



Sps "AM fardi "

q. Tbilisi.  
Tumaniანი ს II ციხე #3  
საცხოვრებელი სახლის  
რეკონსტრუქციის პროექტი

კონსტრუქციული პროექტი

Tbilisi 2013

№	ქვეყნის დასახელება	რაოდენობა	მასალის სარქი ერთ ელემენტზე										მასალის საერთო სარქი											
			Ø8AIII	Ø10AIII	Ø12AIII	Ø16AIII	Ø20AIII	შვალარი No12	მითი Ø120,ბ=5	ფარული -10	კუთხეობა L100x100x10	ბარის მარაგ	ბარის მოცულობა, კმ.მ	Ø8AIII	Ø10AIII	Ø12AIII	Ø16AIII	Ø20AIII	შვალარი No12	მითი Ø120,ბ=5	ფარული -10	კუთხეობა L100x100x10	ბარის მარაგ	ბარის მოცულობა, კმ.მ
1	სიმიქი სიმი-1	4	82				284					B-22.5	7.13	328				1136					B-22.5	28.5
2	ბებონის მომზადება	1										B-7.5	3.80										B-7.5	3.8
2	საპირკაპლის ჯოჯი ს-1	1	582				1439					B-22.5	21.56	582				1439					B-22.5	21.6
3	-2,850 იბანის ფილა	1		183								B-22.5	3.43		183								B-22.5	3.4
4	სვების ამონაგვარი ს-1	4	2				34							8				136						
5	ცოკოლის ჯედლის ამონაგვარი	1	8	80			240							8	80			240						
6	0,000 ნიშნის ბაღახურის გვამა	4	23		1384							B-22.5	12.64	92		5536						B-22.5	50.6	
7	+2,700 ნიშნის ბაღახურის გვამა	4	17		1007							B-22.5	9.20	68		4028						B-22.5	36.8	
8	მონოლითური სვები ს-1	4	13			44						B-22.5	0.44	52			176					B-22.5	1.8	
9	მონოლითური სვები ს-2	1	13			38						B-22.5	0.45	13			38					B-22.5	0.5	
10	0,000 ნიშნის მონოლითური ჯოჯი ს-1	1	410				1337					B-22.5	6.88	410			1337					B-22.5	6.9	
11	+2,700 ნიშნის მონოლითური ჯოჯი ს-1	1	267				854					B-22.5	4.49	267			854					B-22.5	4.5	
12	ხის მარტი ს-1	2	1		65							B-22.5	0.81	2		130						B-22.5	1.6	
13	ხის მარტი ს-2	1	1		66							B-22.5	0.56	1		66						B-22.5	0.6	
14	ხის ჩარჩო	1	14		12	32						B-22.5	1.00	14		12	32					B-22.5	1.0	
15	ფრონტონის სარტყალი	1	30	70								B-22.5	0.81	30	70							B-22.5	0.8	
16	ლიტონის ჩარჩო	1					295	110	57								295	110	57					
17	ლიტონის მომარჯობა ლრ-1	2							11	125								22	250					
18	ლიტონის მომარჯობა ლრ-2	7							44	211								308	1477					
19	ლიტონის მომარჯობა ლრ-3	2							66	271								132	542					
20	ლიტონის მომარჯობა ლრ-4	4							66	271								264	1084					
21	შუბლის ბარსაღი შ-1	4							57									228						
22	ჯედლის არმირება	1	415											415										
23	რინდაბონის სარტყალი	1	83	158								B-22.5	4.20	83	158							B-22.5	4.2	
													ჯამი:	2373	491	9772	246	5142	295	110	1011	3353		166.4
													სულ არმირება:	18024										

naxazebi s CamonaTval i		
#	naxazebi s clasaxel eba	naxazi s #
1	Tavfur cel i	k-1
2	saZi r kvl ebi s gegma	k-2
3	xi mi nj i xi m-1	k-3
4	saZi r kvl i s koWi sk-1-i s ar mi r ebi s sqema	k-4
5	0,000 ni Snul i s gadaxur vi s gegma	k-5
6	0,000 ni Snul i s gadaxur vi s fil i s ar mi r ebi s gegma	k-6
7	+2,700 ni Snul i s gadaxur vi s gegma	k-7
8	+2,700 ni Snul i s gadaxur vi s fil i s ar mi r ebi s gegma	k-8
9	monol iTur i sveti s-1, s-2	k-9
10	monol iTur i koWi s k-1-s ar mi r eba	k-10
11	ki bi s mar Si km-1, km-2	k-11
12	ki bi s Car Co	k-12
13	ni vni vebi s gegma	k-13
14	ni vni vebi s gegma; Wr i l ebi kvanZebi	k-14
15	I iToni s moCar Coeba l C-1, l C-2	k-15
16	I iToni s moCar Coeba l C-3, l C-4	k-16
17	kedl ebi s ar mi r ebi s kvanZi	k-17

ganmar tebi Ti baraTi

q. Tbil isi. Tumanianis II Cixi #3 sacxovrebel i saxl is rekonstruqciis proeqti damuSavebul ia Sps " AM- fardi "-s mier. rekonstruqciis prioeqti iTval iswinebs arsebul i Senobis Riobebis gamagrebas, aguris wyobis gamagreba armaturis badeze gal esviT da Senobaze rkinabetonis sartyel is mowyobas, agreTve proeqti iTval iswinebs axal i miSenebis mowyobas.

miSenebis saZirkvl ebad gaTval iswinebul ia ximiJebi. ximiJebis amoTxra ganxorciel des xel iT, amoTxrisas ganxorciel des ximiJebis ormoebis kedl ebi s gamagreba xis konstruqciebiT. ximiJebis Ziris niSnul ebi miRebul iqnas geol ogis da konstruqtoris mier.

Senobis rostverkaT proeqtiT gaTval iswinebul ia saZirkvl i s koWi. koWis qveS moewyos betonis momzadeba.

Senobis monol iTuri rkinabetonis karkasi da gadaxurvis fil ebi moewyos betoni B-22.5 kl asis gamoyenebiT.

gare kedl ebi s Sevseba ganxorciel des mcire zomis betonis bl okebisagan. bl okis wyobis kedl ebSi moewyos horizontal uri armireba 2Ø8AI simaRI is yovel 600 milimetrSi.

saxuravis xis el ementebi damuSavdes cecxl medegi da antiseptikuri xsnarebiT.

cokol is kedl ebze miwis mxridan moewyos vertikal uri hidroizol acia.


I iTonis el ementebis SeerTeba ganxorciel des xel is el eqtro SemduRebl iT (el eqtrodi e-42), Sexebis mTli an konturebze.

SenaduRi nakeris simaRI e miReba SesaduRi el ementebis umciresi sisqis tol i.

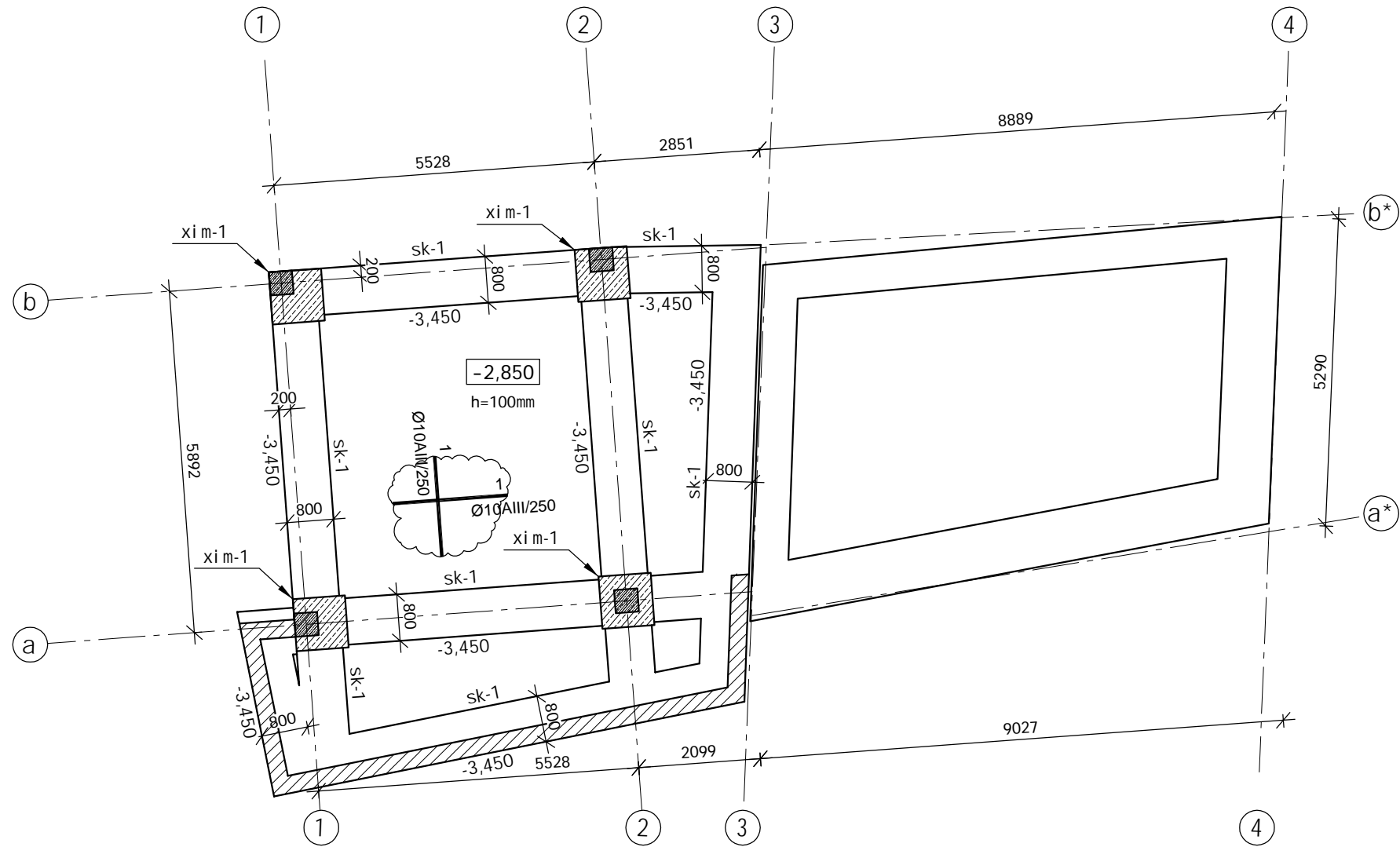
yvel a zomebi mocemul ia mil imetrebSi, niSnul ebi metrebSi.


mocemul i proeqti ganxil eba arqiteqturul nawil Tan erTad.

konstruqciebis gegmebze mocemul ia koWebis Ziris niSnul i da gadaxurvis fil ebi s zedapiris niSnul i.

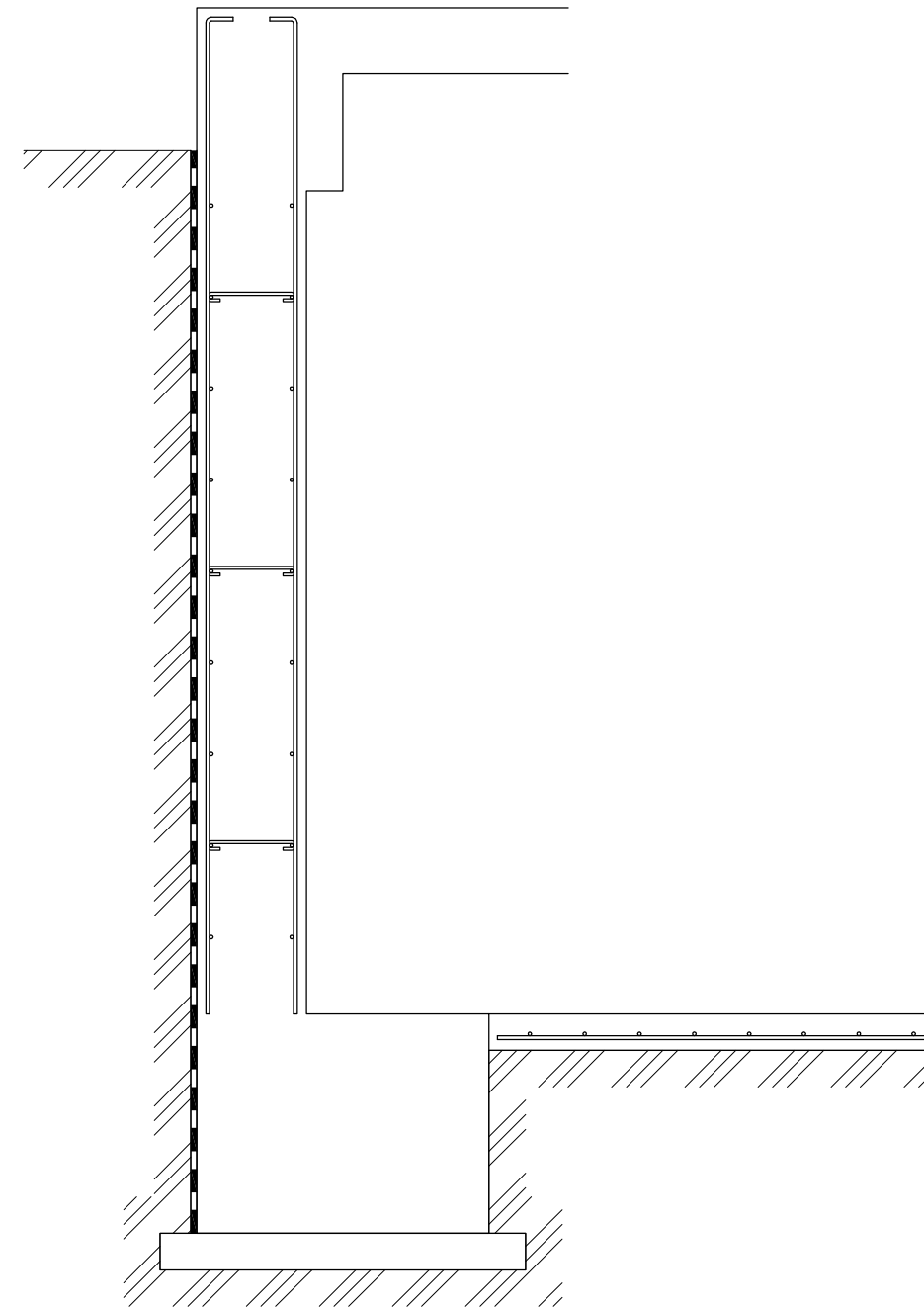
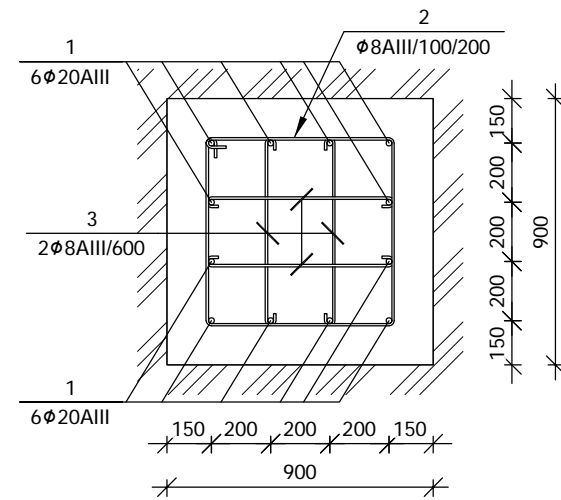
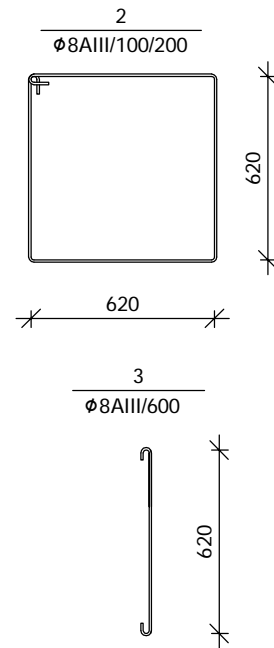
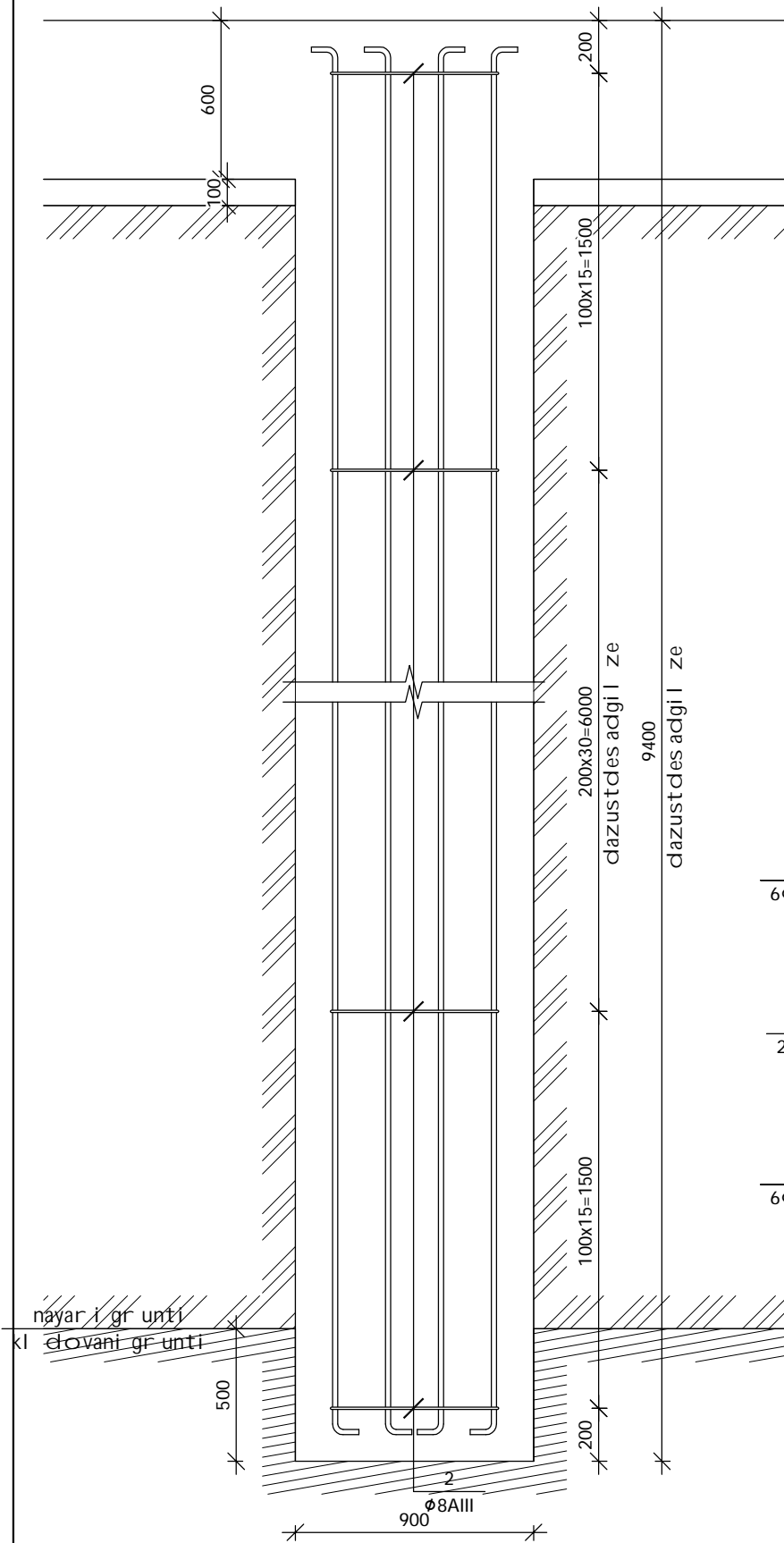
direqtori	m. buxai Ze	<i>J. Sulyanidze</i>	q. Tbil isi. Tumanianis II Cixi #3 sacxovrebel i saxl is rekonstruqciis proeqti	 Sps "AM fardi "			
pr. avtori	a. gogi aSvil i	<i>A. Gogiasvili</i>					
pr. avtori	m. buxai Ze	<i>J. Sulyanidze</i>					
konstruqt.	g. comala	<i>G. Comala</i>	konstruqciul i proeqti	stadi a	furcel i	r-ba	masSt.
			Tavfur cel i	sp	k- 1		

