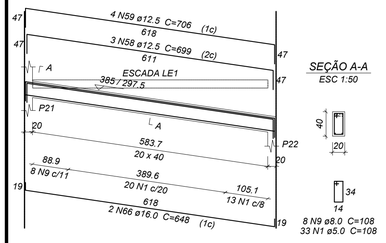
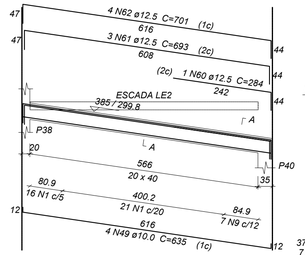
VL57
ESC 1:75

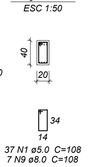


SEÇÃO A-A
ESC 1:50

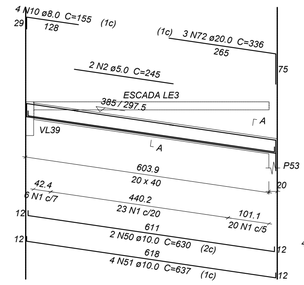
VL58
ESC 1:75



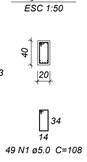
SEÇÃO A-A
ESC 1:50



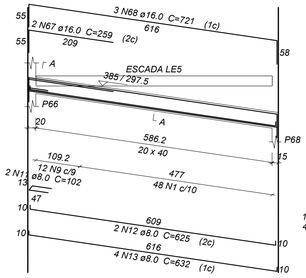
VL59
ESC 1:75



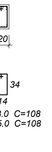
SEÇÃO A-A
ESC 1:50



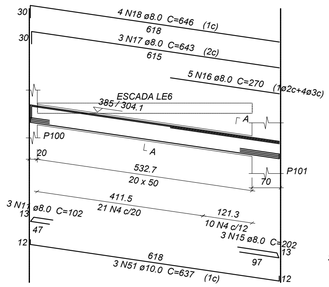
VL60
ESC 1:75



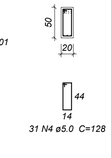
SEÇÃO A-A
ESC 1:50



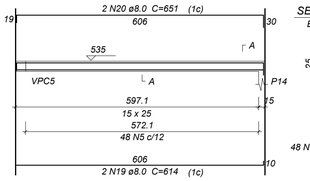
VL62
ESC 1:75



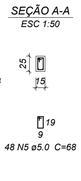
SEÇÃO A-A
ESC 1:50



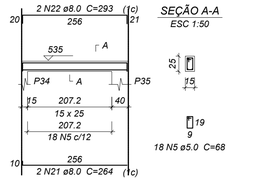
VPC1
ESC 1:75



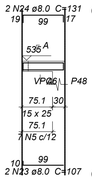
SEÇÃO A-A
ESC 1:50



VPC2
ESC 1:75

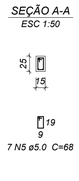


SEÇÃO A-A
ESC 1:50

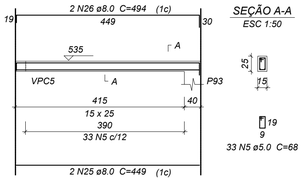


VPC3
ESC 1:75

SEÇÃO A-A
ESC 1:50

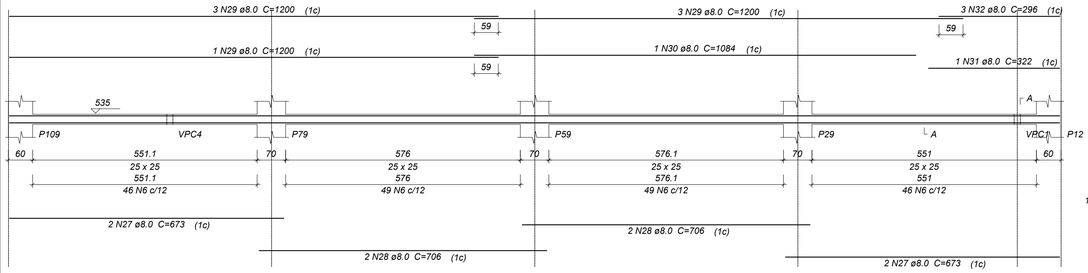


VPC4
ESC 1:75

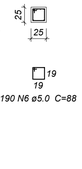


SEÇÃO A-A
ESC 1:50

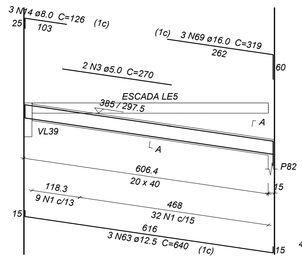
VPC5
ESC 1:75



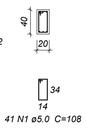
SEÇÃO A-A
ESC 1:50



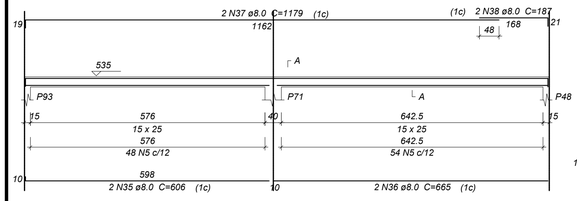
VL61
ESC 1:75



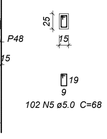
SEÇÃO A-A
ESC 1:50



