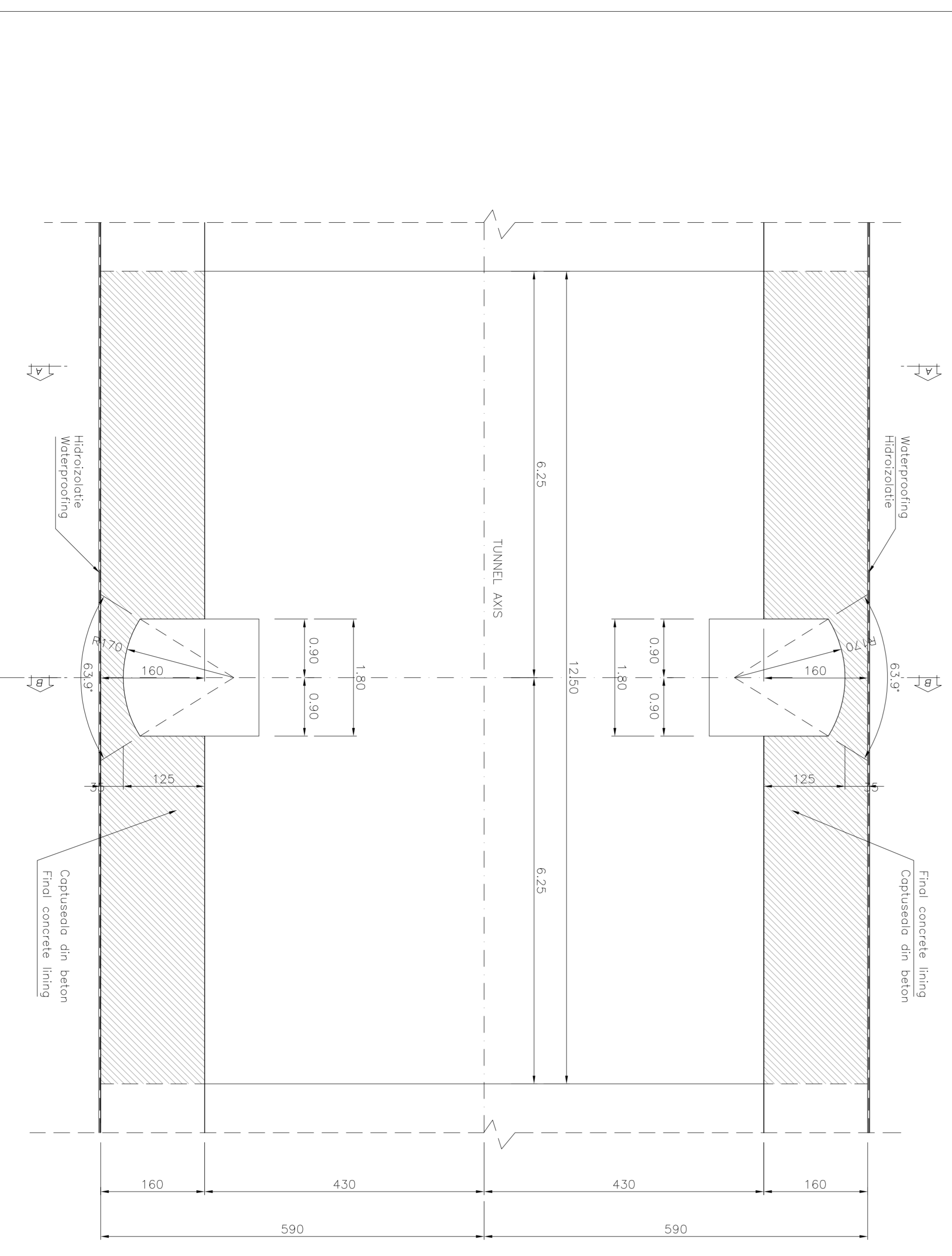


