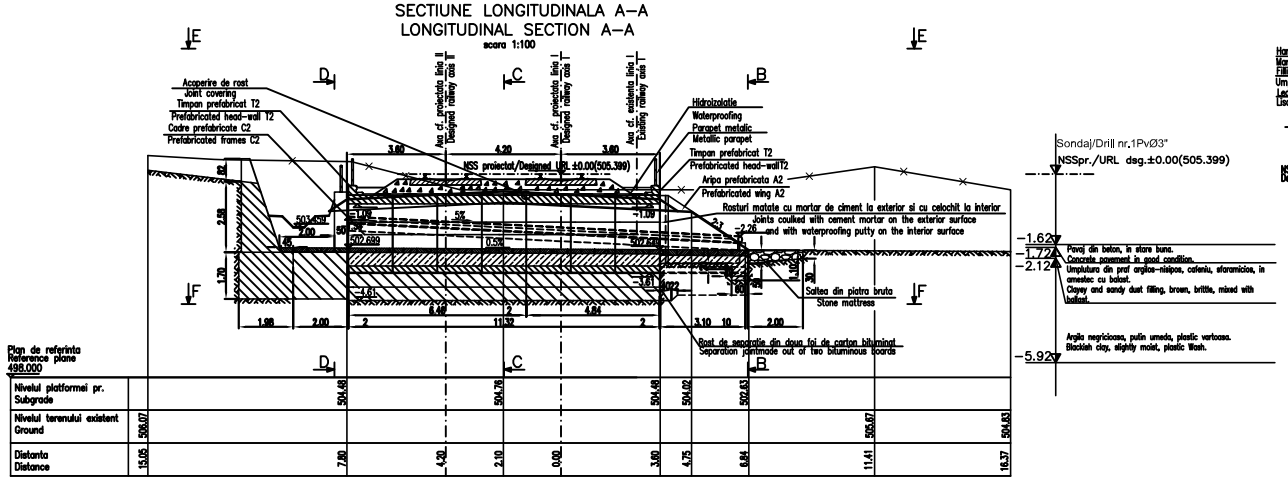
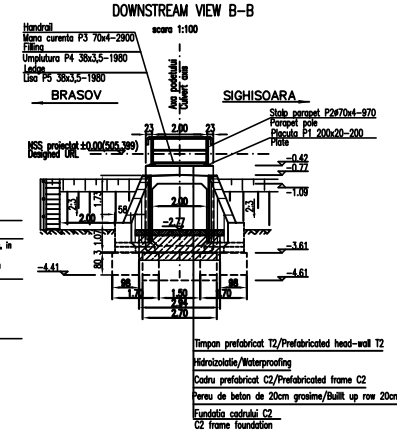
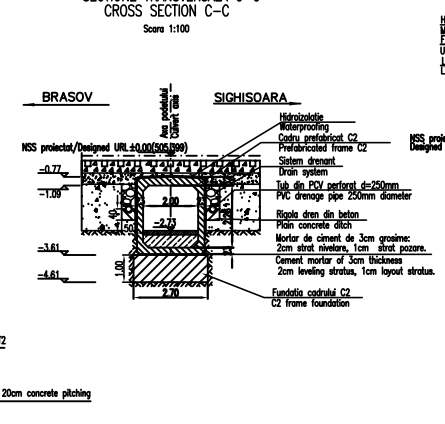
SECTIUNE LONGITUDINALA A–A
LONGITUDINAL SECTION A–A
scara 1:100



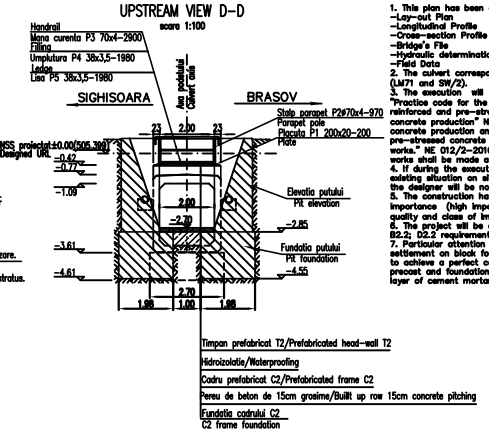
VEDERE DIN AVAL B–B
DOWNSTREAM VIEW B–B
scara 1:100