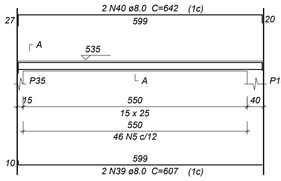
VPC7
ESC 1:75



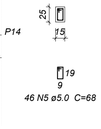
SEÇÃO A-A
ESC 1:50



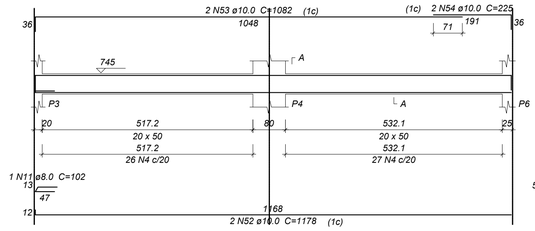
VPC8
ESC 1:75



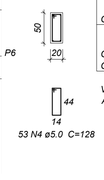
SEÇÃO A-A
ESC 1:50



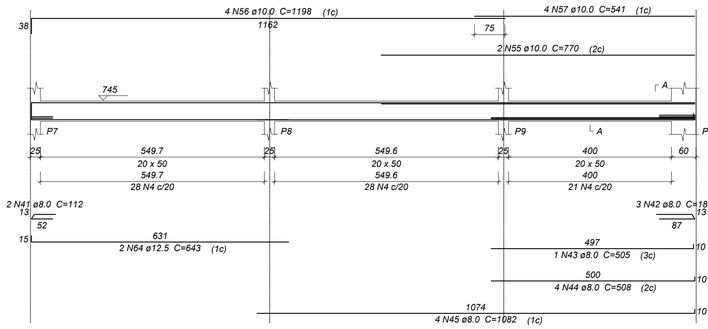
VAT1
ESC 1:75



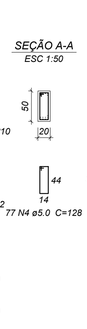
SEÇÃO A-A
ESC 1:50



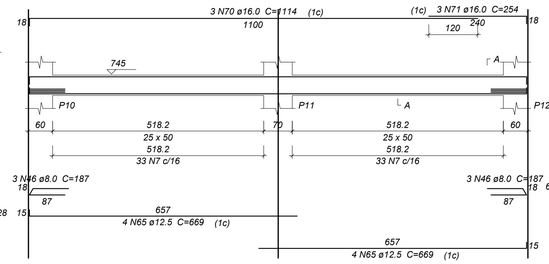
VAT2
ESC 1:75



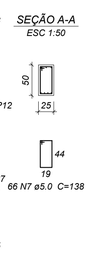
SEÇÃO A-A
ESC 1:50



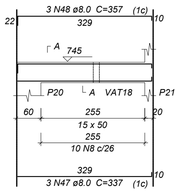
VAT3
ESC 1:75



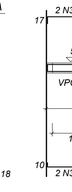
SEÇÃO A-A
ESC 1:50



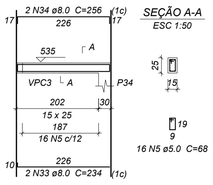
VAT4
ESC 1:75



SEÇÃO A-A
ESC 1:50



VPC6
ESC 1:75



SEÇÃO A-A
ESC 1:50

Relação do aço

1° Pavimento:	VL57	VL58
	VL59	VL60
	VL61	VL62
Platibanda Camarim:	VPC1	VPC2
	VPC3	VPC4
	VPC5	VPC6
	VPC7	VPC8
Área Tecnica:	VAT1	VAT2
	VAT3	VAT4

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	208	108	22464
	2	5.0	2	245	490
	3	5.0	2	270	540
	4	5.0	161	128	20608
	5	5.0	270	68	18360
	6	5.0	190	88	16720
	7	5.0	66	138	9108
	8	5.0	10	118	1180
CA50	9	8.0	27	108	2916
	10	8.0	4	155	620
	11	8.0	6	102	612
	12	8.0	2	625	1250
	13	8.0	4	632	2528
	14	8.0	3	126	378
	15	8.0	3	202	606
	16	8.0	5	270	1350
	17	8.0	3	643	1929
	18	8.0	4	646	2584
	19	8.0	2	614	1228
