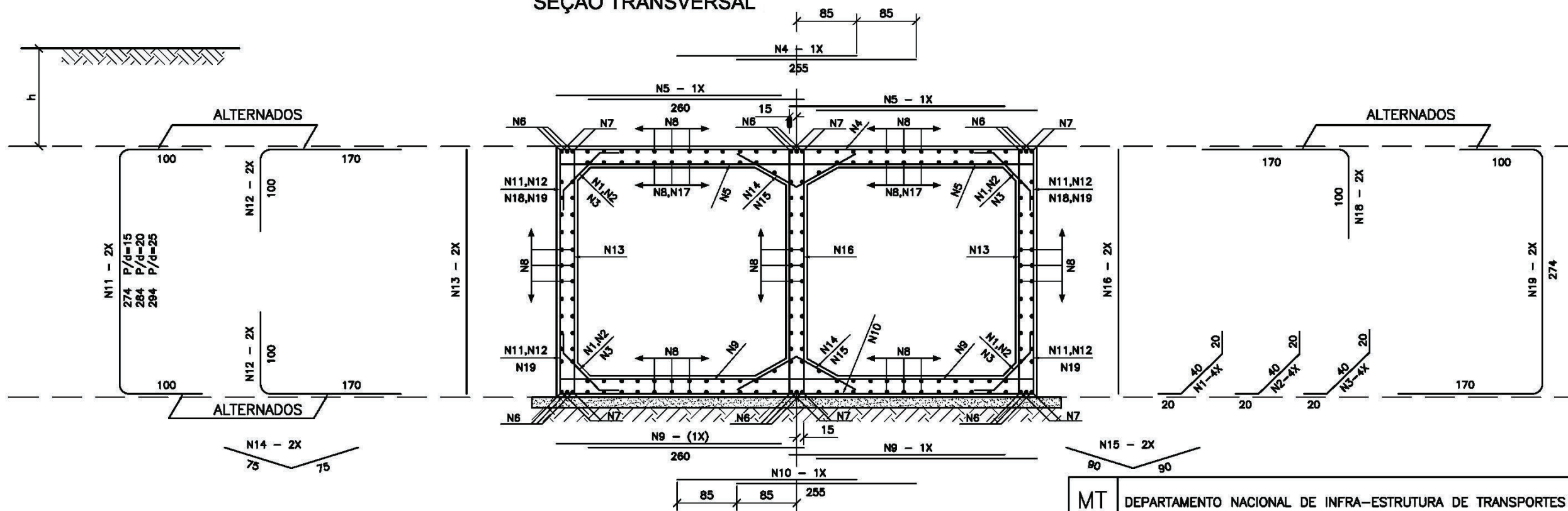


TABELA DAS ARMADURAS (POR METRO DE GALERIA)

0 ≤ h ≤ 100					100 ≤ h ≤ 250					250 ≤ h ≤ 500					500 ≤ h ≤ 750					750 ≤ h ≤ 1000					1000 ≤ h ≤ 1250					1250 ≤ h ≤ 1500				
f _s ≥ 0,21 MPa					f _s ≥ 0,21 MPa					f _s ≥ 0,23 MPa					f _s ≥ 0,28 MPa					f _s ≥ 0,32 MPa					f _s ≥ 0,36 MPa					f _s ≥ 0,41 MPa				
Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.
1	6,3	20	80	c/20	1	6,3	20	80	c/20	1					1					1					1									
2					2					2	6,3	20	100	c/20	2	6,3	20	100	c/20	2					2									
3					3					3					3	6,3	20	110	c/20	3	6,3	20	110	c/20	3	6,3	20	110	c/20					
4	12,5	10	255	c/10	4	10,0	6	255	c/15	4	12,5	6	255	c/15	4	16,0	6	255	c/16	4	16,0	7	255	c/14	4	16,0	9	255	c/14					
5	10,0	20	260	c/10	5	10,0	20	260	c/10	5	12,5	14	260	c/13	5	16,0	14	260	c/14	5	16,0	14	260	c/14	5	16,0	18	260	c/14					
6					6					6	12,5	18	corr.		6					6	16,0	18	corr.		6	16,0	18	corr.						
7	12,5	12	corr.		7	12,5	12	corr.		7					7	16,0	12	corr.		7					7									
8	6,3	156	corr.	c/20	8	6,3	168	corr.	c/20	8	6,3	168	corr.	c/20	8	6,3	168	corr.	c/20	8	6,3	168	corr.	c/20	8	6,3	168	corr.	c/20					
9	10,0	14	260	c/14	9	10,0	16	260	c/12	9	12,5	14	260	c/13	9	16,0	14	260	c/14	9	16,0	12	260	c/15	9	16,0	16	260	c/15					
10	10,0	6	255	c/15	10	10,0	6	255	c/15	10	12,5	6	255	c/15	10	16,0	6	255	c/16	10	16,0	7	255	c/14	10	16,0	9	255	c/14					
11					11	10,0	8	474	c/26	11	10,0	8	484	c/28	11	12,5	8	484	c/28	11	12,5	8	494	c/28	11	16,0	6	494	c/28					
12					12	10,0	16	270	c/26	12	10,0	16	270	c/28	12	12,6	16	270	c/28	12	12,5	16	270	c/28	12	16,0	12	270	c/28					
13	6,3	9	275	c/11	13	10,0	8	275	c/25	13	10,0	8	285	c/28	13	6,3	14	285	c/13	13	6,3	20	295	c/10	13	10,0	10	295	c/10					
14	6,3	10	150	c/20	14	6,3	10	150	c/20	14					14					14					14									
15					15					15	6,3	10	180	c/20	15	6,3	10	180	c/20	15	6,3	10	180	c/20	15	6,3	10	180	c/20					
16	6,3	12	275	c/15	16	10,0	8	275	c/30	16	10,0	8	285	c/30	16	6,3	12	285	c/15	16	6,3	12	295	c/15	16	10,0	8	295	c/15					
17	10,0	16	corr.	c/15						17					17					17					17									
18	12,5	12	270	c/16						18					18					18					18									
19	12,5	12	544	c/16						19					19					19					19									
RESUMO			RESUMO			RESUMO			RESUMO			RESUMO			RESUMO			RESUMO																
φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)														
6,3	0,245	59,964	6,3	0,245	48,755	6,3	0,245	50,470	6,3	0,245	68,625	6,3	0,245	74,088	6,3	0,245	50,960	6,3	0,245	50,960														
10,0	0,617	73,855	10,0	0,617	153,830	10,0	0,617	78,680	12,5	0,963	78,889	12,5	0,963	79,659	10,0	0,617	32,763	10,0	0,617	32,763														
12,5	0,963	130,178	12,5	0,963	11,556	12,5	0,963	116,908	16,0	1,578	182,101	16,0	1,578	191,411	16,0	1,578	338,229	16,0	1,578	403,526														
TOTAL		263,997	TOTAL		214,141	TOTAL		246,058	TOTAL		329,615	TOTAL		345,159	TOTAL		421,951	TOTAL		487,249														

