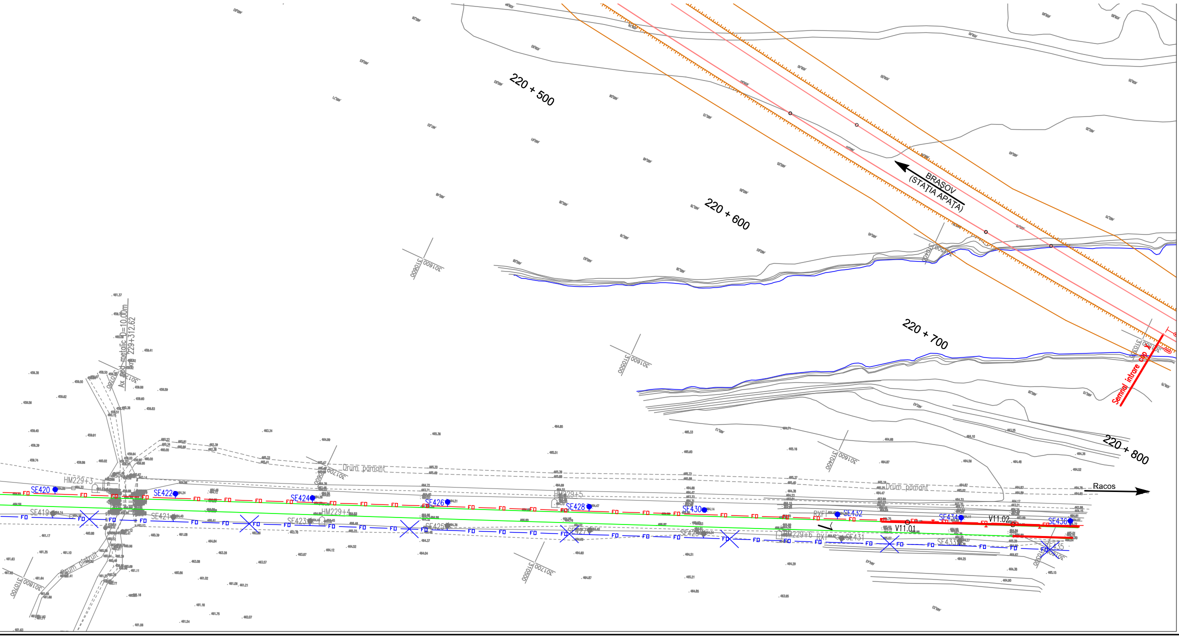
310800
302000


220 + 500
220 + 600
220 + 700
220 + 800
BRAŞOV
(STAŢIA APAŢA)
Semnal intrare cap X
Racos
Ax pod metalic D=10.00m
km 229+312.62
Drum pamant
Drum pietruit
HM229+3
HM229+4
HM229+5
HM229+6
SE419
SE420
SE421
SE422
SE423
SE424
SE425
SE426
SE427
SE428
SE429
SE430
SE431
SE432
SE433
SE434
SE435
SE436
V11.01
V11.02
FD
301600
310600
310500
301700
310400
301800
310700

LEGENDA TELECOMUNICATII
TELECOMMUNICATIONS LEGEND:

— FO — FO —	Cablu FO aerian proiectat Designed aerial OF cable
— FO — FO —	Cablu FO existent OF existing cable
—✕FO — FO✕—	Demontare cablu FO aerian Dismounted aerial OF cable
●	Stalp de beton existent care se pastreaza Existing concrete pole which preserved
⊗	Stalp de beton existent - demontat Dismounted existing concrete pole
N ●	Stalp de beton proiectat pentru sustinerea cablului FO Designed concrete pole for supporting the OF cable

DESCRIEREA LUCRĂRILOR

Scopul lucrărilor de telecomunicaţii este de a păstra şi menţine în funcţiune cablul aerian cu fibre optice existent instalat pe stâlpii de beton ai liniei de contact.
Cablul cu fibre optice existent este instalat pe partea dreaptă a căii ferate şi este afectat construirea noilor linii c.f.Lucrările de protejare a cablului cu fibre optice existent se vor realiza în 2 faze.