saZi r kvl ebi s gegma m 1:100




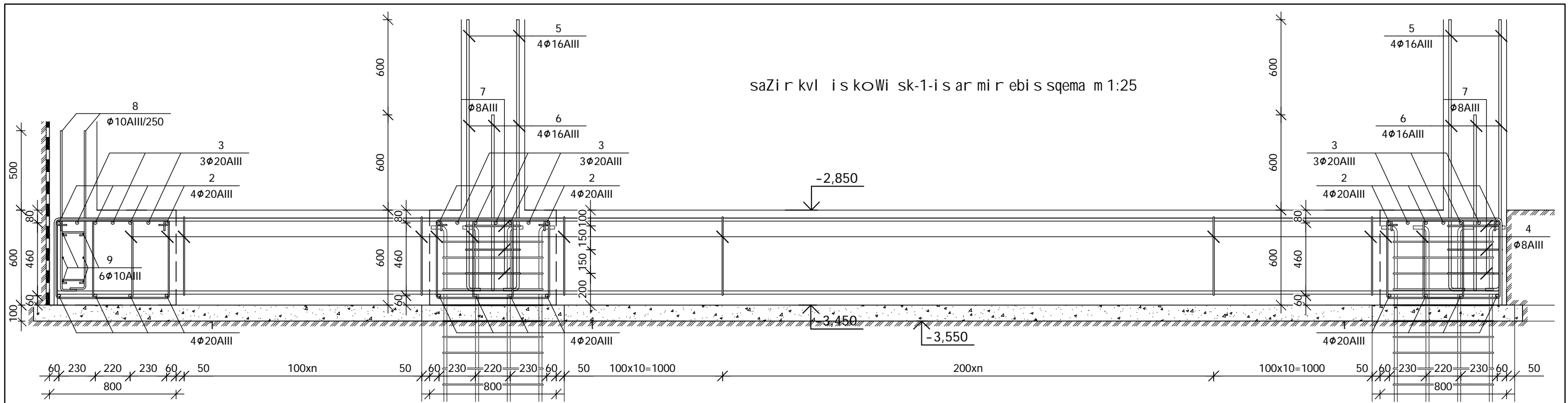
direqtori	m. buxai Ze	<i>J. Sulyandz</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti	 Sps "AM fardi "			
pr. avtori	a. gogi aSvil i	<i>a. gogi aSvil i</i>					
pr. avtori	m. buxai Ze	<i>J. Sulyandz</i>					
			konstruqciul i proeqti				
konstruqt.	g. comai a	<i>g. comai a</i>	saZi r kvl ebi s gegma	stadi a	furcel i	r-ba	masSt.
				sp	k- 2		

xi mi nj i xi m-1 m 1:25

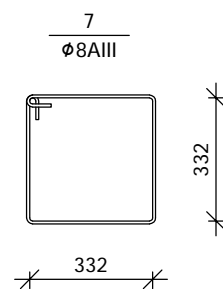
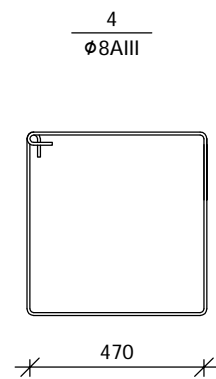
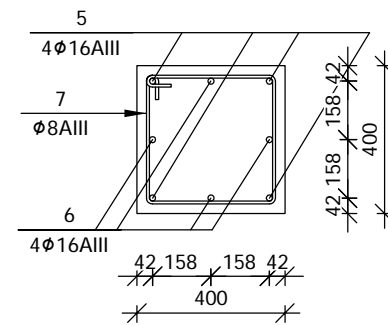
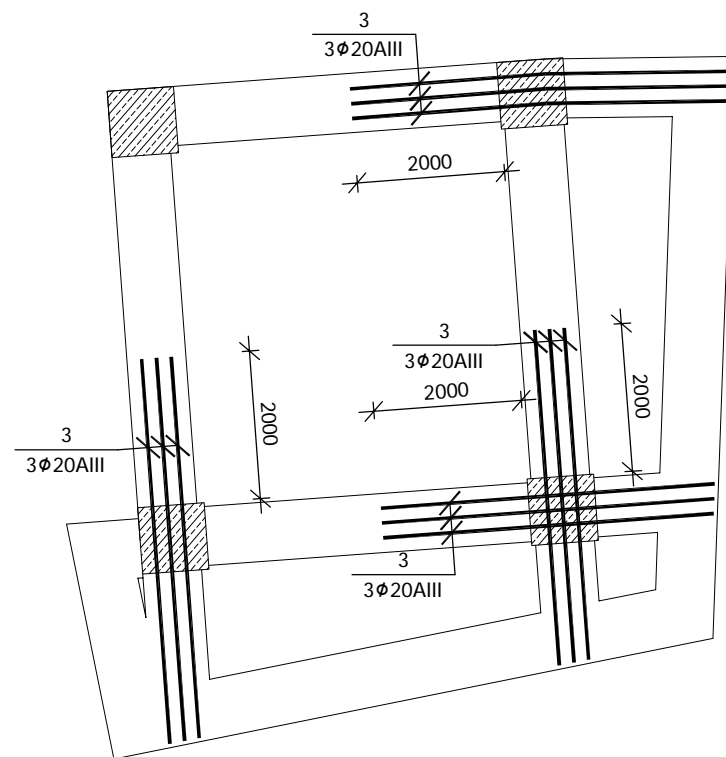


# poz	aRni Svna	claxaxel eba	raod. el -Si	wona, (kg)		Seni Svna
				er T is	saer To	
xi mi nj i xi m-1				4 cal i		
1		Ø 20 AIII GOCT 5781-82 L= 9600 mm	12	23.66	284	
2		Ø 8 AIII GOCT 5781-82 L= 2630 mm	61	1.04	63	
3		Ø 8 AIII GOCT 5781-82 L= 770 mm	64	0.30	19	
		betoni		B-22.5	7.13	kub m
		ar matur a/betoni			51	kg/kub m


direqtori	m. buxai Ze	<i>J. Sulyandz</i>	q. Tbilisi. Tumani ani s II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti		Sps "AM fardi "			
pr. avtori	a. gogaSvi l i	<i>a. gogaSvi l i</i>						
pr. avtori	m. buxai Ze	<i>J. Sulyandz</i>						
			konstruqciul i proeqti					
konstruqt.	g. comai a	<i>g. comai a</i>	xi mi nj i xi m-1	stadi a	furcel i	r-ba	masSt.	
				sp	k-3			



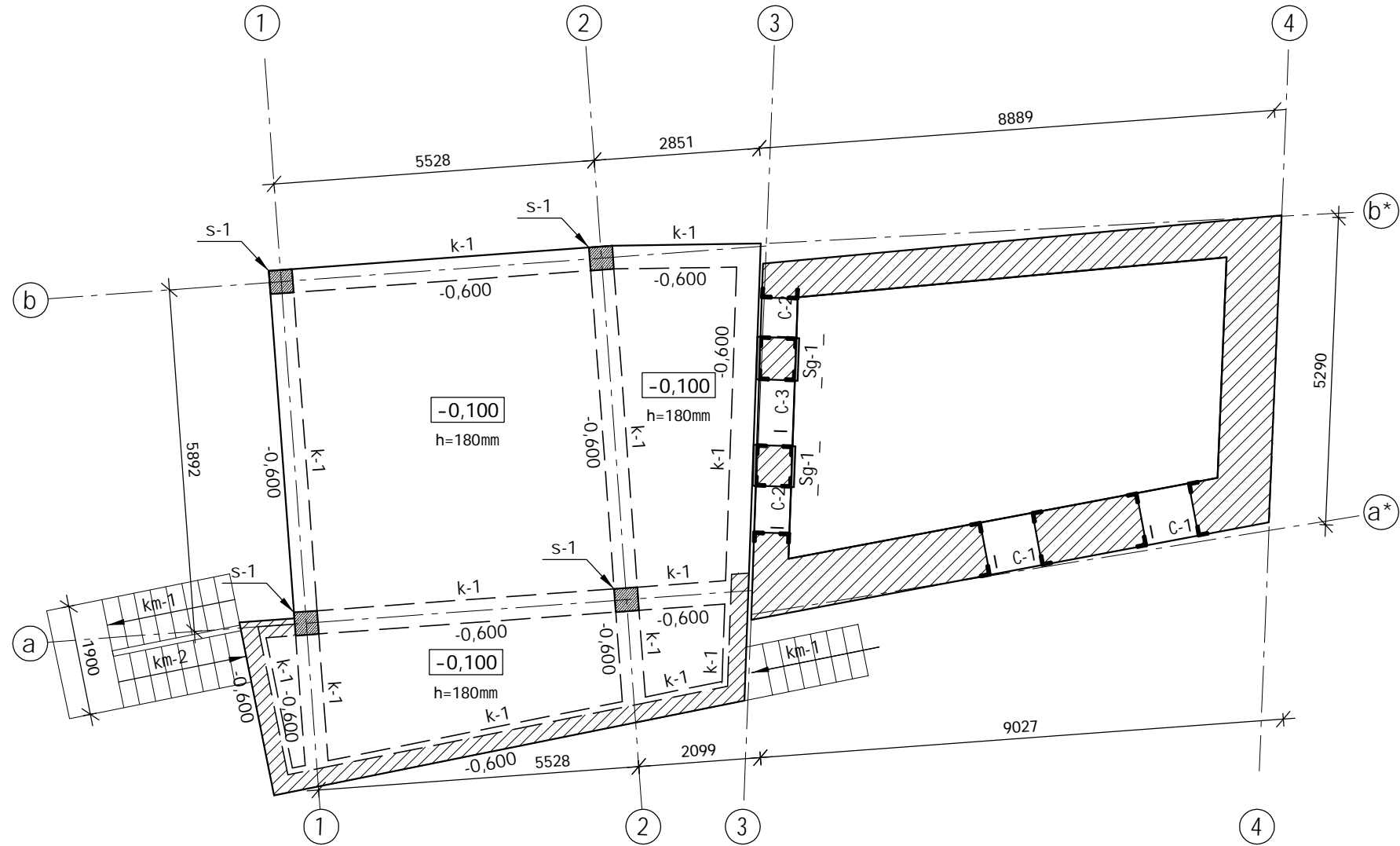
poz. #3-i s ganl agebi s sqema m 1:100




# poz	aRni Svna	dasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er Tis	saer To	
saZi r kvl i s koWi sk-1 1 cal i						
1		∅ 20 AIII GOCT 5781-82 L= 58500 mm	4	144.20	577	
2		∅ 20 AIII GOCT 5781-82 L= 72900 mm	4	179.69	719	
3		∅ 20 AIII GOCT 5781-82 L= 19400 mm	3	47.82	143	
4		∅ 8 AIII GOCT 5781-82 L= 2050 mm	720	0.81	582	
		betoni		B-22.5	21.56	kub m
		ar matur a/betoni			94	kg/kub m
-2,850 iatakis fila 1 cal i						
1		∅ 10 AIII GOCT 5781-82 L= 297093 mm	1	183.08	183	
		betoni		B-22.5	3.43	kub m
		ar matur a/betoni			53	kg/kub m
svetis amonaSver i sa-1 4 cal i						
1		∅ 20 AIII GOCT 5781-82 L= 1800 mm	4	4.44	18	
2		∅ 20 AIII GOCT 5781-82 L= 1600 mm	4	3.94	16	
3		∅ 8 AIII GOCT 5781-82 L= 1478 mm	3	0.58	2	
cokol is kedl is amonaSver i 1 cal i						
1		∅ 10 AIII GOCT 5781-82 L= 1100 mm	118	0.68	80	
2		∅ 20 AIII GOCT 5781-82 L= 16244 mm	6	40.04	240	
3		∅ 8 AIII GOCT 5781-82 L= 400 mm	49	0.16	8	

direqtori	m. buxai Ze	<i>J. Symbandy</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti		Sps "AM fardi"				
pr. avtori	a. gogiasvil i	<i>a. gogiasvil i</i>							
pr. avtori	m. buxai Ze	<i>J. Symbandy</i>							
			konstruqciul i proeqti						
konstruqt.	g. comala	<i>g. comala</i>	saZi r kvl i s koWi sk-1-i-s ar mi r ebi s sqema	stadi a	furcel i	r-ba	masSt.		
				sp	k- 4				

