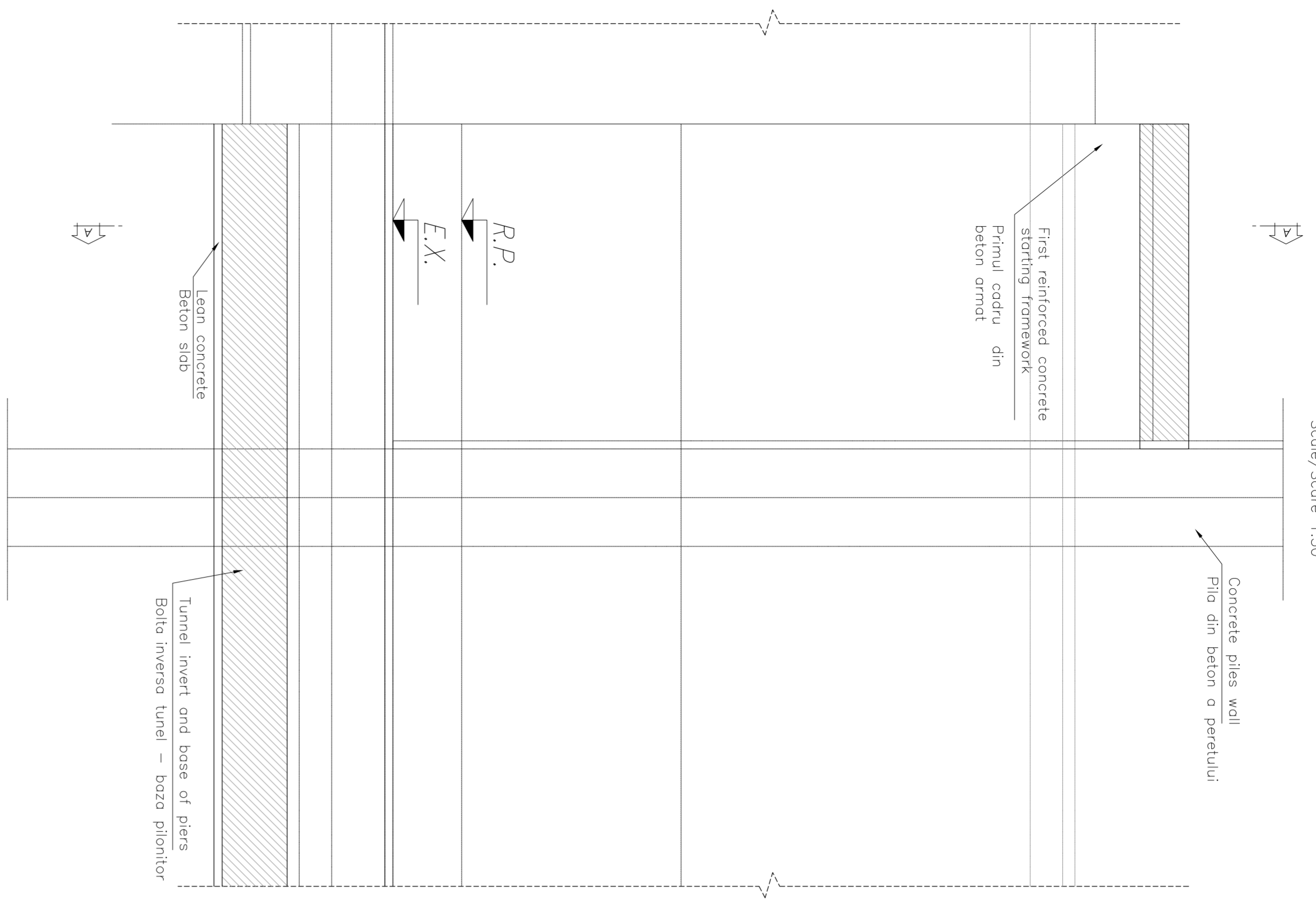


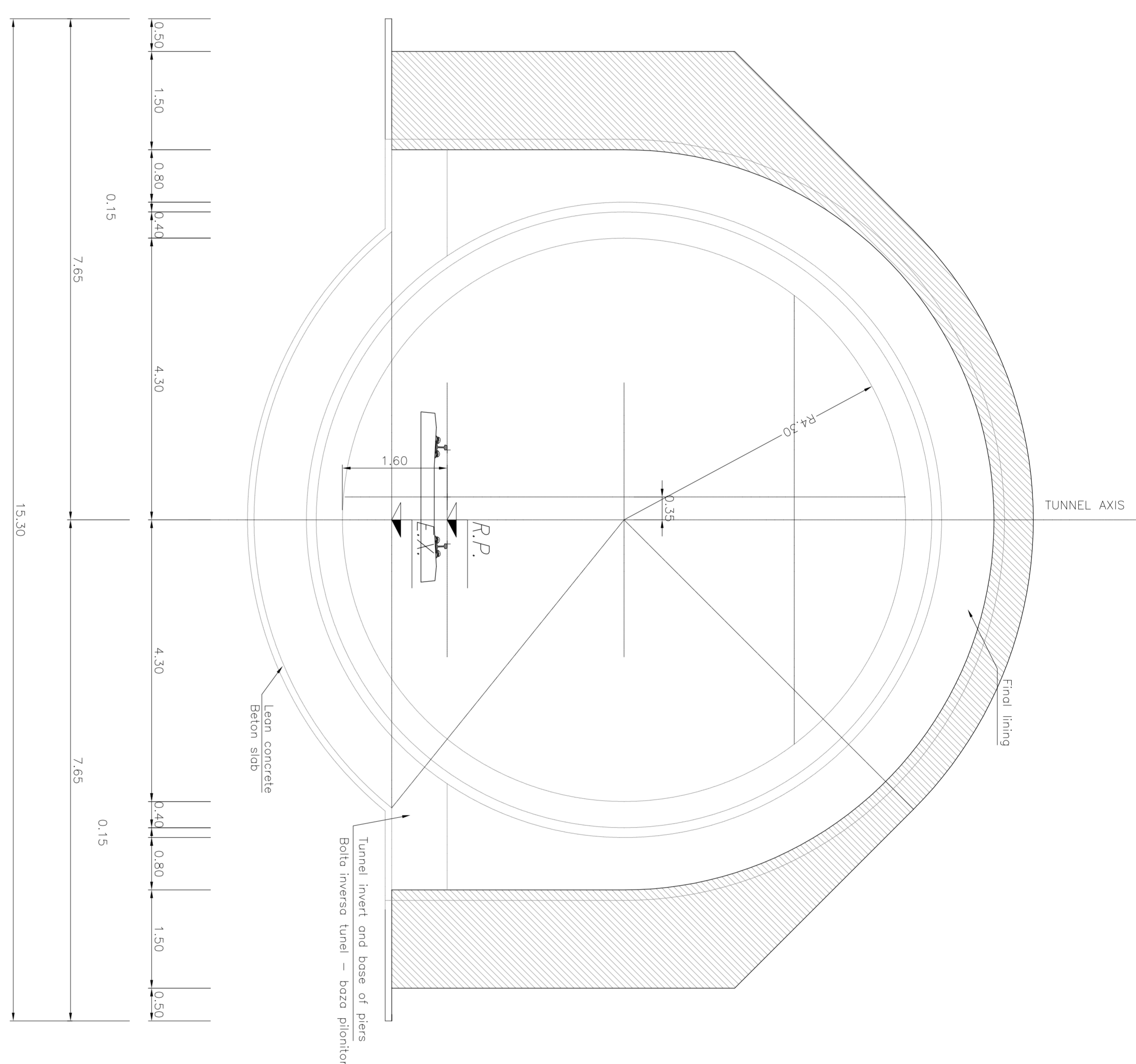
LONGITUDINAL SECTION
SECTIUNEA LONGITUDINALA