	20	8.0	2	651	1302
	21	8.0	2	264	528
	22	8.0	2	293	586
	23	8.0	2	107	214
	24	8.0	2	131	262
	25	8.0	2	449	898
	26	8.0	2	494	988
	27	8.0	4	673	2692
	28	8.0	4	706	2824
	29	8.0	7	1200	8400
	30	8.0	1	1084	1084
	31	8.0	1	322	322
	32	8.0	3	296	888
	33	8.0	2	234	468
	34	8.0	2	256	512
	35	8.0	2	606	1212
	36	8.0	2	665	1330
	37	8.0	2	1179	2358
	38	8.0	2	187	374
	39	8.0	2	607	1214
	40	8.0	2	642	1284
	41	8.0	2	112	224
	42	8.0	3	182	546
	43	8.0	1	505	505
	44	8.0	4	508	2032
	45	8.0	4	1082	4328
	46	8.0	6	187	1122
	47	8.0	3	337	1011
	48	8.0	3	357	1071
	49	10.0	4	635	2540
	50	10.0	2	630	1260
	51	10.0	7	637	4459
	52	10.0	2	1178	2356
	53	10.0	2	1082	2164
	54	10.0	2	225	450
	55	10.0	2	770	1540
	56	10.0	4	1198	4792
	57	10.0	4	541	2164
	58	12.5	3	699	2097
	59	12.5	4	706	2824
	60	12.5	1	284	284
	61	12.5	3	693	2079
	62	12.5	4	701	2804
	63	12.5	3	640	1920
	64	12.5	2	643	1286
	65	12.5	8	669	5352
	66	16.0	2	648	1296
	67	16.0	2	259	518
	68	16.0	3	721	2163
	69	16.0	3	319	957
	70	16.0	3	1114	3342
	71	16.0	3	254	762
	72	20.0	3	336	1008

Resumo do aço

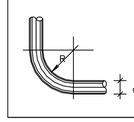
AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	8.0	565.8	223.3
	10.0	217.3	133.9
	12.5	186.5	179.6
	16.0	90.4	142.7
	20.0	10.1	24.9
CA60	5.0	894.7	137.9
PESO TOTAL			
CA50	704.3		
CA60	137.9		