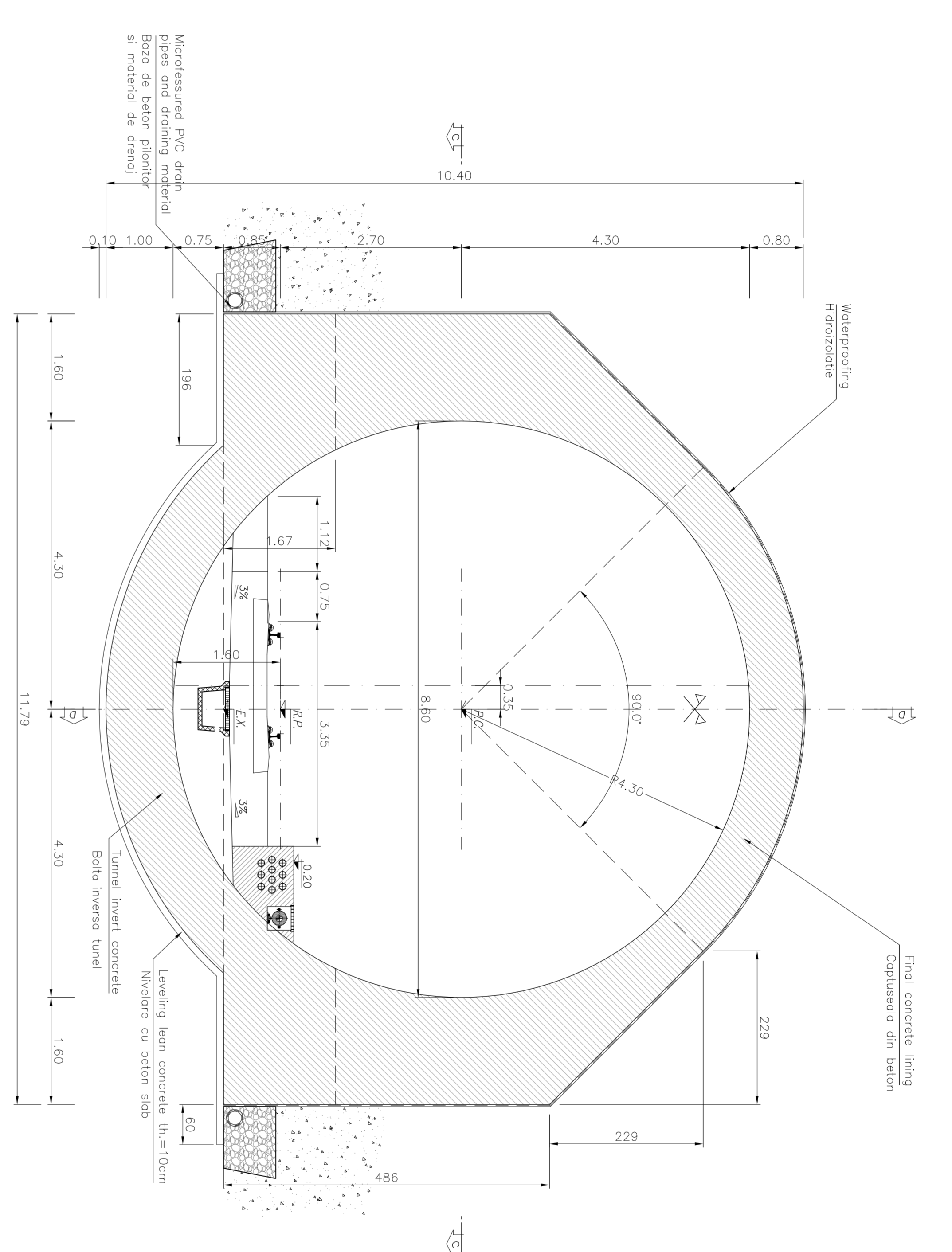
