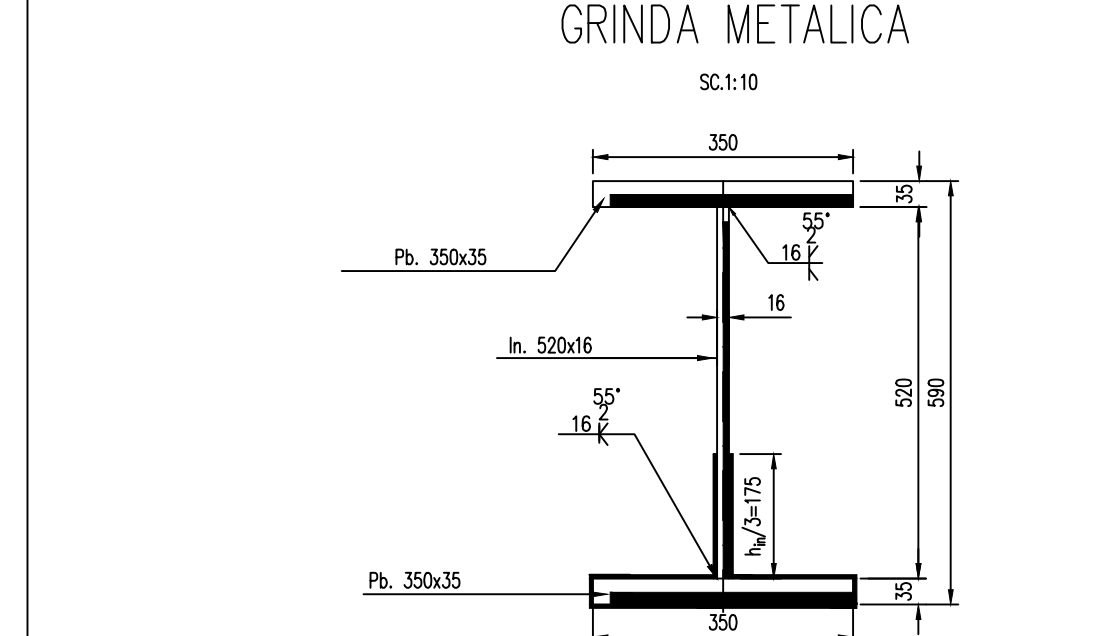
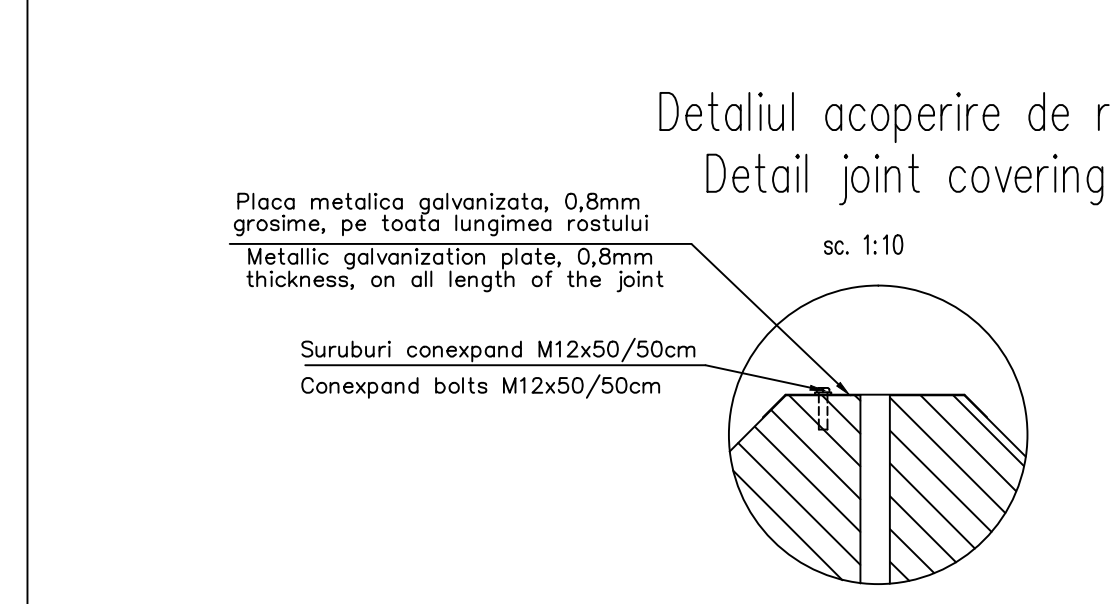


