

# **RELATÓRIO DE PESQUISAS**

## CONTAGEM VOLUMÉTRICA CLASSIFICADA EM CRUZAMENTOS (15)

146 (e 147) - R. Silveira Martins X R. Padre Euclides

Ref.: RT-4378-01-200-3J21-146\_A



Responsável Técnico:	CREA N°:

Fábio de Campos Bittencourt

ART 28027230181266891



#### Croquis 146 (e 147) - R. Silveira Martins X R. Padre Euclides





#### Movimentos Contados

2 > 4 R. Silveira Martins em frente

3 > 2 R. Padre Euclides conv à dir. R. Silveira Martins

4 > 2 R. Silveira Martins em frente



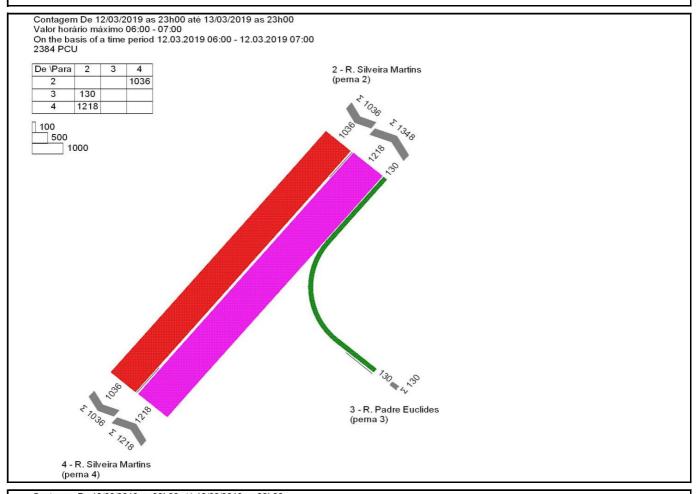


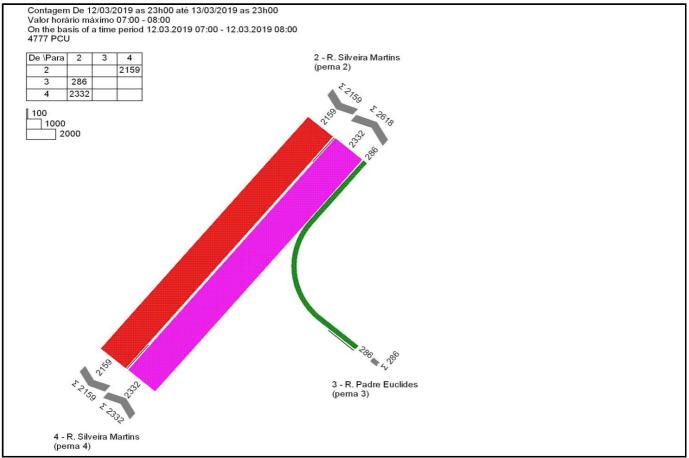




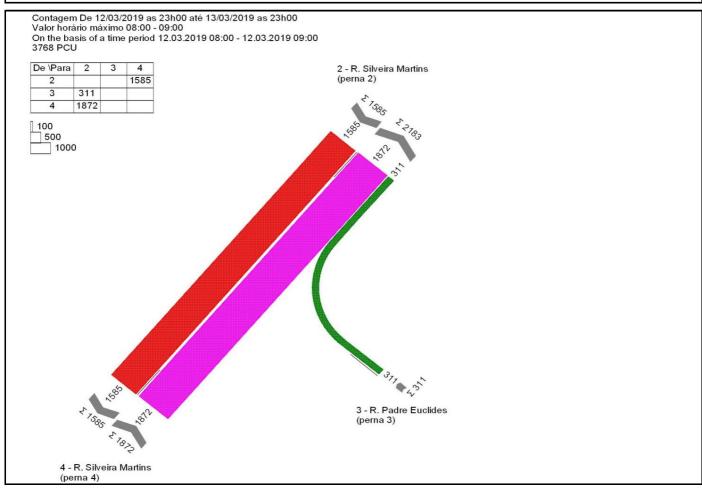
#### Diagrama de Fluxos

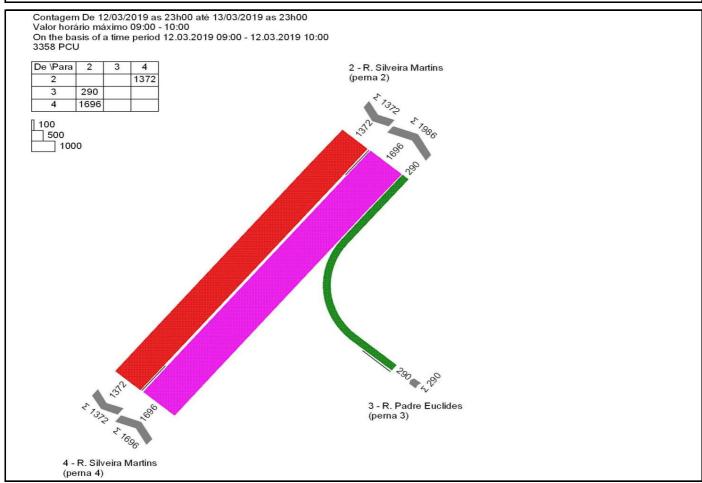
#### 146 (e 147) - R. Silveira Martins X R. Padre Euclides



