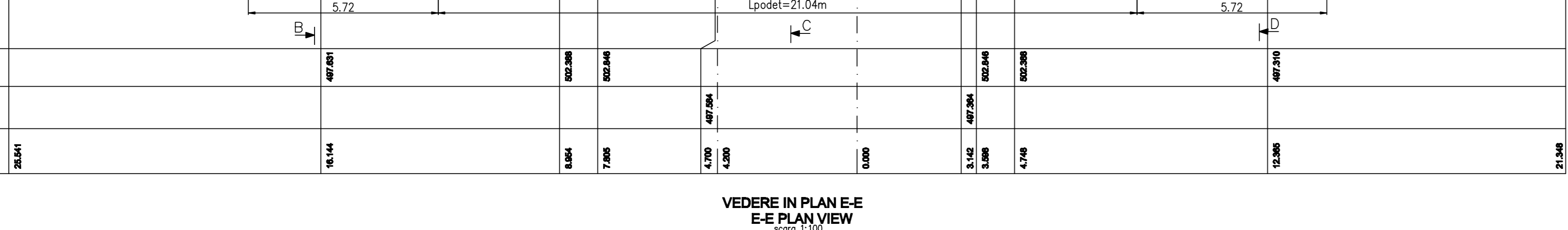
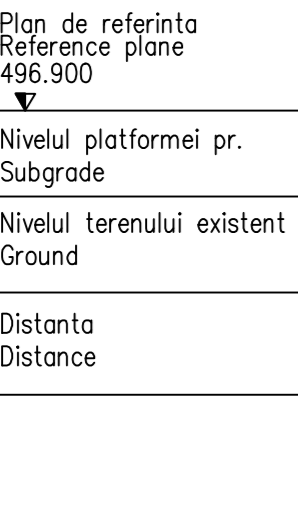
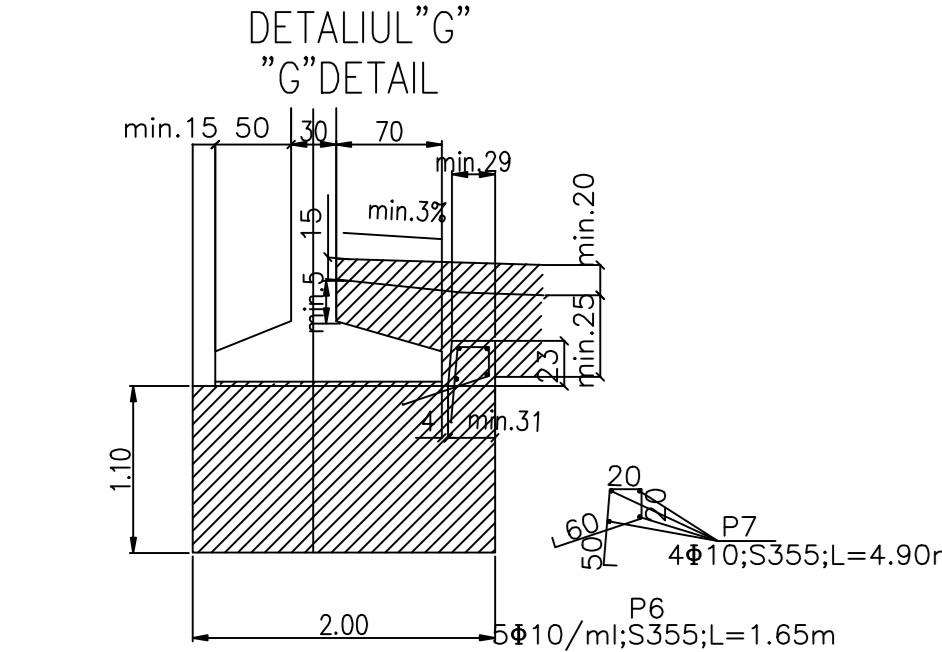


**DATE HIDRAULICE:**  
 -Înălțimea de apă în podet: h=0,50m  
 -Perimetrul udat: P=5,00m  
 -Aria udată: A=2,00m<sup>2</sup>  
 -Viteza de curgere a apei V=2,22m/s

**HIDRAULIC DATA:**  
 -Hydraulic height: h=0,50m  
 -Perimeter: P=5,00m  
 -surface: A=2,00m<sup>2</sup>  
 -Water flow speed: V=2,22/s

**NOTA**  
**Numar de elemente prefabricate**  
 -Dale marginale D4 2buc.  
 -Dale curentii D4 24buc.  
 -Aripi prefabricate A3 4buc.  
 -Elevatii L1 26buc.

