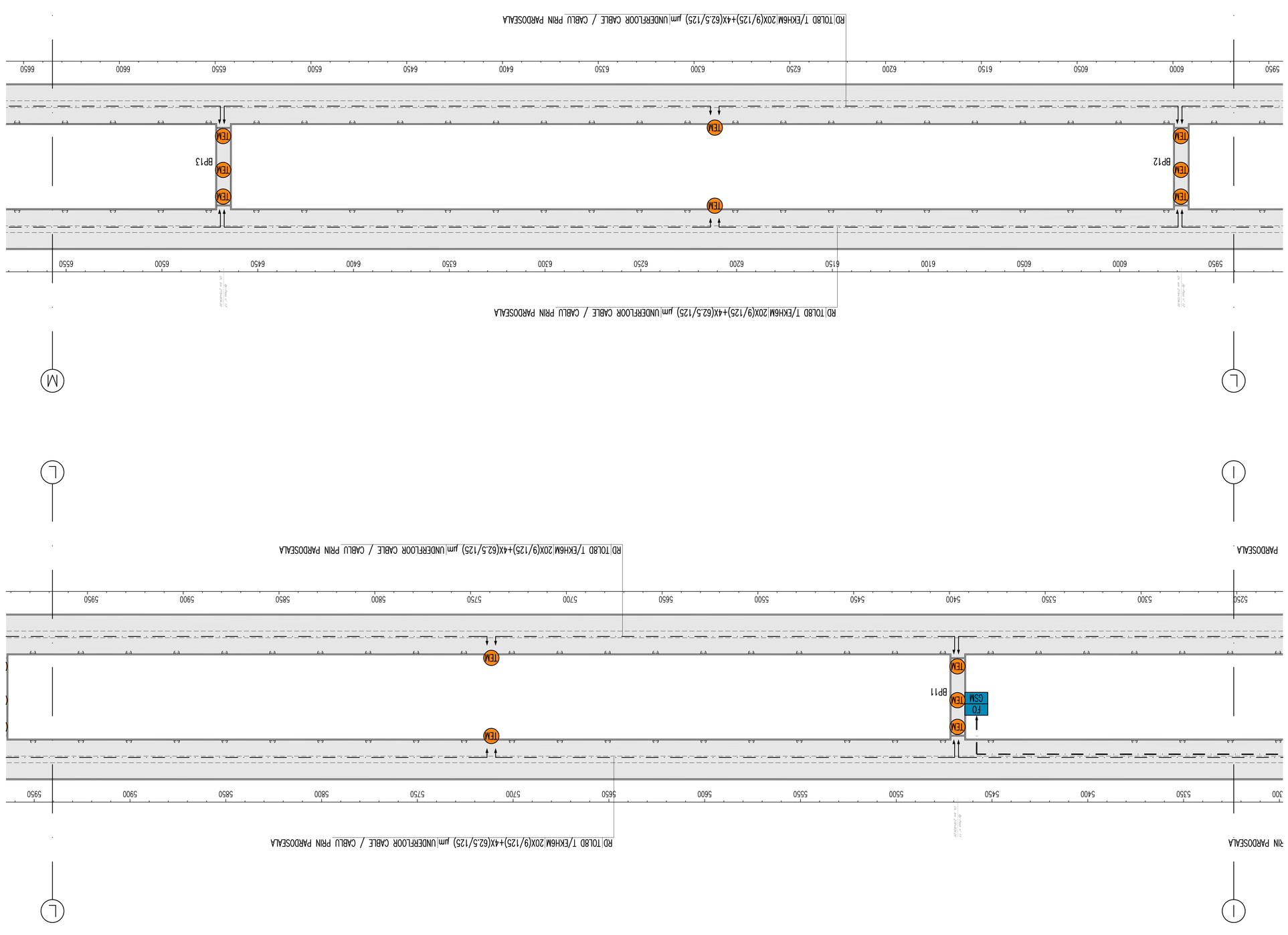
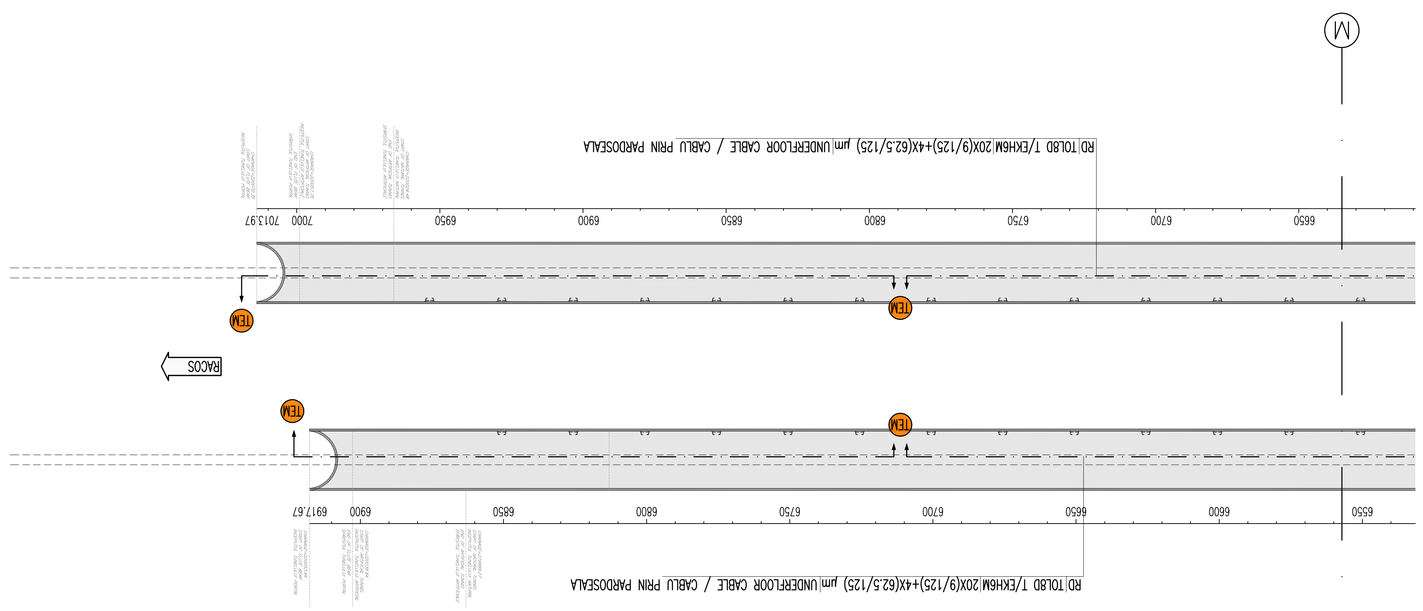