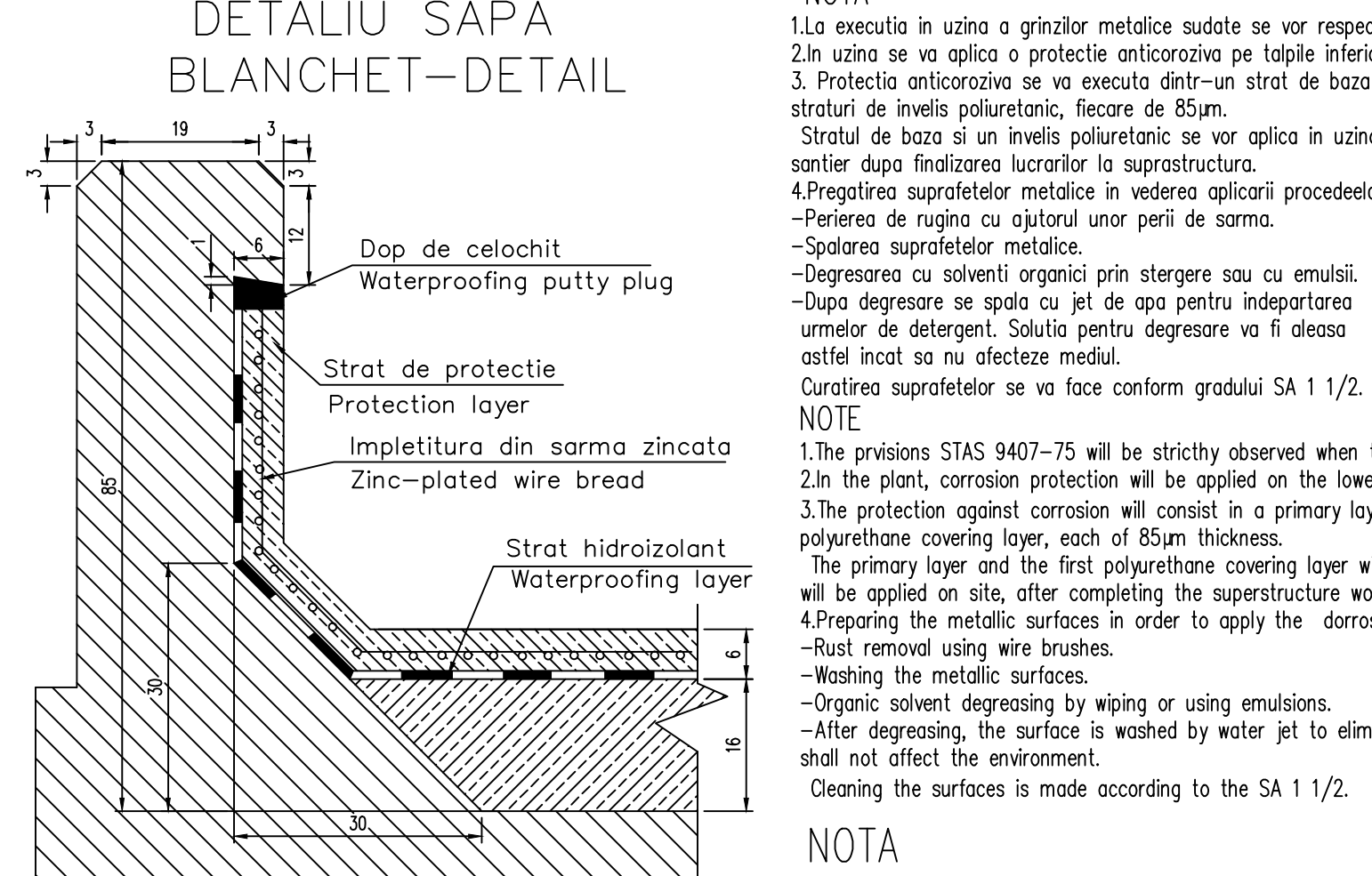
