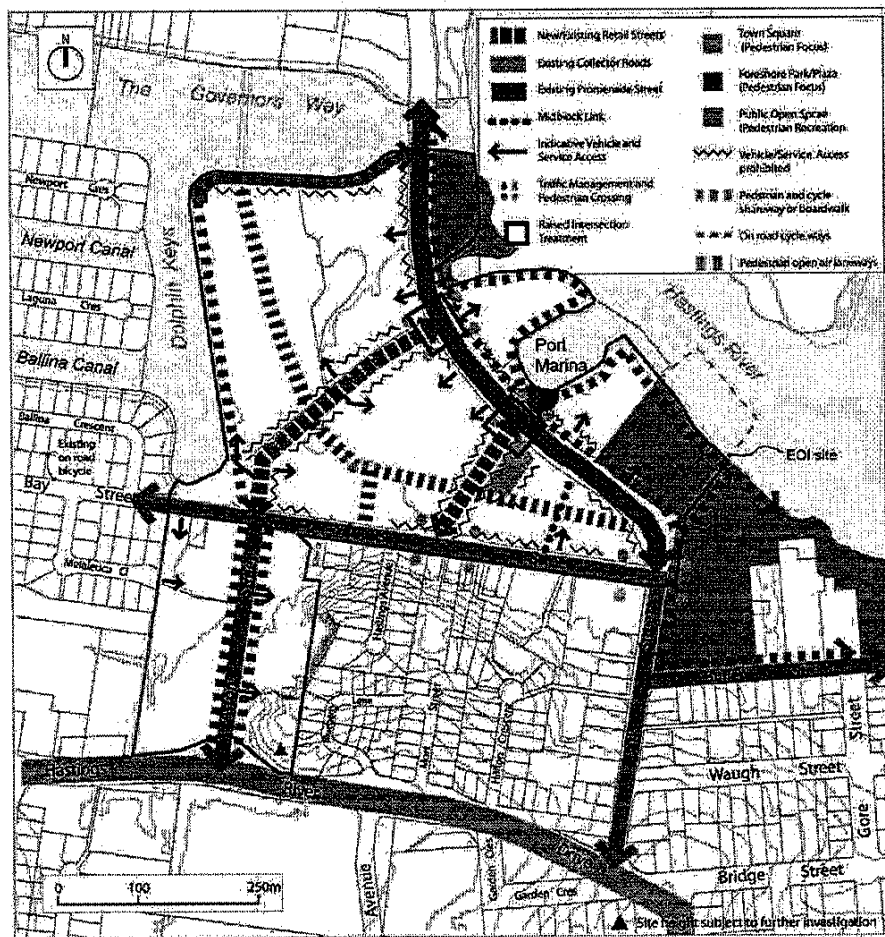


Figure 18. Settlement City Precinct Structure Plan - Street Hierarchy and Movement





4. PARKING

An indication of the appropriate parking provision for the expanded and partially redeveloped centre is provided by the criteria contained in Council's DCP № 18 as follows:

Commercial premises/shops – 1 space per 30m² GLFA

Stage 1 of the expanded centre will contain cinema and bowling elements, however the patron demands for these elements:

- * will have peaks which do not correspond with the dominant peak retail demands
- * will have substantial elements of patronage which are ancillary to patronage of the retail and restaurant/food court elements
- * will have significant elements of teenage patronage with heightened travel modes towards public transport and walking/cycling.

It is apparent that the parking activity related to the cinema and bowling elements during the peak retail times will essentially not be 'additional'. The proposed total retail/commercial floorspace for Stage 1 is 34,512m² GLFA and application of Council's code of 1 space per 30m² indicates a requirement of 1,151 spaces for this floorspace while 129 spaces are currently designated for the club (ie total 1,280 spaces).

It is proposed to provide 1,396 spaces in the retail carpark areas and retain the 129 club spaces giving a total provision of 1,525 spaces. This indicates an appropriate contingent 'buffer' provision of +20% to accommodate any super peak seasonal demands.

Some 30 spaces will be designated and suitable for disabled drivers (ie 2% in compliance with the DCP specification) while provision will be made for 100 bicycle spaces (staff and visitors) and 10 motor cycle spaces.

It is apparent that the proposed parking provision will be suitable and appropriate for the proposed Stage 1 development scheme. Whilst the RTA Development Guidelines also provide criteria in relation to carparking, however this criteria is outdated and not relevant to contemporary circumstances due to the reasons outlined in Section 5.

5. TRAFFIC

5.1 VEHICLES

Data providing an indication of the traffic generation of a shopping centre, in the context of a major regional town centre, is provided in the RTA study³. Aggregation of this data has been made to provide a typical peak traffic generation rate as follows:

Centre	Retail m ²	Parking Provision	vtpH Thursday/Friday	
			IN	OUT
Queanbeyan	19880	550	587	499
Gosford	15075	700	322	333
Albury	13303	780	379	457
Dubbo	6231	260	175	200
Batemans Bay	5888	200	189	193
Nowra	5671	219	184	196
Total	66048m²		3714 (vtpH)	

The aggregation reveals a generation rate of 5.6 vtpH per 100m² GLA on Thursday/Friday afternoon. The recent traffic surveys at the Settlement City site (Figure 5) reveal the following peak access movements for the shopping centre, club and service station:

	IN	OUT	Total
Thursday PM	635	626	1261
Saturday MD	569	680	1249

It is assessed that the club generates some 150 vtpH at these times (75 IN/75 OUT) whilst the service station generates some 50 vtpH externally indicating a traffic generation rate for the retail centre of 19,241m² of 5.5 vtpH per 100m² GLFA.

³

Landuse Traffic Generation Surveys Retail Centre
Arup Transportation Planning (for RTA)

Reference to the RTA Development Guidelines indicates that based on the centre study undertaken in 1990 a centre of < 20,000m² would generate peak movements as follows:

Thursday PM	7.6 vtpm per 100m ²
Saturday Midday	7.5 vtpm per 100m ²

However, there have been substantial changes to retail trading circumstances since 1990 with extended trading hours and lifestyle changes etc. The implications of these changes are indicated on the graphs reproduced in Appendix D which compare a 1990 trading pattern with a contemporary supermarket trading pattern. Hence, the recorded existing peak traffic generation characteristic at Settlement City of some 5.5 vtpm per 100m². The RTA has recognised the outdated nature of its Development Guidelines and has initiated a program of review as indicated in the EOI extract provided in Appendix D.

Nonetheless, the RTA Guidelines also indicate how traffic generation reduces per 100m² with larger centres (eg 30,000 to 40,000m² 4.6 vtpm per 100m² Thursday PM and 6.1 vtpm per 100m² Saturday midday). This represents a reduction as compared to the 10,000 to 20,000m² range of -40% on Thursday and -19% on Saturday.

The issue of traffic generation for the Settlement City development scheme is complicated by the inclusion of the cinema and bowling elements which will generate very little additional traffic during the peak retail traffic periods. However, the following presents composite assessment largely based on the recorded existing traffic generation circumstances:

	Floorarea	Thursday	Saturday
Existing	19,157m ² @ 5.5 vtp	1,061	1,049
Additional retail	7,626m ² @ 3.5 vtp	267	267
Commercial	84 spaces @ 60%*	50	@ 20% 20
Cinema/Bowling	Say	100	100
Club		150	150
Service Station		50	50
Total		1,678	1,678
IN		839	818
OUT		839	818

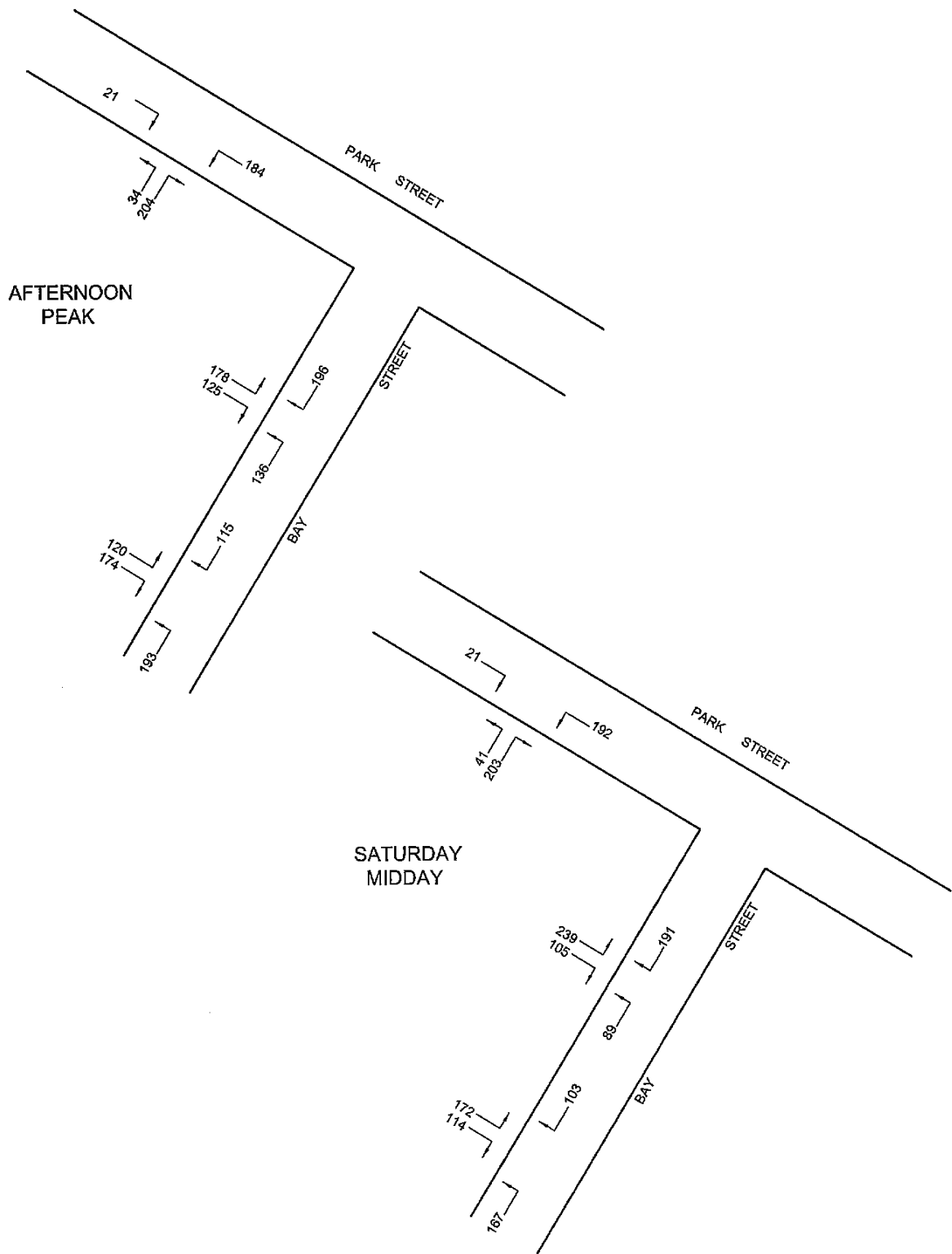
* 60% staff arrive/depart in 1 hour

The existing distribution of traffic through the vehicle access points for the centre will change somewhat due to the new rooftop carpark element. However, the overall distribution pattern on the road system serving the site will remain very similar (ie to existing) and the projected distribution of traffic flows with the expanded centre is shown on Figure 6.

The operational performance of the access intersections has been assessed using SIDRA for the future peak demand circumstances and the results of that analysis are provided Appendix E and summarised in the following:

	Thursday PM			Saturday Midday		
	LOS	DS	AVD	LOS	DS	AVD
Bay Street/Park Street (RAB)	A	0.455	9.1	A	0.624	10.0
Bay Street/access (RAB)	A	0.457	9.1	A	0.480	9.2
Bay Street/access (south)	A/C	0.757	9.4	A/B	0.463	6.7
Park Street (access)	A	0.372	7.7	A	0.461	7.6

TO CHANGE



LEGEND



**FUTURE PEAK
FLOWS**

FIG 6

The results of this analysis reveal that the operational performance of the intersections/access points serving the centre will remain quite satisfactory and that no ameliorating works are required to accommodate the increased traffic flows.

5.2 PEDESTRIANS AND CYCLISTS

The Stage 1 provisions for pedestrians and cyclists will accord with the requirements of the Precinct Plan apart from elements which will be completed in Stage 2. Through site and internal access will be provided along Leisure Street and Entertainment Street while the waterfront perimeter will contain a shared pedestrian/cyclist corridor.

The frontage footways will be upgraded and traffic control devices/pedestrian crossings with entrance pedestrian amenity along and across Leisure Street and Entertainment Street.

5.3 TRANSPORT SERVICES

The centre is already well served by 3 bus routes which run along the frontage roadways. The existing bus stops on the frontages would be upgraded with the proposed footway works. Provision for taxis will be made within the site and it is apparent that suitable provisions will be made for public transport servicing of the centre.

6. ACCESS, INTERNAL CIRCULATION AND SERVICING

Access

The existing vehicle accesses will be retained on the Bay Street and Park Street frontages and these are quite suitable and appropriate with the central access on Bay Street having a roundabout control.

All of the accesses are located with suitable separation (ie from intersections and each other) and with sight distance provisions in accordance with AS 2890.1 and 2.

Internal Circulation

The proposed internal circulation arrangements will be very flexible with the interconnected carpark areas providing access to/from the three separate access driveways for cars. The design of the parking areas will accord with AS 2890.1 in terms of aisle, parking bay and ramp design and the three access points will ensure an even distribution of ingress/egress movements without any particular concentration which would cause queuing or congestion.

Servicing

The existing loading dock arrangements along the western and northern sides of the site will be retained with some rearrangement of the northern dock accessed by a new turning circle. The northern dock will be relocated in Stage 2 accord with the Precinct Plan requirement. The small retail units along Leisure Street and Entertainment Street will only generate movements by small service vehicles (vans) which will stand on-street in designated LOADING ZONES.

The loading dock provisions will be quite comprehensive and will accommodate all vehicles requiring to access the development without any on-site or on-street queuing.

7. CONCLUSION

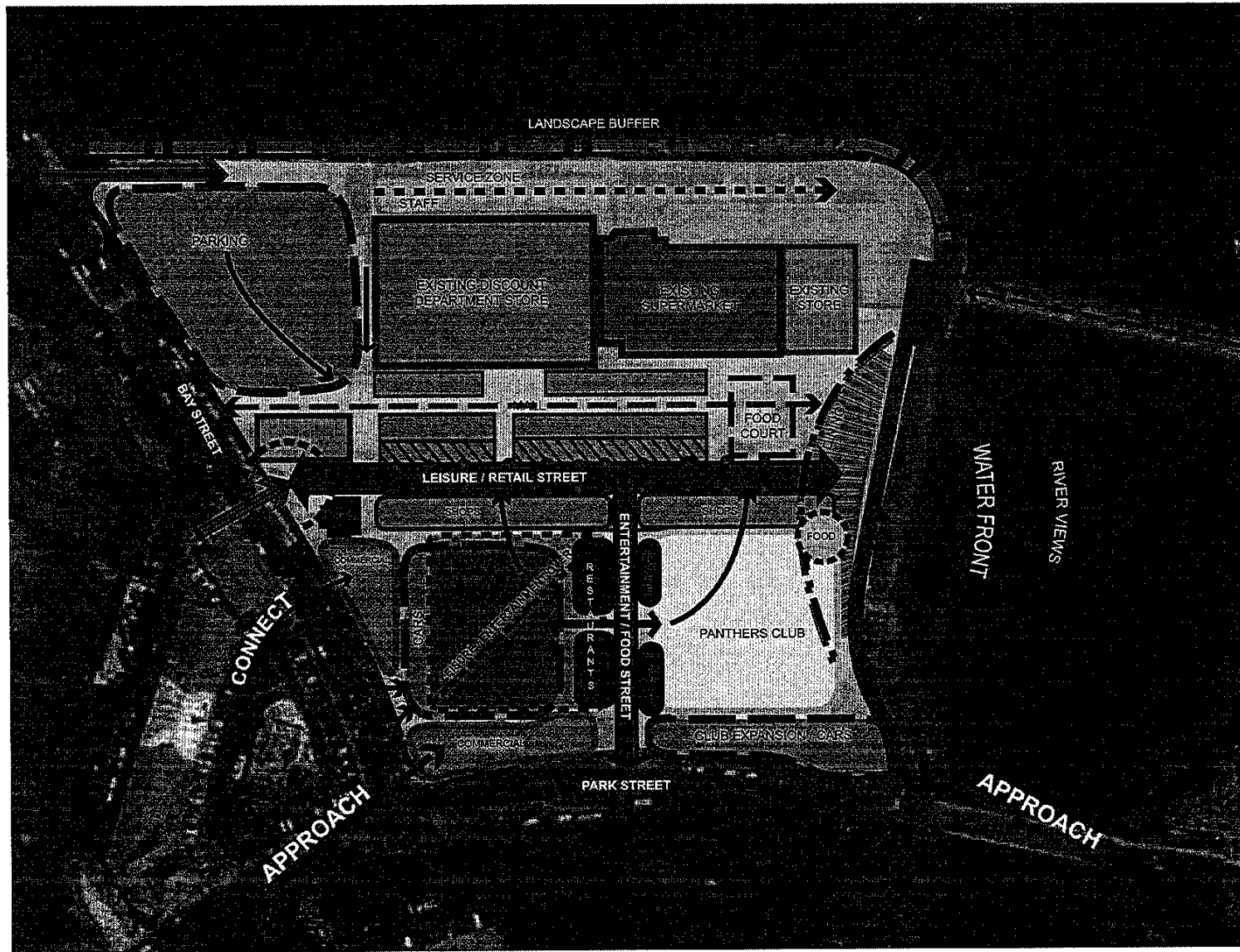
The proposed Stage 1 expansion of the Settlement City Shopping Centre involves an increase in retail floorspace from 19,157m² GLFA to 26,783m² with ancillary elements of cinemas and bowling alley as well as commercial floorspace (2,787m²). The total parking provision on-site will be increased to 1,530 spaces, including a new rooftop element, and the parking areas will be interlinked.