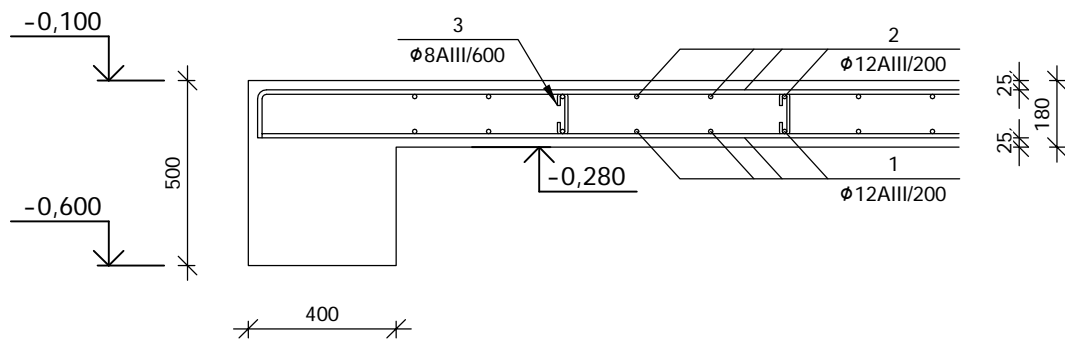
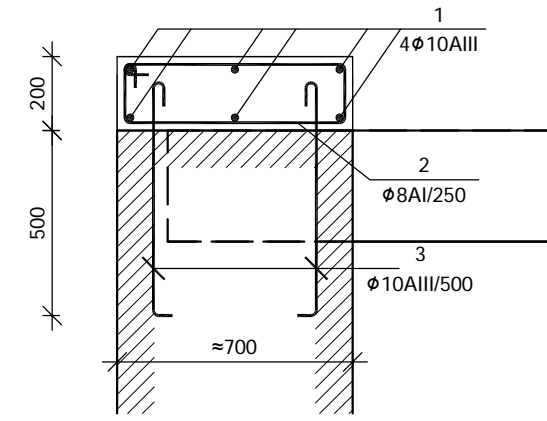
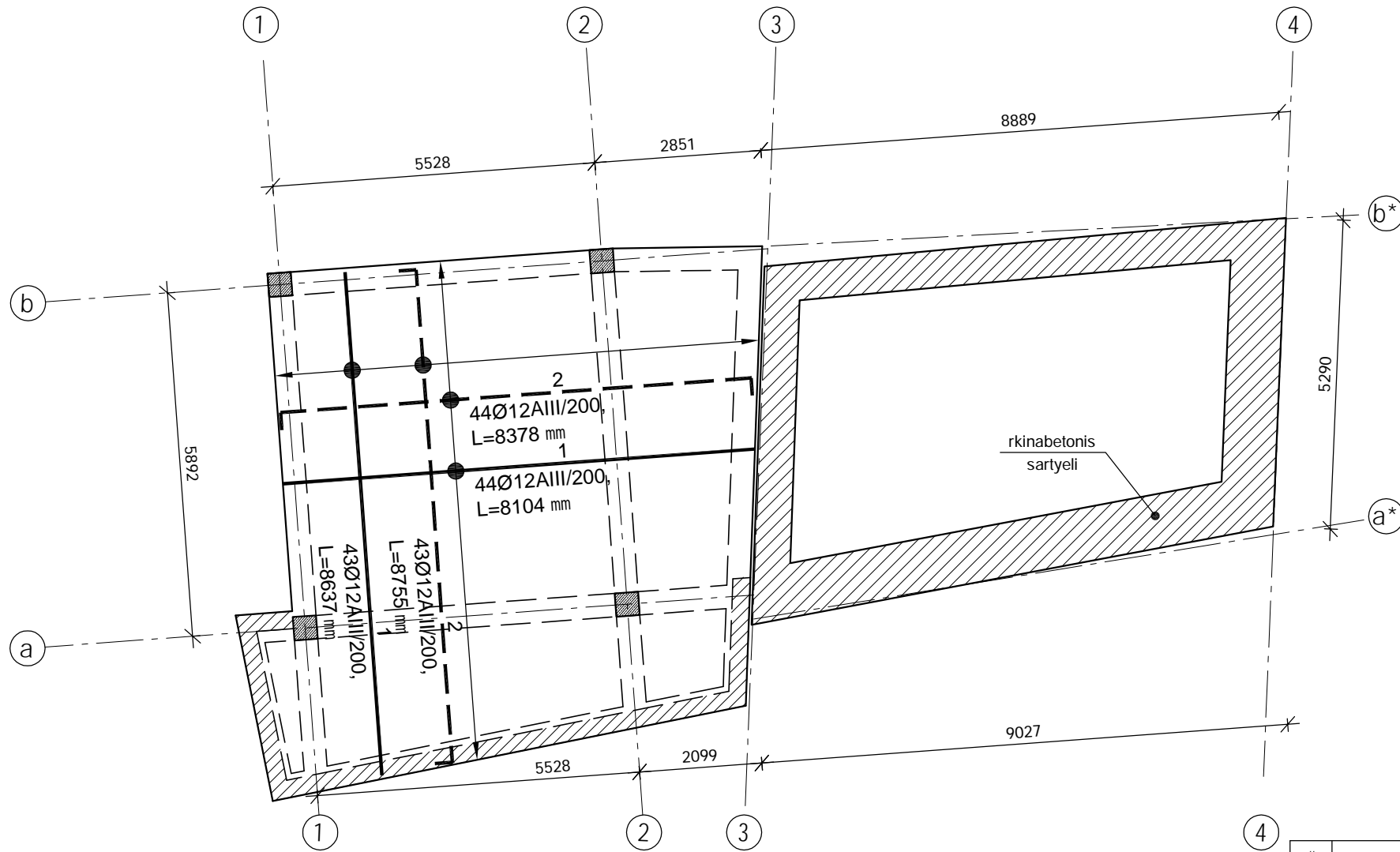
0,000 ni Snul i s gaclaxur vi s gegma m 1:100




direqtori	m. buxai Ze	<i>J. Sulyandz</i>	q. Tbilisi. Tumani ani s Il Ci xi #3 sacxovrebel i saxl i s rekonstruqci i s proeqti	 Sps "AM fardi"			
pr. avtori	a. gogaSvil i	<i>a. gogaSvil i</i>					
pr. avtori	m. buxai Ze	<i>J. Sulyandz</i>					
			konstruqciul i proeqti				
konstruqt.	g. comai a	<i>g. comai a</i>	0,000 ni Snul i s gaclaxur vi s gegma	stadi a	furcel i	r-ba	masSt.
				sp	k- 5		

0,000 ni Snul i s gadaxur vi s f i l i s ar mi r ebi s gegma m 1:100

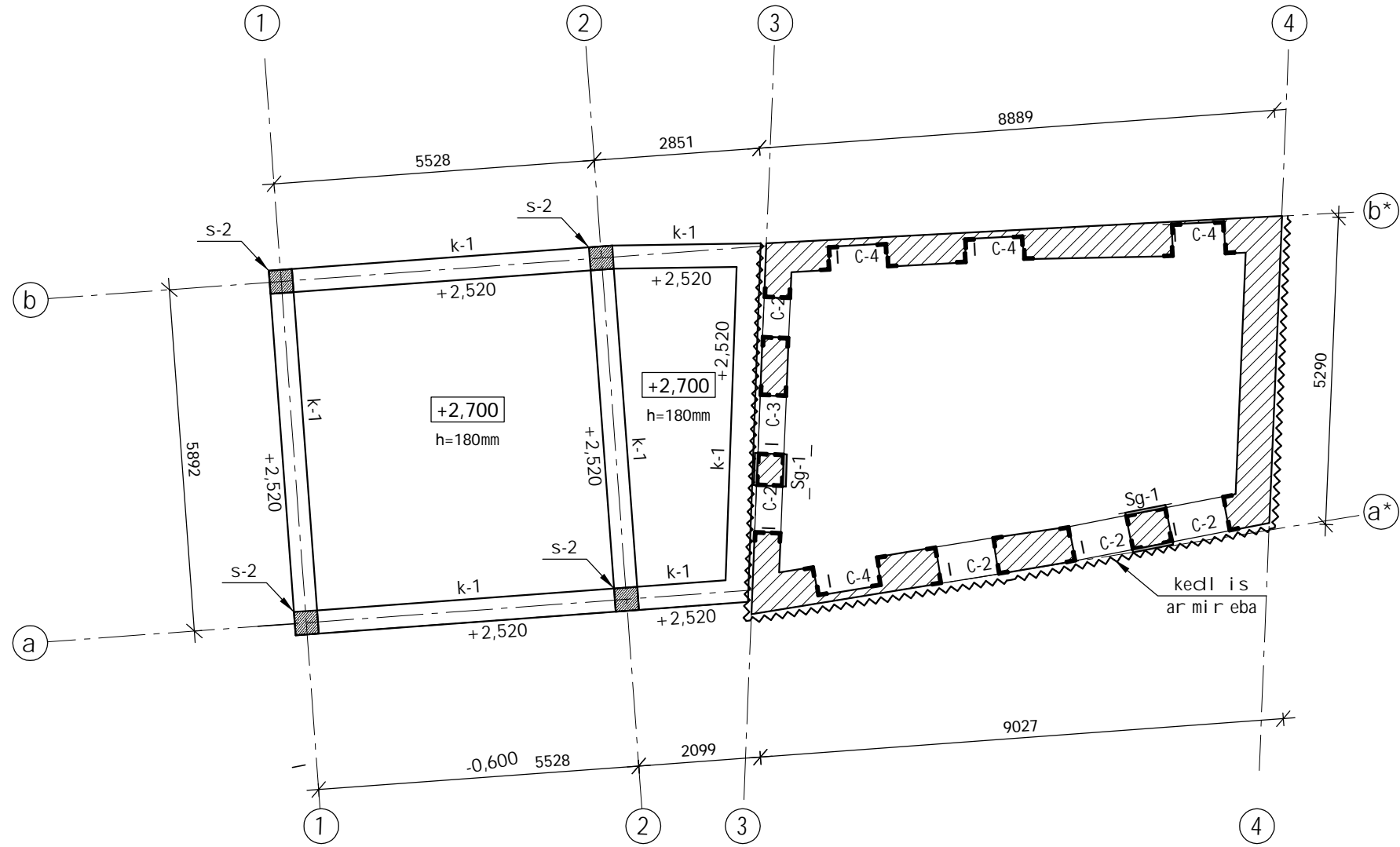
r ki nabetoni s sar tyel i m 1:20




# poz	aRni Svna	clasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er Ti s	saer To	
0,000 ni Snul i s gadaxur vi s gegma 4 cali						
1		Ø 12 AIII GOCT 5781-82 L= 760500 mm	1	674.84	675	
2		Ø 12 AIII GOCT 5781-82 L= 798525 mm	1	708.58	709	
3		Ø 8 AIII GOCT 5781-82 L= 300 mm	195	0.12	23	
		betoni		B-22.5	12.64	kub m
		ar matur a/betoni			111	kg/kub m
r ki nabetoni s sar tyel i 1 cali						
1		Ø 10 AIII GOCT 5781-82 L= 33150 mm	6	20.43	123	
2		Ø 8 AIII GOCT 5781-82 L= 1750 mm	120	0.69	83	
3		Ø 10 AIII GOCT 5781-82 L= 950 mm	60	0.59	35	
		betoni		B-22.5	4.20	kub m
		ar matur a/betoni			57	kg/kub m

direqtori	m. buxai Ze	<i>J. Sulybndy</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci i s proeqti	 Sps "AM fardi"			
pr. avtori	a. gogi aSvi l i	<i>a. gogi aSvi l i</i>					
pr. avtori	m. buxai Ze	<i>J. Sulybndy</i>					
			konstruqciul i proeqti				
konstruqt.	g. comai a	<i>g. comai a</i>	0,000 ni Snul i s gadaxur vi s f i l i s ar mi r ebi s gegma	stadi a	furcel i	r-ba	masSt.
				sp	k- 6		