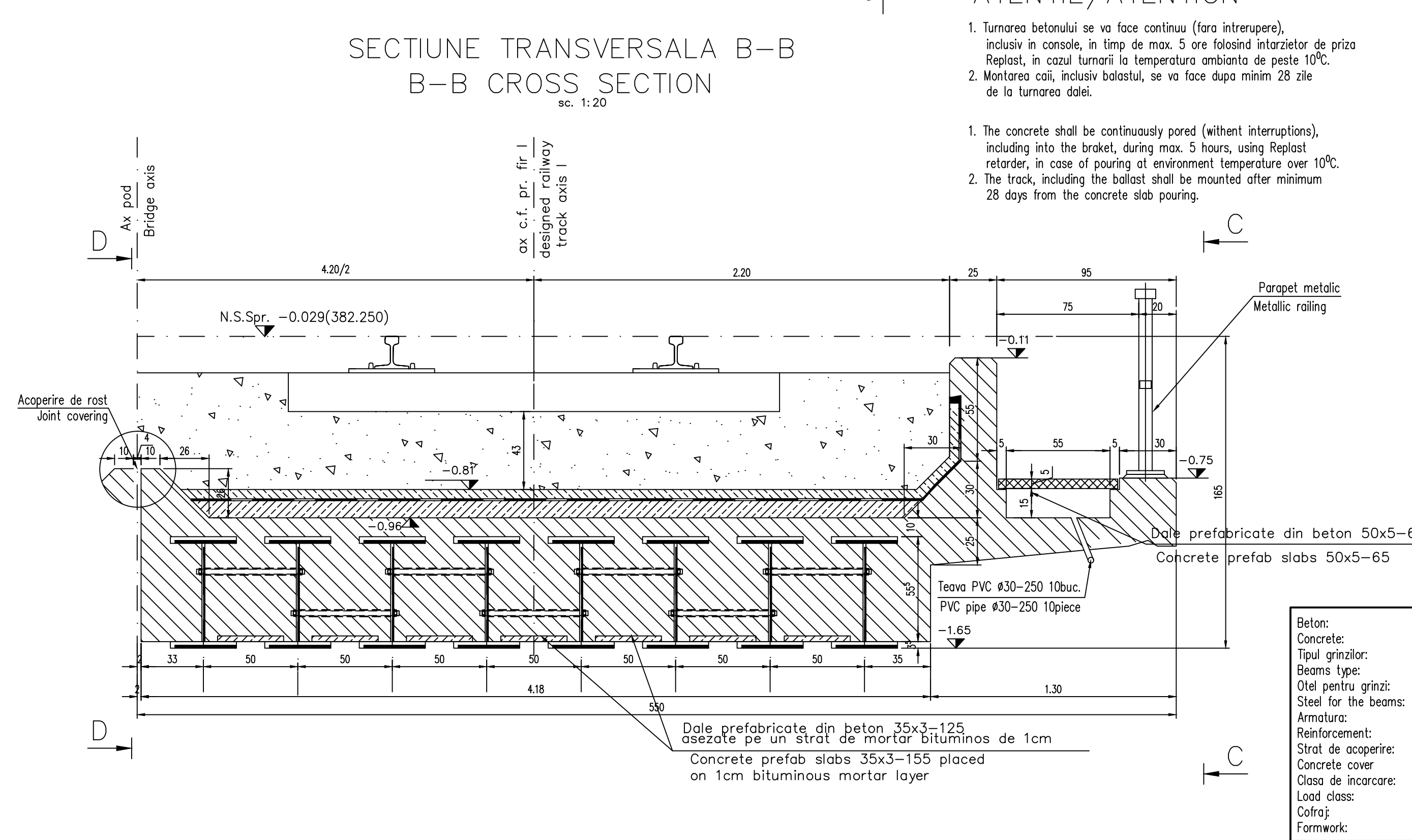
**LEGENDA BETOANELOR/CONCRETE LIST**

