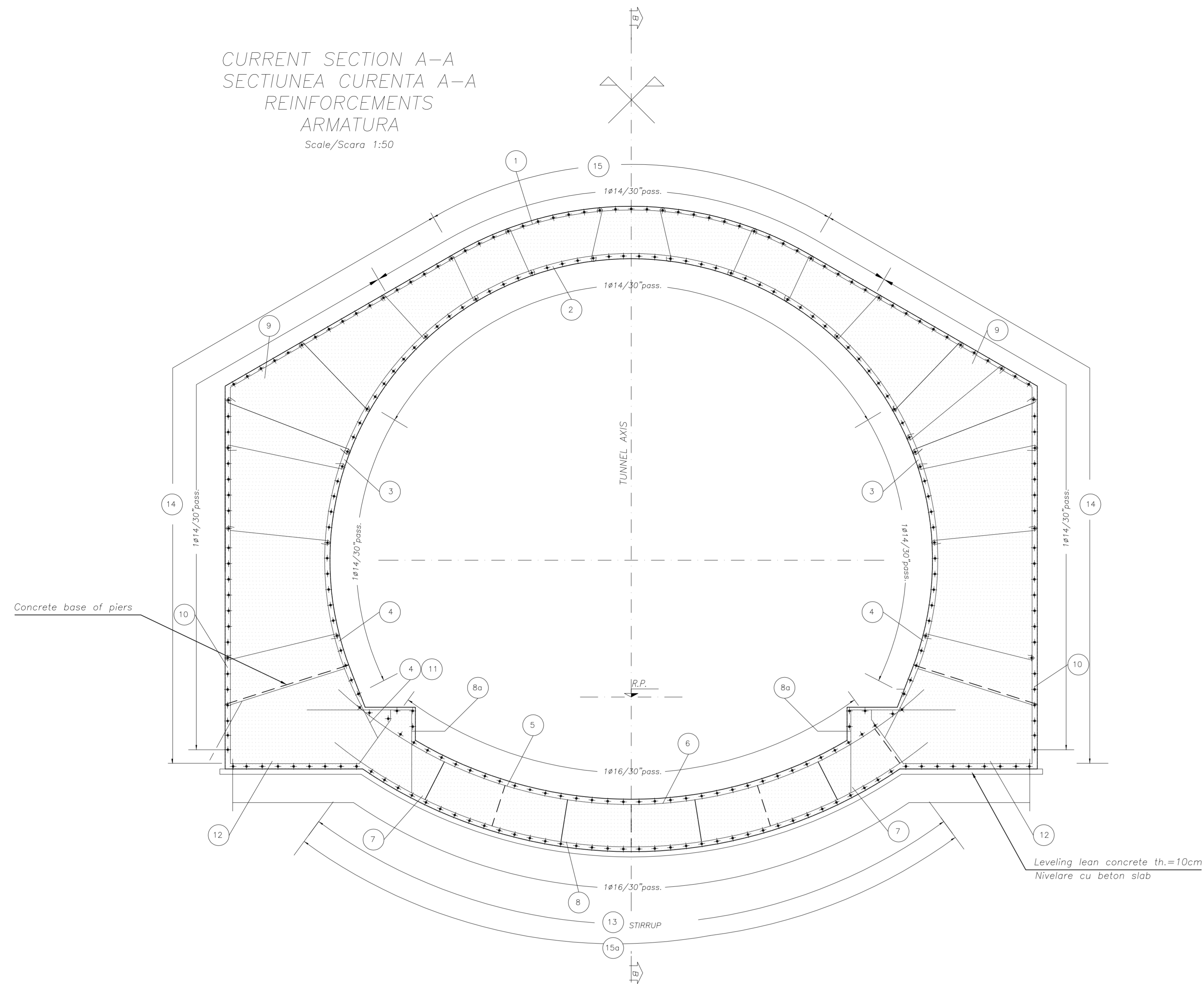
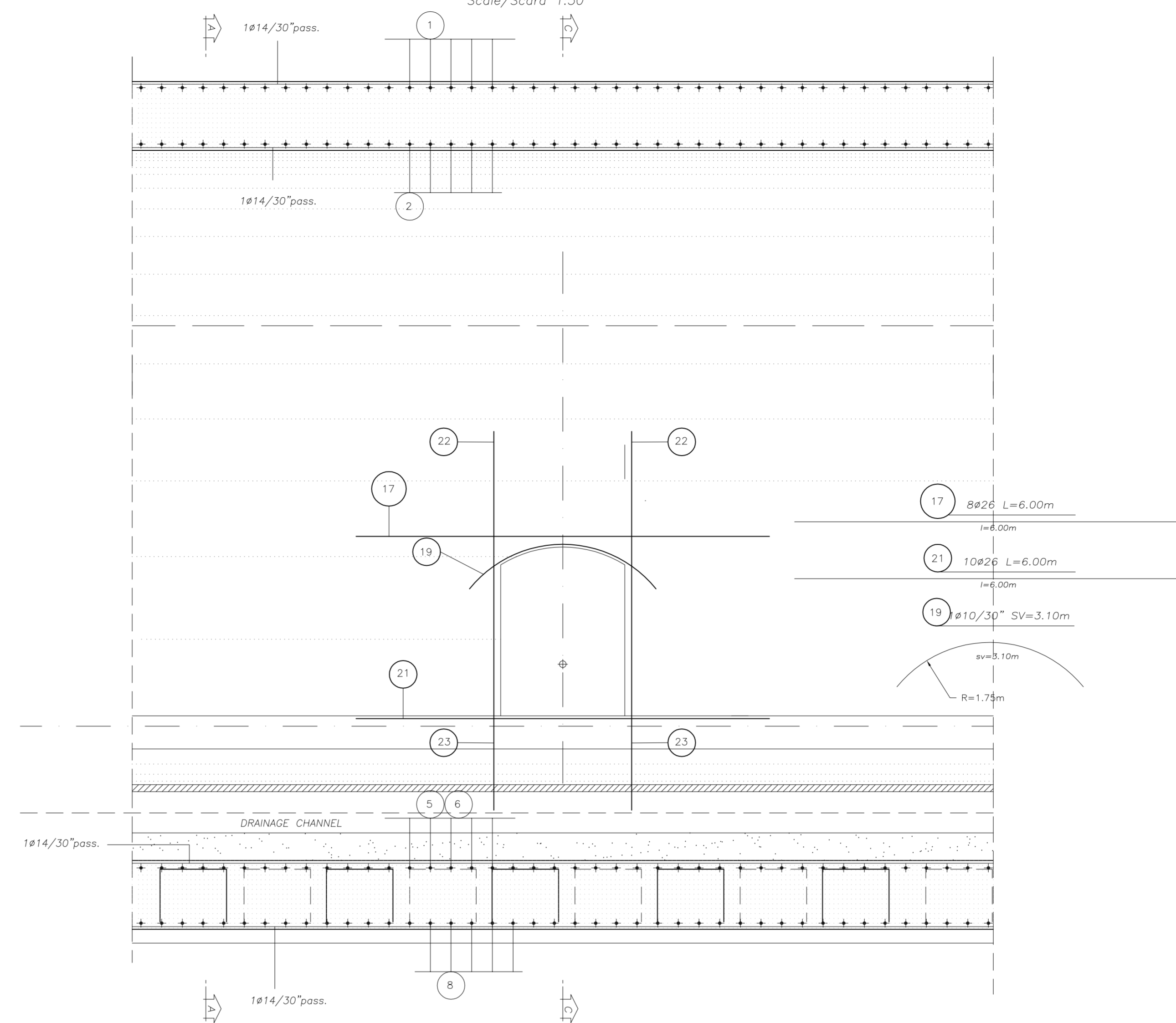