NETWORK LEGEND–LEGENDA OBIECTIVE

— —	FIBER OPTIC CABLE GSM–UMTS RADIO SYSTEMS/CABLU DE FIBRA OPTICA SISTEME RADIO GSM–UMTS
— —	FIBER OPTIC CABLE EMERGENCY NETWORK DATA/CABLU DE FIBRA OPTICA RETEA DATE DE URGENTA

SYMBOLS LEGEND/LEGENDA SIMBOLURI

GSM	MANAGEMENT EQUIPMENT RADIO SIGNALS GSM/ECHIPAMENT DE MANAGEMENT AL SEMNALELOR RADIO GSM
TEM	TELEPHONE COLUMN TEM_DS/COLOANA DE TELEFON TEM_DS
E	MUFFLE FOR CONNECTION FIBER OPTIC CABLE/MUFLA PENTRU CONEXIUNE CABLU DE FIBRA OPTICA
FO	JUNCTION AND EXTENSIONS BOX FIBER OPTIC NETWORK DATA/BOX PENTRU JONCTIUNE SI RAMIFICA FIBRA OPTICA
FE	JUNCTION AND EXTENSIONS BOX FIBER OPTIC SYSTEMS GSM/BOX PENTRU JONCTIUNE SI RAMIFICA FIBRA OPTICA SISTEMELE GSM