**NOTE**  
**Number of precast section**  
 -Standard slab D4 2pcs.  
 -Edge slab D4 24pcs.  
 -Prefabricated wings A3 4pcs.  
 -L1 elevation 26pcs.

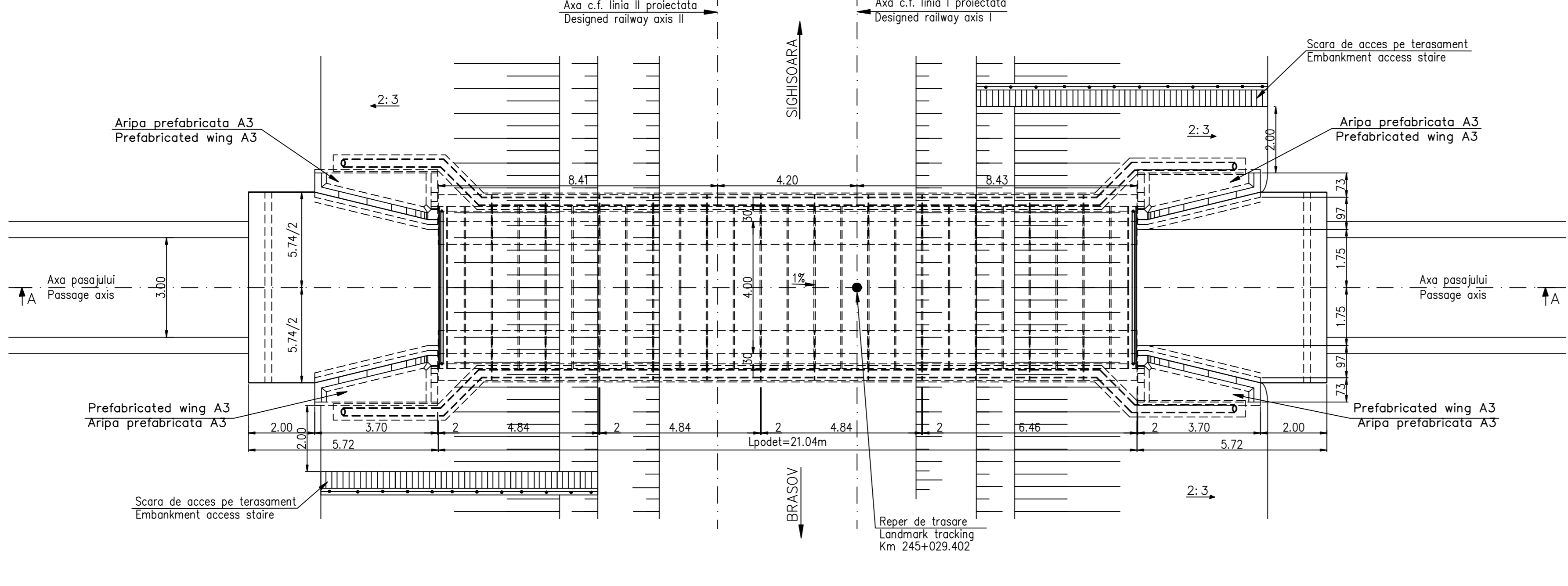


**Extras armatura / Statement reinforcing**

| Poz.          | Price | Denumirea materialului / The denomination of the material | Buc. | Diametru / Diametre | Lung. / Long. (cm) | Sectiune / Section |        |
|---------------|-------|---|------|---------------------|--------------------|--------------------|--------|
|               |       |   |      |                     |                    | kg/ml              | kg/buc |
| P6            |       | Armatura Reinforced steel S355                            | 20x6 | Ø10                 | 1.65               | 0.617              | 1.018  |
| P7            |       | Armatura Reinforced steel                                 | 4x6  | Ø10                 | 4.90               | 0.617              | 3.023  |
| P8            |       | Armatura Reinforced steel                                 | 2x32 | Ø10                 | 1.65               | 0.617              | 1.018  |