SECTIUNE TRANSVERSALA C–C
CROSS SECTION C–C
Scara 1:100



VEDERE DIN AMONTE D–D
UPSTREAM VIEW D–D
scara 1:100



NOTE:

1. This plan has been drawn up based on the following data:
–Lay–out Plan
–Longitudinal Profile
–Cross–section Profile
–Bridge's File
–Hydraulic determination
–Field Data
2. The culvert corresponds to the UIC determination convoys (LM71 and SW/2).
3. The execution will strictly comply with the provisions of "Normativ pentru producerea betonului si executarea lucrarilor din beton, beton armat si beton precomprimat. Partea 1: Producerea betonului", indicativ NE 012/1–2007 si "Normativ pentru producerea betonului si executarea lucrarilor din beton, beton armat si beton precomprimat. Partea 2: Executarea lucrarilor din beton", indicativ NE 012/2–2010, iar verificarea calitatii lucrarilor si receptionarea lor se va face conform normativului C56–1985.
4. During the execution, discrepancies are found between the existing situation on site and the situation stated in the project, the designer will be noticed.
5. The construction has been classified in B category of importance (high important constructions), modul 1–ensuring the quality and class of importance B according to G.D. 766/97.
6. The project will be checked in order to comply with the A4.2; B2.2; D2.2 requirements.
7. Particular attention is drawn on binding prefabricated elevations settlement on block foundation through a layer of cement mortar to achieve a perfect contact over the entire surface between precast and foundation base.Propping is prohibited without direct layer of cement mortar.

NOTA:

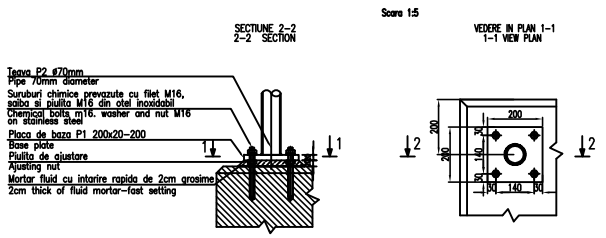
1. Prezentul plan a–a intocmit pe baza urmatoarelor date:
–plan de situatie
–profil in lung
–profil transversal
–fisa podului
–calcul hidraulic
–date culese pe teren
2. Podetul corespunde la convoalele de calcul UIC (LM71 si SW/2)
3. La executie se vor respecta cu strictete prevederile din "Normativ pentru producerea betonului si executarea lucrarilor din beton, beton armat si beton precomprimat. Partea 1: Producerea betonului", indicativ NE 012/1–2007 si "Normativ pentru producerea betonului si executarea lucrarilor din beton, beton armat si beton precomprimat. Partea 2: Executarea lucrarilor din beton", indicativ NE 012/2–2010, iar verificarea calitatii lucrarilor si receptionarea lor se va face conform normativului C56–1985.
4. Daca la executie se vor constata neconcordante intre situatia existenta pe teren si cea din proiect se va anunta proiectantul.
5. Constructia se incadreaza in categoria de importanta B (constructii de importanta deosebita), modul 1 de asigurare a calitatii si clase de importanta B, conform HG 766/1997.
6. Proiectul va fi verificat la exigentele A4.2; B2.2; D2.2.
7. Se atrage in mod deosebit atentia asupra obligativitatii rezemarii elementelor prefabricate a blocurilor de fundatie prin intermediul unui strat de mortar de ciment pentru o ee realiza un contact perfect pe toata suprafata intre talpa prefabricatului si fundatie. Se interzice rezemarea directa fara strat de mortar de ciment.