SEÇÃO TRANSVERSAL



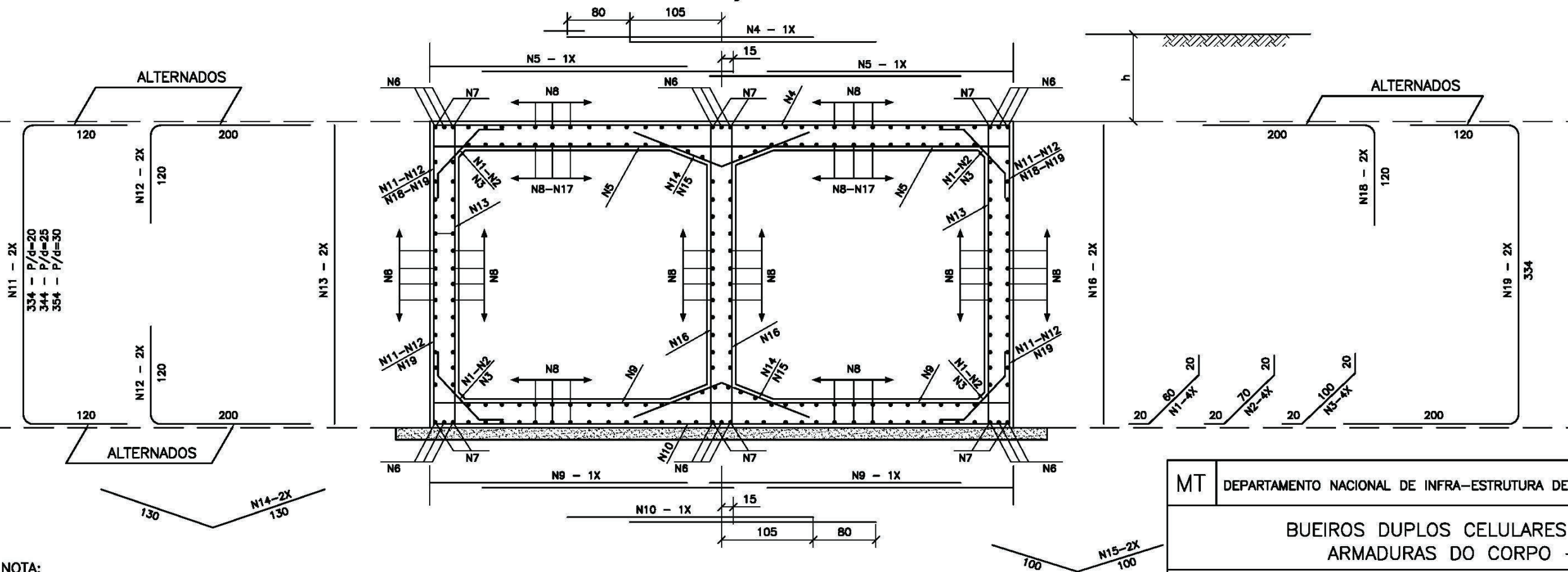
NOTA:
- Ver notas e complementos desta no desenho 6.25

MT	DEPARTAMENTO NACIONAL DE INFRA-ESTRUTURA DE TRANSPORTES - DNIT	IPR
BUEIROS DUPLOS CELULARES DE CONCRETO ARMADURAS DO CORPO - 250x250		
ALBUM DE PROJETOS-TIPO DE DISPOSITIVOS DE DRENAGEM		DESENHO 6.19

TABELA DAS ARMADURAS (POR METRO DE GALERIA)

0 ≤ h ≤ 100					100 ≤ h ≤ 250					250 ≤ h ≤ 500					500 ≤ h ≤ 750					750 ≤ h ≤ 1000					1000 ≤ h ≤ 1250					1250 ≤ h ≤ 1500				
f _s ≥ 0,21 MPa					f _s ≥ 0,21 MPa					f _s ≥ 0,23 MPa					f _s ≥ 0,28 MPa					f _s ≥ 0,32 MPa					f _s ≥ 0,36 MPa					f _s ≥ 0,42 MPa				
Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.
1	6,3	20	100	c/20	1	6,3	20	100	c/20	1					1					1					1									
2					2					2	6,3	20	110	c/20	2	6,3	20	110	c/20	2					2									
3					3					3					3	8,0	16	140	c/25	3	8,0	16	140	c/25	3	8,0	16	140	c/25					
4	12,5	10	290	c/10	4	10,0	10	290	c/11	4	12,5	5	290	c/20	4	16,0	6	290	c/15	4	16,0	7	290	c/13	4	16,0	10	290	c/10					
5	10,0	20	290	c/10	5	10,0	20	290	c/10	5	12,5	16	300	c/12	5	16,0	16	300	c/12	5	16,0	16	300	c/12	5	16,0	22	300	c/9					
6					6					6	12,5	18	corr.		6	16,0	18	corr.		6	16,0	18	corr.	c/11	6	16,0	18	corr.						
7	12,5	12	co rr.		7	12,5	12	co rr.		7					7					7					7									
8	6,3	168	co rr.	c/20	8	6,3	196	co rr.	c/20	8	6,3	196	corr.	c/20	8	6,3	196	corr.	c/20	8	8,0	154	corr.	c/25	8	8,0	154	corr.	c/25					
9	10,0	14	290	c/13	9	10,0	18	290	C/11	9	12,5	14	290	c/13	9	16,0	12	300	c/15	9	16,0	14	300	c/13	9	16,0	20	300	c/10					
10	12,5	5	290	c/20	10	10,0	9	290	c/11	10	12,0	5	290	c/20	10	16,0	7	290	c/14	10	16,0	8	290	c/12	10	16,0	10	290	c/10					
11					11	10,0	8	574	c/28	11	10,0	6	584	c/34	11	16,0	6	584	c/38	11	16,0	6	594	c/36	11	16,0	8	594	c/30					
12					12	10,0	16	320	c/28	12	10,0	12	320	c/34	12	16,0	12	320	c/38	12	16,0	12	320	c/36	12	16,0	16	320	c/30					
13	10,0	8	335	c/25	13	10,0	8	335	c/25	13	10,0	10	345	c/20	13	10,0	10	345	c/20	13	10,0	10	355	c/20	13	10,0	10	355	c/20					
14					14					14					14					14	8,0	8	260	c/5	14	8,0	8	260	c/25					
15	6,3	10	200	c/20	15	6,3	10	200	c/20	15	6,3	10	200	c/20	15	6,3	10	200	c/20	15					15									
16	10,0	8	335	c/30	16	10,0	8	335	C/25	16	10,0	8	345	c/25	16	10,0	10	345	c/20	16	10,0	10	355	c/20	16	10,0	10	355	c/20					
17	10,0	32	corr.	c/18	17					17					17					17					17									
18	12,5	10	320	c/20	18					18					18					18					18									
19	12,5	10	654	c/20	19					19					19					19					19									
RESUMO					RESUMO					RESUMO					RESUMO					RESUMO					RESUMO					RESUMO				
φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)		
6,3	0,245	50,960			6,3	0,245	57,820			6,3	0,245	58,310			6,3	0,245	58,31			8,0	0,395	77,894			8,0	0,395	77,894			8,0	0,395	77,894		
10,0	0,617	113,651			10,0	0,617	194,984			10,0	0,617	83,628			10,0	0,617	42,573			10,0	0,617	43,807			10,0	0,617	43,807			12,5	0,963	173,533		
12,5	0,963	147,243			12,5	0,963	11,556			12,5	0,963	130,583			16,0	1,578	336,335			16,0	1,578	355,902			16,0	1,578	474,536			20,0	2,466	337,349		
TOTAL		311,854			TOTAL		264,360			TOTAL		272,521			TOTAL		437,218			TOTAL		477,603			TOTAL		596,237			TOTAL		588,775		