__Faza 1__

Operaţiile de eliberare a amplasamentului se va executa înaintea începerii lucrărilor de construcţii, în următoarea ordine:

a) Inserarea de bucăţi noi de cablu cu fibre optice pe partea stângă a căii ferate între stâlpul proiectat de lângă semnalul de intrare Y (începând de la clădirea existentă staţia Apaţa - stâlpul SE34) şi stâlpul SE129 spre staţia Racoş.

b) Cablul proiectat se va instala pe stâlpii de beton existenţi şi pe stâlpi noi (unde noile linii c.f. sfectează stâlpii existenţi), după cum urmează:
  - pe stâlpi proiectaţi între semnalul de intrare Y şi SE36
  - pe stâlpii existenţi între SE36 - SE110
  - pe stâlpi proiectaţi între SE110 şi SE128.

c) Cablul proiectat va avea fixări mediane pe stâlpul proiectat (lângă stâlpul existent SE18) şi pe stâlpul SE70.

d) Intre stâlpii SE130 şi SE129 se vor supratraversa liniile c.f.

e) Pe stâlpul SE129 cablul proiectat se va joncţiona de cablul cu fibre optice existent.

f) Inserarea de bucăţi noi de cablu cu fibre optice pe partea stângă a căii ferate între stâlpul SE399 până la staţia Racoş.

g) Pe stâlpul SE399 (de pe partea dreaptă) cablul proiectat se va joncţiona de cablul cu fibre optice existent, după care va supratraversa liniile c.f. între stâlpii SE399-SE400.

h) După preluarea comunicaţiilor pe noul cablu, cablul existent se va demonta.

DESCRIPTION OF WORKS

The goal of the telecommunications works is to preserve and to maintain in operation the existing aerial fiber optic cable installed on the concrete poles of the traction line.
The existing fiber optic cable is installed on the right side of the railway tracks and it is affected by the construction of the new railway tracks.
The protection of the existing fiber optic cable will be performed in 2 phases.

__1st Phase__

The works on the fiber optic cable for setting free the works site must be performed before the beginning of the construction works of the new rail tracks in the following order:

a) Insertion of new fiber optic cable on the left side of the railway tracks between the designed pole near the Y entrance signal (beginning from the existing station building Apaţa - SE34 pole) and the SE129 pole towards Racoş station.

b) The designed cable will be installed on the existing concrete poles and on new poles (where the new tracks affect the existing poles) as follows:
  - on designed poles between the Y entrance signal and SE36 pole
  - on existing poles between SE36 - SE110 poles
  - on designed poles between SE110 şi SE128 poles.

c) The designed cable will have median fastenings on the designed pole (near the existing SE18 pole) and the SE70 pole.

d) Between the SE130 and SE129 poles will be over-crossed the railway tracks.

e) On the SE129 pole the designed fiber optic cable will be junctioned with the existing fiber optic cable.

f) Insertion of new fiber optic cable on the left side of the railway tracks between the existing SE399 pole up to the Racoş station.

g) On the SE399 pole (from the right side) the designed fiber optic cable will be junctioned with the existing fiber optic cable, and after that it will over-crossing the rail tracks between the SE399-SE400 poles.

h) After taking over of the communications on the new fibre optic cable, the existing cable will be dismounted.

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

SUBCONTRACTANT / SUBCONTRACTOR

AREX Lider COMPANY

Aprobat Approved	Responsabil Subcontractant Subcontractor Responsible	A.Stanciu - Dinulescu	10.2011	
Întocmit Elaborated	Proiectant Designer	Gabriela Trifan	10.2011	Trifan

Reabilitarea liniei de cale ferata Brasov - Simeria, parte componentă a coridorului IV Pan European, pentru circulaþia trenurilor cu viteza maximă de 160 km/h,
Tronsonul : Brasov - Sighisoara
Rehabilitation of the railway line Brasov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h,
Section : Brasov - Sighisoara

Proiect/Project
2004/RO/16/P/PA/003

Faza / Phase:
P.Th. / T.D.

Denumire desen / Drawing Title :

Mutarea si protejarea cablului FO existent - Faza 1
Plan de situatie - interval APATA - RACOS Section - Layout Plan
Removal and protection of existing OF cable - 1st Phase

Codificare / Codification System	Scara / Scale 1:1000	LOT / LOT	Nr. / No 01 / 02

E A 5 1 | 0 1 | C | 1 0 | L 7 | T C | 0 5 | 3 | 1 | 0 0 1 | 1