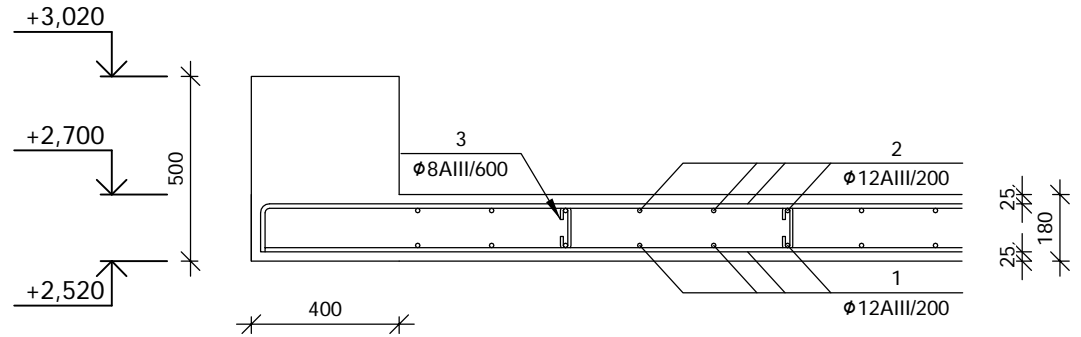
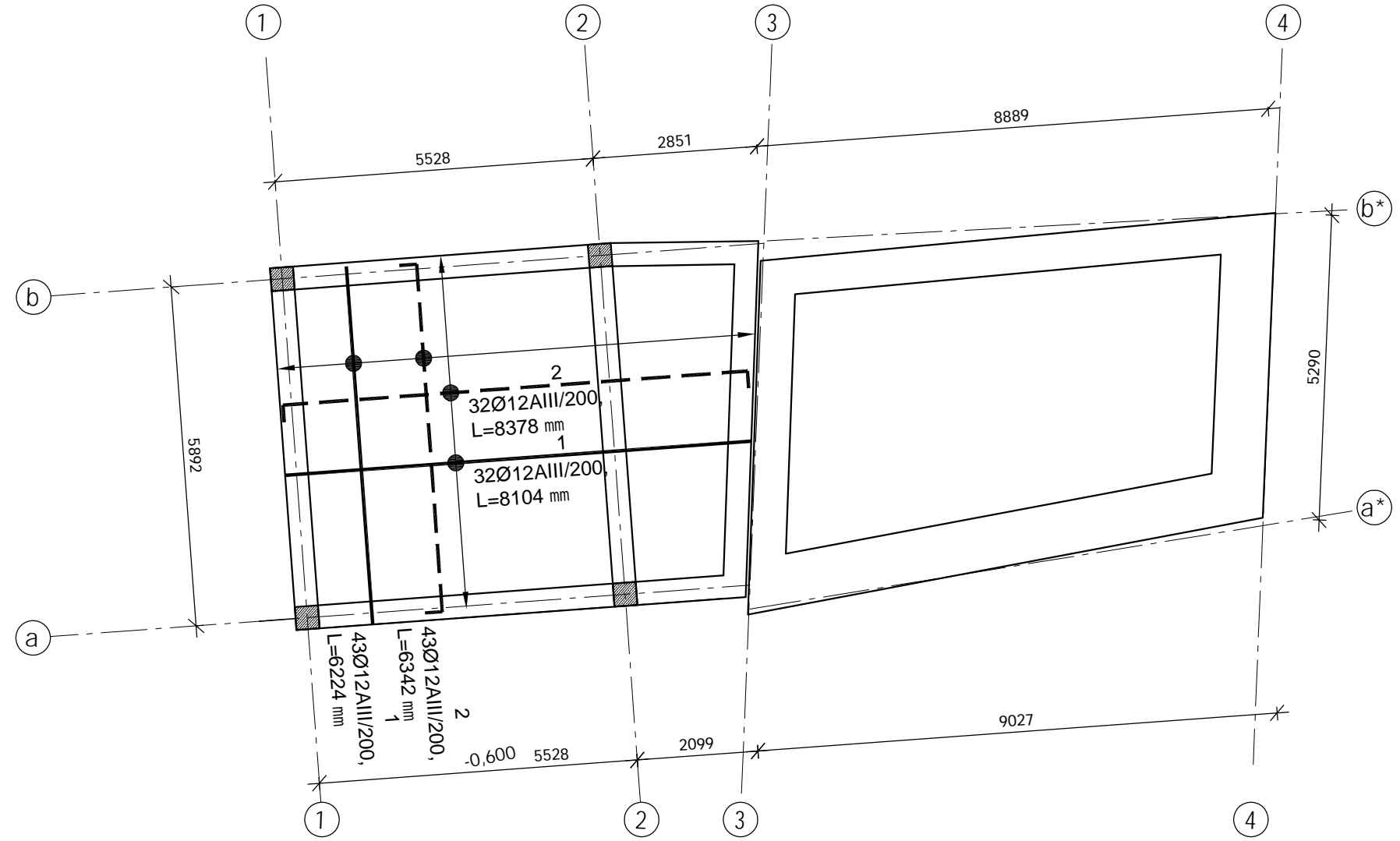
+2,700 ni Snul i s gaclaxur vi s gegma m 1:100



direqtori	m. buxai Ze	<i>J. Sulyandz</i>	q. Tbilisi. Tumani ani s II Ci xi #3 sacxovrebel i saxl is rekonstruqci i s proeqti	 Sps "AM fardi"			
pr. avtori	a. gogi aSvi l i	<i>a. gogi aSvi l i</i>					
pr. avtori	m. buxai Ze	<i>J. Sulyandz</i>					
			konstruqci ul i proeqti				
konstruqt.	g. comai a	<i>g. comai a</i>	+2,700 ni Snul i s gaclaxur vi s gegma	stadi a	furcel i	r-ba	masSt.
				sp	k- 7		

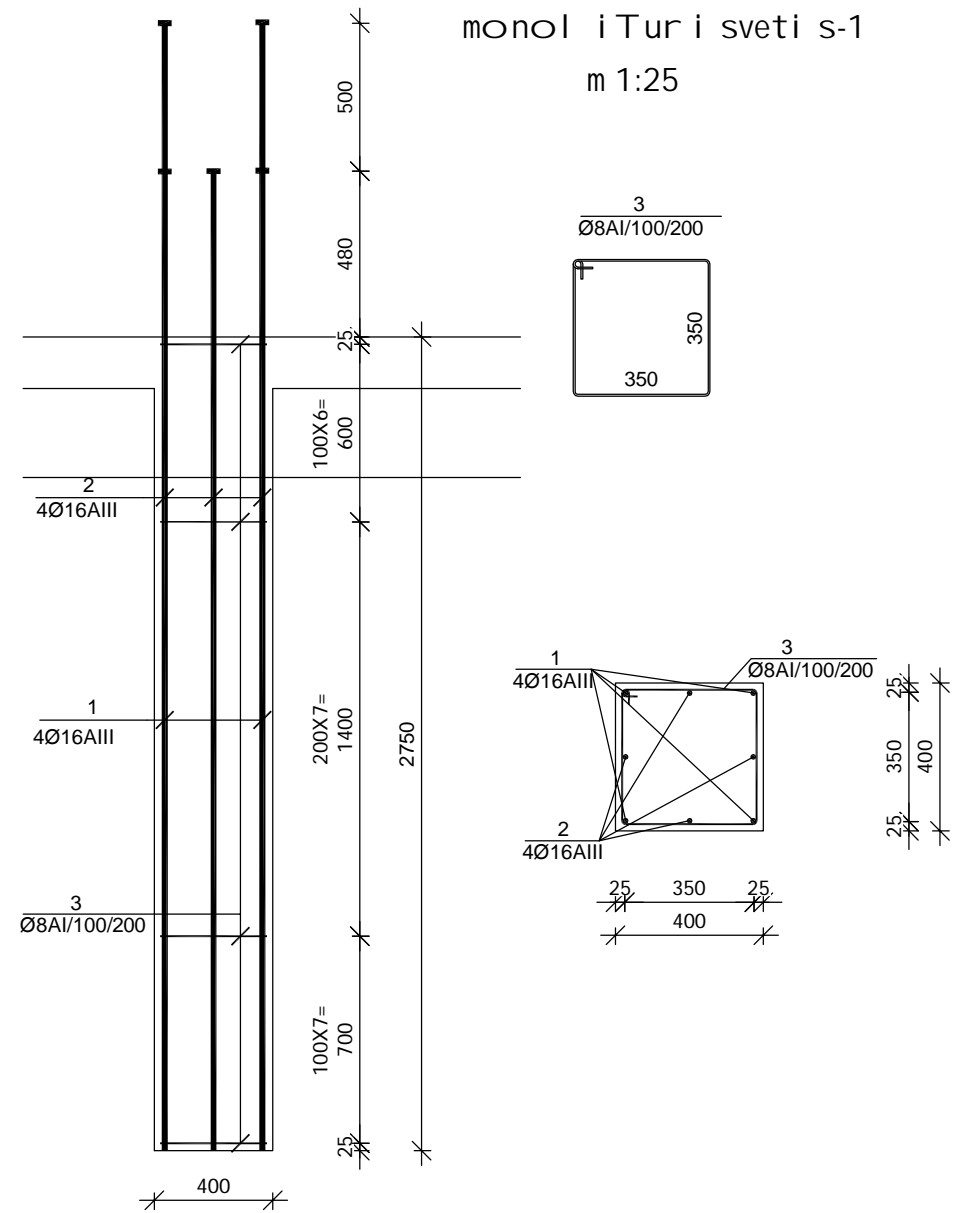


+2,700 ni Snul is gadaxur vis fili is ar m i r e b i s gegma m 1:100

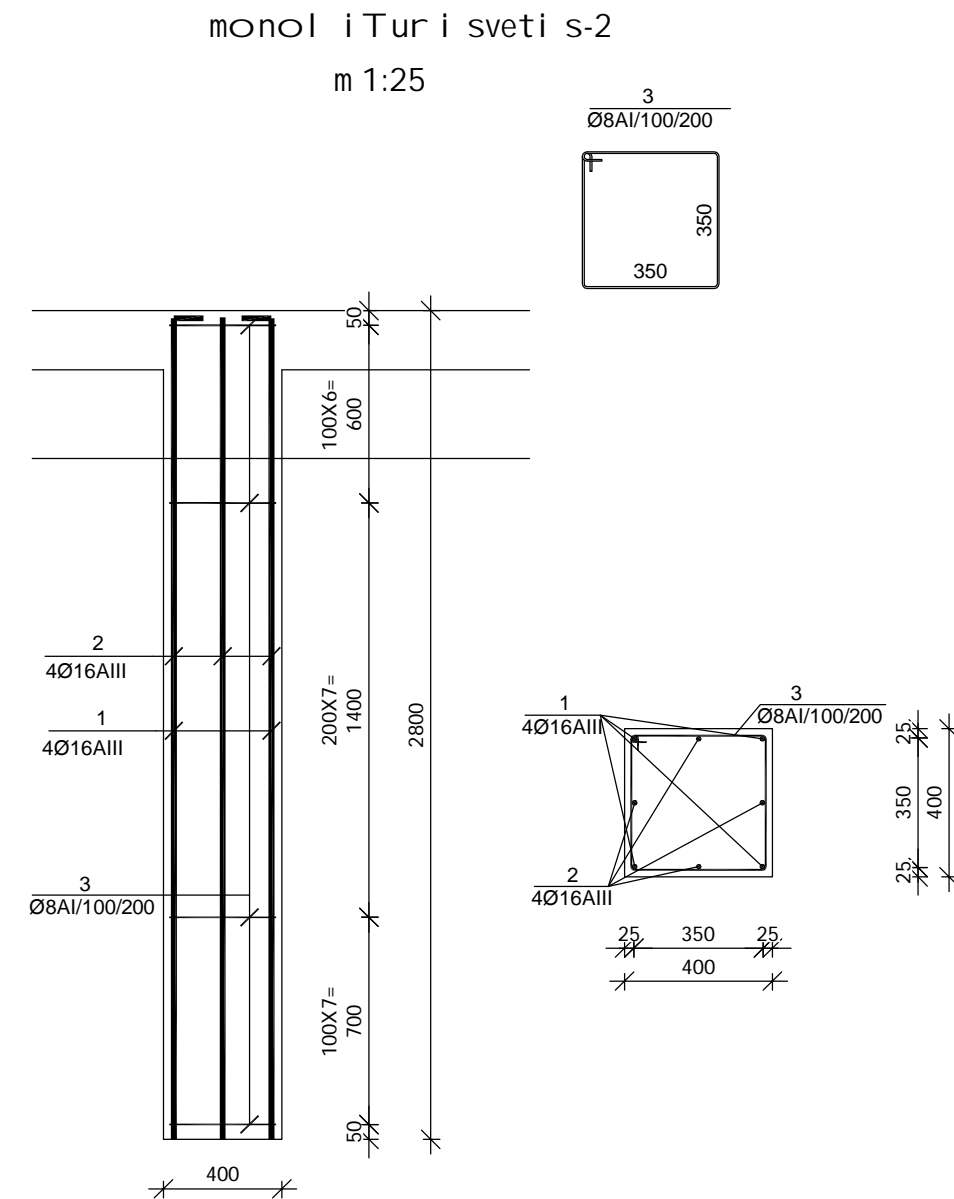


# poz	aRni Svna	dasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er T i s	saer T o	
+2,700 ni Snul is gadaxur vis gegma 4 cali						
1		Ø 12 AIII GOCT 5781-82 L= 553692 mm	1	491.33	491	
2		Ø 12 AIII GOCT 5781-82 L= 581376 mm	1	515.89	516	
3		Ø 8 AIII GOCT 5781-82 L= 300 mm	142	0.12	17	
		betoni		B-22.5	9.20	kub m
		ar matur a/betoni			111	kg/kub m


direqtori	m. buxai Ze	<i>J. Syrbandy</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti	Sps "AM fardi "			
pr. avtori	a. gogaSvil i	<i>a. gogaSvil i</i>					
pr. avtori	m. buxai Ze	<i>J. Syrbandy</i>					
			konstruqciul i proeqti				
konstruqt.	g. comai a	<i>g. comai a</i>	+2,700 ni Snul is gadaxur vis fili is ar m i r e b i s gegma	stadi a	furcel i	r-ba	masSt.
				sp	k- 8		



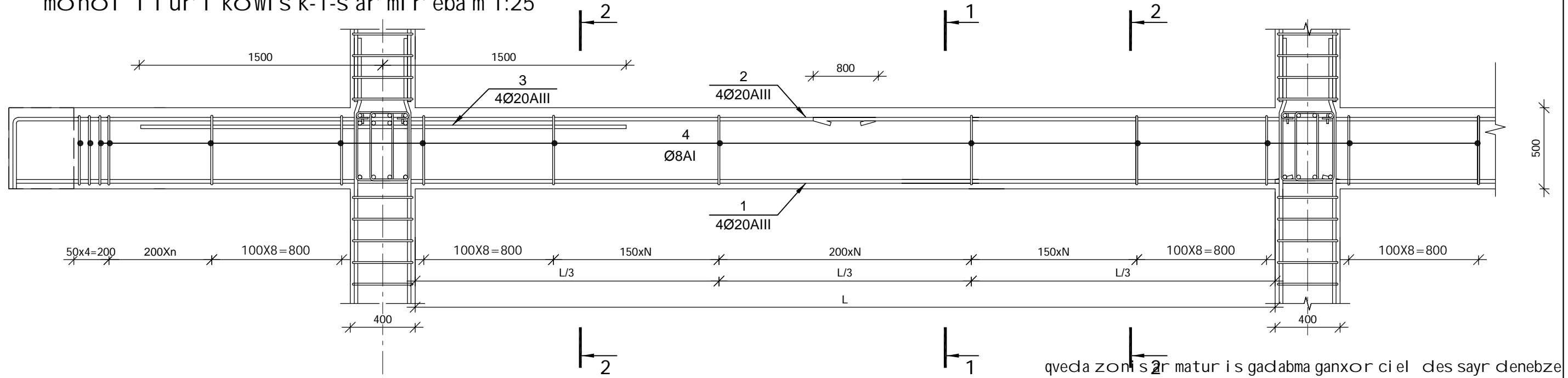
# poz	aRni Svna	dasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er T i s	saer T o	
monol iTur i sveti s-1 4 cal i						
1		Ø 16 AIII GOCT 5781-82 L= 3730 mm	4	5.88	24	
2		Ø 16 AIII GOCT 5781-82 L= 3230 mm	4	5.10	20	
3		Ø 8 AI GOCT 5781-82 L= 1550 mm	21	0.61	13	
		betoni		B-22.5	0.44	kub m
		ar matur a/betoni			129	kg/kub m



# poz	aRni Svna	dasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er T i s	saer T o	
monol iTur i sveti s-2 1 cal i						
1		Ø 16 AIII GOCT 5781-82 L= 3000 mm	4	4.73	19	
2		Ø 16 AIII GOCT 5781-82 L= 3000 mm	4	4.73	19	
3		Ø 8 AI GOCT 5781-82 L= 1550 mm	21	0.61	13	
		betoni		B-22.5	0.45	kub m
		ar matur a/betoni			113	kg/kub m

direqtori	m. buxai Ze	<i>J. Sulybndy</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti		Sps "AM fardi"			
pr. avtori	a. gogi aSvil i	<i>a. gogi aSvil i</i>			konstruqciul i proeqti			
pr. avtori	m. buxai Ze	<i>J. Sulybndy</i>			konstruqciul i proeqti			
konstruqt.	g. comai a	<i>g. comai a</i>	monol iTur i sveti s-1, s-2	stadi a	furcel i	r-ba	masSt.	
				sp	k- 9			