| P9            |       | Armatura Reinforced steel                                 | 4x2  | Ø10                 | 6.55               | 0.617              | 4.04   |
| Total partial |       |   |      |                     |                    |                    | 292.20 |
| Sudura 2%     |       |   |      |                     |                    |                    | 5.84   |
| TOTAL         |       |   |      |                     |                    |                    | 300.00 |

**LEGENDA BETOANELOR CONCRETE LIST**

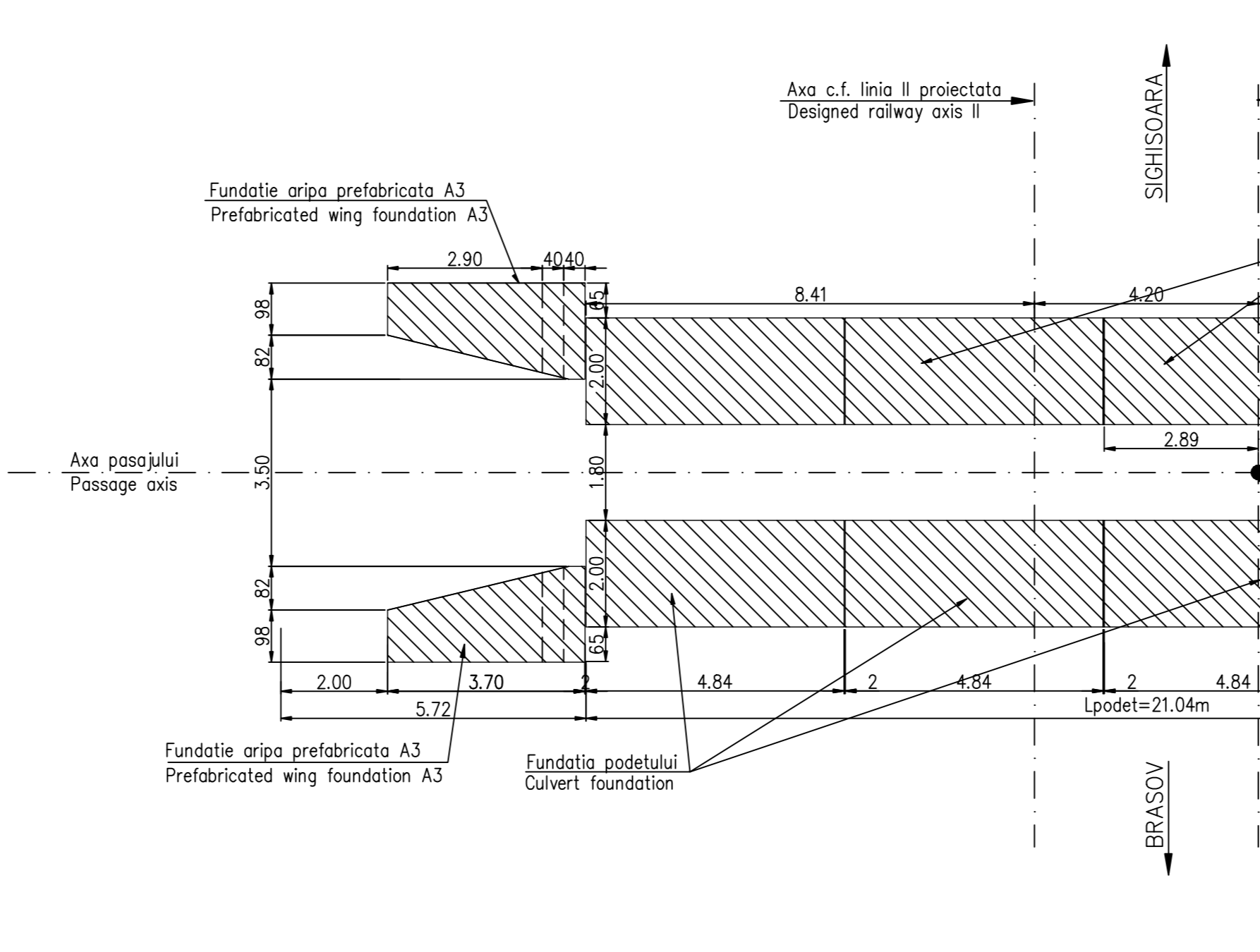
- Beton elemente prefabricate în general (cadr., arpi, timpnase): Concrete for prefabricated elements generally (frames, wings, tympanas)
- Beton în fundația podetelor, a elementelor de racordare (arpi, pinteți), în pereu: Concrete for the foundations of culverts, of connecting elements (wings, breakwaters), in pitching
- Beton în rigla drenurilor, fundațiile stărilor de căr și pentru realizarea straturilor suport pentru peruu: Concrete for the drain gutters, for the foundations of cone quarters and for the support layer of treatment
- Beton în stratul de protecție a hidroizolației: Concrete for the waterproofing protection layer