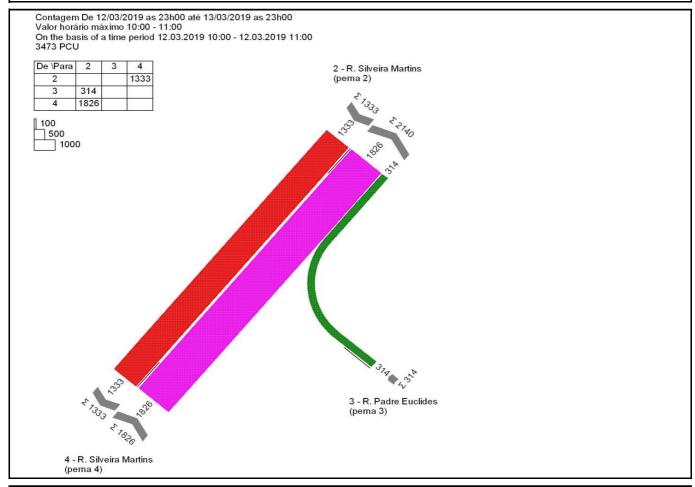


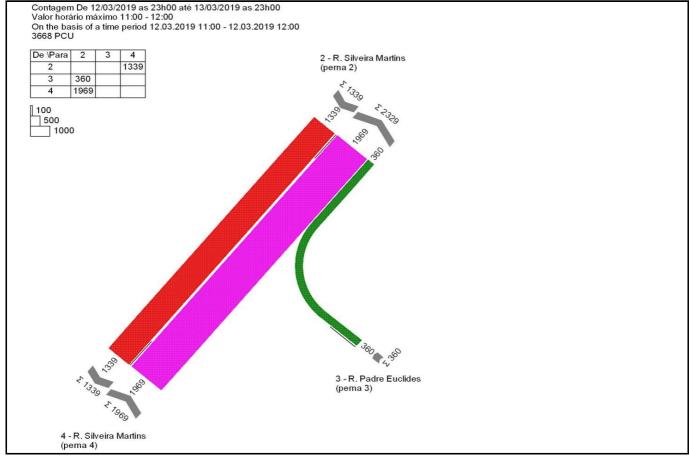




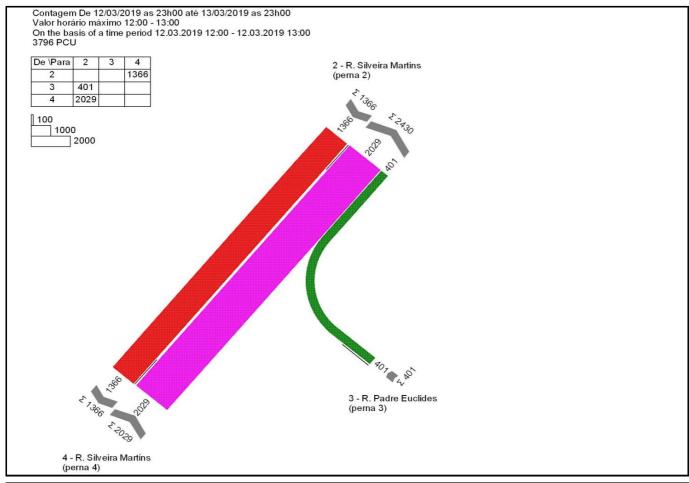


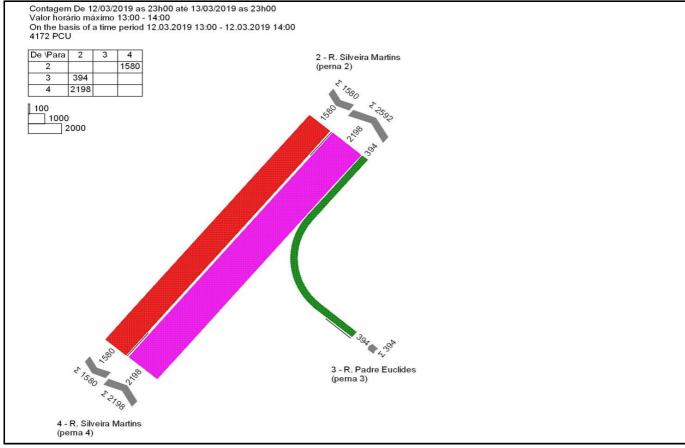




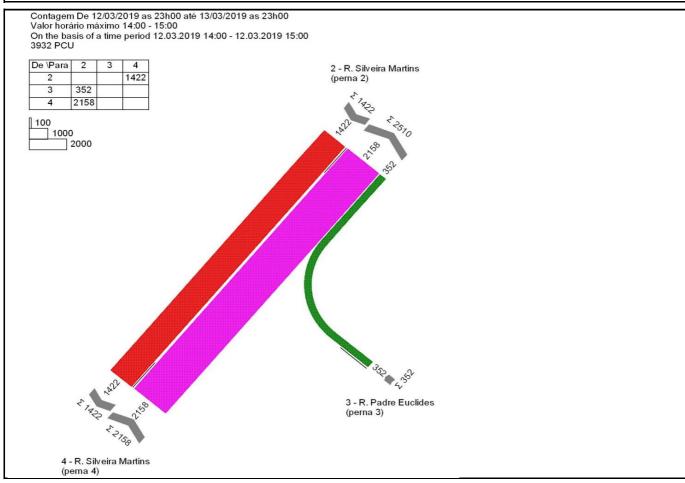


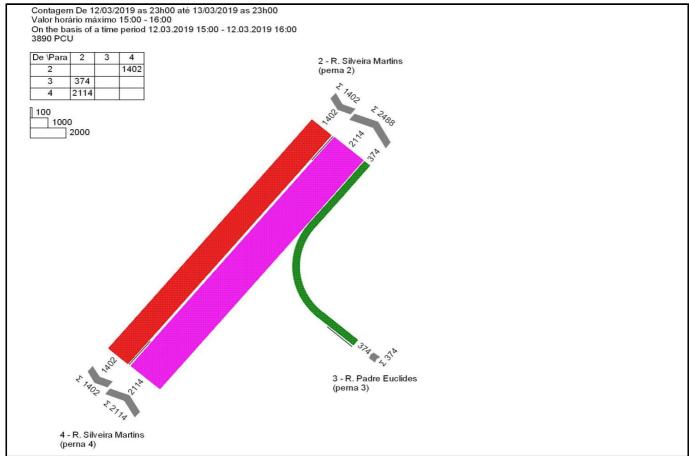




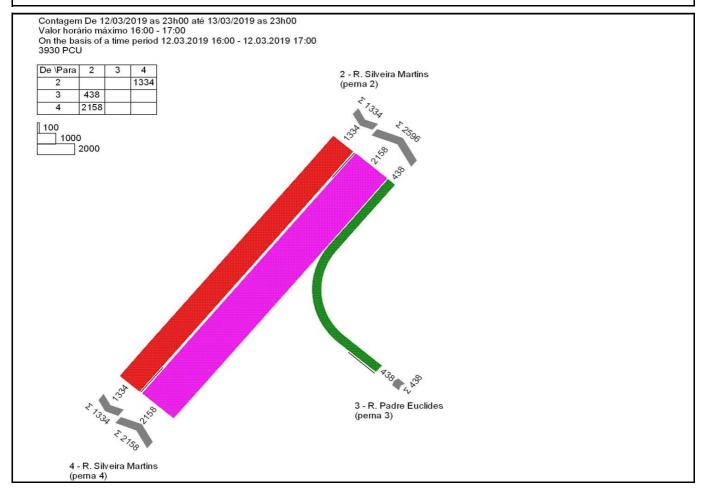


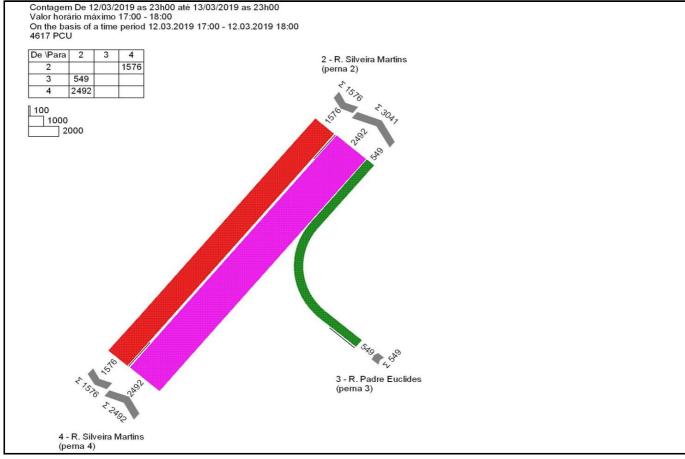




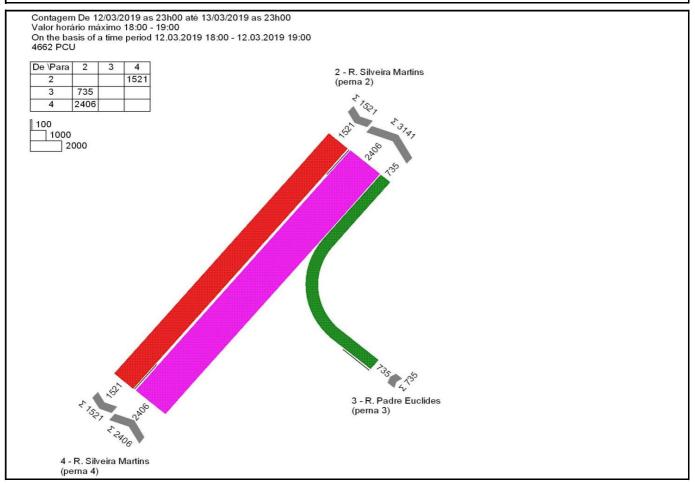


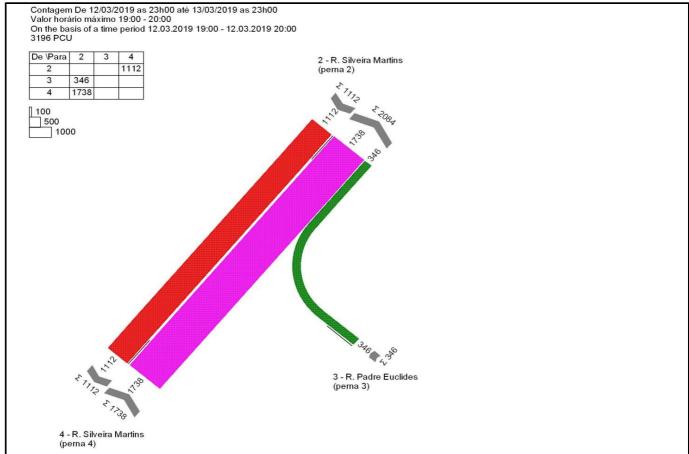




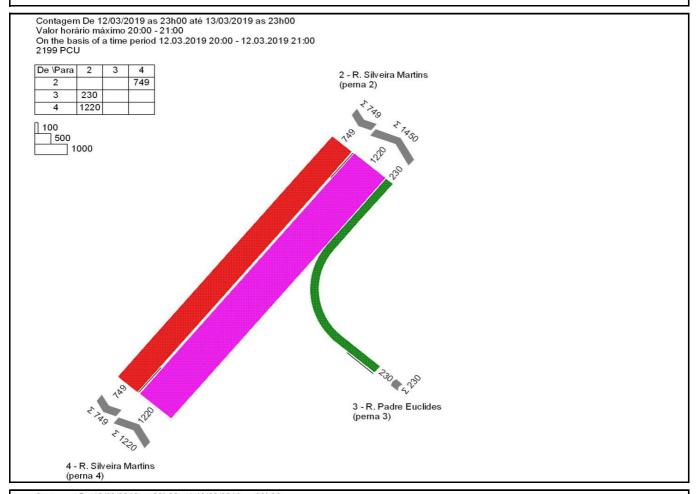


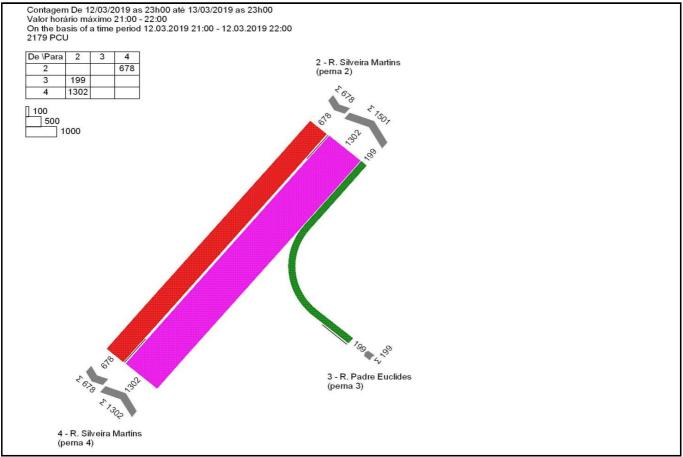




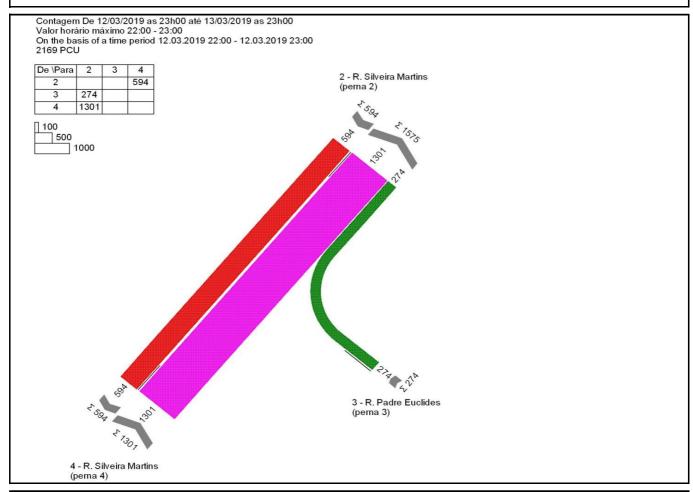


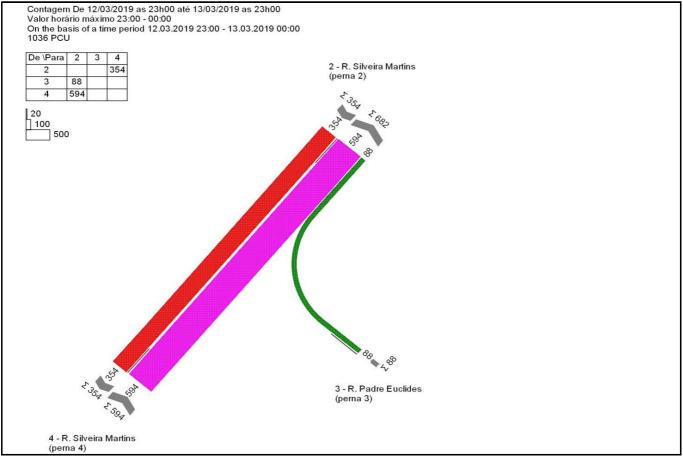














**PCU** 

146 (e 147) - R. Silveira Martins X R. Padre Euclides

Nas tabelas de contagem de fluxo veicular a seguir são apresentadas a classificação pelos tipos de veículos como automóvel (**Car**), moto (**Moto**), ônibus (**Bus**) e caminhão (**Truck**).

Neste mesmo quadro estão representadas as contagens dos movimentos a cada 15 minutos e por hora, onde no final de cada quadro existem duas colunas que são identificadas pelas siglas **VEC** e **PCU**.