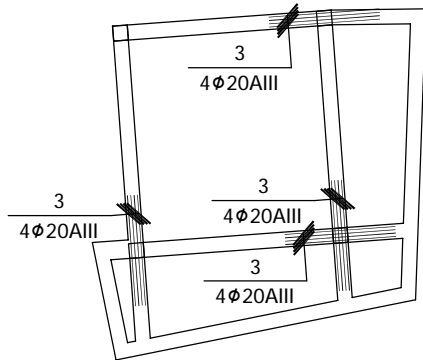
monol iTur i koWis k-1-s ar mi r eba m 1:25



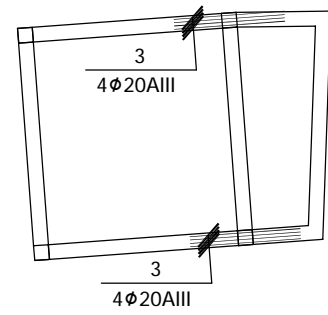
qveda zonis ar matur i s gadabma ganxor ci el des sayr denebze zeda zonis - mal i s SuamesamedSi

damatebi Ti ar mi r ebi s (poz. #3) ganl agebi s sqema

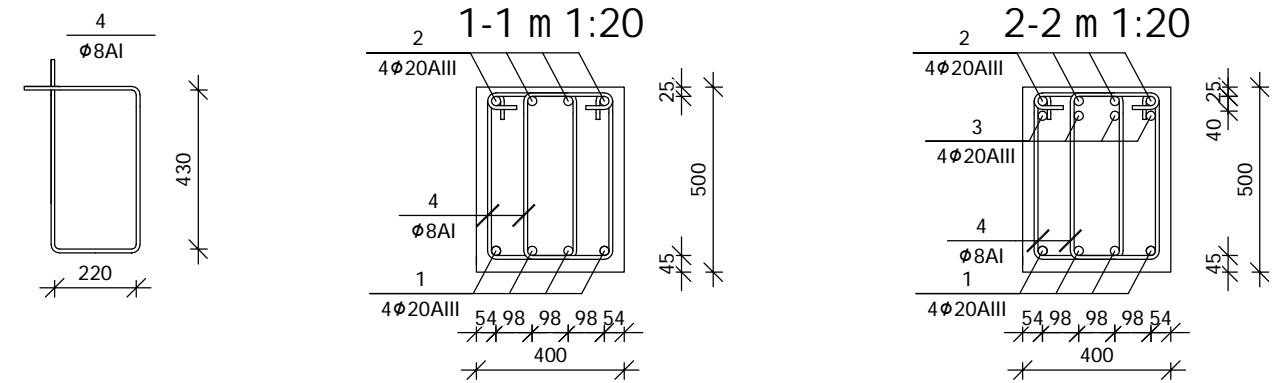
ni Snul i 0,000



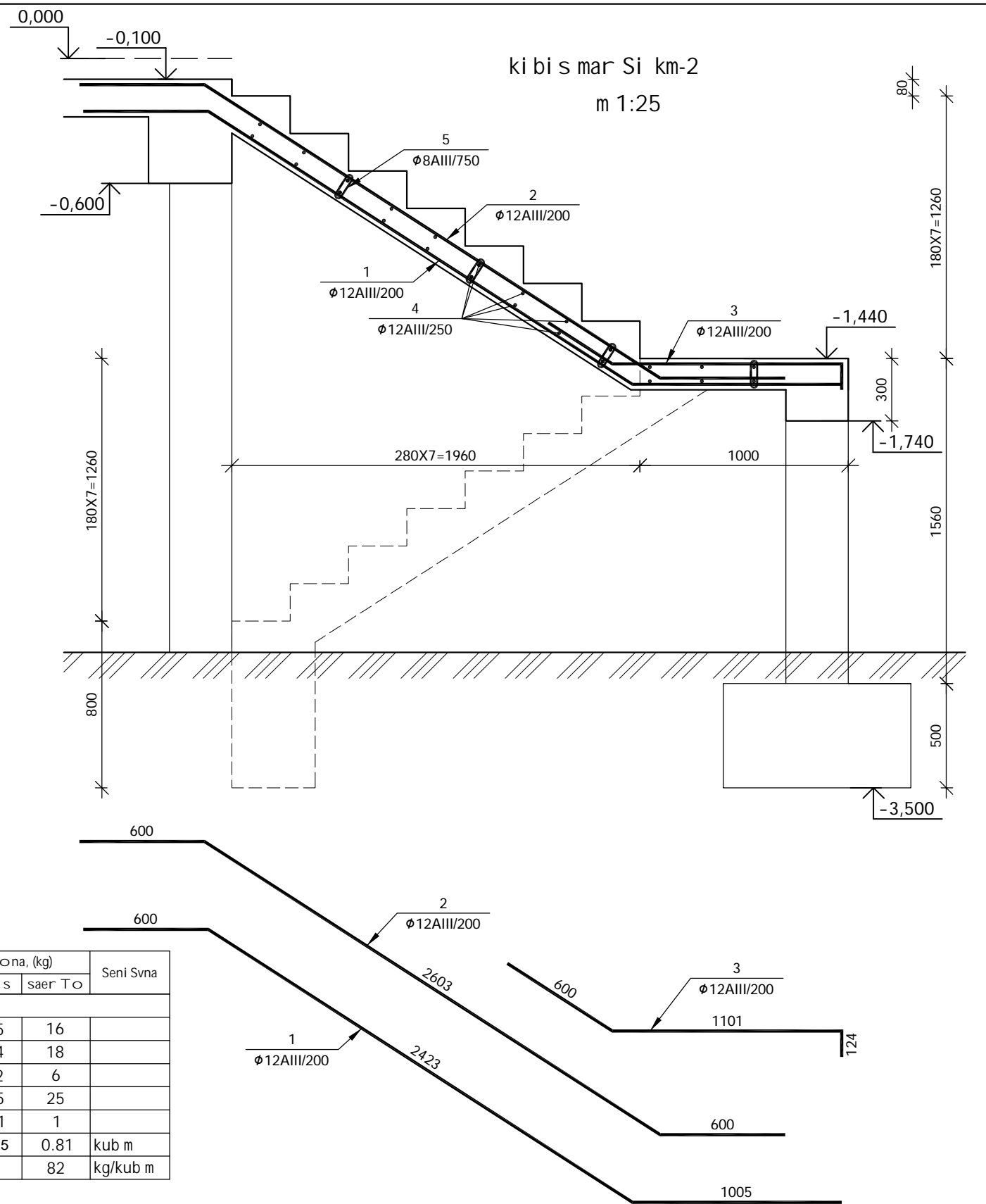
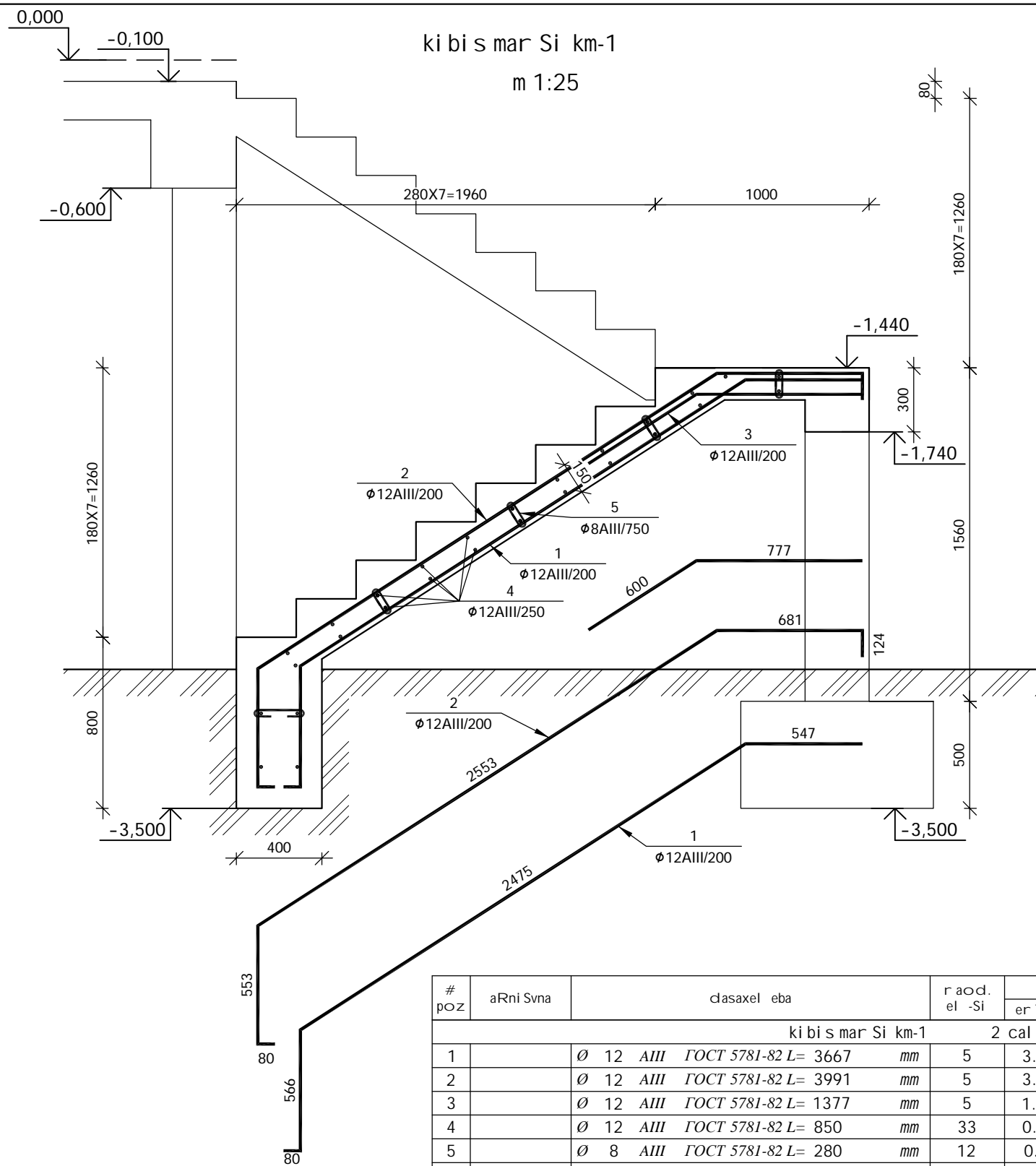
ni Snul i +2,700



# poz	aRni Svna	dasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er Ti s	saer To	
0,000 ni Snul i s monol iTur i koWis k-1 1 cal i						
1		Ø 20 AIII GOCT 5781-82 L= 59147	mm	4	145.8	583
2		Ø 20 AIII GOCT 5781-82 L= 64524	mm	4	159.0	636
3		Ø 20 AIII GOCT 5781-82 L= 3000	mm	16	7.4	118
4		Ø 8 AIII GOCT 5781-82 L= 1450	mm	717	0.6	410
		betoni			B-22.5	6.88 kub m
		ar matur a/betoni				254 kg/kub m
+2,700 ni Snul i s monol iTur i koWis k-1 1 cal i						
1		Ø 20 AIII GOCT 5781-82 L= 38566	mm	4	95.1	380
2		Ø 20 AIII GOCT 5781-82 L= 42072	mm	4	103.7	415
3		Ø 20 AIII GOCT 5781-82 L= 3000	mm	8	7.4	59
4		Ø 8 AIII GOCT 5781-82 L= 1450	mm	467	0.6	267
		betoni			B-22.5	4.49 kub m
		ar matur a/betoni				250 kg/kub m




direqtori	m. buxai Ze	<i>J. Sulybndy</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci i s proeqti		Sps "AM fardi "			
pr. avtori	a. gogi aSvi l i	<i>a. gogi aSvi l i</i>			konstruqci ul i proeqti			
pr. avtori	m. buxai Ze	<i>J. Sulybndy</i>						
konstruqt.	g. comai a	<i>g. comai a</i>	monol iTur i koWis k-1-s ar mi r eba	stadi a	furcel i	r-ba	masSt.	
				sp	k-10			



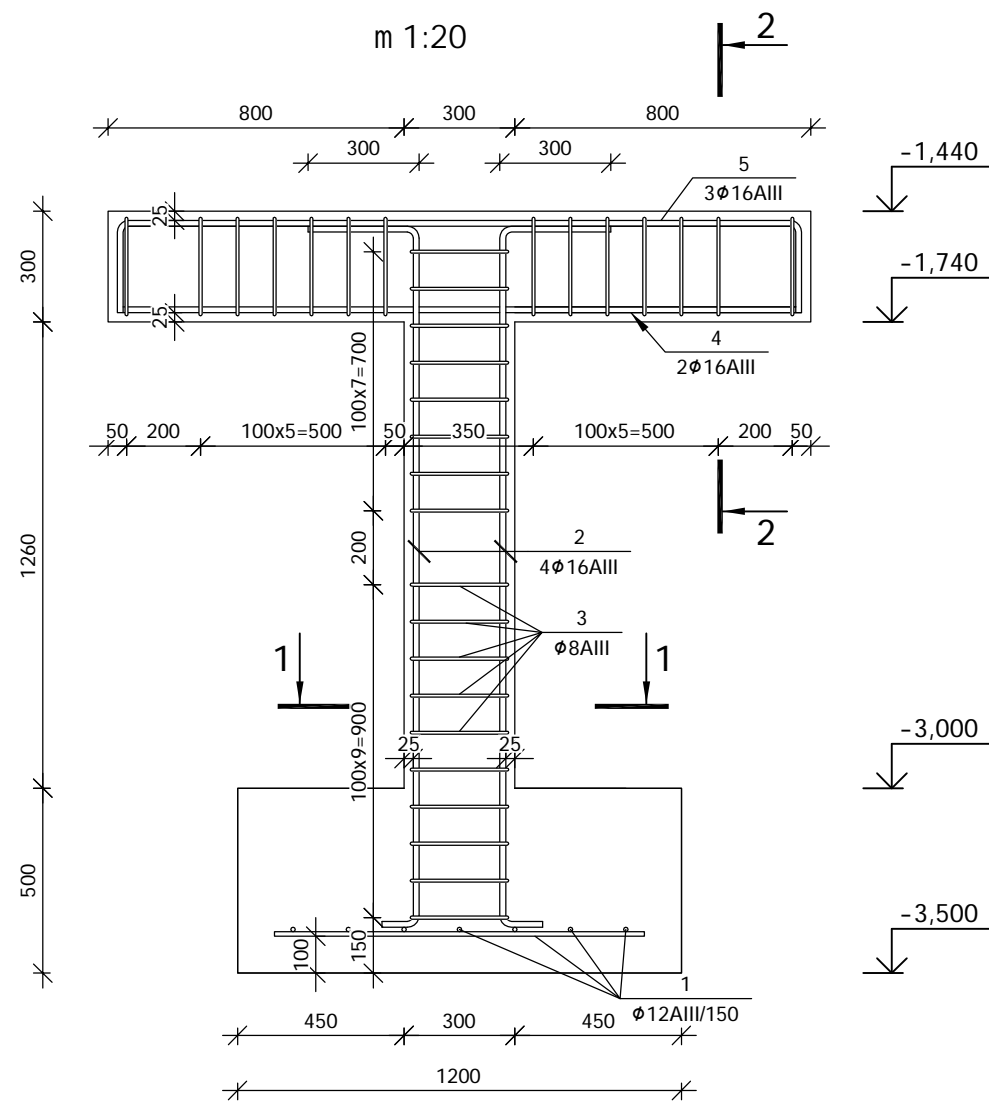
# poz	aRni Svna	dasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er T i s	saer T o	
ki bis mar Si km-1 2 cal i						
1		∅ 12 AIII GOCT 5781-82 L= 3667 mm	5	3.25	16	
2		∅ 12 AIII GOCT 5781-82 L= 3991 mm	5	3.54	18	
3		∅ 12 AIII GOCT 5781-82 L= 1377 mm	5	1.22	6	
4		∅ 12 AIII GOCT 5781-82 L= 850 mm	33	0.75	25	
5		∅ 8 AIII GOCT 5781-82 L= 280 mm	12	0.11	1	
		betoni		B-22.5	0.81	kub m
		ar matur a/betoni			82	kg/kub m

