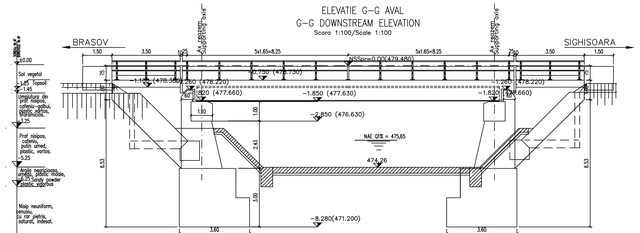
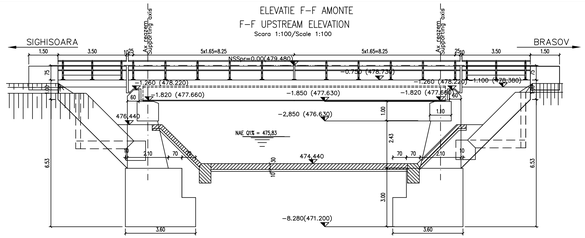
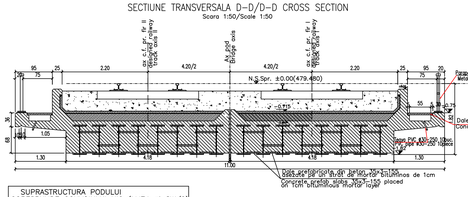
## ELEVATIE G-G AVAL
## G-G DOWNSTREAM ELEVATION
Scara 1:100/Scale 1:100




## ELEVATIE F-F AMONTE
## F-F UPSTREAM ELEVATION
Scara 1:100/Scale 1:100

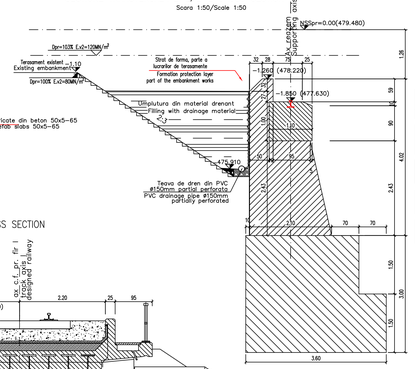



## SECTIUNE TRANSVERSALA D-D/D-D CROSS SECTION
Scara 1:50/Scale 1:50

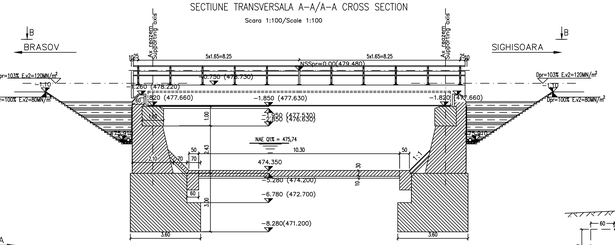



SUPRASTRUCTURA PODULUI
CORESPUNDE CONVOIULUI UIC (LM71 si SW/2)
BRIDGE SUPERSTRUCTURE
CORESPOND TO CONVOY UIC (LM71 si SW/2)

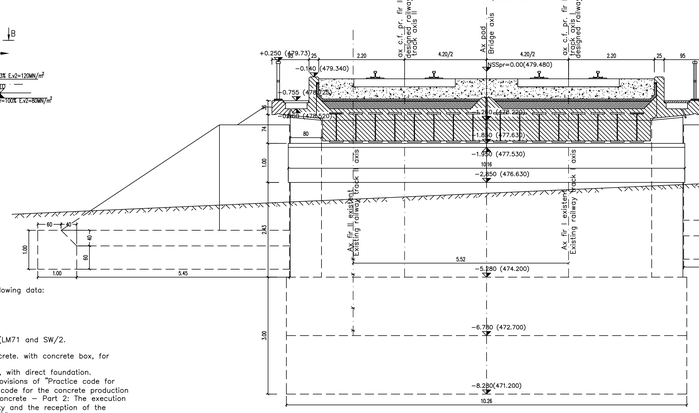
## SECTIUNE TRANSVERSALA E-E/E-E CROSS SECTION
Scara 1:50/Scale 1:50