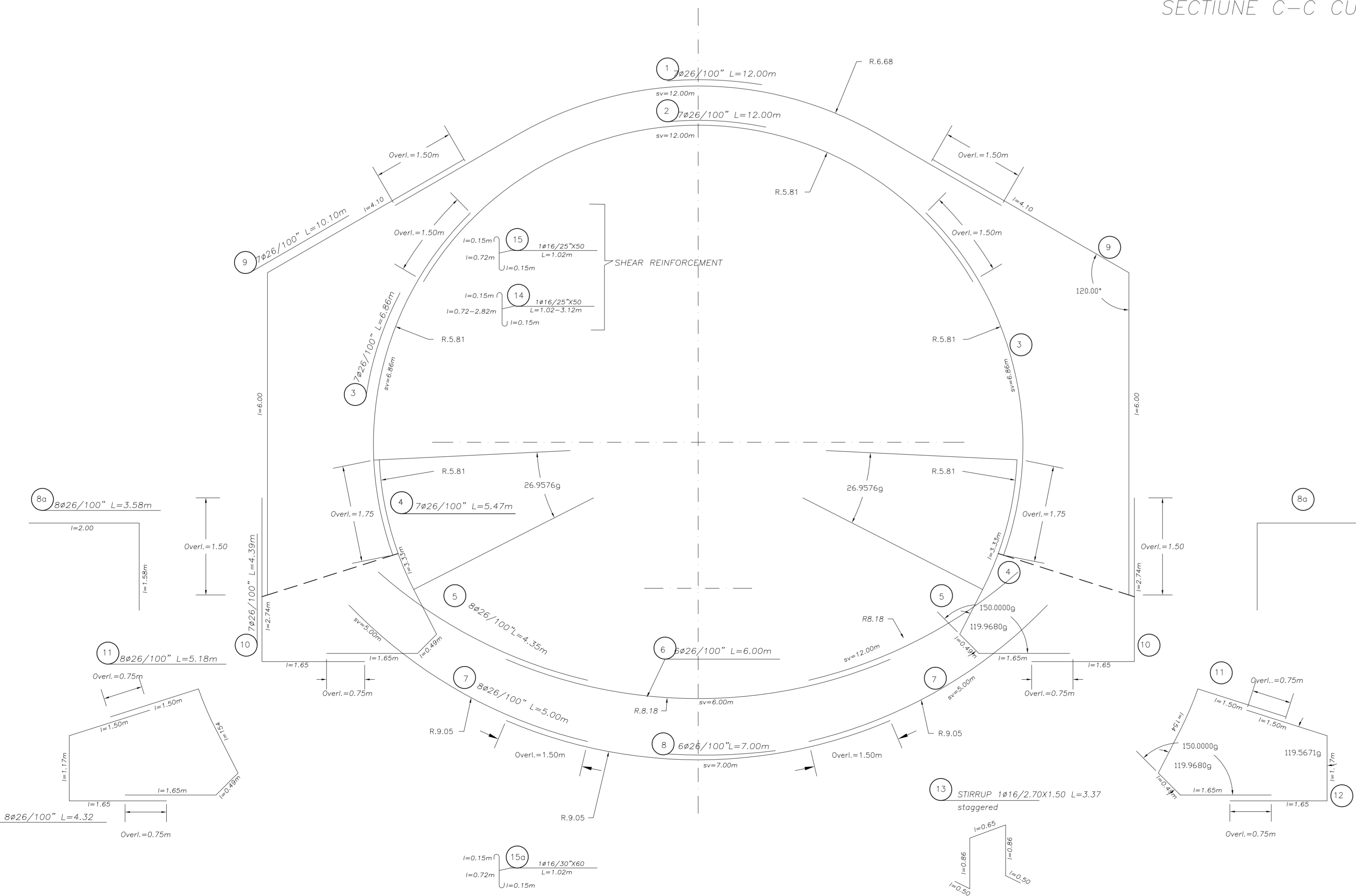
CURRENT SECTION A-A
SECTIUNEA CURENTA A-A
REINFORCEMENTS
ARMATURA
Scale/Scara 1:50