SEÇÃO TRANSVERSAL



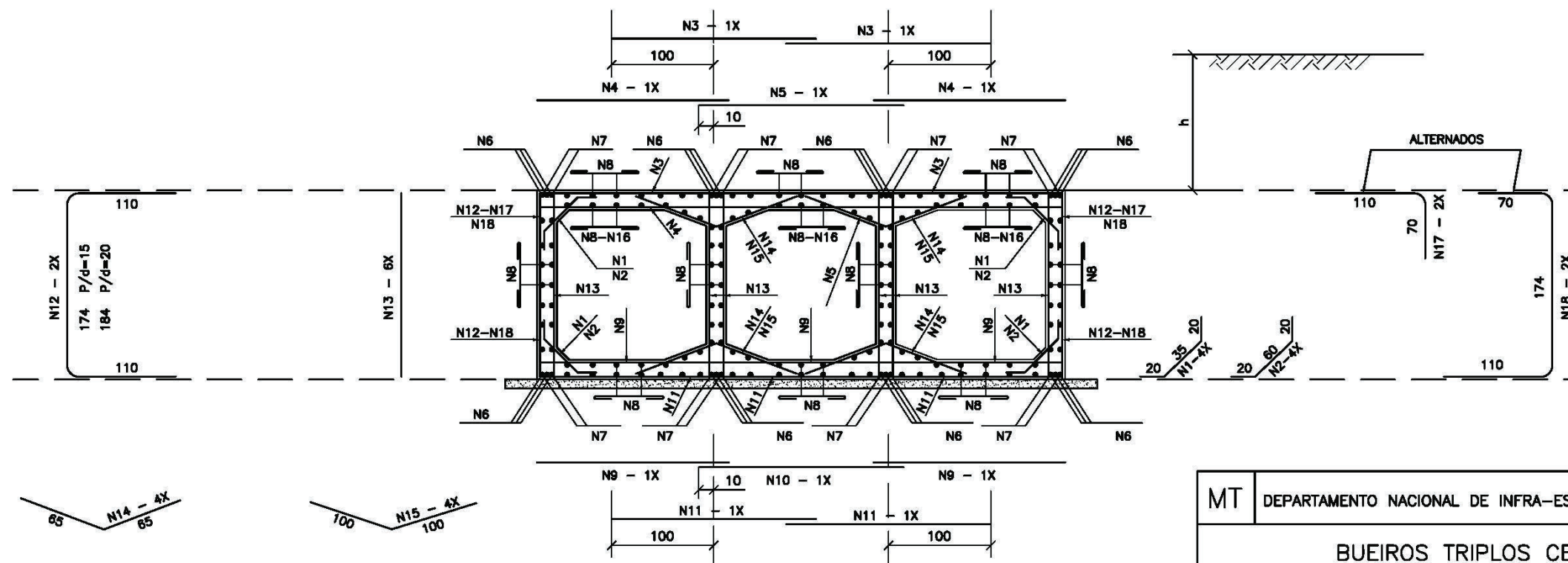
NOTA:
- Ver notas e complementos desta no desenho 6.25

MT	DEPARTAMENTO NACIONAL DE INFRA-ESTRUTURA DE TRANSPORTES - DNIT	IPR
BUEIROS DUPLOS CELULARES DE CONCRETO ARMADURAS DO CORPO - 300x300		
ALBUM DE PROJETOS-TIPO DE DISPOSITIVOS DE DRENAGEM		DESENHO 6.20

TABELA DAS ARMADURAS (POR METRO DE GALERIA)