A sigla VEC é a somatória direta de todos os veículos contados sem fator de equivalência. A sigla PCU, significa Passenger Car Unit ou mais conhecido como veículos equivalentes, representa a somatória dos veículos com seus respectivos fatores de equivalência, sendo adotados conforme sugestão do manual HCM – High Capacity Manual, os seguintes valores:

- Automóvel = 1,0 veículo equivalente
  - Moto = 0,5 veículo equivalente
- **Caminhão** = 2,5 veículos equivalentes
  - **Ônibus** = 2,0 veículos equivalentes

Por exemplo: Na contagem de 1 automóvel, 1 moto, 1 ônibus e 1 caminhão temos como resultado 4 (quatro) **VEC** e 6 (seis) **PCU**, ou seja, 4 (quatro) veículos contados com a consideração dos fatores de equivalência, resultam em 6 (seis) veículos de passeio.

Obs.: Nas tabelas de fluxos veiculares, quando a somatória não resulta em número inteiro o mesmo será arredondado p/ cima.



#### 2 > 4 R. Silveira Martins em frente



#### Fluxo veicular a cada hora

			Pe	ríodo M	anhã			
Perí	odo	Car	Moto	Truck	Bus		PCU	VEC
de	até	Cai	WIOLO	HUCK	Dus	-	PCU	VEC
0:00	1:00	105	33	3	14	0	157	155
1:00	2:00	58	24	2	1	0	77	85
2:00	3:00	33	8	2	0	0	42	43
3:00	4:00	23	3	3	3	0	38	32
4:00	5:00	47	17	2	4	0	69	70
5:00	6:00	175	94	3	32	0	294	304
6:00	7:00	812	164	8	61	0	1036	1045
7:00	8:00	1698	506	28	69	0	2159	2301
8:00	9:00	1145	398	54	53	0	1585	1650
9:00	10:00	1022	332	39	43	0	1372	1436
10:00	11:00	1005	302	34	46	0	1333	1387
11:00	12:00	1001	346	34	40	0	1339	1421

			P	eríodo T	arde			
Perí	odo	Car	Moto	Truck	Bus		PCU	VEC
de	até	Cai	WIOLO	HUCK	Dus	-	PCU	VEC
12:00	13:00	1019	354	28	50	0	1366	1451
13:00	14:00	1231	445	17	42	0	1580	1735
14:00	15:00	1040	351	49	42	0	1422	1482
15:00	16:00	1081	309	29	47	0	1402	1466
16:00	17:00	1026	282	34	41	0	1334	1383
17:00	18:00	1255	327	24	49	0	1577	1655
18:00	19:00	1178	433	13	47	0	1521	1671
19:00	20:00	902	236	3	42	0	1112	1183
20:00	21:00	585	179	5	31	0	749	800
21:00	22:00	533	163	0	32	0	679	728
22:00	23:00	441	151	2	36	0	594	630
23:00	0:00	249	81	5	26	0	354	361