# poz	aRni Svna	dasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er T i s	saer T o	
ki bis mar Si km-2 1 cal i						
1		∅ 12 AIII GOCT 5781-82 L= 4028 mm	5	3.57	18	
2		∅ 12 AIII GOCT 5781-82 L= 3803 mm	5	3.37	17	
3		∅ 12 AIII GOCT 5781-82 L= 1825 mm	5	1.62	8	
4		∅ 12 AIII GOCT 5781-82 L= 850 mm	30	0.75	23	
5		∅ 8 AIII GOCT 5781-82 L= 280 mm	12	0.11	1	
		betoni		B-22.5	0.56	kub m
		ar matur a/betoni			120	kg/kub m

direqtori	m. buxai Ze	<i>J. Sulybndy</i>	q. Tbilisi. Tumani anis II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti	 Sps "AM fardi"			
pr. avtori	a. gogi aSvil i	<i>a. gogi aSvil i</i>					
pr. avtori	m. buxai Ze	<i>J. Sulybndy</i>					
			konstruqciul i proeqti				
konstruqt.	g. comai a	<i>g. comai a</i>	ki bis mar Si km-1, km-2	stadi a	furcel i	r-ba	masSt.
				sp	k-11		

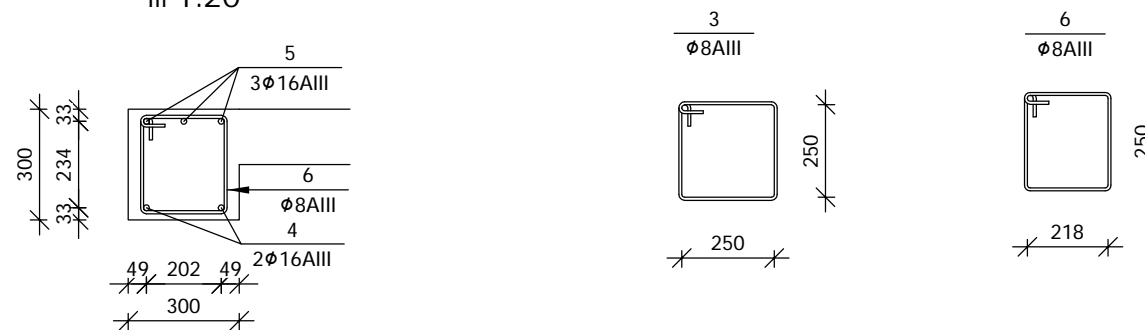
ki bi s Car Co

m 1:20



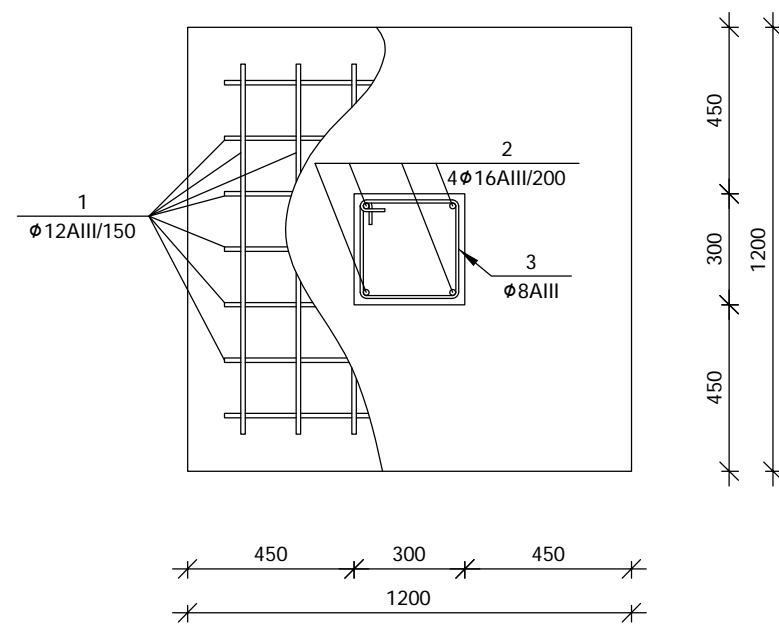
2-2

m 1:20




1-1

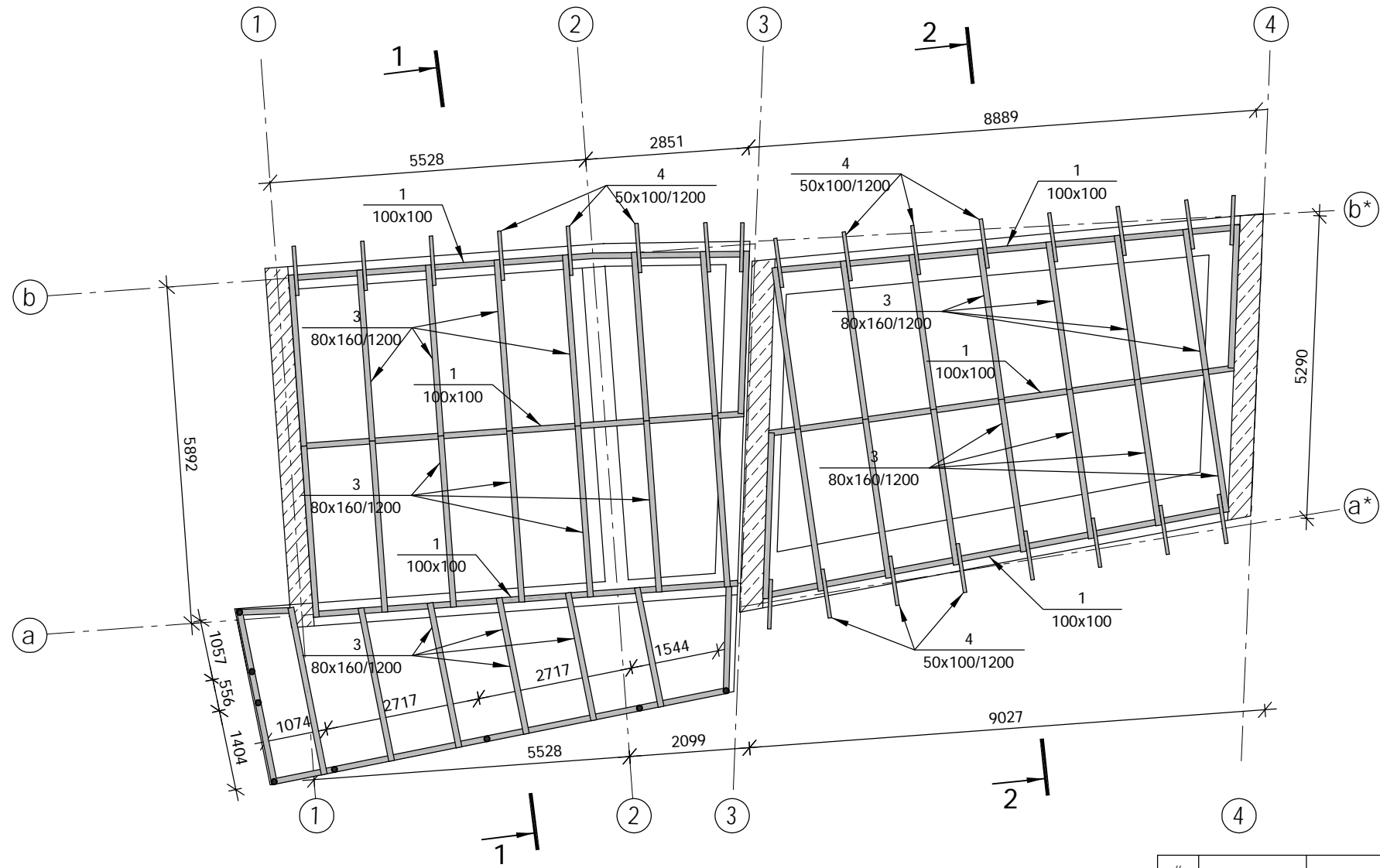
m 1:20



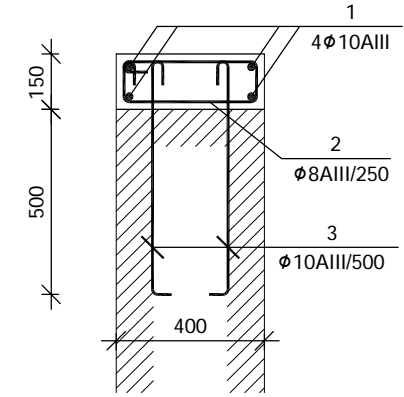
# poz	aRni Svna	clasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er T is	saer T O	
ki bi s Car Co 1 cal i						
1		Ø 12 AIII GOCT 5781-82 L= 1000 mm	14	0.89	12	
2		Ø 16 AIII GOCT 5781-82 L= 2360 mm	4	3.72	15	
3		Ø 8 AIII GOCT 5781-82 L= 1150 mm	18	0.45	8	
4		Ø 16 AIII GOCT 5781-82 L= 1850 mm	2	2.92	6	
5		Ø 16 AIII GOCT 5781-82 L= 2350 mm	3	3.71	11	
6		Ø 8 AIII GOCT 5781-82 L= 1086 mm	14	0.43	6	
		betoni		B-22.5	1.00	kub m
		ar matur a/betoni			58	kg/kub m

direqtori	m. buxai Ze	<i>J. Sulybndy</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti	 Sps "AM fardi "			
pr. avtori	a. gogi aSvil i	<i>a. gogi aSvil i</i>					
pr. avtori	m. buxai Ze	<i>J. Sulybndy</i>					
			konstruqciul i proeqti				
konstruqt.	g. comai a	<i>g. comai a</i>	ki bi s Car Co	stadi a	furcel i	r-ba	masSt.
				sp	k-12		


ni vni vebi s gegma m 1:100



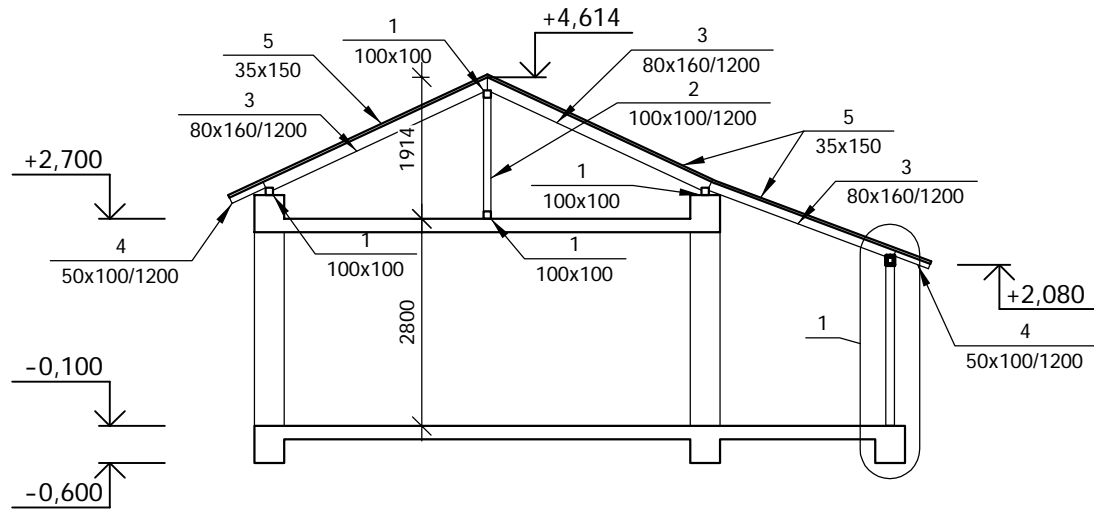
f r ontone s sar tyel i m 1:20



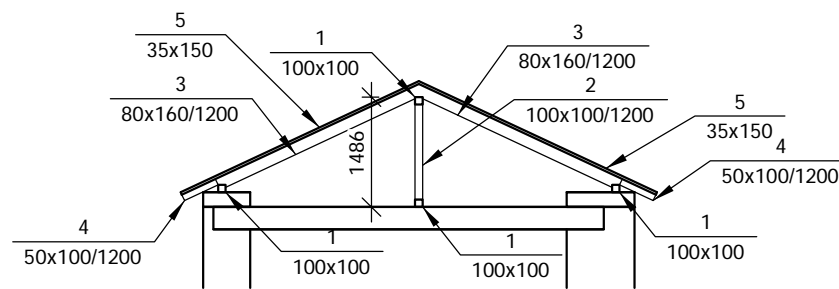
# poz	aRni Svna	clasaxel eba	r aod. el -Si	wona, (kg)		Seni Svna
				er Tis	saer To	
f r ontone s sar tyel i				1 cal i		
1		∅ 10 AIII GOCT 5781-82 L= 19890 mm	4	12.26	49	
2		∅ 8 AIII GOCT 5781-82 L= 1050 mm	72	0.41	30	
3		∅ 10 AIII GOCT 5781-82 L= 950 mm	36	0.59	21	
		betoni		B-22.5	0.81	kub m
		ar matur a/betoni			123	kg/kub m

direqtori	m. buxai Ze	<i>J. Svybandy</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti	 Sps "AM fardi"			
pr. avtori	a. gogaSvili	<i>a. gogaSvili</i>					
pr. avtori	m. buxai Ze	<i>J. Svybandy</i>					
			konstruqciul i proeqti				
konstruqt.	g. comai a	<i>g. comai a</i>	ni vni vebi s gegma	stadi a	furcel i	r-ba	masSt.
				sp	k- 13		

