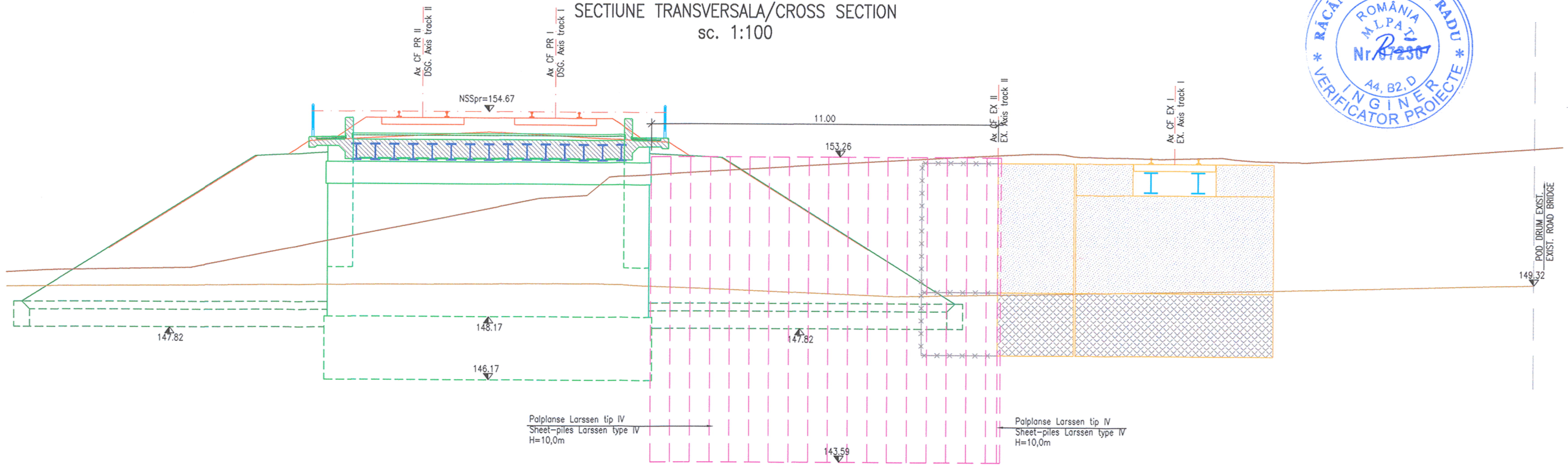
SECTIUNE TRANSVERSALA/CROSS SECTION
sc. 1:100



RĂCĂNEL I. IONUT RADU
Nr. 07230

TEHNOLOGIE DE EXECUTIE

ETAPA I: LUCRARI PREGATITOARE. CIRCULATIE CU VITEZA NORMALA PE LINIILE EXISTENTE.
- Se amenajeaza drumurile de acces si platformele tehnologice.
- Se realizeaza organizarea de santier.
- Se executa lucrari de protectie si/sau deviere a instalatiilor de telecomunicatii, sau de alte tipuri, de pe zona lucrarilor.

ETAPA II: EXECUTIE POD NOU PE AMPLASAMENTUL PROIECTAT, INCLUSIV RACORDARILE CU TERASAMENTUL AVAL.
CIRCULATIE CU VITEZA NORMALA PE LINIILE EXISTENTE.
- Se executa sapatura la adapostul incintei de palplanse pentru realizarea culeelor.
- Se toarna betonul de egalizare. Dupa atingerea a 80% din clasa betonului de egalizare, se demonteaza ultimul sprait (cadru) al incintei de palplanse.
- Se executa culeele, inclusiv zidurile intoarse.
- Pe suprafetele din beton in contact cu pamantul se vor aplica 2 straturi de emulsie din bitum filerizat.
- Se scot sprijinirile si se executa umplutura din balast stabilizat cu ciment la cota drenului.
- Se executa hidroizolatia pe spatele culeelor.
- Se executa fundatia drenului conform detaliilor din proiect.
- Se executa sistemul drenant (geodren, geotextil si tub).
- Se executa pe reazemele definitive suprastructura tip DGMI.
- Se executa hidroizolatia si betonul de protectie al acesteia.
- Se completeaza umplutura in corpul terasamentului, conform caietului de sarcini si se monteaza calea conform proiectului.
- Se executa scarile de acces pe terasamentul aval.
- Se executa pereul pe zona podului si se profileaza albia aval.
- Se asigura continuitatea circuitelor de cale, electroizolarea sinelor si protectia electrica.