The assessment undertaken concludes that the proposed development:

- * will not result in any unsatisfactory traffic implications
- * will have a proposed parking provision which will be adequate and appropriate to accommodate the development demands
- * will have vehicle access, internal circulation and servicing arrangements which will be quite suitable and appropriate
- * will retain very good access by public transport
- * can be accommodated on the existing road system with any adverse traffic capacity, safety or traffic related environmental implications.

Appendix A

MASTERPLAN



PRELIMINARY - ISSUED FOR INFORMATION ONLY

February 2009
30/7/09

Settlement City

Shopping Centre Masterplan

PROJECT NUMBER
307059

DRAWING TITLE
**PROPOSED
CONCEPT
PLAN**

DRAWING NUMBER

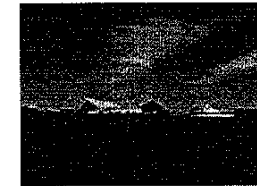
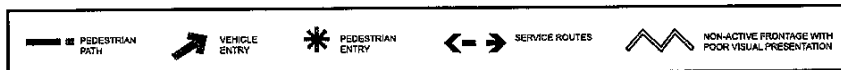
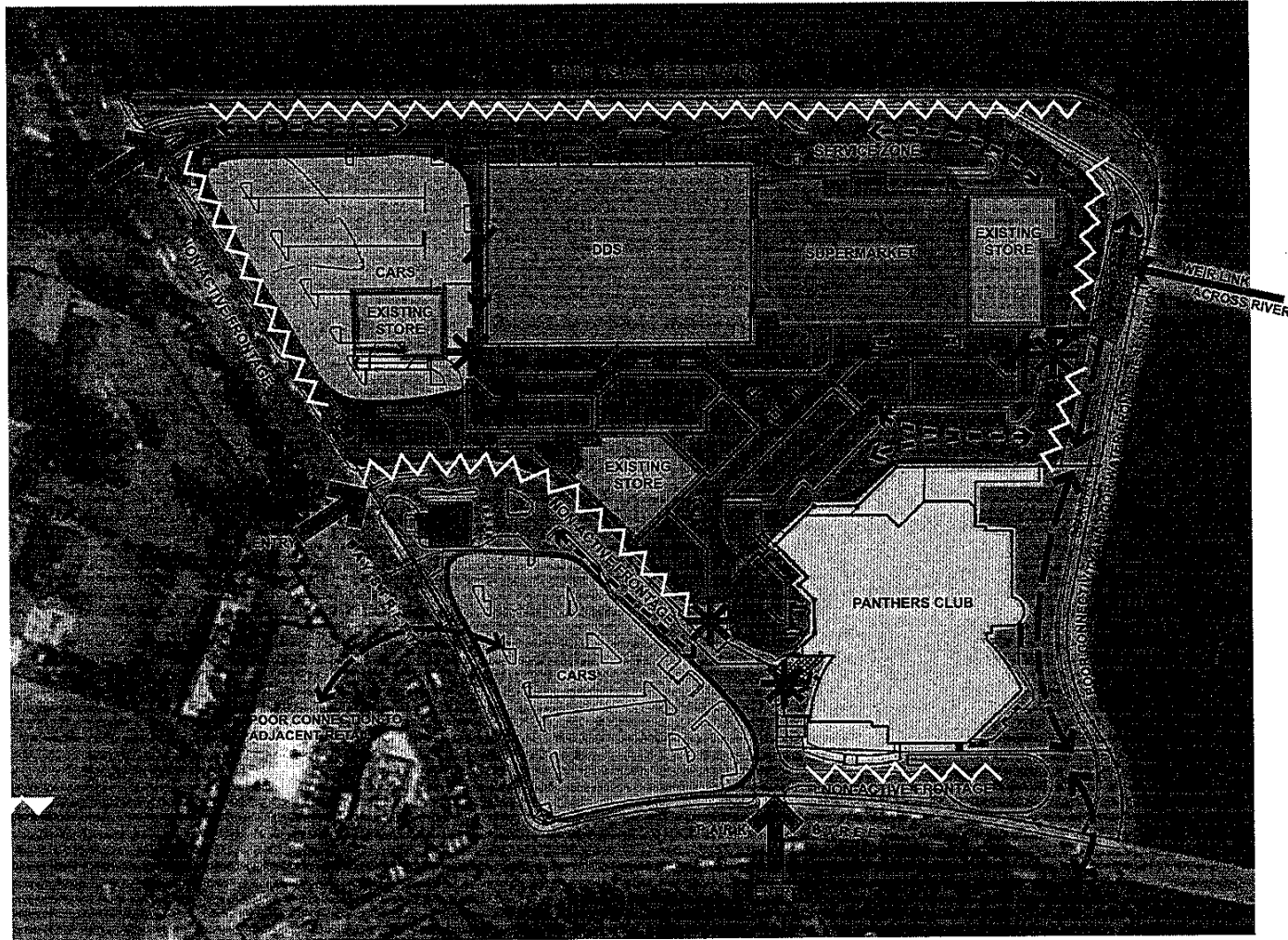
SCALE
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DATE
19 Feb 2009



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PRELIMINARY - ISSUED FOR INFORMATION ONLY

February 2009
207050

Settlement City

Shopping Centre Masterplan

PROJECT NUMBER
207050

DRAWING TITLE
EXISTING
CONDITIONS

DRAWING NUMBER

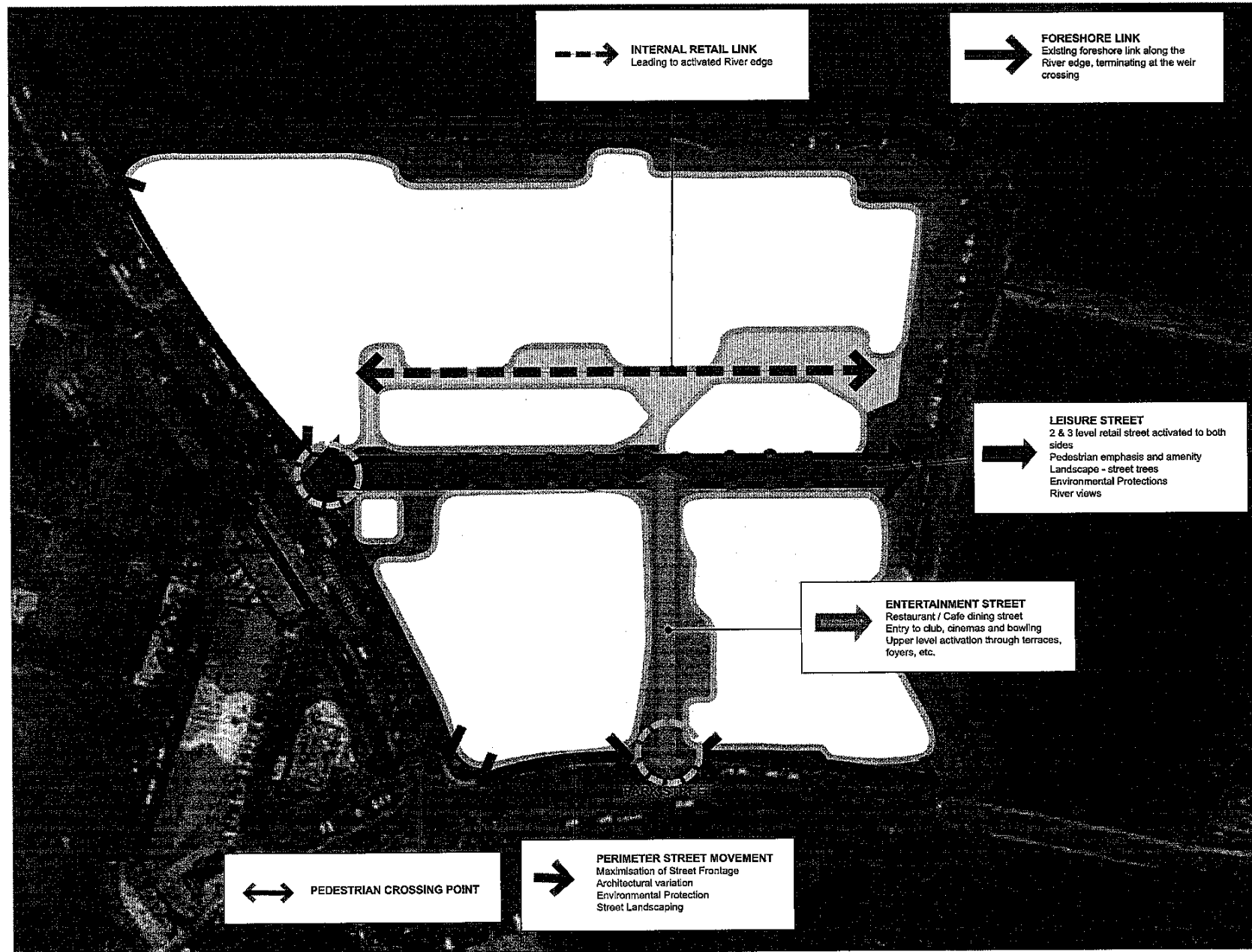
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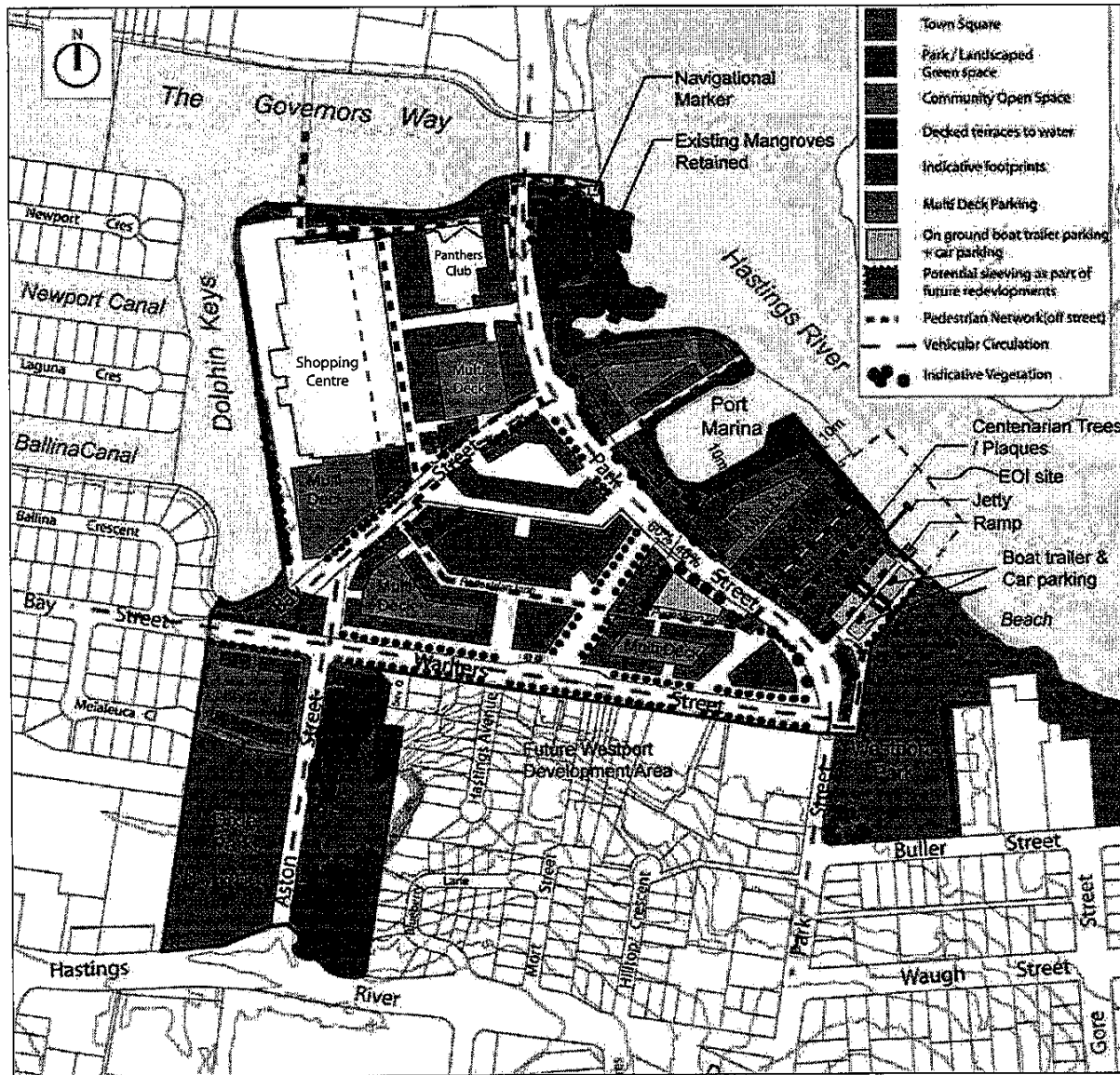
DATE
19 Feb 2009

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PRELIMINARY - ISSUED
FOR INFORMATION ONLY

February 2005
30/05/05

Settlement City

Shopping Centre Masterplan

PROJECT NUMBER
207650

DRAWING TITLE
STRUCTURE
PLAN - PROPOSED
OVERLAY

DRAWING NUMBER

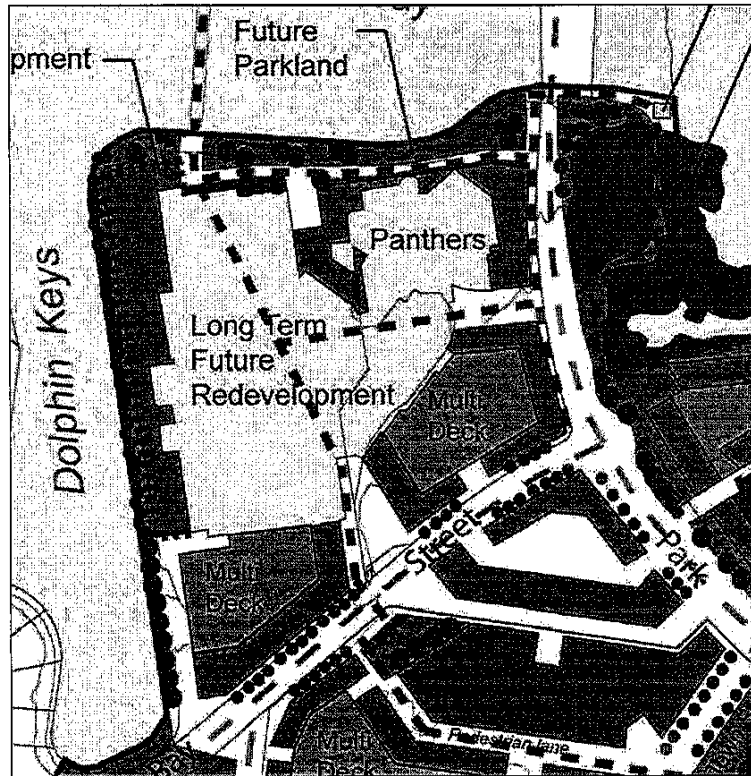
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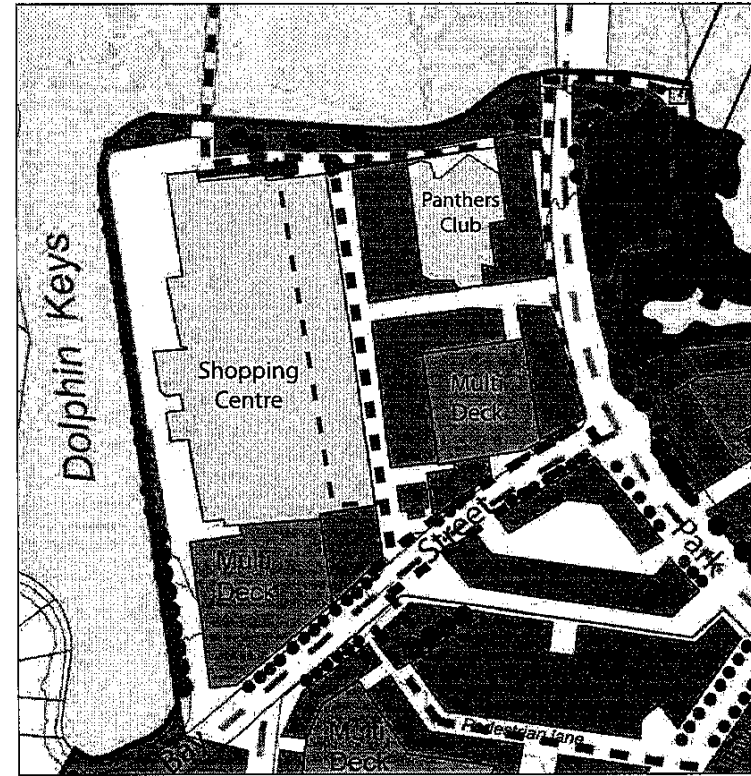
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February 2009
107 080

Settlement City

Shopping Centre Masterplan

PROJECT NUMBER
S27050

DRAWING TITLE
STRUCTURE
PLAN DIAGRAM
COMPARISON

DRAWING NUMBER

SCALE
N/A

DATE
19 Feb. 2009

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Settlement City Shopping Centre Masterplan
The Settlement City Shopping Centre Masterplan
is a preliminary drawing and should not be
used for construction purposes without the
written consent of the architect.