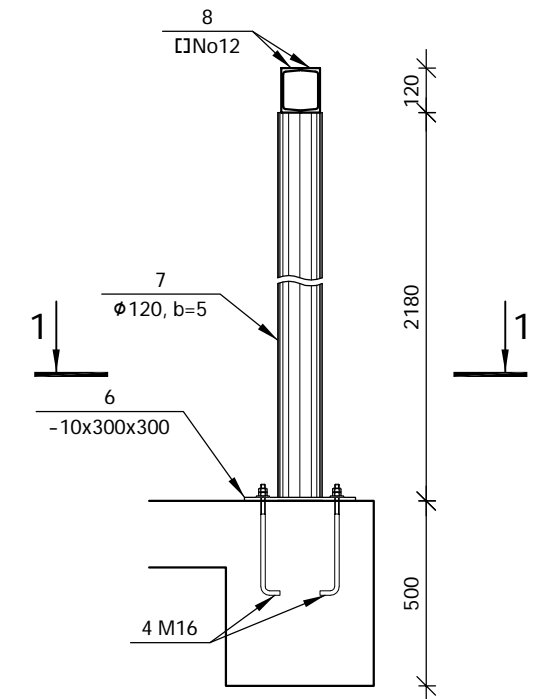
Wr i l i 1-1 m 1:100



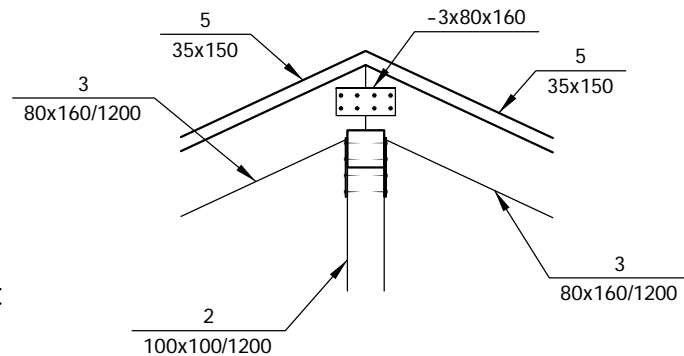
Wr i l i 2-2 m 1:100



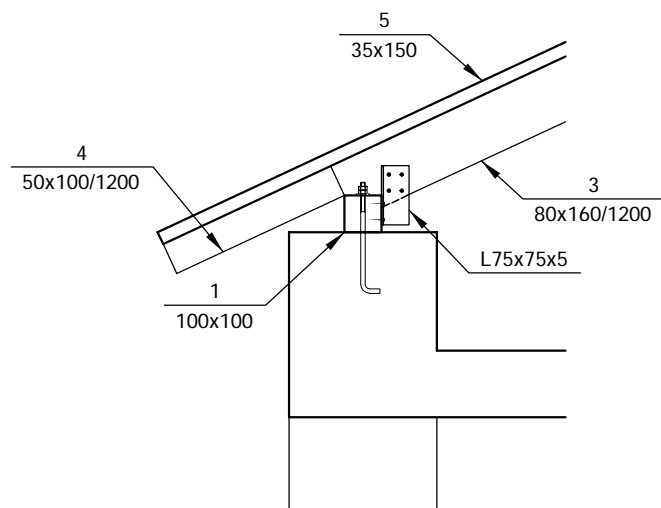
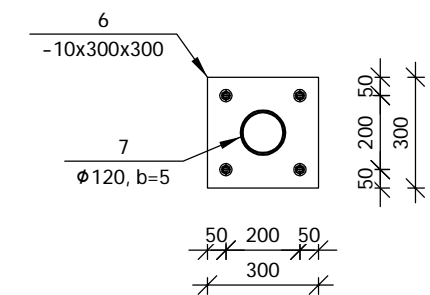
kvanZi "1" m 1:20



saxur avi s kvanani m 1:20




1-1 m 1:20



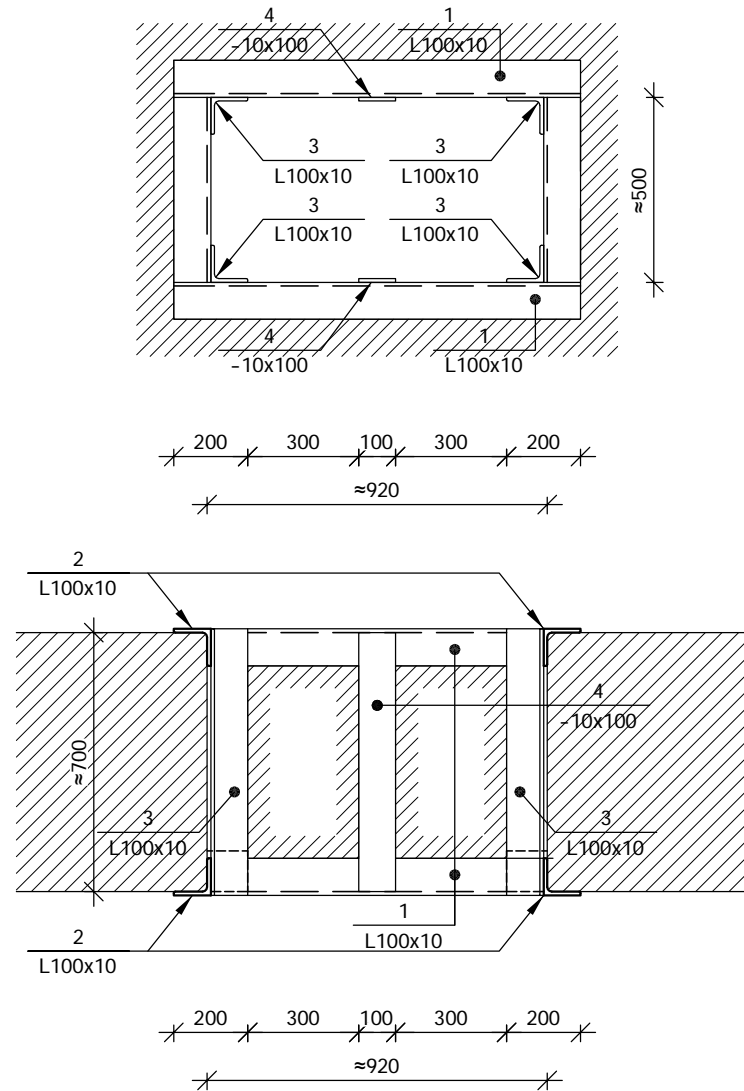
# poz	aRni Svna	clasaxel eba	r aod. el -Si	wOna, (kg)		Seni Svna
				er Tis	saer T O	
I i T o n i s C a r C o				1 c a l i		
6	m i l i	Ø 120, b=5	L= 1000 mm	8	13.70	110
7	f u r c e l i	- 10x300	L= 300 mm	8	7.07	57
8	S v e l e r i	№12	L= 14200 mm	2	147.68	295

x i s s p e c i f i k a c i a

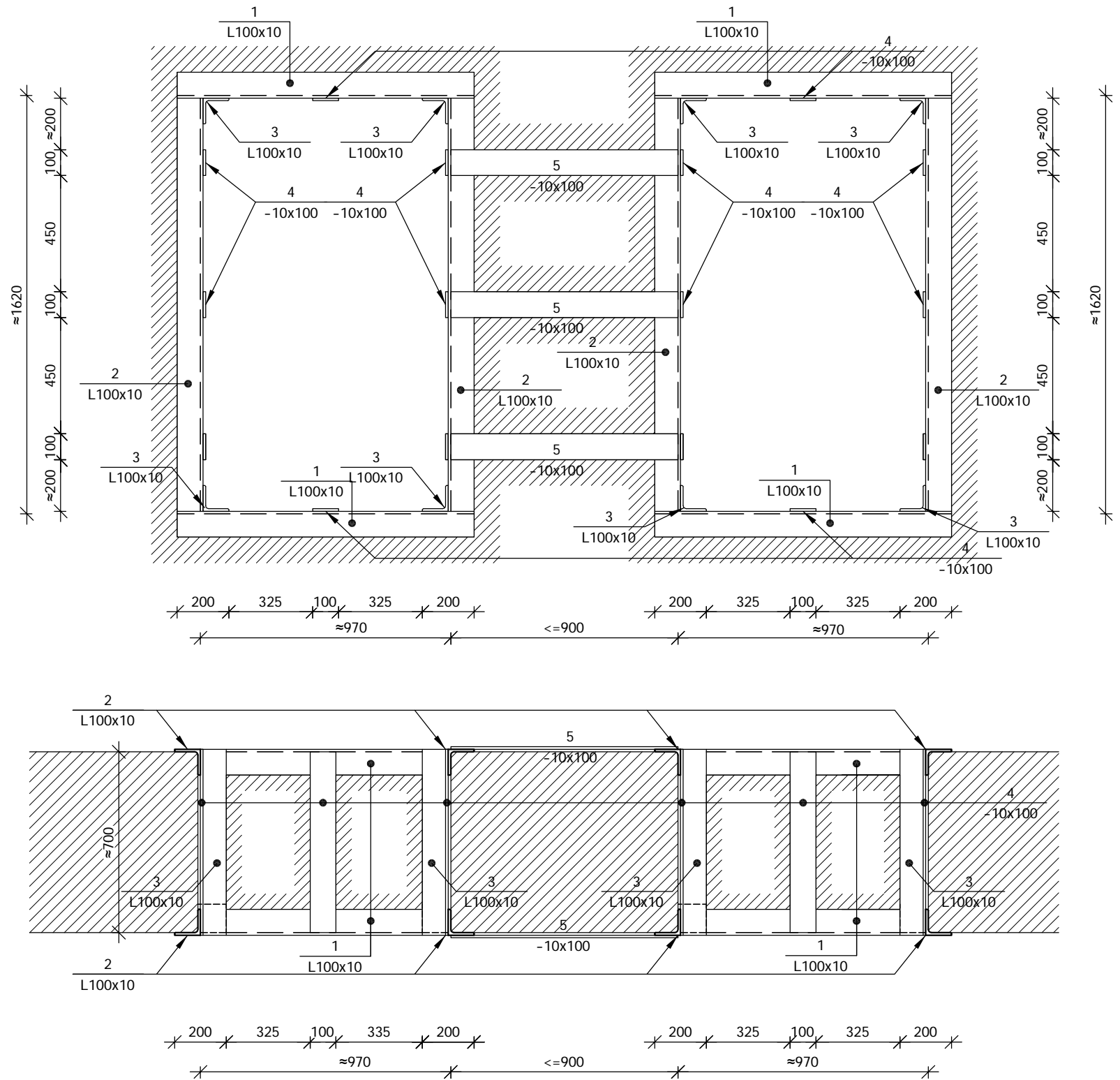
#	el e m e n t i s c l a s a x e l e b a	k v e T i , m m	s i g r Z e , m m	r a o d . c a l i	s a e r T o s i g r Z e , m	m o c u l o b a , k u b m	
						er Tis	saer T O
1	m a u e r l a t i	100 x 100	65000	1	65.0	0.650	0.65
2	d g a r i	100 x 100	2000	14	28.0	0.020	0.28
3	n i v n i v a	80 x 160	140000	1	140.0	1.792	1.79
4	Z e l a k i	50 x 100	1000	32	32.0	0.005	0.16
5	S e f i c v r a	35 x 150	6000	185	1110.0	0.032	5.83
	j a m i :						8.71

direqtori	m. buxaiZe	<i>J. Sulyandz</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti		Sps "AM fardi"			
pr. avtori	a. gogaSvili	<i>a. gogaSvili</i>			konstruqciul i proeqti			
pr. avtori	m. buxaiZe	<i>J. Sulyandz</i>			ni vni vebi s gegma; Wr i l i ebi kvanZebi			
konstruqt.	g. comala	<i>g. comala</i>	stadi a	furcel i	r-ba	masSt.		
			sp	k-14				


I iToni smocar Coeba I C-1 m 1:20



I iToni smocar Coeba I C-2 m 1:20



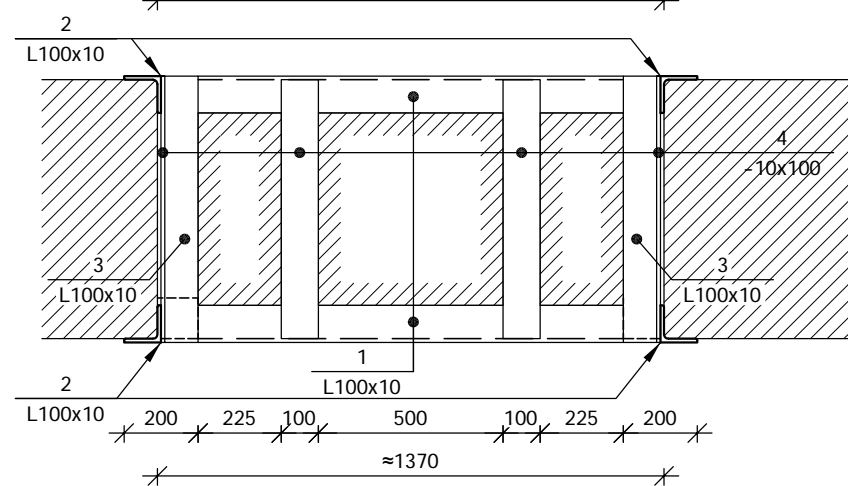
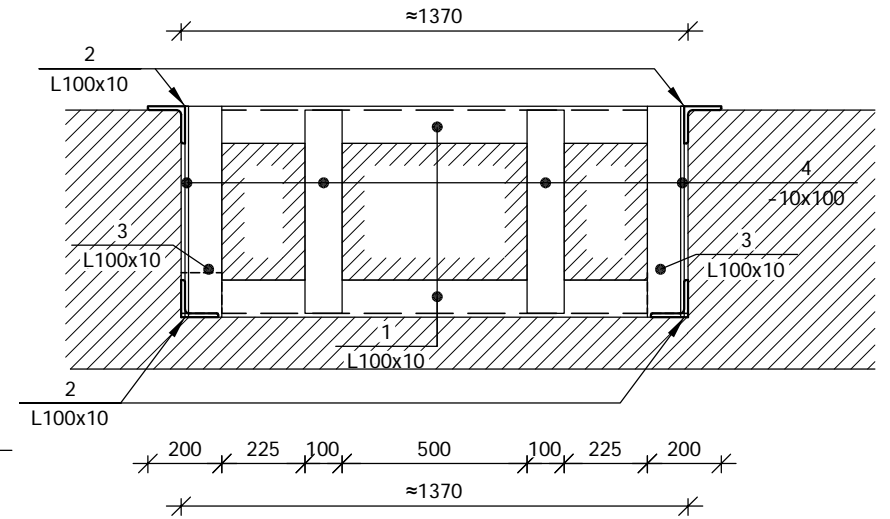
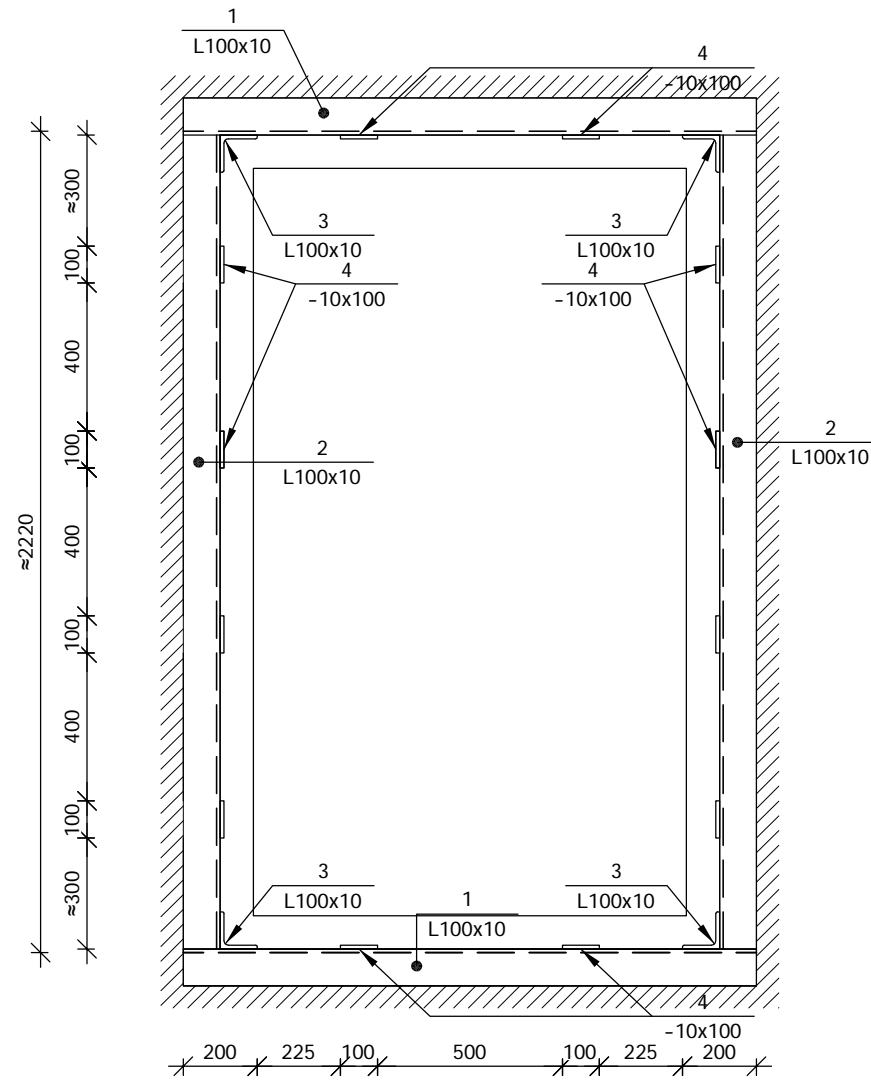
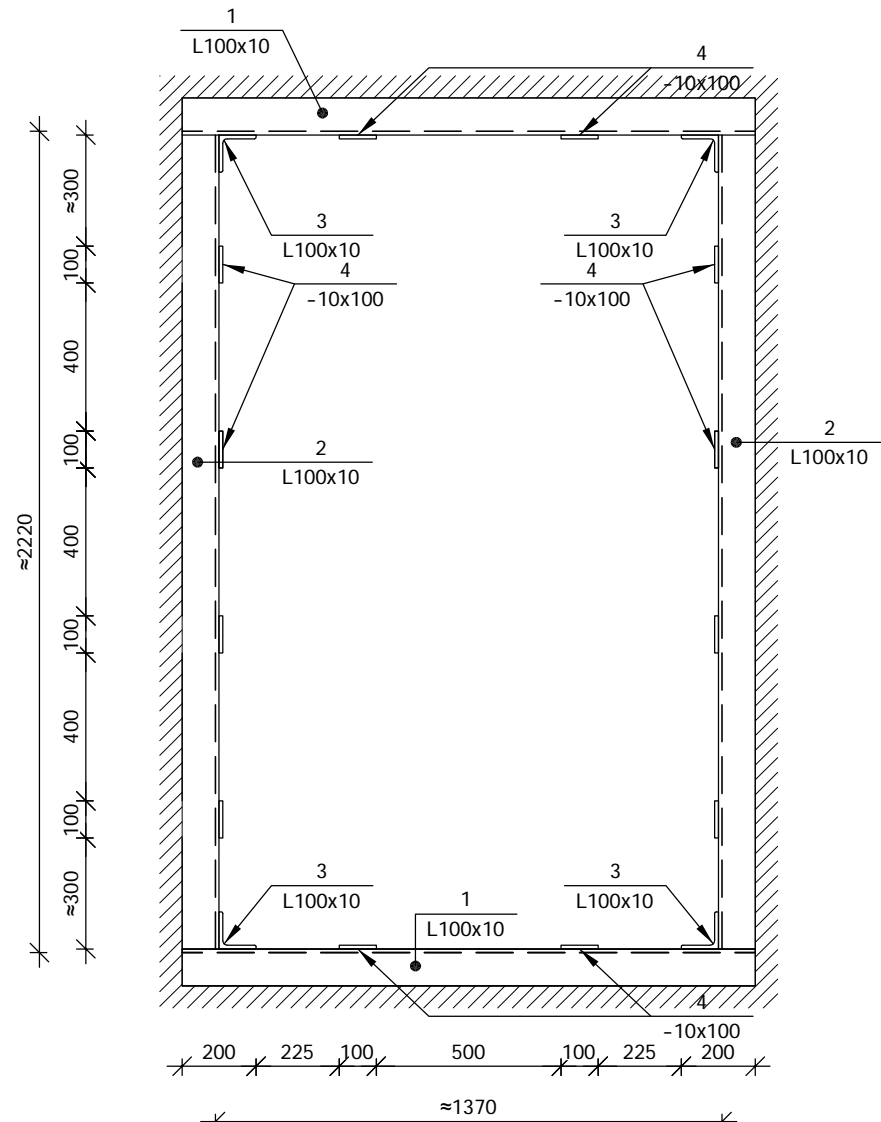
# poz	aRni Svna	claxaxel eba	r aod. el -Si	wona, (kg)		Seni Svna	
				er Tis	saer To		
I iToni smocar Coeba I C-1 2 cali							
1	kuTxovana	L 100x10	ГОСТ 8509-86 L= 1120	mm	4	16.9 68	dazustdes adgil ze
2	kuTxovana	L 100x10	ГОСТ 8509-86 L= 500	mm	2	7.6 15	dazustdes adgil ze
3	kuTxovana	L 100x10	ГОСТ 8509-86 L= 700	mm	4	10.6 42	dazustdes adgil ze
4	zOl ovana	- 10x100	L= 700	mm	2	5.5 11	
I iToni smocar Coeba I C-2 7 cali							
1	kuTxovana	L 100x10	ГОСТ 8509-86 L= 1170	mm	4	17.7 71	dazustdes adgil ze
2	kuTxovana	L 100x10	ГОСТ 8509-86 L= 1620	mm	4	24.5 98	dazustdes adgil ze
3	kuTxovana	L 100x10	ГОСТ 8509-86 L= 700	mm	4	10.6 42	dazustdes adgil ze
4	zOl ovana	- 10x100	L= 700	mm	8	5.5 44	