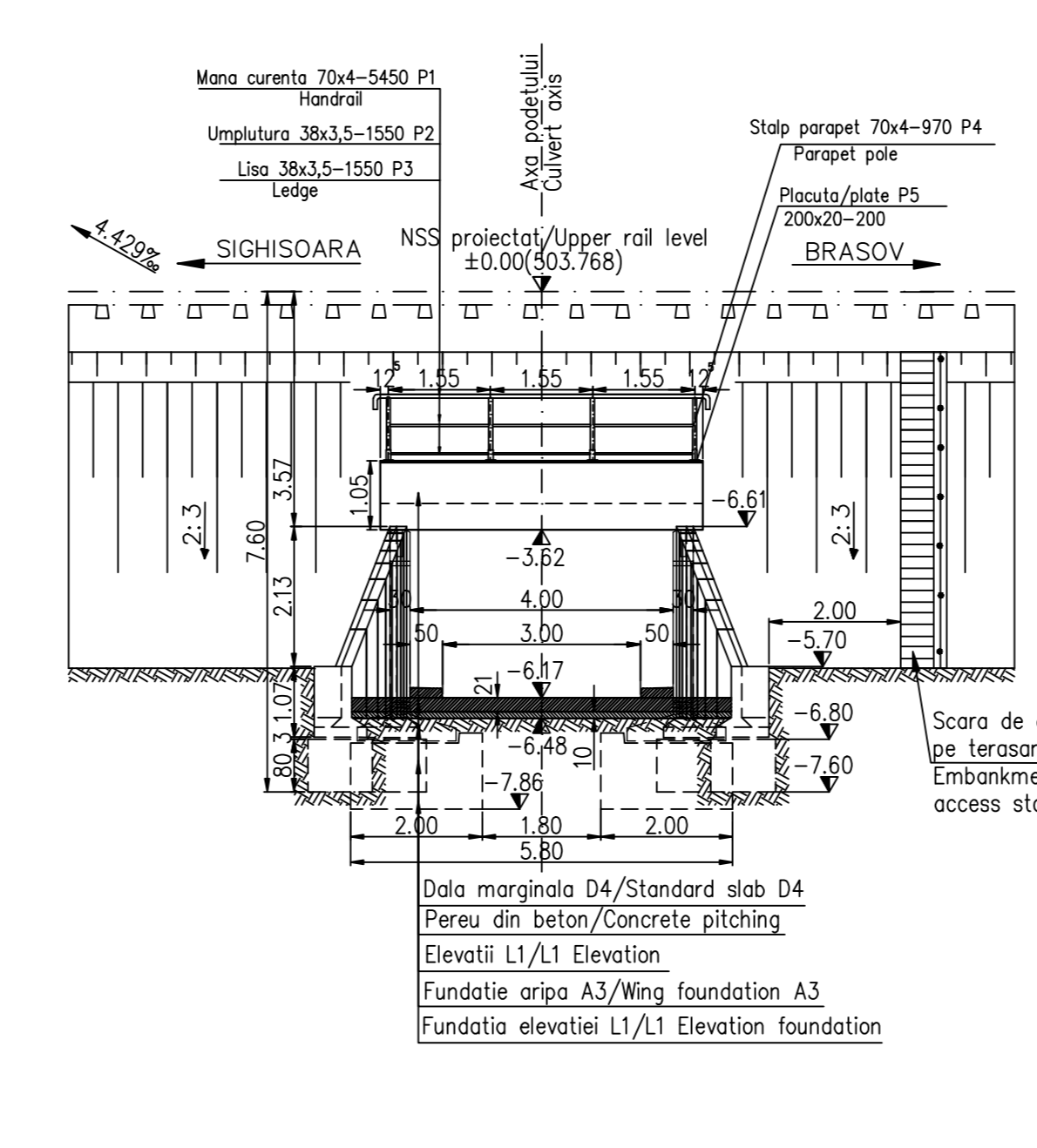
**Sondaj Informativ Survey Information**