Scale/Scala 1:50



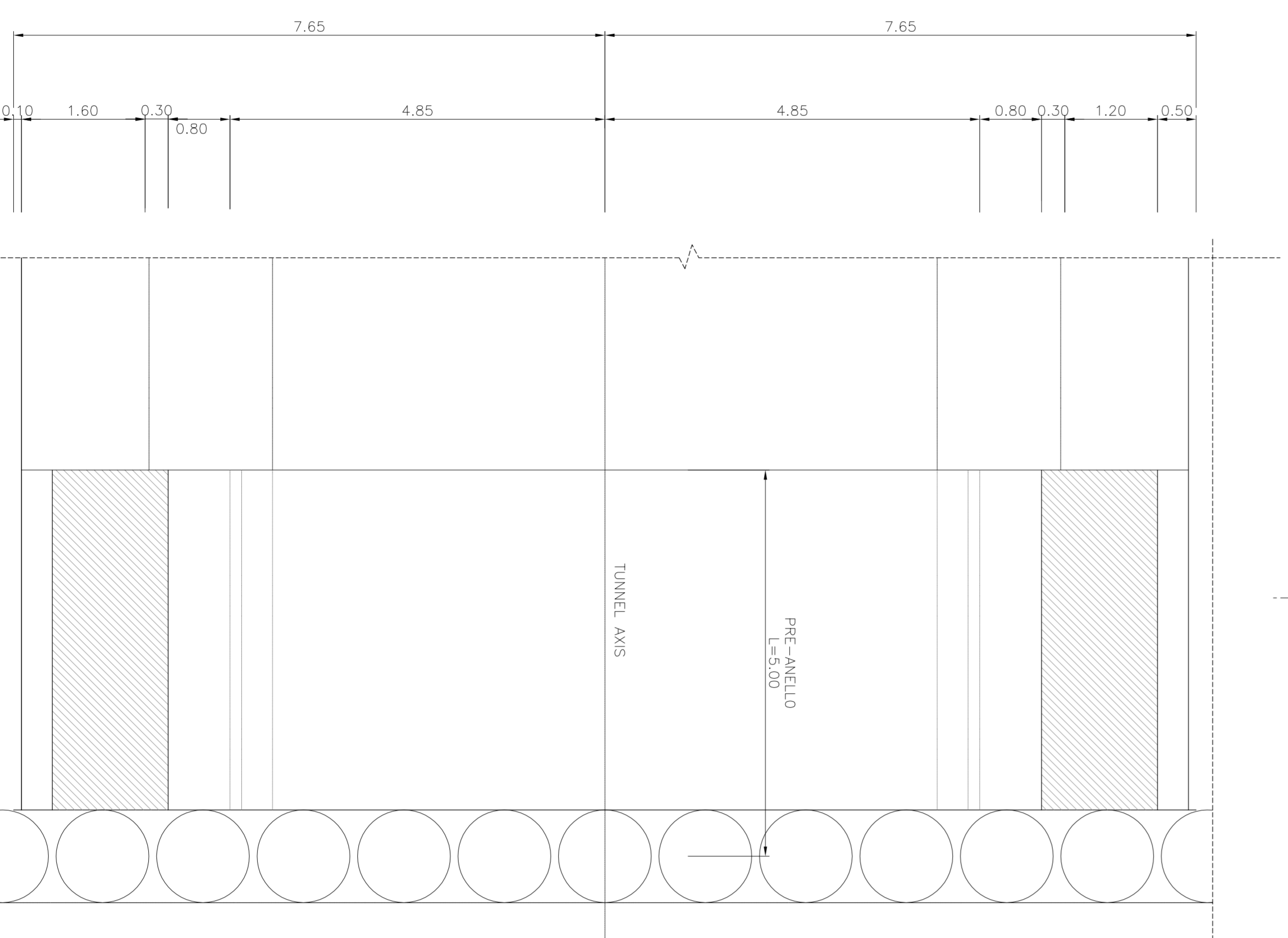
SECTION A-A
SECTIUNEA CURENTA A-A

Scale/Scala 1:50



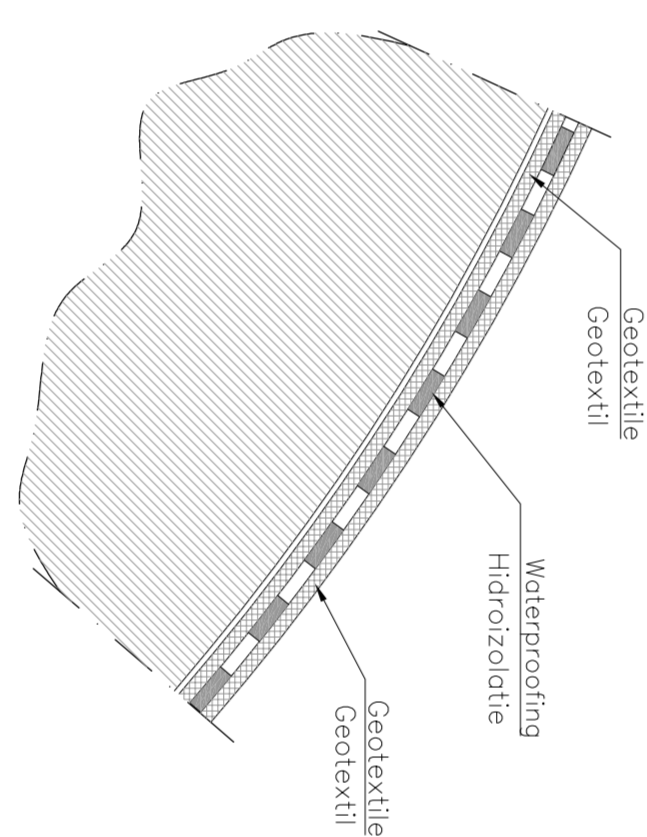
PLAN

Scale/Scala 1:50

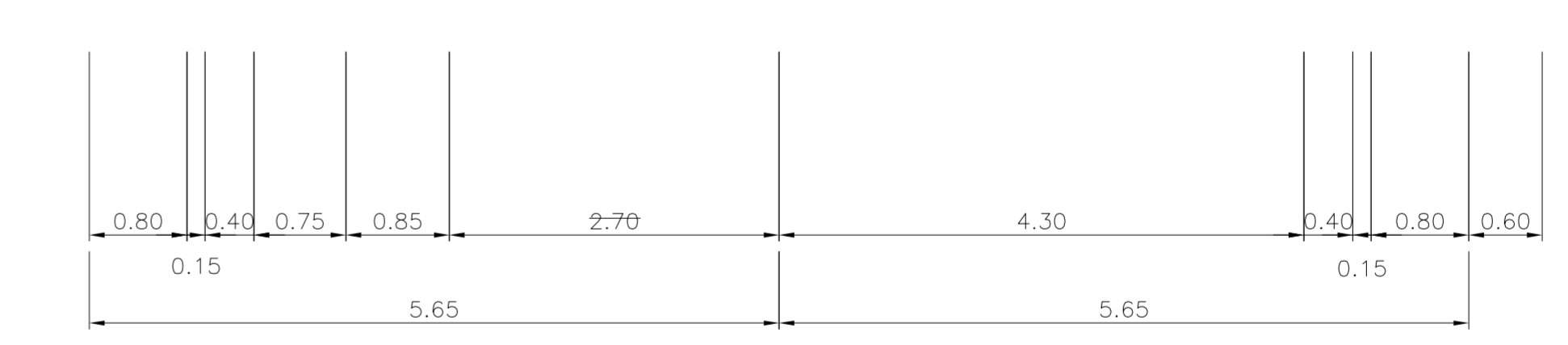


WATERPROOFING TUNNEL CROWN DETAIL
DETALIUL COROANA TUNELULUI HIDROIZOLATIEI

Scale/Scala 1:20



- NOTE:** - The integrity of the concrete structures of the vertical and radial tunnels structure is? Technical Specification for Impregnability.
- NOTE:** - Impregnated structure of water a tunnel? aplicatie si materiale, trebuie sa pentru structuri ST Specificatii tehnice pentru impregnabilitate.
- NOTE:** - Handrail shall be installed approximately at 1 m above roadway providing a route to a safe area (4.2.2.7, Escape walkways IS1).
- 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 Inaltime).
- NOTE:** - Escape signs shall be installed on the side walls at a maximum distance between escape signs of 50m (4.2.2.9 Escape signage IS2).
- NOTE:** - Semnale de evacuare trebuie sa fie instalate pe peretii laterali, la o distanta maxima intre semne de evacuare de 50m (4.2.2.9 Escapage signage IS1).



MATERIAL TABLE	
TUNNEL INVERT CONCRETE	
-	Type C2
-	f _{ck} 20 MPa
-	Minimum structural class S3/S4