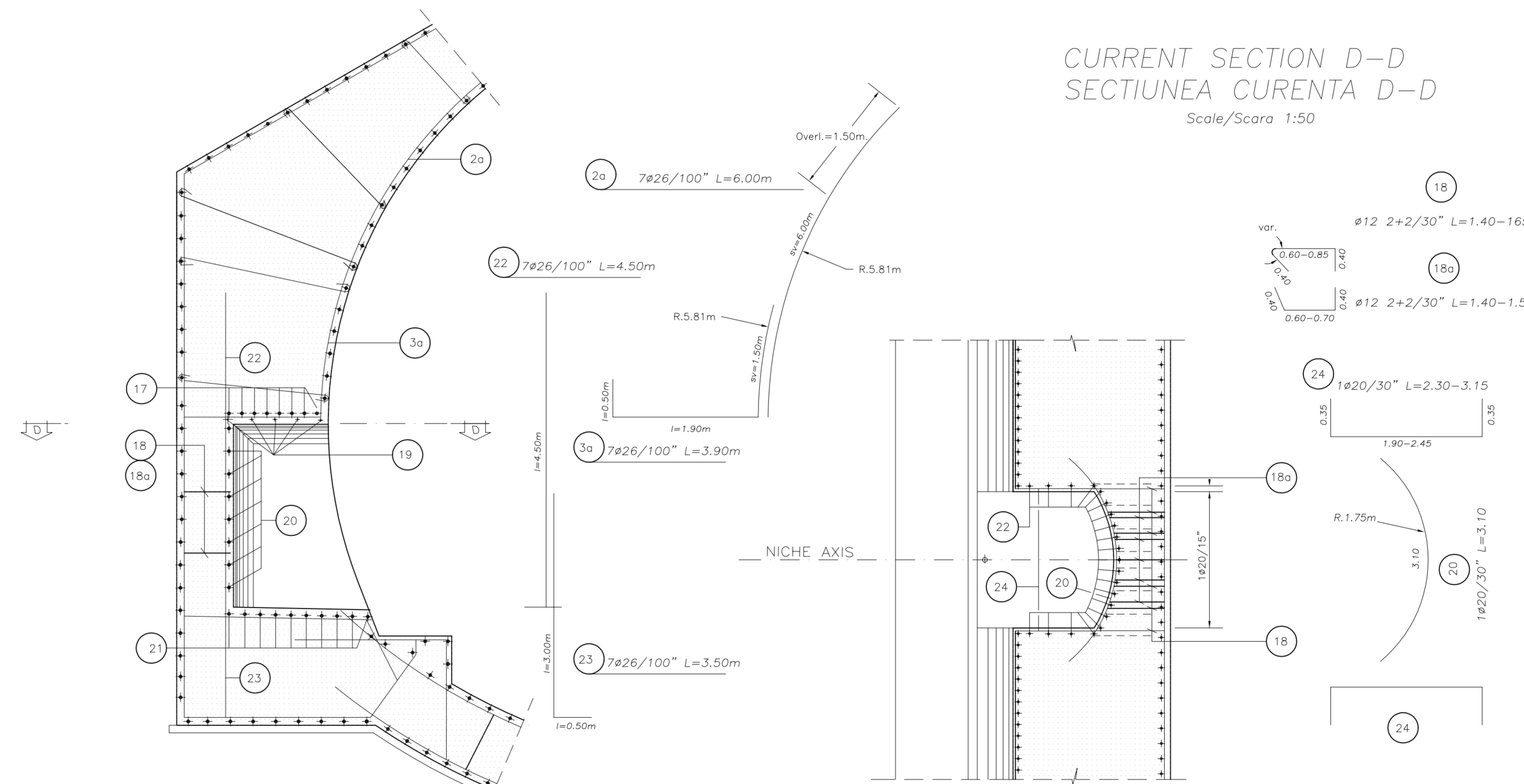
CURRENT SECTION B-B
SECTIUNEA CURENTA B-B
Scale/Scara 1:50