0 ≤ h ≤ 100					100 ≤ h ≤ 250					250 ≤ h ≤ 500					500 ≤ h ≤ 750					750 ≤ h ≤ 1000					1000 ≤ h ≤ 1250					1250 ≤ h ≤ 1500														
fs ≥ 0,10MPa					fs ≥ 0,12 MPa					fs ≥ 0,18 MPa					fs ≥ 0,24 MPa					fs ≥ 0,31 MPa					fs ≥ 0,36 MPa					fs ≥ 0,43 MPa														
Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.										
1	6,3	20	75	c/20	1	6,3	20	75	c/20	1	6,3	20	75	c/20	1	6,3	20	75	c/30	1	6,3	20	75	c/20	1					1														
2					2					2					2					2					2	6,3	20	100	c/20	2	6,3	20	100	c/20										
3	8,0	20	200	c/10	3	8,0	10	200	c/20	3	10,0	10	200	c/20	3	10,0	12	200	c/15	3	12,5	12	200	c/17	3	16,0	8	200	c/17	3	16,0	8	200	c/17										
4	8,0	20	180	c/10	4	8,0	12	180	c/17	4	10,0	12	180	c/17	4	12,5	12	180	c/16	4	12,5	16	180	c/12	4	16,0	10	190	c/12	4	16,0	12	190	c/12										
5	8,0	10	185	c/10	5	8,0	5	185	c/20	5	10,0	5	185	c/20	5	10,0	6	185	c/15	5	12,5	6	185	c/18	5	16,0	4	190	c/18	5	16,0	4	190	c/18										
6					6					6	12,5	24	corr.		6	12,5	24	corr.		6	12,5	24	corr.		6	16,0	24	corr.		6	16,0	24	corr.											
7	12,5	16	corr.		7	12,5	16	corr.		7					7					7					7					7														
8	6,3	119	corr.	c/20	8	6,3	140	corr.	c/20	8	6,3	140	corr.	c/20	8	6,3	140	corr.	c/20	8	6,3	140	corr.	c/20	8	6,3	140	corr.	c/20	8	6,3	140	corr.	c/20										
9	8,0	10	180	c/20	9	8,0	14	180	c/14	9	10,0	14	180	c/14	9	12,5	14	180	c/14	9	12,5	20	180	c/10	9	16,0	12	190	c/10	9	16,0	12	190	c/10										
10	8,0	5	185	c/20	10	8,0	6	185	c/17	10	10,0	6	185	c/17	10	12,5	6	185	c/17	10	12,5	7	185	c/13	10	16,0	4	190	c/13	10	16,0	5	190	c/13										
11	8,0	10	200	c/20	11	8,0	12	200	c/18	11	10,0	12	200	c/18	11	10,0	14	200	c/13	11	12,5	12	200	c/15	11	16,0	8	200	c/15	11	16,0	8	200	c/15										
12					12	8,0	10	394	c/30	12	10,0	8	394	c/30	12	10,0	10	394	c/20	12	10,0	14	394	c/14	12	10,0	12	404	c/14	12	10,0	12	404	c/14										
13	6,3	36	175	c/15	13	6,3	36	175	c/15	13	6,3	36	175	c/15	13	6,3	36	175	c/15	13	6,3	36	175	c/15	13	10,0	24	185	c/15	13	10,0	24	185	c/15										
14	6,3	20	130	c/20	14	6,3	20	130	c/20	14	6,3	20	130	c/20	14	6,3	20	130	c/20	14	6,3	20	130	c/20	14					14														
15					15					15					15						15				15	6,3	20	200	c/20	15	6,3	20	200	c/20										
16	8,0	30	corr.	c/15	16					16					16					16				16					16															
17	12,5	8	180	c/30	17					17					17					17				17					17															
18	12,5	8	354	c/30	18					18					18					18				18					18															
RESUMO					RESUMO					RESUMO					RESUMO					RESUMO					RESUMO					RESUMO														
φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)		
6,3	0,245	54,635			6,3	0,245	59,780			6,3	0,245	59,780			6,3	0,245	59,780			6,3	0,245	59,780			6,3	0,245	49,000			6,3	0,245	49,000			6,3	0,245	49,000			6,3	0,245	49,000		
8,0	0,395	67,841			8,0	0,395	59,467			10,0	0,617	88,027			10,0	0,617	63,243			10,0	0,617	34,034			10,0	0,617	57,307			10,0	0,617	57,307			10,0	0,617	57,307							
12,5	0,963	56,547			12,5	0,963	15,408			12,5	0,963	23,112			12,5	0,963	78,870			12,5	0,963	154,899			16,0	1,578	178,314			16,0	1,578	187,309												
TOTAL		179,024			TOTAL		134,655			TOTAL		170,919			TOTAL		201,892			TOTAL		248,712			TOTAL		284,621			TOTAL		293,616												

SEÇÃO TRANSVERSAL



NOTA:
- Ver notas e complementos desta no desenho 6.25

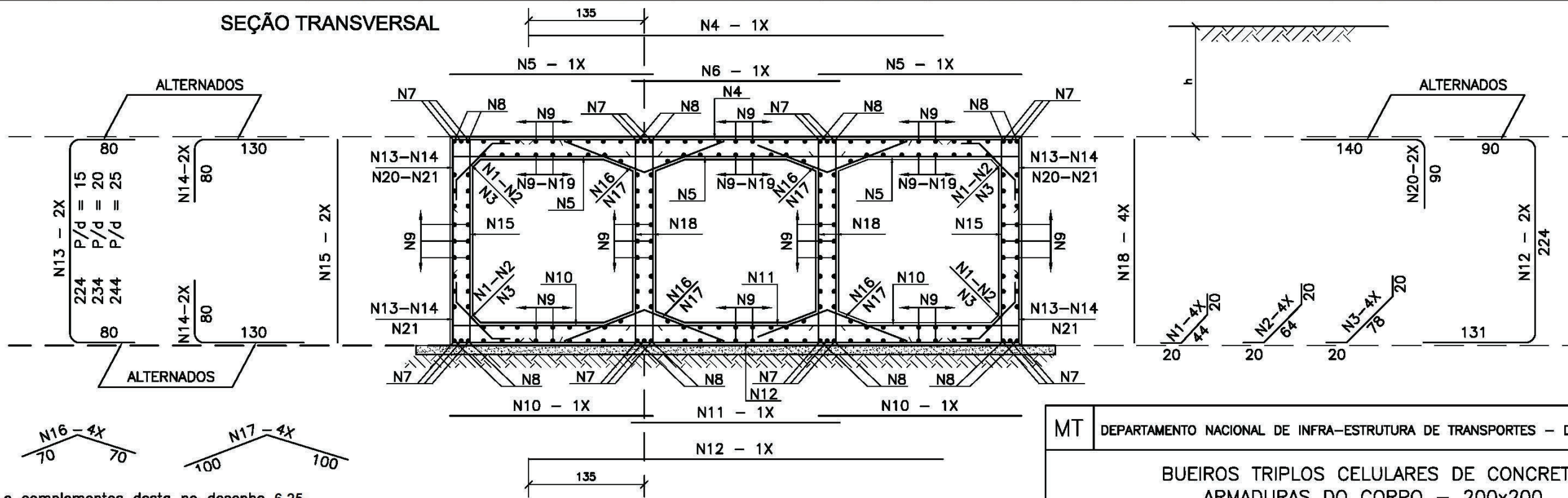
MT	DEPARTAMENTO NACIONAL DE INFRA-ESTRUTURA DE TRANSPORTES - DNIT	IPR
BUEIROS TRIPLOS CELULARES DE CONCRETO ARMADURAS DO CORPO - 150x150		
ALBUM DE PROJETOS-TIPO DE DISPOSITIVOS DE DRENAGEM		DESENHO 6.21

TABELA DAS ARMADURAS (POR METRO DE GALERIA)