-	Exposure class related to environmental conditions MX2
-	Class of chloride content Cl 0.20
-	ρ _{max} aggregate = 20 mm
TUNNEL CROWN CONCRETE	
-	Type C1
-	f _{ck} 20 MPa
-	Minimum structural class S3/S4
-	Exposure class related to environmental conditions MX2
-	Class of chloride content Cl 0.20
-	ρ _{max} aggregate = 20 mm
BENDING STEEL	
-	PLATE certified by endorsement
-	Weldable
LEAN CONCRETE	
-	Type 1
-	f _{ck} 20 MPa
-	Cement type CEM I/V

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

CLIENT / CLIENT	
GUVERNUL ROMANIEI ROMANIAN GOVERNMENT	
PROIECT FINANAT DE UNIUNEA EUROPEANA EUROPEAN UNION FINANCED PROJECT	
CN.C.F. "C.F.R." - SA	
CLIENT / CLIENT	
Sectia 1 Sectia 1 Sectia 1	
CONSULTANT / CONSULTANT	
R. LUTZA R. CERNIBEL C. CERNIBEL	
CONSULTANT / SUBCONSULTANT	
C. CERNIBEL	
CONSULTANT / SUBCONSULTANT	
C. CERNIBEL	
PROJECT INFORMATION	
Project Name: ORNEMIS TUNNEL	
Project Reference: Z046R01697A003	
Project Location: Faza 1, P.10, P.11, 1.D.	
Project Description: ...	
Project Start Date: ...	
Project End Date: ...	
Project Status: ...	
Project Manager: ...	
Project Engineer: ...	
Project Designer: ...	
Project Checker: ...	
Project Approver: ...	
Project Date: ...	
Project Version: ...	
Project Scale: ...	
Project Lot: ...	
Project No: ...	