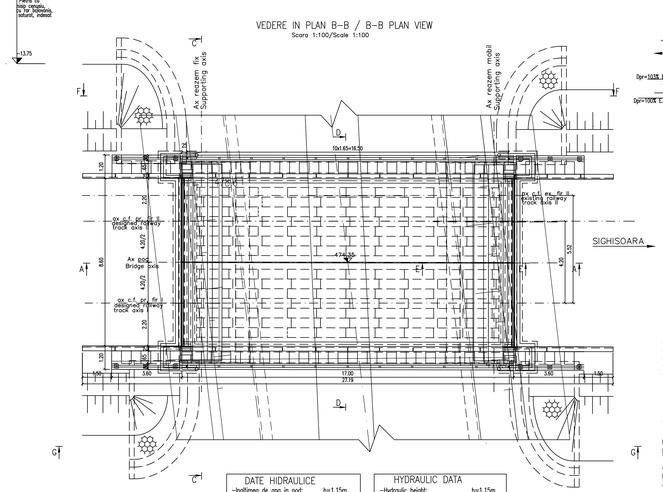

## SECTIUNE TRANSVERSALA A-A/A-A CROSS SECTION
Scara 1:100/Scale 1:100




## SECTIUNE TRANSVERSALA C-C/C-C CROSS SECTION
Scara 1:50/Scale 1:50




## VEDERE IN PLAN B-B / B-B PLAN VIEW
Scara 1:100/Scale 1:100




## NOTA

1. Prezentul plan s-a intocmit pe baza urmatoarelor date:
– plan de situatie;
– profil in lung;
– profil transversal;
– calcul hidraulic;
– date culese pe teren.
2. Podul corespunde la convoaiele de calcul UIC (LM71 si SW/2).
3. Noul pod are urmatoarea alcatuire:
– suprastructura: tablier din grinzi metalice inglobate in beton, pentru cale dubla;
– infrastructura: culei din beton armat, fundate direct.
4. Daca la executie se vor constata neconcordante intre situatia existenta pe teren si cea din proiect se va anunta proiectantul.
5. 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.
6. Constructia se incadreaza in categoria de importanta B (constructii de importanta deosebita), modelul 1 de asigurare a calitatii si clasa de importanta B, conform HG 766/1997.
7. Proiectul va fi verificat la exigentele A4.2; B2.2; D2.2

## NOTE

1. This plan has been drawn up based on the following data:
– Lay-out Plan;
– Longitudinal Profile;
– Cross-section Profile;
– Hydraulic determination;
– Field Data.
2. Bridge convoys calculation corresponds to UIC (LM71 and SW/2.
3. The new bridge has the following structure:
– Superstructure: metallic girders embedded in concrete. with concrete box, for double track;
– Infrastructure: abutments and reinforced concrete, with direct foundation.
4. The execution will strictly comply with the provisions of "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.
5. In case during the execution there will be found out any discrepancies between the existing situation on site and in project, the designer will be anounced.
6. The construction is classified in the B category of importance. Special importance constructions, model 1 for quality ensuring according to HG 766/97.
7. The project will be checked to comply with the requirements A4.2; B2.2; D2.2.

| DATE HIDRAULICE | | HYDRAULIC DATA | |
|---|---|---|---|
| –Inaltimea de apa in pod: | h=1.15m | –Hydraulic height: | h=1.15m |
| –Perimetrul udat: | P=14.55m | –Wet perimeter: | P=14.55m |
| –Aria udata | A=13.27mp | –Wet surface: | A=3.27mp |
| –Viteza de curgere apa: | V=5.43mc/s | –Waters low speed: | V=5.43mc/s |

## ATENTIE/ATENTION

In cazul in care temperatura in timpul turnarii este scazuta, se vor folosi cimenturile cu rezistenta initiala mare, R si aditivi acceleratori, iar in cazul turnarii pe timp caldura, cimenturile cu rezistenta initiala scuda, N si aditivi intarzietori (conf.NE 012/2-2010 si tabelului 2 din SR EN 197-1:2002).
When the temperature during the casting is low, cements with high initial resistance, R and accelerating additives shall be used and when it is cast during warm weather, cements with common initial resistance, N and delaying additives shall be used (according the norm NE 012/2-2010 and table 2 for the SR EN 197-1: 2002).

## ATENTIE/ATENTION

1. Turnarea betonului se va face continuu (fara intreruperi), inclusiv in console, in timp de max. 5 ore folosind intarzietor de
Replast, in cazul turnarii la temperatura ambianta de peste 10°C.
2. Montarea cai, inclusiv balastul, se va face dupa minim 28 zile de la turnarea dalei.
1. The concrete shall be continuously pored (without interruptions), including into the broket, during max. 5 hours, using Replast retarder, in case of pouring at environment temperature over 10°C.
2. The track, including the ballast shall be mounted after minimum 28 days from the concrete slab pouring.

| TITLUL PLANŞEI /PLAN TITLE | | CODICODE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | a | b | c | d | e | f | h | j | g | i | k |
| PLANURI TIP LA PODURI | | | | | | | | | | | | |
| DETAILS FOR WATERPROOFING AND JOINT COVERING | DETALII HIDROIZOLATII SI ROSTURI | E | A | 5 | 1 | 0 | 1 | E | 0 | 0 | 0 | 0 |

