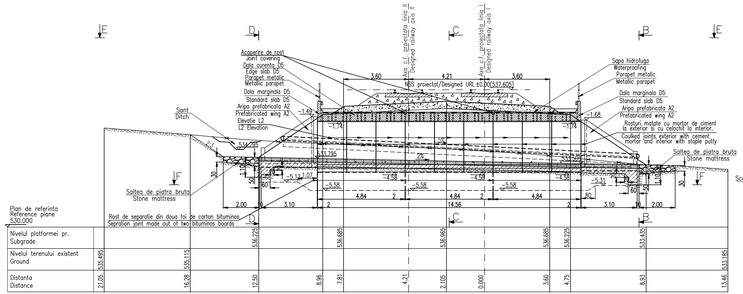
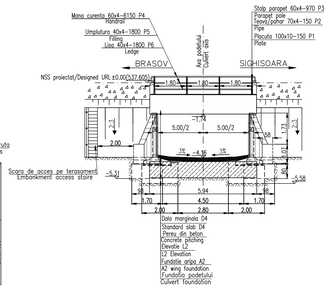
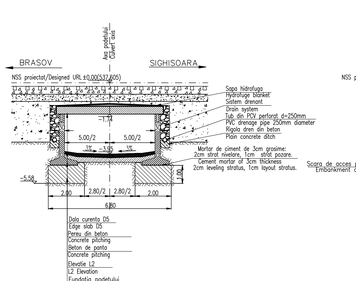
SECTIUNE LONGITUDINALA A–A
LONGITUDINAL SECTION A–A
scara 1:100



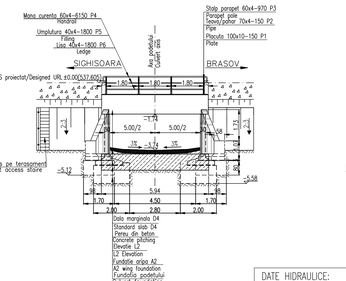
VEDERE DIN AVAL B–B
DOWNSTREAM VIEW B–B
scara 1:100



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

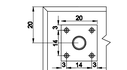


VEDERE DIN AMONTE D–D
UPSTREAM VIEW D–D
scara 1:100

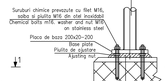


DETALIU PENTRU PRINDEREA PLACUTELOR P1 DE TIMPAN
DETAIL TO JOIN THE SLABS P1 AT THE TYMPANUM

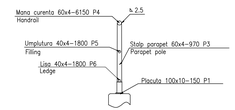
VEDERE IN PLAN 1-1
1-1 VIEW PLAN



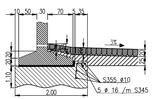
SECTIUNE 2-2
2-2 SECTION



DETALIU DE PARAPET
PARAPET DETAIL
scara 1:25



DETALIU „A" FUNDATII INDEPENDENTE
„A" DETAIL INDEPENDENT FOUNDATIONS
Sc 1:50



NOTA:
1. Prezentul plan a-a intocmit pe baza urmatoarelor date:
–plan de situatie
–profil in lung
–profil transversal
–profil podete
–date hidraulic
–date ruleze pe teren
2. Podetul corespunde la convoalele de calcul LUC (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 I: 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, lor verificarea calitatii lucrarilor si recepționarea 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 (construcții de importanta deosebita), modul 1 de raspunsuri a cutremurului pentru zona de calcul a = 0,20 conform NE 00–2006.
6. Proiectul va fi verificat la exigentele A4.2; B2.2; D2.2.
7. Se atrage in mod deosebit atentia asupra obligativitatii receperii elementelor prefabricate pe biscul de fundatie prin intermediul unui strat de mortar de ciment pentru a se realiza un contact perfect pe toata suprafata intre talpa prefabricatului si fundatie. Se interzice rezemarea directa fara strat de mortar de ciment.