Appendix B

TRAFFIC SURVEYS

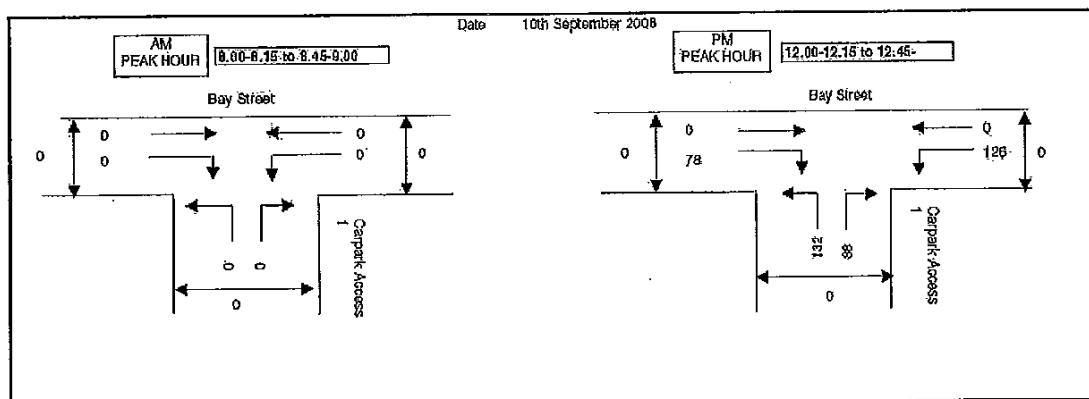
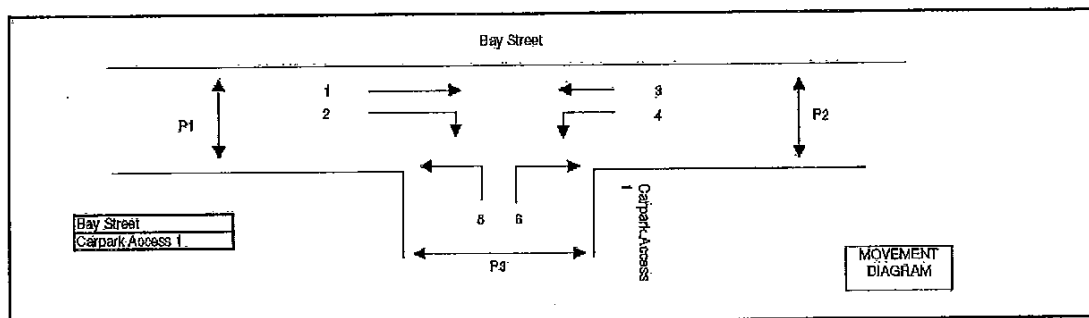
Location Bay Street Street 2 Carpark Access 1 Town Port Macquarie
 Date 10th September 2008 Day Saturday

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8:45-9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00-9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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10:45-11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	Max Hr	0	0	0	0	0

Overall peak hour:	8:00-8:15 to 8:45-9:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Light+HV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time	1	H	2	H	3	H	4	H	5	H	6	H	1/4h totals	1/4h totals	P1	P2	P3	1/4h totals
12:00-12:15	N/A	0	26	0	N/A	0	26	0	43	0	24	1	119	119	N/A	N/A	N/A	0
12:15-12:30	N/A	0	16	0	N/A	0	36	0	28	0	13	1	92	92	N/A	N/A	N/A	0
12:30-12:45	N/A	0	26	0	N/A	0	41	0	41	0	34	0	141	141	N/A	N/A	N/A	0
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13:00-13:15	N/A	0	19	0	N/A	0	37	0	30	0	30	0	116	420	N/A	N/A	N/A	0
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14:15-14:30	N/A	0	13	0	N/A	0	18	0	23	0	29	0	83	378	N/A	N/A	N/A	0
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14:45-15:00	N/A	0	12	0	N/A	0	26	0	29	0	18	0	87	387	N/A	N/A	N/A	0
Total	0	0	222	0	0	0	318	1	373	0	253	3	Max Hr	423	0	0	0	0

Overall peak hour:	12:00-12:15 to 12:45-13:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak total	0	0	78	0	0	0	126	0	132	0	88	2	422	0	0	0	0	0
Light+HV	0	0	78	0	0	0	126	0	132	0	88	2	0	0	0	0	0	0



Location Bay Street
Date 8th September 2008

Street 2 Carpark Access 2
Day Thursday

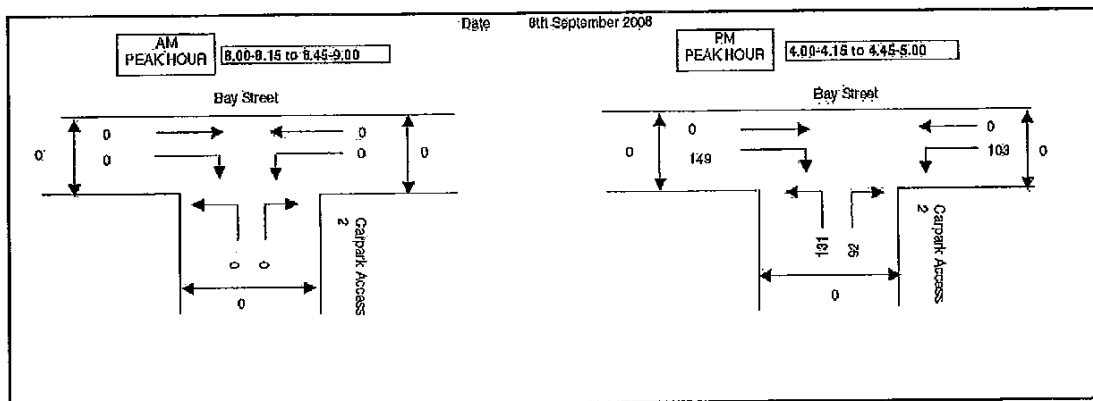
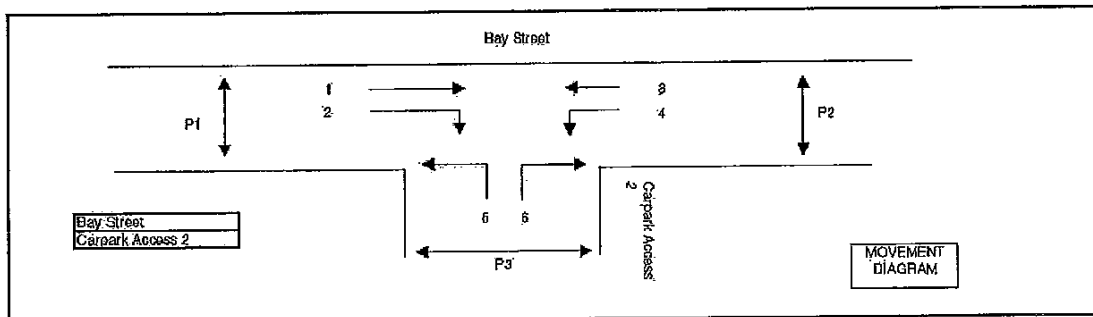
Town Port Macquarie

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8.15-8.30	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
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10.30-10.45	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
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Total	0	0	0	0	0	0	0	0	0	0	0	0	Max Hr		0	0	0	0

Overall peak hour:	8.00-8.15 to 8.45-9.00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Light+HV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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4.00-4.15	N/A	0	64	2	N/A	0	80	3	47	0	39	0	173	Incl. Hvy	N/A	N/A	N/A	0
4.15-4.30	N/A	0	22	0	N/A	0	24	1	27	0	17	0	81		N/A	N/A	N/A	0
4.30-4.45	N/A	0	36	2	N/A	0	20	0	29	0	16	0	103		N/A	N/A	N/A	0
4.45-5.00	N/A	0	32	1	N/A	0	26	1	28	0	20	0	108	476	N/A	N/A	N/A	0
5.00-5.15	N/A	0	47	1	N/A	0	23	2	33	0	21	1	127	429	N/A	N/A	N/A	0
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5.30-5.45	N/A	0	38	0	N/A	0	21	0	25	0	26	0	110	459	N/A	N/A	N/A	0
5.45-6.00	N/A	0	32	0	N/A	0	24	0	27	0	28	0	111	462	N/A	N/A	N/A	0
6.00-6.15	N/A	0	32	0	N/A	0	80	0	26	0	27	0	116	460	N/A	N/A	N/A	0
6.15-6.30	N/A	0	27	0	N/A	0	17	0	19	0	16	0	79	416	N/A	N/A	N/A	0
6.30-6.45	N/A	0	23	0	N/A	0	16	0	26	0	12	0	75	390	N/A	N/A	N/A	0
6.45-7.00	N/A	0	12	0	N/A	0	9	0	22	0	13	0	57	326	N/A	N/A	N/A	0
Total	0	0	386	8	0	0	266	7	340	0	257	1	Max Hr	476	0	0	0	0

Overall peak hour:	4.00-4.15 to 4.45-5.00	1	0	144	5	0	0	100	31	131	0	92	0	476	0	0	0	0
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Light+HV	0	0	149	0	0	0	103	131	92	0	0	0	476	0	0	0	0	0



Location Day Street
Date 10th September 2008

Street 2 Carpark Access 2
Day Saturday

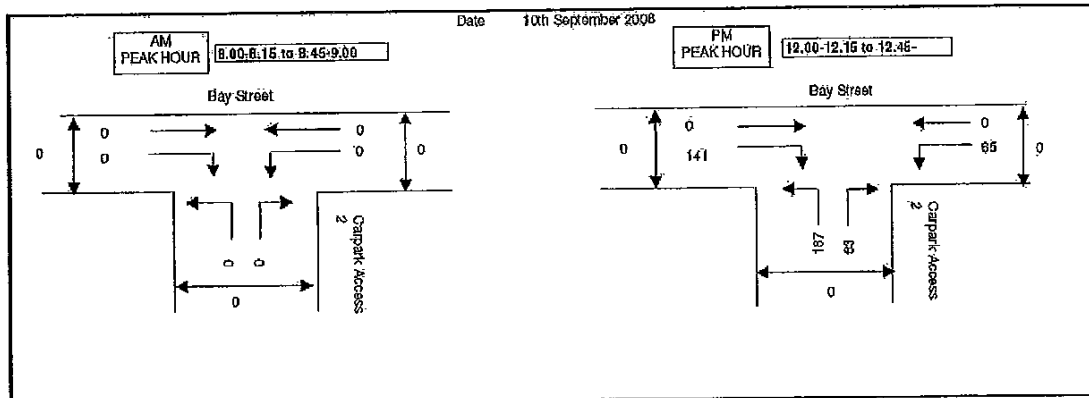
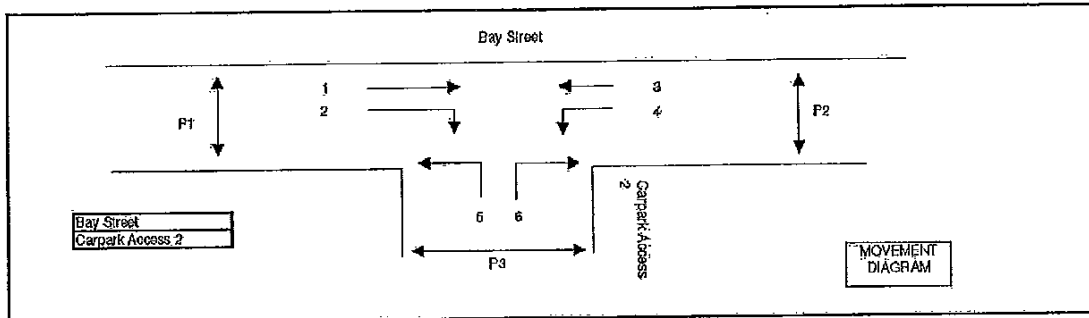
Town Port Macquarie

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8:15-8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30-8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45-9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00-9:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:15-9:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30-9:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45-10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00-10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15-10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30-10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45-11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Max Hr	0	0	0	0	0

Overall peak hour: 8.00-8.15 to 8.45-9.00												0			
Peak total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Light+HV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time	1	H	2	H	3	H	4	H	5	H	6	H	7	H	1/4h totals	Hrly Total	P1	P2	P3	1/4h totals
12:00-12:15	N/A	0	62	1	N/A	0	22	2	61	0	16	0	154	0	Incl. Hvy	N/A	N/A	N/A	N/A	0
12:15-12:30	N/A	0	33	1	N/A	0	14	0	63	0	19	0	114	0		N/A	N/A	N/A	N/A	0
12:30-12:45	N/A	0	26	1	N/A	0	11	0	85	0	32	0	104	0		N/A	N/A	N/A	N/A	0
12:45-13:00	N/A	0	28	0	N/A	0	14	2	99	0	22	0	104	0	476	N/A	N/A	N/A	N/A	0
13:00-13:15	N/A	0	30	2	N/A	0	14	1	36	0	18	0	99	0	421	N/A	N/A	N/A	N/A	0
13:15-13:30	N/A	0	30	0	N/A	0	12	0	27	0	17	1	66	0	393	N/A	N/A	N/A	N/A	0
13:30-13:45	N/A	0	27	1	N/A	0	16	0	24	0	18	0	83	0	372	N/A	N/A	N/A	N/A	0
13:45-14:00	N/A	0	24	1	N/A	0	10	2	26	0	16	0	81	0	349	N/A	N/A	N/A	N/A	0
14:00-14:15	N/A	0	22	0	N/A	0	12	0	22	0	16	0	72	0	322	N/A	N/A	N/A	N/A	0
14:15-14:30	N/A	0	24	0	N/A	0	18	0	20	0	18	0	78	0	314	N/A	N/A	N/A	N/A	0
14:30-14:45	N/A	0	27	1	N/A	0	15	0	18	0	18	0	74	0	306	N/A	N/A	N/A	N/A	0
14:45-15:00	N/A	0	29	0	N/A	0	14	0	16	0	20	0	79	0	303	N/A	N/A	N/A	N/A	0
Total	0	0	461	8	0	0	169	7	876	0	217	1	Max Hr	476	0	0	0	0	0	

Overall peak hour: 12:00-12:15 to 12:45-13:00														1			
Peak total	0	0	138	3	0	0	61	4	187	0	88	0	476	0	0	0	0
Light+HV	0	0	141	0	0	0	66	0	187	0	83	0	0	0	0	0	0



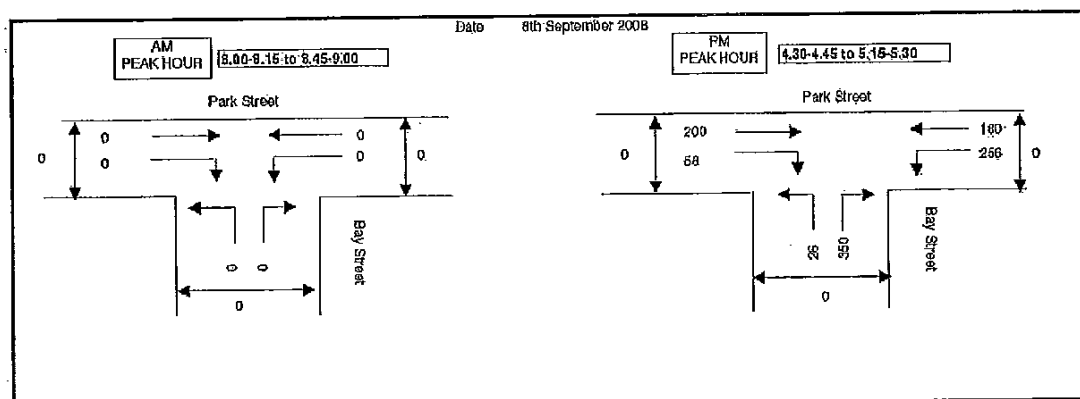
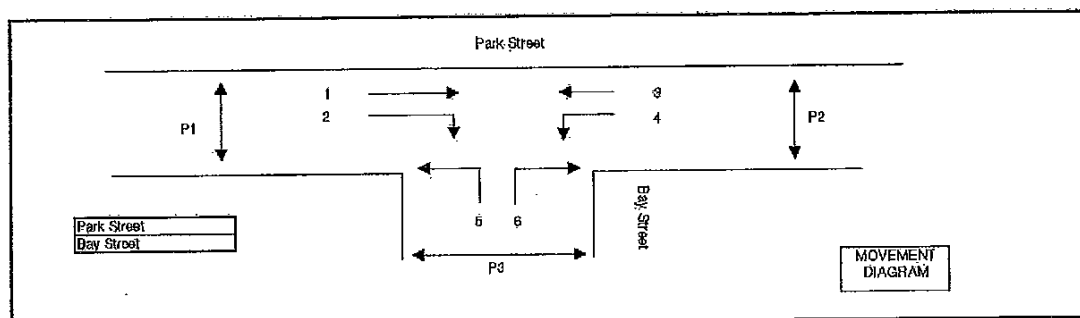
Location Park Street
Date 8th September 2008