0 ≤ h ≤ 100					100 ≤ h ≤ 250					250 ≤ h ≤ 500					500 ≤ h ≤ 750					750 ≤ h ≤ 1000					1000 ≤ h ≤ 1250					1250 ≤ h ≤ 1500				
f _s ≥ 0,12MPa					f _s ≥ 0,14 MPa					f _s ≥ 0,21 MPa					f _s ≥ 0,26 MPa					f _s ≥ 0,33 MPa					f _s ≥ 0,38 MPa					f _s ≥ 0,44 MPa				
Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.
1	6,3	20	84	c/20	1	6,3	20	84	c/20	1	6,3	20	84	c/20	1					1					1					1				
2					2					2					2	6,3	20	104	c/20	2	6,3	20	104	c/20	2					2				
3					3					3					3					3					3	6,3	20	118	c/20	3	6,3	20	118	c/20
4	12,5	7	485	c/15	4	10,0	6	485	c/17	4	10,0	9	485	c/10	4	10,0	8	490	c/12	4	16,0	5	490	c/22	4	16,0	5	495	c/20	4	16,0	6	495	c/17
5	12,5	10	230	c/20	5	10,0	13	230	c/16	5	12,5	15	230	c/13	5	12,5	15	240	c/13	5	16,0	13	240	c/15	5	16,0	13	250	c/16	5	16,0	15	250	c/13
6	12,5	5	230	c/20	6	10,0	5	230	c/20	6	12,5	5	230	c/12	6	12,5	6	240	c/18	6	16,0	5	240	c/20	6	16,0	5	250	c/22	6	16,0	6	250	c/18
7					7					7	12,5	24	corr.		7	12,5	24	corr.		7	16,0	24	corr.		7	16,0	24	corr.		7	16,0	24	corr.	
8	12,5	16	co rr.		8	12,5	16	co rr.		8				8					8					8					8					
9	6,3	153	co rr.	c/20	9	6,3	180	co rr.	c/20	9	6,3	180	corr.	c/20	9	6,3	180	corr.	c/20	9	6,3	180	corr.	c/20	9	6,3	180	corr.	c/20	9	6,3	180	corr.	c/20
10	8,0	20	230	c/10	10	10,0	17	230	c/12	10	12,5	18	230	c/13	10	12,5	18	240	c/11	10	16,0	14	240	c/14	10	16,0	14	250	c/14	10	16,0	18	250	c/11
11	8,0	9	230	c/11	11	10,0	7	230	c/14	11	12,0	8	230	c/10	11	12,5	7	240	c/14	11	16,0	6	240	c/16	11	16,0	6	250	c/18	11	16,0	7	250	c/15
12	8,0	8	485	c/13	12	10,0	6	485	c/17	12	10,0	9	485	c/10	12	10,0	10	490	c/10	12	16,0	5	490	c/20	12	16,0	6	495	c/18	12	16,0	7	495	c/15
13					13	10,0	6	385	c/34	13	10,0	8	385	c/26	13	10,0	7	395	c/30	13	10,0	9	395	c/22	13	10,0	8	405	c/24	13	10,0	10	405	c/20
14					14	10,0	12	210	c/34	14	10,0	15	210	c/26	14	10,0	13	210	c/30	14	10,0	18	210	c/22	14	10,0	17	210	c/24	14	10,0	20	210	c/20
15	6,3	13	225	c/15	15	6,3	13	225	c/15	15	6,3	13	225	c/13	15	10,0	7	235	c/30	15	10,0	7	235	c/30	15	10,0	8	245	c/25	15	10,0	8	245	c/55
16	6,3	20	140	c/20	16	6,3	20	140	c/20	16	6,3	20	140	c/20	16					16					16					16				
17					17					17					17	6,3	20	200	c/20	17	6,3	20	200	c/20	17	6,3	20	200	c/20	17	6,3	20	200	c/20
18	6,3	27	225	c/15	18	6,3	27	225	c/15	18	6,3	27	225	c/15	18	10,0	13	235	c/30	18	10,0	13	235	c/30	18	10,0	13	245	c/30	18	10,0	13	245	c/30
19	8,0	42	corr.	c/13	19					19					19					19					19					19				
20	12,5	10	230	c/20	20					20					20					20					20					20				
21	12,5	10	445	c/20																														

RESUMO			RESUMO			RESUMO			RESUMO			RESUMO			RESUMO			RESUMO		
φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)
6,3	0,245	70,511	6,3	0,245	77,126	6,3	0,245	77,126	6,3	0,245	58,996	6,3	0,245	58,996	6,3	0,245	59,682	6,3	0,245	59,682
8,0	0,395	58,263	10,0	0,617	125,313	10,0	0,617	92,303	10,0	0,617	117,323	10,0	0,617	74,256	10,0	0,617	73,762	10,0	0,617	82,647
12,5	0,963	146,328	12,5	0,963	15,408	12,5	0,963	124,997	12,5	0,963	129,427	16,0	1,578	259,108	16,0	1,578	273,704	16,0	1,578	320,886
TOTAL		275,101	TOTAL		217,847	TOTAL		294,427	TOTAL		305,746	TOTAL		392,360	TOTAL		407,148	TOTAL		463,215

SEÇÃO TRANSVERSAL



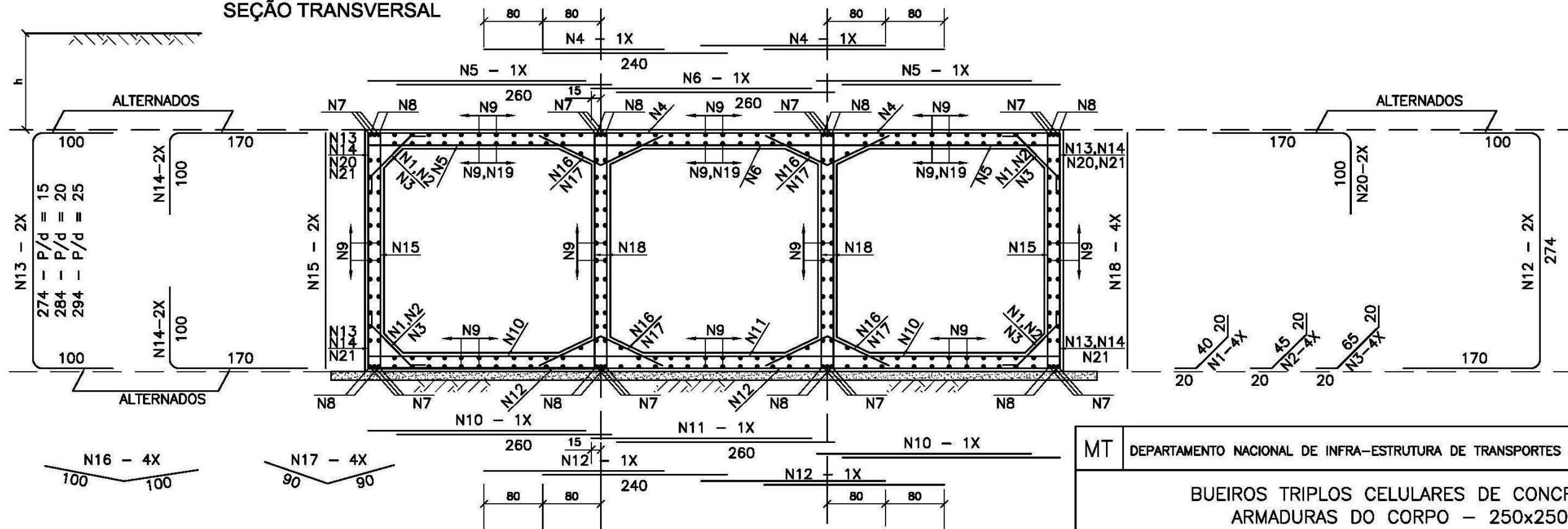
NOTA:
- Ver notas e complementos desta no desenho 6.25

MT	DEPARTAMENTO NACIONAL DE INFRA-ESTRUTURA DE TRANSPORTES - DNIT	IPR
BUEIROS TRIPLOS CELULARES DE CONCRETO ARMADURAS DO CORPO - 200x200		
ALBUM DE PROJETOS-TIPO DE DISPOSITIVOS DE DRENAGEM		DESENHO 6.22