Ref.: RT-4378-01-200-3J21-146\_A.xlsx



#### 2 > 4 R. Silveira Martins em frente

#### Fluxo veicular a cada 15 minutos

	Período Manhã										
Perí	odo									_	
de	até	Car	Moto	Truck	Bus	-	PC	U	VE	C	
0:00	0:15	31	17	1	5	0	52		54		
0:15	0:30	27	6	2	2	0	39	15	37	155	
0:30	0:45	21	4	0	5	0	33	157	30	15	
0:45	1:00	26	6	0	2	0	33		34		
1:00	1:15	22	9	0	0	0	27		31		
1:15	1:30	16	6	1	0	0	22	_	23	82	
1:30	1:45	12	6	0	0	0	15	11	18	×	
1:45	2:00	8	3	1	1	0	14		13		
2:00	2:15	10	4	0	0	0	12		14		
2:15	2:30	10	1	0	0	0	11	45	11	43	
2:30	2:45	8	3	1	0	0	12	4	12	4	
2:45	3:00	5	0	1	0	0	8		6		
3:00	3:15	8	0	1	2	0	15		11		
3:15	3:30	5	1	1	1	0	10	38	8	32	
3:30	3:45	6	1	0	0	0	7	က	7	က	
3:45	4:00	4	1	1	0	0	7		6		
4:00	4:15	10	2	0	0	0	11		12		
4:15	4:30	6	3	0	1	0	10	69	10	02	
4:30	4:45	18	3	2	1	0	27	9	24	7	
4:45	5:00	13	9	0	2	0	22		24		
5:00	5:15	24	6	1	2	0	34		33		
5:15	5:30	32	11	1	8	0	56	294	52	304	
5:30	5:45	53	42	1	11	0	99	7	107	<u>ة</u>	
5:45	6:00	66	35	0	11	0	106		112		
6:00	6:15	74	14	0	12	0	105		100		
6:15	6:30	132	45	3	10	0	182	1036	190	1045	
6:30	6:45	249	43	3	20	0	318	1	315	ا ۲	
6:45	7:00	357	62	2	19	0	431		440		
7:00	7:15	354	60	0	21	0	426		435		
7:15	7:30	396	99	6	17	0	495	2159	518	2301	
7:30	7:45	460	146	9	15	0	586	2	630	23	
7:45	8:00	488	201	13	16	0	653		718		
8:00	8:15	311	118	14	12	0	429		455		
8:15	8:30	286	101	15	17	0	408	1585	419	1650	
8:30	8:45	279	82	15	12	0	382	Ť	388	-	
8:45	9:00	269	97	10	12	0	367		388		
9:00	9:15	246	82	13	10	0	340		351		
9:15	9:30	271	79	12	9	0	359	1372	371	1436	
9:30	9:45	251	80	8	13	0	337	<u> </u>	352	_	
9:45	10:00	254	91	6	11	0	337		362		
10:00	10:15	257	72	8	9	0	331		346		
10:15	10:30	263	64	7	14	0	341	1333	348	1387	
10:30	10:45	255	88	5	10	0	332	_	358	\ \ \	
10:45	11:00	230	78	14	13	0	330		335		
11:00	11:15	244	86	10	9	0	330		349		
11:15	11:30	244	75	10	8	0	323	1339	337	1421	
11:30	11:45	261	96	5	13	0	348	_	375	_	
11:45	12:00	252	89	9	10	0	339		360		

				Período T	arde					
Perí	odo	Car	Moto	Truck	Bus		PC	·11	VE	·C
de	até	Cai	WIOLO	Truck	Dus	_	-	.0	VE	
12:00	12:15	226	75	5	11	0	298		317	
12:15	12:30	263	95	9	11	0	355	1366	378	21
12:30	12:45	264	108	5	14	0	359	13	391	1451
12:45	13:00	266	76	9	14	0	355		365	
13:00	13:15	313	116	3	11	0	401		443	
13:15	13:30	290	102	3	7	0	363	8	402	32
13:30	13:45	337	122	4	13	0	434	1580	476	1735
13:45	14:00	291	105	7	11	0	383		414	
14:00	14:15	269	86	10	10	0	357		375	
14:15	14:30	277	110	14	10	0	387	2	411	22
14:30	14:45	256	80	11	12	0	348	1422	359	1482
14:45	15:00	238	75	14	10	0	331		337	
15:00	15:15	274	78	7	10	0	351		369	
15:15	15:30	245	84	7	9	0	323	2	345	99
15:30	15:45	286	79	6	14	0	369	1402	385	1466
15:45	16:00	276	68	9	14	0	361		367	
16:00	16:15	279	68	9	6	0	348		362	
16:15	16:30	229	70	7	8	0	298	4	314	23
16:30	16:45	255	74	8	16	0	344	1334	353	1383
16:45	17:00	263	70	10	11	0	345		354	
17:00	17:15	321	88	7	12	0	407		428	
17:15	17:30	314	92	7	13	0	404	_	426	55
17:30	17:45	341	69	6	12	0	415	1577	428	1655
17:45	18:00	279	78	4	12	0	352		373	
18:00	18:15	313	138	5	13	0	421		469	
18:15	18:30	287	97	5	12	0	372	Σ.	401	<u>-</u>
18:30	18:45	312	97	1	15	0	393	1521	425	167
18:45	19:00	266	101	2	7	0	336		376	
19:00	19:15	273	97	1	14	0	352		385	
19:15	19:30	231	68	0	10	0	285	7	309	33
19:30	19:45	217	47	1	14	0	271	1112	279	1183
19:45	20:00	181	24	1	4	0	204		210	
20:00	20:15	157	56	1	8	0	204		222	
20:15	20:30	159	33	1	6	0	190	6	199	0
20:30	20:45	130	44	2	10	0	177	749	186	800
20:45	21:00	139	46	1	7	0	179		193	
21:00	21:15	138	31	0	7	0	168		176	
21:15	21:30	149	36	0	6	0	179	6	191	8
21:30	21:45	122	47	0	11	0	168	629	180	728
21:45	22:00	124	49	0	8	0	165		181	
22:00	22:15	156	50	0	4	0	189		210	
22:15	22:30	119	46	1	10	0	165	4	176	0
22:30	22:45	81	38	1	10	0	123	594	130	630
22:45	23:00	85	17	0	12	0	118		114	
23:00	23:15	82	30	0	6	0	109		118	
23:15	23:30	66	21	3	6	0	96	4	96	<u></u>
23:30	23:45	54	15	2	5	0	77	354	76	361
23:45	0:00	47	15	0	9	0	73		71	