## LEGENDA BETOANELOR/CONCRETE LIST

- Beton armat in grinzi inglobate de clasa / Concrete in bearings and in the deck slabs: C 30/37–CEM II/A-S 42,5–(XC4+XF3+XA1)–A/C=0,50–Dmax.16–Cl 0,20
- Beton de panta. / Concrete in the protection layer of waterproofing system. C 25/30–CEM II/A-S 32,5–(XF3)–A/C=0,55–Dmax.16–Cl 0,20
- Beton in stratul de protectie a hidroizolatiei / Concrete in the protection layer of waterproofing system C 25/30–CEM II/A-S 32,5–(XC4+XF3)–A/C=0,50–Dmax.16–Cl 0,20
- Beton in dalele prefabricate pentru trotuare / Concrete in the prefab slabs required for the sidewalks C 25/30–CEM I/A-S 32,5–(XC4+XF3+XA1)–A/C=0,50–Dmax.22–Cl 0,22
- Beton in dalele prefabricate pentru grinzile inglobate in beton / Concrete in the prefab slabs required for the decks made out of steel girders embedded in to concrete C 35/45–CEM I/A-S 52,5–(XC4+XF3+XA2)–A/C=0,50–Dmax.16–Cl 0,10
- Beton armat in cuinzeli si bancheta cuinzeliior / Reinforced concrete in the cushions and cushions bench C 35/45–CEM I/A-S 52,5–(XC4+XF3+XA2)–A/C=0,50–$D_{max}$16–Cl 0,20
- Beton armat in elevatie si in zidurile intoarse / Reinforced concrete in the elevation infrastructure and reverted walls C 25/30–Ciment II II/A-S 42,5–(XC4+XF3)–A/C=0,50–$D_{max}$ 32–Cl 0,20
- Beton simplu in fundatii: / Plain concrete in abutments foundations: C 25/30–Ciment II II/A-S 42,5–(XF3)–A/C=0,50–$D_{max}$32–Cl 0,20

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| Indice / Index | Data / Date | Revizia / Revision | Proiectant / Designer | Aprobat Consultant / Approved Consultant | Aprobat CFR / Approved CFR |
|---|---|---|---|---|---|
| D | | | | | |
| C | | | | | |
| B | | | | | |
| A | 11.2011 | Revizia 1 / 1 Revision | Dinu Andreea | | |

GUVERNUL ROMANIEI / ROMANIAN GOVERNMENT
PROIECT FINANTAT DE UNIUNEA EUROPEANA / EUROPEAN UNION FINANCED PROJECT

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

CLIENT / CLIENT

ITALFERR GRUPPO FERROVIE DELLO STATO Joint Venture leader · Scott Wilson · OBERMEYER PLANEN + BERATEN GmbH · TECNIC Consulting Engineers

CONSULTANT / CONSULTANT

| | | | Data / Date | Semnătura / Signature |
|---|---|---|---|---|
| Aprobat / Approved | k+f project Project manager | R. Liuzza | | |
| Aprobat / Approved | Coordonator Sectiune 1 / Section 1 Coordinator | C. Gambelli | | |
| Verificat / Checked | Expert Cheie / Checking Expert | V. Kallidromitis | | |

SUBCONTRACTANT / SUBCONTRACTOR — AREX IDEER

| | | | | |
|---|---|---|---|---|
| Aprobat / Approved | Responsabil Subconsultant / Subconsultant Responsible | A. Dinulescu Stanciu | 08.2011 | |
| Biscrisi / Elaborated | Proiectant / Designer | Dinu Andreea | 08.2011 | |

Reabilitarea liniei de cale ferata Brasov - Simeria, parte componenta a coridorului IV Pan European, pentru circulatia trenurilor cu viteza maxima de 160 km/h, Sectiunea / Section : 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,

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

Faza / Phase: P.Th. / P.Th

Denumire desen / Drawing Title :

# INTERVAL / SECTION FELDIOARA - APATA

**POD / BRIDGE Km 204+898.420 - D=15.00m**

DISPOZITIE GENERALA / DISPOSITION GENERALE

| Codificare / Codification System | Scara / Scale 1:20; 1:5; 1:10; 1:50 | LOT / LOT | Nr. / No 01 / 01 |
|---|---|---|---|

E A 5 1 | 0 1 | C | 0 8 | P A | P V | 0 1 | 6 | 0 | 0 0 2 | 1