NOTE:
1. This plan has been drawn up based on the following data:
–Lay–out Plan
–Longitudinal Profile
–Cross–section Profile
–Bridge's Fie
–Hydraulic determination
–Land Data
2. The element corresponds to the UIC determination convoys (LM71 and SW/2)
3. The execution will strictly comply with the provisions of "Practice code for the concrete production and works execution, reinforced and pre–stressed concrete – Part 1: Practice code for concrete production" NE 012/1–2007 and "Practice code for the concrete production and works execution, reinforced and pre–stressed concrete – Part 2: The execution of concrete works." NE 012/2–2010, and the quality and the reception of the works shall be made accordingly to Norm C 56–1985.
4. If any differences should be noticed during the execution 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), model 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. Special attention is drawn on binding prefabricated elevations settlement with 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.

DATE HIDRAULICE:
–Inaltimea de apa in podet h= 1.25m
–Perimetrul udat: P= 7.50m
–Aria udata: A=6.25m²
–Viteza de curgere o apei V=~3.5m/s

HIDRAULIC DATA:
–Hydraulic height: h= 1.25m
–Perimeter: P= 7.50m
–surface: A=6.25m²
–Water flow speed: V=~3.5m/s

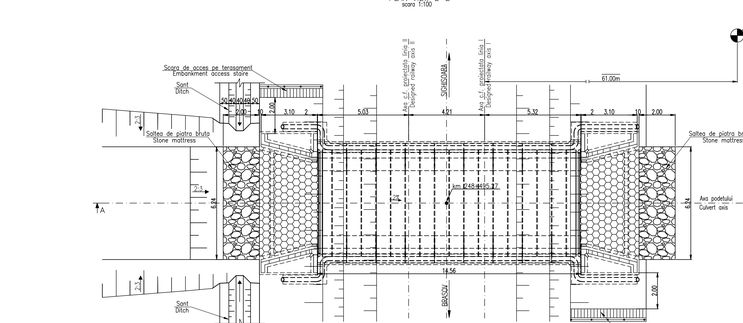
NOTA
Numar de elemente prefabricate
–Dale marginale D5 2buc.
–Dale curente D5 10buc.
–Elevatii L2 10buc.
–Aripi A2 4buc

NOTE
Number of precast section
–Standard slab D4 2pcs.
–Edge slab D4 10pcs.
–L2 elevation 10pcs.
–Prefabricated wings A2 4pcs

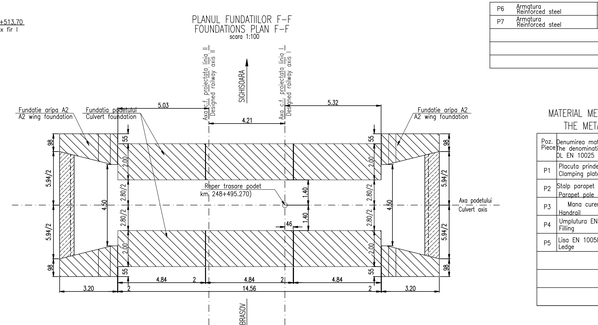
LEGENDA BETOANELOR UTILIZATA LA PODETE:
LEGEND OF CONCRETES USED FOR CULVERTS:

- Beton in rigola drenurilor, fundatiile sferturilor de con si pentru realizarea stratului suport pentru perea: Concrete for the drain gutters, for the foundations of cone quarters and for the support layer of reetment.
  C 25/30 – CEM II/A – S 32.5 – (IF3) – A/C = 0,50 – Dmax32 – Cl 0,20
- Beton de panta: Slope concrete.
  C 25/30 – CEM II/A – S 32.5 – (IF3) – 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 monolite si a camerelor de cadere, in perac:
  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 reetment.
  C 25/30 – CEM II/A – S 32.5 – (IF1) – 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 – (IC4+IF3) – 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 – (IC4+IF3+XA1) – A/C = 0,50 – Dmax22 – Cl 0,20
- Beton in dalele prefabricate din beton precomprimat (D4, D5, etc.):
  Concrete for the pre–stressed concrete prefabricated slabs (D4, D5, etc.):
  C 35/45 – CEM II/A – S 42,5 – (IC4+IF3+XA1) – A/C = 0,50 – Dmax16 – Cl 0,10