Street 2 Bay Street
Day Thursday

Town Port Macquarie

Time	1	H	2	H	3	H	4	H	5	H	6	H	7	1/4h totals	Inv. Total	P1	P2	P3	1/4h totals
8.00-8.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Incl. Hvy	0	0	0	0
8.15-8.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
8.30-8.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
8.45-9.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9.00-9.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9.15-9.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9.30-9.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9.45-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10.45-11.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	Max Hr		0	0	0	0
Overall peak hour: 8.00-8.15 to 8.45-9.00																			
Peak total	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
Light+HV	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0

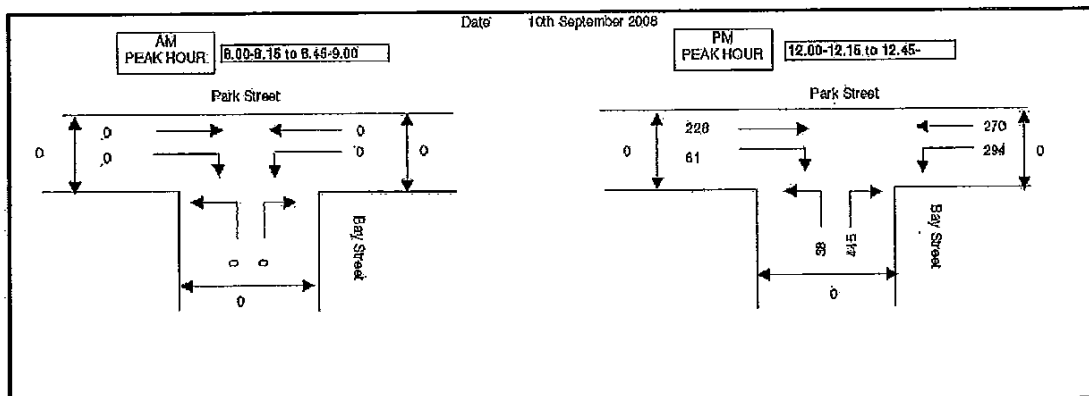
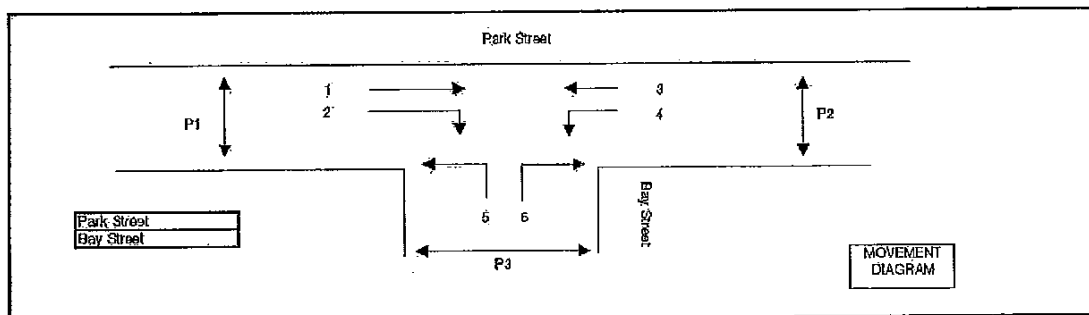
Time	1	H	2	H	3	H	4	H	5	H	6	H	7	1/4h totals	Inv. Total	P1	P2	P3	1/4h totals
4.00-4.15	47	6	24	2	50	0	59	3	14	1	106	0	309	Incl. Hvy	N/A	N/A	N/A	N/A	0
4.15-4.30	62	0	26	2	29	1	65	0	6	0	59	0	230		N/A	N/A	N/A	N/A	0
4.30-4.45	62	8	12	2	47	0	67	3	8	0	82	0	264		N/A	N/A	N/A	N/A	0
4.45-5.00	42	2	16	1	42	1	59	3	6	0	96	0	266	1089	N/A	N/A	N/A	N/A	0
5.00-5.15	62	4	14	1	39	1	72	2	6	0	85	0	276	1095	N/A	N/A	N/A	N/A	0
5.15-5.30	44	1	11	2	50	0	58	2	9	0	88	0	265	1070	N/A	N/A	N/A	N/A	0
5.30-5.45	68	0	11	2	58	0	65	0	5	0	62	1	247	1053	N/A	N/A	N/A	N/A	0
5.45-6.00	62	3	7	0	54	0	49	0	2	0	76	0	243	1030	N/A	N/A	N/A	N/A	0
6.00-6.15	60	1	0	0	45	0	60	0	4	0	66	0	232	997	N/A	N/A	N/A	N/A	0
6.15-6.30	49	1	13	0	31	0	50	1	9	0	64	0	208	930	N/A	N/A	N/A	N/A	0
6.30-6.45	28	0	2	1	39	0	43	0	5	0	46	0	168	841	N/A	N/A	N/A	N/A	0
6.45-7.00	42	0	1	0	32	0	31	0	6	0	53	0	165	763	N/A	N/A	N/A	N/A	0
Total	561	20	143	13	513	3	646	14	77	1	871	1	Max Hr	1070		0	0	0	0
Overall peak hour: 4.30-4.45 to 6.15-6.30																			
Peak total	190	10	52	0	178	2	246	10	26	0	350	0	1070		0	0	0	0	0
Light+HV	200		58		180		266		26		360								



Location Park Street Street 2 Bay Street Town Port Macquarie
 Date 10th September 2008 Day Saturday

Time	1	H	2	H	3	H	4	H	5	H	6	H	1/4h totals	Hwy Total	P1	P2	P3	1/4h totals
8.00-8.15	0	0	0	0	0	0	0	0	0	0	0	0	0	Incl. Hwy	0	0	0	0
8.15-8.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.30-8.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.45-9.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.00-9.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.15-9.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.30-9.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9.45-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10.45-11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	Max Hr	0	0	0	0	0
Overall peak hour: 8.00-8.15 to 8.45-9.00																		
Peak total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Light+HV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time	1	H	2	H	3	H	4	H	5	H	6	H	1/4h totals	Hwy Total	P1	P2	P3	1/4h totals
12.00-12.1	55	5	15	0	50	0	100	1	11	0	105	0	352	Incl. Hwy	N/A	N/A	N/A	0
12.15-12.3	60	1	13	1	73	1	88	1	9	0	124	0	355	0	N/A	N/A	N/A	0
12.30-12.4	65	0	10	2	70	0	73	1	13	0	117	0	341	0	N/A	N/A	N/A	0
12.45-13.0	47	5	20	0	61	0	56	0	5	0	95	0	286	1336	N/A	N/A	N/A	0
13.00-13.1	48	0	58	1	48	0	56	1	6	0	87	0	304	1288	N/A	N/A	N/A	0
13.15-13.3	33	0	18	1	24	1	57	1	7	0	89	0	281	1214	N/A	N/A	N/A	0
13.30-13.4	32	0	7	0	60	0	56	1	36	0	86	0	228	1101	N/A	N/A	N/A	0
13.45-14.0	40	2	11	1	22	1	56	1	7	0	80	0	269	1082	N/A	N/A	N/A	0
14.00-14.1	55	4	15	1	58	0	82	2	7	0	88	0	302	1080	N/A	N/A	N/A	0
14.00-14.1	55	4	15	1	58	0	82	2	7	0	88	0	302	1080	N/A	N/A	N/A	0
14.15-14.3	60	2	9	3	62	0	69	1	8	0	84	1	277	1078	N/A	N/A	N/A	0
14.30-14.4	28	3	8	0	42	0	42	2	6	0	87	1	198	1045	N/A	N/A	N/A	0
14.45-15.0	46	2	7	2	50	0	53	2	12	0	85	0	258	1035	N/A	N/A	N/A	0
Total	558	24	191	12	735	3	761	14	86	0	1071	2	Max Hr	1336	0	0	0	0
Overall peak hour: 12.00-12.15 to 12.45-13.00																		
Peak total	217	11	68	3	259	1	291	3	38	0	445	0	1336	0	0	0	0	0
Light+HV	228	61	270	294	38	445												



Location Park Street
Date 8th September 2008

Street 2 Carpark Access 3
Day Thursday

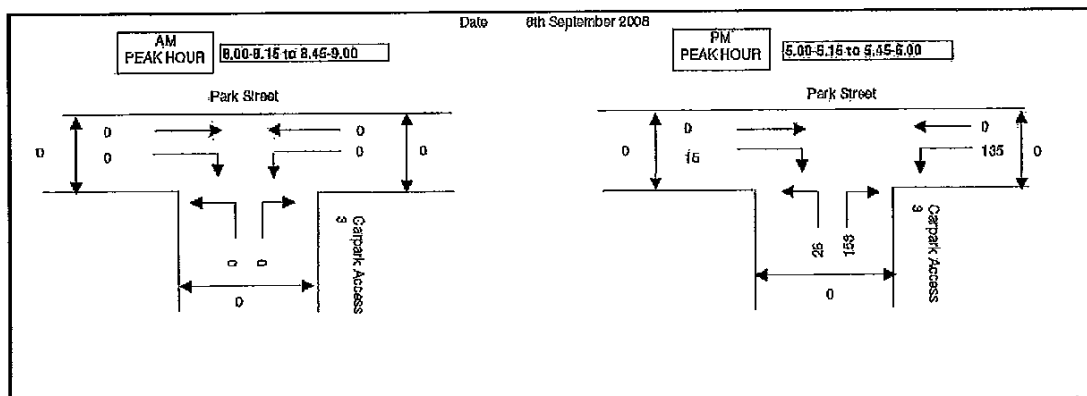
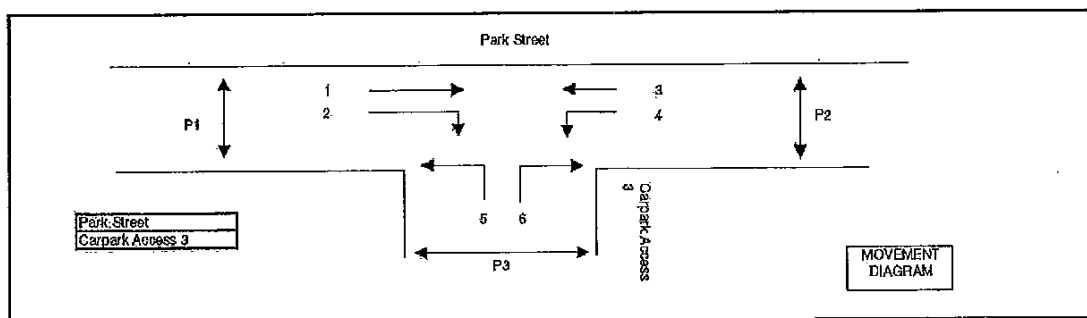
Town Port Macquarie

Time	1	H	2	H	3	H	4	H	5	H	6	H	1/4h totals	1/4h Total	P1	P2	P3	1/4h totals
8.00-8.15	0	0	0	0	0	0	0	0	0	0	0	0	0	Incl. Hwy	0	0	0	0
8.15-8.30	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
8.30-8.45	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
8.45-9.00	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9.00-9.15	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9.15-9.30	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9.30-9.45	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9.45-10.00	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10.00-10.15	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10.15-10.30	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10.30-10.45	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10.45-11.0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	Max Hr		0	0	0	0

Overall peak hour: 8.00-8.15 to 8.45-9.00																		
Peak total	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
Light+HV	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0

Time	1	H	2	H	3	H	4	H	5	H	6	H	1/4h totals	1/4h Total	P1	P2	P3	1/4h totals
4.00-4.15	N/A	0	3	0	N/A	0	29	0	6	1	34	3	75	Incl. Hwy	N/A	N/A	N/A	0
4.15-4.30	N/A	0	2	0	N/A	0	26	1	4	0	40	2	77		N/A	N/A	N/A	0
4.30-4.45	N/A	0	5	0	N/A	0	27	0	11	0	37	3	80		N/A	N/A	N/A	0
4.45-5.00	N/A	0	2	0	N/A	0	31	0	7	0	34	2	74	303	N/A	N/A	N/A	0
5.00-5.15	N/A	0	4	0	N/A	0	21	0	8	0	44	3	77	308	N/A	N/A	N/A	0
5.15-5.30	N/A	0	4	0	N/A	0	28	1	9	0	30	3	72	303	N/A	N/A	N/A	0
5.30-5.45	N/A	0	2	0	N/A	0	31	0	9	0	41	1	77	300	N/A	N/A	N/A	0
5.45-6.00	N/A	0	5	0	N/A	0	54	0	6	0	31	3	96	322	N/A	N/A	N/A	0
6.00-6.15	N/A	0	1	0	N/A	0	36	0	4	0	34	0	75	320	N/A	N/A	N/A	0
6.15-6.30	N/A	0	6	0	N/A	0	24	1	2	0	28	0	66	306	N/A	N/A	N/A	0
6.30-6.45	N/A	0	2	0	N/A	0	26	0	1	0	18	1	47	276	N/A	N/A	N/A	0
6.45-7.00	N/A	0	1	0	N/A	0	21	0	6	0	27	0	64	234	N/A	N/A	N/A	0
Total	0	0	36	0	0	0	368	3	68	1	395	23	Max Hr	322	0	0	0	0

Overall peak hour: 6.00-6.15 to 6.45-7.00																		
Peak total	0	0	15	0	0	0	134	1	26	0	148	12	322		0	0	0	0
Light+HV	0	0	15	0	0	0	135	0	26	0	158	0			0	0	0	0



Location Park Street
Date 10th September 2008

Street 2 Carpark Access 3
Day Saturday

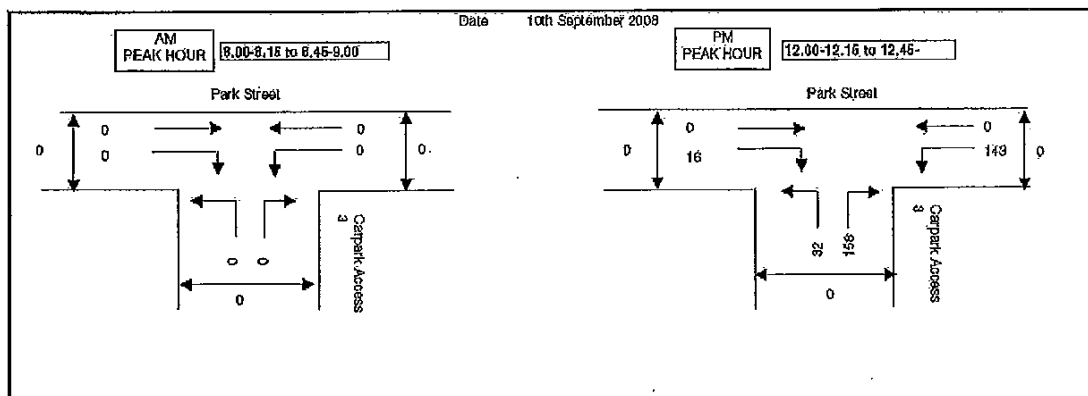
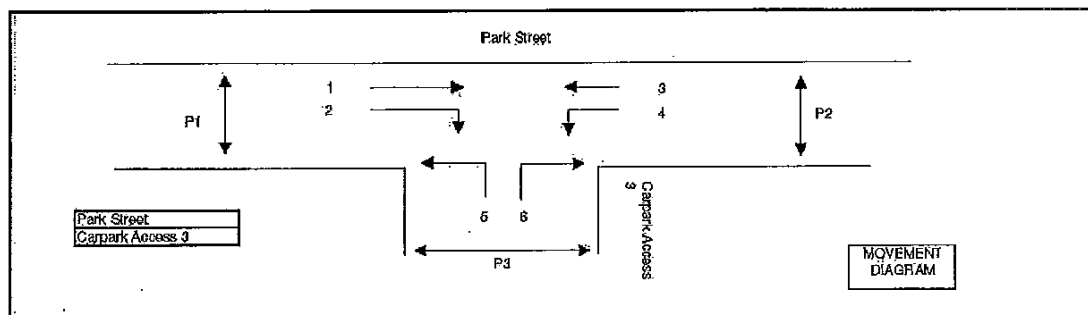
Town Port Macquarie