ELECTRIC CABLES INDICATORS/ INDICATORI DE CABLURI ELECTRICE

A – SYSTEM

MV	MEDIUM VOLTAGE/TENSIUNE
BT(4)	LOW VOLTAGE/JOASA TENSIUNE (1) = 1000 V, (2) = 690 V, (3) 400/230 V,
FE	PROTECTIVE CONDUCTOR/CONDUCTOR/ULUI DE PROTECTIE
IE	OUTDOOR LIGHTING/ILUMINAT EXTERIOR,
RD	DATA NETWORK/REȚEA PENTRU DATE;
CA	ANTINTRUSION–ACCESS CONTROL/ANTIFRAUDE–ACCESUL CONTROLUL;
RI	FIRE DETECTION/DE DETECTARE A INCENDIILOR, TV TVCC,
RA	RADIO GSM.

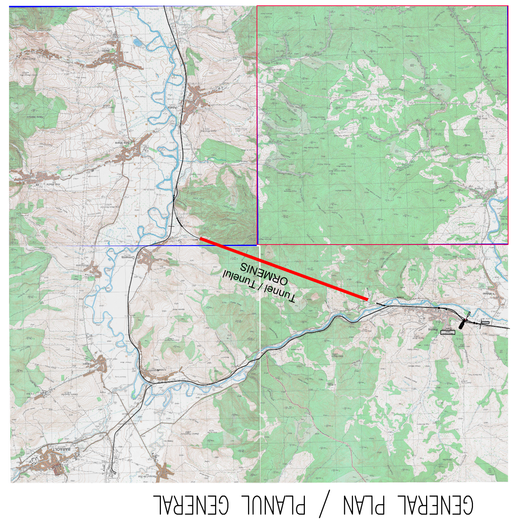
B – CABLE TYPE/CABLU TIP

C – TRAINING CABLE/FORMAREA CABLE

D – OTHERS INFORMATIONS/INFORMATII SUPLIMENTARE

A B C D

GENERAL PLAN / PLANUL GENERAL



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

GUVERNUL ROMANIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

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

CLIENT / CLIENT

Sprre rapid, calitate înaltă
Joint Stock Company

Scott Wilson

OBERMEYER RAMEN + BERATEN GMBH

TECNIC Consulting Engineers

CONSULTANT / CONSULTANT

			Semnătura Signature
Aprobat Approved	Şef proiect Project manager	R. Luizza	
Aprobat Approved	Coordonator Secțiune 1 Section 1 Coordinator	C. Gianbelli	
Verificat Checked	Expert Tunele Tunnel Expert	C. Gianbelli	
Elaborat Elaborated	Proiectant Designer	P. Amodio	

SUBCONSULTANT / SUBCONSULT

Aprobat Approved	Responsabil Subconsultanță Subconsultant Responsible		
Elaborat Elaborated	Proiectant Designer		

Reabilitarea liniei de cale ferată Brașov - Simeria, parte componentă a coridorului IV Pan European, pentru creșterea vitezei maxime de 160 km/h.
Secțiunea 1 Brașov - Sighișoara

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

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 1 Brasov - Sighisoara

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

Denumire desen / Drawing Title : **TUNNEL/TUNELUL OBREMIS**
NATURAL TUNNEL/TUNELUL NATURAL
Radiocommunication systems/Sistme radio
Cablu instalation fibru optic GSM radio propagation, emergency data network,emergency telephone and sound diffusion
Fibrul de cablu de instalare radio GSM propagare, rețea de date de urgență, telefon de urgență și difuzare de sunet

CodBrare / CodBrication System

Scara / Scale	LOT	Nr. / No.
-		4/4

E A 5 1 0 1 C 1 0 L X T S 1 0 1 4 0 1 3 0