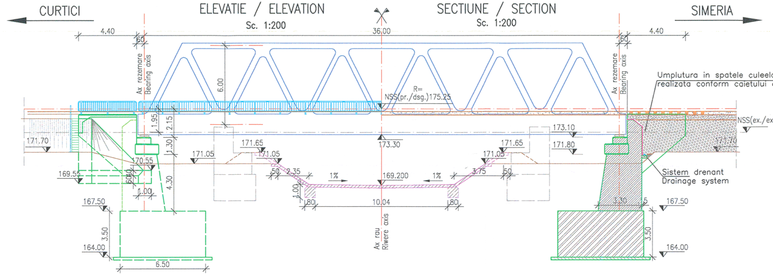
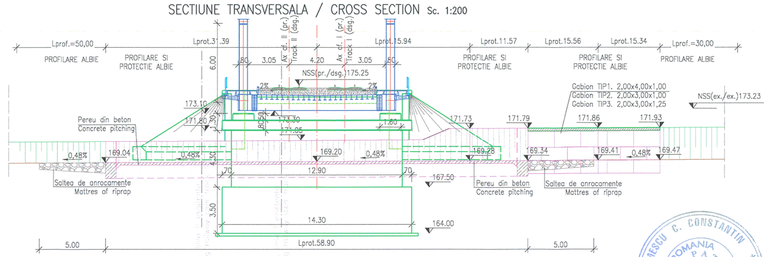
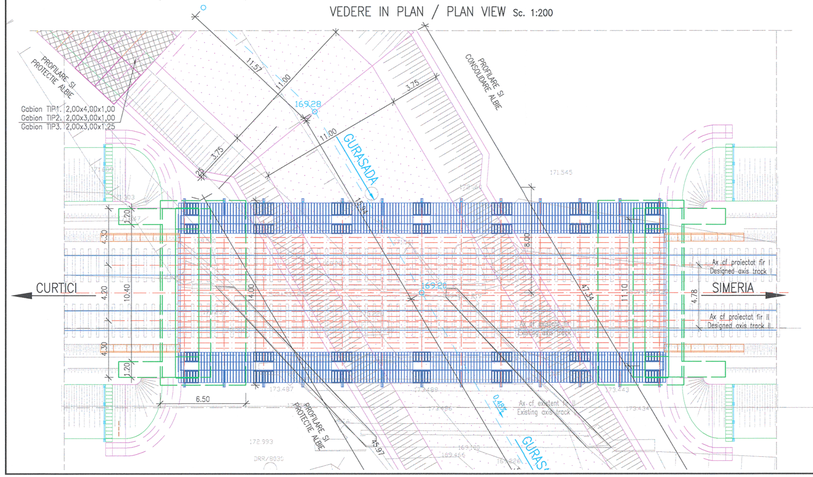




FISA FORAJULUI
SHEET OF DRILLING

171.280	Umplutura din balast si piatra sparta /Filling made out of ballast and crushed stone
170.780	
169.180	Argila prafoasa/ Dusty clay
168.080	Pietris cu liant argilos /Gravel with clayey binder
166.080	Argila prafoasa / Dusty clay
164.480	Praf nisipos, plastic consistent. / Sandy dust, plastic-consistent.
161.280	Nisip mare cu pietris mic /Big-size sand with small-size gravel

CONVOI DE CALCUL LM71
CALCULATION CONVOY LM71



NOTA:

1. Prezentul plan s-a intocmit in baza urmatoarelor date:
– studiu topografic;
– studiu geotehnic;
2. Pentru realizarea podului se vor executa urmatoarele lucrari:
– infrastructura va fi alcatuita din doua culee din beton armat cu fundatii directe 6,50x14,00m iar racordarile cu terasamentul c.f. sunt realizate cu sferturi de con perate;
– suprastructura este de tip grinzi cu zabrele calea jos. Inaltimea de constructie de 1.95 m si deschidera de 36.00m;
– corectia si amenajarea albiei, protectia cu pereu din beton pe 112,00m amonte;
– corectia si amenajarea albiei, protectia cu pereu din beton pe 72,00m aval;
– calibrarea si amenajarea albiei, pe 30,00m amonte;
– calibrarea si amenajarea albiei pe 30,00m aval;
– impermeabilizarea suprafetelor din beton vizibile
3. La executie se vor respecta cu strictete prevederile din:
– Codul de practica pentru executarea lucrarilor din beton, beton armat si beton precomprimat, indicativ NE 012:1–2007 si NE 012:2–2010;
– Codul de practica pentru executarea elementelor prefabricate din beton, beton armat si beton precomprimat, indicativ NE 013–2002;
– Normativul pentru verificarea calitatii si receptia lucrarilor de constructii aferente, indicativ C56–85
– Caietul de sarcini.
4. Conform H.G. 766/1997 lucrarea se incadreaza in categoria "B" a constructiilor de importanta deosebita.
5. Proiectul va fi verificat de verificatori atestati MLPAT la exigentele A.4, B.2 si D.2.

NOTE:

1. This plan was prepared based on the following data:
– topographic survey;
– geo-technical study.
2. In order to make the bridge, the following works will be carried-out:
– the infrastructure will be formed of two reinforced concrete abutments with direct foundations 6,500x14,00m and the connections to the railway embankment are carried out by help of pitched cone quarters;
– the superstructure is of type truss girders bottom road. The height system is of 1.95m and the span of 36.00m;
– correction and arrangement of the riverbed, protection made of concrete pitching on 112,00m upstream;
– correction and arrangement of the riverbed, protection made of concrete pitching on 72,00m downstream;
– calibration and arrangement of the riverbed on 30.00m upstream;
– calibration and arrangement of the riverbed on 30.00m downstream;
– waterproofing of the visible concrete areas.
3. During the execution, the provisions of the following documents will be strictly observed:
– Practice code for the execution of works made of concrete, reinforced concrete and pre-stressed concrete, indicative NE 012:1–2007 and NE 012:2–2010;
– Practice code for the execution of the precast elements made of concrete, reinforced concrete and pre-stressed concrete, indicative NE 013–2002;
– Normative for quality checking and taking over of afferent construction works, indicative C56–85
– The Technical Specifications.
4. Complying with H.G. 766/1997 this structure belongs to category "B" of importance.
5. The project will be verified at A.4, B.2 and D.2 requirements.

OBSERVATIE:
1.Pe toate suprafetele din beton in contact cu pamantul se vor aplica 2 straturi de emulsie din bitum filerizat.
2.Protectia betonului a albiei se va executa cu rosturi conform C.S.

ATTENTION:
1.All concrete surfaces in contact with soil will be coated with 2 bituminous layers.
2.The concrete protection of the riverbed will be executed with joints according with technical specifications.

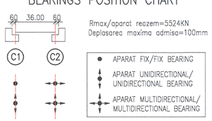
NOTA:
Pentru trasarea lucrarilor se vor folosi ca repere in plan axele liniilor c.f. iar ca repere de nivel cota NSS(Pr.).

NOTA:
For setting out the works, the axes of the railway lines will be utilised as reference marks in plan and the NSS(Dsg.)(top of the rail).

LEGENDA BETOANELOR/CONCRETE LEGEND
conform NE 012–1:2007/SR EN 206–1

- BETON C25/30 – Beton cu caldura de hidratare limitata, clasa de expunere XC2+XF1+XA1, agregate D_{max} 22. FUNDATII DIRECTE/DIRECT FOUNDATIONS
- BETON C25/30 – Clasa de expunere XC4+XF3, agregate D_{max} 22. ELEVATIA INFRASTRUCTURII/INFRASTRUCTURE ELEVATION
- BETON C25/30 – Clasa de expunere XC4+XF3+XA1, agregate D_{max} 22. SFERT DE CON, PERELU SI SCARI DE ACCES QUARTER CONE, PITCHING AND ACCESS STAIRS
- BETON C16/20 – Clasa de expunere X0+XF3, agregate D_{max} 16. DREN, BETON DE EGALIZARE DRAINAGE, LEAN CONCRETE