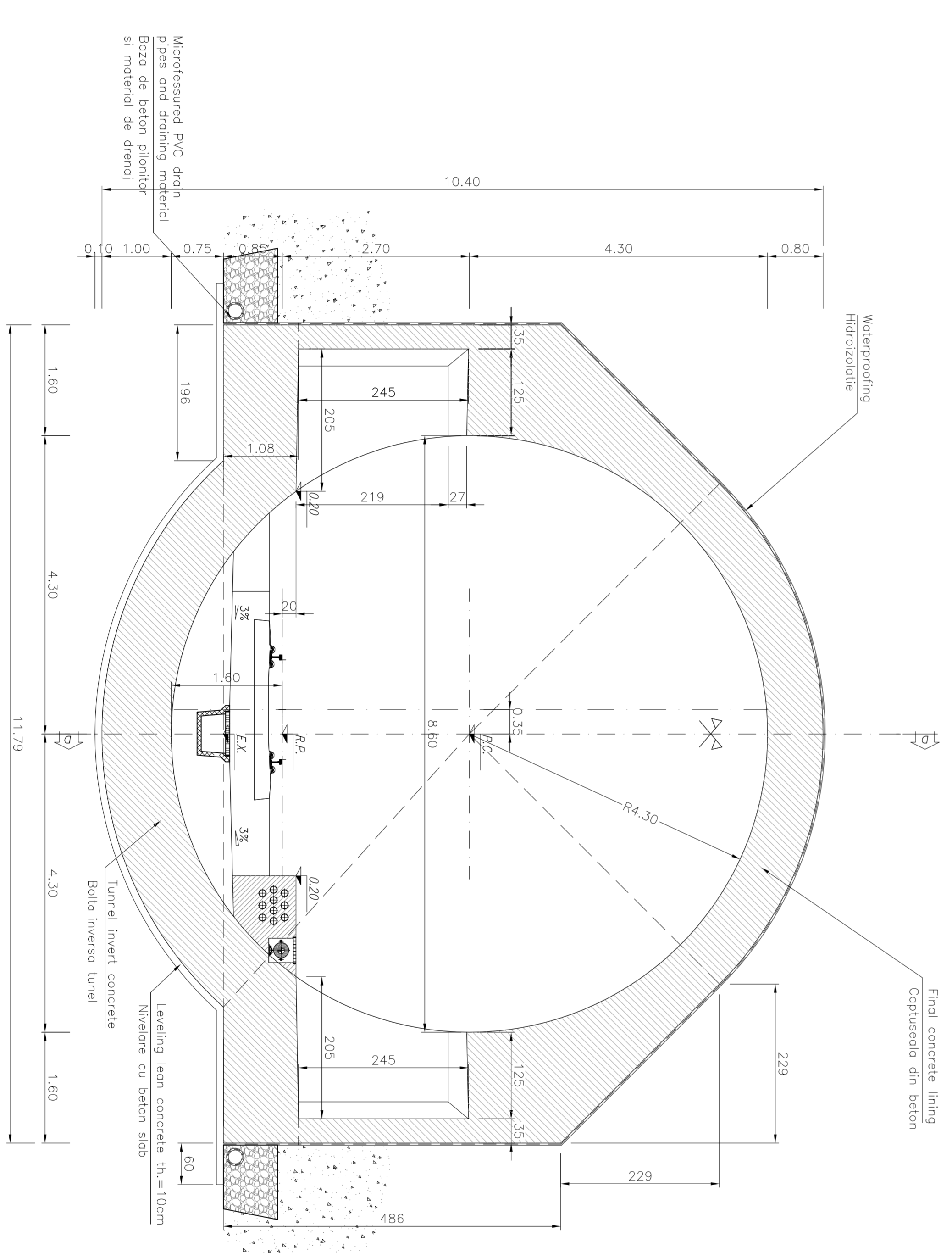
SECTION D-D
Scale/Scara 1:50