Time	1	H	2	H	3	H	4	H	5	H	6	H	1/4h totals	Hrly Total	P1	P2	P3	1/4h totals
8:00-8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	Incl. Hvy.	0	0	0	0
8:15-8:30	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
8:30-8:45	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
8:45-9:00	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9:00-9:15	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9:15-9:30	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9:30-9:45	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
9:45-10:00	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10:00-10:15	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10:15-10:30	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10:30-10:45	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
10:45-11:00	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	Max Hr		0	0	0	0

Overall peak hour: 8:00-8:15 to 8:45-9:00																		
Peak total	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0
Light+HV	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0

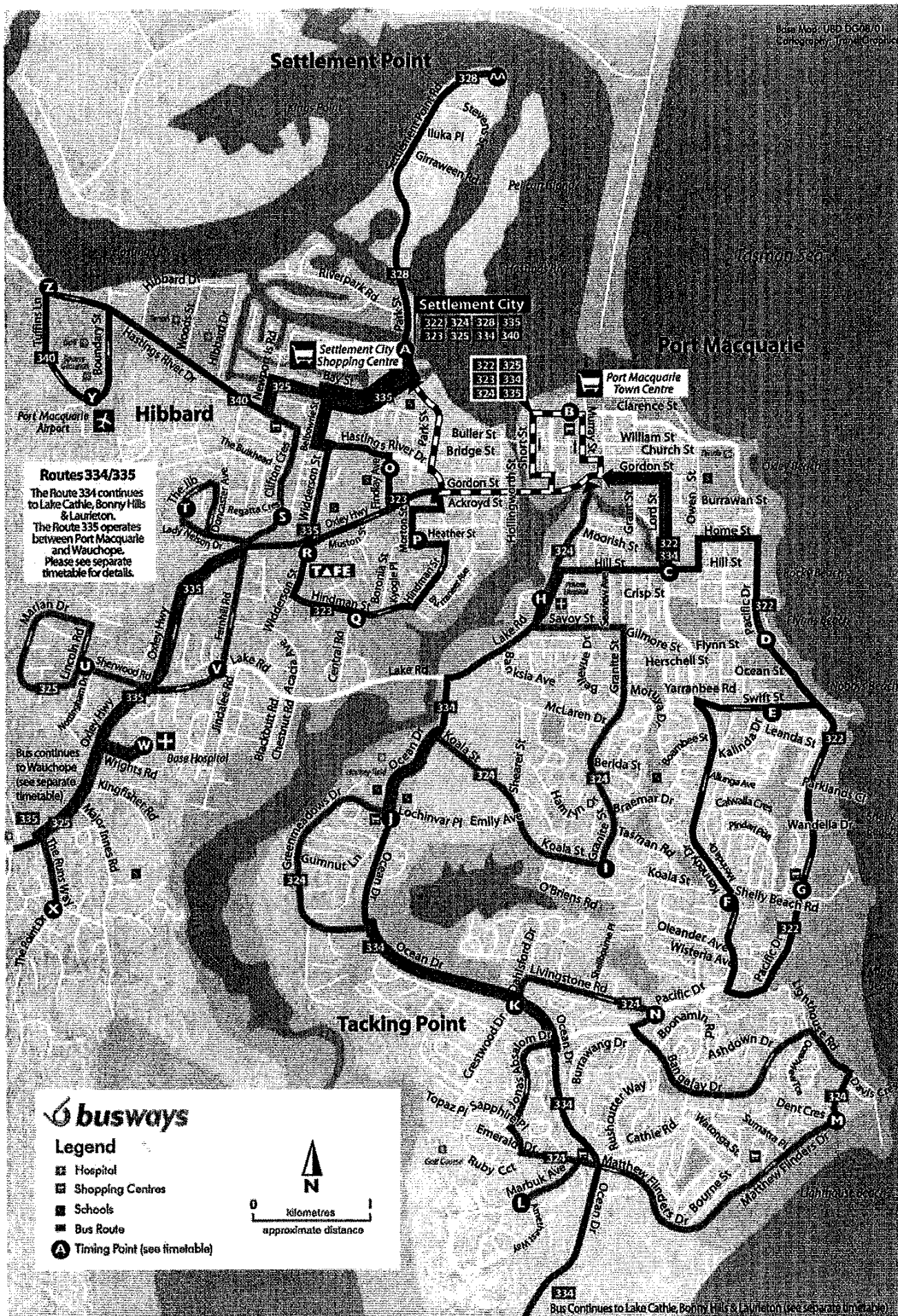
Time	1	H	2	H	3	H	4	H	5	H	6	H	1/4h totals	Hrly Total	P1	P2	P3	1/4h totals
12:00-12:15	N/A	0	7	0	N/A	0	58	0	13	0	43	3	119	Incl. Hvy.	N/A	N/A	N/A	0
12:15-12:30	N/A	0	7	0	N/A	0	19	1	3	0	27	2	58		N/A	N/A	N/A	0
12:30-12:45	N/A	0	2	0	N/A	0	33	0	18	1	43	1	97		N/A	N/A	N/A	0
12:45-13:00	N/A	0	0	0	N/A	0	34	0	12	0	36	3	77	342	N/A	N/A	N/A	0
13:00-13:15	N/A	0	6	0	N/A	0	36	0	7	1	37	2	87	310	N/A	N/A	N/A	0
13:15-13:30	N/A	0	6	0	N/A	0	37	1	5	0	32	1	80	321	N/A	N/A	N/A	0
13:30-13:45	N/A	0	7	0	N/A	0	37	0	5	0	33	0	85	327	N/A	N/A	N/A	0
13:45-14:00	N/A	0	7	0	N/A	0	27	0	7	0	22	2	63	313	N/A	N/A	N/A	0
14:00-14:15	N/A	0	2	0	N/A	0	23	1	7	0	37	5	70	298	N/A	N/A	N/A	0
14:15-14:30	N/A	0	2	0	N/A	0	31	1	4	0	26	3	63	279	N/A	N/A	N/A	0
14:30-14:45	N/A	0	8	0	N/A	0	25	0	7	0	39	0	79	276	N/A	N/A	N/A	0
14:45-15:00	N/A	0	3	0	N/A	0	32	0	9	0	42	2	86	298	N/A	N/A	N/A	0
Total	0	0	56	0	0	0	390	4	83	2	416	26	Max Hr		0	0	0	0

Overall peak hour: 12:00-12:15 to 12:45-13:00																		
Peak total	0	0	16	0	0	0	142	1	91	1	149	9	340		0	0	0	0
Light+HV	0	0	16	0	0	0	143	0	92	1	158	0			0	0	0	0



Appendix C

BUS TIMETABLES

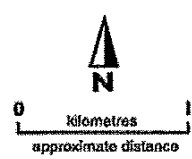


Routes 334/335
The Route 334 continues to Lake Cathie, Bonny Hills & Laurieton.
The Route 335 operates between Port Macquarie and Wauchope.
Please see separate timetable for details.

busways

Legend

- Hospital
- Shopping Centres
- Schools
- Bus Route
- Timing Point (see timetable)



Bus Continues to Lake Cathie, Bonny Hills & Laurieton (see separate timetable)



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Route 322: Settlement City - Flynn's Beach (Loop)

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WEEKDAY MORNINGS

Route Number	RTE 323 at CTY Health Centre	Route 323 at TAFE	Settlement City	Town Centre	Lord St & Hill St	Flynn's Beach	Swift St & Kalinda Dr	Kennedy Dr & Koala St	Shelly Beach	Flynn's Beach	Lord St & Hill St	Town Centre	Settlement City	RTE 323 at CTY Health Centre	Route 323 at TAFE
322			08:50		06:56	06:59	07:00	07:03	07:06	07:09	07:12	07:17	07:25	07:33	07:39
322			07:20		07:26	07:29	07:30	07:34	07:38	07:42	07:46	07:53	08:03	08:13	08:19
322			07:50	07:58	08:02	08:05	08:06	08:10	08:14	08:18	08:22	08:29	08:43	08:53	08:56
322										08:42	08:46	08:53	09:03		
322	08:13	08:19	08:30	08:40	08:45	08:48	08:50	08:54	08:58	09:02	09:06	09:13	09:23	09:33	09:33
322							09:10	09:14	09:18	09:22	09:26	09:33	09:43		
322	08:53	08:59	09:10	09:20	09:25	09:28	09:30	09:34	09:38	09:42	09:46	09:53	10:03	10:13	10:19
322			09:30	09:40	09:45	09:48	09:50	09:54	09:58	10:02	10:06	10:13	10:23		
322	09:33	09:39	09:50	10:00	10:05	10:08	10:10	10:14	10:18	10:22	10:26	10:33	10:43	10:53	10:53
322	10:13	10:19	10:30	10:40	10:45	10:48	10:50	10:54	10:58	11:02	11:06	11:13	11:23	11:33	11:39
322	10:53	10:59	11:10	11:20	11:25	11:28	11:30	11:34	11:38	11:42	11:46	11:53	12:03	12:13	12:19
322	11:33	11:39	11:50	12:00	12:05	12:08	12:10	12:14	12:18	12:22	12:26	12:33	12:43	12:53	12:59

WEEKDAY AFTERNOONS

Route Number	RTE 323 at CTY Health Centre	Route 323 at TAFE	Settlement City	Town Centre	Lord St & Hill St	Flynn's Beach	Swift St & Kalinda Dr	Kennedy Dr & Koala St	Shelly Beach	Flynn's Beach	Lord St & Hill St	Town Centre	Settlement City	RTE 323 at CTY Health Centre	Route 323 at TAFE
322	12:13	12:19	12:30	12:40	12:45	12:48	12:50	12:50	12:58	13:02	13:06	13:13	13:23	13:33	13:39
322	12:53	12:59	13:10	13:20	13:25	13:28	13:30	13:34	13:38	13:42	13:46	13:53	14:03	14:13	14:19
322	13:33	13:39	13:50	14:00	14:05	14:08	14:10	14:14	14:18	14:22	14:26	14:33	14:43	14:53	14:59

322	14:13	14:19	14:30	14:40	14:45	14:48	14:50	14:54	14:58	15:02	15:06	15:13	15:23	15:33	15:39
322	14:53	14:59	15:10	15:20	15:25	15:28	15:30	15:34	15:38	15:42	15:46	15:53	16:03	16:13	16:19
322	15:33	15:39	15:50	16:00	16:05	16:08	16:10	16:14	16:18	16:22	16:26	16:33	16:43	16:53	16:59
322	16:13	16:19	16:30	16:40	16:45	16:48	16:50	16:54	16:58	17:02	17:06	17:13	17:23	17:33	17:39
322	16:53	17:04	17:15	17:25	17:30	17:33	17:35	17:39	17:43	17:46	17:49	17:55	18:04		
322	17:33	17:39	17:50	18:00	18:05	18:08	18:10	18:14	18:18	18:21	18:24		18:30		

Additional Information

For the trip starting at 07:50 from Settlement City - the Bus diverts to TAFE college along Oxley Highway for the final timing point.



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Route 323: Town Centre - Westport

Weekdays

Saturday (Including Easter Saturday)

Sunday / Public Holidays

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WEEKDAY MORNINGS

Route Number	Route 322 at Shelly Beach	Route 322 at Flynn's Beach	Town Centre	Settlement City	Garden Village	Lourdes Village	Parkland Village	TAFE	Garden Village	Settlement City	Town Centre	Route 322 at Flynn's Beach	Route 322 at Shelly Beach
323	07:06	07:09	07:17	07:28	07:31	07:34	07:36	07:39	07:40	07:40	07:58	08:05	08:14
323	07:38	07:42	07:53	08:08	08:11	08:14	08:16	08:19	08:20	08:30	08:40	08:48	08:58
323	08:14	08:18	08:29	08:48	08:51	08:54	08:56	08:59	09:00	09:10	09:20	09:28	09:38
323	08:58	09:02	09:13	09:28	09:31	09:34	09:36	09:39	09:40	09:50	10:00	10:08	10:18
323	09:38	09:42	09:53	10:08	10:11	10:14	10:16	10:19	10:20	10:30	10:40	10:48	10:58
323	10:18	10:22	10:33	10:48	10:51	10:54	10:56	10:59	11:00	11:10	11:20	11:28	11:38
323	10:58	11:02	11:13	11:28	11:31	11:34	11:36	11:39	11:40	11:50	12:00	12:08	12:18
323	11:38	11:42	11:53	12:08	12:11	12:14	12:16	12:19	12:20	12:30	12:40	12:48	12:58

WEEKDAY AFTERNOONS

Route Number	Route 322 at Shelly Beach	Route 322 at Flynn's Beach	Town Centre	Settlement City	Garden Village	Lourdes Village	Parkland Village	TAFE	Garden Village	Settlement City	Town Centre	Route 322 at Flynn's Beach	Route 322 at Shelly Beach
323	12:18	12:22	12:33	12:48	12:51	12:54	12:56	12:59	13:00	13:10	13:20	13:28	13:38
323	12:58	13:02	13:13	13:28	13:31	13:34	13:36	13:39	13:40	13:50	14:00	14:08	14:18
323	13:38	13:42	13:53	14:08	14:11	14:14	14:16	14:19	14:20	14:30	14:40	14:48	14:58
323	14:18	14:22	14:33	14:48	14:51	14:54	14:56	14:59	15:00	15:10	15:20	15:28	15:38
323	14:58	15:02	15:13	15:28	15:31	15:34	15:36	15:39	15:40	15:50	16:00	16:08	16:18
323	15:38	15:42	15:53	16:08	16:11	16:14	16:16	16:19	16:20	16:30	16:40	16:48	16:58
323	16:18	16:22	16:33	16:48	16:51	16:54	16:56	17:04	17:05	17:15	17:25	17:33	17:43
323	16:58	17:02	17:13	17:28	17:31	17:34	17:36	17:39	17:40	17:50	18:00	18:08	18:18



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Route 324: Lighthouse Beach - Settlement City

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WEEKDAY

MORNINGS

[Opposite Direction](#)

Route Number	Ocean Dr & Crestwood Dr	Marbuk Ave & Amethyst Way	Lighthouse Beach Surf Club	Pacific Dr & Livingstone Rd	Ocean Dr & Crestwood Dr	Ocean Dr & Lochinvar Pl	Granite St & Koala St	Private Hospital	Town Centre	Settlement City	Routes 325 & 335 at TAFE	Routes 325 & 335 at Base Hospital
324	06:56	07:01	07:07	07:13	07:16	07:22	07:25	07:31	07:38	07:48	07:51	
324					07:30	07:32			07:50	07:40	07:36	
324	07:26	07:31	07:37	07:43	07:46	07:52	07:55	08:01	08:08	08:18	08:29	08:33
324					08:20	08:22			08:45	08:35	08:30	09:07
324	08:26	08:31	08:37	08:43	08:46	08:52	08:55	09:01	09:08	09:18	09:29	09:33
324	08:56	09:01	09:07	09:13	09:16	09:22	09:25	09:31	09:38	09:48		
324	09:26	09:31	09:37	09:43	09:46	09:52	09:55	10:01	10:08	10:18		10:31
324					09:55	09:57		10:00	10:10	10:20	10:23	
324	09:56	10:01	10:07	10:13	10:16	10:22	10:25	10:31	10:38	10:48		
324	10:26	10:31	10:37	10:43	10:46	10:52	10:55	11:01	11:08	11:18		11:31
324					10:55	10:57		11:00	11:10	11:20	11:23	
324	11:26	11:31	11:37	11:43	11:46	11:52	11:55	12:01	12:08	12:18		12:42

WEEKDAY

AFTERNOONS

[Opposite Direction](#)

Route Number	Ocean Dr & Crestwood Dr	Marbuk Ave & Amethyst Way	Lighthouse Beach Surf Club	Pacific Dr & Livingstone Rd	Ocean Dr & Crestwood Dr	Ocean Dr & Lochinvar Pl	Granite St & Koala St	Private Hospital	Town Centre	Settlement City	Routes 325 & 335 at TAFE	Routes 325 & 335 at Base Hospital
324					12:30	12:32		12:35	12:45	12:55	13:03	13:07
324	12:26	12:31	12:37	12:43	12:46	12:52	12:55	13:01	13:08	13:18		13:42
324	13:26	13:31	13:37	13:43	13:46	13:52	13:55	14:01	14:01	14:18		14:18

324					14:30	14:32		14:35	14:45	14:55	15:03	15:07
324	14:26	14:31	14:37	14:43	14:46	14:52	14:55	15:01	15:08	15:18		15:42
324	15:26	15:31	15:37	15:43	15:46	15:52	15:55	16:01	16:08	16:18	16:32	16:44
324					16:30	16:32		16:35	16:45	16:55	17:02	
324	16:29	16:34	16:40	16:46	16:49	16:49	16:57	17:01	17:08	17:18	17:32	

Additional Information

For the trip starting at 7:30 from Ocean Dr and Crestwood Dr - From Ocean Dr and Lake Rd bus operates via Central Rd, Hindman Rd and Widderson Rd to TAFE College, then on to Settlement City and terminates at the Town Centre.