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



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



Extras armatura / Statement reinforcing

P6	Armatura Reinforced steel	57	Ø10	1650	0.617	1.018	58.03
P7	Armatura Reinforced steel	8	Ø10	6520	0.617	4.022	32.176
		Total partial Partially total					90.20
		Sudura 2%					1.80
		Welding 2%					
		TOTAL kg					92.00

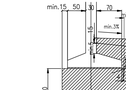
MATERIAL METALIC PENTRU CONFECTIONAREA PARAPETULUI PODETULUI
THE METALLIC MATERIAL TO BUILD PARAPET OF CULVERT

Poz. Piece	Denumirea materialului / The denomination of the material EL EN 10025 – S235 JR	Buc.	Sectiune Section	Lung. Long. (mm)	Sectiune/Section kg/ml	kg/buc	kg
P1	Placuta prindere / Clamping plate	8	200x20	200	7.85	1.18	9.44
P2	Stalp parapet EN 10297 – E275 / Parapet pole	8	70x4	970	5.52	5.36	42.88
P3	Mana curenta EN 10297 – E275 / Handrail	2	70x4	6150	5.52	33.95	67.90
P4	Umplutura EN 10058 / Filling	6	40x4	1800	3.35	6.03	36.18
P5	Lisa EN 10058 / Ledge	6	40x4	1800	3.35	6.03	36.18
		Total partial Partially total					200.42
		Sudura 2% / Welding 2%					4.01
		TOTAL kg					204.43

SE INTERZICE COPIEREA, DIFUZAREA, IMPRUMUTAREA SAU UTILIZAREA IN ALTE SCOPURI FARA PERMISIUNEA AREX LIDER COMPANY CA PROPRIETAR AL DESENULUI

THIS DRAWING IS FORBIDDEN TO BE COPIED, LENT OR USED IN OTHER PURPOSES THAN THOSE PREVIOUSLY APPROVED BY AREX LIDER COMPANY AS ITS OWNER.

DETALIUL „A" FUNDATII INDEPENDENTE
„A" DETAIL INDEPENDENT FOUNDATIONS
Sc 1:50



Index Indice	Data Date	Modificare Modification/Revision	Proiectant Designer	Aprobat Consultant Approved Consultant	Aprobat CFR Approved CFR
D					
C					
B					
A	13.2011	Revizie 1	Tatan Ciprian		

GUVERNUL ROMANIEI / ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ A / EUROPEAN UNION FINANCED PROJECT

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

CLIENT / CLIENT

Joint Venture Arex/or

CONSULTANT / CONSULTANT

	Data Date	Semnătura Signature
Aprobat / Approved	Șef proiect / Project manager	R. Liuzza
Aprobat / Approved	Coordonator Sectiune 1 / Section 1 Coordinator	C. Gambelli
Verificat / Checked	Expert Clasa / Checking Expert	V.Kalidromitis

SUBCONTRACTANT / SUBCONTRACTOR

Aprobat / Approved	Responsabil Subcontractant / Subcontractant Responsible	A. Dinulescu Standu	10.2011
Întocmit / Elaborated	Proiectant / Designer	Tatan Ciprian	10.2011

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

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

Reabilitarea liniei de cale ferata Brașov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteza maximă de 160 km/h, Tronsonul :Brașov - Sighișoara

Rehabilitation of the railway line Brașov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h, Section : Brașov - Sighișoara

Denumire desen / Drawing Title :

INTERVAL / SECTION CATA - ARCHITA
PODET - KM 248+485.270 / KM 248+495.270 - 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 6 0 1 0 0 2 1			