|   |        |
|---|--------|
| NSS proiectat / Upper rail level ± 0.000 (503.768)  | -6.81  |
| NST existent / -1.41  | -7.91  |
| Depuneri / Deposits   | -7.91  |
| Argila maslăoasă neagră vartoasă / Wash black clay stock  | -8.74  |
| Argila galbenă cu intercalatii de cenușu puțin umedă și vartoasă / Yellow clay with intercalations of gray little wet and heavy | -11.21 |
| Sondaj oprit în piatră la -11.21 m / Drill stopped at -11.21 m  |        |

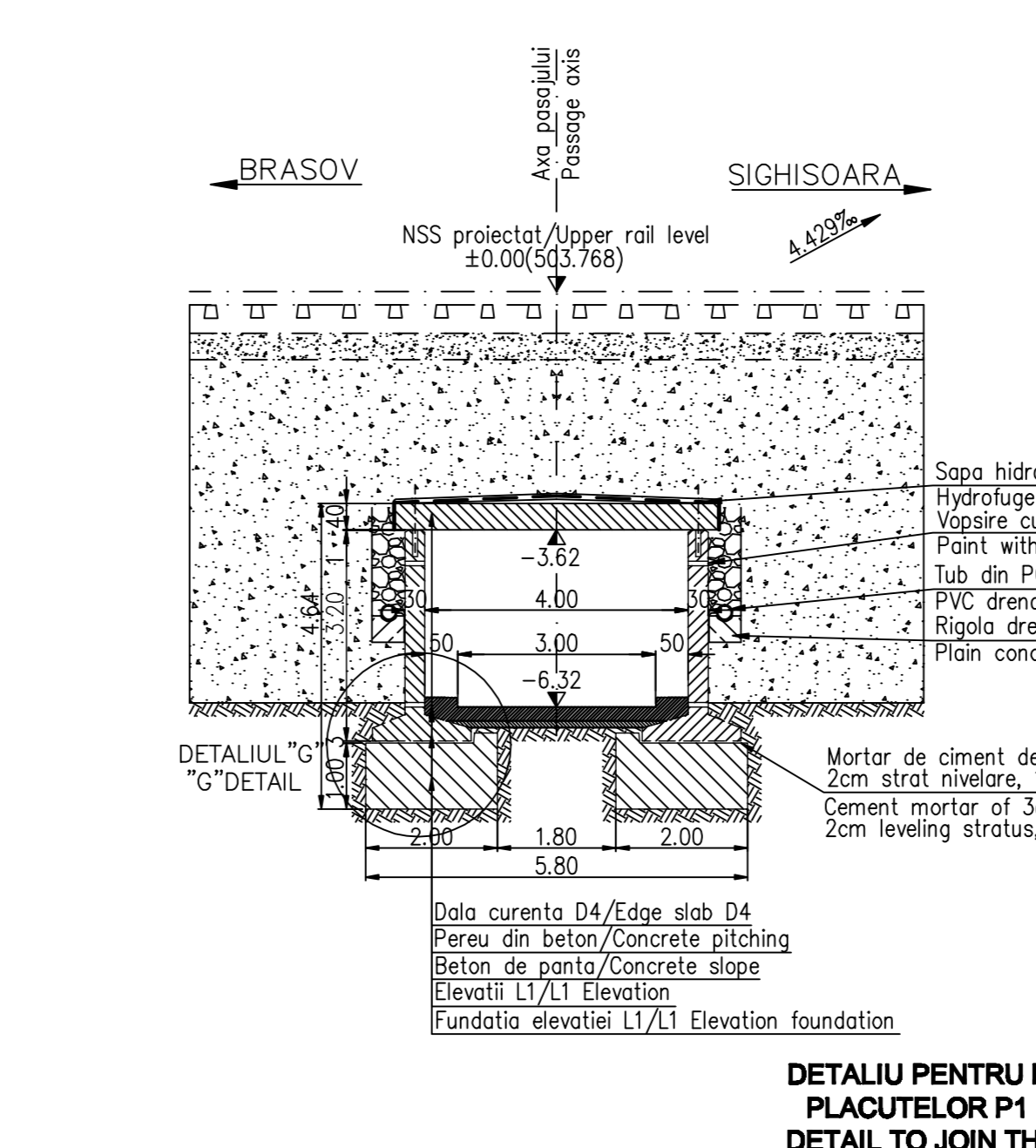
**PLANUL FUNDATIILOR F-F F-F FOUNDATION PLAN**



