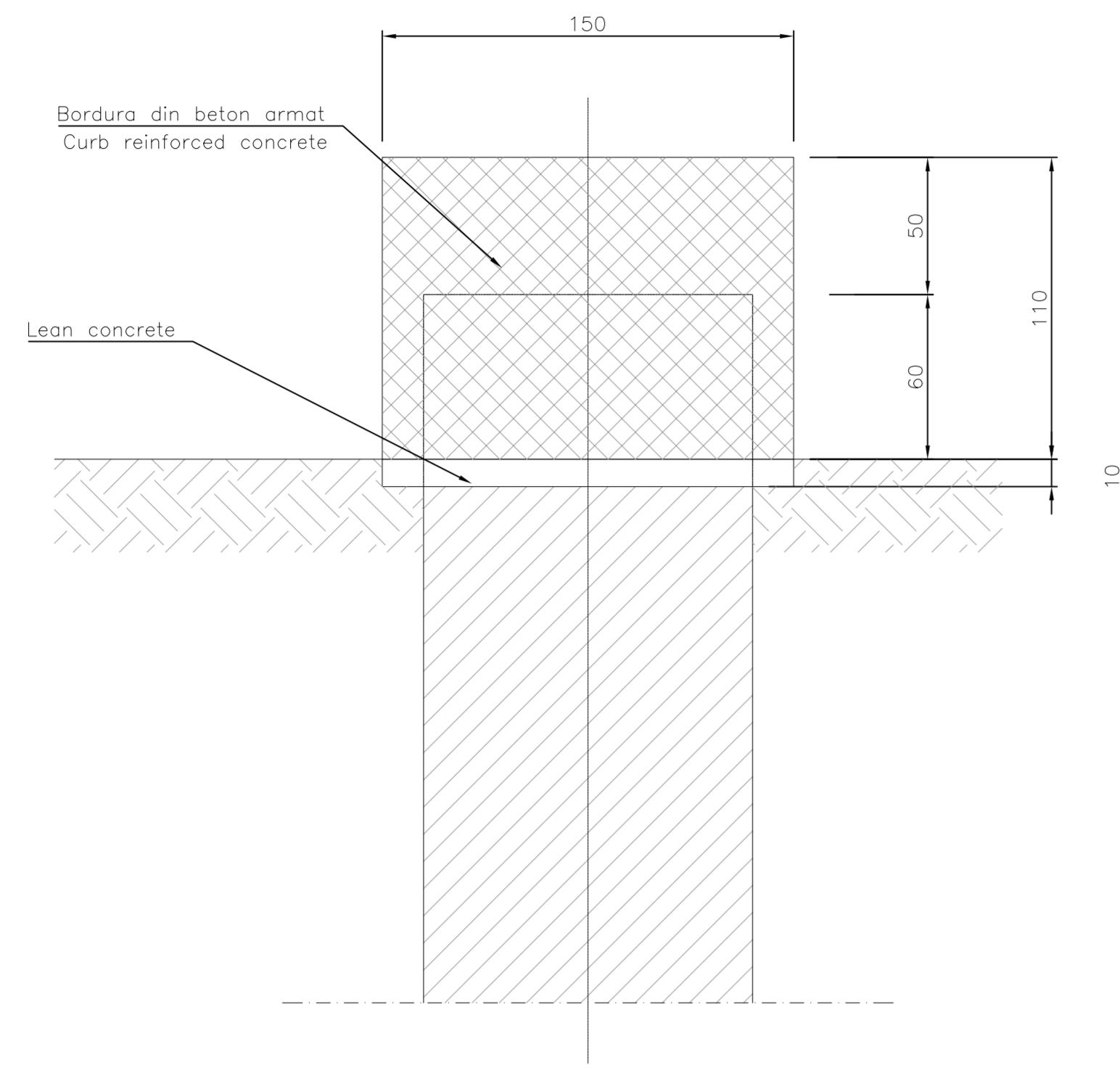
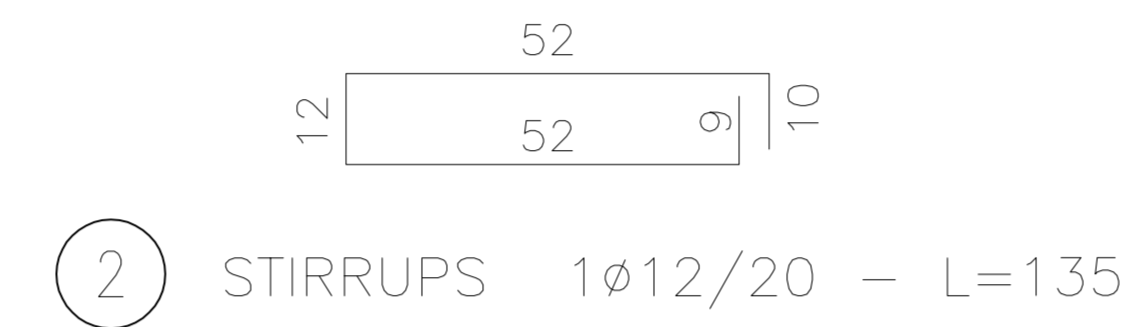
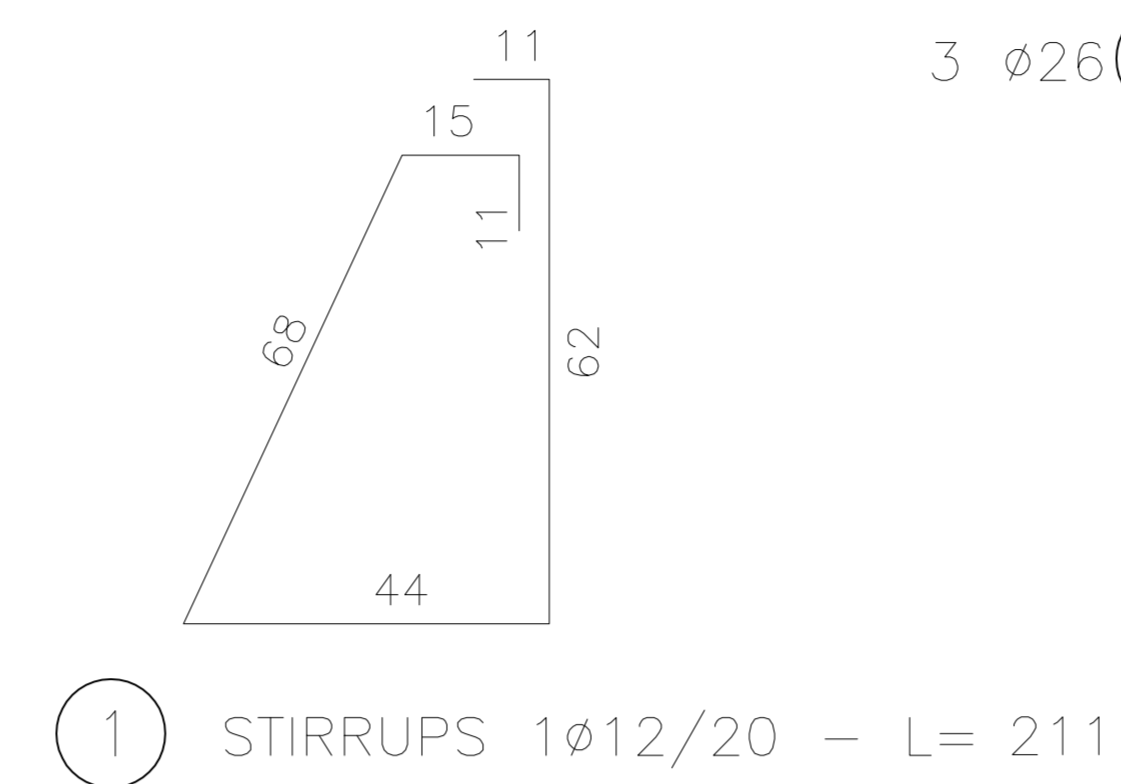
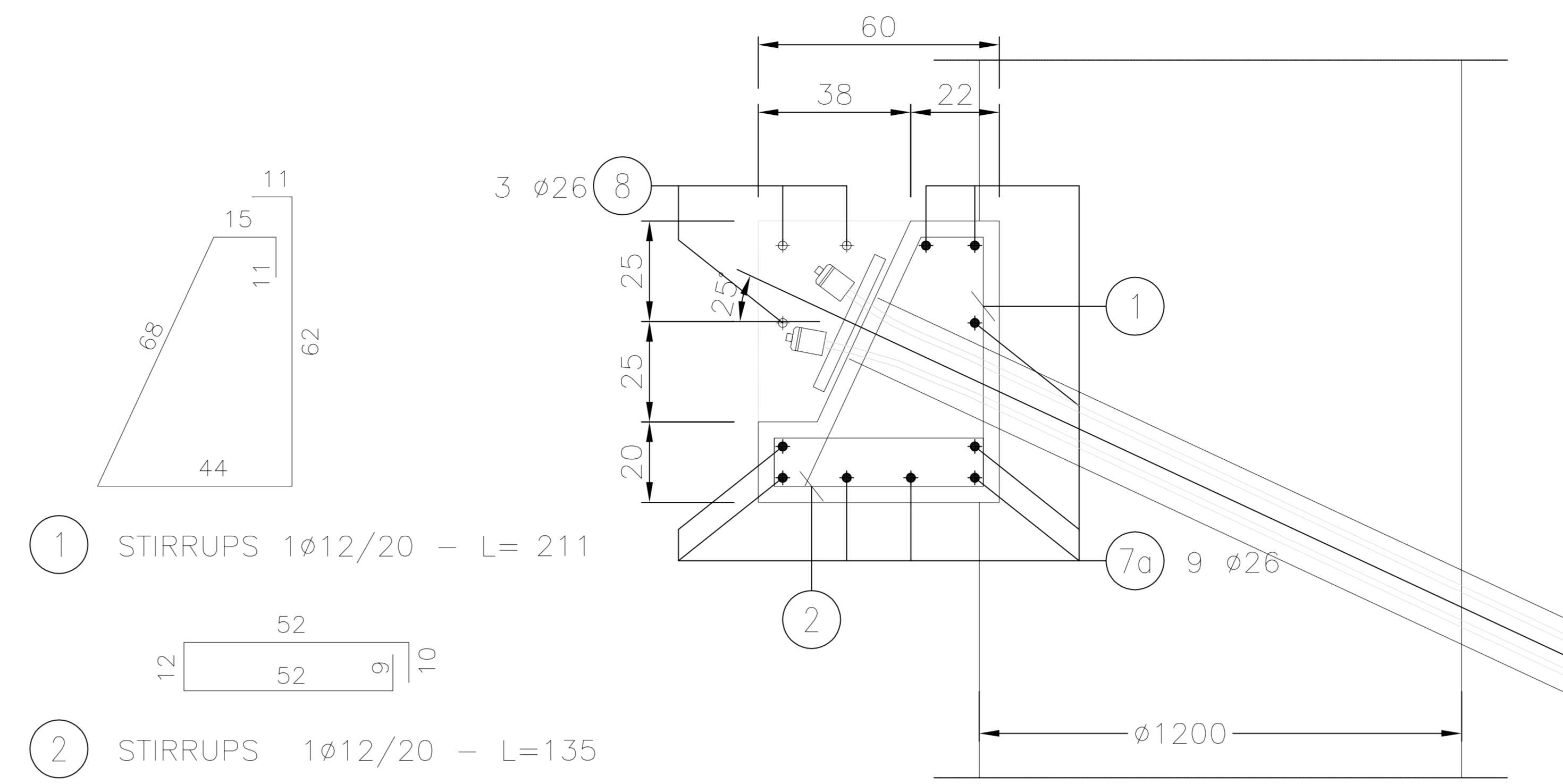


CURB REINFORCED CONCRETE
BORDURA DIN BETON ARMAT
Formworks/Cofraje
Scale/Scale 1:20

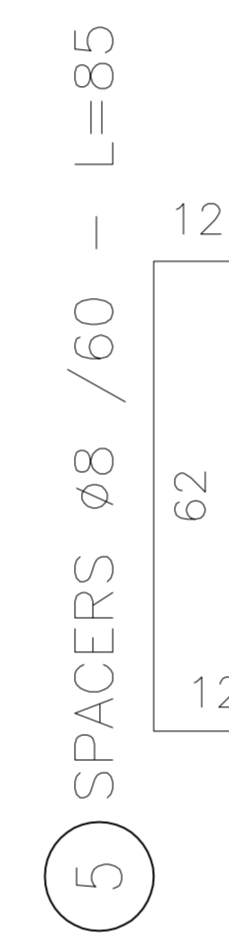
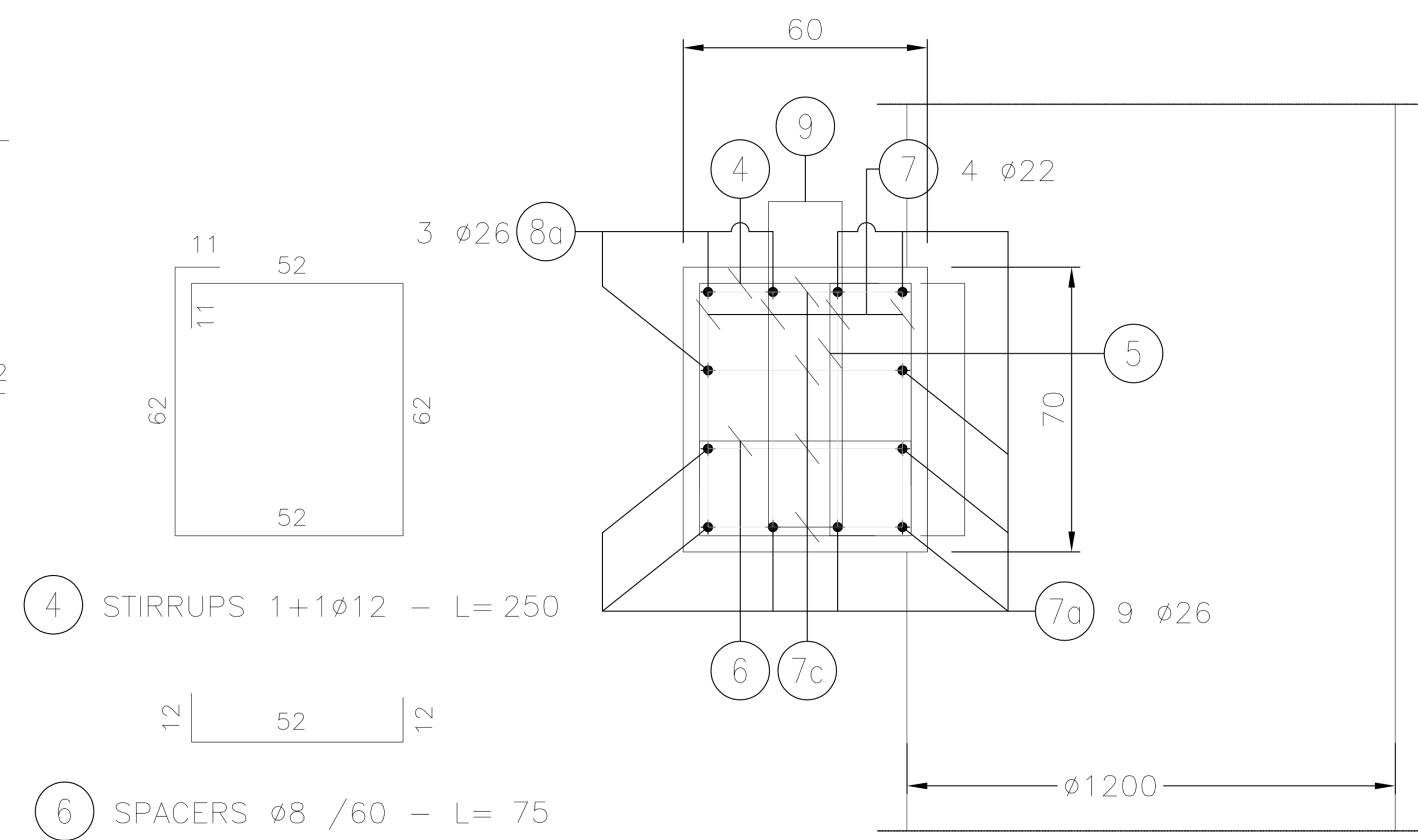


CURB REINFORCED CONCRETE WITH TENDONS-TYPE 2
BORDURA DIN BETON ARMAT CU FRÂNGHIE-TIP 2