TABELA DAS ARMADURAS (POR METRO DE GALERIA)

0 ≤ h ≤ 100					100 ≤ h ≤ 250					250 ≤ h ≤ 500					500 ≤ h ≤ 750					750 ≤ h ≤ 1000					1000 ≤ h ≤ 1250					1250 ≤ h ≤ 1500									
f _s ≥ 0,21 MPa					f _s ≥ 0,21 MPa					f _s ≥ 0,23 MPa					f _s ≥ 0,28 MPa					f _s ≥ 0,33 MPa					f _s ≥ 0,39 MPa					f _s ≥ 0,45 MPa									
Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.					
1	6,3	20	80	c/20	1	6,3	20	80	c/20	1					1					1					1					1									
2					2					2	6,3	20	85	c/20	2	6,3	20	85	c/20	2					2					2									
3					3					3					3					3	8,0	12	105	c/30	3	8,0	12	105	c/30	3	8,0	12	105	c/30					
4	12,5	20	240	c/10	4	10,0	12	240	c/15	4	10,0	20	240	c/10	4	12,5	18	240	c/11	4	12,5	20	240	c/10	4	16,0	14	240	c/13	4	16,0	18	240	c/11					
5	12,5	14	260	c/14	5	12,5	12	260	c/15	5	12,5	14	260	c/13	5	16,0	14	260	c/14	5	16,0	14	260	c/13	5	16,0	20	260	c/10	5	20,0	14	260	c/14					
6	10,0	6	260	c/17	6	10,0	7	260	c/13	6	10,0	8	260	c/12	6	12,5	7	260	c/13	6	16,0	6	260	c/17	6	16,0	6	260	c/16	6	16,0	7	260	c/13					
7					7					7	12,5	24	corr.		7	16,0	24	corr.		7	16,0	24	corr.		7	16,0	24	corr.		7	16,0	24	corr.						
8	12,5	16	co rr.		8	12,5	16	co rr.		8					8					8					8					8									
9	6,3	204	co rr.	c/20	9	6,3	240	co rr.	c/20	9	6,3	240	corr.	c/20	9	6,3	240	corr.	c/20	9	8,0	160	corr.	c/30	9	8,0	160	corr.	c/30	9	8,0	160	corr.	c/30					
10	10,0	14	260	c/14	10	12,5	12	260	c/15	10	12,5	14	260	c/13	10	16,0	12	260	c/15	10	16,0	14	260	c/14	10	16,0	18	260	c/11	10	20,0	12	260	c/15					
11	10,0	6	260	c/16	11	10,0	9	260	c/11	11	10,0	10	260	c/10	11	12,5	9	260	c/11	11	16,0	6	260	c/15	11	16,0	6	260	c/15	11	16,0	8	260	c/12					
12	10,0	12	240	c/15	12	10,0	12	240	c/15	12	10,0	20	240	c/10	12	12,5	18	240	c/11	12	12,5	20	240	c/10	12	16,0	14	240	c/13	12	16,0	18	240	c/11					
13					13	10,0	8	474	c/26	13	10,0	8	484	c/26	13	12,5	8	484	c/24	13	12,5	8	494	c/28	13	12,5	10	494	c/20	13	16,0	8	494	c/28					
14					14	10,0	16	270	c/26	14	10,0	16	270	c/26	14	12,5	16	270	c/24	14	12,5	16	270	c/28	14	12,5	20	270	c/20	14	16,0	16	270	c/28					
15	6,3	20	275	c/10	15	6,3	16	275	c/12	15	6,3	14	285	c/13	15	6,3	14	285	c/13	15	8,0	12	295	c/15	15	8,0	12	295	c/15	15	8,0	16	295	c/15					
16					16					16	6,3	20	200	c/20	16	6,3	20	200	c/20	16	8,0	12	200	c/30	16	8,0	12	200	c/30	16	8,0	12	200	c/30					
17	6,3	20	180	c/20	17	6,3	20	180	c/20	17					17					17					17					17									
18	6,3	20	275	c/20	18	6,3	20	275	c/20	18	6,3	24	285	c/15	18	6,3	24	285	c/15	18	8,0	20	295	c/20	18	8,0	20	295	c/20	18	8,0	20	295	c/20					
19	10,0	48	corr.	c/15	19					19					19					19					19					19									
20	12,5	12	270	c/16	20					20					20					20					20					20									
21	12,5	12	544	c/16																																			
RESUMO					RESUMO					RESUMO					RESUMO					RESUMO					RESUMO					RESUMO									
φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)			φ	kg/m	PESO (kg)		
6,3	0,245	89,670			6,3	0,245	95,795			6,3	0,245	99,299			6,3	0,245	99,2985			8,0	0,395	114,945			8,0	0,395	114,945			8,0	0,395	114,945			8,0	0,395	119,606		
10,0	0,617	89,095			10,0	0,617	111,257			10,0	0,617	138,652			12,5	0,963	202,153			12,5	0,963	172,107			12,5	0,963	99,574			16,0	1,578	366,285							
12,5	0,963	190,751			12,5	0,963	75,499			12,5	0,963	93,218			16,0	1,578	144,545			16,0	1,578	201,984			16,0	1,578	349,054			20,0	2,466	166,702							
TOTAL		369,516			TOTAL		282,552			TOTAL		331,169			TOTAL		445,996			TOTAL		489,036			TOTAL		563,573			TOTAL		652,593							

SEÇÃO TRANSVERSAL



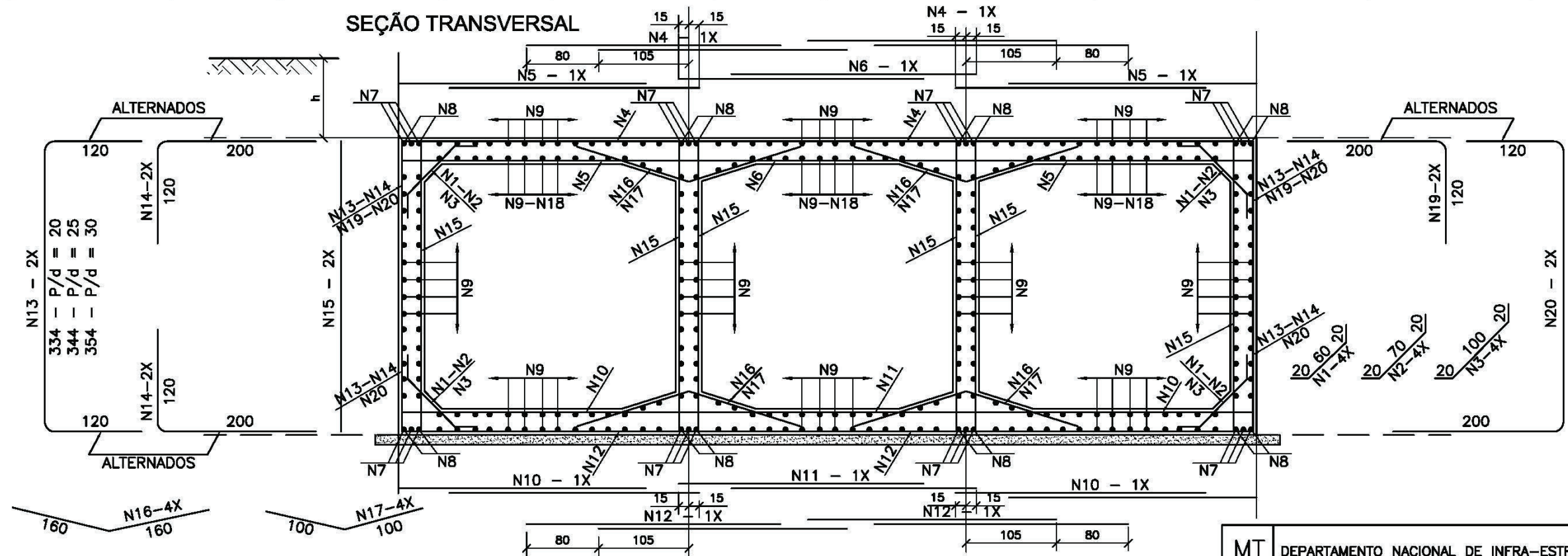
NOTA:
- Ver notas e complementos desta no desenho 6.25

