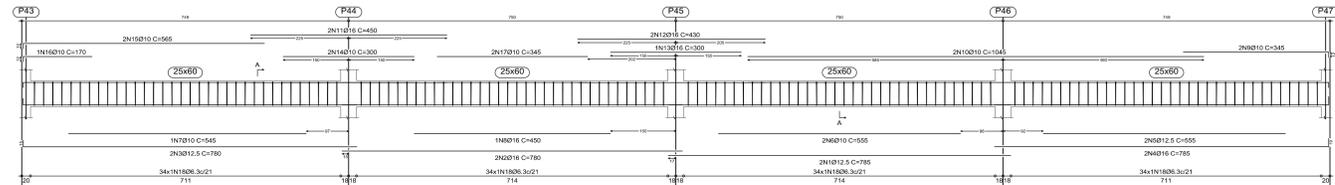
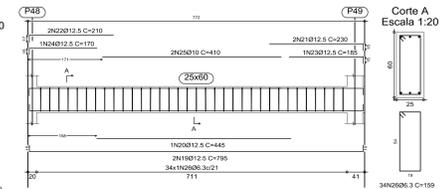


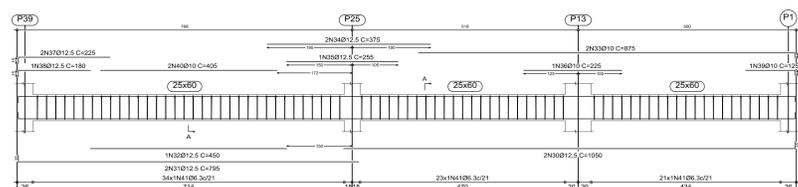
VB 120  
Escala 1:50



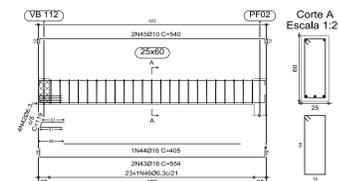
VB 121  
Escala 1:50



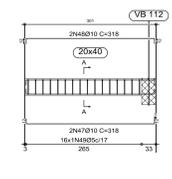
VB 123  
Escala 1:50



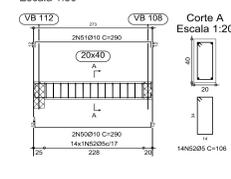
VB 124  
Escala 1:50



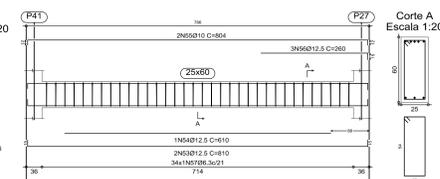
VB 125  
Escala 1:50



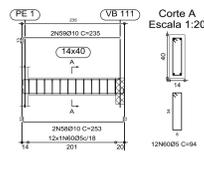
VB 126  
Escala 1:50



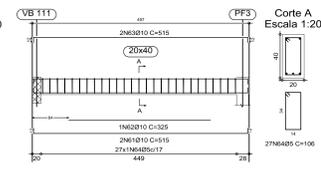
VB 127  
Escala 1:50



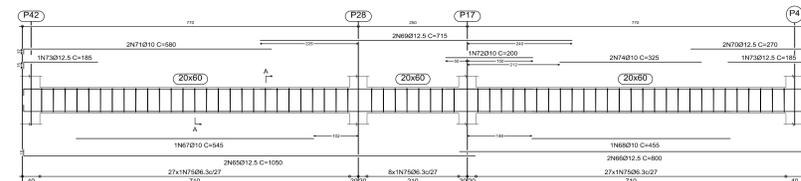
VB 128  
Escala 1:50



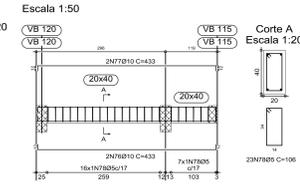
VB 129  
Escala 1:50



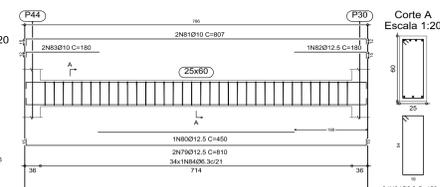
VB 130  
Escala 1:50



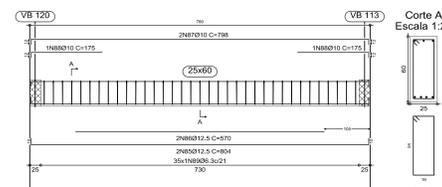
VB 131  
Escala 1:50



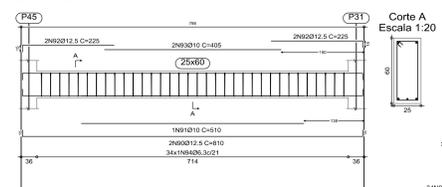
VB 133  
Escala 1:50



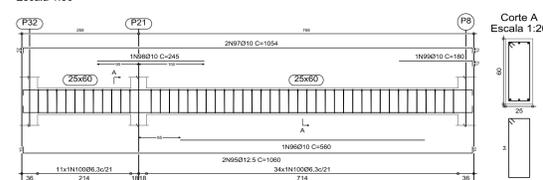
VB 134  
Escala 1:50



VB 135  
Escala 1:50



VB 136  
Escala 1:50



Elemento	Pos.	Diam.	Q	Ob.	Rea	Dob.	Comp.	Comp.	Total	CA-50-A	CA-60-B
				(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(kg)	(kg)
VB 120	1	Ø12.5	2	785	785	785	785	785	1570	15.4	15.4
	2	Ø16	2	785	785	785	785	785	1570	24.3	24.3
	3	Ø16	16	785	785	785	785	785	1570	24.3	24.3
	4	Ø12.5	2	555	555	555	555	555	1110	10.3	10.3
	5	Ø10	2	400	400	400	400	400	800	7.0	7.0
	6	Ø10	2	400	400	400	400	400	800	7.1	7.1
	7	Ø10	2	325	325	325	325	325	650	4.3	4.3
	8	Ø10	2	430	430	430	430	430	860	13.1	13.1
	9	Ø10	2	300	300	300	300	300	600	4.7	4.7
	10	Ø10	2	1045	1045	1045	1045	1045	2090	18.1	18.1
Total+10%										200.9	200.9
VB 121	19	Ø12.5	2	16	765	15	765	15	765	15.4	15.4
	20	Ø12.5	1	445	445	445	445	445	890	4.4	4.4
	21	Ø12.5	2	210	210	210	210	210	420	4.1	4.1
	22	Ø12.5	2	170	170	170	170	170	340	1.8	1.8
	23	Ø12.5	1	155	155	155	155	155	310	1.7	1.7
Total+10%										56.7	56.7
VB 123	31	Ø12.5	2	15	780	15	780	15	780	15.6	15.6