Vol. de concreto total (C-25) = 10.62 m³
Área de forma total = 133.61 m²

NOTAS GERAIS

1 - DIMENSÕES EM CENTÍMETRO, ELEVAÇÕES EM METRO E BITOLAS DOS FERROS EM MILIMETROS EXCETO INDICAÇÃO CONTRÁRIA.
2 - TENSÃO PARA O CONCRETO:
CONCRETO ESTRUTURAL fck=25 MPa
CONCRETO MAGRO fck=10 MPa
3 - AÇO CA50, fyk=5000 kgf/cm²
CA60, fyk=6000 kgf/cm²
4 - EXECUTAR PASSAGENS PARA TUBULAÇÕES DE ÁGUA, ESGOTO E ELETRICIDADE. NÃO SERÁ PERMITIDO NENHUMA TUBULAÇÃO DENTRO DOS ELEMENTOS ESTRUTURAIS, EXCETO AS PREVISTAS EM PROJETO;
5 - REALIZAR ENSAIOS DE COMPRESSÃO EM CORPO DE PROVA PARA ASSEGURAR A RESISTÊNCIA FINAL DO CONCRETO;
6 - DIMENSÃO MÁXIMA DO AGREGADO RECOMENDADA DE 19mm;
7 - DOSAGEM DO CONCRETO: PARA EVITAR SEGREGAÇÃO, DEVEM SER CONSIDERADAS AS PROPRIEDADES:
ESTABILIDADE - EXSUDAÇÃO E SEGREGAÇÃO
MOBILIDADE - VISCOSIDADE, COESÃO E ANGULO DE ATRITO INTERNO
COMPACIDADE - DENSIDADE
NECESSITANDO, PORTANTO, DE UM ESTUDO EM FUNÇÃO DOS MATERIAIS A SEREM UTILIZADOS;
8 - CURA DO CONCRETO: FUNÇÃO DO TIPO DE CIMENTO UTILIZADO E DA EXPOSIÇÃO AOS INTEMPERISMOS.
A CURA DEVE SER DE:
7 DIAS PARA CONCRETO COM CIMENTO PORTLAND
10 DIAS PARA CONCRETO COM CIMENTO ALTO FORNO
28 DIAS PARA CONCRETO COM CIMENTO POZOLÂNICO
CONSERVAR ÚMIDAS AS PARTES CONCRETADAS DURANTE O TEMPO DE CURA
9 - COBRIMENTO MÍNIMO DAS ARMADURAS:
VIGAS e PILARES = 3,0cm
LAJES = 2,5cm
O RECOBRIMENTO DEVERÁ SER GARANTIDO COM O USO DE ESPAÇADORES
10 - FATOR ÁGUA/CIMENTO DO CONCRETO: AC ≤ 0,60
11 - CONFRONTAR AS MEDIDAS DO PROJETO ESTRUTURAL COM O PROJETO ARQUITETÔNICO;
12 - EM CASO DE DÚVIDAS CONSULTAR O CALCULISTA.

RAIO DE CURVATURA DAS BARRAS



ø	R (cm)
12.5	10
16.0	12
20.0	15
25.0	19

CONCRETO ADOTADO

fck = 25 MPa

fcj=fck+1,65 x { 4 MPa / 5,5 MPa / 7 MPa }

DE ACORDO COM O ITEM 8.3.1.2 DA NBR-6118

ATUALIZAÇÃO:			
05			
04			
03			
02			
01			
Nº.	DESCRIÇÃO	RESP.	DATA

ASSINATURA DO PROPRIETÁRIO DO PROJETO

ASSINATURA DO AUTOR DO PROJETO

CARIMBOS P.M.P.B SECRETARIA DE PLANEJAMENTO URBANO E SAÚDE PÚBICA

MUNICÍPIO DE PATO BRANCO
Secretaria de Planejamento Urbano

OBRA: TEATRO MUNICIPAL NAURA RIGON

ESPECIFICAÇÃO:
ESTRUTURAL

AREA TOTAL 2.164,80 m² | ESCALA hidicada | DATA 04/09/2019 | DESENHO

AUTOR DO PROJETO ARQUITETO E URBANISTA
STEPHANIE POLETINI DE SOUZA
CAU A1323463-2

AUTOR DO PROJETO ARQUITETO E URBANISTA
DIEGO LEOPOLDINO LEITE
CAU A1325680

PROPRIETÁRIO
Município de Pato Branco
CNPJ: 76.995.448/ 0001/54

QUADRA 15F | LOTE 03 e 14 | ENDEREÇO DA OBRA Lacerdi, 400, Bairro Panzanello, Pato Branco - PR.

VERSÃO | ALTERAÇÃO:

PRANCHA Nº

30 /61