#### 3 > 2 R. Padre Euclides conv à dir. R. Silveira Martins



#### Fluxo veicular a cada hora

			Pe	ríodo M	anhã			
Perí	odo	Car	Moto	Truck	Bus	_	PCU	VEC
de	até	Cai	WIOLO	HUGK	Dus	_	1 00	VLC
0:00	1:00	31	8	0	0	0	35	39
1:00	2:00	10	6	0	0	0	13	16
2:00	3:00	11	2	0	0	0	12	13
3:00	4:00	9	2	2	1	0	17	14
4:00	5:00	7	2	0	0	0	8	9
5:00	6:00	19	5	1	0	0	24	25
6:00	7:00	114	26	1	0	0	130	141
7:00	8:00	260	38	2	1	0	286	301
8:00	9:00	271	60	4	0	0	311	335
9:00	10:00	239	57	8	1	0	290	305
10:00	11:00	253	86	7	0	0	314	346
11:00	12:00	291	113	5	0	0	360	409

			P	eríodo T	arde			
Perí	odo	Car	Moto	Truck	Bus		PCU	VEC
de	até	Cai	WIOLO	HUCK	Dus	-	PCU	VEC
12:00	13:00	337	103	5	0	0	401	445
13:00	14:00	325	97	8	0	0	394	430
14:00	15:00	279	92	11	0	0	353	382
15:00	16:00	310	88	8	0	0	374	406
16:00	17:00	368	107	6	1	0	439	482
17:00	18:00	458	152	6	0	0	549	616
18:00	19:00	634	189	1	2	0	735	826
19:00	20:00	304	72	0	3	0	346	379
20:00	21:00	196	62	1	0	0	230	259
21:00	22:00	166	62	0	1	0	199	229
22:00	23:00	212	119	0	1	0	274	332
23:00	0:00	73	30	0	0	0	88	103

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#### 3 > 2 R. Padre Euclides conv à dir. R. Silveira Martins

#### Fluxo veicular a cada 15 minutos

Período Manhã										
Perí	odo	Car	Moto	Truck	Bus		PC	11	VE	
de	até	Cai	WIOLO	HUCK	Dus	_			٧.	
0:00	0:15	12	4	0	0	0	14		16	
0:15	0:30	7	1	0	0	0	8	35	8	39
0:30	0:45	9	3	0	0	0	11	က	12	ိ
0:45	1:00	3	0	0	0	0	3		3	
1:00	1:15	3	1	0	0	0	4		4	
1:15	1:30	4	3	0	0	0	6	က	7	9
1:30	1:45	3	2	0	0	0	4	<del>-</del>	5	-
1:45	2:00	0	0	0	0	0	0		0	
2:00	2:15	6	0	0	0	0	6		6	
2:15	2:30	3	1	0	0	0	4	12	4	13
2:30	2:45	1	1	0	0	0	2	<del>-</del>	2	+
2:45	3:00	1	0	0	0	0	1		1	
3:00	3:15	4	2	1	1	0	10		8	
3:15	3:30	2	0	0	0	0	2	_	2	4
3:30	3:45	1	0	1	0	0	4	17	2	14
3:45	4:00	2	0	0	0	0	2		2	
4:00	4:15	2	0	0	0	0	2		2	
4:15	4:30	0	1	0	0	0	1		1	
4:30	4:45	4	0	0	0	0	4	∞	4	6
4:45	5:00	1	1	0	0	0	2		2	
5:00	5:15	3	1	0	0	0	4		4	
5:15	5:30	2	0	0	0	0	2		2	ا ۱
5:30	5:45	8	2	1	0	0	12	24	11	25
5:45	6:00	6	2	0	0	0	7		8	
6:00	6:15	12	4	0	0	0	14		16	
6:15	6:30	19	8	1	0	0	26		28	_
6:30	6:45	24	6	0	0	0	27	130	30	141
6:45	7:00	59	8	0	0	0	63		67	
7:00	7:15	64	11	1	0	0	72		76	
7:15	7:30	67	12	0	0	0	73	မွ	79	_
7:30	7:45	75	5	1	1	0	82	286	82	301
7:45	8:00	54	10	0	0	0	59		64	
8:00	8:15	63	22	0	0	0	74		85	
8:15	8:30	54	13	2	0	0	66	_	69	ا يبا
8:30	8:45	71	13	2	0	0	83	311	86	335
8:45	9:00	83	12	0	0	0	89		95	
9:00	9:15	46	11	2	0	0	57		59	
9:15	9:30	60	17	2	0	0	74	•	79	2
9:30	9:45	60	9	3	0	0	72	290	72	305
9:45	10:00	73	20	1	1	0	88		95	
10:00	10:15	59	24	0	0	0	71		83	
10:15	10:30	58	21	3	0	0	76	4	82	၂
10:30	10:45	67	19	3	0	0	84	314	89	346
10:45	11:00	69	22	1	0	0	83		92	
11:00	11:15	67	32	1	0	0	86		100	
11:15	11:30	65	23	0	0	0	77		88	ြ ၂
11:30	11:45	85	33	0	0	0	102	360	118	409
11:45	12:00	74	25	4	0	0	97		103	
				•			· ·		. 50	