direqtori	m. buxaiZe	<i>J. Syrbandy</i>	q. Tbilisi. Tumani ani s II Ci xi #3 sacxovrebel i saxl is rekonstrukcii s proeqti		Sps "AM fardi"			
pr. avtori	a. gogi aSvil i	<i>a. gogi aSvil i</i>			konstrukciul i proeqti	stadi a	furcel i	r-ba
pr. avtori	m. buxaiZe	<i>J. Syrbandy</i>	I iToni smocar Coeba I C-1, I C-2	sp	k-15			
konstruqt.	g. comai a	<i>g. comai a</i>						




I iToni smocar Coeba I C-3 m 1:20

I iToni smocar Coeba I C-4 m 1:20

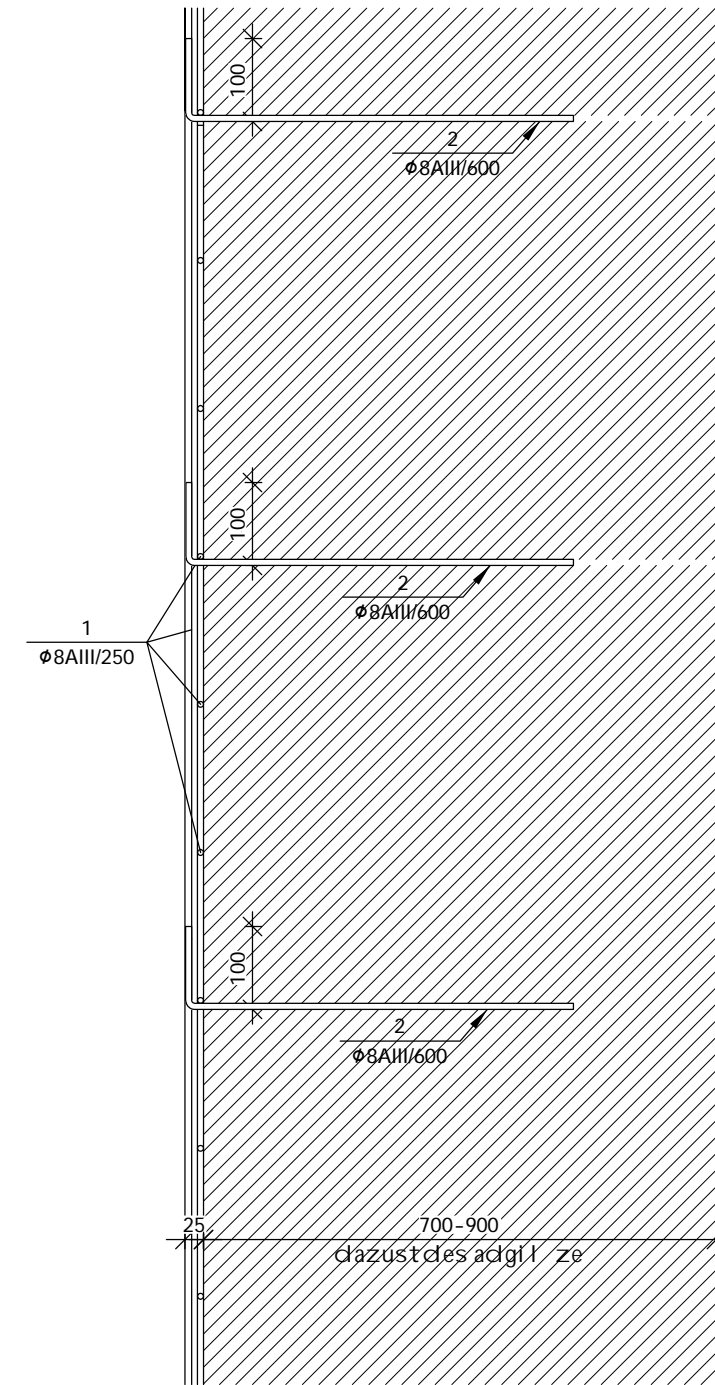
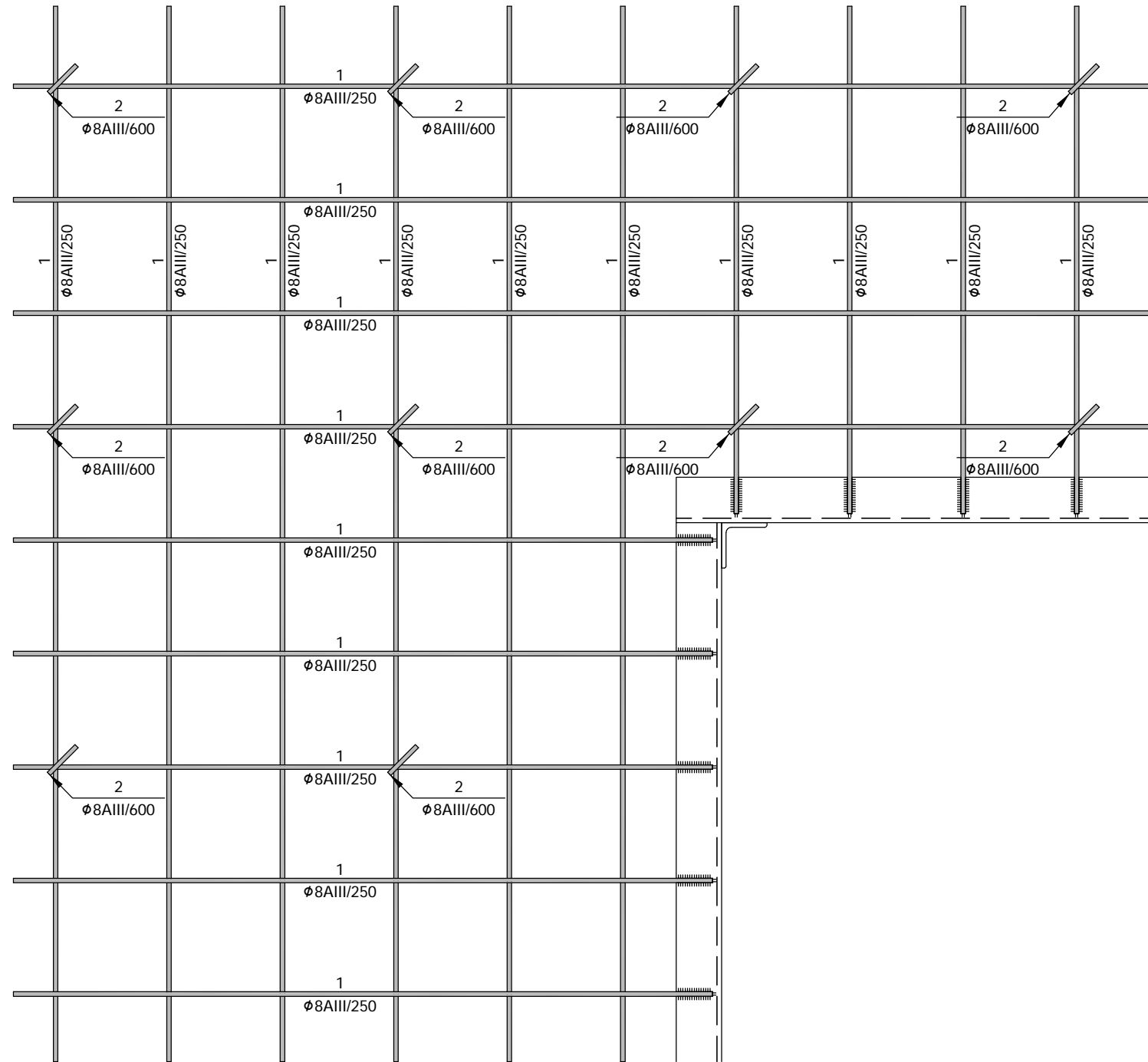


# poz	aRni Svna	dasaxel eba	raod. el -Si	wona, (kg)		Seni Svna	
				er Ti s	saer To		
I iToni smocar Coeba I C-4 4 cali							
1	kuTxovana	L 100x10 GOCT 8509-86 L= 1570	mm	4	23.7	95	dazustdes adgil ze
2	kuTxovana	L 100x10 GOCT 8509-86 L= 2220	mm	4	33.5	134	dazustdes adgil ze
3	kuTxovana	L 100x10 GOCT 8509-86 L= 700	mm	4	10.6	42	dazustdes adgil ze
4	zol ovana	- 10x100 L= 700	mm	12	5.5	66	
Suakedl is gar sakl i Sg-1 4 cali							
5	zol ovana	- 10x100 L= 900	mm	8	7.1	57	


# poz	aRni Svna	dasaxel eba	raod. el -Si	wona, (kg)		Seni Svna	
				er Ti s	saer To		
I iToni smocar Coeba I C-3 2 cali							
1	kuTxovana	L 100x10 GOCT 8509-86 L= 1570	mm	4	23.7	95	dazustdes adgil ze
2	kuTxovana	L 100x10 GOCT 8509-86 L= 2220	mm	4	33.5	134	dazustdes adgil ze
3	kuTxovana	L 100x10 GOCT 8509-86 L= 700	mm	4	10.6	42	dazustdes adgil ze
4	zol ovana	- 10x100 L= 700	mm	12	5.5	66	

direqtori	m. buxai Ze	<i>J. Sulybndy</i>	q. Tbilisi. Tumani ans II Ci xi #3 sacxovrebel i saxl is rekonstruqci is proeqti	 Sps "AM fardi"			
pr. avtori	a. gogi aSvil i	<i>a. gogi aSvil i</i>					
pr. avtori	m. buxai Ze	<i>J. Sulybndy</i>					
			konstruqciul i proeqti				
konstruqt.	g. comai a	<i>g. comai a</i>	I iToni smocar Coeba I C-3, I C-4	stadi a	furcel i	r-ba	masSt.
				sp	k-16		

kedl ebi s ar mi r ebi s kvanZi m 1:10



# პოზ	არნი სვნი	დასახელება	რაოდ. ელ-სი	მონა, (kg)		სენი სვნი
				ერთის	საერთო	
kedl ebi s ar mi r eba 1 cal i						
1		ø 8 AIII GOCT 5781-82 L= 884000 mm	1	348.6	349	
2		ø 8 AIII GOCT 5781-82 L= 600 mm	278	0.24	66	
		საერთო ფართი			100	კვმ

დირექტორი	მ. ბუაი ჯე	<i>J. Symbadze</i>	თბილისი. თუმანიანი II ციხე #3 სახოვრებელი სახლის რეკონსტრუქციის პროექტი	 Sps "AM Fardi"			
პრ. ავტორი	ა. გოგიაშვილი	<i>A. Gogiasvili</i>					
პრ. ავტორი	მ. ბუაი ჯე	<i>J. Symbadze</i>	კონსტრუქციული პროექტი				
კონსტრუქტ.	გ. კომალა	<i>G. Komala</i>	kedl ebi s ar mi r ebi s kvanZi	სტადია	ფურცელი	რ-ბა	მასშტ.
				sp	k-17		