Niveluri / Levels

Nivelul platformei pr. Subgrade	504.48		504.78		504.48	504.60		504.63				504.67					504.63
Nivelul terenului existent Ground	505.07											505.07					
Distanta Distance	15.05		7.80		4.50	2.10	4.00		3.80	4.75	4.84		11.41				16.37

SECTIUNE PRIN TERASAMENTE
EARTHWORKS SECTION

DETALIU PENTRU PRINDEREA PLACUTELOR P1 DE TIMPAN
DETAIL TO JOIN THE SLABS P1 AT THE TYMPANUM
Scara 1:5



DATE HIDRAULICE:

–Inaltimea de apa in podet	h=0,70m
–Perimetrul udat:	P=3,40m
–Aria udata:	A=1,40m²
–Viteza de curgere a apei	V=2,62m/s

HIDRAULIC DATA:

–Hydraulic height:	h=0,70m
–Perimetar:	P=3,40m
–Surface:	A=1,40m²
–Water flow speed:	V=2,62m/s

NOTA
Numar de elemente prefabricate

–Cadre prefabricate C2	7buc
–Timpane prefabricate T2	2buc.
–Aripi prefabricate A2	2buc.

NOTE
Number of prefabricated elements

–Prefabricated frame C2	7pcs.
–Prefabricated head–wall T2	2pcs.
–Prefabricated wings A2	2pcs.

LEGENDA BETOANELOR UTILIZATA LA PODETE:
LEGEND OF CONCRETES USED FOR CULVERTS:

- Beton in rigole drenuritor, fundatiile sferturilor de con si pentru realizarea stratului suport pentru pereu: Concrete for the drain gutters, for the foundations of cone quarters and for the support layer of revetment:
  C 25/30 – CEM II/A – S 32,5 – (XC4+XF3+XA1) – A/C = 0,50 – Dmax32 – Cl 0,20
- Beton de panta: Slope concrete:
  C 25/30 – CEM II/A – S 32,5 – (XF3) – A/C = 0,55 – Dmax16 – Cl 0,20
- Beton in fundatiile podetelor, a elementele de racordare (aripi, pinteni, camere de cadere, sferturi de con, etc), in elevatiile aripilor monolitie si a camerelor de cadere, in pereu: Concrete for the foundations of culverts, of connecting elements (wings, breakwaters, water falling chambers, cone quarters etc), for the elevations of monolith wings and of water falling chambers, in revetment:
  C 25/30 – CEM II/A – S 32,5 – (XF1) – A/C = 0,50 – Dmax32 – Cl 0,20
- Beton in stratul de protectie a hidroizolatiei: Concrete for the waterproofing protection layer:
  C 25/30 – CEM II/A – S 32,5 – (XC4+XF3+XA1) – A/C = 0,50 – Dmax16 – Cl 0,20
- Beton in elemente prefabricate in general (cadre, bolti, aripi, timpane, L–uri): Concrete for prefabricated elements generally (frames, arches, wings, tympans, L–shaped elements):
  C 35/45 – CEM II/A – S 32,5 – (XC4+XF3+XA1) – A/C = 0,50 – Dmax22 – Cl 0,20