	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-CI 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-CI 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-CI 0,20
	Beton in dalele prefabricate pentru trotuare Concrete in the prefabricated slabs required for the sidewalks C 25/30-CEM II/A-S 32,5-(XC4+XF3+XA1)-A/C=0,50-Dmax.22-CI 0,20
	Beton in dalele prefabricate pentru grinzi inglobate in beton Concrete in the prefabricated slabs required for the decks made out of steel girders embedded in concrete C 35/45-CEM II/A-S 42,5-(XC4+XF3+XA2)-A/C=0,50-Dmax.8-CI 0,10

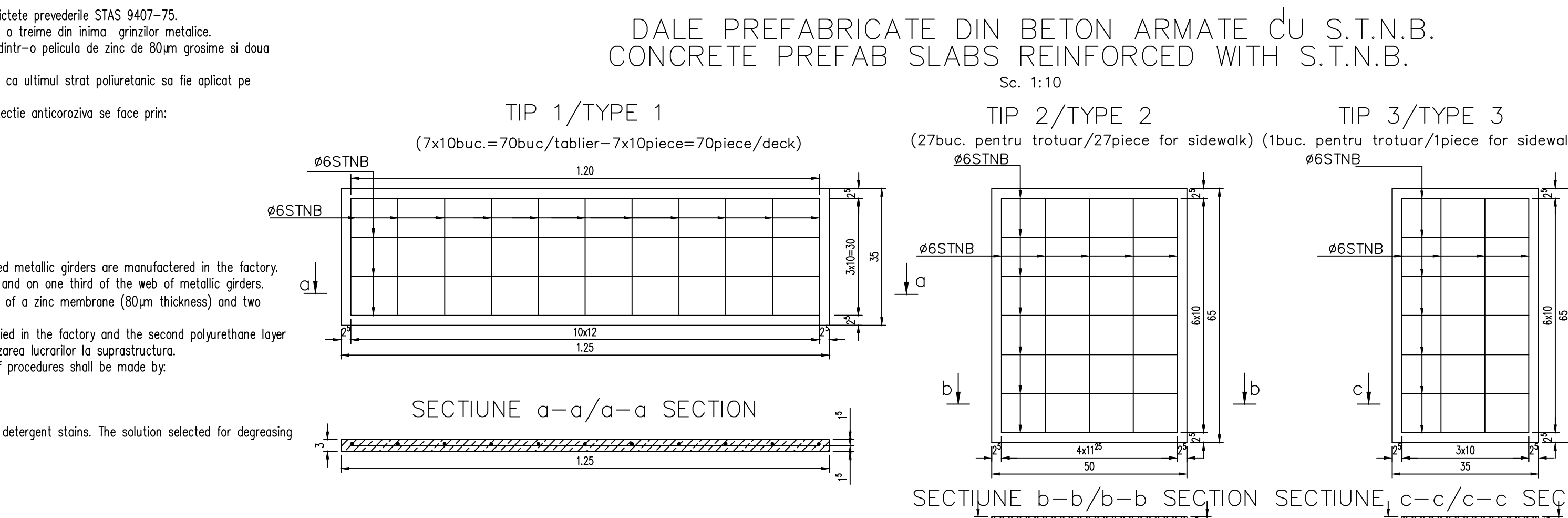
In cazul in care temperatura in timpul turnarii este scazuta, se vor folosi cimenturile cu rezistenta initiala mare, R si aditivi acceleratori, iar in cazul turnarii pe timp cald, cimenturile cu rezistenta initiala uzuala, N si aditivi intarzieri (conf.NE 012/2-2010 si tabelului 2 din SR EN 197-1:2002).  
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 to the norm NE 012/2-2010 and table 2 for the SR EN 197-1: 2002).



**MATERIALE**  
(- OL37 EP STAS 12187-88 elementele grinzelor metalice.)  
- S275J2G3 EN 10025/2004



Beton:	- C30/37 suprastructura/superstructura
Concrete:	- C30/37 suprastructura/superstructura
Tipul grinzelor:	- grinzi metalice sudate/steel welded girders
Beams type:	- OL 37-EP S275J2G3 (EN 10025/2004)
Otel pentru grinzi:	- S355
Steel for the beams:	- S355
Armatura:	- min. 4cm expunere in aer/air exposed
Reinforcement:	- calculat cu convoiuil T8.5, verificat cu convoiuil UIC 71
Clasa de incarcare:	- Metal sau lemn/Steel or wood
Load class:	- Metal sau lemn/Steel or wood
Coafaj:	- Metal sau lemn/Steel or wood
Formwork:	- Metal sau lemn/Steel or wood



**EXTRAS DE ARMATURA STNB PENTRU UN TABLIER DE CALE FERATA SIMPLA TABLE FOR REINFORCEMENTS STNB FOR SINGLE YRAK RAILWAY DECK**

TIP/TYPER	TIP ARMATURA TYPE REINFORCEMENT	Nr. BUC. No. PIECE	kg/m	m/buc. m/piece	kg
TIP 1 TYPE 1	STNB 6 G.Q.283	70	0.222	8.10	130,00
TIP 2 TYPE 2	STNB 6 G.Q.283	27	0.222	6.15	37,00
TIP 2 TYPE 2	STNB 6 G.Q.283	1	0.222	4.50	1,00
TOTAL					168,00kg

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**ATENTIE / ATENTION**

1. Turnarea betonului se va face continuu (fara intrerupere), inclusiv in consola, in timp de max. 5 ore folosind intarzieri de priza Replast, in cazul turnarii la temperatura ambianta de peste 10°C.
2. Montarea caili, inclusiv balastul, se va face dupa minim 28 zile de la turnarea dalei.