For the trip starting at 8:20 from Ocean Dr and Crestwood Dr - From Ocean Dr and Lake Rd bus operates via Central Rd, Hindman Rd and Widderson Rd to TAFE College, then on to Settlement City
--



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Route 324: Settlement City - Lighthouse Beach

Weekdays

Saturday (Including Easter Saturday)

Sunday / Public Holidays

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WEEKDAY MORNINGS

Opposite Direction

Route Number	Routes 325 & 335 at Base Hospital	Routes 325 & 335 at TAFE	Settlement City	Town Centre	Private Hospital	Granite St & Koala St	Ocean Dr & Lochinvar Pl	Ocean Dr & Crestwood Dr	Marbuk Ave & Amethyst Way	Lighthouse Beach Surf Club	Pacific Dr & Livingstone Rd
324			06:42		06:48		06:51	06:56	07:01	07:07	07:13
324			07:12		07:18		07:21	07:26	07:31	07:37	07:43
324	07:33		08:00	08:10	08:14	08:18	08:21	08:26	08:31	08:37	08:43
324	08:25	08:30	08:35	08:50	08:53		08:55	08:57			
324	08:33	08:47	09:00	09:10	09:14	09:18	09:21	09:26	09:26	09:37	09:43
324	09:33		10:00	10:10	10:14	10:18	10:21	10:26	10:31	10:37	10:43
324	10:01	10:05	10:15	10:25	10:32		10:35	10:37			
324	10:31		11:00	11:10	11:14	11:18	11:21	11:26	11:31	11:37	11:43
324	11:31		12:00	12:10	12:14	12:18	12:21	12:26	12:31	12:37	12:43

WEEKDAY AFTERNOONS

Opposite Direction

Route Number	Routes 325 & 335 at Base Hospital	Routes 325 & 335 at TAFE	Settlement City	Town Centre	Private Hospital	Granite St & Koala St	Ocean Dr & Lochinvar Pl	Ocean Dr & Crestwood Dr	Marbuk Ave & Amethyst Way	Lighthouse Beach Surf Club	Pacific Dr & Livingstone Rd
324	12:01	12:05	12:15	12:25	12:32		12:35	12:37			
324	12:42		13:00	13:10	13:14	13:18	13:21	13:26	13:31	13:37	13:43
324	13:42		14:00	14:10	14:14	14:18	14:21	14:26	14:31	14:37	14:43
324	14:01	14:05	14:15	14:25	14:32		14:35	14:37			
324	14:42		15:00	15:10	15:14	15:18	15:21	15:26	15:31	15:37	15:43
324		15:08	15:15	15:25	15:32		15:35	15:37			

324	15:42	16:05	16:00	16:13	16:17	16:21	16:24	16:29	16:34	16:40	16:46
324	16:01	16:05	16:15	16:25	16:32		16:35	16:37			
324	16:44	17:05	17:00	17:13	17:17	17:21	17:24	17:29	17:34	17:40	17:46
324		17:08	17:15	17:25	17:32		17:35	17:37			
324			17:45	17:55	17:59	18:03	18:06	18:11	18:15	18:20	18:25

Additional Information

For the trips starting at 15:42 and 16:44 - Bus diverts to
TAFE College along Oxley Highway.



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Route 325: The Ruins Way - Town Centre

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WEEKDAY

MORNINGS

[Opposite Direction](#)

Route Number	The Ruins Way	Base Hospital	Sherwood Rd & Lincoln Rd	Lake Rd & Fernhill Rd	TAFE	The Jib	Clifton Dr & Regatta Cres	Settlement City	Town Centre	Routes 324 & 334 at Private Hospital	Route 324 at Lighthouse Beach
325		07:31			07:35			07:40	07:50		
325	07:37	07:33	07:41	07:45		07:48	07:50	08:00	08:10	08:14	08:37
325		08:25			08:30			08:35	08:45	08:53	
325	08:37	08:33	08:41	08:45	08:47	08:50	08:52	09:00	09:10	09:14	09:37
325	09:07		09:11	09:15	09:17	09:20	09:22	09:30	09:40		
325	09:37	09:33	09:41	09:45		09:48	09:50	10:00	10:10	10:14	10:37
325		10:01			10:05			10:15	10:25	10:32	
325	10:35	10:31	10:39	10:43		10:46	10:48	11:00	11:10	11:14	11:37
325	11:35	11:31	11:39	11:43		11:46	11:48	12:00	12:10	12:14	12:37

WEEKDAY

AFTERNOONS

[Opposite Direction](#)

Route Number	The Ruins Way	Base Hospital	Sherwood Rd & Lincoln Rd	Lake Rd & Fernhill Rd	TAFE	The Jib	Clifton Dr & Regatta Cres	Settlement City	Town Centre	Routes 324 & 334 at Private Hospital	Route 324 at Lighthouse Beach
325		12:01			12:05			12:15	12:25	12:32	
325	12:39	12:42	12:33	12:46			12:48	13:00	13:10	13:14	13:37
325	13:39	13:42	13:33	13:46			13:48	14:00	14:10	14:14	14:37
325		14:01			14:05			14:15	14:25	14:25	
325	14:39	14:42	14:33	14:46			14:48	15:00	15:10	15:14	15:37
325	15:39	15:42	15:33	15:46			15:48	16:00	16:13	16:17	16:40
325		16:01			16:05			16:15	16:25	16:32	
325	16:41	16:44	16:35	16:48			16:50	17:00	17:13	17:17	17:40
325		17:15			17:19			17:24			



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Route 340: Port Macquarie - Kempsey

School Days

School Holidays

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SCHOOL DAY

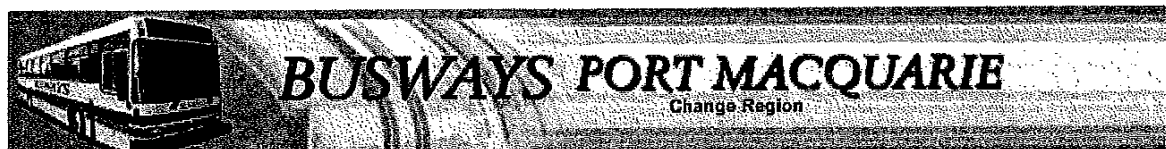
MORNINGS [Opposite Direction](#)

Route Number	Port Macquarie Town Centre	Settlement City	Kempsey Medical Centre
340	07:00	07:10	08:50

SCHOOL DAY

AFTERNOONS [Opposite Direction](#)

Route Number	Port Macquarie Town Centre	Settlement City	Kempsey Medical Centre
340	14:00	14:10	14:50
340	14:55		16:23



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Route 334: Settlement City - Kendall

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WEEKDAY MORNINGS

[Opposite Direction](#)

Route Number	Route 335 at Base Hospital	Route 335 at TAFE	Settlement City	Port Macquarie Town Centre	Private Hospital	Ocean Dr & Matthew Flinders Dr	Lake Cathie (Tavern)	Bonny Hills (Caravan Park)	North Haven (Bowling Club)	Laurieton (Bi-Lo)	Lakewood	Kendall
334	08:25	08:30	08:35	08:50	08:53	08:59	09:10	09:18	09:28	09:36	09:44	09:54
334	10:01	10:05	10:15	10:25	10:32	10:39	10:50	10:58	11:08	11:16	11:24	11:32

WEEKDAY AFTERNOONS

[Opposite Direction](#)

Route Number	Route 335 at Base Hospital	Route 335 at TAFE	Settlement City	Port Macquarie Town Centre	Private Hospital	Ocean Dr & Matthew Flinders Dr	Lake Cathie (Tavern)	Bonny Hills (Caravan Park)	North Haven (Bowling Club)	Laurieton (Bi-Lo)	Lakewood	Kendall
334	12:01	12:05	12:15	12:25	12:32	12:39	12:50	12:58	13:08	13:16	13:24	13:32
334	14:01	14:05	14:15	14:25	14:32	14:39	14:50	14:58	15:08	15:16	15:24	15:32
334		15:08	15:15	15:25	15:32	15:39	15:50	15:58	16:08	16:16	16:24	16:32
334	16:01	16:05	16:15	16:25	16:32	16:39	16:50	16:58	17:08	17:16	17:24	17:32
334		17:08	17:15	17:25	17:32	17:39	17:50	17:58	18:08	18:16	18:24	18:32

Additional Information

For the trip starting at 08:35 from Settlement City - From Gordon St bus operates direct along Lake Rd omitting Lord St and Hill St.
 For the trip starting at 08:35 from Settlement City - Bus operates via Kendall Station.



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Route 335 : Port Macquarie Town Centre - Wauchope

Weekdays

Saturday (Including Easter Saturday)

Sunday / Public Holidays

Options

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- ▶ [Order by Post](#)
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View

- ▶ [Frequency Guide](#)
- ▶ [Route Description](#)

Other

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WEEKDAY

MORNINGS

[Opposite Direction](#)

Route Number	Route 334 at Private Hospital	Port Macquarie Town Centre	Settlement City	TAFE	Base Hospital	Wauchope (Bransdon St)	Bago Rd & Fairmont Dr	Forest Way & Colonial Cct	Wauchope (Bransdon St)
335			06:33	06:36		06:53	06:57	07:03	07:16
335		08:50	09:00	09:03	09:07	09:23	09:27	09:33	09:46
335		10:50	11:00	11:03	11:07	11:23	11:27	11:33	11:46

WEEKDAY

AFTERNOONS

[Opposite Direction](#)

Route Number	Route 334 at Private Hospital	Port Macquarie Town Centre	Settlement City	TAFE	Base Hospital	Wauchope (Bransdon St)	Bago Rd & Fairmont Dr	Forest Way & Colonial Cct	Wauchope (Bransdon St)
335	12:35	12:45	13:00	13:03	13:07	13:23	13:27	13:33	13:46
335	14:35	14:45	15:00	15:03	15:07	15:23	15:27	15:33	15:46
335		16:05	16:15	16:18	16:22	16:38	16:42	16:48	17:00
335	16:35	17:05	17:15	17:18	17:22	17:38	17:42	17:48	18:00

Additional Information

Buses from Port Macquarie divert to Wauchope Station on request.
Buses travelling to Port Macquarie divert via Randall St and depart the station at the following times:

Weekdays: at 7:18am, 1:48pm and 3:48pm

Saturdays: at 2:48pm and 4:48pm

Sundays and Public Holidays: at 10:48am and 3:48pm

Appendix D

TRAFFIC GENERATION CHARACTERISTICS

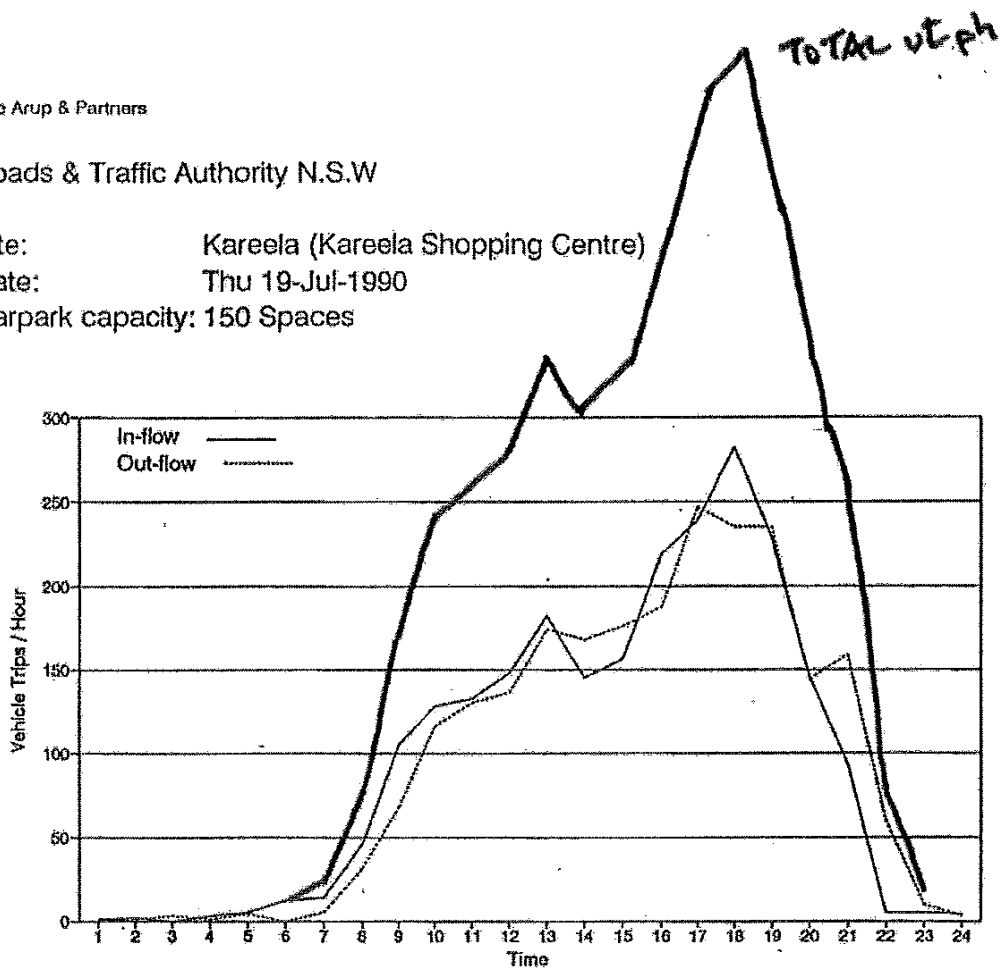
Ove Arup & Partners

Roads & Traffic Authority N.S.W

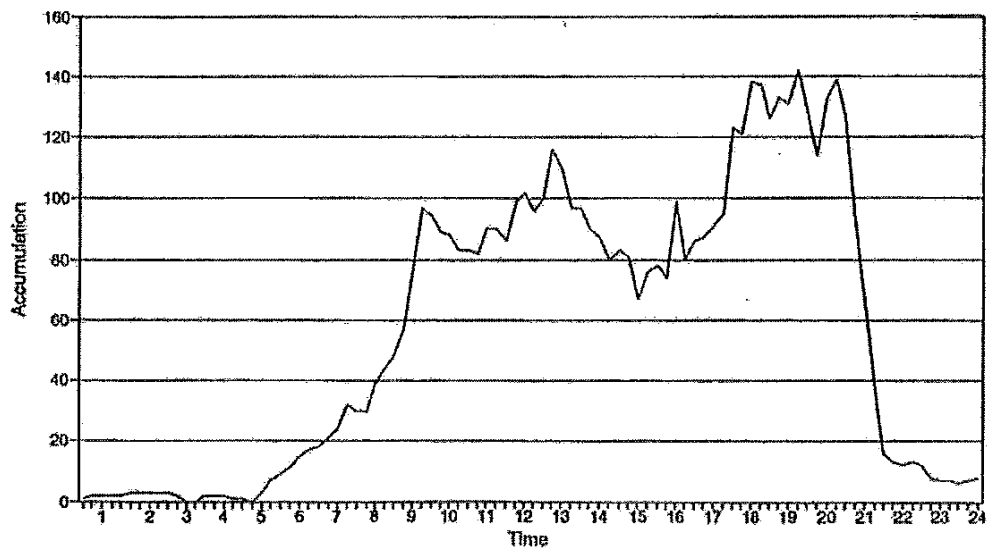
Site: Kareela (Kareela Shopping Centre)