ETAPA III: EXECUTIA RACORDARII CU TERASAMENTUL AMONTE.
INCHIDERE DE CIRCULATIE PE LINIA II EXISTENTA SI CIRCULATIE CU VITEZA NORMALA PE LINIA I EXISTENTA.
- Se demoleaza partial culeea Curtici de sub linia II existenta si se monteaza sprijiniri din palplanse pentru sustinerea terasamentului existent.
- Se executa sfertul de con amonte spre Curtici.
- Se completeaza umplutura in corpul terasamentului, conform caietului de sarcini.
- Se executa pereul pe zona podului si se profileaza partial albia amonte.
- Se pune sub tensiune linia de contact, si se deschide circulatia in trepte de viteza conform instructiilor in vigoare pe traseul proiectat, pana la atingerea vitezei normale de circulatie.

ETAPA IV: CIRCULATIE CU VITEZA NORMALA PE TRASEUL PROIECTAT.
- Se continua demolarea podurilor de pe traseul existent si se demonteaza palplansele metalice ce sustin terasamentul existent.
- Se continua profilarea albiei amonte, pana la podul de sosea.
- Se dezafecteaza linia si terasamentul de pe traseul existent.
- Se dezafecteaza platformele si accesele din zona de lucru.

EXECUTION TECHNOLOGY

STAGE I: PRELIMINARY WORKS. TRAFFIC WITH NORMAL SPEED ON THE EXISTING LINES.
- Arranging the access roads and the technological platforms.
- Making the site organization.
- Executing the works for protection and/or deflection of the telecommunication installations or other types of works on the works' area.

STAGE II: EXECUTION OF NEW BRIDGE ON THE DESIGNED LOCATION, INCLUDING CONENCTIONS TO THE DOWNSTREAM EMBANKMENT. TRAFFIC WITH NORMAL SPEED ON THE EXISTING LINES.
- Executing the excavation with under the protection of sheet–piles premises for making the abutments.
- Casting the leaning concrete. The last frame of the sheet–pile premises is dismantled after reaching 80% of the leaning concrete class.
- Executing the abutments, including the wing walls.
- 2 layers of filler bitumen emulsion will be applied on the concrete surfaces that are in contact with the soil.
- Removing the propping–ups and preparing the cement stabilized ballast filling at the drain foundation level.
- Executing the waterproofing on the back of the abutments.
- Executing the drain foundation according to the details from the design.
- Executing the draining system (geo–drain, geo–textile and tube).
- Executing the superstructure type DGMI (slab with built–in metallic girders) on the final bearings.
- Executing the waterproofing and its protection concrete.
- Supplementing the filling in the embankment, according to the Technical Specifications and mounting the track according to the design.
- Executing the access stairs on the downstream embankment.
- Executing the pitching on the bridge area and shaping the downstream riverbed.
- Ensuring the continuity of track circuits, the rails' electric insulation and the electric protection.

STAGE III: EXECUTING THE CONNECTION TO THE UPSTREAM EMBANKMENT. TRAFFIC CLOSURE ON THE EXISTING LINE II AND TRAFFIC WITH NORMAL SPEED ON THE EXISTING LINE I.
- Partially demolishing the abutment Curtici from under the existing line II and mounting sheet–pile propping–ups to support the existing embankment.
- Executing the cone quarter upstream towards Curtici.
- Supplementing the filling in the embankment, according to the Technical Specifications.
- Executing the pitching on the bridge area and partially shaping the upstream riverbed.
- Restoring the voltage on the contact line, opening the traffic with speed limits according to the instructions in force on the designed route, until reaching the normal traffic speed.

STAGE IV: TRAFFIC WITH NORMAL SPEED ON THE DESIGEND ROUTE.
- Continuing to demolish the bridges on the existing route and the metallic sheet–piles that support the existing embankment.
- Continuing the shape the upstream riverbed, until to the road bridge.
- Closing–down the line and the embankment from the existing route.
- Closing–down the platforms and the access from the work area.

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

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

European Investment Bank

MINISTERUL TRANSPORTURILOR

BENEFICIAR / BENEFICIARY :

COMPANIA NAȚIONALĂ DE CĂI FERATE "CFR" SA

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

"Reabilitarea liniei c.f. Frontier ă - Curtici - Simeria, parte componentă a coridorului IV Pan - European pentru circula ţia trenurilor cu viteză maximă de 160 km/h"
Tronsonul 2-B : cap Y Bârzava - cap Y Ilteu
"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 2-B : end Y Bârzava - end Y Ilteu

Project 9i
35311.1

Faza / Phase:
PTH+CS / TD+TS

Denumire desen / Drawing name:

TEHNOLOGIE DE EXECUTIE / EXECUTION TECHNOLOGY
POD / BRIDGE KM pr. 543+983 (KM ex. 547+714)

Scara / Scale	Revizia / Revision	Cod desen / Drawing Code	Nr / No
1:100	1 / 04.2013	PT.02.02.13.PO.03.04	04