Reinforcments/Armaturi
Scale/Scale 1:10

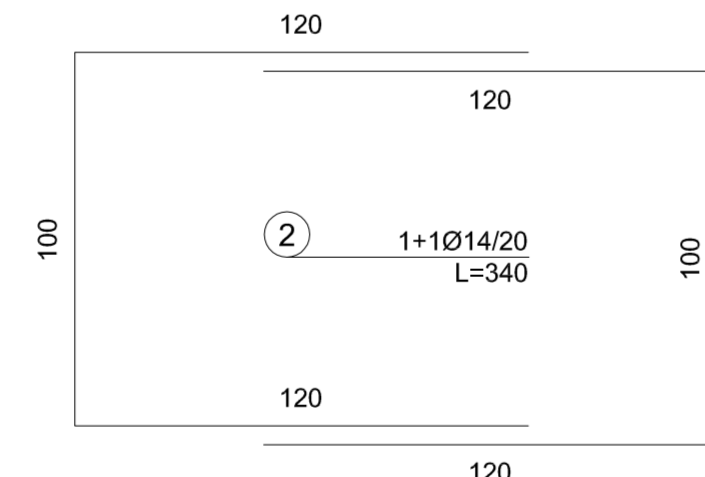
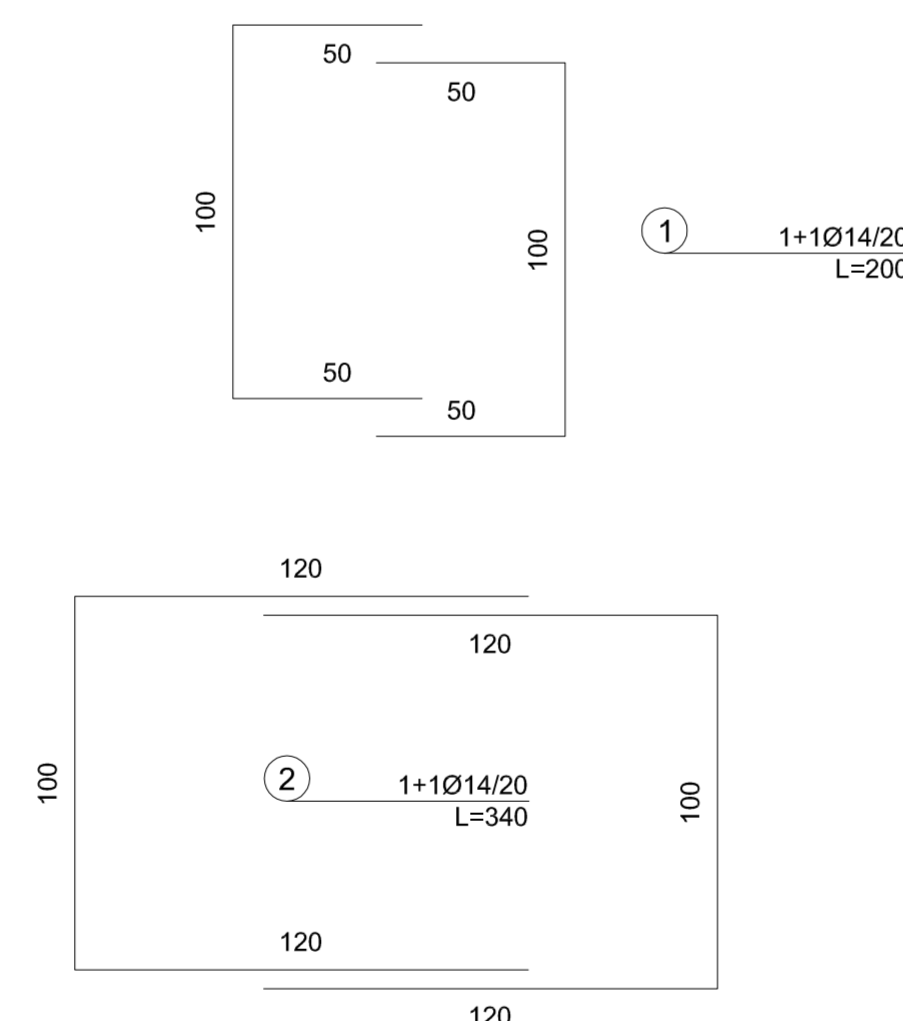
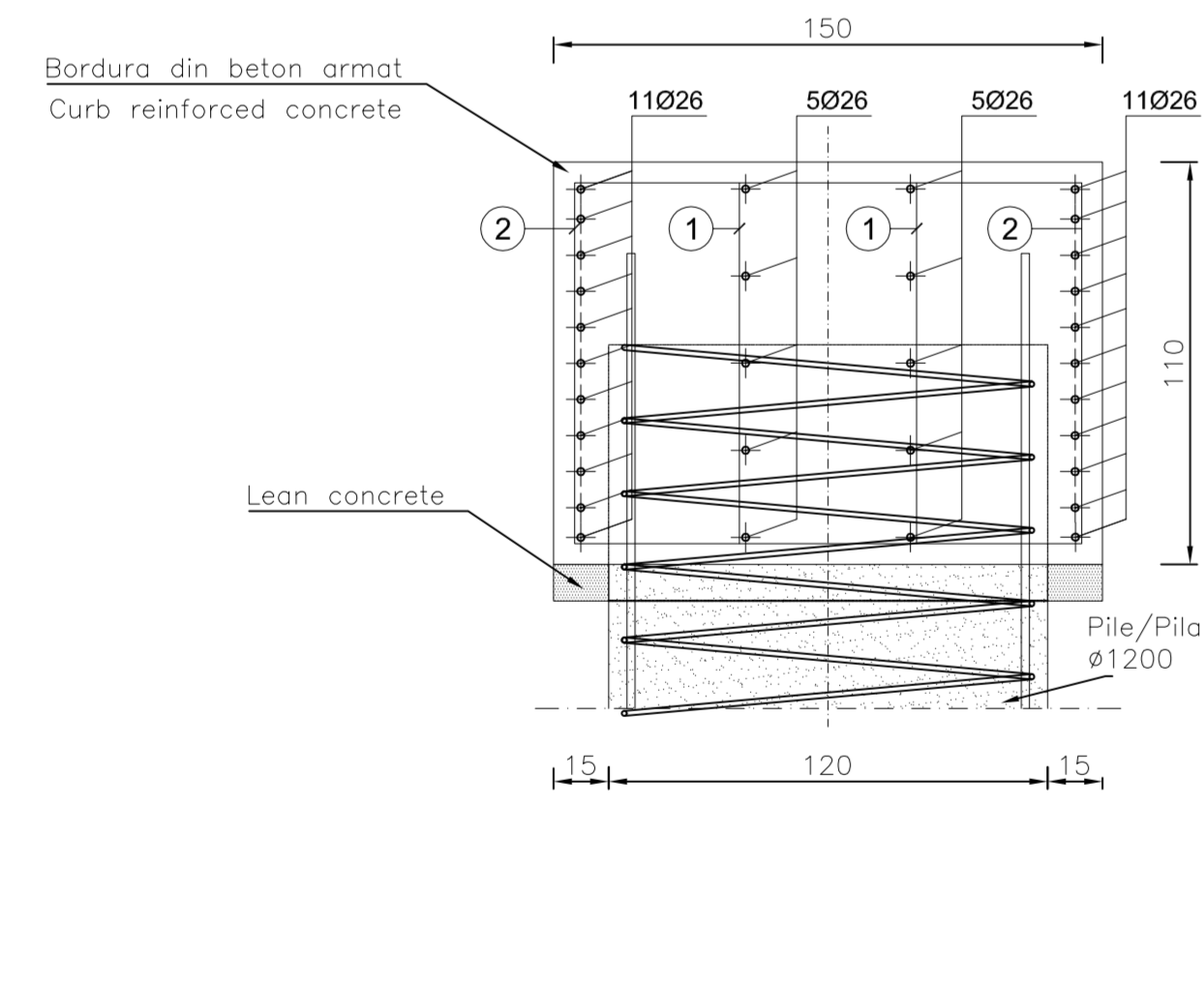


STEELS TABLE	
REINFORCING STEEL:	
- B450C (weldable)	
Bending diameter d_{br} :	
ϕ Bar < $\phi 20 \rightarrow d_{br} = 6\phi$	
ϕ Bar $\phi 20 - \phi 26 \rightarrow d_{br} = 8\phi$	
Legend measures:	
MATERIAL TABLE	