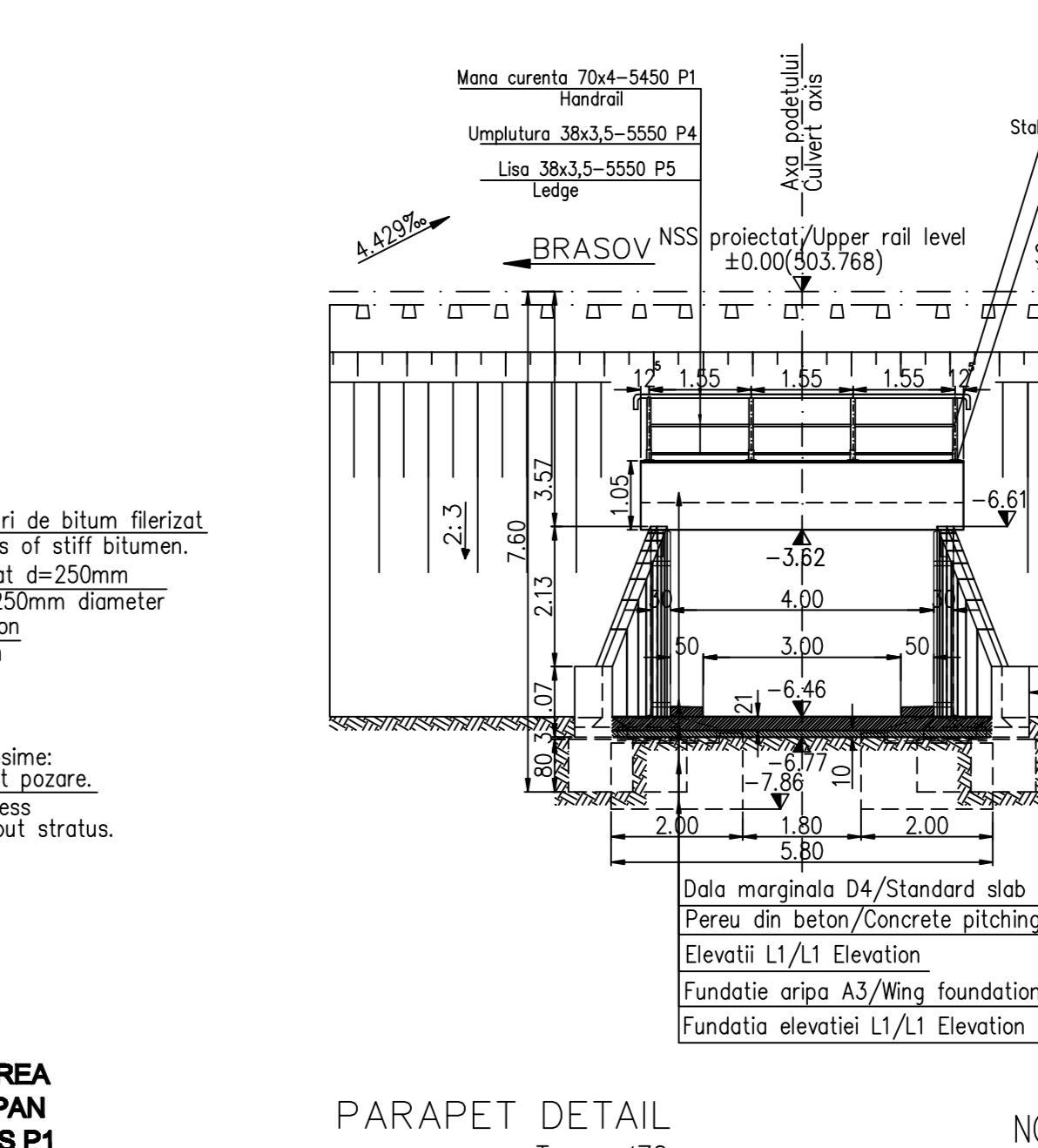
**SECTIUNE B-B B-B SECTION**



**SECTIUNE C-C C-C SECTION**



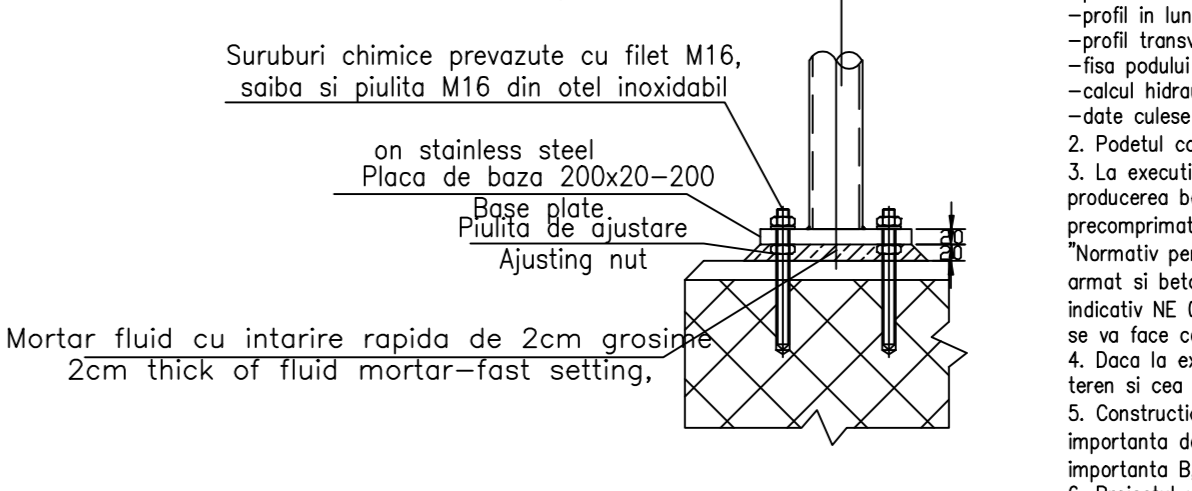
**SECTIUNE D-D D-D SECTION**



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



**PARAPET DETAIL**



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

| Poz.          | Price | Denumirea materialului / The denomination of the material | Buc. | Sectiune / Section | Lung. / Long. (mm) | Sectiune / Section |        |
|---------------|-------|---|------|--------------------|--------------------|--------------------|--------|
|               |       |   |      |                    |                    | kg/ml              | kg/buc |
| P1            |       | Mana curenta EN 10297 - E275                              | 2    | 70x4               | 5450               | 6.51               | 35.47  |
| P2            |       | Umplutura EN 10058  | 6    | 38x3,5             | 1550               | 2.98               | 4.62   |
| P3            |       | Lia EN 10058  | 6    | 38x3,5             | 1550               | 2.98               | 4.62   |
| P4            |       | Stalp parapet EN 10297 - E275                             | 8    | 70x4               | 970                | 6.51               | 6.32   |
| P5            |       | Placuta gelinder Clamping plate                           | 8    | 200x20             | 200                | 31.40              | 6.28   |
| Total partial |       |   |      |                    |                    |                    | 227.20 |
| Sudura 2%     |       |   |      |                    |                    |                    | 4.54   |