SCHEMA AMPLASARE APARATE DE REAZEM
BEARINGS POSITION CHART



Rmax/aparat reazem=5524KN
Deplasare maxima admisa=100mm

PLANURI DETALII GENERALE / GENERAL DRAWING DETAILS	
HIDROIZOLATIE SI ACOPERIRI DE ROSTURI WATERPROFFING AND EXPANSION JOINTS	P T 0 3 0 2 0 0 P O 0 1 9
SISTEM DE DRENARE PODURI BRIDGE DRAINAGE SYSTEM	P T 0 3 0 2 0 0 P O 0 2 0
ELEMENT PREFABRICAT TIP L PREFABRICATED ELEMENT TYPE L	P T 0 3 0 2 0 0 P O 0 2 1
SCARA DE ACCES SI BALUSTRADA METALICA ACCESS STAIRS AND METALLIC BALUSTRADE	P T 0 3 0 2 0 0 P O 0 2 2
FUNDATIE PREFABRICATA PENTRU PODURI PROVIZORII SI DETALII DE REZEMARE PODURI PROVIZORII PREFABRICATED FOUNDATION FOR TEMPORARY BRIDGES AND PROPPING-UP DETAILS FOR TEMPORARY BRIDGES	P T 0 3 0 2 0 0 P O 0 2 3
PARAPET METALIC PENTRU PODURI DE BETON METALLIC HANDRAIL FOR CONCRETE BRIDGES	P T 0 3 0 2 0 0 P O 0 2 4

RACANEL I. IONUT RADU
ROMANIA
Nr. 07230
AS, B2, D
INGINER EXPERT
VERIFICATOR PROIECTE

SIMESCU C. CONSTANTIN
ROMANIA
MLPAT
NR: 1107
A4, A7, B4, B2, D2
INGINER
VERIFICATOR PROIECTE

Prezentul plan anuleaza si inlocuieste versiunea anterioara
This plan cancels and replaces previous version

CHERICA C. ANTON
ROMANIA
MLPAT
INGINER EXPERT

CHIRIAC C. ANTON
ROMANIA
MLPAT
INGINER EXPERT

Verificator / Expert Checker / Expert	Cerinta Requirement	Semnatura Signature	Referat / Expertiza Report / Expertise

European Investment Bank

MINISTERUL TRANSPORTURILOR

BENEFICIAR / BENEFICIARY :

CFR

COMPANIA NAȚIONALĂ DE CĂI FERATE "CFR" SA

			Data Date	Semnatura Signature
PROIECTANT / DESIGNER:	PÖYRY			
Aprobat Approved	Sef de echipa Team leader	C. Teodorescu	01.2013	
Verificat Checked	Expert Cheie Key Expert	R. Tudorascu	01.2013	
Subcontractant / Subcontractor	IOTOP			
Aprobat Approved	Adjunct Sef de echipa Deputy Team leader	A.M. Baicu	01.2013	
Proiectat Designed	Inginer Engineer	F. Ioanidi	01.2013	

"Reabilitarea liniei c.f. Frontier ă - Curtici - Simeria , parte componentă a Coridorului IV Pan - European pentru circula ția trenurilor cu viteză maximă de 160 km/h"
Tronsonul 3: Gurasada - Simeria

"Rehabilitation of the Railway Line Border - Curtici - Simeria , component Part of the IV Pan - European Corridor for the Trains Circulation with maximum speed of 160 km/h"
Section 3: Gurasada - Simeria

Project 9i 35311.1

Faza / Phase: PTH+CS / TD+TS

Denumire desen / Drawing name:

DISPOZITIE GENERALA / GENERAL LAYOUT
POD / BRIDGE KM pr. 508+447.23 (KM ex. 509+515)

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr / No
1:200	1 / 04.2013	PT.03.02.21.PO.05.03	03