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



CURRENT SECTION D-D
SECTIUNEA CURENTA D-D
Scale/Scara 1:50



STEELS TABLE	
REINFORCING STEEL:	
- B450C (weldable)	
Bending diameter d_{b1} :	
ϕ Bar $\leq \phi 20$	$\rightarrow d_{b1} = 6\phi$
ϕ Bar $\phi 20 - \phi 26$	$\rightarrow d_{b1} = 8\phi$
Legend measures:	
MATERIAL TABLE	
TUNNEL INVERT CONCRETE:	
- Type C2	
- $f_{ck} \geq 30$ MPa	
- Water/cement ratio < 0.50	
- Minimum structural Class S3/S4	
- Exposure class related to environmental conditions: XA2	
- Cement type CEM III/V	
- Class of chloride content Cl 0.20	
- ϕ max aggregate = 32 mm	
TUNNEL CROWN CONCRETE:	
- Type C1	
- $f_{ck} \geq 30$ MPa	
- Water/cement ratio < 0.50	
- Minimum structural Class S4/S5	
- Exposure class related to environmental conditions: XA2	
- Cement type CEM III/V	
- Class of chloride content Cl 0.20	
- ϕ max aggregate = 32 mm	
REINFORCING STEEL:	
- B450C, controlled by establishment	
- Weldable	
LEAN CONCRETE:	
- Type I	
- $f_{ck} \geq 12$ MPa	
- Cement type CEM I/V	

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

D					
C					
B					
A					
Index	Date	Modificari	Proiectant	Approbat	Approbat CFR
		Modificari/Revisi	Designer	Approved Consultant	Approved CFR

GUVERNUL ROMANIEI / ROMANIAN GOVERNMENT
PROIECT FINANATAT DE UNIUNEA EUROPEANA / EUROPEAN UNION FINANCED PROJECT

CLIENT / CLIENT
ITALFER / Scot Wilson / OBERMEYER PLANEN + BERATEN GmbH / **TECNIC** Consulting Engineers

CONSULTANT / CONSULTANT		Date	Signature
Approbat	Self project		
Approved	Project manager	R. Liuzza	
Approbat	Coordonator Sectiune 1		
Approved	Section 1 Coordinator	C. Gambelli	
Verificat	Tunnel Expert		
Checked	Tunnel Expert	C. Gambelli	
Intocmit	Projector		
Elaborated	Designer	C. Gambelli	

SUBCONSULTANT / SUBCONSULTANT		Date	Signature
Approbat	Responsabil Subconsultant		
Approved	Subconsultant Responsible		
Intocmit	Projector		
Elaborated	Designer		

Rehabilitarea liniei de cale ferata Brasov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteză maximă de 160 km/h. Section 1 Brasov - Sighisoara **Project/Project 2004/RO/16/PP/PA/003**
 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 1 Brasov - Sighisoara **Faza / Phase: P.Th. / T.D.**

Denumire desen / Drawing Title: **ARCHITA 2 TUNNEL ENTRANCE ARCHITA SIDE Artificial tunnel: reinforcements Tunnel artificial: armaturi**

Modificari / Codification System	Scara / Scale	LOT	Nr. / No
	variat / various		

E A 5 1 0 1 C 1 4 B B G A 0 9 0 0 0 0 7 0