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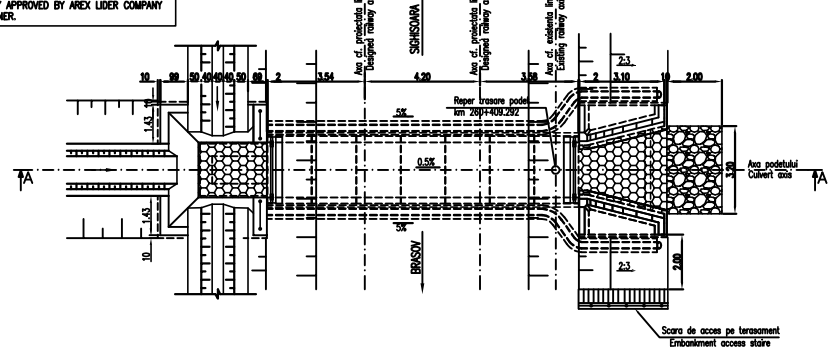
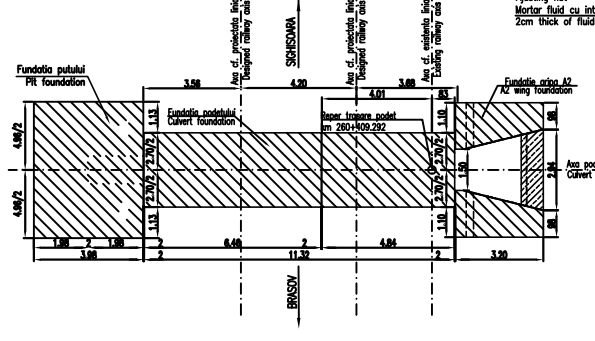
VEDERE IN PLAN E–E
E–E PLAN VIEW
scara 1:100



PLANUL FUNDATIILOR F–F
FOUNDATION PLAN F–F
scara 1:100



MATERIAL METALIC PENTRU CONFECTIONAREA PARAPETULUI PODETULUI
THE METALLIC MATERIAL TO BUILD PARAPET OF CULVERT

Poz. Place	Denumirea materialului The denomination of the material cf. EN 10025 – S235 JR	Buc.	Sectiune Section	Lung. Long. (mm)	Sectiune/Section kg/ml	kg/buc	kg
P1	Placuta prindere Clamping plate	4	200x20	200	31.40	6.28	25.12
P2	Stalp parapet EN 10297 – E275 Parapet pole	4	70x4	970	6.51	6.32	25.26
P3	Mana curenta EN 10297 – E275 Handrail	2	70x4	2900	6.51	18.88	37.76
P4	Umplutura EN 10058 Filling	2	38x3,5	1980	2.98	5.90	11.80
P5	Lisa EN 10058 Ledge	2	38x3,5	1980	2.98	5.90	11.80
	Total partial						111.74
	Partially total						
	Sudura 2%						2.24
	Welding 2%						
	TOTAL kg						115

D					
C					
B					
A	12.2011	REVIZIA 1	Ciprian Totan		
Indice Index	Data Date	Modificari Modification/Revision	Proiectant Designer	Asistent Consultant Approved Consultant	Asistent CFR Approved CFR

GUVERNUL ROMANIEI ROMANIAN GOVERNMENT

PROIECT FINANTAT DE UNIUNEA EUROPEANA EUROPEAN UNION FINANCED PROJECT

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

CLIENT / CLIENT

Joint Venture leader

CONSULTANT/CONSULTANT

			Data Date	Semnatura Signature
Aprobat Approved	Sef proiect Project manager	R. Liuzza	11.2011	
Aprobat Approved	Coordonator Sec Bune 1 Section 1 Coordinator	C. Gambelli	11.2011	
Verificat Checked	Expert Cheie Checking Expert	V.Kallidromitis	11.2011	

SUBCONTRACTANT / SUBCONTRACTOR

Aprobat Approved	Responsabil Subcontractant Subconsultant Responsible	A. Dinulescu Stanciu	11.2011	
Intocmit Elaborated	Proiectant Designer	Totan Ciprian	11.2011	

Reabilitarea liniei de cale ferata Brasov - Simeria, pare component à a coridorului V Pan European, pentru circula ja trenurilor cu viteza maxim à 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 :

INTERVAL / SECTION CATA - ARCHITA
PODET- KM 245+297.792 / KM 245+297.792 - CULVERT
DISPOZITIE GENERALA / GENERAL LAYOUT

Codificare / Codification System

Scara / Scale 1:100; 1:5	LOT / LOT	Nr. / No
		01/01

E	A	5	1	0	1	C	1	4	P	A	P	O	0	5	3	1	0	0	2	1