Date: Thu 19-Jul-1990

Carpark capacity: 150 Spaces



Vehicle Flow



Parking Accumulation

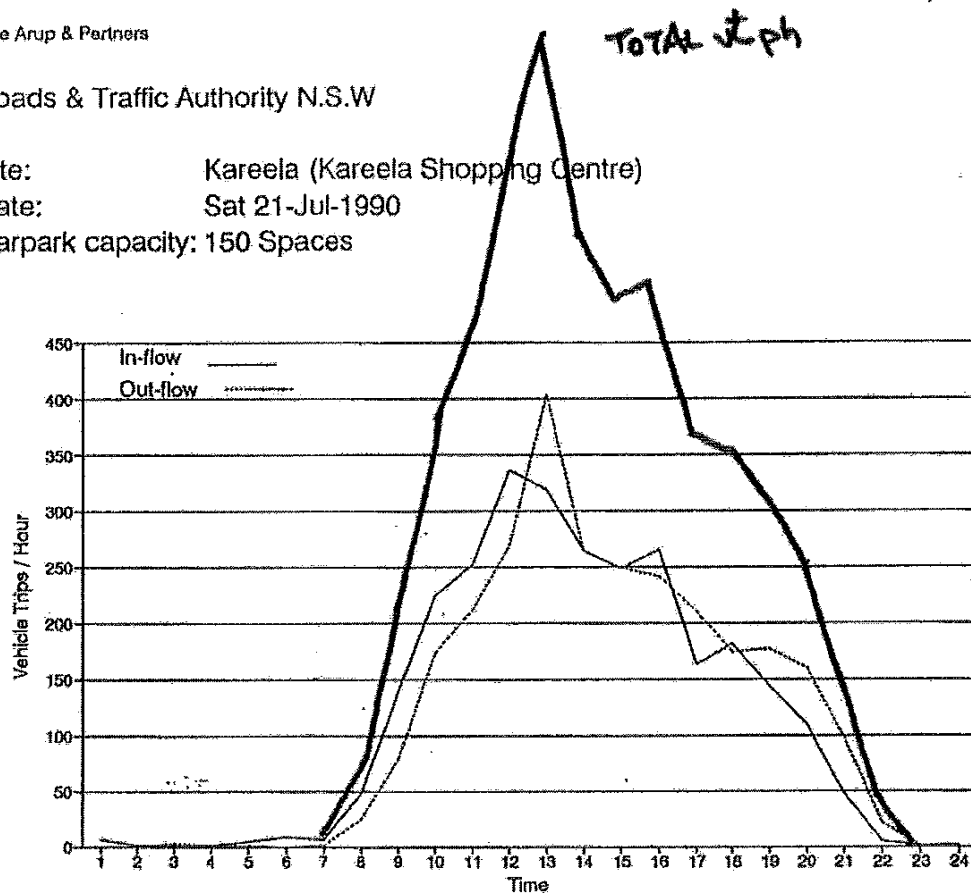
Ove Arup & Partners

Roads & Traffic Authority N.S.W

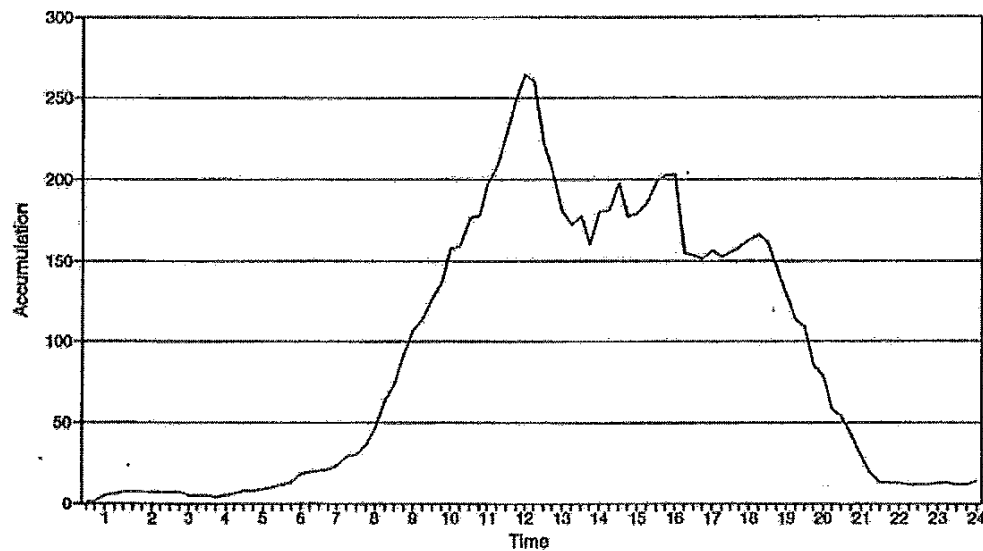
Site: Kareela (Kareela Shopping Centre)

Date: Sat 21-Jul-1990

Carpark capacity: 150 Spaces



Vehicle Flow



Parking Accumulation

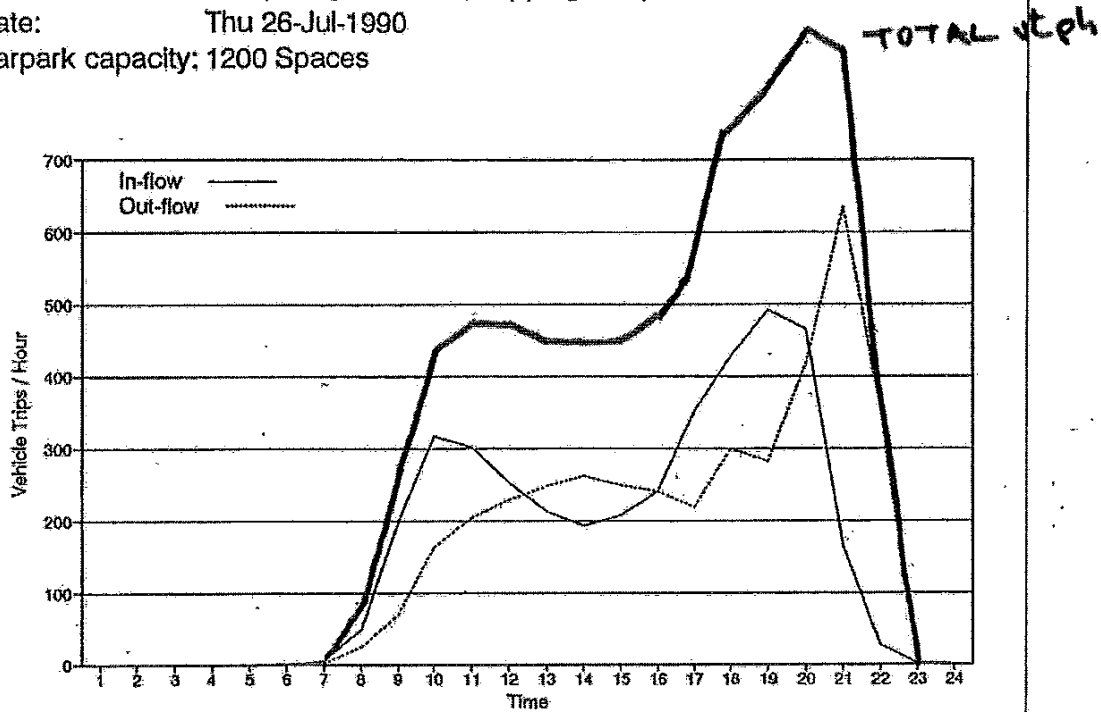
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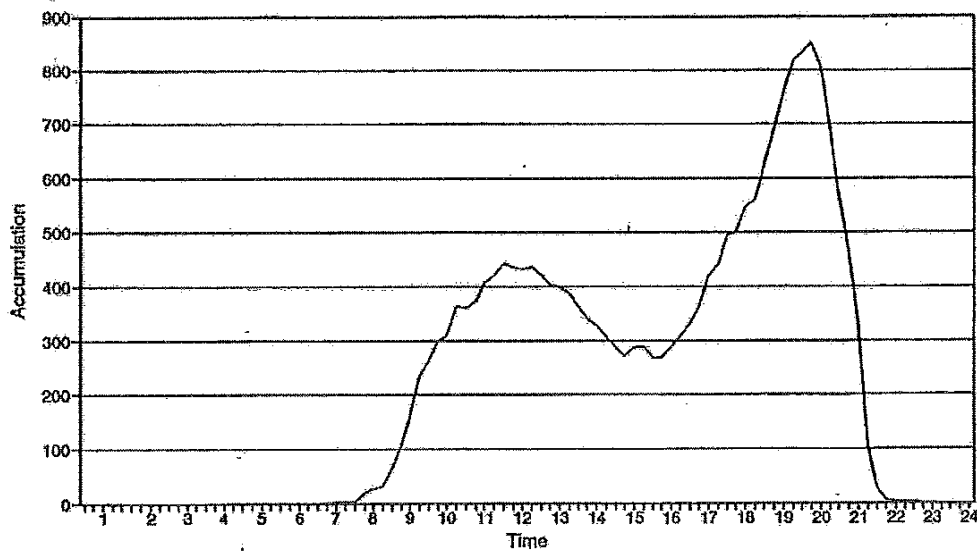
Site: Liverpool (Westfield Shoppingtown)

Date: Thu 26-Jul-1990

Carpark capacity: 1200 Spaces



Vehicle Flow



Parking Accumulation

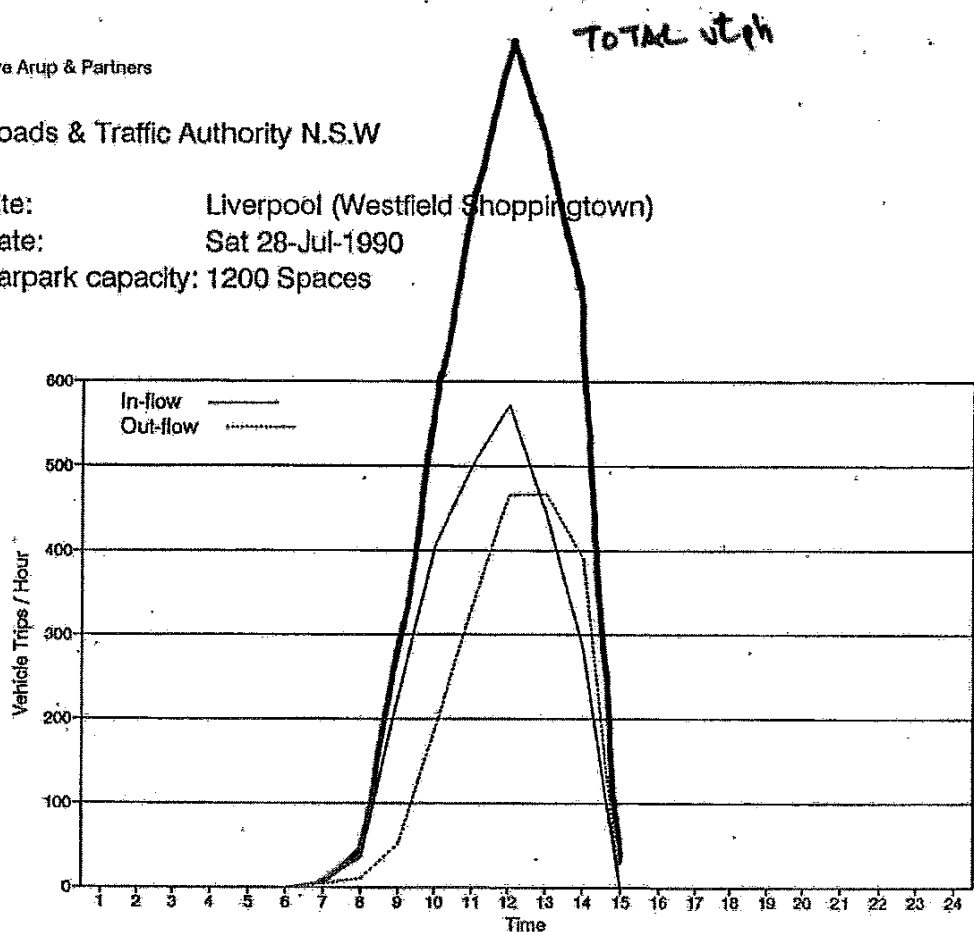
Ove Arup & Partners

Roads & Traffic Authority N.S.W

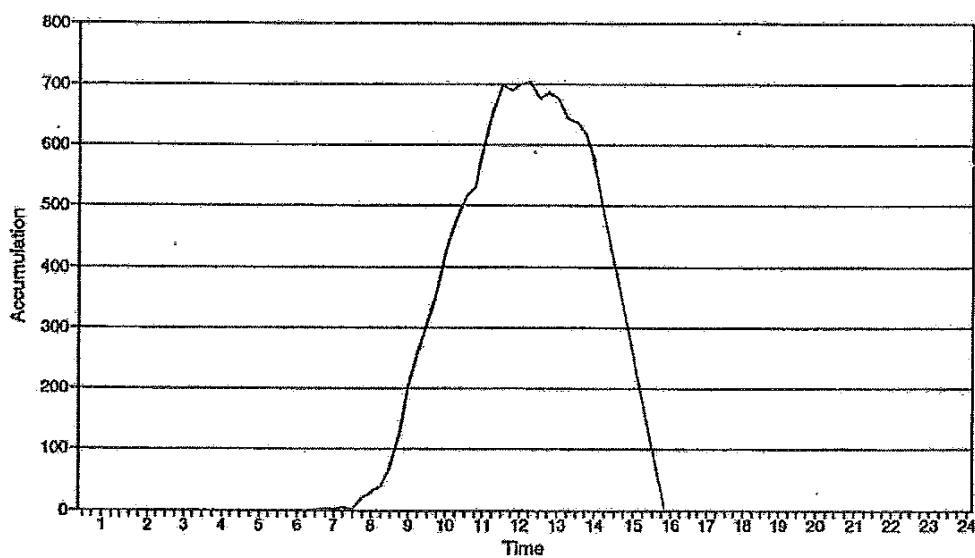
Site: Liverpool (Westfield Shoppingtown)

Date: Sat 28-Jul-1990

Carpark capacity: 1200 Spaces

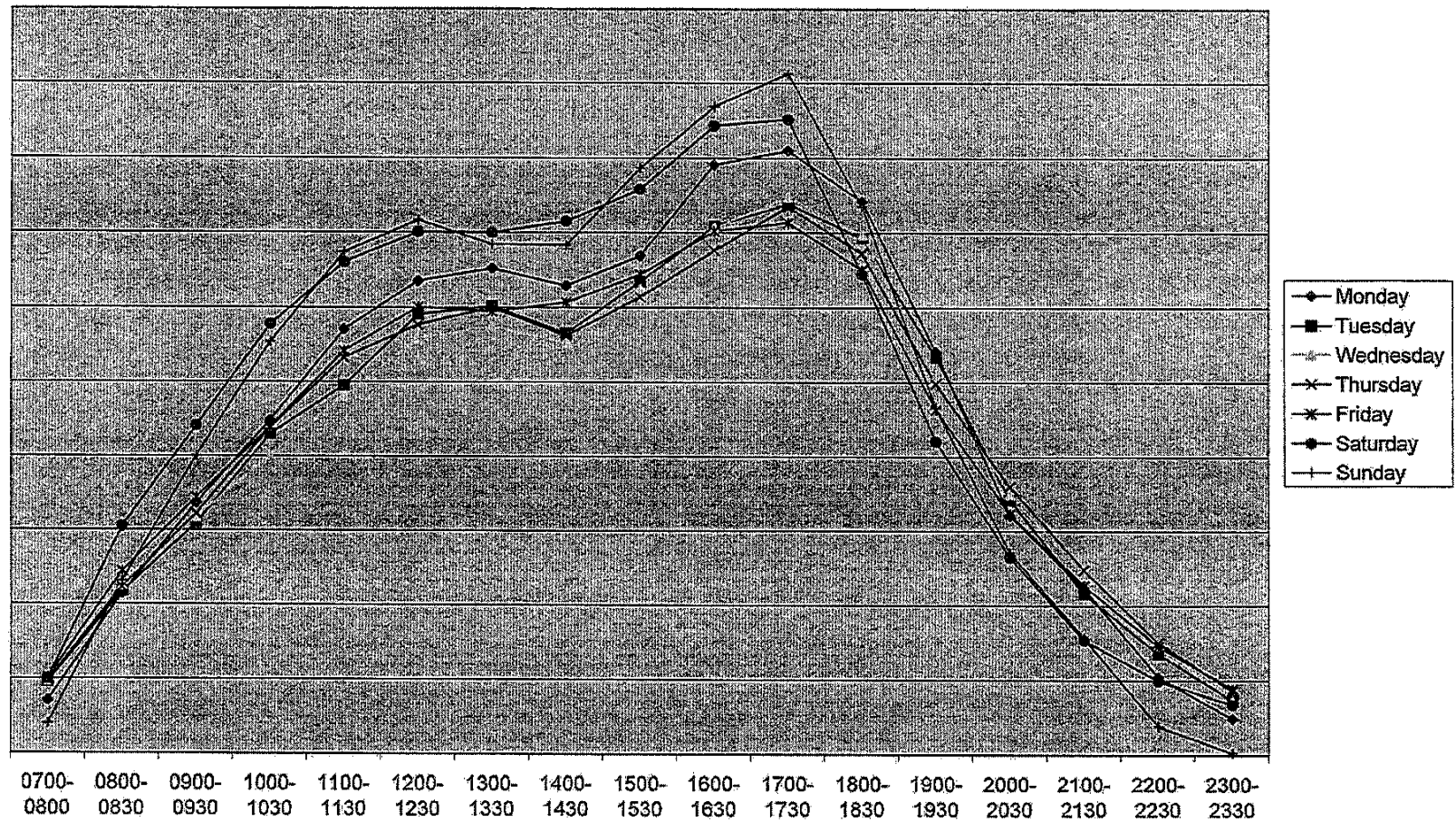


Vehicle Flow



Parking Accumulation

Hourly Accumulative Patronage (Woolworths Supermarket)





EXPRESSION OF INTEREST
for the conduct of Trip Generation and Parking Generation surveys

INVITATION

DRAFT BRIEF

for the conduct of Trip Generation and Parking Generation surveys

1. Background

The RTA published its *Guide to Traffic Generating Developments* ("Guide") in the mid-1990s and has made several revisions since. The document drew on the results of a number of trip generation and parking generation surveys covering a range of business types, which were conducted progressively since the early 1980s.