| TOTAL         |       |   |      |                    |                    |                    | 232    |

**NOTE:**

- This plan has been drawn up based on the following data:
  - Longitudinal Plan
  - Cross-section Profile
  - Bridge's File
  - Hydraulic determination
  - Field Data
- The culvert corresponds to the UIC determination conveyors (LM71 and SW/2).
- 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 situation stated in the project, the designer will be notified.
- If during the execution, discrepancies are found between the existing situation on site and the situation stated in the project, the designer will be notified.
- The construction has been classified in B category of importance (high importance constructions), mode 1-ensuring the quality and class of importance B according to G.O. 766/97.
- The project will be checked in order to comply with the A4.2; B2.2; D2.2 requirements.
- 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.

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| D | C | B | A | 12.2011 | Revizua 1 | Modificari / Modification/Revision | Proiectant / Designer | Aprobat / Approved | Aprobat / Approved | Aprobat / Approved |
|---|---|---|---|---------|-----------|------------------------------------|-----------------------|--------------------|--------------------|--------------------|
|   |   |   |   |         |           |                                    | Mihail Ady-Nicolae    |                    |                    |                    |

**GVERNUL ROMANIEI ROMANIAN GOVERNMENT** **PROIECT FINANȚAT DE UNIUNEA EUROPEA EUROPEAN UNION FINANCED PROJECT**

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