MT	DEPARTAMENTO NACIONAL DE INFRA-ESTRUTURA DE TRANSPORTES - DNIT	IPR
BUEIROS TRIPLOS CELULARES DE CONCRETO ARMADURAS DO CORPO - 250x250		
ALBUM DE PROJETOS-TIPO DE DISPOSITIVOS DE DRENAGEM		DESENHO 6.23

TABELA DAS ARMADURAS (POR METRO DE GALERIA)

0 ≤ h ≤ 100					100 ≤ h ≤ 250					250 ≤ h ≤ 500					500 ≤ h ≤ 750					750 ≤ h ≤ 1000					1000 ≤ h ≤ 1250					1250 ≤ h ≤ 1500									
f _s ≥ 0,21 MPa					f _s ≥ 0,21 MPa					f _s ≥ 0,23 MPa					f _s ≥ 0,29 MPa					f _s ≥ 0,33 MPa					f _s ≥ 0,39 MPa					f _s ≥ 0,45 MPa									
Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.	Nº	φ	Q	COMP.	ESP.					
1	6,3	20	100	c/20	1	6,3	20	100	c/20	1	6,3	20	110	c/20	1	8,0	20	110	c/20	1	8,0	16	140	c/30	1	8,0	16	140	c/30	1	8,0	16	140	c/30					
2					2					2					2					2					2					2									
3					3					3					3	8,0	16	140	c/30	3	8,0	16	140	c/30	3	8,0	16	140	c/30	3	8,0	16	140	c/30					
4	12,5	20	290	c/10	4	12,5	10	290	c/20	4	12,5	14	290	c/13	4	16,0	12	290	c/15	4	12,5	20	290	c/10	4	16,0	16	290	c/12	4	20,0	12	290	c/16					
5	12,5	12	290	c/15	5	12,5	12	290	c/15	5	12,5	16	300	c/12	5	16,0	16	300	c/12	5	16,0	18	300	c/11	5	20,0	14	300	c/14	5	20,0	16	300	c/12					
6	12,5	6	280	c/15	6	8,0	10	280	c/10	6	10,0	10	280	c/10	6	12,5	9	280	c/11	6	12,5	9	280	c/11	6	16,0	7	280	c/14	6	16,0	9	280	c/11					
7					7					7	12,5	24	corr.		7	16,0	24	corr.		7	16,0	24	corr.		7	20,0	24	corr.		7	20,0	24	corr.						
8	12,5	16	co rr.		8	12,5	16	co rr.		8				8					8					8					8										
9	6,3	238	co rr.	c/20	9	6,3	280	co rr.	c/20	9	6,3	280	corr.	c/20	9	8,0	220	corr.	c/25	9	8,0	220	corr.	c/25	9	8,0	220	corr.	c/25	9	8,0	220	corr.	c/25					
10	8,0	20	290	c/10	10	12,5	12	290	c/17	10	12,5	16	300	c/12	10	16,0	12	300	c/15	10	16,0	16	300	c/12	10	20,0	12	300	c/15	10	20,0	14	300	c/13					
11	8,0	10	280	c/10	11	8,0	10	280	c/10	11	10,0	10	280	c/10	11	12,5	9	280	c/11	11	12,5	10	280	c/10	11	16,0	8	280	c/12	11	16,0	10	280	c/10					
12	8,0	20	290	c/10	12	12,5	10	290	c/20	12	12,5	14	290	c/14	12	16,0	12	290	c/15	12	12,5	20	290	c/10	12	16,0	14	290	c/13	12	20,0	12	290	c/16					
13					13	8,0	12	574	c/18	13	10,0	8	584	c/24	13	12,5	8	584	c/24	13	12,5	8	594	c/26	13	16,0	6	594	c/36	13	16,0	8	594	c/28					
14					14	8,0	24	320	c/18	14	10,0	16	320	c/24	14	12,5	16	320	c/24	14	12,5	16	320	c/26	14	16,0	12	320	c/36	14	16,0	16	320	c/28					
15	8,0	30	335	c/20	15	8,0	36	335	c/15	15	10,0	24	345	c/25	15	8,0	36	345	c/15	15	8,0	36	355	c/15	15	8,0	36	355	c/15	15	8,0	36	355	c/15					
16					16					16				16					16					16	8,0	16	320	c/30	16	8,0	16	320	c/30	16	8,0	16	320	c/30	
17	6,3	20	200	c/20	17	6,3	20	200	c/20	17	6,3	20	200	c/20	17	8,0	20	200	c/20	17					17					17					17				
18	8,0	66	co rr.	c/13	18					18				18					18					18					18					18					
19	12,5	10	320	c/20	19					19				19					19					19					19					19					
20	12,5	10	654	c/20	20					20				20					20					20					20					20					