TUNNEL INVERT CONCRETE:	
- Type C2	
- $f_{ck} \geq 30$ MPa	
- Water/cement ratio < 0.50	
- Minimum structural Class S3/S4	
- Exposure class related to environmental conditions: XX2	
- 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: XX2	
- 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	

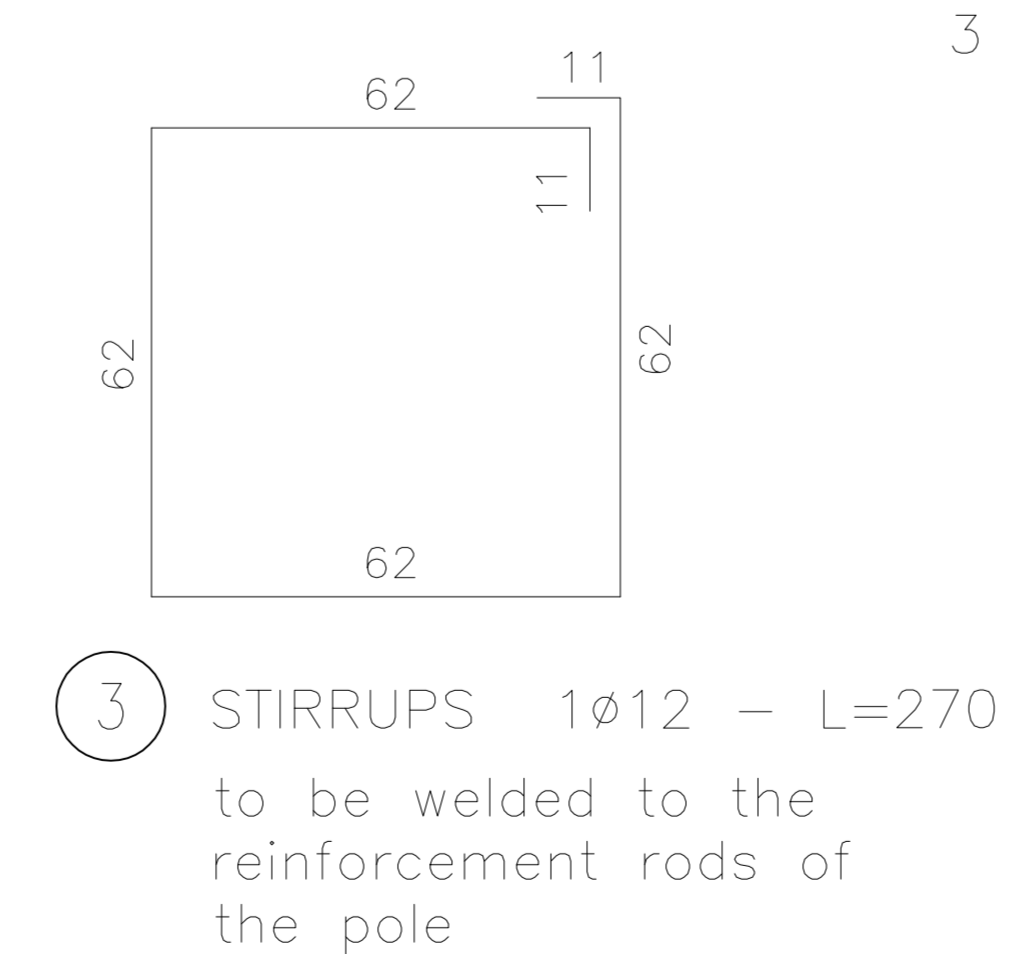
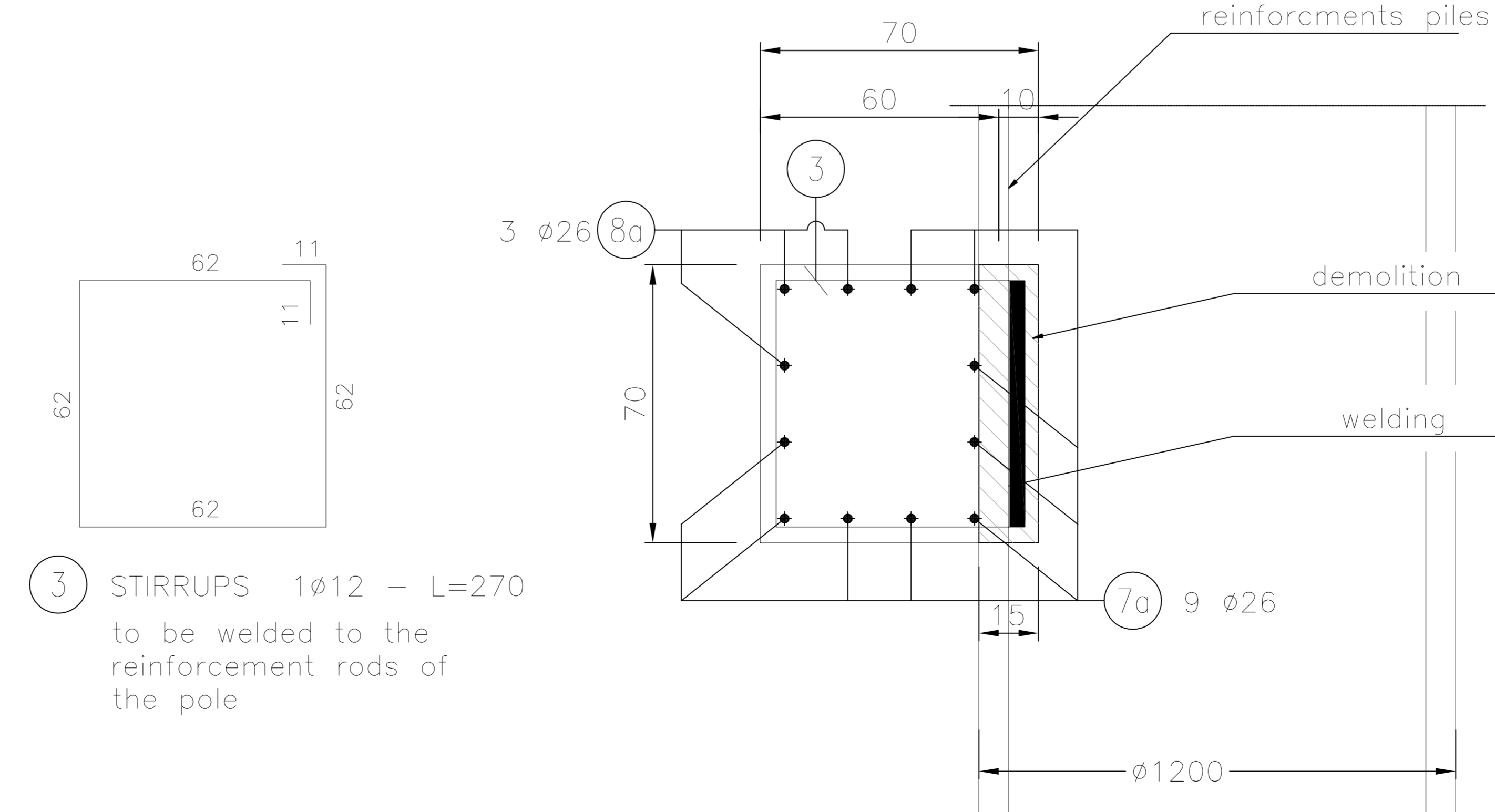
CURB REINFORCED CONCRETE-TYPICAL SECTION