Recent developments on this topic include:

- i. The trip generation and parking requirement data in the *Guide* is becoming increasingly out-of-date. Several new business types are not adequately represented (eg factory outlet centres) and there is evidence of ongoing industry rationalisation (eg larger service stations).
- ii. There is an increasing awareness that public transport has not been adequately accounted for in previous trip and parking generation surveys. In order that public transport accessibility be taken into account in future when determining trip behaviour and parking requirements, a new analytical methodology has been proposed (see Appendix A for details). It is based on the estimation of trip and parking generation rates for an "unconstrained" situation (ie where there are few on-site parking constraints, and street parking is available), and the subsequent application of a "discount factor", based on the *proximity* and *frequency* of nearby public transport and the walking distance to a "centre".
- iii. Several large trip and parking generation rate databases have been developed. Notable among these are the New Zealand Trips & Parking Database Bureau (NZTPDB); the US Institute of Transportation Engineers (ITE) Trip Generation / Parking Generation; Trip Rate Information Computer System (TRICS); and Trip Rate Assessment Valid for London (TRAVL). Some of these databases are now accessible to subscribers on-line.

In addition to these specific issues, there are also ongoing societal and economic changes which collectively have the potential to impact on the relevance and reliability of the information in the *Guide*. These include:

- Retail hours have changed and Sunday trading is now the norm rather than the exception
- Changing demographics – aging population and smaller household sizes
- Changes in car ownership as the real cost of new vehicles continues to fall
- Recent evidence that increasing fuel cost and the effect of tolls may be moderating the growth in vehicle travel
- Changing patterns of work and leisure, including the effects of flexible/extended working hours and part-time work, and the ongoing increase in the numbers of working women.

In response to these issues it is envisaged that, subject to funding availability, further trip generation and parking generation surveys may be conducted for specified business types at agreed locations within Sydney and NSW regional centres over the coming years. It is intended that the results from these surveys then be compared with similar data available from the various overseas organisations to assess the relevance and applicability of that data for use in the local context.

Appendix E

SIDRA RESULTS

Movement Summary

Bay Street / Park Street

Existing Afternoon

Roundabout

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	27	0.0	0.359	11.8	LOS A	17	0.39	0.69	45.2
1	R	368	0.0	0.359	11.8	LOS A	17	0.39	0.69	45.2
Approach		395	0.0	0.359	11.8	LOS A	17	0.39	0.69	45.2
East Approach										
4	L	269	0.0	0.188	7.2	LOS A	8	0.18	0.56	49.3
5	T	189	0.0	0.149	6.2	LOS A	6	0.18	0.49	50.4
Approach		458	0.0	0.188	6.8	LOS A	8	0.18	0.53	49.7
West Approach										
11	T	211	0.0	0.129	7.4	LOS A	6	0.45	0.60	48.7
12	R	61	0.0	0.129	12.5	LOS A	6	0.46	0.72	44.7
Approach		272	0.0	0.129	8.5	LOS A	6	0.46	0.63	47.7
All Vehicles		1125	0.0	0.359	9.0	LOS A	17	0.32	0.61	47.5



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Movement Summary

Bay Street / Park Street

Existing Saturday

Roundabout

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	40	0.0	0.501	12.7	LOS A	27	0.55	0.75	44.6
1	R	468	0.0	0.501	12.7	LOS A	27	0.55	0.75	44.6
Approach		508	0.0	0.501	12.7	LOS A	27	0.55	0.75	44.6
East Approach										
4	L	309	0.0	0.215	7.2	LOS A	10	0.20	0.56	49.2
5	T	284	0.0	0.212	6.2	LOS A	10	0.20	0.49	50.3
Approach		593	0.0	0.215	6.7	LOS A	10	0.20	0.53	49.7
West Approach										
11	T	240	0.0	0.159	7.9	LOS A	8	0.55	0.66	48.1
12	R	64	0.0	0.159	13.1	LOS A	7	0.55	0.76	44.4
Approach		304	0.0	0.159	9.0	LOS A	8	0.55	0.68	47.2
All Vehicles		1405	0.0	0.501	9.4	LOS A	27	0.40	0.64	47.2



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Movement Summary

Bay Street / Access

Existing Afternoon

Roundabout

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	108	0.0	0.317	7.4	LOS A	18	0.42	0.57	48.5
1	T	258	0.0	0.317	7.4	LOS A	18	0.42	0.57	48.5
1	R	16	0.0	0.317	7.4	LOS A	18	0.42	0.57	48.5
Approach		382	0.0	0.317	7.4	LOS A	18	0.42	0.57	48.5
East Approach										
4	L	26	0.0	0.045	9.8	LOS A	2	0.50	0.64	46.9
4	T	5	0.0	0.045	9.8	LOS A	2	0.50	0.64	46.9
4	R	13	0.0	0.045	9.8	LOS A	2	0.50	0.64	46.9
Approach		44	0.0	0.045	9.8	LOS A	2	0.50	0.64	46.9
North Approach										
7	L	26	0.0	0.258	9.1	LOS A	14	0.33	0.59	47.2
7	T	147	0.0	0.258	9.1	LOS A	14	0.33	0.59	47.2
7	R	157	0.0	0.258	9.1	LOS A	14	0.33	0.59	47.2
Approach		330	0.0	0.258	9.1	LOS A	14	0.33	0.59	47.2
West Approach										
10	L	138	0.0	0.228	10.1	LOS A	12	0.50	0.67	46.4
10	T	5	0.0	0.228	10.1	LOS A	12	0.50	0.67	46.4
10	R	97	0.0	0.228	10.1	LOS A	12	0.50	0.67	46.4
Approach		240	0.0	0.228	10.1	LOS A	12	0.50	0.67	46.4
All Vehicles		996	0.0	0.317	8.7	LOS A	18	0.41	0.60	47.5



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Movement Summary

Bay Street / Access

Existing Saturday

Roundabout

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	68	0.0	0.330	7.4	LOS A	18	0.41	0.57	48.6
1	T	312	0.0	0.330	7.4	LOS A	18	0.41	0.57	48.6
1	R	21	0.0	0.330	7.4	LOS A	18	0.41	0.57	48.6
Approach		401	0.0	0.330	7.4	LOS A	18	0.41	0.57	48.6
East Approach										
4	L	28	0.0	0.052	10.2	LOS A	2	0.53	0.65	46.6
4	T	5	0.0	0.052	10.2	LOS A	2	0.53	0.65	46.6
4	R	16	0.0	0.052	10.2	LOS A	2	0.53	0.65	46.6
Approach		49	0.0	0.052	10.2	LOS A	2	0.53	0.65	46.6
North Approach										
7	L	24	0.0	0.288	8.6	LOS A	16	0.34	0.58	47.5
7	T	201	0.0	0.288	8.6	LOS A	16	0.34	0.58	47.5
7	R	148	0.0	0.288	8.6	LOS A	16	0.34	0.58	47.5
Approach		373	0.0	0.289	8.6	LOS A	16	0.34	0.58	47.5
West Approach										
10	L	197	0.0	0.289	10.1	LOS A	16	0.57	0.70	46.5
10	T	5	0.0	0.289	10.1	LOS A	16	0.57	0.70	46.5
10	R	87	0.0	0.289	10.1	LOS A	16	0.57	0.70	46.5
Approach		289	0.0	0.289	10.1	LOS A	16	0.57	0.70	46.5
All Vehicles		1112	0.0	0.330	8.6	LOS A	18	0.43	0.61	47.6



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Movement Summary

Bay Street / Park Street

Future Afternoon

Roundabout

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	69	0.0	0.435	12.0	LOS A	22	0.49	0.73	45.0
1	R	379	0.0	0.435	12.0	LOS A	22	0.49	0.73	45.0
Approach		448	0.0	0.436	12.0	LOS A	22	0.49	0.73	45.0
East Approach										
4	L	274	0.0	0.199	7.3	LOS A	9	0.23	0.56	49.0
5	T	258	0.0	0.198	6.3	LOS A	9	0.23	0.50	50.1
Approach		532	0.0	0.199	6.8	LOS A	9	0.23	0.53	49.5
West Approach										
11	T	303	0.0	0.189	7.5	LOS A	9	0.49	0.63	48.4
12	R	88	0.0	0.189	12.7	LOS A	9	0.50	0.74	44.6
Approach		391	0.0	0.189	8.7	LOS A	9	0.49	0.65	47.5
All Vehicles		1371	0.0	0.435	9.0	LOS A	22	0.39	0.63	47.4



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Movement Summary

Bay Street / Park Street

Future Saturday

Roundabout

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	91	0.0	0.593	13.5	LOS A	38	0.64	0.84	44.2
1	R	480	0.0	0.593	13.5	LOS A	38	0.64	0.84	44.2
Approach		571	0.0	0.593	13.5	LOS A	38	0.64	0.84	44.2
East Approach										
4	L	321	0.0	0.249	7.3	LOS A	12	0.24	0.56	49.0
5	T	353	0.0	0.249	6.3	LOS A	12	0.25	0.50	50.0
Approach		674	0.0	0.249	6.8	LOS A	12	0.24	0.53	49.5
West Approach										
11	T	321	0.0	0.218	8.1	LOS A	11	0.59	0.68	47.9
12	R	86	0.0	0.218	13.3	LOS A	11	0.59	0.78	44.2
Approach		407	0.0	0.218	9.2	LOS A	11	0.59	0.70	47.0
All Vehicles		1652	0.0	0.593	9.7	LOS A	38	0.47	0.68	46.9



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Movement Summary

Bay Street / Access

Future Afternoon

Roundabout

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	126	0.0	0.363	7.4	LOS A	21	0.43	0.57	48.5
1	T	301	0.0	0.363	7.4	LOS A	21	0.43	0.57	48.5
1	R	16	0.0	0.363	7.4	LOS A	21	0.43	0.57	48.5
Approach		443	0.0	0.363	7.4	LOS A	21	0.43	0.57	48.5
East Approach										
4	L	26	0.0	0.047	10.1	LOS A	2	0.54	0.65	46.7
4	T	5	0.0	0.047	10.1	LOS A	2	0.54	0.65	46.7
4	R	13	0.0	0.047	10.1	LOS A	2	0.54	0.65	46.7
Approach		44	0.0	0.047	10.1	LOS A	2	0.54	0.65	46.7
North Approach										
7	L	26	0.0	0.294	8.9	LOS A	17	0.38	0.59	47.3
7	T	188	0.0	0.294	8.9	LOS A	17	0.38	0.59	47.3
7	R	152	0.0	0.294	8.9	LOS A	17	0.38	0.59	47.3
Approach		366	0.0	0.293	8.9	LOS A	17	0.38	0.59	47.3
West Approach										
10	L	135	0.0	0.254	10.6	LOS A	13	0.54	0.70	46.1
10	T	5	0.0	0.254	10.6	LOS A	13	0.54	0.70	46.1
10	R	118	0.0	0.254	10.6	LOS A	13	0.54	0.70	46.1
Approach		258	0.0	0.254	10.6	LOS A	13	0.54	0.70	46.1
All Vehicles		1111	0.0	0.363	8.7	LOS A	21	0.44	0.61	47.4



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Movement Summary

Bay Street / Access

Future Saturday

Roundabout

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	84	0.0	0.403	7.5	LOS A	24	0.47	0.59	48.3
1	T	378	0.0	0.403	7.5	LOS A	24	0.47	0.59	48.3
1	R	21	0.0	0.403	7.5	LOS A	24	0.47	0.59	48.3
Approach		483	0.0	0.403	7.5	LOS A	24	0.47	0.59	48.3
East Approach										
4	L	28	0.0	0.053	10.4	LOS A	3	0.55	0.66	46.5
4	T	5	0.0	0.053	10.4	LOS A	3	0.55	0.66	46.5
4	R	16	0.0	0.053	10.4	LOS A	3	0.55	0.66	46.5
Approach		49	0.0	0.053	10.4	LOS A	3	0.55	0.66	46.5
North Approach										
7	L	24	0.0	0.312	8.7	LOS A	18	0.34	0.58	47.5
7	T	215	0.0	0.312	8.7	LOS A	18	0.34	0.58	47.5
7	R	168	0.0	0.312	8.7	LOS A	18	0.34	0.58	47.5
Approach		407	0.0	0.312	8.7	LOS A	18	0.34	0.58	47.5
West Approach										
10	L	177	0.0	0.282	10.6	LOS A	15	0.62	0.73	46.2
10	T	5	0.0	0.282	10.6	LOS A	15	0.62	0.73	46.2
10	R	84	0.0	0.282	10.6	LOS A	15	0.62	0.73	46.2
Approach		266	0.0	0.282	10.6	LOS A	15	0.62	0.73	46.2
All Vehicles		1205	0.0	0.403	8.7	LOS A	24	0.46	0.62	47.5



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Movement Summary

Park Street / Access

Future Afternoon

Give-way

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	34	0.0	0.035	9.1	LOS A	1	0.30	0.64	47.6
3	R	286	0.0	0.514	15.3	LOS B	33	0.65	0.98	42.2
Approach		320	0.0	0.515	14.7	LOS B	33	0.61	0.94	42.7
East Approach										
4	L	253	0.0	0.136	8.2	LOS A	0	0.00	0.67	49.0
5	T	75	0.0	0.038	0.0	LOS A	0	0.00	0.00	60.0
Approach		328	0.0	0.136	6.3	LOS A		0.00	0.51	51.1
West Approach										
11	T	105	0.0	0.035	0.5	LOS A	2	0.14	0.00	58.1
12	R	17	0.0	0.035	9.6	LOS A	2	0.40	0.66	47.2
Approach		122	0.0	0.035	1.7	LOS A	2	0.18	0.09	56.3
All Vehicles		770	0.0	0.514	9.1	Not Applicable	33	0.28	0.62	47.9



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Movement Summary

Park Street / Access

Future Saturday

Give-way

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	42	0.0	0.048	9.8	LOS A	2	0.38	0.68	47.3
3	R	269	0.0	0.609	20.5	LOS B	39	0.74	1.10	38.4
Approach		311	0.0	0.608	19.0	LOS B	39	0.69	1.05	39.4
East Approach										
4	L	269	0.0	0.145	8.2	LOS A	0	0.00	0.67	49.0
5	T	174	0.0	0.089	0.0	LOS A	0	0.00	0.00	60.0
Approach		443	0.0	0.145	5.0	LOS A		0.00	0.41	52.8
West Approach										
11	T	138	0.0	0.045	0.7	LOS A	3	0.17	0.00	57.6
12	R	17	0.0	0.045	10.2	LOS A	3	0.47	0.70	46.8
Approach		155	0.0	0.045	1.8	LOS A	3	0.21	0.08	56.2
All Vehicles		909	0.0	0.609	9.2	Not Applicable	39	0.27	0.57	47.7



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Movement Summary

Bat Street south access

Future Afternoon

Give-way

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	194	0.0	0.136	8.2	LOS A	0	0.00	0.67	49.0
2	T	325	0.0	0.136	0.0	LOS A	0	0.00	0.00	60.0
Approach		519	0.0	0.136	3.1	LOS A		0.00	0.25	55.3
North Approach										
8	T	333	0.0	0.145	0.4	LOS A	7	0.08	0.00	58.9
9	R	101	0.0	0.145	11.0	LOS A	7	0.51	0.78	46.0
Approach		434	0.0	0.145	2.9	LOS A	7	0.18	0.18	55.3
West Approach										
10	L	118	0.0	0.156	10.8	LOS A	5	0.48	0.76	46.2
12	R	168	0.0	0.774	45.4	LOS D	44	0.93	1.30	26.6
Approach		286	0.0	0.773	31.1	LOS C	44	0.74	1.08	32.3
All Vehicles		1239	0.0	0.774	9.5	Not Applicable	44	0.23	0.42	47.5



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Movement Summary

Bat Street south access

Future Saturday

Give-way

Vehicle Movements

Mov No	Turn	Dem Flow (veh/h)	%HV	Deg of Satn (v/c)	Aver Delay (sec)	Level of Service	95% Back of Queue (m)	Prop. Queued	Eff. Stop Rate	Aver Speed (km/h)
South Approach										
1	L	194	0.0	0.133	8.2	LOS A	0	0.00	0.67	49.0
2	T	315	0.0	0.133	0.0	LOS A	0	0.00	0.00	60.0
Approach		509	0.0	0.133	3.1	LOS A		0.00	0.25	55.3
North Approach										
8	T	226	0.0	0.116	0.0	LOS A	0	0.00	0.00	60.0
9	R	101	0.0	0.118	10.7	LOS A	4	0.51	0.76	46.3
Approach		327	0.0	0.118	3.3	LOS A	4	0.16	0.24	55.0
West Approach										
10	L	168	0.0	0.219	10.9	LOS A	8	0.49	0.78	46.2
12	R	101	0.0	0.371	23.9	LOS B	14	0.79	0.99	36.2
Approach		269	0.0	0.372	15.8	LOS B	14	0.60	0.86	41.8
All Vehicles		1105	0.0	0.371	6.3	Not Applicable	14	0.19	0.40	51.2



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