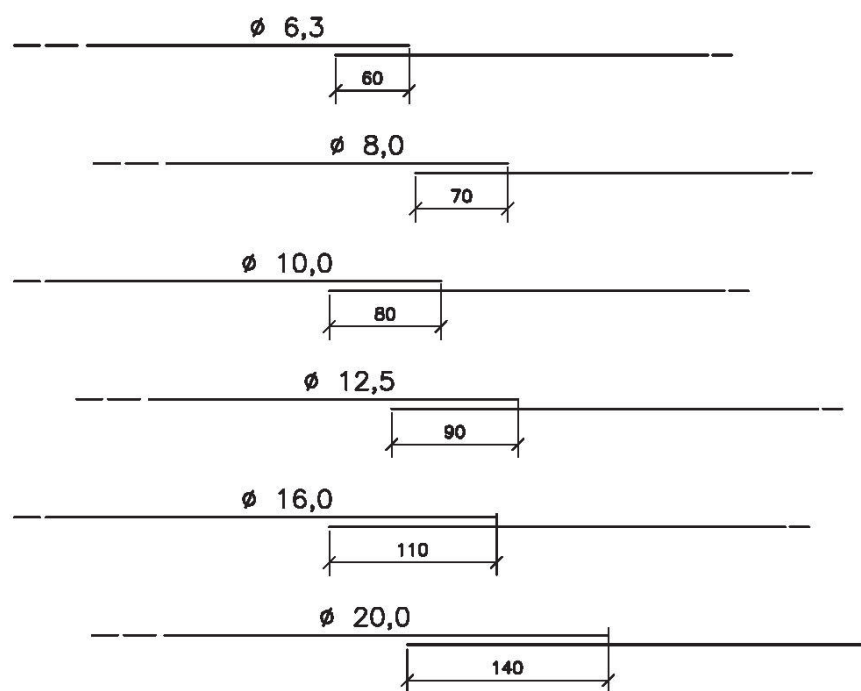
RESUMO			RESUMO			RESUMO			RESUMO			RESUMO			RESUMO			RESUMO					
φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)	φ	kg/m	PESO (kg)			
6,3	0,245	73,010	6,3	0,245	83,300	6,3	0,245	83,790	8,0	0,395	160,449	8,0	0,395	166,453	8,0	0,395	166,453	8,0	0,395	166,453	8,0	0,395	166,453
8,0	0,395	122,648	8,0	0,395	127,301	10,0	0,617	146,056	12,5	0,963	142,832	12,5	0,963	258,007	16,0	1,578	320,397	16,0	1,578	239,730	16,0	1,578	239,730
12,5	0,963	214,749	12,5	0,963	138,287	12,5	0,963	193,756	16,0	1,578	280,253	16,0	1,578	198,828	20,0	2,466	251,532	20,0	2,466	452,758	20,0	2,466	452,758
TOTAL		410,407	TOTAL		348,887	TOTAL		423,602	TOTAL		583,534	TOTAL		623,288	TOTAL		738,382	TOTAL		858,940			



NOTA:
- Ver notas e complementos desta no desenho 6.25

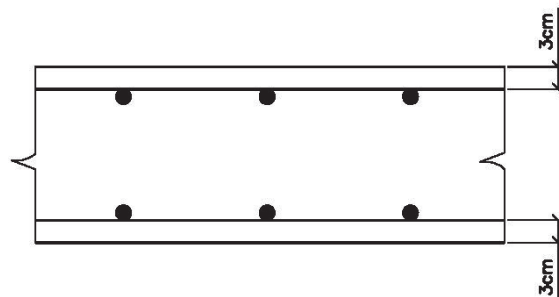
MT	DEPARTAMENTO NACIONAL DE INFRA-ESTRUTURA DE TRANSPORTES - DNIT	IPR
BUEIROS TRIPLOS CELULARES DE CONCRETO ARMADURAS DO CORPO - 300x300		
ALBUM DE PROJETOS-TIPO DE DISPOSITIVOS DE DRENAGEM		DESENHO 6.24

EMENDAS DAS BARRAS CORRIDAS (QUANDO NECESSÁRIO)



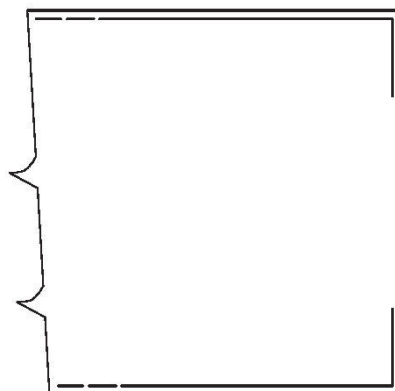
COLOCAR AS EMENDAS EM PONTOS ALTERNADOS

COBRIMENTO



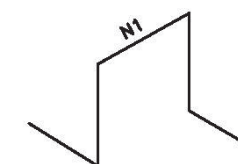
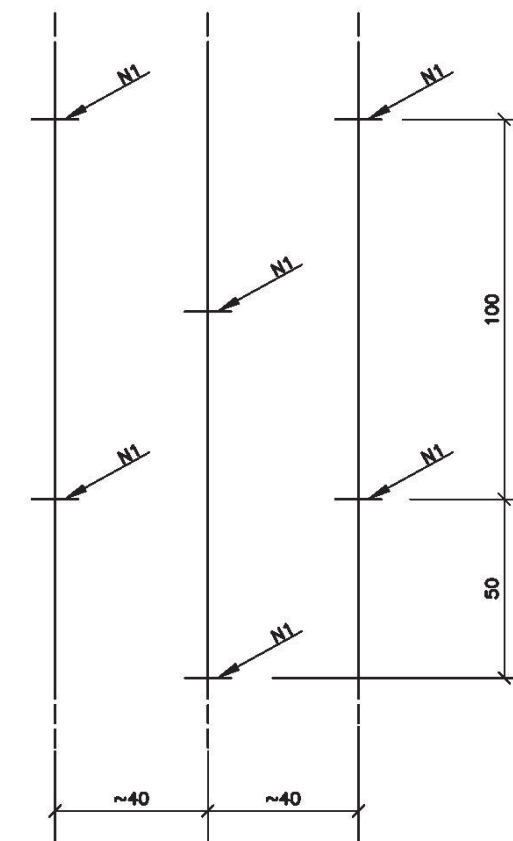
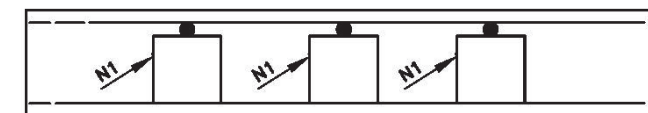
POSIÇÃO DA ARMADURA SUPERIOR E INFERIOR DAS PAREDES NAS EXTREMIDADES

ELEVAÇÃO



SUPOORTE PARA APOIO DA ARMADURA SUPERIOR NAS LAJES

SEÇÃO



ESTA ARMADURA NÃO ESTÁ COMPUTADA NOS RESUMOS DOS AÇOS

NOTAS:

- 1 - Características do aço : aço C.A-50.
- 2 - Armaduras: Medidas em centímetros.
- 3 - Resumos dos aços sem perda.
- 4 - Deverão ser previstos pastilhas.
- 5 - As quantidades e medidas das armaduras de concreto para garantir o cobrimento de 3cm das cabeceiras serão determinadas pelas medidas reais da forma para cada tipo de bueiro.

MT

DEPARTAMENTO NACIONAL DE INFRA-ESTRUTURA DE TRANSPORTES - DNIT

IPR

BUEIROS CELULARES DE CONCRETO
NOTAS E DETALHES COMPLEMENTARES

ALBUM DE PROJETOS-TIPO DE DISPOSITIVOS DE DRENAGEM

DESENHO
6.25