SECTION C-C
SECTIUNEA CURENTA C-C
Scale/Scara 1:50

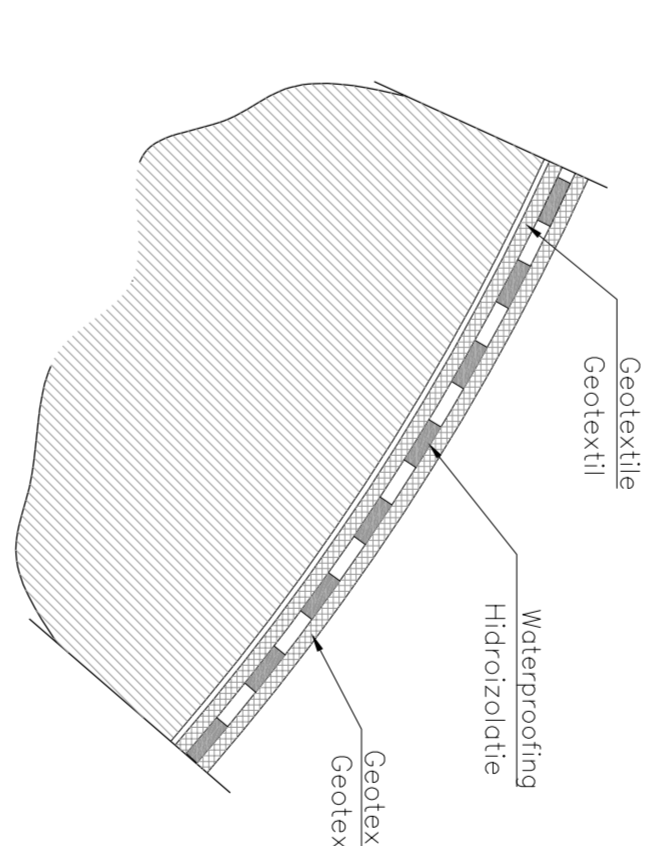


SECTION A-A
SECTIUNEA CURENTA A-A
Scale/Scara 1:50

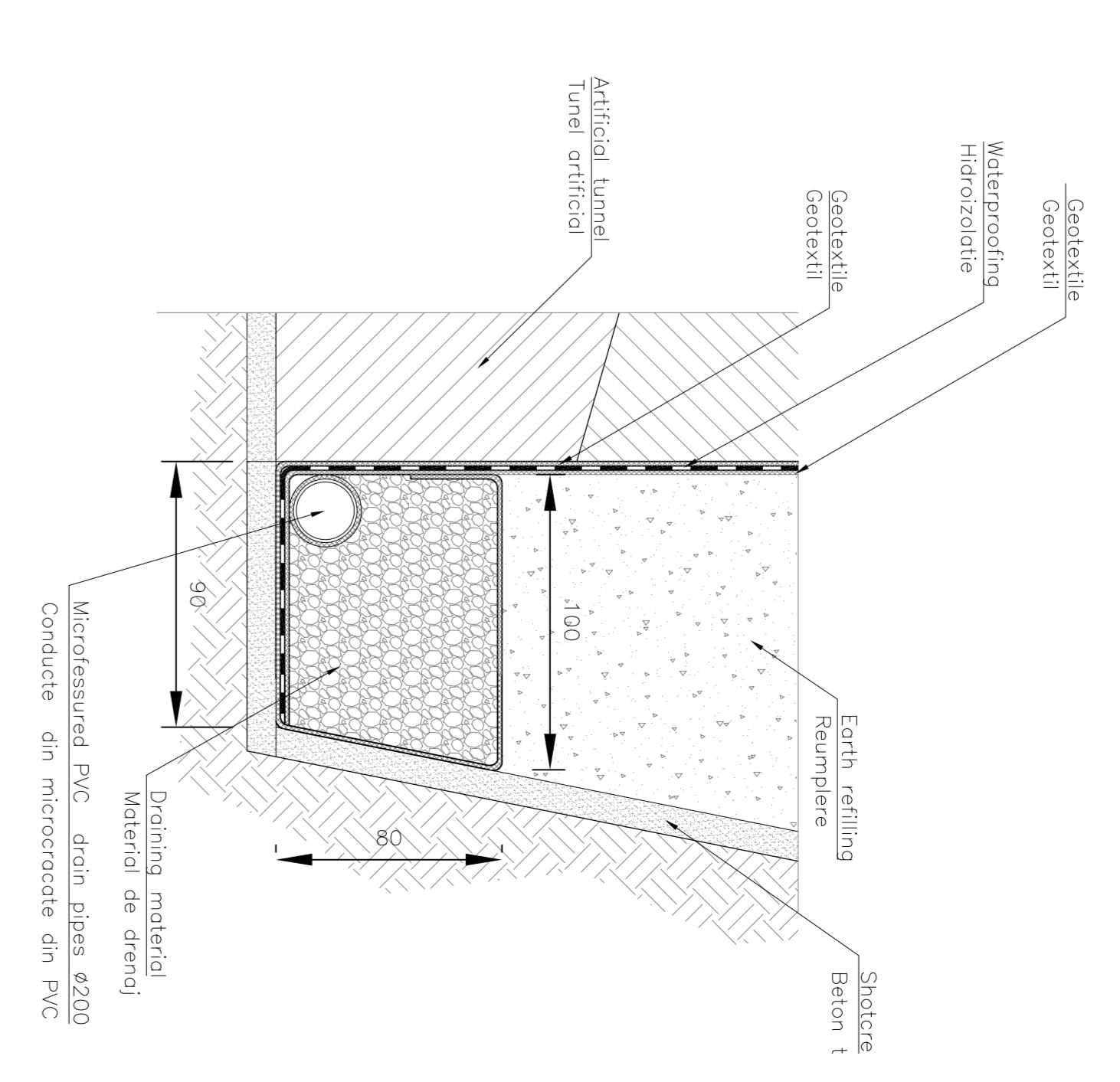
SECTION WITH SHELTER STAFF NICHE B-B
SECTIUNEA CU NISE PENTRU ADAPOSTUL PERSONALULUI B-B
Scale/Scara 1:50