	32	Ø12.5	1	450	450	450	450	450	900	4.4	4.4
	33	Ø12.5	2	850	850	850	850	850	1700	11.0	11.0
	34	Ø12.5	2	375	375	375	375	375	750	7.4	7.4
	35	Ø12.5	2	255	255	255	255	255	510	2.3	2.3
	36	Ø10	1	225	225	225	225	225	450	1.4	1.4
	37	Ø10	2	110	110	110	110	110	220	4.4	4.4
	38	Ø12.5	1	165	165	165	165	165	330	1.8	1.8
	39	Ø10	1	110	110	110	110	110	220	5.1	5.1
	40	Ø10	2	405	405	405	405	405	810	11.1	11.1
Total+10%										116.3	116.3
VB 124	42	Ø6.3	4	51	17	51	17	51	170	1.2	1.2
	43	Ø16	1	19	19	19	19	19	38	17.4	17.4
	44	Ø16	1	405	405	405	405	405	810	6.4	6.4
	45	Ø10	2	110	110	110	110	110	220	10.1	10.1
Total+10%										39.7	39.7
VB 125	47	Ø10	12	284	12	284	12	284	568	4.0	4.0
	48	Ø10	12	294	12	294	12	294	588	4.3	4.3
	49	Ø5	16	106	106	106	106	106	212	2.7	2.7
Total+10%										10.8	10.8
VB 126	50	Ø10	2	260	12	260	12	260	520	3.6	3.6
	51	Ø10	2	260	12	260	12	260	520	3.6	3.6
Total+10%										7.3	7.3
VB 127	53	Ø12.5	2	15	760	15	760	15	760	15.4	15.4
	54	Ø12.5	1	610	610	610	610	610	1220	6.0	6.0
	55	Ø10	2	780	780	780	780	780	1560	10.1	10.1
	56	Ø12.5	3	245	15	245	15	245	490	7.7	7.7
Total+10%										44.3	44.3
VB 128	58	Ø10	2	12	220	12	220	12	220	3.2	3.2
	59	Ø10	2	13	227	12	227	12	227	3.3	3.3
	60	Ø5	27	94	94	94	94	94	188	1.8	1.8
Total+10%										6.8	6.8
VB 129	61	Ø10	2	12	481	12	481	12	481	6.5	6.5
	62	Ø10	1	325	325	325	325	325	650	2.0	2.0
	63	Ø10	2	12	491	12	491	12	491	6.5	6.5
	64	Ø5	27	106	106	106	106	106	212	4.5	4.5
Total+10%										18.5	18.5
VB 130	66	Ø12.5	2	15	1035	15	1035	15	1035	20.6	20.6
	67	Ø10	1	785	785	785	785	785	1570	3.4	3.4
	68	Ø10	1	545	545	545	545	545	1090	4.9	4.9
	69	Ø12.5	2	715	715	715	715	715	1430	14.0	14.0
	70	Ø12.5	2	555	555	555	555	555	1110	5.3	5.3
	71	Ø10	2	550	550	550	550	550	1100	7.3	7.3
	72	Ø12.5	2	190	190	190	190	190	380	3.8	3.8
	73	Ø10	2	325	325	325	325	325	650	4.1	4.1
	74	Ø10	2	325	325	325	325	325	650	4.1	4.1
	75	Ø6.3	62	149	149	149	149	149	298	22.8	22.8