Período Tarde										
Perí de	odo até	Car	Moto	Truck	Bus	-	PC	U	VE	:C
12:00	12:15	90	29	2	0	0	110		121	
12:15	12:30	87	23	1	0	0	101	_	111	ιĊ
12:30	12:45	80	26	0	0	0	93	401	106	445
12:45	13:00	80	25	2	0	0	98		107	
13:00	13:15	91	30	1	0	0	109		122	
13:15	13:30	80	29	3	0	0	102	4	112	0
13:30	13:45	63	16	1	0	0	74	394	80	430
13:45	14:00	91	22	3	0	0	110		116	
14:00	14:15	54	26	2	0	0	72		82	
14:15	14:30	72	23	6	0	0	99	353	101	382
14:30	14:45	77	20	1	0	0	90	<u>بي</u>	98	38
14:45	15:00	76	23	2	0	0	93		101	
15:00	15:15	81	21	4	0	0	102		106	
15:15	15:30	77	29	0	0	0	92	374	106	406
15:30	15:45	82	26	3	0	0	103	ю. П	111	4
15:45	16:00	70	12	1	0	0	79		83	
16:00	16:15	83	23	1	1	0	99		108	
16:15	16:30	84	28	2	0	0	103	439	114	482
16:30	16:45	88	34	3	0	0	113	4	125	4
16:45	17:00	113	22	0	0	0	124		135	
17:00	17:15	101	30	1	0	0	119		132	
17:15	17:30	102	41	3	0	0	130	549	146	16
17:30	17:45	131	41	1	0	0	154	2	173	61
17:45	18:00	124	40	1	0	0	147		165	
18:00	18:15	157	80	1	0	0	200		238	
18:15	18:30	164	53	0	0	0	191	735	217	826
18:30	18:45	159	39	0	0	0	179	7	198	8,
18:45	19:00	154	17	0	2	0	167		173	
19:00	19:15	101	27	0	3	0	121		131	
19:15	19:30	88	16	0	0	0	96	346	104	379
19:30	19:45	62	19	0	0	0	72		81	
19:45	20:00	53	10	0	0	0	58		63	
20:00	20:15	52	16	0	0	0	60		68	
20:15	20:30	53	14	0	0	0	60	230	67	259
20:30	20:45	42	15	1	0	0	50		57 67	
20:45		49 51	17 17	0	0	0	60 60		67 68	
21:00	21:15 21:30	46	13	0	0	0	53	_	59	
21:15	21:30	39	13	0	1	0	48	199	53	229
21:45	22:00	30	19	0	0	0	40		49	
22:00	22:15	50	22	0	0	0	61		72	
22:15	22:30	64	41	0	0	0	85		105	ا _ ا
22:30	22:45	66	42	0	0	0	87	274	108	332
22:45	23:00	32	14	0	1	0	41		47	
23:00	23:15	29	8	0	0	0	33		37	
23:15	23:30	23	4	0	0	0	25		27	_
23:30	23:45	17	8	0	0	0	21	88	25	103
23:45	0:00	4	10	0	0	0	9		14	
20.40	0.00		10	U	U		J		'-	



#### 4 > 2 R. Silveira Martins em frente



#### Fluxo veicular a cada hora

			Pe	ríodo M	anhã			
Perí	odo	Ca.	Mata	Truck	Bus		PCU	VEC
de	até	Car	Moto	Truck	Bus	-	PCU	VEC
0:00	1:00	233	151	3	14	0	344	401
1:00	2:00	126	74	2	1	0	170	203
2:00	3:00	60	34	4	3	0	93	101
3:00	4:00	50	11	2	2	0	65	65
4:00	5:00	54	11	3	7	0	81	75
5:00	6:00	201	102	11	35	0	350	349
6:00	7:00	954	228	9	64	0	1219	1255
7:00	8:00	1875	549	28	56	0	2332	2508
8:00	9:00	1464	441	32	54	0	1873	1991
9:00	10:00	1252	409	59	46	0	1696	1766
10:00	11:00	1347	478	56	50	0	1826	1931
11:00	12:00	1438	543	67	46	0	1969	2094

			P	eríodo T	arde			
Perí	odo	Car	Moto	Truck	Bus	_	PCU	VEC
de	até	Cai	WIOLO	HUCK	Dus		1 00	VLC
12:00	13:00	1501	591	53	50	0	2029	2195
13:00	14:00	1721	638	28	44	0	2198	2431
14:00	15:00	1625	631	51	45	0	2158	2352
15:00	16:00	1560	568	64	55	0	2114	2247
16:00	17:00	1581	636	54	62	0	2158	2333
17:00	18:00	1886	688	35	87	0	2492	2696
18:00	19:00	1780	888	15	72	0	2406	2755
19:00	20:00	1310	564	15	54	0	1738	1943
20:00	21:00	946	393	7	30	0	1220	1376
21:00	22:00	1029	368	9	33	0	1302	1439
22:00	23:00	940	545	5	38	0	1301	1528
23:00	0:00	406	247	2	30	0	595	685