BORDURA DIN BETON ARMAT-SECTIUNI TIP
Reinforcments/Armaturi
Scale/Scale 1:10



CURB REINFORCED CONCRETE -TYPE 1
BORDURA DIN BETON ARMAT-TIP 1
Reinforcments/Armaturi
Scale/Scale 1:20



CURB REINFORCED CONCRETE ON PILES
BORDURA DIN BETON ARMAT DEASUPRA PILA
Reinforcments/Armaturi
Scale/Scale 1:10



D	C	B	A	Index	Date	Modifications/Revision	Projectant	Approved Consultant	Approved CFR											
				PROIECT FINANȚAT DE UNIUNEA EUROPEANĂ EUROPEAN UNION FINANCED PROJECT																
		C.N.C.F. "C.F.R." - S.A.																		
CLIENT / CLIENT																				
CONSULTANT / CONSULTANT																				
Approved	Self project	Project manager		R. Liuzza		Date		Semnătură												
Approved	Coordinator	Section 1 Coordinator		C. Gambelli		Date		Semnătură												
Verified	Checked	Tunnel Expert		C. Gambelli		Date		Semnătură												
Elaborated	Elaborated	Projectant		C. Gambelli		Date		Semnătură												
SUBCONSULTANT / SUBCONSULTANT																				
Approved	Responsible	Subconsultant				Date		Semnătură												
Elaborated	Elaborated	Designer				Date		Semnătură												
Rehabilitarea liniei de cale ferată Braşov - Simeria, parte componentă a coridorului IV Pan European, pentru circulația trenurilor cu viteză maximă de 160 km/h. Secțiunea 1 Braşov - Sighisoara. Project/Project 2004/RO/16/PA/002																				
Rehabilitation of the railway line Braşov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with maximum speed of 160 km/h. Section 1 Braşov - Sighisoara. Faza / Phase: P,Th. / T.D.																				
Denumire desen / Drawing Title : ARCHITA 2 TUNNEL																				
Tunelul intrare concrete pile wall: curb reinforced concrete - formwork and reinforcement Piles din beton a peretului de la intrarea in tunel: bordura din beton armat - cofraje si armaturi																				
Codificare / Codification System		Scale / Scale		LOT		Nr. / No														
variat / various		variat / various																		
E	A	5	1	0	1	C	1	4	B	Z	G	A	0	9	0	0	0	0	3	0