Total+10%										111.1	111.1
VB 131+VB 132	76	Ø10	2	12	400	12	400	12	400	5.4	5.4
	77	Ø10	2	12	400	12	400	12	400	5.4	5.4
	78	Ø5	23	106	106	106	106	106	212	4.3	4.3
Total+10%										15.8	15.8
VB 133	79	Ø12.5	2	15	780	15	780	15	780	15.6	15.6
	80	Ø12.5	1	450	450	450	450	450	900	4.4	4.4
	81	Ø12.5	4	15	780	15	780	15	780	15.6	15.6
	82	Ø12.5	1	165	165	165	165	165	330	1.8	1.8
Total+10%										44.3	44.3
VB 134	85	Ø12.5	2	15	774	15	774	15	774	15.3	15.3
	86	Ø12.5	2	570	570	570	570	570	1140	11.2	11.2
	87	Ø10	2	774	774	774	774	774	1548	10.0	10.0
	88	Ø10	2	163	163	163	163	163	326	2.2	2.2
Total+10%										38.7	38.7
VB 135	89	Ø12.5	2	15	780	15	780	15	780	15.6	15.6
	90	Ø10	1	510	510	510	510	510	1020	3.2	3.2
	91	Ø10	1	210	210	210	210	210	420	1.5	1.5
	92	Ø10	2	405	405	405	405	405	810	5.1	5.1
Total+10%										35.4	35.4
VB 136	96	Ø12.5	2	15	1030	15	1030	15	1030	20.6	20.6
	97	Ø10	1	660	660	660	660	660	1320	3.0	3.0
	98	Ø10	2	1030	1030	1030	1030	1030	2060	13.2	13.2
	99	Ø10	1	245	245	245	245	245	490	1.5	1.5
	100	Ø6.3	16	168	168	168	168	168	336	17.7	17.7
Total+10%										63.6	63.6

PAV TERREO  
 Desenho de vigas  
 Concreteo C20 em panel  
 Apo CA-50-A e CA-60-B  
 Escala vigas: 1:50  
 Escala seções: 1:20

**CAMPUS CETEPS EM SUMARÉ**      UN - ETEC SUMARÉ  
 RUA RAFAEL ROSSI, RUA PLINIO GOMETTI E RUA VICENTE IZAIAS DA SILVA - SUMARÉ - SP

**ESTRUTURA**      Escala: 1:50      Projeto: EST - 24/40

PROJETO BÁSICO  
 DETALHAMENTO DAS VIGAS  
 BALCÔNIO  
 EXECUÇÃO - CONSTRUÇÃO

EMPRESA: SAYÃO  
 PROJETO: SAYÃO  
 EXECUÇÃO: SAYÃO

LOCAL: CONFREIR MEDONAS LOCAL  
 DATA: 25/06/2019

**Sayão** Construções e Projetos Personalizados  
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 tel: 19 3461-0473 / fax: 19 3465-3600 - e-mail: projetos@sayao.com.br / www.sayao.com.br

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 CARLOS SAYÃO  
 ENGENHEIRO CIVIL CREA N. 506183/022  
 GUILHERME SAYÃO