Ref.: RT-4378-01-200-3J21-146\_A.xlsx



#### 4 > 2 R. Silveira Martins em frente

### Fluxo veicular a cada 15 minutos

				Período	Manhã					
	odo	Car	Moto	Truck	Bus		PC	:U	VE	c
de	até									
0:00	0:15	73	50	1	11	0	123		135	
0:15	0:30	59	47	1	2	0	89	344	109	401
0:30	0:45	55	31	0	0	0	71	က	86	4
0:45	1:00	46	23	1	1	0	62		71	
1:00	1:15	47	25	0	1	0	62		73	
1:15	1:30	30	18	0	0	0	39	170	48	203
1:30	1:45	31	21	0	0	0	42	_	52	2
1:45	2:00	18	10	2	0	0	28		30	
2:00	2:15	19	6	3	0	0	30		28	
2:15	2:30	16	9	1	1	0	25	93	27	5
2:30	2:45	11	12	0	1	0	19	တ	24	101
2:45	3:00	14	7	0	1	0	20		22	
3:00	3:15	13	3	1	1	0	19		18	
3:15	3:30	9	4	0	0	0	11	65	13	65
3:30	3:45	16	0	0	0	0	16	ý	16	ڧ
3:45	4:00	12	4	1	1	0	19		18	
4:00	4:15	9	3	1	1	0	15		14	
4:15	4:30	12	3	0	0	0	14	_	15	ا ي
4:30	4:45	16	3	2	1	0	25	20	22	75
4:45	5:00	17	2	0	5	0	28		24	
5:00	5:15	20	9	4	7	0	49		40	
5:15	5:30	33	21	2	7	0	63	0	63	6
5:30	5:45	58	30	3	10	0	101	350	101	349
5:45	6:00	90	42	2	11	0	138		145	
6:00	6:15	103	22	2	18	0	155		145	
6:15	6:30	123	45	1	18	0	184	<u>6</u>	187	22
6:30	6:45	276	61	2	16	0	344	1219	355	1255
6:45	7:00	452	100	4	12	0	536		568	
7:00	7:15	492	89	6	17	0	586		604	
7:15	7:30	470	112	7	14	0	572	22	603	8
7:30	7:45	420	146	7	13	0	537	2332	586	2508
7:45	8:00	493	202	8	12	0	638		715	
8:00	8:15	433	135	11	17	0	562		596	
8:15	8:30	346	102	11	15	0	455	က္	474	<u>-</u>
8:30	8:45	367	97	5	11	0	450	1873	480	1991
8:45	9:00	318	107	5	11	0	406		441	
9:00	9:15	275	91	15	14	0	386		395	
9:15	9:30	300	102	16	11	0	413	9	429	99
9:30	9:45	313	112	15	11	0	429	1696	451	1766
9:45	10:00	364	104	13	10	0	469		491	
10:00	10:15	329	119	14	14	0	452		476	
10:15	10:30	355	103	11	10	0	454	9	479	<u>-</u>
10:30	10:45	320	116	21	12	0	455	1826	469	1931
10:45	11:00	343	140	10	14	0	466		507	
11:00	11:15	364	112	19	14	0	496		509	
11:15	11:30	352	119	17	14	0	482	6	502	4
11:30	11:45	387	161	16	11	0	530	1969	575	2094
11:45	12:00	335	151	15	7	0	462		508	
+3	.2.00	555	101	10	_ ′		-102		500	

Período Tarde										
Peri	odo	Car Moto Truck Bus -				PCU		VEC		
de	até	Oai	Wioto	Huck	Dus		. 55			
12:00	12:15	380	157	19	18	0	542		574	
12:15	12:30	354	139	10	8	0	465	2029	511	2195
12:30	12:45	384	137	11	13	0	506		545	
12:45	13:00	383	158	13	11	0	517		565	
13:00	13:15	509	144	10	13	0	632	2198	676	2431
13:15	13:30	392	165	5	11	0	509		573	
13:30	13:45	402	163	7	10	0	521		582	
13:45	14:00	418	166	6	10	0	536		600	
14:00	14:15	414	146	14	14	0	550	2158	588	2352
14:15	14:30	409	162	13	10	0	543		594	
14:30	14:45	431	175	11	10	0	566		627	
14:45	15:00	371	148	13	11	0	500		543	
15:00	15:15	325	132	16	19	0	469		492	2247
15:15	15:30	417	162	12	9	0	546	2158 2114	600	
15:30	15:45	430	136	18	14	0	571		598	
15:45	16:00	388	138	18	13	0	528		557	
16:00	16:15	395	161	11	12	0	527		579	2333
16:15	16:30	379	145	19	18	0	535		561	
16:30	16:45	399	177	18	19	0	571		613	
16:45	17:00	408	153	6	13	0	526		580	
17:00	17:15	381	169	7	24	0	531	2492	581	2696
17:15	17:30	537	182	15	23	0	712		757	
17:30	17:45	478	156	9	21	0	621		664	
17:45	18:00	490	181	4	19	0	629		694	
18:00	18:15	458	272	6	19	0	647	2406	755	2755
18:15	18:30	429	233	2	19	0	589		683	
18:30	18:45	457	178	3	24	0	602		662	
18:45	19:00	436	205	4	10	0	569		655	
19:00	19:15	389	171	8	22	0	539	1738	590	1943
19:15	19:30	325	167	5	11	0	443		508	
19:30	19:45	309	121	1	12	0	396		443	
19:45	20:00	287	105	1	9	0	360		402	
20:00	20:15	254	94	0	9	0	319		357	
20:15	20:30	237	118	3	7	0	318	1220	365	1376
20:30	20:45	244	75	3	8	0	305		330	
20:45	21:00	211	106	1	6	0	279		324	
21:00	21:15	280	80	2	15	0	355	1302	377	
21:15	21:30	261	111	1	7	0	333		380	65
21:30	21:45	222	72	3	6	0	278		303	1439
21:45	22:00	266	105	3	5	0	336		379	
22:00	22:15	296	141	2	10	0	392		449	
22:15	22:30	260	181	2	7	0	370	Σ	450	<u>∞</u>
22:30	22:45	216	132	1	14	0	313	1301	363	1528
22:45	23:00	168	91	0	7	0	228		266	
23:00	23:15	128	69	0	11	0	185		208	
23:15	23:30	108	64	1	3	0	149	595	176	685
23:30	23:45	86	64	0	12	0	142		162	
23:45	0:00	84	50	1	4	0	120		139	
20.40	0.00	l <sup>04</sup>	50	'	7	v	120		100	