**CONSULTANT / CONSULTANT**

| Aprobat / Approved | Responsabil / Responsible                      | Data / Date | Semnatura / Signature |
|--------------------|--|-------------|-----------------------|
|                    | Proiectant / Project manager                   |             | R. Luceza             |
|                    | Coordonator Secțiune 1 / Section 1 Coordinator |             | C. Gembău             |
|                    | Verificator / Checking Expert                  |             | V. Kallidromidis      |

**SUBCONTRACTANT / SUBCONTRACTOR**

| Aprobat / Approved | Responsabil / Responsible    | Data / Date | Semnatura / Signature |
|--------------------|------------------------------|-------------|-----------------------|
|                    | Proiectant / Project manager |             | A. Dinulescu Stancu   |
|                    | Proiectant / Project manager |             | Mihail Ady-Nicolae    |

**Reabilitarea liniei de cale ferată Brasov - Simeria, parte componentă a coridorului IV Pan-European, pentru circulația trenurilor cu viteză maximă de 160 km/h, 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, Brasov - Sighisoara**

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

**Denumire desen / Drawing Title:** **INTERVAL/SECTION CATA-ARCHITA**

**PODET km 245+029.402 / DISPOZITIE GENERALA CULVERT km 245+029.402 / GENERAL LAYOUT**

| Codificare / Codification System          | Scara / Scale | LOT / LOT | Nr. / No |
|---|---------------|-----------|----------|
| E A 5 1 0 1 C 1 4 P A P O 0 5 2 1 0 0 2 1 | 1:100, 1:5    |           | 01/01    |