WATERPROOFING TUNNEL CROWN DETAIL
DETALIUL COROANA TUNELULUI HIDROIZOLATIEI



WATERPROOFING PIER DETAIL
DETALIUL PILONIOR HIDROIZOLATIEI



MATERIAL TABLE

TUNEL INVERT CONCRETE:

- Type C2
- 100 >= 30 MPa
- Min. cement content 350 kg/m³
- Min. aggregate content 535 kg/m³
- Exposure class related to environmental conditions MX2
- Class of chloride content C 0.20
- φ max aggregate = 32 mm

TUNEL CROWN CONCRETE:

- Type C1
- 100 >= 30 MPa
- Water/cement ratio 0.230
- Min. cement content 350 kg/m³
- Min. aggregate content 535 kg/m³
- Exposure class related to environmental conditions MX2
- Class of chloride content C 0.20
- φ max aggregate = 32 mm

REFERENCE SHEET:

- Reinforced concrete
- Reinforced concrete by embedment

LEAN CONCRETE:

- Type I
- 100 >= 17 MPa
- Cement type CEM I/V

LEGEND

RP = REFERENCE PLANE
EX = EXCAVATIONS PLANE
PC = CENTERS PLANE

CLIENT / CLIENT

GOVERNUL ROMÂNIEI
ROMANIAN GOVERNMENT

PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ
EUROPEAN UNION FINANCED PROJECT

CLIENT / CLIENT

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

CONSULTANT / CONSULTANT

TECNIC
Consulting Engineers

CONSULTANT / CONSULTANT

R. LUTZA
C. GEMELLI
C. GEMELLI

PROJECT INFORMATION

Project/Proiect: Z04/R02/16/27/4002
Faza / Phase: P.I.N. / I.D.

Scale/Scara: 1:50

Drawn by: [Name]

Checked by: [Name]

Approved by: [Name]

NOTE: - The integrity of the concrete structures of the artificial and natural tunnels have to maintained in case of fire (4.2.2.3 fire protection requirements for structure 15) (Technical Specification for Integritability).

NOTE: - Integritatea structurilor de beton a tunelului artificial si natural, trebuie sa ramana intacta in caz de incendiu (4.2.2.3 cerinta de protectie la foc pentru structura 15) (Specificatiile tehnice pentru integritate).

NOTE: - Horizontal shafts has installed approximately of 1 m above walking providing a route to a safe area (4.2.2.7 Escape walkways 15).

NOTE: - Baza de maza trebuie sa fie instalata aproximativ la 1 m deasupra carii de evacuare oferind un traseu sigur (4.2.2.7 evacuare traseu sigur).

NOTE: - Semnale de evacuare trebuie sa fie instalate pe peretii laterali, la o distanta maxima intre semnale de evacuare de 50m (4.2.2.9 Escape Signs 57).