1. The concrete shall be continuously pored (withnt 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.

**NOTA**

1. La executia in uzina a grinzelor metalice sudate se vor respecta cu strictete prevederile STAS 9407-75.
2. In uzina se va aplica o protectie anticoroziva pe talpile inferioare si pe o treime din inima grinzelor metalice.
3. Protectia anticoroziva se va executa dintr-un strat de baza alcotuit dintr-o pelicula de zinc de 80µm grosime si doua straturi de invelis poliuretanic, fiecare de 85µm.
4. Stratul de baza si un invelis poliuretanic se vor aplica in uzina, urmand ca ultimul strat poliuretanic sa fie aplicat pe santier dupa finalizarea lucrarilor la suprastructura.
5. Pregatirea suprafetelor metalice in vederea aplicarii procedurilor de protectie anticoroziva se face prin:  
-Periere de rugina cu ajutorul unor peri de sarma.  
-Spalarea suprafetelor metalice.  
-Degresarea cu solventi organici prin stergere sau cu emulsi.  
-Dupa degresare se spala cu jet de apa pentru indepartarea urmarilor de detergent. Solutia pentru degresare va fi aleasa astfel incat sa nu afecteze mediul.  
Curatirea suprafetelor se va face conform gradului SA 1 1/2.

**NOTE**

1. The provisions STAS 9407-75 will be strictly observed when the welded metallic girders are manufactured in the factory.
2. In the plant, corrosion protection will be applied on the lower flanges and on one third of the web of metallic girders.
3. The protection against corrosion will consist in a primary layer made of a zinc membrane (80µm thickness) and two polyurethane covering layer, each of 85µm thickness.
4. The primary layer and the first polyurethane covering layer will be applied in the factory and the second polyurethane layer will be applied on site, after completing the superstructure works. Finalizarea lucrarilor la suprastructura.
5. Preparing the metallic surfaces in order to apply the corrosion-proof procedures shall be made by:  
-Rust removal using wire brushes.  
-Washing the metallic surfaces.  
-Organic solvent degreasing by wiping or using emulsions.  
-After degreasing, the surface is washed by water jet to eliminate the detergent stains. The solution selected for degreasing shall not affect the environment.  
Cleaning the surfaces is made according to the SA 1 1/2.

D					
C					
B					
A	12.2011	Revizia 1 1 Revision	Dinu Andreea	Proiectant Designer	Proiectant Approved Consultant
Indice Index	Data Date	Modificari Modification/Revision	Proiectant Designer	Proiectant Approved Consultant	Proiectant Approved CFR

**GUVERNUL ROMANIEI ROMANIAN GOVERNMENT**

**PROIECT FINANAT DE UNIUNEA EUROPEANA EUROPEAN UNION FINANCED PROJECT**

**CFR**

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

**CLIENT / CLIENT**

**ITALFER** GRUPA FERROVIE ROMANE GRUPO FERROVIARIO DEL ESTADO  
**Scott Wilson**  
**OBERMEYER** PLANEN + BERATEN GmbH  
**TECNIC** Consulting Engineers

**CONSULTANT / CONSULTANT**

Proiectant Designer	Dinu Andreea	Data Date	Semnatura Signature
Coordonator Sectiune 1 Section 1 Coordinator	C. Gambelli		
Expert Chief	V. Kallidromitis		

**SUBCONTRACTANT / SUBCONTRACTOR**

Responsabil Subcontractant Subcontractant Responsible	A. Stanciu - Dinulescu	11.2011	
Proiectant Designer	Dinu Andreea	11.2011	

Reabilitarea liniei de cale ferata Brasov - Simeria, parte componenta a a coridorului IV Pan European, pentru circulatia trenurilor cu viteza maxima 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/PPA/003  
Faza / Phase:  
P.Th. / T.D.  
D.E. / E.D.

Denumire desen / Drawing Title : **INTERVAL / SECTION ARCHITA - VANATORI**  
**POD / BRIDGE Km 267+963.152 D=12.00m+35.00m+12.00m**  
**COFRAJ SUPRASTRUCTURA LINIA 1 - TABLIER 1**  
**SUPERSTRUCTURE SHUTTERING RAILWAY 1- DECK 1**

Codificare / Codification System: Scara / Scale: 1:20, LOT / LOT, Nr. / No: 01 / 01

**E A S I 0 1 E 1 6 B B P V 0 4 0 3 0 0 9 1**